Package: ggrefine (via r-universe)

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Title Publication-Quality 'ggplot2' Themes

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Description Complete themes and functions for publication-quality 'ggplot2' visualisation.

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Author David Hodge [aut, cre, cph] (ORCID: <https://orcid.org/0000-0002-3868-7501>)

Maintainer David Hodge <davidhodge931@gmail.com>

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`aes_colour_blend` *Blend fill into a derived colour mapping*

Description

Note: this sets `colour`, not `fill` — `fill` is the value it reads from, `colour` is what it derives. Maps `colour` to a blended version of `fill`, evaluated after scale training via `ggplot2::after_scale()`. Attaches no scale itself — use `scale_colour_blend_discrete()` (or `_continuous`/`_binned`) for a ready-to-plot version that also scales `fill`. Requires the `ggrefine` function to be used instead of `ggplot2::ggplot` to work where no fill aesthetic is mapped.

Usage

```
aes_colour_blend(blend = NULL)
```

Arguments

`blend`	A function that takes a colour vector and returns a blended colour vector.

Value

A ggplot2 mapping object (as returned by ggplot2::aes()).

---

aes_colour_contrast *Derive a legible colour by contrasting against fill*

Description

Note: this sets colour, not fill — fill is the value it reads from, colour is what it derives. Maps colour to a dark or light shade chosen for contrast against the layer's fill aesthetic, evaluated after scale training via ggplot2::after_scale(). Attaches no scale itself — sits downstream of whatever fill scale you've already applied.

Usage

```
aes_colour_contrast(dark = NULL, light = NULL, ...)
```

Arguments

dark	A dark colour string or hex value. If NULL, derived from the active theme.
light	A light colour string or hex value. If NULL, derived from the active theme.
...	Unused. Included to support trailing commas.

Value

A ggplot2 mapping object (as returned by ggplot2::aes()).

---

aes_colour_panel *Derive a legible colour by contrasting against the panel background*

Description

Maps colour to a dark or light shade chosen for contrast against the active theme's panel (or plot) background fill, evaluated after scale training via ggplot2::after_scale(). Attaches no scale itself.

Usage

```
aes_colour_panel(dark = NULL, light = NULL, ...)
```

Arguments

dark	A dark colour string or hex value. If NULL, derived from the active theme.
light	A light colour string or hex value. If NULL, derived from the active theme.
...	Unused. Included to support trailing commas.

Value

A ggplot2 mapping object (as returned by ggplot2::aes()).

---

aes_fill_blend *Blend colour into a derived fill mapping*

Description

Note: this sets fill, not colour — colour is the value it reads from, fill is what it derives. Maps fill to a blended version of colour, evaluated after scale training via ggplot2::after_scale(). Attaches no scale itself — use scale_fill_blend_discrete() (or _continuous/_binned) for a ready-to-plot version that also scales colour.

Usage

```
aes_fill_blend(blend = NULL)
```

Arguments

blend	A function that takes a colour vector and returns a blended colour vector.

Value

A ggplot2 mapping object (as returned by ggplot2::aes()).

---

ggrefine *Initialize a plot object with theme-aware default aesthetics*

Description

ggrefine() initializes a plot object using a specified plotting function (defaults to ggplot2::ggplot()) and pre-populates default identity fill and colour aesthetic mappings derived from the active theme's geom defaults (falling back to "grey35" and "black" respectively).

These default aesthetics act as lightweight fallbacks and are cleanly overridden when explicit mappings are added in subsequent layers via ggplot2::aes().

Usage

```
ggrefine(data = NULL, initialise = ggplot2::ggplot)
```

Arguments

data	Default data frame or graph object to use for plot. If not specified, must be supplied in individual layers.
initialise	Function or lambda used to initialize the plot object (e.g., ggplot2::ggplot, \(x) ggplot2::ggplot(x), or \(x) ggraph::ggraph(x, layout = "kk")). Defaults to ggplot2::ggplot().

Value

A plot object initialized with default aesthetic mappings.

Examples

```
library(ggplot2)
library(dplyr)

set_theme(ggrefine::theme_lights())

mpg |>
  count(class) |>
  ggrefine() +
  aes(x = class, y = n, fill = class) +
  geom_col() +
  scale_colour_blend_discrete()
```

`refine_axis_grid` *Refine plot axes and panel grid*

Description

A single entry point over the `axis_mode` x `grid_mode` combinations previously exposed as sixteen separate `refine_*_*()` functions. Those functions still exist internally (e.g. `.refine_modern_drift()`) and do the actual work; this function just dispatches to the right one.

Usage

```
refine_axis_grid(
  discrete = "none",
  orientation = NULL,
  ...,
  axis_mode = "modern",
  grid_mode = "flow"
)
```

Arguments

`discrete`	Character. Which axes should be treated as discrete for refinement purposes: `"none"`, `"x"`, `"y"`, or `"both"`. Default `"none"`.
`orientation`	Character. The primary axis of interest: `"x"` or `"y"`. Affects `grid_mode` values `"drift"` and `"flow"`. If `NULL` (default), it is inferred from `discrete`: `"y"` gives `"y"`, otherwise `"x"`.
`...`	For trailing comma support.
`axis_mode`	Character. One of `"modern"`, `"minimal"`, `"classic"` `"void"`. Default `"modern"`.
`grid_mode`	Character. One of `"flow"`, `"drift"`, `"keep"`, `"drop"`. Default `"flow"`.

Details

`axis_mode` controls what happens to axis lines, ticks, text, and titles:

classic Removes ticks on discrete axes only.

modern Like `classic`, plus removes the axis line and ticks on the non-orientation axis.

minimal Removes all axis lines and ticks, regardless of orientation or discreteness.

void Like `minimal`, plus removes all axis text and titles.

