Package 'ggblanket'

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Title Simplify 'ggplot2' Visualisation

Version 1.6.2

Description Simplify 'ggplot2' visualisation with 'ggblanket' wrapper functions.

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URL <https://davidhodge931.github.io/ggblanket/>,

<https://github.com/davidhodge931/ggblanket/>

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Suggests colorspace, ggdensity, ggiraph, ggtext, hexbin, knitr,
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R topics documented:

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add_tooltip   *Add a tooltip column*

Description

Add a tooltip column of united variable names and values.

Usage

```
add_tooltip(data, ..., titles = snakecase::to_sentence_case, name = "tooltip")
```

Arguments

data	A data frame or tibble.
...	Arguments passed to select (i.e unquoted variables, tidyselect helpers etc). If no arguments provided, uses all columns.
titles	A function to format the variable names, including in rlang lambda format.
name	The name of the column created. Defaults to "tooltip".

Value

A data frame or tibble with a column of text

Examples

```
library(ggplot2)

iris %>%
  add_tooltip() %>%
  head(1)

 iris %>%
  add_tooltip(tidyselect::contains("Sepal"), Species) %>%
  head(1)

if (requireNamespace("ggiraph", quietly = TRUE)) {
p <- iris %>%
  add_tooltip(tidyselect::contains("Sepal"), Species) %>%
  gg_blank(x = Sepal.Width,
           y = Sepal.Length,
           col = Species,
           facet = Species) +
  ggiraph::geom_point_interactive(aes(tooltip = tooltip))

  ggiraph::girafe(ggobj = p, width_svg = 5, height_svg = 4)
}
```

---

gg_area	*Area ggplot*

Description

Create a area ggplot with a wrapper around the ggplot2::geom_area function.

Usage

```
gg_area(
  data = NULL,
  x = NULL,
  y = NULL,
```

```
col = NULL,
facet = NULL,
facet2 = NULL,
group = NULL,
stat = "align",
position = "identity",
clip = "on",
pal = NULL,
pal_na = "#7F7F7F",
alpha = 0.9,
...,
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
```

```
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

`data`	A data frame or tibble.
`x`	Unquoted x aesthetic variable.
`y`	Unquoted y aesthetic variable.
`col`	Unquoted col and fill aesthetic variable.
`facet`	Unquoted facet aesthetic variable.
`facet2`	Unquoted second facet variable.
`group`	Unquoted group aesthetic variable.
`stat`	Statistical transformation. A character string (e.g. "identity").
`position`	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
`clip`	Whether to clip geometries outside of the panel. Either "on" or "off".
`pal`	Colours to use. A character vector of hex codes (or names).
`pal_na`	Colour to use for NA values. A character vector of a hex code (or name).
`alpha`	Opacity. A number between 0 and 1.
`...`	Other arguments passed to the ggplot2::geom_area function.
`title`	Title string.
`subtitle`	Subtitle string.
`x_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`x_expand`	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
`x_grid`	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
`x_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`x_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
`x_limits`	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
`x_sec_axis`	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
`x_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`x_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`y_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

gg_area(mtcars, x = wt, y = mpg)
gg_area(mtcars, x = wt, y = mpg, col = cyl)

mtcars %>%
  dplyr::mutate(cyl = factor(cyl)) %>%
  gg_area(x = wt, y = mpg, col = cyl, size = 1)

gg_area(diamonds, x = carat, y = price, alpha = 0.01)
```

---

gg_bar	*Bar ggplot*

Description

Create a bar ggplot with a wrapper around the ggplot2::geom_bar function.

Usage

```
gg_bar(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "count",
```

```
      position = "stack",
      clip = "on",
      pal = NULL,
      pal_na = "#7F7F7F",
      alpha = 0.9,
      ...,
      title = NULL,
      subtitle = NULL,
      x_breaks = NULL,
      x_expand = NULL,
      x_grid = NULL,
      x_include = NULL,
      x_labels = NULL,
      x_limits = NULL,
      x_sec_axis = ggplot2::waiver(),
      x_title = NULL,
      x_trans = "identity",
      y_breaks = NULL,
      y_expand = NULL,
      y_grid = NULL,
      y_include = NULL,
      y_labels = NULL,
      y_limits = NULL,
      y_sec_axis = ggplot2::waiver(),
      y_title = NULL,
      y_trans = "identity",
      col_breaks = NULL,
      col_continuous = "gradient",
      col_include = NULL,
      col_labels = NULL,
      col_legend_place = NULL,
      col_legend_ncol = NULL,
      col_legend_nrow = NULL,
      col_legend_rev = FALSE,
      col_limits = NULL,
      col_rescale = NULL,
      col_title = NULL,
      col_trans = "identity",
      facet_labels = NULL,
      facet_ncol = NULL,
      facet_nrow = NULL,
      facet_scales = "fixed",
      facet_space = "fixed",
      facet_layout = NULL,
      caption = NULL,
      titles = snakecase::to_sentence_case,
      theme = gg_theme()
    )
```

Arguments

`data`	A data frame or tibble.
`x`	Unquoted x aesthetic variable.
`y`	Unquoted y aesthetic variable.
`col`	Unquoted col and fill aesthetic variable.
`facet`	Unquoted facet aesthetic variable.
`facet2`	Unquoted second facet variable.
`group`	Unquoted group aesthetic variable.
`stat`	Statistical transformation. A character string (e.g. "identity").
`position`	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
`clip`	Whether to clip geometries outside of the panel. Either "on" or "off".
`pal`	Colours to use. A character vector of hex codes (or names).
`pal_na`	Colour to use for NA values. A character vector of a hex code (or name).
`alpha`	Opacity. A number between 0 and 1.
`...`	Other arguments passed to the ggplot2::geom_bar function.
`title`	Title string.
`subtitle`	Subtitle string.
`x_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`x_expand`	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
`x_grid`	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
`x_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`x_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
`x_limits`	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
`x_sec_axis`	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
`x_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`x_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`y_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`y_expand`	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
`y_grid`	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
`y_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).

y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
gg_bar(mpg, x = class)
gg_bar(mpg, y = class)
gg_bar(mpg, x = class, col = drv)
gg_bar(mpg, y = class, col = drv, col_legend_place = "t")
```

---

gg_bin2d   *Bin2d ggplot*

Description

Create a bin2d ggplot with a wrapper around the ggplot2::geom_bin2d function.

Usage

```
gg_bin2d(
  data = NULL,
  x = NULL,
  y = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "bin2d",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
```

```
    y_expand = NULL,
    y_grid = NULL,
    y_include = NULL,
    y_labels = NULL,
    y_limits = NULL,
    y_sec_axis = ggplot2::waiver(),
    y_title = NULL,
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.

