# Package 'ggblanket'

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gg histogram

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add\_tooltip\_text

Add a tooltip text column of united variable names and values.

# Description

Add a tooltip text column of united variable names and values.

# Usage

```
add_tooltip_text(data, ..., titles = NULL)
```

#### **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.

A function to format the variable names, including in rlang lambda format.

titles

#### Value

A data frame or tibble with a column of text

#### **Examples**

```
iris %>%
 add_tooltip_text() %>%
 head(1)
iris %>%
 add_tooltip_text(Species, tidyselect::contains("Sepal")) %>%
 head(1)
 library(snakecase)
iris %>%
 add_tooltip_text(titles = ~ to_sentence_case(.x)) %>%
 head(1)
iris %>%
  add_tooltip_text() %>%
  gg_point(x = Sepal.Width,
            y = Sepal.Length,
            col = Species,
            text = text,
            theme = gg_theme("helvetica", grid_v = TRUE, grid_h = TRUE)) %>%
   plotly::ggplotly(tooltip = "text")
```

gg\_area

Area ggplot.

# Description

Create a area plot with a wrapper around the ggplot2::geom\_area function.

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

```
titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_include = NULL,
  x_{labels} = NULL,
 x_limits = NULL,
 x_oob = scales::oob_keep,
 x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
 x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

data	A data frame or tibble.
X	Unquoted x aesthetic variable.
у	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	
	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_ncol	
col_legend_nrov	The number of columns for the legend elements.
cor_regend_m of	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
theme	A ggplot2 theme.

# Value

A ggplot object.

# **Examples**

```
huron <- data.frame(year = 1875:1972, level = as.vector(LakeHuron))
huron %>%
    gg_area(
        x = year,
        y = level,
        x_labels = ~.x)
huron %>%
    gg_area(
        y = year,
```

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```
x = level,
x_labels = ~.x,
orientation = "y")
```

gg\_bar

Bar ggplot.

# Description

Create a bar plot with a wrapper around the ggplot2::geom\_bar function.

```
gg_bar(
 data = NULL,
 x = NULL
 y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "count",
  position = "stack",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.9,
 width = NULL,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_{expand} = NULL
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_{title} = NULL,
  x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
```

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```
y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
 col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
 col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
 caption = NULL,
  theme = NULL
)
```

data	A data frame or tibble.
X	Unquoted x aesthetic variable.
у	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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.
width	Width. A number 0 upwards.
	Other arguments passed to the relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.

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subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_pla	
cal larged see	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_nco	The number of columns for the legend elements.

col_legend_nrow	V
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
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\_blank Point ggplot.

# Description

Create a point plot with a wrapper around the ggplot2::geom\_blank function.

```
gg_blank(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  label = NULL,
  xmin = NULL,
```

```
xmax = NULL,
  xend = NULL,
 ymin = NULL,
 ymax = NULL,
  yend = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_{expand} = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

#### **Arguments**

data A data frame or tibble. Unquoted x aesthetic variable. Х Unquoted y aesthetic variable. У 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. Unquoted group aesthetic variable. group label Unquoted label aesthetic variable. Unquoted xmin aesthetic variable. xmin Unquoted xmax aesthetic variable. xmax xend Unquoted xend aesthetic variable. ymin Unquoted ymin aesthetic variable. ymax Unquoted ymax aesthetic variable. vend Unquoted xend aesthetic variable. Statistical transformation. A character string (e.g. "identity"). stat Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. position ggplot2::position\_identity()). pal Colours to use. A character vector of hex codes (or names). Colour to use for NA values. A character vector of a hex code (or name). pal\_na Other arguments passed to the relevant ggplot2::geom\_\* function. . . . titles A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to\_sentence\_case. title Title string. subtitle Subtitle string. coord Coordinate system. A function that takes the limits as input (e.g. scales::breaks\_pretty()), or a vector x\_breaks x\_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)). 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. x\_oob A scales::oob\_\* function for how to deal with out-of-bounds values. A secondary axis specified by the ggplot2::sec\_axis or ggplot2::dup\_axis funcx\_sec\_axis Axis title string. Defaults to converting to sentence case with spaces. Use "" for x\_title no title.

x_trans	For a numeric variable, a transformation object (e.g. "log10").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_pla	
cal larged non	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_nco	The number of columns for the legend elements.
col_legend_nro	
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
theme	A ggplot2 theme.

# Value

A ggplot object.

