Package 'ggblanket'

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Title Publication-Quality 'ggplot2' Visualisation

Version 30.0.0

Description Wrapper 'ggplot2' functions for publication-quality visualisation. Aligned with 'ggplot2' and 'tidyverse'. Covers much of what 'ggplot2' does.

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BugReports https://github.com/davidhodge931/ggblanket/issues

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gg_area *Area ggplot*

Description

An area ggplot with geom_area() defaults for the geom, stat and position.

Usage

```
gg_area(
  data,
  ...,
  geom = "area",
  stat = "align",
  position = ggplot2::position_stack(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
```

```
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
```

```
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
```

```
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().

x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.

x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.

fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks` Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels` Labels for the linetype scale.

`linetype_limits` Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette` Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

shape_breaks	Breaks for the shape scale.
shape_drop	Whether to drop unused levels for the shape scale. Defaults to TRUE.
shape_guide	Guide for the shape scale. Defaults to NULL.
shape_labels	Labels for the shape scale.
shape_limits	Limits for the shape scale.
shape_name	Name/title for the shape scale.
shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
ggplot2::economics |>
  gg_area(
    x = date,
    y = unemploy,
  )

ggplot2::economics_long |>
  gg_area(
    x = date,
    y = value01,
    fill = variable,
  )

ggplot2::economics_long |>
  gg_area(
    x = date,
    y = value01,
    facet = variable,
  )
```

---

gg_bar *Bar ggplot*

Description

A bar ggplot with geom_bar() defaults for the geom, stat and position.

Usage

```
gg_bar(
  data,
  ...,
  geom = "bar",
  stat = "count",
  position = ggplot2::position_stack(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
```

```
    ymin = NULL,
    ymax = NULL,
    yend = NULL,
    yintercept = NULL,
    z = NULL,
    fill = NULL,
    colour = NULL,
    alpha = NULL,
    shape = NULL,
    linetype = NULL,
    linewidth = NULL,
    size = NULL,
    stroke = NULL,
    label = NULL,
    weight = NULL,
    group = NULL,
    width = NULL,
    height = NULL,
    slope = NULL,
    intercept = NULL,
    sample = NULL,
    angle = NULL,
    radius = NULL,
    mapping = ggplot2::aes(),
    x_type = NULL,
    x_subtype = NULL,
    x_breaks = NULL,
    x_drop = TRUE,
    x_expand = NULL,
    x_guide = ggplot2::waiver(),
    x_labels = NULL,
    x_limits = NULL,
    x_minor_breaks = ggplot2::waiver(),
    x_name = ggplot2::waiver(),
    x_oob = scales::oob_censor,
    x_palette = seq_len,
    x_position = "bottom",
    x_sec_axis = ggplot2::waiver(),
    x_transform = NULL,
    y_type = NULL,
    y_subtype = NULL,
    y_breaks = NULL,
    y_drop = TRUE,
    y_expand = NULL,
    y_guide = ggplot2::waiver(),
    y_labels = NULL,
    y_limits = NULL,
    y_minor_breaks = ggplot2::waiver(),
```

```
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
```

```
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
shape_palette = NULL,
facet = NULL,
facet_rows = NULL,
facet_cols = NULL,
facet_axes = "margins",
facet_axis_labels = "all",
facet_drop = TRUE,
facet_labeller = "label_value",
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
coord_xlim = NULL,
coord_ylim = NULL,
coord_clip = NULL,
coord_reverse = "none",
coord_ratio = NULL,
title = NULL,
```

```
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.

stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().

y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.

colour_palette Palette for the colour scale.

colour_transform
: Transform for the colour scale. Inherits from `fill_transform` if `NULL`.

alpha_type Scale type for alpha. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

alpha_subtype Scale subtype for alpha. Auto-detected if `NULL`.

alpha_breaks Breaks for the alpha scale.

alpha_drop Whether to drop unused levels for a discrete alpha scale. Defaults to `TRUE`.

alpha_guide Guide for the alpha scale. Defaults to `NULL`.

alpha_labels Labels for the alpha scale.

alpha_limits Limits for the alpha scale.

alpha_name Name/title for the alpha scale.

alpha_oob Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

alpha_palette Palette for the alpha scale.

alpha_transform
: Transform for the alpha scale.

size_type Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

size_subtype Scale subtype for size. Auto-detected if `NULL`.

size_breaks Breaks for the size scale.

size_drop Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

size_guide Guide for the size scale. Defaults to `NULL`.

size_labels Labels for the size scale.

size_limits Limits for the size scale.

size_name Name/title for the size scale.

size_oob Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

size_palette Palette for the size scale.

size_transform Transform for the size scale.

linewidth_type Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

linewidth_subtype
: Scale subtype for linewidth. Auto-detected if `NULL`.

linewidth_breaks
: Breaks for the linewidth scale.

linewidth_drop Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

linewidth_guide
: Guide for the linewidth scale. Defaults to `NULL`.

linewidth_labels
: Labels for the linewidth scale.

linewidth_limits
: Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
Palette for the linewidth scale.

`linewidth_transform`
Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

`shape_palette` Palette for the shape scale.

`facet` Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows` Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols` Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes` Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
Which axis labels to draw on facet panels. Defaults to `"all"`.

`facet_drop` Whether to drop unused factor levels in facets. Defaults to `TRUE`.

`facet_labeller` Labeller for facet strip labels. Defaults to `"label_value"`.

`facet_ncol` Number of columns for `ggplot2::facet_wrap()`.

`facet_nrow` Number of rows for `ggplot2::facet_wrap()`.

`facet_scales` Whether facet scales are fixed or free. Defaults to `"fixed"`.

facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
ggplot2::diamonds |>
  gg_bar(
    x = color,
  )

ggplot2::diamonds |>
  gg_bar(
    x = color,
    fill = cut,
    position = ggplot2::position_dodge(),
  )

ggplot2::diamonds |>
  dplyr::filter(cut %in% c("Premium", "Ideal")) |>
  gg_bar(
    x = color,
    facet = cut,
  )
```

