Package 'hrbrthemes'

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Type Package

Title Additional Themes, Theme Components and Utilities for 'ggplot2'

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Description A compilation of extra 'ggplot2' themes, scales and utilities, including a spell check function for plot label fields and an overall emphasis on typography. A copy of the 'Google' font 'Roboto Condensed' is also included.

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Encoding UTF-8

Suggests testthat, dplyr, gridExtra, hunspell, stringi, gcookbook, clipr, vdiffr, svglite

Depends R (>= 4.0.0)

Imports ggplot2 (>= 3.4.0), grDevices, grid, scales, extrafont, tools, magrittr, gdtools, utils

RoxygenNote 7.2.3

NeedsCompilation no

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R topics documented:

`flush_ticks` *Makes axis text labels flush on the ends*

Description

A covenience function intended for basic, fixed-scale plots only (i.e. does not handle free scales in facets).

You need to pass in a ggplot2 object to this function. It can't be +'d in a chain of geoms, coords, scales, themes, etc. It also builds the plot (but does not display it) so if the plt takes a while (i.e. has lots of data or transforms) this will also take a while.

Usage

```
flush_ticks(gg, flush = "XY", plot = TRUE, cat = TRUE)
```

Arguments

gg	ggplot2 plot object
flush	either "X" or "Y" or "XY" to flush individual or both axes. Default: both.
plot	if FALSE then the ggplot object will be returned *invisibly*
cat	if TRUE then display theme() statements and copy them to the clipboard

Value

ggplot2 object with theme() elements added

Note

Intended for basic, fixed-scale plots only (i.e. does not handle free scales in facets).

---

font_an *Arial Narrow font name R variable aliases*

Description

font_an == "Arial Narrow"

Usage

```
font_an
```

Format

length 1 character vector

font_es *Econ Sans Condensed font name R variable aliases*

Description

`font_es` == "EconSansCndLig"

`font_es_bold` == "EconSansCndBol"

`font_es_light` == "EconSansCndLig"

Usage

```
font_es

font_es_bold

font_es_light
```

Format

length 1 character vector

An object of class `character` of length 1.

An object of class `character` of length 1.

Note

`font_es_bold` (a.k.a. "EconSansCndBol") is not available on Windows and will throw a warning if used in plots.

`font_es_light` (a.k.a. "EconSansCndLig") is not available on Windows and will throw a warning if used in plots.

font_gs *Goldman Sans font name R variable aliases*

Description

`font_gs` == "Goldman Sans Condensed"

Usage

```
font_gs
```

Format

length 1 character vector

font_inter_thin *Inter font name R variable aliases*

Description

font_inter_thin == "Inter-Thin"

font_inter_thin_italic == "Inter-ThinItalic"

font_inter_medium == "Inter-Medium"

font_inter_medium_italic == "Inter-MediumItalic"

font_inter_semibold == "Inter-SemiBold"

font_inter_bold == "Inter-Bold"

font_inter_italic == "Inter-Italic"

Usage

```
font_inter_thin

font_inter_thin_italic

font_inter_medium

font_inter_medium_italic

font_inter_semibold

font_inter_bold

font_inter_italic
```

Format

length 1 character vector

length 1 character vector

length 1 character vector

length 1 character vector

length 1 character vector

length 1 character vector

length 1 character vector

font_ps *PlexSans font name R variable aliases*

Description

`font_ps` == "IBMPlexSans"

`font_ps_light` == "IBMPlexSans-Light"

Usage

```
font_ps

font_ps_light
```

Format

length 1 character vector

An object of class `character` of length 1.

Note

`font_ps_light` (a.k.a. "IBMPlexSans-Light") is not available on Windows and will throw a warning if used in plots.

font_pub *Public Sans font name R variable aliases*

Description

`font_pub` == "Public Sans"

`font_pub_bold` == "Public Sans Bold"

`font_pub_light` == "Public Sans Light"

`font_pub_thin` == "Public Sans Thin"

Usage

```
font_pub

font_pub_bold

font_pub_light

font_pub_thin
```

Format

length 1 character vector

An object of class `character` of length 1.

An object of class `character` of length 1.

An object of class `character` of length 1.

Note

`font_pub_bold` (a.k.a. "`Public Sans Bold`") is not available on Windows and will throw a warning if used in plots.

`font_rc` *Roboto Condensed font name R variable aliases*

Description

`font_rc` == "`Roboto Condensed`"

`font_fc_light` == "`Roboto Condensed Light`"

Usage

```
font_rc

font_rc_light
```

Format

length 1 character vector

An object of class `character` of length 1.

Note

`font_rc_light` (a.k.a. "`Roboto Condensed Light`") is not available on Windows and will throw a warning if used in plots.

ft_cols *FT color palette*

Description

FT color palette

Usage

```
ft_cols

ft_text_col
```

Format

An object of class `list` of length 9.

An object of class `character` of length 1.

Note

don't forget you can use `scales::alpha()` with these colors

ft_geom_defaults *Change geom defaults from black to custom lights for the FT theme*

Description

Change geom defaults from black to custom lights for the FT theme

Usage

```
ft_geom_defaults()
```

ft_pal *A bright qualitative color palette*

Description

A bright qualitative color palette

Usage

```
ft_pal()
```

Examples

```
library(scales)
scales::show_col(ft_pal()(8))
```

gg_check *Spell check ggplot2 plot labels*

Description

Due to the way ggplot2 objects are created, this has to be used in a standalone context.