#### **Examples**

```
library(ggplot2)

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

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

gg_blank(diamonds, x = carat, y = price)
```

gg\_boxplot

Boxplot ggplot.

# Description

Create a boxplot plot with a wrapper around the ggplot2::geom\_boxplot function.

```
gg_boxplot(
 data = NULL,
  x = NULL
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "boxplot",
  position = "dodge2",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.5,
 width = NULL,
  . . . ,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_{expand} = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
```

```
x_oob = scales::oob_keep,
 x_sec_axis = ggplot2::waiver(),
 x_{title} = NULL
 x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

data	A data frame or tibble.
X	Unquoted x aesthetic variable.
у	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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.
width	Width. A number 0 upwards.
	Other arguments passed to the relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).

A function that takes the breaks as inputs (e.g. scales::label\_comma()), or a col\_labels vector of labels. Note this does not affect where col\_intervals is not NULL. col\_legend\_place The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left. col\_legend\_ncol The number of columns for the legend elements. col\_legend\_nrow The number of rows for the legend elements. col\_limits A vector to determine the limits of the axis. col\_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title. 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 facetted plots. facet\_nrow The number of rows of facetted plots. Whether facet\_scales should be "fixed" across facets, "free" in both directions, facet\_scales or free in just one direction (i.e. "free\_x" or "free\_y"). Defaults to "fixed". caption Caption title string. 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))
```

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gg\_col

Col ggplot.

#### **Description**

Create a col plot with a wrapper around the ggplot2::geom\_col function.

```
gg_col(
  data = NULL,
  x = NULL,
 y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "stack",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.9,
 width = NULL,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_include = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_{title} = NULL,
  x_{trans} = "identity",
  y_breaks = NULL,
 y_expand = NULL,
  y_include = NULL,
  y_{labels} = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
```

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```
col_breaks = NULL,
 col_include = NULL,
 col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
 facet_scales = "fixed",
 caption = NULL,
  theme = NULL
)
```

data	A data frame or tibble.
X	Unquoted x aesthetic variable.
у	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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.
width	Width. A number 0 upwards.
	Other arguments passed to the relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.

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x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length $2$ (e.g. $c(0, 0)$ ).
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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_pla	
col_legend_nco	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
cor_regend_nco	The number of columns for the legend elements.
col_legend_nro	
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
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 plot with a wrapper around the ggplot2::geom\_crossbar function.

```
gg_crossbar(
 data = NULL,
 x = NULL
  xmin = NULL,
 xmax = NULL,
 y = NULL,
 ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
```

```
alpha = 0.5,
 width = NULL,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_include = NULL,
 x_{labels} = NULL,
  x_limits = NULL,
 x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_{title} = NULL,
  x_{trans} = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_{labels} = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.

у	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 for a facet grid of facet by facet2 variables.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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.
width	Width. A number 0 upwards.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
	Other arguments passed to the relevant ggplot2::geom_* function.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	
col_legend_ncol	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
cor_regend_neor	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
theme	A ggplot2 theme.
0.100	

# Value

A ggplot object.

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# **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)</pre>
```

gg\_density

Density ggplot.

# **Description**

Create a density plot with a wrapper around the ggplot2::geom\_density function.

```
gg_density(
  data = NULL,
  x = NULL
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "density",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.5,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_{expand} = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
```

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```
x_oob = scales::oob_keep,
 x_sec_axis = ggplot2::waiver(),
 x_{title} = NULL
  x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

data	A data frame or tibble.
X	Unquoted x aesthetic variable.
у	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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).

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alpha	Opacity. A number between 0 and 1.
	Other arguments passed to the relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).

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. "b" for bottom, "r" for right, "t" for top, or "l" for left. col\_legend\_ncol The number of columns for the legend elements. col\_legend\_nrow The number of rows for the legend elements. A vector to determine the limits of the axis. col\_limits col\_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for 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", ...)). The number of columns of facetted plots. facet\_ncol facet\_nrow The number of rows of facetted plots. 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". caption Caption title string. 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 plot with a wrapper around the ggplot2::geom\_errorbar function.