`grid_mode` controls what happens to panel gridlines:

keep Leaves panel gridlines unchanged.

drift Removes gridlines on the orientation axis, but only when at least one axis is discrete.

flow Removes gridlines on the orientation axis unconditionally.

drop Removes all panel gridlines.

Value

A ggplot2 theme object.

`refine_legend` *Move Legend*

Description

Helper shortcut to set legend position, location, and margins.

Usage

```
refine_legend(position = "right", ...)
```

Arguments

`position`	Character. Where to place the legend ("right", "top", or "bottom").
`...`	For trailing comma support.

Value

A ggplot2 theme object.

scale_colour_blend_binned

Scale fill, and derive colour by blending (binned)

Description

Scales `fill` with a binned colour scale, and additionally maps `colour` to a blended version of the resulting `fill`, via `aes_colour_blend()`. The `colour` legend is suppressed since `fill` already communicates the mapping.

Usage

```
scale_colour_blend_binned(blend = NULL, ...)
```

Arguments

`blend`	A function that takes a colour vector and returns a blended colour vector.
`...`	Additional arguments passed on to `ggplot2::scale_colour_binned()`, and `ggplot2::scale_fill_binned()`.

Value

A `list` of ggplot2 components (a mapping, a binned colour/fill scale, and a guide) that can be added to a ggplot object.

scale_colour_blend_continuous

Scale fill, and derive colour by blending (continuous)

Description

Scales `fill` with a continuous colour scale, and additionally maps `colour` to a blended version of the resulting `fill`, via `aes_colour_blend()`. The `colour` legend is suppressed since `fill` already communicates the mapping.

Usage

```
scale_colour_blend_continuous(blend = NULL, ...)
```

Arguments

`blend`	A function that takes a colour vector and returns a blended colour vector.
`...`	Additional arguments passed on to `ggplot2::scale_colour_continuous()`, and `ggplot2::scale_fill_continuous()`.

Value

A `list` of ggplot2 components (a mapping, a continuous colour/fill scale, and a guide) that can be added to a ggplot object.

`scale_colour_blend_discrete` *Scale fill, and derive colour by blending (discrete)*

Description

Scales `fill` with a discrete colour scale, and additionally maps `colour` to a blended version of the resulting `fill`, via `aes_colour_blend()`. The `colour` legend is suppressed since `fill` already communicates the mapping.

Usage

```
scale_colour_blend_discrete(blend = NULL, ...)
```

Arguments

`blend`	A function that takes a colour vector and returns a blended colour vector.
`...`	Additional arguments passed on to `ggplot2::scale_colour_discrete()`, and `ggplot2::scale_fill_discrete()`.

Value

A `list` of ggplot2 components (a mapping, a discrete colour/fill scale, and a guide) that can be added to a ggplot object.

`scale_fill_blend_binned` *Scale colour, and derive fill by blending (binned)*

Description

Scales `colour` with a binned colour scale, and additionally maps `fill` to a blended version of the resulting `colour`, via `aes_fill_blend()`. The `fill` legend is suppressed since `colour` already communicates the mapping.

Usage

```
scale_fill_blend_binned(blend = NULL, ...)
```

Arguments

blend	A function that takes a colour vector and returns a blended colour vector.
...	Additional arguments passed on to ggplot2::scale_colour_binned(), and ggplot2::scale_fill_binned().

Value

A list of ggplot2 components (a mapping, a binned colour/fill scale, and a guide) that can be added to a ggplot object.

---

scale_fill_blend_continuous

Scale colour, and derive fill by blending (continuous)

Description

Scales colour with a continuous colour scale, and additionally maps fill to a blended version of the resulting colour, via aes_fill_blend(). The fill legend is suppressed since colour already communicates the mapping.

Usage

```
scale_fill_blend_continuous(blend = NULL, ...)
```

Arguments

blend	A function that takes a colour vector and returns a blended colour vector.
...	Additional arguments passed on to ggplot2::scale_colour_continuous(), and ggplot2::scale_fill_continuous().

Value

A list of ggplot2 components (a mapping, a continuous colour/fill scale, and a guide) that can be added to a ggplot object.

scale_fill_blend_discrete *Scale colour, and derive fill by blending (discrete)*

Description

Scales `colour` with a discrete colour scale, and additionally maps `fill` to a blended version of the resulting `colour`, via `aes_fill_blend()`. The `fill` legend is suppressed since `colour` already communicates the mapping.

Usage

```
scale_fill_blend_discrete(blend = NULL, ...)
```

Arguments

`blend`	A function that takes a colour vector and returns a blended colour vector.
`...`	Additional arguments passed on to `ggplot2::scale_colour_discrete()`, and `ggplot2::scale_fill_discrete()`.

Value

A `list` of ggplot2 components (a mapping, a discrete colour/fill scale, and a guide) that can be added to a ggplot object.

scale_x_zero *Set continuous x-axis minimum flush to zero*

Description

A convenience wrapper around `ggplot2::scale_x_continuous()` that sets the lower limit of the x-axis strictly to zero with no padding by default, while allowing full customization of scale parameters.

Usage

```
scale_x_zero(expand = ggplot2::expansion(c(0, 0.05)), limits = c(0, NA), ...)
```

Arguments

`expand`	Padding multiplier/addend vector. Defaults to `expansion(c(0, 0.05))`.
`limits`	Axis limits. Defaults to `c(0, NA)` to force the lower bound to zero.
`...`	Additional arguments passed on to `ggplot2::scale_x_continuous()`.

Value

A `ScaleContinuousPosition` object.

scale_y_zero *Set continuous y-axis minimum flush to zero*

Description

A convenience wrapper around `ggplot2::scale_y_continuous()` that sets the lower limit of the y-axis strictly to zero with no padding by default, while allowing full customization of scale parameters.