...	Other arguments passed to the ggplot2::geom_bin2d function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol

        The number of columns for the legend elements.

col_legend_nrow

        The number of rows for the legend elements.

col_legend_rev   Reverse the elements of the legend. Defaults to FALSE.

col_limits   A vector to determine the limits of the colour scale.

col_rescale   For a continuous col variable, a vector to rescale the pal non-linearly.

col_title   Legend title string. Defaults to converting to sentence case with spaces. Use ""
        for no title.

col_trans   For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "re-
        verse").

facet_labels   A function that takes the breaks as inputs (e.g. scales::label_comma()), or a
        named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol   The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow   The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales   Whether facet scales should be "fixed" across facets, "free" in both directions,
        or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space   Whether facet space should be "fixed" across facets, "free" to be proportional in
        both directions, or free to be proportional in just one direction (i.e. "free_x" or
        "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and
        facet scales are not "fixed".

facet_layout   Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or
        facet2) argument is provided, then defaults to "wrap". If NULL and both facet
        and facet2 arguments are provided, defaults to "grid".

caption   Caption title string.

titles   A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme   A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

diamonds %>%
  gg_bin2d(depth, price)
```

gg_blank	*Blank ggplot*

Description

Create a blank ggplot with a wrapper around the ggplot2::geom_blank function.

Usage

```
gg_blank(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xlower = NULL,
  xupper = NULL,
  xmiddle = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  ylower = NULL,
  yupper = NULL,
  ymiddle = NULL,
  sample = NULL,
  label = NULL,
  subgroup = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
```

```
        x_title = NULL,
        x_trans = "identity",
        y_breaks = NULL,
        y_expand = NULL,
        y_grid = NULL,
        y_include = NULL,
        y_labels = NULL,
        y_limits = NULL,
        y_sec_axis = ggplot2::waiver(),
        y_title = NULL,
        y_trans = "identity",
        col_breaks = NULL,
        col_continuous = "gradient",
        col_include = NULL,
        col_labels = NULL,
        col_legend_place = NULL,
        col_legend_ncol = NULL,
        col_legend_nrow = NULL,
        col_legend_rev = FALSE,
        col_limits = NULL,
        col_rescale = NULL,
        col_title = NULL,
        col_trans = "identity",
        facet_labels = NULL,
        facet_ncol = NULL,
        facet_nrow = NULL,
        facet_scales = "fixed",
        facet_space = "fixed",
        facet_layout = NULL,
        caption = NULL,
        titles = snakecase::to_sentence_case,
        theme = gg_theme(),
        void = NULL
    )
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.

xend	Unquoted xend aesthetic variable.
xlower	Unquoted xlower aesthetic variable.
xupper	Unquoted xupper aesthetic variable.
xmiddle	Unquoted xmiddle aesthetic variable.
ymin	Unquoted ymin aesthetic variable.
ymax	Unquoted ymax aesthetic variable.
yend	Unquoted yend aesthetic variable.
ylower	Unquoted ylower aesthetic variable.
yupper	Unquoted yupper aesthetic variable.
ymiddle	Unquoted ymiddle aesthetic variable.
sample	Unquoted sample aesthetic variable.
label	Unquoted label aesthetic variable.
subgroup	Unquoted subgroup aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
...	Other arguments passed to the ggplot2::geom_blank function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.
void	TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value

A ggplot object.

Examples

```
library(ggplot2)

gg_blank(diamonds, x = carat)
gg_blank(diamonds, x = carat, binwidth = 0.01)
gg_blank(diamonds, x = carat, bins = 200)
gg_blank(diamonds, y = carat)

gg_blank(diamonds, x = price, col = cut)
gg_blank(diamonds, x = price, col = cut, position = "fill")
```

---

gg_boxplot	*Boxplot ggplot*

Description

Create a boxplot ggplot with a wrapper around the ggplot2::geom_boxplot function.

Usage

```
gg_boxplot(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
```

```
    xmin = NULL,
    xlower = NULL,
    xmiddle = NULL,
    xupper = NULL,
    xmax = NULL,
    ymin = NULL,
    ylower = NULL,
    ymiddle = NULL,
    yupper = NULL,
    ymax = NULL,
    stat = "boxplot",
    position = "dodge2",
    clip = "on",
    pal = NULL,
    pal_na = "#7F7F7F",
    alpha = 0.5,
    ...,
    title = NULL,
    subtitle = NULL,
    x_breaks = NULL,
    x_expand = NULL,
    x_grid = NULL,
    x_include = NULL,
    x_labels = NULL,
    x_limits = NULL,
    x_sec_axis = ggplot2::waiver(),
    x_title = NULL,
    x_trans = "identity",
    y_breaks = NULL,
    y_expand = NULL,
    y_grid = NULL,
    y_include = NULL,
    y_labels = NULL,
    y_limits = NULL,
    y_sec_axis = ggplot2::waiver(),
    y_title = NULL,
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
```

```
  col_trans = "identity",
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  facet_layout = NULL,
  caption = NULL,
  titles = snakecase::to_sentence_case,
  theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xlower	Unquoted xlower aesthetic variable.
xmiddle	Unquoted xmiddle aesthetic variable.
xupper	Unquoted xupper aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
ymin	Unquoted ymin aesthetic variable.
ylower	Unquoted ylower aesthetic variable.
ymiddle	Unquoted ymiddle aesthetic variable.
yupper	Unquoted yupper aesthetic variable.
ymax	Unquoted ymax aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_boxplot function.
title	Title string.
subtitle	Subtitle string.

x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.

`col_legend_nrow`	
	The number of rows for the legend elements.
`col_legend_rev`	Reverse the elements of the legend. Defaults to FALSE.
`col_limits`	A vector to determine the limits of the colour scale.
`col_rescale`	For a continuous col variable, a vector to rescale the pal non-linearly.
`col_title`	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`col_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`facet_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
`facet_ncol`	The number of columns of facets. Only applies to a facet layout of "wrap".
`facet_nrow`	The number of rows of facets. Only applies to a facet layout of "wrap".
`facet_scales`	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
`facet_space`	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
`facet_layout`	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
`caption`	Caption title string.
`titles`	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
`theme`	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
gg_boxplot(mpg, x = class, y = hwy)
gg_boxplot(mpg, x = hwy, y = class)
gg_boxplot(mpg, x = hwy, y = class, notch = TRUE)
gg_boxplot(mpg, x = hwy, y = class, varwidth = TRUE)
gg_boxplot(mpg, x = hwy, y = class, pal = "#3366FF", alpha = 0)

gg_boxplot(mpg, x = hwy, y = class, col = drv)

gg_boxplot(diamonds, x = carat, y = price)

gg_boxplot(diamonds, carat, price, group = ggplot2::cut_width(carat, 0.25))
```