Usage

```
gg_check(gg, dict, ignore)
```

Arguments

gg	ggplot2 object
dict	a dictionary object or string which can be passed to hunspell::dictionary. Defaults to `hunspell::dictionary("en_US")`
ignore	character vector with additional approved words added to the dictionary. Defaults to `hunspell::en_stats`

Details

Current functionality only looks for misspelled words in the labels of ggplot2 objects. When misspelled words are found, a message is printed with the words and the label that they are in. No messages will be printed if there are no misspelled words.

Value

the object that was passed in

Examples

```
library(ggplot2)

df <- data.frame(x=c(20, 25, 30), y=c(4, 4, 4), txt=c("One", "Two", "Three"))

# not piping
ggplot(mtcars, aes(mpg, wt)) +
  geom_point() +
  labs(x="This is some txt", y="This is more text",
       title="Thisy is a titlle",
       subtitle="This is a subtitley",
       caption="This is a captien") -> gg

gg_check(gg)
```

`hrbrthemes-exports` *hrbrthemes exported operators*

Description

The following functions are imported and then re-exported from the hrbrthemes package to enable use of the magrittr pipe operator with no additional library calls

---

`import_econ_sans` *Import Roboto Condensed font for use in charts*

Description

Roboto Condensed is a trademark of Google.

Usage

```
import_econ_sans()
```

Details

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

`import_goldman_sans` *Import Goldman Sans font for use in charts*

Description

Goldman Sans is a trademark of Goldman Sachs and distributed under the Goldman Sachs Restricted Font License

Usage

```
import_goldman_sans()
```

Details

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

`import_inter` *Import Inter font for use in charts*

Description

Inter is Copyright (c) 2016-2024 The Inter Project Authors

Usage

```
import_inter()
```

Details

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

`import_plex_sans` *Import IBM Plex Sans font for use in charts*

Description

IBM Plex Sans is a trademark of IBM and distributed under the SIL Open Font License, Version 1.1.

Usage

```
import_plex_sans()
```

Details

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

`import_public_sans` *Import Public Sans font for use in charts*

Description

Public Sans is Copyright 2015 Impallari Type and licensed under the SIL Open Font License, Version 1.1

Usage

```
import_public_sans()
```

Details

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

import_roboto_condensed *Import Roboto Condensed font for use in charts*

Description

Roboto Condensed is a trademark of Google.

Usage

```
import_roboto_condensed()
```

Details

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

Note

This will take care of ensuring PDF/PostScript usage. The location of the font directory is displayed after the base import is complete. It is highly recommended that you install them on your system the same way you would any other font you wish to use in other programs.

ipsum_pal *A muted, qualitative color palette*

Description

A muted, qualitative color palette

Usage

```
ipsum_pal()
```

Examples

```
library(scales)
scales::show_col(ipsum_pal()(9))
```

modern_geom_defaults *Change geom defaults from black to white for the modern theme*

Description

Change geom defaults from black to white for the modern theme

Usage

```
modern_geom_defaults()
```

scale_colour_ft *Discrete color & fill scales based on the FT palette*

Description

See ft_pal().

Usage

```
scale_colour_ft(...)

scale_color_ft(...)

scale_fill_ft(...)
```

Arguments

...	Arguments passed on to ggplot2::discrete_scale
aesthetics	The names of the aesthetics that this scale works with.
scale_name	**[Deprecated]** The name of the scale that should be used for error messages associated with this scale.
palette	A palette function that when called with a single integer argument (the number of levels in the scale) returns the values that they should take (e.g., scales::pal_hue()).
name	The name of the scale. Used as the axis or legend title. If waiver(), the default, the name of the scale is taken from the first mapping used for that aesthetic. If NULL, the legend title will be omitted.
breaks	One of: • NULL for no breaks • waiver() for the default breaks (the scale limits) • A character vector of breaks • A function that takes the limits as input and returns breaks as output. Also accepts rlang lambda function notation.

`labels` One of:

- `NULL` for no labels
- `waiver()` for the default labels computed by the transformation object
- A character vector giving labels (must be same length as `breaks`)
- An expression vector (must be the same length as breaks). See ?plotmath for details.
- A function that takes the breaks as input and returns labels as output. Also accepts rlang lambda function notation.

`limits` One of:

- `NULL` to use the default scale values
- A character vector that defines possible values of the scale and their order
- A function that accepts the existing (automatic) values and returns new ones. Also accepts rlang lambda function notation.

`na.translate` Unlike continuous scales, discrete scales can easily show missing values, and do so by default. If you want to remove missing values from a discrete scale, specify `na.translate = FALSE`.

`na.value` If `na.translate = TRUE`, what aesthetic value should the missing values be displayed as? Does not apply to position scales where `NA` is always placed at the far right.

`drop` Should unused factor levels be omitted from the scale? The default, `TRUE`, uses the levels that appear in the data; `FALSE` uses all the levels in the factor.

`guide` A function used to create a guide or its name. See `guides()` for more information.

`call` The `call` used to construct the scale for reporting messages.

`super` The super class to use for the constructed scale

`scale_colour_ipsum` *Discrete color & fill scales based on the ipsum palette*

Description

See `ipsum_pal()`.