Usage

```
scale_y_zero(expand = ggplot2::expansion(c(0, 0.05)), limits = c(0, NA), ...)
```

Arguments

`expand`	Padding multiplier/addend vector. Defaults to `expansion(c(0, 0.05))`.
`limits`	Axis limits. Defaults to `c(0, NA)` to force the lower bound to zero.
`...`	Additional arguments passed on to `ggplot2::scale_y_continuous()`.

Value

A `ScaleContinuousPosition` object.

set_darks *set_darks*

Description

Builds `theme_darks()` and registers it as the session-wide default theme with `ggplot2::set_theme()`. All arguments are forwarded to `theme_darks()`.

Usage

```
set_darks(
  ...,
  text_size = 10,
  text_family = "",
  text_colour = "#CECDC3",
  title_size = NULL,
  title_family = NULL,
  title_colour = NULL,
  subtitle_size = NULL,
  subtitle_family = NULL,
  subtitle_colour = NULL,
  caption_size = NULL,
```

```
  caption_family = NULL,
  caption_colour = NULL,
  caption_hjust = 0,
  legend_position = "right",
  legend_axis_line_colour = NULL,
  legend_axis_line_linewidth = NULL,
  legend_background_fill = NULL,
  legend_key_fill = NULL,
  legend_ticks_colour = NULL,
  legend_ticks_linewidth = NULL,
  legend_ticks_linetype = 1,
  legend_ticks_length = grid::unit(c(2.75, 0), "pt"),
  axis_line_colour = NULL,
  axis_line_linewidth = 0.15,
  axis_ticks_colour = NULL,
  axis_ticks_linewidth = NULL,
  axis_ticks_length = grid::unit(3.66, "pt"),
  panel_background_fill = "#282726",
  panel_grid_colour = "#100F0F",
  panel_grid_linetype = 1,
  panel_grid_linewidth = 1,
  panel_grid_minor_linetype = 1,
  panel_grid_minor_linewidth = ggplot2::rel(0.5),
  plot_background_fill = "#100F0F"
)
```

Arguments

`...`	Require named arguments (and support trailing commas).
`text_size`	The base size of the text theme element. Defaults to 10.
`text_family`	The base family of the text theme element. Defaults to "".
`text_colour`	The base colour of the text theme element.
`title_size`	The size of the `plot.title` theme element. Defaults to `text_size`.
`title_family`	The family of the `plot.title` theme element. Defaults to `text_family`.
`title_colour`	The colour of the `plot.title` theme element. Defaults to `text_colour`.
`subtitle_size`	The size of the `plot.subtitle` theme element. Defaults to `text_size`.
`subtitle_family`	The family of the `plot.subtitle` theme element. Defaults to `text_family`.
`subtitle_colour`	The colour of the `plot.subtitle` theme element. Defaults to `text_colour`.
`caption_size`	The size of the `plot.caption` theme element. Defaults to `text_size`.
`caption_family`	The family of the `plot.caption` theme element. Defaults to `text_family`.
`caption_colour`	The colour of the `plot.caption` theme element. Defaults to `text_colour`.
`caption_hjust`	The horizontal justification of the `plot.caption` theme element. Defaults to 0.

`legend_position`
: The position of the legend. Either "right", "top" or "bottom".

`legend_axis_line_colour`
: The colour of the legend.axis.line theme element.

`legend_axis_line_linewidth`
: The linewidth of the legend.axis.line theme element.

`legend_background_fill`
: The fill (and colour) of the `legend.background` theme element.

`legend_key_fill`
: The fill (and colour) of the legend.key theme element.

`legend_ticks_colour`
: The colour of the legend.ticks theme element.

`legend_ticks_linewidth`
: The linewidth of the legend.ticks theme element.

`legend_ticks_linetype`
: The linetype of the legend.ticks theme element. Defaults to 1.

`legend_ticks_length`
: The length of the legend.ticks.length theme element.

`axis_line_colour`
: The colour of the axis.line theme element. Defaults to `text_colour`.

`axis_line_linewidth`
: The linewidth of the axis.line theme element.

`axis_ticks_colour`
: The colour of the axis.ticks theme element.

`axis_ticks_linewidth`
: The linewidth of the axis.ticks theme element.

`axis_ticks_length`
: The length of the axis.ticks.length theme element.

`panel_background_fill`
: The fill (and colour) of the panel.background theme element.

`panel_grid_colour`
: The colour of the panel.grid theme element.

`panel_grid_linetype`
: The linetype of the panel.grid.major theme element.

`panel_grid_linewidth`
: The linewidth of the panel.grid.major theme element.

`panel_grid_minor_linetype`
: The linetype of the panel.grid.minor theme element.

`panel_grid_minor_linewidth`
: The linewidth of the panel.grid.minor theme element.

`plot_background_fill`
: The fill (and colour) of the plot.background theme element.

Details

Set the darks theme as the active ggplot2 theme

Value

Invisibly returns the previously active theme, so it can be restored with `ggplot2::set_theme()`.

`set_greys` *set_greys*

Description

Builds `theme_greys()` and registers it as the session-wide default theme with `ggplot2::set_theme()`. All arguments are forwarded to `theme_greys()`.