gg_col   *Col ggplot*

Description

Create a col ggplot with a wrapper around the ggplot2::geom_col function.

Usage

```
gg_col(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "stack",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.9,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
```

```
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
  col_limits = NULL,
  col_rescale = NULL,
  col_title = NULL,
  col_trans = "identity",
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  facet_layout = NULL,
  caption = NULL,
  titles = snakecase::to_sentence_case,
  theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_col function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.

col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
df <- data.frame(trt = c("a", "b", "c"), outcome = c(2.3, 1.9, 3.2))
gg_col(df, x = trt, y = outcome)
gg_col(df, x = trt, y = outcome, col = trt)
```

---

gg_crossbar *Crossbar ggplot*

Description

Create a crossbar ggplot with a wrapper around the ggplot2::geom_crossbar function.

Usage

```
gg_crossbar(
  data = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.5,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
```

```
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
y	Unquoted y aesthetic variable.
ymin	Unquoted ymin aesthetic variable.
ymax	Unquoted ymax aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_crossbar function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.

col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

df <- data.frame(
  trt = factor(c(1, 1, 2, 2)),
  resp = c(1, 5, 3, 4),
  group = factor(c(1, 2, 1, 2)),
  upper = c(1.1, 5.3, 3.3, 4.2),
  lower = c(0.8, 4.6, 2.4, 3.6)
)

gg_crossbar(df, x = trt, y = resp, ymin = lower, ymax = upper, col = group)
```

gg_density   *Density ggplot*

Description

Create a density ggplot with a wrapper around the ggplot2::geom_density function.

Usage

```
gg_density(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "density",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.5,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
```

```
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
  col_limits = NULL,
  col_rescale = NULL,
  col_title = NULL,
  col_trans = "identity",
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  facet_layout = NULL,
  caption = NULL,
  titles = snakecase::to_sentence_case,
  theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_density function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.

col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
gg_density(diamonds, x = carat)
gg_density(diamonds, y = carat)
gg_density(diamonds, x = carat, adjust = 1/5)
gg_density(diamonds, x = carat, adjust = 5)
gg_density(diamonds, x = depth, col = cut, x_limits = c(55, 70))
gg_density(diamonds, x = carat, col = cut, position = "stack", alpha = 0.9)
gg_density(diamonds, x = carat, col = cut, position = "fill", alpha = 0.9)
```

---

gg_errorbar *Errorbar ggplot*

Description

Create a errorbar ggplot with a wrapper around the ggplot2::geom_errorbar function.

Usage

```
gg_errorbar(
  data = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
```

```
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
y	Unquoted y aesthetic variable.
ymin	Unquoted ymin aesthetic variable.
ymax	Unquoted ymax aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_errorbar function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.

col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

df <- data.frame(
  trt = factor(c(1, 1, 2, 2)),
  resp = c(1, 5, 3, 4),
  group = factor(c(1, 2, 1, 2)),
  upper = c(1.1, 5.3, 3.3, 4.2),
  lower = c(0.8, 4.6, 2.4, 3.6)
)

gg_errorbar(df, x = trt, ymin = lower, ymax = upper, col = group)
gg_errorbar(df, y = trt, xmin = lower, xmax = upper, col = group)

gg_errorbar(df, x = trt, y = resp, ymin = lower, ymax = upper, col = group) +
  geom_line(aes(group = group)) +
  geom_point()

dodger <- position_dodge(width = 0.75)
```

```
gg_blank(df, x = trt, y = resp, ymin = lower, ymax = upper, col = group) +
  geom_col(position = dodger, width = 0.75) +
  geom_errorbar(aes(x = trt, ymin = lower, ymax = upper, group = group),
                inherit.aes = FALSE,
                position = dodger,
                width = 0.1)
```

---

gg_freqpoly   *Freqpoly ggplot*

Description

Create a freqpoly ggplot with a wrapper around the ggplot2::geom_freqpoly function.

Usage

```
gg_freqpoly(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "bin",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
```

```
      y_labels = NULL,
      y_limits = NULL,
      y_sec_axis = ggplot2::waiver(),
      y_title = NULL,
      y_trans = "identity",
      col_breaks = NULL,
      col_continuous = "gradient",
      col_include = NULL,
      col_labels = NULL,
      col_legend_place = NULL,
      col_legend_ncol = NULL,
      col_legend_nrow = NULL,
      col_legend_rev = FALSE,
      col_limits = NULL,
      col_rescale = NULL,
      col_title = NULL,
      col_trans = "identity",
      facet_labels = NULL,
      facet_ncol = NULL,
      facet_nrow = NULL,
      facet_scales = "fixed",
      facet_space = "fixed",
      facet_layout = NULL,
      caption = NULL,
      titles = snakecase::to_sentence_case,
      theme = gg_theme()
    )
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_freqpoly function.

title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol

> The number of columns for the legend elements.

col_legend_nrow

> The number of rows for the legend elements.

col_legend_rev   Reverse the elements of the legend. Defaults to FALSE.

col_limits   A vector to determine the limits of the colour scale.

col_rescale   For a continuous col variable, a vector to rescale the pal non-linearly.

col_title   Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans   For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels   A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol   The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow   The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales   Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space   Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout   Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption   Caption title string.

titles   A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme   A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
gg_freqpoly(diamonds, x = carat)
gg_freqpoly(diamonds, x = carat, binwidth = 0.01)
gg_freqpoly(diamonds, x = carat, bins = 200)
gg_freqpoly(diamonds, y = carat)
gg_freqpoly(diamonds, x = price, col = cut)
```

gg_function	*Function ggplot*

Description

Create a function ggplot with a wrapper around the ggplot2::geom_function function.