Usage

```
scale_colour_ipsum(...)

scale_color_ipsum(...)

scale_fill_ipsum(...)
```

Arguments

...	Arguments passed on to ggplot2::discrete_scale
	aesthetics The names of the aesthetics that this scale works with.
	scale_name **[Deprecated]** The name of the scale that should be used for error messages associated with this scale.
	palette A palette function that when called with a single integer argument (the number of levels in the scale) returns the values that they should take (e.g., scales::pal_hue()).
	name The name of the scale. Used as the axis or legend title. If waiver(), the default, the name of the scale is taken from the first mapping used for that aesthetic. If NULL, the legend title will be omitted.
	breaks One of: • NULL for no breaks • waiver() for the default breaks (the scale limits) • A character vector of breaks • A function that takes the limits as input and returns breaks as output. Also accepts rlang lambda function notation.
	labels One of: • NULL for no labels • waiver() for the default labels computed by the transformation object • A character vector giving labels (must be same length as breaks) • An expression vector (must be the same length as breaks). See ?plotmath for details. • A function that takes the breaks as input and returns labels as output. Also accepts rlang lambda function notation.
	limits One of: • NULL to use the default scale values • A character vector that defines possible values of the scale and their order • A function that accepts the existing (automatic) values and returns new ones. Also accepts rlang lambda function notation.
	na.translate Unlike continuous scales, discrete scales can easily show missing values, and do so by default. If you want to remove missing values from a discrete scale, specify na.translate = FALSE.
	na.value If na.translate = TRUE, what aesthetic value should the missing values be displayed as? Does not apply to position scales where NA is always placed at the far right.
	drop Should unused factor levels be omitted from the scale? The default, TRUE, uses the levels that appear in the data; FALSE uses all the levels in the factor.
	guide A function used to create a guide or its name. See guides() for more information.
	call The call used to construct the scale for reporting messages.
	super The super class to use for the constructed scale

scale_x_percent *X & Y scales with opinionated pre-sets for percent & comma label formats*

Description

The _comma ones set comma format for axis text and expand=c(0,0) (you need to set limits).

Usage

```
scale_x_percent(
  name = waiver(),
  breaks = waiver(),
  minor_breaks = waiver(),
  guide = waiver(),
  n.breaks = NULL,
  labels,
  limits = NULL,
  expand = c(0.01, 0),
  oob = censor,
  na.value = NA_real_,
  trans = "identity",
  transform = "identity",
  position = "bottom",
  sec.axis = waiver(),
  accuracy = 1,
  scale = 100,
  prefix = "",
  suffix = "%",
  big.mark = " ",
  decimal.mark = ".",
  trim = TRUE,
  ...
)

scale_y_percent(
  name = waiver(),
  breaks = waiver(),
  minor_breaks = waiver(),
  guide = waiver(),
  n.breaks = NULL,
  labels,
  limits = NULL,
  expand = c(0.01, 0),
  oob = censor,
  na.value = NA_real_,
  trans = "identity",
```

```
  transform = "identity",
  position = "left",
  sec.axis = waiver(),
  accuracy = 1,
  scale = 100,
  prefix = "",
  suffix = "%",
  big.mark = " ",
  decimal.mark = ".",
  trim = TRUE,
  ...
)

scale_x_comma(
  name = waiver(),
  breaks = waiver(),
  minor_breaks = waiver(),
  guide = waiver(),
  n.breaks = NULL,
  labels,
  limits = NULL,
  expand = c(0.01, 0),
  oob = censor,
  na.value = NA_real_,
  trans = "identity",
  transform = "identity",
  position = "bottom",
  sec.axis = waiver(),
  accuracy = 1,
  scale = 1,
  prefix = "",
  suffix = "",
  big.mark = ",",
  decimal.mark = ".",
  trim = TRUE,
  ...
)

scale_y_comma(
  name = waiver(),
  breaks = waiver(),
  minor_breaks = waiver(),
  guide = waiver(),
  n.breaks = NULL,
  labels,
  limits = NULL,
  expand = c(0.01, 0),
  oob = censor,
```

```
  na.value = NA_real_,
  trans = "identity",
  transform = "identity",
  position = "left",
  sec.axis = waiver(),
  accuracy = 1,
  scale = 1,
  prefix = "",
  suffix = "",
  big.mark = ",",
  decimal.mark = ".",
  trim = TRUE,
  ...
)
```

Arguments

name	The name of the scale. Used as axis or legend title. If `waiver()`, the default, the name of the scale is taken from the first mapping used for that aesthetic. If `NULL`, the legend title will be omitted.
breaks	One of: • `NULL` for no breaks • `waiver()` for the default breaks computed by the transformation object • A numeric vector of positions • A function that takes the limits as input and returns breaks as output
minor_breaks	One of: • `NULL` for no minor breaks • `waiver()` for the default breaks (one minor break between each major break) • A numeric vector of positions • A function that given the limits returns a vector of minor breaks.
guide	guide A function used to create a guide or its name. See `guides()` for more information.
n.breaks	An integer guiding the number of major breaks. The algorithm may choose a slightly different number to ensure nice break labels. Will only have an effect if `breaks = waiver()`. Use NULL to use the default number of breaks given by the transformation.
labels	Specifying overrides the default format (i.e. you really don't want to do that). `NULL` means no labels.
limits	A numeric vector of length two providing limits of the scale. Use `NA` to refer to the existing minimum or maximum.
expand	same as in ggplot2
oob	Function that handles limits outside of the scale limits (out of bounds). The default replaces out of bounds values with NA.