Usage

```
set_greys(
  ...,
  text_size = 10,
  text_family = "",
  text_colour = "#100F0F",
  title_size = NULL,
  title_family = NULL,
  title_colour = NULL,
  subtitle_size = NULL,
  subtitle_family = NULL,
  subtitle_colour = NULL,
  caption_size = NULL,
  caption_family = NULL,
  caption_colour = NULL,
  caption_hjust = 0,
  legend_position = "right",
  legend_axis_line_colour = NULL,
  legend_axis_line_linewidth = NULL,
  legend_background_fill = NULL,
  legend_key_fill = NULL,
  legend_ticks_colour = NULL,
  legend_ticks_linewidth = NULL,
  legend_ticks_linetype = 1,
  legend_ticks_length = grid::unit(c(2.75, 0), "pt"),
  axis_line_colour = NULL,
  axis_line_linewidth = 0.15,
  axis_ticks_colour = NULL,
  axis_ticks_linewidth = NULL,
  axis_ticks_length = grid::unit(3.66, "pt"),
  panel_background_fill = "#F2F0E5FF",
  panel_grid_colour = "white",
  panel_grid_linetype = 1,
  panel_grid_linewidth = 1,
```

```
  panel_grid_minor_linetype = 1,
  panel_grid_minor_linewidth = ggplot2::rel(0.5),
  plot_background_fill = "white"
)
```

Arguments

...	Require named arguments (and support trailing commas).
text_size	The base size of the text theme element. Defaults to 10.
text_family	The base family of the text theme element. Defaults to "".
text_colour	The base colour of the text theme element.
title_size	The size of the plot.title theme element. Defaults to text_size.
title_family	The family of the plot.title theme element. Defaults to text_family.
title_colour	The colour of the plot.title theme element. Defaults to text_colour.
subtitle_size	The size of the plot.subtitle theme element. Defaults to text_size.
subtitle_family	The family of the plot.subtitle theme element. Defaults to text_family.
subtitle_colour	The colour of the plot.subtitle theme element. Defaults to text_colour.
caption_size	The size of the plot.caption theme element. Defaults to text_size.
caption_family	The family of the plot.caption theme element. Defaults to text_family.
caption_colour	The colour of the plot.caption theme element. Defaults to text_colour.
caption_hjust	The horizontal justification of the plot.caption theme element. Defaults to 0.
legend_position	The position of the legend. Either "right", "top" or "bottom".
legend_axis_line_colour	The colour of the legend.axis.line theme element.
legend_axis_line_linewidth	The linewidth of the legend.axis.line theme element.
legend_background_fill	The fill (and colour) of the legend.background theme element.
legend_key_fill	The fill (and colour) of the legend.key theme element.
legend_ticks_colour	The colour of the legend.ticks theme element.
legend_ticks_linewidth	The linewidth of the legend.ticks theme element.
legend_ticks_linetype	The linetype of the legend.ticks theme element. Defaults to 1.
legend_ticks_length	The length of the legend.ticks.length theme element.
axis_line_colour	The colour of the axis.line theme element. Defaults to text_colour.

`axis_line_linewidth`
: The linewidth of the axis.line theme element.

`axis_ticks_colour`
: The colour of the axis.ticks theme element.

`axis_ticks_linewidth`
: The linewidth of the axis.ticks theme element.

`axis_ticks_length`
: The length of the axis.ticks.length theme element.

`panel_background_fill`
: The fill (and colour) of the panel.background theme element.

`panel_grid_colour`
: The colour of the panel.grid theme element.

`panel_grid_linetype`
: The linetype of the panel.grid.major theme element.

`panel_grid_linewidth`
: The linewidth of the panel.grid.major theme element.

`panel_grid_minor_linetype`
: The linetype of the panel.grid.minor theme element.

`panel_grid_minor_linewidth`
: The linewidth of the panel.grid.minor theme element.

`plot_background_fill`
: The fill (and colour) of the plot.background theme element.

Details

Set the greys theme as the active ggplot2 theme

Value

Invisibly returns the previously active theme, so it can be restored with `ggplot2::set_theme()`.

`set_lights` *set_lights*

Description

Builds `theme_lights()` and registers it as the session-wide default theme with `ggplot2::set_theme()`. All arguments are forwarded to `theme_lights()`.

Usage

```
set_lights(
  ...,
  text_size = 10,
  text_family = "",
  text_colour = "#100F0F",
```

```
  title_size = NULL,
  title_family = NULL,
  title_colour = NULL,
  subtitle_size = NULL,
  subtitle_family = NULL,
  subtitle_colour = NULL,
  caption_size = NULL,
  caption_family = NULL,
  caption_colour = NULL,
  caption_hjust = 0,
  legend_position = "right",
  legend_axis_line_colour = NULL,
  legend_axis_line_linewidth = NULL,
  legend_background_fill = NULL,
  legend_key_fill = NULL,
  legend_ticks_colour = NULL,
  legend_ticks_linewidth = NULL,
  legend_ticks_linetype = 1,
  legend_ticks_length = grid::unit(c(2.75, 0), "pt"),
  axis_line_colour = NULL,
  axis_line_linewidth = 0.15,
  axis_ticks_colour = NULL,
  axis_ticks_linewidth = NULL,
  axis_ticks_length = grid::unit(3.66, "pt"),
  panel_background_fill = "white",
  panel_grid_colour = "#F2F0E5",
  panel_grid_linetype = 1,
  panel_grid_linewidth = 1,
  panel_grid_minor_linetype = 1,
  panel_grid_minor_linewidth = ggplot2::rel(0.5),
  plot_background_fill = "white"
)
```

Arguments

`...`	Require named arguments (and support trailing commas).
`text_size`	The base size of the text theme element. Defaults to 10.
`text_family`	The base family of the text theme element. Defaults to "".
`text_colour`	The base colour of the text theme element.
`title_size`	The size of the `plot.title` theme element. Defaults to `text_size`.
`title_family`	The family of the `plot.title` theme element. Defaults to `text_family`.
`title_colour`	The colour of the `plot.title` theme element. Defaults to `text_colour`.
`subtitle_size`	The size of the `plot.subtitle` theme element. Defaults to `text_size`.
`subtitle_family`	The family of the `plot.subtitle` theme element. Defaults to `text_family`.
`subtitle_colour`	The colour of the `plot.subtitle` theme element. Defaults to `text_colour`.

caption_size The size of the plot.caption theme element. Defaults to text_size.