Usage

```
gg_function(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "function",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
```

```
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_function function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.

col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
gg_function(data.frame(x = rnorm(100)), x = x, fun = ~dnorm(.x))
gg_function(data.frame(x = rnorm(100)), x = x, fun = ~0.5*exp(-abs(.x)))
```

---

gg_hex   *Hex ggplot*

Description

Create a hex ggplot with a wrapper around the ggplot2::geom_hex function.

Usage

```
gg_hex(
  data = NULL,
  x = NULL,
  y = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "binhex",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
  col_limits = NULL,
  col_rescale = NULL,
  col_title = NULL,
  col_trans = "identity",
  facet_labels = NULL,
```

```
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  facet_layout = NULL,
  caption = NULL,
  titles = snakecase::to_sentence_case,
  theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_hex function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
if (requireNamespace("hexbin", quietly = TRUE)) {
 library(ggplot2)
 diamonds %>%
   gg_hex(depth, price)
}
```

---

gg_histogram	*Histogram ggplot*

Description

Create a histogram ggplot with a wrapper around the ggplot2::geom_histogram function.

Usage

```
gg_histogram(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "bin",
  position = "stack",
  clip = "on",
  pal = NULL,
```

```
    pal_na = "#7F7F7F",
    alpha = 0.9,
    ...,
    title = NULL,
    subtitle = NULL,
    x_breaks = NULL,
    x_expand = NULL,
    x_grid = NULL,
    x_include = NULL,
    x_labels = NULL,
    x_limits = NULL,
    x_sec_axis = ggplot2::waiver(),
    x_title = NULL,
    x_trans = "identity",
    y_breaks = NULL,
    y_expand = NULL,
    y_grid = NULL,
    y_include = NULL,
    y_labels = NULL,
    y_limits = NULL,
    y_sec_axis = ggplot2::waiver(),
    y_title = NULL,
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data   A data frame or tibble.

x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_histogram function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

gg_histogram(diamonds, x = carat)
gg_histogram(diamonds, x = carat, binwidth = 0.01)
gg_histogram(diamonds, x = carat, bins = 200)
gg_histogram(diamonds, y = carat)

gg_histogram(diamonds, x = price, col = cut)
gg_histogram(diamonds, x = price, col = cut, position = "fill")
```

---

gg_jitter   *Jitter ggplot*

Description

Create a jitter ggplot with a wrapper around the ggplot2::geom_jitter function.

Usage

```
gg_jitter(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "jitter",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
```

```
    x_limits = NULL,
    x_sec_axis = ggplot2::waiver(),
    x_title = NULL,
    x_trans = "identity",
    y_breaks = NULL,
    y_expand = NULL,
    y_grid = NULL,
    y_include = NULL,
    y_labels = NULL,
    y_limits = NULL,
    y_sec_axis = ggplot2::waiver(),
    y_title = NULL,
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").

position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_jitter function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
gg_jitter(mpg, x = cyl, y = hwy)
gg_jitter(mpg, x = cyl, y = hwy, col = class)
gg_jitter(mpg, x = cyl, y = hwy, col = class,
          position = position_jitter(width = 0.25))
```

---

gg_label   *Label ggplot*

Description

Create a label ggplot with a wrapper around the ggplot2::geom_label function.

Usage

```
gg_label(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  label = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
```

```
    y_include = NULL,
    y_labels = NULL,
    y_limits = NULL,
    y_sec_axis = ggplot2::waiver(),
    y_title = NULL,
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
label	Unquoted label aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).

alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_label function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.

col_legend_place

The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol

The number of columns for the legend elements.

col_legend_nrow

The number of rows for the legend elements.

col_legend_rev   Reverse the elements of the legend. Defaults to FALSE.

col_limits   A vector to determine the limits of the colour scale.

col_rescale   For a continuous col variable, a vector to rescale the pal non-linearly.

col_title   Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans   For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels   A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol   The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow   The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales   Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space   Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout   Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption   Caption title string.

titles   A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme   A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
gg_label(mtcars, wt, mpg, label = rownames(mtcars))
gg_label(mtcars, wt, mpg, label = rownames(mtcars), alpha = 0.1)
```

gg_line	*Line ggplot*

Description

Create a line ggplot with a wrapper around the ggplot2::geom_line function.

Usage

```
gg_line(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
```

```
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_line function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.

col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

gg_line(mtcars, x = wt, y = mpg)
gg_line(mtcars, x = wt, y = mpg, col = cyl)

mtcars %>%
  dplyr::mutate(cyl = factor(cyl)) %>%
  gg_line(x = wt, y = mpg, col = cyl, size = 1)

gg_line(diamonds, x = carat, y = price, alpha = 0.01)
```

---

gg_linerange   *Linerange ggplot*

Description

Create a linerange ggplot with a wrapper around the ggplot2::geom_linerange function.

Usage

```
gg_linerange(
  data = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
```

```
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
y	Unquoted y aesthetic variable.
ymin	Unquoted ymin aesthetic variable.
ymax	Unquoted ymax aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_linerange function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.

col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

df <- data.frame(
  trt = factor(c(1, 1, 2, 2)),
  resp = c(1, 5, 3, 4),
  group = factor(c(1, 2, 1, 2)),
  upper = c(1.1, 5.3, 3.3, 4.2),
  lower = c(0.8, 4.6, 2.4, 3.6)
)

gg_linerange(df, x = trt, ymin = lower, ymax = upper, col = group,
             position = position_dodge(width = 0.2))
```

gg_path   *Path ggplot*

Description

Create a path ggplot with a wrapper around the ggplot2::geom_path function.

Usage

```
gg_path(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
```

```
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_path function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.

col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

economics %>%
  dplyr::mutate(unemploy_rate = unemploy / pop) %>%
  gg_path(x = unemploy_rate, y = psavert)
```

---

gg_point   *Point ggplot*

Description

Create a point ggplot with a wrapper around the ggplot2::geom_point function.