```
gg_errorbar(
  data = NULL,
  x = NULL
  xmin = NULL,
  xmax = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  width = 0.1,
  . . . ,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
```

```
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_limits = NULL,
col_title = NULL,
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
caption = NULL,
theme = NULL
```

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
У	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 for a facet grid of facet by facet2 variables.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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.
width	Width. A number 0 upwards.
	Other arguments passed to the relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_pla	
col_legend_nco	
	The number of columns for the legend elements.
col_legend_nro	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for
CO1_01016	no title.

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 facetted plots.

facet\_nrow The number of rows of facetted plots.

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".

caption Caption title string.

theme A ggplot2 theme.

#### Value

A ggplot object.

# **Examples**

```
library(ggplot2)
df <- data.frame(</pre>
 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)</pre>
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 plot with a wrapper around the ggplot2::geom\_freqpoly function.

```
gg_freqpoly(
  data = NULL,
  x = NULL
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "bin",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  bins = 30,
  . . . ,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_{trans} = "identity",
  y_breaks = NULL,
  y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
```

```
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
caption = NULL,
theme = NULL
)
```

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
у	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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.
bins	Number of bins. An integer 0 upwards.
	Other arguments passed to the relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.

x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	
col_legend_ncol	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
COI_Tegenu_ncoi	The number of columns for the legend elements.
col_legend_nrow	•
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
theme	A ggplot2 theme.

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#### 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 plot with a wrapper around the ggplot2::geom\_function function.

```
gg_function(
 data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "function",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
```

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```
x_sec_axis = ggplot2::waiver(),
 x_{title} = NULL,
 x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
У	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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).

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alpha	Opacity. A number between 0 and 1.
	Other arguments passed to the relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).

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. "b" for bottom, "r" for right, "t" for top, or "l" for left. col\_legend\_ncol The number of columns for the legend elements. col\_legend\_nrow The number of rows for the legend elements. A vector to determine the limits of the axis. col\_limits Axis title string. Defaults to converting to sentence case with spaces. Use "" for col\_title no title. A function that takes the breaks as inputs (e.g. scales::label\_comma()), or a facet\_labels named vector of labels (e.g. c(value = "label", ...)). facet\_ncol The number of columns of facetted plots. facet\_nrow The number of rows of facetted plots. Whether facet\_scales should be "fixed" across facets, "free" in both directions, facet\_scales or free in just one direction (i.e. "free\_x" or "free\_y"). Defaults to "fixed". Caption title string. caption 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\_histogram

Histogram ggplot.

# Description

Create a histogram plot with a wrapper around the ggplot2::geom\_histogram function.

```
gg_histogram(
  data = NULL,
  x = NULL
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "bin",
  position = "stack",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.9,
  bins = 30,
  . . . ,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_{trans} = "identity",
  y_breaks = NULL,
  y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
```

```
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
caption = NULL,
theme = NULL
)
```

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
у	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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.
bins	Number of bins. An integer 0 upwards.
	Other arguments passed to the relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.

x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_pla	
aal lagand naa	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_nco	The number of columns for the legend elements.
col_legend_nro	
_ 0 _	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
theme	A ggplot2 theme.

# Value

A ggplot object.

#### **Examples**

gg\_jitter

Jitter ggplot.

#### **Description**

Create a jitter plot with a wrapper around the ggplot2::geom\_jitter function.

```
gg_jitter(
 data = NULL,
 x = NULL
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "jitter",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  titles = NULL,
  title = NULL,
```

```
subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
 x_include = NULL,
 x_{labels} = NULL,
 x_limits = NULL,
 x_oob = scales::oob_keep,
 x_sec_axis = ggplot2::waiver(),
 x_title = NULL,
 x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
 col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

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

-0	
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	
	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_nco	
	The number of columns for the legend elements.
col_legend_nro	
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
theme	A ggplot2 theme.

# Value

A ggplot object.

# **Examples**

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gg\_label

Label ggplot.

#### **Description**

Create a label plot with a wrapper around the ggplot2::geom\_label function.

```
gg_label(
  data = NULL,
  x = NULL,
 y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  label = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_include = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_{title} = NULL,
  x_{trans} = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_include = NULL,
  y_{labels} = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
```

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```
col_breaks = NULL,
col_include = NULL,
col_intervals = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_limits = NULL,
col_title = NULL,
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
caption = NULL,
theme = NULL
```

_	
data	A data frame or tibble.
X	Unquoted x aesthetic variable.
у	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.

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x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. $c(0, 0)$ ).
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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	
col_legend_ncol	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
cor_regend_neer	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for

no title.

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 facetted plots.

facet\_nrow The number of rows of facetted plots.

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".

caption Caption title string.