caption_family The family of the plot.caption theme element. Defaults to text_family.

caption_colour The colour of the plot.caption theme element. Defaults to text_colour.

caption_hjust The horizontal justification of the plot.caption theme element. Defaults to 0.

legend_position
The position of the legend. Either "right", "top" or "bottom".

legend_axis_line_colour
The colour of the legend.axis.line theme element.

legend_axis_line_linewidth
The linewidth of the legend.axis.line theme element.

legend_background_fill
The fill (and colour) of the legend.background theme element.

legend_key_fill
The fill (and colour) of the legend.key theme element.

legend_ticks_colour
The colour of the legend.ticks theme element.

legend_ticks_linewidth
The linewidth of the legend.ticks theme element.

legend_ticks_linetype
The linetype of the legend.ticks theme element. Defaults to 1.

legend_ticks_length
The length of the legend.ticks.length theme element.

axis_line_colour
The colour of the axis.line theme element. Defaults to text_colour.

axis_line_linewidth
The linewidth of the axis.line theme element.

axis_ticks_colour
The colour of the axis.ticks theme element.

axis_ticks_linewidth
The linewidth of the axis.ticks theme element.

axis_ticks_length
The length of the axis.ticks.length theme element.

panel_background_fill
The fill (and colour) of the panel.background theme element.

panel_grid_colour
The colour of the panel.grid theme element.

panel_grid_linetype
The linetype of the panel.grid.major theme element.

panel_grid_linewidth
The linewidth of the panel.grid.major theme element.

panel_grid_minor_linetype
The linetype of the panel.grid.minor theme element.

panel_grid_minor_linewidth
The linewidth of the panel.grid.minor theme element.

plot_background_fill
The fill (and colour) of the plot.background theme element.

Details

Set the lights theme as the active ggplot2 theme

Value

Invisibly returns the previously active theme, so it can be restored with `ggplot2::set_theme()`.

`theme_darks` *theme_darks*

Description

A complete theme with a dark plot and panel background. Uses flexoki inspired colours.

Usage

```
theme_darks(
  ...,
  text_size = 10,
  text_family = "",
  text_colour = "#CECDC3",
  title_size = NULL,
  title_family = NULL,
  title_colour = NULL,
  subtitle_size = NULL,
  subtitle_family = NULL,
  subtitle_colour = NULL,
  caption_size = NULL,
  caption_family = NULL,
  caption_colour = NULL,
  caption_hjust = 0,
  legend_position = "right",
  legend_axis_line_colour = NULL,
  legend_axis_line_linewidth = NULL,
  legend_background_fill = NULL,
  legend_key_fill = NULL,
  legend_ticks_colour = NULL,
  legend_ticks_linewidth = NULL,
  legend_ticks_linetype = 1,
  legend_ticks_length = grid::unit(c(2.75, 0), "pt"),
  axis_line_colour = NULL,
  axis_line_linewidth = 0.15,
  axis_ticks_colour = NULL,
  axis_ticks_linewidth = NULL,
  axis_ticks_length = grid::unit(3.66, "pt"),
  panel_background_fill = "#282726",
  panel_grid_colour = "#100F0F",
```

```
  panel_grid_linetype = 1,
  panel_grid_linewidth = 1,
  panel_grid_minor_linetype = 1,
  panel_grid_minor_linewidth = ggplot2::rel(0.5),
  plot_background_fill = "#100F0F"
)
```

Arguments

`...`	Require named arguments (and support trailing commas).
`text_size`	The base size of the text theme element. Defaults to 10.
`text_family`	The base family of the text theme element. Defaults to "".
`text_colour`	The base colour of the text theme element.
`title_size`	The size of the `plot.title` theme element. Defaults to `text_size`.
`title_family`	The family of the `plot.title` theme element. Defaults to `text_family`.
`title_colour`	The colour of the `plot.title` theme element. Defaults to `text_colour`.
`subtitle_size`	The size of the `plot.subtitle` theme element. Defaults to `text_size`.
`subtitle_family`	The family of the `plot.subtitle` theme element. Defaults to `text_family`.
`subtitle_colour`	The colour of the `plot.subtitle` theme element. Defaults to `text_colour`.
`caption_size`	The size of the `plot.caption` theme element. Defaults to `text_size`.
`caption_family`	The family of the `plot.caption` theme element. Defaults to `text_family`.
`caption_colour`	The colour of the `plot.caption` theme element. Defaults to `text_colour`.
`caption_hjust`	The horizontal justification of the `plot.caption` theme element. Defaults to 0.
`legend_position`	The position of the legend. Either "right", "top" or "bottom".
`legend_axis_line_colour`	The colour of the legend.axis.line theme element.
`legend_axis_line_linewidth`	The linewidth of the legend.axis.line theme element.
`legend_background_fill`	The fill (and colour) of the `legend.background` theme element.
`legend_key_fill`	The fill (and colour) of the legend.key theme element.
`legend_ticks_colour`	The colour of the legend.ticks theme element.
`legend_ticks_linewidth`	The linewidth of the legend.ticks theme element.
`legend_ticks_linetype`	The linetype of the legend.ticks theme element. Defaults to 1.
`legend_ticks_length`	The length of the legend.ticks.length theme element.

`axis_line_colour`
: The colour of the axis.line theme element. Defaults to `text_colour`.

`axis_line_linewidth`
: The linewidth of the axis.line theme element.

`axis_ticks_colour`
: The colour of the axis.ticks theme element.

`axis_ticks_linewidth`
: The linewidth of the axis.ticks theme element.

`axis_ticks_length`
: The length of the axis.ticks.length theme element.

`panel_background_fill`
: The fill (and colour) of the panel.background theme element.

`panel_grid_colour`
: The colour of the panel.grid theme element.

`panel_grid_linetype`
: The linetype of the panel.grid.major theme element.