Usage

```
gg_point(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
  col_limits = NULL,
  col_rescale = NULL,
  col_title = NULL,
  col_trans = "identity",
```

```
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_point function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

gg_point(mtcars, x = wt, y = mpg)
gg_point(mtcars, x = wt, y = mpg, col = cyl)

mtcars %>%
  dplyr::mutate(cyl = factor(cyl)) %>%
  gg_point(x = wt, y = mpg, col = cyl, size = 1)

gg_point(diamonds, x = carat, y = price, alpha = 0.01)
```

---

gg_pointrange	*Pointrange ggplot*

Description

Create a pointrange ggplot with a wrapper around the ggplot2::geom_pointrange function.

Usage

```
gg_pointrange(
  data = NULL,
  x = NULL,
  xmin = NULL,
```

```
xmax = NULL,
y = NULL,
ymin = NULL,
ymax = NULL,
col = NULL,
facet = NULL,
facet2 = NULL,
group = NULL,
stat = "identity",
position = "identity",
clip = "on",
pal = NULL,
pal_na = "#7F7F7F",
alpha = 1,
...,
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
```

```
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
y	Unquoted y aesthetic variable.
ymin	Unquoted ymin aesthetic variable.
ymax	Unquoted ymax aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_pointrange function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

df <- data.frame(
  trt = factor(c(1, 1, 2, 2)),
  resp = c(1, 5, 3, 4),
  group = factor(c(1, 2, 1, 2)),
  upper = c(1.1, 5.3, 3.3, 4.2),
  lower = c(0.8, 4.6, 2.4, 3.6)
)

gg_pointrange(df, x = trt, y = resp, col = group, ymin = lower, ymax = upper,
              position = position_dodge(width = 0.2))
```

---

gg_polygon	*Polygon ggplot*

Description

Create a polygon ggplot with a wrapper around the ggplot2::geom_polygon function.

Usage

```
gg_polygon(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  subgroup = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.9,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
  col_limits = NULL,
  col_rescale = NULL,
  col_title = NULL,
```

```
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
subgroup	Unquoted subgroup aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_polygon function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).

x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

ids <- factor(c("1.1", "2.1", "1.2", "2.2", "1.3", "2.3"))

values <- data.frame(
  id = ids,
  value = c(3, 3.1, 3.1, 3.2, 3.15, 3.5)
)

positions <- data.frame(
  id = rep(ids, each = 4),
  x = c(2, 1, 1.1, 2.2, 1, 0, 0.3, 1.1, 2.2, 1.1, 1.2, 2.5, 1.1, 0.3,
        0.5, 1.2, 2.5, 1.2, 1.3, 2.7, 1.2, 0.5, 0.6, 1.3),
  y = c(-0.5, 0, 1, 0.5, 0, 0.5, 1.5, 1, 0.5, 1, 2.1, 1.7, 1, 1.5,
        2.2, 2.1, 1.7, 2.1, 3.2, 2.8, 2.1, 2.2, 3.3, 3.2)
)

datapoly <- merge(values, positions, by = c("id"))

datapoly %>%
  gg_polygon(x = x,
             y = y,
             col = value,
             group = id)

holes <-
  do.call(rbind, lapply(split(datapoly, datapoly$id), function(df) {
    df$x <- df$x + 0.5 * (mean(df$x) - df$x)
```

```
      df$y <- df$y + 0.5 * (mean(df$y) - df$y)
      df
  }))

datapoly$subid <- 1L
holes$subid <- 2L
datapoly <- rbind(datapoly, holes)

datapoly %>%
  gg_polygon(
    x = x,
    y = y,
    col = value,
    group = id,
    subgroup = subid
  )
```

---

gg_qq   *Qq ggplot*

Description

Create a qq ggplot with a wrapper around the ggplot2::geom_qq function.

Usage

```
gg_qq(
  data = NULL,
  sample = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  x = NULL,
  y = NULL,
  stat = "qq",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
```

```
    x_labels = NULL,
    x_limits = NULL,
    x_sec_axis = ggplot2::waiver(),
    x_title = NULL,
    x_trans = "identity",
    y_breaks = NULL,
    y_expand = NULL,
    y_grid = NULL,
    y_include = NULL,
    y_labels = NULL,
    y_limits = NULL,
    y_sec_axis = ggplot2::waiver(),
    y_title = NULL,
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

`data`	A data frame or tibble.
`sample`	Unquoted sample aesthetic variable.
`col`	Unquoted col and fill aesthetic variable.
`facet`	Unquoted facet aesthetic variable.
`facet2`	Unquoted second facet variable.
`group`	Unquoted group aesthetic variable.
`x`	Unquoted x aesthetic variable.
`y`	Unquoted y aesthetic variable.

stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_qq function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
df <- data.frame(y = rt(200, df = 5))

gg_qq(df, sample = y, distribution = stats::qnorm) +
  geom_qq_line(distribution = stats::qnorm)
```

```
gg_raster                      Raster ggplot
```

Description

Create a raster ggplot with a wrapper around the ggplot2::geom_raster function.

Usage

```
gg_raster(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = c(0, 0),
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = c(NA, NA),
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = c(0, 0),
  y_grid = NULL,
  y_include = NULL,
```

```
    y_labels = NULL,
    y_limits = c(NA, NA),
    y_sec_axis = ggplot2::waiver(),
    y_title = NULL,
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme(),
    void = FALSE
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.

...	Other arguments passed to the ggplot2::geom_raster function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol

          The number of columns for the legend elements.

col_legend_nrow

          The number of rows for the legend elements.

col_legend_rev   Reverse the elements of the legend. Defaults to FALSE.

col_limits   A vector to determine the limits of the colour scale.

col_rescale   For a continuous col variable, a vector to rescale the pal non-linearly.

col_title   Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans   For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels   A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol   The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow   The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales   Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space   Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout   Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption   Caption title string.

titles   A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme   A ggplot2 theme.

void   TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(ggplot2)

gg_raster(faithfuld, x = waiting, y = eruptions, col = density)

gg_raster(faithfuld, x = waiting, y = eruptions, col = density,
        x_limits = c(NA, NA), y_limits = c(NA, NA))
```

---

gg_rect   *Rect ggplot*

Description

Create a rect ggplot with a wrapper around the ggplot2::geom_rect function.