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 plot with a wrapper around the ggplot2::geom\_line function.

```
gg_line(
  data = NULL,
  x = NULL
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  titles = NULL,
  title = NULL,
```

```
subtitle = NULL,
 coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
 x_{include} = NULL,
 x_{labels} = NULL,
 x_limits = NULL,
 x_oob = scales::oob_keep,
 x_sec_axis = ggplot2::waiver(),
 x_title = NULL,
 x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
 col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

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

text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	
	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
theme	A ggplot2 theme.

# Value

A ggplot object.

# **Examples**

```
library(ggplot2)
gg_line(economics, x = date, y = unemploy)
gg_line(economics, x = date, y = unemploy, linetype = 2)
gg_line(economics_long, x = date, y = value01, col = variable)
gg_line(economics, x = unemploy, y = date, orientation = "y")
```

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gg\_linerange

Linerange ggplot.

#### **Description**

Create a linerange plot with a wrapper around the ggplot2::geom\_linerange function.

```
gg_linerange(
  data = NULL,
  x = NULL,
  xmin = NULL,
 xmax = NULL,
 y = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_{expand} = NULL,
  x_include = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_{title} = NULL,
  x_trans = "identity",
  y_breaks = NULL,
 y_expand = NULL,
  y_include = NULL,
 y_{\text{labels}} = NULL,
  y_limits = NULL,
 y_oob = scales::oob_keep,
```

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```
y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
 col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
 facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
у	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 for a facet grid of facet by facet2 variables.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.

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title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	
	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.

col\_legend\_ncol

The number of columns for the legend elements.

col\_legend\_nrow

The number of rows for the legend elements.

col\_limits A vector to determine the limits of the axis.

col\_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for

no title.

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 facetted plots.

facet\_nrow The number of rows of facetted plots.

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".

caption Caption title string.

theme A ggplot2 theme.

#### Value

A ggplot object.

#### **Examples**

gg\_path

Path ggplot.

#### Description

Create a path plot with a wrapper around the ggplot2::geom\_path function.

```
gg_path(
  data = NULL,
  x = NULL
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_{expand} = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_{title} = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
  y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
```

```
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
caption = NULL,
theme = NULL
)
```

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
у	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	
	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	_
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
theme	A ggplot2 theme.

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# 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 plot with a wrapper around the ggplot2::geom\_point function.

```
gg_point(
  data = NULL,
 x = NULL
 y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "identity",
 pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
```

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```
x_title = NULL,
  x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

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,

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	Other arguments passed to the relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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. "b" for bottom, "r" for right, "t" for top, or "l" for left. col\_legend\_ncol The number of columns for the legend elements. col\_legend\_nrow The number of rows for the legend elements. col\_limits A vector to determine the limits of the axis. Axis title string. Defaults to converting to sentence case with spaces. Use "" for col\_title no title. 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 facetted plots. facet\_nrow The number of rows of facetted plots. Whether facet\_scales should be "fixed" across facets, "free" in both directions, facet\_scales or free in just one direction (i.e. "free\_x" or "free\_y"). Defaults to "fixed". Caption title string. caption

#### Value

theme

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)
```

A ggplot2 theme.

gg\_pointrange

Pointrange ggplot.

#### Description

Create a pointrange plot with a wrapper around the ggplot2::geom\_pointrange function.

```
gg_pointrange(
  data = NULL,
  x = NULL
  xmin = NULL,
  xmax = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  . . . ,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_{expand} = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_oob = scales::oob_keep,
  y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
```

```
col_legend_nrow = NULL,
col_limits = NULL,
col_title = NULL,
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
caption = NULL,
theme = NULL
```

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
у	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 for a facet grid of facet by facet2 variables.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.#'
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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",)).

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facet\_ncol The number of columns of facetted plots.

facet\_nrow The number of rows of facetted plots.

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".

caption Caption title string.

theme A ggplot2 theme.

#### Value

A ggplot object.

#### **Examples**

gg\_qq

Qq ggplot.