`panel_grid_linewidth`
: The linewidth of the panel.grid.major theme element.

`panel_grid_minor_linetype`
: The linetype of the panel.grid.minor theme element.

`panel_grid_minor_linewidth`
: The linewidth of the panel.grid.minor theme element.

`plot_background_fill`
: The fill (and colour) of the plot.background theme element.

Details

Dark theme

Value

A ggplot theme.

`theme_greys` *theme_greys*

Description

A complete theme with a light grey panel background and white panel grid colour. Uses flexoki inspired colours.

Usage

```
theme_greys(
  ...,
  text_size = 10,
  text_family = "",
  text_colour = "#100F0F",
  title_size = NULL,
  title_family = NULL,
  title_colour = NULL,
  subtitle_size = NULL,
  subtitle_family = NULL,
  subtitle_colour = NULL,
  caption_size = NULL,
  caption_family = NULL,
  caption_colour = NULL,
  caption_hjust = 0,
  legend_position = "right",
  legend_axis_line_colour = NULL,
  legend_axis_line_linewidth = NULL,
  legend_background_fill = NULL,
  legend_key_fill = NULL,
  legend_ticks_colour = NULL,
  legend_ticks_linewidth = NULL,
  legend_ticks_linetype = 1,
  legend_ticks_length = grid::unit(c(2.75, 0), "pt"),
  axis_line_colour = NULL,
  axis_line_linewidth = 0.15,
  axis_ticks_colour = NULL,
  axis_ticks_linewidth = NULL,
  axis_ticks_length = grid::unit(3.66, "pt"),
  panel_background_fill = "#F2F0E5FF",
  panel_grid_colour = "white",
  panel_grid_linetype = 1,
  panel_grid_linewidth = 1,
  panel_grid_minor_linetype = 1,
  panel_grid_minor_linewidth = ggplot2::rel(0.5),
  plot_background_fill = "white"
)
```

Arguments

`...`	Require named arguments (and support trailing commas).
`text_size`	The base size of the text theme element. Defaults to 10.
`text_family`	The base family of the text theme element. Defaults to "".
`text_colour`	The base colour of the text theme element.
`title_size`	The size of the `plot.title` theme element. Defaults to `text_size`.
`title_family`	The family of the `plot.title` theme element. Defaults to `text_family`.

`title_colour` The colour of the `plot.title` theme element. Defaults to `text_colour`.

`subtitle_size` The size of the `plot.subtitle` theme element. Defaults to `text_size`.

`subtitle_family`
The family of the `plot.subtitle` theme element. Defaults to `text_family`.

`subtitle_colour`
The colour of the `plot.subtitle` theme element. Defaults to `text_colour`.

`caption_size` The size of the `plot.caption` theme element. Defaults to `text_size`.

`caption_family` The family of the `plot.caption` theme element. Defaults to `text_family`.

`caption_colour` The colour of the `plot.caption` theme element. Defaults to `text_colour`.

`caption_hjust` The horizontal justification of the `plot.caption` theme element. Defaults to 0.

`legend_position`
The position of the legend. Either "right", "top" or "bottom".

`legend_axis_line_colour`
The colour of the legend.axis.line theme element.

`legend_axis_line_linewidth`
The linewidth of the legend.axis.line theme element.

`legend_background_fill`
The fill (and colour) of the `legend.background` theme element.

`legend_key_fill`
The fill (and colour) of the legend.key theme element.

`legend_ticks_colour`
The colour of the legend.ticks theme element.

`legend_ticks_linewidth`
The linewidth of the legend.ticks theme element.

`legend_ticks_linetype`
The linetype of the legend.ticks theme element. Defaults to 1.

`legend_ticks_length`
The length of the legend.ticks.length theme element.

`axis_line_colour`
The colour of the axis.line theme element. Defaults to `text_colour`.

`axis_line_linewidth`
The linewidth of the axis.line theme element.

`axis_ticks_colour`
The colour of the axis.ticks theme element.

`axis_ticks_linewidth`
The linewidth of the axis.ticks theme element.

`axis_ticks_length`
The length of the axis.ticks.length theme element.

`panel_background_fill`
The fill (and colour) of the panel.background theme element.

`panel_grid_colour`
The colour of the panel.grid theme element.

`panel_grid_linetype`
The linetype of the panel.grid.major theme element.

panel_grid_linewidth
: The linewidth of the panel.grid.major theme element.

panel_grid_minor_linetype
: The linetype of the panel.grid.minor theme element.

panel_grid_minor_linewidth
: The linewidth of the panel.grid.minor theme element.

plot_background_fill
: The fill (and colour) of the plot.background theme element.

Details

Grey theme

Value

A ggplot theme.

`theme_lights` *theme_lights*

Description

A complete theme with a white panel background and a light panel grid colour. Uses flexoki inspired colours.

Usage

```
theme_lights(
  ...,
  text_size = 10,
  text_family = "",
  text_colour = "#100F0F",
  title_size = NULL,
  title_family = NULL,
  title_colour = NULL,
  subtitle_size = NULL,
  subtitle_family = NULL,
  subtitle_colour = NULL,
  caption_size = NULL,
  caption_family = NULL,
  caption_colour = NULL,
  caption_hjust = 0,
  legend_position = "right",
  legend_axis_line_colour = NULL,
  legend_axis_line_linewidth = NULL,
  legend_background_fill = NULL,
  legend_key_fill = NULL,
```

```
  legend_ticks_colour = NULL,
  legend_ticks_linewidth = NULL,
  legend_ticks_linetype = 1,
  legend_ticks_length = grid::unit(c(2.75, 0), "pt"),
  axis_line_colour = NULL,
  axis_line_linewidth = 0.15,
  axis_ticks_colour = NULL,
  axis_ticks_linewidth = NULL,
  axis_ticks_length = grid::unit(3.66, "pt"),
  panel_background_fill = "white",
  panel_grid_colour = "#F2F0E5",
  panel_grid_linetype = 1,
  panel_grid_linewidth = 1,
  panel_grid_minor_linetype = 1,
  panel_grid_minor_linewidth = ggplot2::rel(0.5),
  plot_background_fill = "white"
)
```