Usage

```
gg_rect(
  data = NULL,
  xmin = NULL,
  xmax = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  x = NULL,
  y = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.9,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
```

```
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
ymin	Unquoted ymin aesthetic variable.
ymax	Unquoted ymax aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.

`...`	Other arguments passed to the ggplot2::geom_rect function.
`title`	Title string.
`subtitle`	Subtitle string.
`x_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`x_expand`	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
`x_grid`	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
`x_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`x_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
`x_limits`	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
`x_sec_axis`	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
`x_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`x_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`y_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`y_expand`	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
`y_grid`	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
`y_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`y_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
`y_limits`	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
`y_sec_axis`	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
`y_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`y_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`col_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`col_continuous`	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
`col_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`col_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
`col_legend_place`	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol

> The number of columns for the legend elements.

col_legend_nrow

> The number of rows for the legend elements.

col_legend_rev Reverse the elements of the legend. Defaults to FALSE.

col_limits A vector to determine the limits of the colour scale.

col_rescale For a continuous col variable, a vector to rescale the pal non-linearly.

col_title Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption Caption title string.

titles A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

df <- data.frame(
  x = rep(c(2, 5, 7, 9, 12), 2),
  y = rep(c(1, 2), each = 5),
  z = factor(rep(1:5, each = 2)),
  w = rep(diff(c(0, 4, 6, 8, 10, 14)), 2)
)

df %>%
  dplyr::mutate(xmin = x - w / 2, xmax = x + w / 2, ymin = y, ymax = y + 1) %>%
  gg_rect(xmin = xmin, xmax = xmax, ymin = ymin, ymax = ymax, col = z)
```

gg_ribbon   *Ribbon ggplot*

Description

Create a ribbon ggplot with a wrapper around the ggplot2::geom_ribbon function.

Usage

```
gg_ribbon(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  xmin = NULL,
  xmax = NULL,
  ymin = NULL,
  ymax = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.5,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
```

```
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
ymin	Unquoted ymin aesthetic variable.
ymax	Unquoted ymax aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.

`...`	Other arguments passed to the ggplot2::geom_ribbon function.
`title`	Title string.
`subtitle`	Subtitle string.
`x_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`x_expand`	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
`x_grid`	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
`x_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`x_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
`x_limits`	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
`x_sec_axis`	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
`x_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`x_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`y_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`y_expand`	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
`y_grid`	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
`y_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`y_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
`y_limits`	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
`y_sec_axis`	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
`y_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`y_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`col_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`col_continuous`	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
`col_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`col_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
`col_legend_place`	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol

        The number of columns for the legend elements.

col_legend_nrow

        The number of rows for the legend elements.

col_legend_rev   Reverse the elements of the legend. Defaults to FALSE.

col_limits   A vector to determine the limits of the colour scale.

col_rescale   For a continuous col variable, a vector to rescale the pal non-linearly.

col_title   Legend title string. Defaults to converting to sentence case with spaces. Use ""
              for no title.

col_trans   For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "re-
              verse").

facet_labels   A function that takes the breaks as inputs (e.g. scales::label_comma()), or a
              named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol   The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow   The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales   Whether facet scales should be "fixed" across facets, "free" in both directions,
              or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space   Whether facet space should be "fixed" across facets, "free" to be proportional in
              both directions, or free to be proportional in just one direction (i.e. "free_x" or
              "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and
              facet scales are not "fixed".

facet_layout   Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or
              facet2) argument is provided, then defaults to "wrap". If NULL and both facet
              and facet2 arguments are provided, defaults to "grid".

caption   Caption title string.

titles   A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme   A ggplot2 theme.

Value

    A ggplot object.

Examples

```
library(ggplot2)
huron <- data.frame(year = 1875:1972, level = as.vector(LakeHuron))

huron %>%
  gg_ribbon(
    x = year,
    ymin = 0,
    ymax = level,
    x_labels = ~.x,
    alpha = 0.9)

huron %>%
```

```
dplyr::mutate(level_min = level - 1, level_max = level + 1) %>%
gg_ribbon(
  x = year,
  ymin = level_min,
  ymax = level_max,
  pal = scales::alpha(pal_viridis_mix(1), 0)) +
geom_line(aes(x = year, y = level), col = pal_viridis_mix(1))
```

---

gg_segment   *Segment ggplot*

Description

Create a segment ggplot with a wrapper around the ggplot2::geom_segment function.

Usage

```
gg_segment(
  data = NULL,
  x = NULL,
  xend = NULL,
  y = NULL,
  yend = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
```

```
    y_grid = NULL,
    y_include = NULL,
    y_labels = NULL,
    y_limits = NULL,
    y_sec_axis = ggplot2::waiver(),
    y_title = NULL,
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xend	Unquoted xend aesthetic variable.
y	Unquoted y aesthetic variable.
yend	Unquoted xend aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".

`pal`	Colours to use. A character vector of hex codes (or names).
`pal_na`	Colour to use for NA values. A character vector of a hex code (or name).
`alpha`	Opacity. A number between 0 and 1.
`...`	Other arguments passed to the ggplot2::geom_segment function.
`title`	Title string.
`subtitle`	Subtitle string.
`x_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`x_expand`	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
`x_grid`	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
`x_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`x_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
`x_limits`	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
`x_sec_axis`	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
`x_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`x_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`y_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`y_expand`	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
`y_grid`	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
`y_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`y_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
`y_limits`	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
`y_sec_axis`	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
`y_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`y_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`col_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`col_continuous`	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
`col_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).

col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
df <- data.frame(x1 = 2.62, x2 = 3.57, y1 = 21.0, y2 = 15.0)

gg_segment(df, x = x1, y = y1, xend = x2, yend = y2)
```

gg_sf	*Sf ggplot*

Description

Create a blank ggplot with a wrapper around the ggplot2::geom_sf function.

Usage