### **Description**

Create a qq plot with a wrapper around the ggplot2::geom\_qq function.

```
gg_qq(
  data = NULL,
  sample = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  x = NULL,
  y = NULL,
  stat = "qq",
```

 $gg_{-}qq$ 

```
position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  . . . ,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
 x_expand = NULL,
  x_include = NULL,
 x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
 x_{title} = NULL,
  x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

# Arguments

data A data frame or tibble.

sample Unquoted sample aesthetic variable.

 $gg_qq$ 

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.

text Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(.,

tooltip = "text").

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()).

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 relevant ggplot2::geom\_\* function.

titles A function to format the x, y and col titles, including in rlang lambda format.

Defaults to snakecase::to\_sentence\_case.

title Title string.
subtitle Subtitle string.
coord Coordinate system.

x\_breaks A function that takes the limits as input (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\_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.

x\_oob A scales::oob\_\* function for how to deal with out-of-bounds values.#'

x\_sec\_axis A secondary axis specified by the ggplot2::sec\_axis or ggplot2::dup\_axis func-

tion.

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").

y\_breaks A function that takes the limits as input (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\_include For a numeric or date variable, any values that the scale should include (e.g. 0).

 $gg_{-}qq$  71

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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_pla	
col_legend_nco	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
coi_legend_nco	The number of columns for the legend elements.
col_legend_nro	
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
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)</pre>
```

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gg\_raster

Raster ggplot.

#### **Description**

Create a raster plot with a wrapper around the ggplot2::geom\_raster function.

```
gg_raster(
  data = NULL,
  x = NULL,
 y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.9,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_{expand} = NULL,
  x_include = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_{trans} = "identity",
  y_breaks = NULL,
  y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
  y_limits = NULL,
 y_oob = scales::oob_keep,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
```

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```
col_include = NULL,
col_intervals = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_limits = NULL,
col_title = NULL,
facet_labels = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
caption = NULL,
theme = NULL
```

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
У	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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. $c(0, 0)$ ).

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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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_pla	
col_legend_nco	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
cor_regend_nco	The number of columns for the legend elements.
col_legend_nro	
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.

facet\_nrow The number of rows of facetted plots.

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".

caption Caption title string.

theme A ggplot2 theme.

#### Value

A ggplot object.

#### **Examples**

```
library(ggplot2)  \begin{split} & gg\_raster(faithfuld, \ x = waiting, \ y = eruptions, \ col = density) \\ & gg\_raster(faithfuld, \ x = waiting, \ y = eruptions, \ col = density, \\ & \quad x\_limits = c(NA, NA), \ y\_limits = c(NA, NA)) \end{split}
```

gg\_rect

Rect ggplot.

#### Description

Create a rect plot with a wrapper around the ggplot2::geom\_rect function.

```
gg_rect(
  data = NULL,
  xmin = NULL,
  xmax = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  x = NULL
  y = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
```

```
alpha = 0.9,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_include = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_{title} = NULL
  x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_{title} = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

data	A data frame or tibble.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
ymin	Unquoted ymin aesthetic variable.
vmax	Unquoted ymax aesthetic variable.

Unquoted col and fill aesthetic variable. col facet Unquoted facet aesthetic variable. facet2 Unquoted second facet variable for a facet grid of facet by facet2 variables. Unquoted group aesthetic variable. group text Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").Х Unquoted x aesthetic variable. Unquoted y aesthetic variable. у Statistical transformation. A character string (e.g. "identity"). stat Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. position ggplot2::position\_identity()). pal Colours to use. A character vector of hex codes (or names). Colour to use for NA values. A character vector of a hex code (or name). pal\_na alpha Opacity. A number between 0 and 1. Other arguments passed to the relevant ggplot2::geom\_\* function. . . . titles A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to\_sentence\_case. title Title string. subtitle Subtitle string. coord Coordinate system. x\_breaks A function that takes the limits as input (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\_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. A vector of length 2 to determine the limits of the axis. x\_limits x\_oob A scales::oob\_\* function for how to deal with out-of-bounds values. x\_sec\_axis A secondary axis specified by the ggplot2::sec\_axis or ggplot2::dup\_axis function. Axis title string. Defaults to converting to sentence case with spaces. Use "" for x\_title no title. For a numeric variable, a transformation object (e.g. "log10"). x\_trans A function that takes the limits as input (e.g. scales::breaks\_pretty()), or a vector y\_breaks of breaks.

Padding to the limits with the ggplot2::expansion function, or a vector of length

For a numeric or date variable, any values that the scale should include (e.g. 0).

y\_expand

y\_include

2 (e.g. c(0, 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.	
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.	
y_sec_axis	A secondary axis specified by 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").	
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.	
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).	
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).	
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_plac		
	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.	
col_legend_ncol	The number of columns for the legend elements.	
col_legend_nrow		
_ 0 _	The number of rows for the legend elements.	
col_limits	A vector to determine the limits of the axis.	
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.	
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 facetted plots.	
facet_nrow	The number of rows of facetted plots.	
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".	
caption	Caption title string.	
theme	A ggplot2 theme.	