na.value	If na.translate = TRUE, what value aesthetic value should missing be displayed as? Does not apply to position scales where NA is always placed at the far right.
trans	(DEPRECATED) Either the name of a transformation object, or the object itself. Built-in transformations include "asn", "atanh", "boxcox", "exp", "identity", "log", "log10", "log1p", "log2", "logit", "probability", "probit", "reciprocal", "reverse" and "sqrt".
transform	Either the name of a transformation object, or the object itself. Built-in transformations include "asn", "atanh", "boxcox", "exp", "identity", "log", "log10", "log1p", "log2", "logit", "probability", "probit", "reciprocal", "reverse" and "sqrt".
position	The position of the axis. "left" or "right" for vertical scales, "top" or "bottom" for horizontal scales
sec.axis	specify a secondary axis
accuracy, scale, prefix, suffix, big.mark, decimal.mark, trim	See [scales::comma_format()] or [scales::percent_format()]
...	passed on to [scales::comma_format()] or [scales::percent_format()]

Details

The _percent ones set percent format for axis text and expand=c(0,0) (you need to set limits).

---

theme_ft_rc *A precise & pristine ggplot2 theme with opinionated defaults and an emphasis on typoghraphy*

Description

You should import_roboto_condensed() first and also install the fonts on your system before trying to use this theme.

Usage

```
theme_ft_rc(
  base_family = "Roboto Condensed",
  base_size = 11.5,
  plot_title_family = base_family,
  plot_title_size = 18,
  plot_title_face = "bold",
  plot_title_margin = 10,
  subtitle_family = if (.Platform$OS.type == "windows") "Roboto Condensed" else
    "Roboto Condensed Light",
  subtitle_size = 13,
  subtitle_face = "plain",
  subtitle_margin = 15,
  strip_text_family = base_family,
```

```
  strip_text_size = 12,
  strip_text_face = "plain",
  caption_family = if (.Platform$OS.type == "windows") "Roboto Condensed" else
    "Roboto Condensed Light",
  caption_size = 9,
  caption_face = "plain",
  caption_margin = 10,
  axis_text_size = base_size,
  axis_title_family = base_family,
  axis_title_size = 9,
  axis_title_face = "plain",
  axis_title_just = "rt",
  plot_margin = margin(30, 30, 30, 30),
  grid = TRUE,
  axis = FALSE,
  ticks = FALSE
)

theme_modern_rc(
  base_family = "Roboto Condensed",
  base_size = 11.5,
  plot_title_family = base_family,
  plot_title_size = 18,
  plot_title_face = "bold",
  plot_title_margin = 10,
  subtitle_family = if (.Platform$OS.type == "windows") "Roboto Condensed" else
    "Roboto Condensed Light",
  subtitle_size = 13,
  subtitle_face = "plain",
  subtitle_margin = 15,
  strip_text_family = base_family,
  strip_text_size = 12,
  strip_text_face = "plain",
  caption_family = if (.Platform$OS.type == "windows") "Roboto Condensed" else
    "Roboto Condensed Light",
  caption_size = 9,
  caption_face = "plain",
  caption_margin = 10,
  axis_text_size = base_size,
  axis_title_family = base_family,
  axis_title_size = 9,
  axis_title_face = "plain",
  axis_title_just = "rt",
  plot_margin = margin(30, 30, 30, 30),
  grid = TRUE,
  axis = FALSE,
  ticks = FALSE
)
```

```
theme_ipsum_rc(
  base_family = "Roboto Condensed",
  base_size = 11.5,
  plot_title_family = base_family,
  plot_title_size = 18,
  plot_title_face = "bold",
  plot_title_margin = 10,
  subtitle_family = if (.Platform$OS.type == "windows") "Roboto Condensed" else
    "Roboto Condensed Light",
  subtitle_size = 13,
  subtitle_face = "plain",
  subtitle_margin = 15,
  strip_text_family = base_family,
  strip_text_size = 12,
  strip_text_face = "plain",
  caption_family = if (.Platform$OS.type == "windows") "Roboto Condensed" else
    "Roboto Condensed Light",
  caption_size = 9,
  caption_face = "plain",
  caption_margin = 10,
  axis_text_size = base_size,
  axis_title_family = base_family,
  axis_title_size = 9,
  axis_title_face = "plain",
  axis_title_just = "rt",
  plot_margin = margin(30, 30, 30, 30),
  panel_spacing = grid::unit(2, "lines"),
  grid_col = "#cccccc",
  grid = TRUE,
  axis_col = "#cccccc",
  axis = FALSE,
  ticks = FALSE
)
```

Arguments

`base_family`, `base_size`
: base font family and size

`plot_title_family`, `plot_title_face`, `plot_title_size`, `plot_title_margin`
: plot tilte family, face, size and margin

`subtitle_family`, `subtitle_face`, `subtitle_size`
: plot subtitle family, face and size

`subtitle_margin`
: plot subtitle margin bottom (single numeric value)

`strip_text_family`, `strip_text_face`, `strip_text_size`
: facet label font family, face and size

`caption_family`, `caption_face`, `caption_size`, `caption_margin`
: plot caption family, face, size and margin

`axis_text_size`
: font size of axis text

`axis_title_family`, `axis_title_face`, `axis_title_size`
: axis title font family, face and size

`axis_title_just`
: axis title font justification one of `[blmcrt]`

`plot_margin`
: plot margin (specify with ggplot2::margin)

`grid`
: panel grid (`TRUE`, `FALSE`, or a combination of `X`, `x`, `Y`, `y`)

`axis`
: add x or y axes? `TRUE`, `FALSE`, "`xy`"

`ticks`
: ticks if `TRUE` add ticks

`panel_spacing`
: panel spacing (use `unit()`)

`grid_col`
: grid color

`axis_col`
: axis color

Details

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

Why Roboto Condensed?