```
gg_sf(
  data = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "sf",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  ...,
  title = NULL,
  subtitle = NULL,
  x_grid = NULL,
  x_title = NULL,
  y_grid = NULL,
  y_title = NULL,
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
  col_limits = NULL,
  col_rescale = NULL,
  col_title = NULL,
  col_trans = "identity",
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  facet_layout = NULL,
  caption = NULL,
  titles = snakecase::to_sentence_case,
```

```
    theme = gg_theme(),
    void = TRUE
)
```

Arguments

`data`	A data frame or tibble.
`col`	Unquoted col and fill aesthetic variable.
`facet`	Unquoted facet aesthetic variable.
`facet2`	Unquoted second facet variable.
`group`	Unquoted group aesthetic variable.
`stat`	Statistical transformation. A character string (e.g. "identity").
`position`	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
`clip`	Whether to clip geometries outside of the panel. Either "on" or "off".
`pal`	Colours to use. A character vector of hex codes (or names).
`pal_na`	Colour to use for NA values. A character vector of a hex code (or name).
`...`	Other arguments passed to the ggplot2::geom_sf function.
`title`	Title string.
`subtitle`	Subtitle string.
`x_grid`	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
`x_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`y_grid`	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
`y_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`col_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`col_continuous`	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
`col_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`col_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
`col_legend_place`	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
`col_legend_ncol`	
	The number of columns for the legend elements.
`col_legend_nrow`	
	The number of rows for the legend elements.
`col_legend_rev`	Reverse the elements of the legend. Defaults to FALSE.

col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.
void	TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels. Defaults to TRUE.

Value

A ggplot object.

Examples

```
if (requireNamespace("sf", quietly = TRUE)) {
  library(ggplot2)
  nc <- sf::st_read(system.file("shape/nc.shp", package = "sf"), quiet = TRUE)

  gg_sf(nc, col = AREA, col_legend_place = "b")
}
```

gg_smooth   *Smooth ggplot*

Description

Create a smooth ggplot with a wrapper around the ggplot2::geom_smooth function.

Usage

```
gg_smooth(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "smooth",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.5,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
```

```
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_smooth function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.

col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

gg_smooth(mpg, x = displ, y = hwy)

gg_smooth(mpg, x = displ, y = hwy) +
  geom_point()

gg_smooth(mpg, x = hwy, y = displ) +
  geom_point()

gg_smooth(mpg, x = hwy, y = displ, orientation = "y") +
  geom_point()

gg_smooth(mpg, x = displ, y = hwy, method = "lm") +
  geom_point()
```

gg_step *Step ggplot*

Description

Create a step plot with a wrapper around the ggplot2::geom_step function.

Usage

```
gg_step(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
```

```
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable for a facet grid of facet by facet2 variables.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_step function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.

col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
recent <- economics[economics$date > as.Date("2013-01-01"), ]
gg_step(recent, x = date, y = unemploy)
```

---

gg_text	*Text ggplot*

Description

Create a text plot with a wrapper around the ggplot2::geom_text function.

Usage

```
gg_text(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  label = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
  col_limits = NULL,
  col_rescale = NULL,
  col_title = NULL,
```

```
  col_trans = "identity",
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  facet_layout = NULL,
  caption = NULL,
  titles = snakecase::to_sentence_case,
  theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable for a facet grid of facet by facet2 variables.
group	Unquoted group aesthetic variable.
label	Unquoted label aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_text function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).

x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
gg_text(mtcars, wt, mpg, label = rownames(mtcars), size = 2.5)
```

---

gg_theme	*Quick theme for a ggplot*

Description

Quick theme for a ggplot visualisation.

Usage

```
gg_theme(
  text_family = "",
  text_size = 10,
  text_pal = "#323232",
  text_face = "plain",
  title_size = text_size + 1,
  title_pal = "#000000",
  title_face = "bold",
  title_vjust = text_size * 0.2,
  title_margin = ggplot2::margin(t = text_size * -0.5, b = text_size * 1.25),
  subtitle_size = text_size,
```

```
    subtitle_pal = "#323232",
    subtitle_face = "plain",
    subtitle_vjust = text_size * 0.4,
    subtitle_margin = ggplot2::margin(t = text_size * -0.5, b = text_size),
    caption_size = text_size - 1,
    caption_pal = "#7F7F7F",
    caption_face = "plain",
    caption_hjust = 0,
    axis_line_linewidth = 0.3,
    axis_line_pal = "#323232",
    axis_ticks_linewidth = NULL,
    axis_ticks_pal = NULL,
    legend_key_pal = NULL,
    panel_background_pal = "#FEFEFE",
    panel_grid_linewidth = 0.2,
    panel_grid_pal = "#D3D3D3",
    panel_spacing_lines = 1.25,
    plot_background_pal = "#F1F3F5"
)
```

Arguments

`text_family`	The font family for all text to use. Defaults to "".
`text_size`	The size of all text other than the title, subtitle and caption. Defaults to 10.
`text_pal`	The colour for all text other than the title, subtitle or caption. Defaults to "#323232".
`text_face`	The font style of all text other than the title, subtitle or caption. Defaults to "plain".
`title_size`	The size of the title text_family. Defaults to 11.
`title_pal`	The colour for the title text_family. Defaults to "#000000".
`title_face`	The font style of the title text_family. Defaults to "bold".
`title_vjust`	The vertical adjustment for the title.
`title_margin`	The margin for the title.
`subtitle_size`	The size of the subtitle text_family. Defaults to 10.
`subtitle_pal`	The colour for the subtitle text_family. Defaults to "#323232".
`subtitle_face`	The font style of the subtitle text_family. Defaults to "plain".
`subtitle_vjust`	The vertical adjustment for the subtitle.
`subtitle_margin`	
	The margin for the title.
`caption_size`	The size of the caption. Defaults to 9.
`caption_pal`	The colour for the caption. Defaults to "#7F7F7F".
`caption_face`	The font style of the caption. Defaults to "plain".
`caption_hjust`	The horizontal adjustment for the caption.

axis_line_linewidth

     The linewidth of the axis. Defaults to 0.3.

axis_line_pal The colour for the axis. Defaults to "#323232".

axis_ticks_linewidth

     The linewidth of the ticks. Defaults to 0.3.

axis_ticks_pal The colour for the ticks. Defaults to "#323232".

legend_key_pal The colour for the legend key. Defaults to the plot_background_pal.

panel_background_pal

     The colour for the panel background colour.

panel_grid_linewidth

     The linewidth of the vertical major gridlines. Defaults to 0.2.

panel_grid_pal The colour for the vertical major gridlines. Defaults to "#D3D3D3".

panel_spacing_lines

     The size of the spacing between facet panels in units of "lines". Defaults to 1.25.

plot_background_pal

     The colour for the plot background colour.

Value

A ggplot theme.

---

gg_tile	*Tile ggplot*

Description

Create a tile plot with a wrapper around the ggplot2::geom_tile function.

Usage