# Value

A ggplot object.

# Examples

```
library(ggplot2)

df <- data.frame(</pre>
```

```
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 plot with a wrapper around the ggplot2::geom\_ribbon function.

```
gg_ribbon(
  data = NULL,
  x = NULL,
  y = NULL
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  xmin = NULL,
  xmax = NULL,
  ymin = NULL,
  ymax = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.5,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_{expand} = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
```

```
x_oob = scales::oob_keep,
 x_sec_axis = ggplot2::waiver(),
 x_{title} = NULL
 x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

data	A data frame or tibble.
х	Unquoted x aesthetic variable.
У	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").

col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	ce
	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_ncol	
	The number of columns for the legend elements.
col_legend_nrow	· ·
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
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 %>%
    gg_ribbon(
        x = year,
        ymin = level - 1,
```

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```
ymax = level + 1,
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 plot with a wrapper around the ggplot2::geom\_segment function.

```
gg_segment(
  data = NULL,
 x = NULL
 xend = NULL,
  y = NULL,
 yend = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  . . . ,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_{title} = NULL,
  x_trans = "identity",
  y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
```

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```
y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_{title} = NULL,
 y_trans = "identity",
 col_breaks = NULL,
 col_include = NULL,
  col_intervals = NULL,
 col_labels = NULL,
 col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
 theme = NULL
)
```

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xend	Unquoted xend aesthetic variable.
у	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 for a facet grid of facet by facet2 variables.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.

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titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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.

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col\_legend\_place

The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.

col\_legend\_ncol

The number of columns for the legend elements.

col\_legend\_nrow

The number of rows for the legend elements.

col\_limits A vector to determine the limits of the axis.

col\_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for

no title.

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 facetted plots.

facet\_nrow The number of rows of facetted plots.

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".

caption Caption title string. 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)</pre>
```

gg\_sf

Sf ggplot.

#### **Description**

Create a sf plot with a wrapper around the ggplot2:: %>% function.

```
gg_sf(
  data = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
```

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```
text = NULL,
  stat = "sf",
 position = "identity",
 pal = NULL,
 pal_na = "#7F7F7F",
  alpha = 0.9,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = ggplot2::coord_sf(),
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
 facet_ncol = NULL,
  facet_nrow = NULL,
  caption = NULL,
  theme = NULL
)
```

data	A sf object.
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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.

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	title	Title string.
	subtitle	Subtitle string.
	coord	Coordinate system.
	col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
	col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
	col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
	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_plac	
		The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
	col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow		
		The number of rows for the legend elements.
	col_limits	A vector to determine the limits of the axis.
	col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
	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 facetted plots.
	facet_nrow	The number of rows of facetted plots.
	caption	Caption title string.
	theme	A ggplot2 theme.

# 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")
}</pre>
```

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gg\_smooth

Smooth ggplot.

#### **Description**

Create a smooth plot with a wrapper around the ggplot2::geom\_smooth function.

```
gg_smooth(
  data = NULL,
  x = NULL,
 y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "smooth",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.5,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_{expand} = NULL,
  x_include = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
  y_limits = NULL,
 y_oob = scales::oob_keep,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
```

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```
col_include = NULL,
col_intervals = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_nrool = NULL,
col_legend_nrow = NULL,
col_limits = NULL,
col_title = NULL,
facet_labels = NULL,
facet_nrool = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
caption = NULL,
theme = NULL
```

data	A data frame or tibble.
X	Unquoted x aesthetic variable.
У	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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. $c(0, 0)$ ).

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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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.#'
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_pla	
aal lagand naa	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_nco	The number of columns for the legend elements.
col_legend_nro	-
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.

facet\_nrow The number of rows of facetted plots.

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".

caption Caption title string.

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.

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

```
text = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_{expand} = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = 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 for a facet grid of facet by facet2 variables.

group Unquoted group aesthetic variable.

text Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(.,

tooltip = "text").

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()).

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 relevant ggplot2::geom\_\* function.

titles A function to format the x, y and col titles, including in rlang lambda format.

Defaults to snakecase::to\_sentence\_case.

title Title string.
subtitle Subtitle string.
coord Coordinate system.

x\_breaks A function that takes the limits as input (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\_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.

x\_oob A scales::oob\_\* function for how to deal with out-of-bounds values.

x\_sec\_axis A secondary axis specified by the ggplot2::sec\_axis or ggplot2::dup\_axis func-

tion.

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").

y\_breaks A function that takes the limits as input (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\_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	
	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrov	
_ 5 _	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
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)
```

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 $gg\_text$ 

Text ggplot.