Arguments

`...`	Require named arguments (and support trailing commas).
`text_size`	The base size of the text theme element. Defaults to 10.
`text_family`	The base family of the text theme element. Defaults to "".
`text_colour`	The base colour of the text theme element.
`title_size`	The size of the `plot.title` theme element. Defaults to `text_size`.
`title_family`	The family of the `plot.title` theme element. Defaults to `text_family`.
`title_colour`	The colour of the `plot.title` theme element. Defaults to `text_colour`.
`subtitle_size`	The size of the `plot.subtitle` theme element. Defaults to `text_size`.
`subtitle_family`	The family of the `plot.subtitle` theme element. Defaults to `text_family`.
`subtitle_colour`	The colour of the `plot.subtitle` theme element. Defaults to `text_colour`.
`caption_size`	The size of the `plot.caption` theme element. Defaults to `text_size`.
`caption_family`	The family of the `plot.caption` theme element. Defaults to `text_family`.
`caption_colour`	The colour of the `plot.caption` theme element. Defaults to `text_colour`.
`caption_hjust`	The horizontal justification of the `plot.caption` theme element. Defaults to 0.
`legend_position`	The position of the legend. Either "right", "top" or "bottom".
`legend_axis_line_colour`	The colour of the legend.axis.line theme element.
`legend_axis_line_linewidth`	The linewidth of the legend.axis.line theme element.
`legend_background_fill`	The fill (and colour) of the `legend.background` theme element.

`legend_key_fill`
: The fill (and colour) of the legend.key theme element.

`legend_ticks_colour`
: The colour of the legend.ticks theme element.

`legend_ticks_linewidth`
: The linewidth of the legend.ticks theme element.

`legend_ticks_linetype`
: The linetype of the legend.ticks theme element. Defaults to 1.

`legend_ticks_length`
: The length of the legend.ticks.length theme element.

`axis_line_colour`
: The colour of the axis.line theme element. Defaults to `text_colour`.

`axis_line_linewidth`
: The linewidth of the axis.line theme element.

`axis_ticks_colour`
: The colour of the axis.ticks theme element.

`axis_ticks_linewidth`
: The linewidth of the axis.ticks theme element.

`axis_ticks_length`
: The length of the axis.ticks.length theme element.

`panel_background_fill`
: The fill (and colour) of the panel.background theme element.

`panel_grid_colour`
: The colour of the panel.grid theme element.

`panel_grid_linetype`
: The linetype of the panel.grid.major theme element.

`panel_grid_linewidth`
: The linewidth of the panel.grid.major theme element.

`panel_grid_minor_linetype`
: The linetype of the panel.grid.minor theme element.

`panel_grid_minor_linewidth`
: The linewidth of the panel.grid.minor theme element.

`plot_background_fill`
: The fill (and colour) of the plot.background theme element.

Details

Lights theme

Value

A ggplot theme.

update_darks *update_darks*

Description

Updates the currently active/set theme in place with the colours of `theme_darks()`, via `ggplot2::theme_update()`. Useful for recolouring every plot for the rest of the session without swapping out the full theme.

Usage

```
update_darks(
  ...,
  text_colour = "#CECDC3",
  title_colour = NULL,
  subtitle_colour = NULL,
  caption_colour = NULL,
  axis_line_colour = NULL,
  axis_ticks_colour = NULL,
  legend_axis_line_colour = NULL,
  legend_background_fill = NULL,
  legend_key_fill = NULL,
  legend_ticks_colour = NULL,
  panel_background_fill = "#282726",
  panel_grid_colour = "#100F0F",
  plot_background_fill = "#100F0F"
)
```

Arguments

`...`	Require named arguments (and support trailing commas).
`text_colour`	The base colour of the text theme element.
`title_colour`	The colour of the `plot.title` theme element. Defaults to `text_colour`.
`subtitle_colour`	The colour of the `plot.subtitle` theme element. Defaults to `text_colour`.
`caption_colour`	The colour of the `plot.caption` theme element. Defaults to `text_colour`.
`axis_line_colour`	The colour of the axis.line theme element. Defaults to `text_colour`.
`axis_ticks_colour`	The colour of the axis.ticks theme element. Defaults to `axis_line_colour`.
`legend_axis_line_colour`	The colour of the legend.axis.line theme element. Defaults to `plot_background_fill`.
`legend_background_fill`	The fill (and colour) of the `legend.background` theme element. Defaults to `plot_background_fill`.

`legend_key_fill`
: The fill (and colour) of the legend.key theme element. Defaults to `plot_background_fill`.

`legend_ticks_colour`
: The colour of the legend.ticks theme element. Defaults to `legend_axis_line_colour`.

`panel_background_fill`
: The fill (and colour) of the panel.background theme element.

`panel_grid_colour`
: The colour of the panel.grid theme element.

`plot_background_fill`
: The fill (and colour) of the plot.background theme element.

Details

Update the set theme (Darks)

Value

The previous theme, invisibly (see `ggplot2::theme_update()`).

`update_greys` *update_greys*

Description

Updates the currently active/set theme in place with the colours of `theme_greys()`, via `ggplot2::theme_update()`. Useful for recolouring every plot for the rest of the session without swapping out the full theme.