It's free, has tolerable kerning pairs and multiple weights. It's also different than Arial Narrow and the fonts most folks use in ggplot2 charts.

Examples

```
## Not run:
library(ggplot2)
library(dplyr)

# seminal scatterplot
ggplot(mtcars, aes(mpg, wt)) +
  geom_point() +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 scatterplot example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_rc()

# seminal bar chart

# note: make this font_rc on Windows
update_geom_font_defaults(family=font_rc_light)

count(mpg, class) %>%
  ggplot(aes(class, n)) +
```

```
  geom_col() +
  geom_text(aes(label=n), nudge_y=3) +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 bar chart example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_rc(grid="Y") +
  theme(axis.text.y=element_blank())

## End(Not run)
```

---

theme_ipsum *A precise & pristine ggplot2 theme with opinionated defaults and an emphasis on typography*

Description

Also has a "dark" / "modern" version for the new RStudio theme

Usage

```
theme_ipsum(
  base_family = "Arial Narrow",
  base_size = 11.5,
  plot_title_family = base_family,
  plot_title_size = 18,
  plot_title_face = "bold",
  plot_title_margin = 10,
  subtitle_family = base_family,
  subtitle_size = 12,
  subtitle_face = "plain",
  subtitle_margin = 15,
  strip_text_family = base_family,
  strip_text_size = 12,
  strip_text_face = "plain",
  caption_family = base_family,
  caption_size = 9,
  caption_face = "italic",
  caption_margin = 10,
  axis_text_size = base_size,
  axis_title_family = subtitle_family,
  axis_title_size = 9,
  axis_title_face = "plain",
  axis_title_just = "rt",
  plot_margin = margin(30, 30, 30, 30),
  grid_col = "#cccccc",
  grid = TRUE,
  axis_col = "#cccccc",
```

```
  axis = FALSE,
  ticks = FALSE
)
```

Arguments

base_family, base_size	base font family and size
plot_title_family, plot_title_face, plot_title_size, plot_title_margin	plot title family, face, size and margi
subtitle_family, subtitle_face, subtitle_size	plot subtitle family, face and size
subtitle_margin	plot subtitle margin bottom (single numeric value)
strip_text_family, strip_text_face, strip_text_size	facet label font family, face and size
caption_family, caption_face, caption_size, caption_margin	plot caption family, face, size and margin
axis_text_size	font size of axis text
axis_title_family, axis_title_face, axis_title_size	axis title font family, face and size
axis_title_just	axis title font justification, one of [blmcrt]
plot_margin	plot margin (specify with ggplot2::margin())
grid_col, axis_col	grid & axis colors; both default to #cccccc
grid	panel grid (TRUE, FALSE, or a combination of X, x, Y, y)
axis	add x or y axes? TRUE, FALSE, "xy"
ticks	ticks if TRUE add ticks

Why Arial Narrow?

First and foremost, Arial Narrow is generally installed by default or readily available on any modern system, so it's "free"-ish; plus, it is a condensed font with solid default kerning pairs and geometric numbers.

Building upon theme_ipsum

The function is setup in such a way that you can customize your own one by just wrapping the call and changing the parameters. See source for examples.

Gotchas

There are distinctions between font names and various devices. Names that work for display graphics devices and bitmap ones such as png may not work well for PostScript or PDF ones. You may need two versions of a font-based theme function for them to work in a particular situation. This

situation usually only arises when using a newer font with many weights but somewhat irregular internal font name patterns.

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

Examples

```
## Not run:
library(ggplot2)
library(dplyr)

# seminal scatterplot
ggplot(mtcars, aes(mpg, wt)) +
  geom_point() +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 scatterplot example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum()

# seminal bar chart

update_geom_font_defaults()

count(mpg, class) %>%
  ggplot(aes(class, n)) +
  geom_col() +
  geom_text(aes(label=n), nudge_y=3) +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 bar chart example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum(grid="Y") +
  theme(axis.text.y=element_blank())

## End(Not run)
```

`theme_ipsum_es` *A precise & pristine ggplot2 theme with opinionated defaults and an emphasis on typoghraphy*

Description

You should `import_econ_sans()` first and install the fonts on your system before trying to use this theme.