#### **Description**

Create a text plot with a wrapper around the ggplot2::geom\_text function.

```
gg_text(
  data = NULL,
  x = NULL,
 y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  label = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 1,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_include = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_{title} = NULL,
  x_{trans} = "identity",
  y_breaks = NULL,
 y_expand = NULL,
  y_include = NULL,
  y_{labels} = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
```

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```
col_breaks = NULL,
col_include = NULL,
col_intervals = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_nrow = NULL,
col_legend_nrow = NULL,
col_limits = NULL,
col_title = NULL,
facet_labels = NULL,
facet_nrow = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
caption = NULL,
theme = NULL
```

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
У	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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 relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.

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x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. $c(0, 0)$ ).	
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.	
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.#'	
x_sec_axis	A secondary axis specified by 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").	
y_breaks	A function that takes the limits as input (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_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.	
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.	
y_sec_axis	A secondary axis specified by 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").	
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.	
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).	
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).	
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		
col_legend_nco		
aal lagand noo	The number of columns for the legend elements.	
col_legend_nro	The number of rows for the legend elements.	
col_limits	A vector to determine the limits of the axis.	
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.	

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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 facetted plots.

facet\_nrow The number of rows of facetted plots.

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".

caption Caption title string.

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.

```
gg_theme(
  font = "",
  title_pal = "#000000",
  title_font = NULL,
  title_size = 11,
  title_style = "bold",
  subtitle_font = NULL,
  subtitle_pal = "#323232",
  subtitle_size = 10,
  subtitle_style = "plain",
  body_font = NULL,
  body_pal = "#323232",
  body_size = 10,
  body_style = "plain",
  caption_font = NULL,
  caption_pal = "#7F7F7F",
  caption_size = 9,
  caption_style = "plain",
```

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```
axis_size = 0.3,
axis_pal = "#323232",
ticks_size = 0.3,
ticks_pal = "#323232",
bg_plot_pal = "#F1F3F5",
bg_panel_pal = "#FEFEFE",
bg_legend_key_pal = "plot",
grid_h = FALSE,
grid_v = FALSE,
grid_pal = "#D3D3D3",
grid_size = 0.2,
facet_gap_size = 1.5,
void = FALSE
```

font	The font for all text to use. Defaults to "".
title_pal	The colour palette for the title font. Defaults to "#000000".
title_font	The font for the title. If NULL, inherits from font argument.
title_size	The size of the title font. Defaults to 11.
title_style	The style of the title font. Defaults to "bold".
subtitle_font	The font for the subtitle. If NULL, inherits from font argument.
subtitle_pal	The colour palette for the subtitle font. Defaults to "#323232".
subtitle_size	The size of the subtitle font. Defaults to 10.
subtitle_style	The style of the subtitle font. Defaults to "plain".
body_font	The font for all text other than the title, subtitle and caption. If NULL, inherits from font argument.
body_pal	The colour palette for all text other than the title, subtitle or caption. Defaults to "#323232".
body_size	The size of all text other than the title, subtitle and caption. Defaults to 10.
body_style	The style of all text other than the title, subtitle or caption. Defaults to "plain".
caption_font	The font for the caption. If NULL, inherits from font argument.
caption_pal	The colour palette for the caption. Defaults to "#7F7F7F".
caption_size	The size of the caption. Defaults to 9.
caption_style	The style of the caption. Defaults to "plain".
axis_size	The size of the axis. Defaults to 0.3.
axis_pal	The colour palette for the axis. Defaults to "#323232".
ticks_size	The size of the ticks. Defaults to 0.3.
ticks_pal	The colour palette for the ticks. Defaults to "#323232".
bg_plot_pal	The colour palette for the plot background colour.
bg_panel_pal	The colour palette for the panel background colour.

bg_legend_key_pal		
	The colour palette for the legend key. Can also use special values of "plot" and "panel".	
grid_h	TRUE or FALSE of whether to show hotizontal gridlines. Defaults to FALSE.	
grid_v	TRUE or FALSE of whether to show vertical gridlines. Defaults to FALSE.	
grid_pal	The colour palette for the vertical major gridlines. Defaults to "#D3D3D3".	
grid_size	The size of the vertical major gridlines. Defaults to 0.2.	
<pre>facet_gap_size</pre>	The size of the spacing between facet panels in units of "lines". Defaults to 1.5.	
void	TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.	