Usage

```
update_greys(
  ...,
  text_colour = "#100F0F",
  title_colour = NULL,
  subtitle_colour = NULL,
  caption_colour = NULL,
  axis_line_colour = NULL,
  axis_ticks_colour = NULL,
  legend_axis_line_colour = NULL,
  legend_background_fill = NULL,
  legend_key_fill = NULL,
  legend_ticks_colour = NULL,
  panel_background_fill = "#F2F0E5FF",
  panel_grid_colour = "white",
  plot_background_fill = "white"
)
```

Arguments

`...`	Require named arguments (and support trailing commas).
`text_colour`	The base colour of the text theme element.
`title_colour`	The colour of the `plot.title` theme element. Defaults to `text_colour`.
`subtitle_colour`	The colour of the `plot.subtitle` theme element. Defaults to `text_colour`.
`caption_colour`	The colour of the `plot.caption` theme element. Defaults to `text_colour`.
`axis_line_colour`	The colour of the axis.line theme element. Defaults to `text_colour`.
`axis_ticks_colour`	The colour of the axis.ticks theme element. Defaults to `axis_line_colour`.
`legend_axis_line_colour`	The colour of the legend.axis.line theme element. Defaults to `plot_background_fill`.
`legend_background_fill`	The fill (and colour) of the `legend.background` theme element. Defaults to `plot_background_fill`.
`legend_key_fill`	The fill (and colour) of the legend.key theme element. Defaults to `plot_background_fill`.
`legend_ticks_colour`	The colour of the legend.ticks theme element. Defaults to `legend_axis_line_colour`.
`panel_background_fill`	The fill (and colour) of the panel.background theme element.
`panel_grid_colour`	The colour of the panel.grid theme element.
`plot_background_fill`	The fill (and colour) of the plot.background theme element.

Details

Update the set theme (greys)

Value

The previous theme, invisibly (see `ggplot2::theme_update()`).

`update_lights` *update_lights*

Description

Updates the currently active/set theme in place with the colours of `theme_lights()`, via `ggplot2::theme_update()`. Useful for recolouring every plot for the rest of the session without swapping out the full theme.

Usage

```
update_lights(
  ...,
  text_colour = "#100F0F",
  title_colour = NULL,
  subtitle_colour = NULL,
  caption_colour = NULL,
  axis_line_colour = NULL,
  axis_ticks_colour = NULL,
  legend_axis_line_colour = NULL,
  legend_background_fill = NULL,
  legend_key_fill = NULL,
  legend_ticks_colour = NULL,
  panel_background_fill = "white",
  panel_grid_colour = "#F2F0E5",
  plot_background_fill = "white"
)
```

Arguments

`...`	Require named arguments (and support trailing commas).
`text_colour`	The base colour of the text theme element.
`title_colour`	The colour of the `plot.title` theme element. Defaults to `text_colour`.
`subtitle_colour`	The colour of the `plot.subtitle` theme element. Defaults to `text_colour`.
`caption_colour`	The colour of the `plot.caption` theme element. Defaults to `text_colour`.
`axis_line_colour`	The colour of the axis.line theme element. Defaults to `text_colour`.
`axis_ticks_colour`	The colour of the axis.ticks theme element. Defaults to `axis_line_colour`.
`legend_axis_line_colour`	The colour of the legend.axis.line theme element. Defaults to `plot_background_fill`.
`legend_background_fill`	The fill (and colour) of the `legend.background` theme element. Defaults to `plot_background_fill`.
`legend_key_fill`	The fill (and colour) of the legend.key theme element. Defaults to `plot_background_fill`.
`legend_ticks_colour`	The colour of the legend.ticks theme element. Defaults to `legend_axis_line_colour`.
`panel_background_fill`	The fill (and colour) of the panel.background theme element.
`panel_grid_colour`	The colour of the panel.grid theme element.
`plot_background_fill`	The fill (and colour) of the plot.background theme element.

Details

Update the set theme (Lights)

Value

The previous theme, invisibly (see `ggplot2::theme_update()`).

`update_palette` *Update colour/fill palettes or fixed geom colour/fill*

Description

Modifies active theme settings for fixed, discrete, and continuous palettes only for parameters explicitly provided by the user.

Usage

```
update_palette(
  fixed = NULL,
  discrete = NULL,
  continuous = NULL,
  aesthetic = c("colour", "fill")
)
```

Arguments

`fixed`	Colour applied to geometric elements via `element_geom()`. Updates the aesthetics named in `aesthetic`.
`discrete`	Palette specification (e.g., `scales::pal_hue()`) for discrete scales (`palette.<aesthetic>.discrete`).
`continuous`	Palette specification for continuous scales (`palette.<aesthetic>.continuous`).
`aesthetic`	Which aesthetic(s) to update: `"colour"`, `"fill"`, or both (the default).

Value

Invisibly returns the result of the `theme_update()` calls.

Examples

```
## Not run:
# Update fixed geom colour and fill
update_palette(fixed = "steelblue")

# Update only the fill of fixed geoms
update_palette(fixed = "steelblue", aesthetic = "fill")

# Update discrete palette for colour only
update_palette(discrete = scales::pal_hue(), aesthetic = "colour")
```

```
# Update continuous palette for both colour and fill
update_palette(continuous = scales::pal_viridis())

## End(Not run)
```

`update_panel_size` *Update panel dimensions in the current ggplot theme*

Description

Modifies panel dimensions such as heights and widths by updating the global theme settings.

Usage

```
update_panel_size(heights = ggplot2::waiver(), widths = ggplot2::waiver())
```

Arguments

`heights`	A `margin` or unit object specifying the panel heights (e.g., `grid::unit(5, "cm")`).
`widths`	A `margin` or unit object specifying the panel widths (e.g., `grid::unit(5, "cm")`).

Value

Invisibly returns the updated theme object.

Examples

```
## Not run:
update_panel_size(
  heights = grid::unit(6, "cm"),
  widths = grid::unit(8, "cm")
)

## End(Not run)
```

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