Usage

```
theme_ipsum_es(
  base_family = "EconSansCndReg",
  base_size = 11.5,
  plot_title_family = "EconSansCndBol",
  plot_title_size = 18,
  plot_title_face = "bold",
  plot_title_margin = 10,
  subtitle_family = if (.Platform$OS.type == "windows") "EconSansCndLig" else
    "EconSansCndLig",
  subtitle_size = 13,
  subtitle_face = "plain",
  subtitle_margin = 15,
  strip_text_family = base_family,
  strip_text_size = 12,
  strip_text_face = "plain",
  caption_family = if (.Platform$OS.type == "windows") "EconSansCndLig" else
    "EconSansCndLig",
  caption_size = 9,
  caption_face = "plain",
  caption_margin = 10,
  axis_text_size = base_size,
  axis_title_family = base_family,
  axis_title_size = 9,
  axis_title_face = "plain",
  axis_title_just = "rt",
  plot_margin = margin(30, 30, 30, 30),
  panel_spacing = grid::unit(2, "lines"),
  grid_col = "#cccccc",
  grid = TRUE,
  axis_col = "#cccccc",
  axis = FALSE,
  ticks = FALSE
)
```

Arguments

`base_family`, `base_size`
: base font family and size

`plot_title_family`, `plot_title_face`, `plot_title_size`, `plot_title_margin`
: plot tilte family, face, size and margin

`subtitle_family`, `subtitle_face`, `subtitle_size`
: plot subtitle family, face and size

`subtitle_margin`
: plot subtitle margin bottom (single numeric value)

`strip_text_family`, `strip_text_face`, `strip_text_size`
: facet label font family, face and size

`caption_family, caption_face, caption_size, caption_margin`
: plot caption family, face, size and margin

`axis_text_size`
: font size of axis text

`axis_title_family, axis_title_face, axis_title_size`
: axis title font family, face and size

`axis_title_just`
: axis title font justification one of `[blmcrt]`

`plot_margin`
: plot margin (specify with ggplot2::margin)

`panel_spacing`
: panel spacing (use `unit()`)

`grid_col`
: grid color

`grid`
: panel grid (`TRUE`, `FALSE`, or a combination of `X`, `x`, `Y`, `y`)

`axis_col`
: axis color

`axis`
: add x or y axes? `TRUE`, `FALSE`, "`xy`"

`ticks`
: ticks if `TRUE` add ticks

Details

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

Why Econ Sans Condensed?

It's free, has tolerable kerning pairs and multiple weights. It's also different than Arial Narrow and the fonts most folks use in ggplot2 charts.

Examples

```
## Not run:
library(ggplot2)
library(dplyr)

# seminal scatterplot
ggplot(mtcars, aes(mpg, wt)) +
  geom_point() +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 scatterplot example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_es()

# seminal bar chart

# note: may need to make this font_es on Windows
update_geom_font_defaults(family=font_es_light)

count(mpg, class) %>%
  ggplot(aes(class, n)) +
```

```
  geom_col() +
  geom_text(aes(label=n), nudge_y=3) +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 bar chart example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_es(grid="Y") +
  theme(axis.text.y=element_blank())

## End(Not run)
```

---

theme_ipsum_gs *A precise & pristine ggplot2 theme with opinionated defaults and an emphasis on typoghraphy*

Description

You should `import_goldman_sans()` first and install the fonts on your system before trying to use this theme.

Usage

```
theme_ipsum_gs(
  base_family = "Goldman Sans Condensed",
  base_size = 11.5,
  plot_title_family = "Goldman Sans Condensed",
  plot_title_size = 18,
  plot_title_face = "bold",
  plot_title_margin = 10,
 subtitle_family = if (.Platform$OS.type == "windows") "Goldman Sans Condensed" else
    "Goldman Sans Condensed",
  subtitle_size = 13,
  subtitle_face = "plain",
  subtitle_margin = 15,
  strip_text_family = "Goldman Sans Condensed",
  strip_text_size = 12,
  strip_text_face = "bold",
 caption_family = if (.Platform$OS.type == "windows") "Goldman Sans Condensed" else
    "Goldman Sans Condensed",
  caption_size = 9,
  caption_face = "plain",
  caption_margin = 10,
  axis_text_size = 9,
  axis_title_family = base_family,
  axis_title_size = 9,
  axis_title_face = "plain",
  axis_title_just = "rt",
  plot_margin = margin(30, 30, 30, 30),
```

```
  grid_col = "#cccccc",
  grid = TRUE,
  axis_col = "#cccccc",
  axis = FALSE,
  ticks = FALSE
)
```

Arguments

`base_family, base_size`	base font family and size
`plot_title_family, plot_title_face, plot_title_size, plot_title_margin`	plot tilte family, face, size and margin
`subtitle_family, subtitle_face, subtitle_size`	plot subtitle family, face and size
`subtitle_margin`	plot subtitle margin bottom (single numeric value)
`strip_text_family, strip_text_face, strip_text_size`	facet label font family, face and size
`caption_family, caption_face, caption_size, caption_margin`	plot caption family, face, size and margin
`axis_text_size`	font size of axis text
`axis_title_family, axis_title_face, axis_title_size`	axis title font family, face and size
`axis_title_just`	axis title font justification one of `[blmcrt]`
`plot_margin`	plot margin (specify with ggplot2::margin)
`grid_col`	grid color
`grid`	panel grid (`TRUE`, `FALSE`, or a combination of `X`, `x`, `Y`, `y`)
`axis_col`	axis color
`axis`	add x or y axes? `TRUE`, `FALSE`, `"xy"`
`ticks`	ticks if `TRUE` add ticks

Details

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

Why Goldman Sans?