```
gg_tile(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.9,
  ...,
```

```
    title = NULL,
    subtitle = NULL,
    x_breaks = NULL,
    x_expand = NULL,
    x_grid = NULL,
    x_include = NULL,
    x_labels = NULL,
    x_limits = NULL,
    x_sec_axis = ggplot2::waiver(),
    x_title = NULL,
    x_trans = "identity",
    y_breaks = NULL,
    y_expand = NULL,
    y_grid = NULL,
    y_include = NULL,
    y_labels = NULL,
    y_limits = NULL,
    y_sec_axis = ggplot2::waiver(),
    y_title = NULL,
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.

`col`	Unquoted col and fill aesthetic variable.
`facet`	Unquoted facet aesthetic variable.
`facet2`	Unquoted second facet variable for a facet grid of facet by facet2 variables.
`group`	Unquoted group aesthetic variable.
`stat`	Statistical transformation. A character string (e.g. "identity").
`position`	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
`clip`	Whether to clip geometries outside of the panel. Either "on" or "off".
`pal`	Colours to use. A character vector of hex codes (or names).
`pal_na`	Colour to use for NA values. A character vector of a hex code (or name).
`alpha`	Opacity. A number between 0 and 1.
`...`	Other arguments passed to the ggplot2::geom_tile function.
`title`	Title string.
`subtitle`	Subtitle string.
`x_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`x_expand`	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
`x_grid`	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
`x_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`x_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
`x_limits`	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
`x_sec_axis`	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
`x_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`x_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`y_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`y_expand`	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
`y_grid`	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
`y_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`y_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
`y_limits`	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
`y_sec_axis`	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

`y_title`	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`y_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`col_breaks`	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
`col_continuous`	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
`col_include`	For a numeric or date variable, any values that the scale should include (e.g. 0).
`col_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
`col_legend_place`	
	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
`col_legend_ncol`	
	The number of columns for the legend elements.
`col_legend_nrow`	
	The number of rows for the legend elements.
`col_legend_rev`	Reverse the elements of the legend. Defaults to FALSE.
`col_limits`	A vector to determine the limits of the colour scale.
`col_rescale`	For a continuous col variable, a vector to rescale the pal non-linearly.
`col_title`	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
`col_trans`	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
`facet_labels`	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
`facet_ncol`	The number of columns of facets. Only applies to a facet layout of "wrap".
`facet_nrow`	The number of rows of facets. Only applies to a facet layout of "wrap".
`facet_scales`	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
`facet_space`	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
`facet_layout`	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
`caption`	Caption title string.
`titles`	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
`theme`	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

df <- data.frame(
  x = rep(c(2, 5, 7, 9, 12), 2),
  y = rep(c(1, 2), each = 5),
  z = factor(rep(1:5, each = 2)),
  w = rep(diff(c(0, 4, 6, 8, 10, 14)), 2)
)

df %>%
gg_tile(x = x, y = y, col = z,
        height = 0.9, width = 0.9)
```

---

gg_violin   *Violin ggplot*

Description

Create a violin plot with a wrapper around the ggplot2::geom_violin function.

Usage

```
gg_violin(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "ydensity",
  position = "dodge",
  clip = "on",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.9,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
```

```
    x_sec_axis = ggplot2::waiver(),
    x_title = NULL,
    x_trans = "identity",
    y_breaks = NULL,
    y_expand = NULL,
    y_grid = NULL,
    y_include = NULL,
    y_labels = NULL,
    y_limits = NULL,
    y_sec_axis = ggplot2::waiver(),
    y_title = NULL,
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
    col_legend_nrow = NULL,
    col_legend_rev = FALSE,
    col_limits = NULL,
    col_rescale = NULL,
    col_title = NULL,
    col_trans = "identity",
    facet_labels = NULL,
    facet_ncol = NULL,
    facet_nrow = NULL,
    facet_scales = "fixed",
    facet_space = "fixed",
    facet_layout = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = gg_theme()
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable for a facet grid of facet by facet2 variables.
group	Unquoted group aesthetic variable.
stat	Statistical transformation. A character string (e.g. "identity").
position	Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).

clip	Whether to clip geometries outside of the panel. Either "on" or "off".
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_violin function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis (and the zoom via the coord).
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".

col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.

col_legend_place

	The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol

	The number of columns for the legend elements.

col_legend_nrow

	The number of rows for the legend elements.

col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_rescale	For a continuous col variable, a vector to rescale the pal non-linearly.
col_title	Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans	For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption	Caption title string.
titles	A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)
mtcars %>%
  dplyr::mutate(cyl = as.factor(cyl)) %>%
  gg_violin(x = cyl, y = mpg)
```

---

pal_d3_mix *D3 palette reordered.*

Description

A function to retreive a vector of hex codes for a non-numeric (or non-ordererd) variable.

Usage

```
pal_d3_mix(n)
```

Arguments

n   The number of colours (excluding an NA colour).

Value

A character vector of hex codes.

Examples

```
scales::show_col(pal_d3_mix(9))
```

---

pal_na *NA palette.*

Description

A function to retreive a hex code for a colour to use for NA values.

Usage

```
pal_na(pal = "#7F7F7F")
```

Arguments

pal   The hex code or name of the NA colour. Defaults to "#7F7F7FFF".

Value

A character vector.

Examples

```
scales::show_col(pal_na())
```

---

pal_viridis_mix   *Viridis palette reordered.*

Description

A function to retreive a vector of hex codes for a numeric (or ordererd) variable.

Usage

```
pal_viridis_mix(n)
```

Arguments

n   The number of colours (excluding an NA colour).

Value

A character vector of hex codes.

Examples

```
scales::show_col(pal_viridis_mix(9))
```

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