#### Value

A ggplot theme.

gg\_tile Tile ggplot.

# Description

Create a tile plot with a wrapper around the ggplot2::geom\_tile function.

```
gg_tile(
  data = NULL,
 x = NULL,
 y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "identity",
  position = "identity",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.9,
  height = 1,
 width = 1,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
```

```
x_breaks = NULL,
  x_expand = NULL,
  x_{include} = NULL,
  x_{labels} = NULL,
 x_limits = NULL,
 x_oob = scales::oob_keep,
 x_sec_axis = ggplot2::waiver(),
 x_title = NULL,
 x_trans = "identity",
 y_breaks = NULL,
 y_expand = NULL,
 y_include = NULL,
 y_labels = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
  col_breaks = NULL,
  col_include = NULL,
  col_intervals = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_limits = NULL,
  col_title = NULL,
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  caption = NULL,
  theme = NULL
)
```

A data frame or tibble

uata	A data frame of thoole.
x	Unquoted x aesthetic variable.
У	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").

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()).
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.
height	Height. A number 0 upwards.
width	Width. A number 0 upwards.
	Other arguments passed to the relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (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_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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_pla	
	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_nco	
col_legend_nro	The number of columns for the legend elements.
COI_Iegend_III O	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
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 facetted plots.
facet_nrow	The number of rows of facetted plots.
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".
caption	Caption title string.
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)
)

gg_tile(df, x = x, y = y, col = z)</pre>
```

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 $gg\_violin$ 

Violin ggplot.

#### **Description**

Create a violin plot with a wrapper around the ggplot2::geom\_violin function.

```
gg_violin(
  data = NULL,
  x = NULL,
 y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  stat = "ydensity",
  position = "dodge",
  pal = NULL,
  pal_na = "#7F7F7F",
  alpha = 0.9,
 width = NULL,
  titles = NULL,
  title = NULL,
  subtitle = NULL,
  coord = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_include = NULL,
  x_{labels} = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_{title} = NULL,
  x_{trans} = "identity",
  y_breaks = NULL,
 y_expand = NULL,
  y_include = NULL,
  y_{labels} = NULL,
 y_limits = NULL,
 y_oob = scales::oob_keep,
 y_sec_axis = ggplot2::waiver(),
 y_title = NULL,
 y_trans = "identity",
```

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```
col_breaks = NULL,
col_include = NULL,
col_intervals = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_nrow = NULL,
col_legend_nrow = NULL,
col_limits = NULL,
col_title = NULL,
facet_labels = NULL,
facet_nrow = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
caption = NULL,
theme = NULL
```

data	A data frame or tibble.
X	Unquoted x aesthetic variable.
У	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.
text	Unquoted text aesthetic variable, which can be used in combination with plotly::ggplotly(., tooltip = "text").
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()).
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.
width	Width. A number 0 upwards.
	Other arguments passed to the relevant ggplot2::geom_* function.
titles	A function to format the x, y and col titles, including in rlang lambda format. Defaults to snakecase::to_sentence_case.
title	Title string.
subtitle	Subtitle string.
coord	Coordinate system.
x_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.

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x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. $c(0, 0)$ ).
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.
x_oob	A scales::oob_* function for how to deal with out-of-bounds values.#'
x_sec_axis	A secondary axis specified by 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").
y_breaks	A function that takes the limits as input (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_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.
y_oob	A scales::oob_* function for how to deal with out-of-bounds values.
y_sec_axis	A secondary axis specified by 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").
col_breaks	A function that takes the limits as input (e.g. scales::breaks_pretty()), or a vector of breaks.
col_include	For a numeric or date variable, any values that the scale should include (e.g. 0).
col_intervals	A function to cut or chop the numeric variable into intervals (e.g. $\sim$ santoku::chop_mean_sd(.x, drop = FALSE)).
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_plac	The place for the legend. "b" for bottom, "r" for right, "t" for top, or "l" for left.
col_legend_ncol	
001_1080001	The number of columns for the legend elements.
col_legend_nrow	
	The number of rows for the legend elements.
col_limits	A vector to determine the limits of the axis.
col_title	Axis title string. Defaults to converting to sentence case with spaces. Use "" for

no title.

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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 facetted plots.

facet\_nrow The number of rows of facetted plots.

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".

caption Caption title string. 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 109

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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