Google "goldman sans design system"

Examples

```
## Not run:
library(ggplot2)
library(dplyr)

# seminal scatterplot
ggplot(mtcars, aes(mpg, wt)) +
  geom_point() +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 scatterplot example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_gs()

# seminal bar chart

update_geom_font_defaults(family=font_gs_light)

count(mpg, class) %>%
  ggplot(aes(class, n)) +
  geom_col() +
  geom_text(aes(label=n), nudge_y=3) +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 bar chart example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_gs(grid="Y") +
  theme(axis.text.y=element_blank())

## End(Not run)
```

`theme_ipsum_inter` *A precise & pristine ggplot2 theme with opinionated defaults and an emphasis on typoghraphy*

Description

You should `import_inter()` first and install the fonts on your system before trying to use this theme.

Usage

```
theme_ipsum_inter(
  base_family = "Inter-Medium",
  base_size = 10,
  plot_title_family = "Inter-Bold",
  plot_title_size = 16,
  plot_title_face = "bold",
  plot_title_margin = 8,
```

```
  subtitle_family = "Inter-Light",
  subtitle_size = 12,
  subtitle_face = "plain",
  subtitle_margin = 13,
  strip_text_family = "Inter-SemiBold",
  strip_text_size = 12,
  strip_text_face = "bold",
  caption_family = "Inter-Thin",
  caption_size = 9,
  caption_face = "plain",
  caption_margin = 10,
  axis_text_family = "Inter-Light",
  axis_text_face = "plain",
  axis_text_size = 9,
  axis_title_family = base_family,
  axis_title_size = 9,
  axis_title_face = "plain",
  axis_title_just = "rt",
  plot_margin = margin(30, 30, 30, 30),
  grid_col = "#cccccc",
  grid = TRUE,
  axis_col = "#cccccc",
  axis = FALSE,
  ticks = FALSE
)
```

Arguments

`base_family`, `base_size`
: base font family and size

`plot_title_family`, `plot_title_face`, `plot_title_size`, `plot_title_margin`
: plot tilte family, face, size and margin

`subtitle_family`, `subtitle_face`, `subtitle_size`
: plot subtitle family, face and size

`subtitle_margin`
: plot subtitle margin bottom (single numeric value)

`strip_text_family`, `strip_text_face`, `strip_text_size`
: facet label font family, face and size

`caption_family`, `caption_face`, `caption_size`, `caption_margin`
: plot caption family, face, size and margin

`axis_text_family`, `axis_text_face`,
: axis text font family and face

`axis_text_size` font size of axis text

`axis_title_family`, `axis_title_face`, `axis_title_size`
: axis title font family, face and size

`axis_title_just`
: axis title font justification one of `[blmcrt]`

plot_margin	plot margin (specify with ggplot2::margin)
grid_col	grid color
grid	panel grid (TRUE, FALSE, or a combination of X, x, Y, y)
axis_col	axis color
axis	add x or y axes? TRUE, FALSE, "xy"
ticks	ticks if TRUE add ticks

Details

There is an option hrbrthemes.loadfonts which – if set to TRUE – will call extrafont::loadfonts() to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

Why Inter?

Google "inter font".

Examples

```
## Not run:
library(ggplot2)
library(dplyr)

# seminal scatterplot
ggplot(mtcars, aes(mpg, wt)) +
  geom_point() +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 scatterplot example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_inter()

# seminal bar chart

update_geom_font_defaults(family=font_inter_medium)

count(mpg, class) %>%
  ggplot(aes(class, n)) +
  geom_col() +
  geom_text(aes(label=n), nudge_y=3) +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 bar chart example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_inter(grid="Y") +
  theme(axis.text.y=element_blank())

## End(Not run)
```

theme_ipsum_ps *A precise & pristine ggplot2 theme with opinionated defaults and an emphasis on typoghraphy*

Description

You should `import_plex_sans()` first and install the fonts on your system before trying to use this theme.

Usage

```
theme_ipsum_ps(
  base_family = "IBMPlexSans",
  base_size = 11.5,
  plot_title_family = "IBMPlexSans-Bold",
  plot_title_size = 18,
  plot_title_face = "plain",
  plot_title_margin = 10,
  subtitle_family = if (.Platform$OS.type == "windows") "IBMPlexSans" else
    "IBMPlexSans-Light",
  subtitle_size = 13,
  subtitle_face = "plain",
  subtitle_margin = 15,
  strip_text_family = "IBMPlexSans-Medium",
  strip_text_size = 12,
  strip_text_face = "plain",
  caption_family = if (.Platform$OS.type == "windows") "IBMPlexSans" else
    "IBMPlexSans-Thin",
  caption_size = 9,
  caption_face = "plain",
  caption_margin = 10,
  axis_text_size = 9,
  axis_title_family = base_family,
  axis_title_size = 9,
  axis_title_face = "plain",
  axis_title_just = "rt",
  plot_margin = margin(30, 30, 30, 30),
  grid_col = "#cccccc",
  grid = TRUE,
  axis_col = "#cccccc",
  axis = FALSE,
  ticks = FALSE
)
```

Arguments

`base_family, base_size`
: base font family and size

`plot_title_family, plot_title_face, plot_title_size, plot_title_margin`
: plot tilte family, face, size and margin

`subtitle_family, subtitle_face, subtitle_size`
: plot subtitle family, face and size

`subtitle_margin`
: plot subtitle margin bottom (single numeric value)

`strip_text_family, strip_text_face, strip_text_size`
: facet label font family, face and size

`caption_family, caption_face, caption_size, caption_margin`
: plot caption family, face, size and margin

`axis_text_size`
: font size of axis text

`axis_title_family, axis_title_face, axis_title_size`
: axis title font family, face and size

`axis_title_just`
: axis title font justification one of `[blmcrt]`

`plot_margin`
: plot margin (specify with ggplot2::margin)

`grid_col`
: grid color

`grid`
: panel grid (`TRUE`, `FALSE`, or a combination of `X`, `x`, `Y`, `y`)

`axis_col`
: axis color

`axis`
: add x or y axes? `TRUE`, `FALSE`, `"xy"`

`ticks`
: ticks if `TRUE` add ticks

Details

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

Why IBM Plex Sans?

It's free, has tolerable kerning pairs and multiple weights. It's also different "not Helvetica".

Examples

```
## Not run:
library(ggplot2)
library(dplyr)

# seminal scatterplot
ggplot(mtcars, aes(mpg, wt)) +
  geom_point() +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 scatterplot example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_rc()
```

```
# seminal bar chart

# note: make this font_rc on Windows
update_geom_font_defaults(family=font_rc_light)

count(mpg, class) %>%
  ggplot(aes(class, n)) +
  geom_col() +
  geom_text(aes(label=n), nudge_y=3) +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 bar chart example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_rc(grid="Y") +
  theme(axis.text.y=element_blank())

## End(Not run)
```

---

theme_ipsum_pub *A precise & pristine ggplot2 theme with opinionated defaults and an emphasis on typoghraphy*

Description

You should import_public_sans() first and install the fonts on your system before trying to use this theme.

Usage

```
theme_ipsum_pub(
  base_family = "Public Sans",
  base_size = 10.5,
  plot_title_family = if (.Platform$OS.type == "windows") "Public Sans" else
    "Public Sans Bold",
  plot_title_size = 18,
  plot_title_face = "bold",
  plot_title_margin = 10,
  subtitle_family = if (.Platform$OS.type == "windows") "Public Sans Thin" else
    "Public Sans Thin",
  subtitle_size = 13,
  subtitle_face = "plain",
  subtitle_margin = 15,
  strip_text_family = base_family,
  strip_text_size = 12,
  strip_text_face = "plain",
  caption_family = if (.Platform$OS.type == "windows") "Public Sans Thin" else
    "Public Sans Thin",
  caption_size = 9,
```

```
  caption_face = "plain",
  caption_margin = 10,
  axis_text_size = base_size,
  axis_title_family = base_family,
  axis_title_size = 9,
  axis_title_face = "plain",
  axis_title_just = "rt",
  plot_margin = margin(30, 30, 30, 30),
  grid_col = "#cccccc",
  grid = TRUE,
  axis_col = "#cccccc",
  axis = FALSE,
  ticks = FALSE
)
```

Arguments

`base_family, base_size`	base font family and size
`plot_title_family, plot_title_face, plot_title_size, plot_title_margin`	plot tilte family, face, size and margin
`subtitle_family, subtitle_face, subtitle_size`	plot subtitle family, face and size
`subtitle_margin`	plot subtitle margin bottom (single numeric value)
`strip_text_family, strip_text_face, strip_text_size`	facet label font family, face and size
`caption_family, caption_face, caption_size, caption_margin`	plot caption family, face, size and margin
`axis_text_size`	font size of axis text
`axis_title_family, axis_title_face, axis_title_size`	axis title font family, face and size
`axis_title_just`	axis title font justification one of `[blmcrt]`
`plot_margin`	plot margin (specify with ggplot2::margin)
`grid_col`	grid color
`grid`	panel grid (`TRUE`, `FALSE`, or a combination of `X`, `x`, `Y`, `y`)
`axis_col`	axis color
`axis`	add x or y axes? `TRUE`, `FALSE`, `"xy"`
`ticks`	ticks if `TRUE` add ticks

Details

There is an option `hrbrthemes.loadfonts` which – if set to `TRUE` – will call `extrafont::loadfonts()` to register non-core fonts with R PDF & PostScript devices. If you are running under Windows, the package calls the same function to register non-core fonts with the Windows graphics device.

Why Public Sans?

See the design principles.

Examples

```
## Not run:
library(ggplot2)
library(dplyr)

# seminal scatterplot
ggplot(mtcars, aes(mpg, wt)) +
  geom_point() +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 scatterplot example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_pub()

# seminal bar chart

update_geom_font_defaults(family=font_pub)

count(mpg, class) %>%
  ggplot(aes(class, n)) +
  geom_col() +
  geom_text(aes(label=n), nudge_y=3) +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="Seminal ggplot2 bar chart example",
       subtitle="A plot that is only useful for demonstration purposes",
       caption="Brought to you by the letter 'g'") +
  theme_ipsum_pub(grid="Y") +
  theme(axis.text.y=element_blank())

## End(Not run)
```

---

update_geom_font_defaults

Update matching font defaults for text geoms

Description

Updates [ggplot2::geom_label] and [ggplot2::geom_text] font defaults

Usage

```
update_geom_font_defaults(
  family = "Arial Narrow",
  face = "plain",
  size = 3.5,
```

```
  color = "#2b2b2b"
)
```

Arguments

`family, face, size, color`	font family name, face, size and color

Index