---

gg_bin2d *Bin2d ggplot*

Description

A bin2d ggplot with geom_bin2d() defaults for the geom, stat and position.

Note gg_bin2d defaults to colour = NA.

Usage

```
gg_bin2d(
  data,
  ...,
  geom = "bin2d",
  stat = "bin2d",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = ggplot2::after_stat(.data$count),
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
```

```
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
```

```
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
```

```
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.

ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to `TRUE`.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to `ggplot2::waiver()`.
x_labels	Labels for the x scale. Defaults to `scales::label_date_short()` for date/datetime, otherwise `scales::label_number()`.

x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.

fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.
size_breaks	Breaks for the size scale.
size_drop	Whether to drop unused levels for a discrete size scale. Defaults to TRUE.
size_guide	Guide for the size scale. Defaults to NULL.
size_labels	Labels for the size scale.
size_limits	Limits for the size scale.
size_name	Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype`
Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks`
Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
Labels for the linewidth scale.

`linewidth_limits`
Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
Palette for the linewidth scale.

`linewidth_transform`
Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
ggplot2::diamonds |>
  gg_bin2d(
    x = carat,
    y = price,
  )

ggplot2::diamonds |>
  gg_bin2d(
    x = carat,
    y = price,
    facet = cut,
  )
```

gg_blanket *Any ggplot*

Description

A blank ggplot with geom_blank() defaults for the geom, stat and position.

Note this is an all-purpose custom wrapper intended for use with any geom.

Defaults for fill, colour, linewidth, palettes etc. come from the theme, e.g. via `ggplot2::set_theme()`. Use `set_refine()`, `set_colour_blend()` and `set_fill_blend()` to set the remaining ggblanket-specific global options.

Usage

```
gg_blanket(
  data,
  ...,
  geom = "blank",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = NULL,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
```

```
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
```

```
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
```

```
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.

polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.

x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.

fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.

alpha_transform
: Transform for the alpha scale.

size_type
: Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

size_subtype
: Scale subtype for size. Auto-detected if NULL.

size_breaks
: Breaks for the size scale.

size_drop
: Whether to drop unused levels for a discrete size scale. Defaults to TRUE.

size_guide
: Guide for the size scale. Defaults to NULL.

size_labels
: Labels for the size scale.

size_limits
: Limits for the size scale.

size_name
: Name/title for the size scale.

size_oob
: Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

size_palette
: Palette for the size scale.

size_transform
: Transform for the size scale.

linewidth_type
: Scale type for linewidth. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

linewidth_subtype
: Scale subtype for linewidth. Auto-detected if NULL.

linewidth_breaks
: Breaks for the linewidth scale.

linewidth_drop
: Whether to drop unused levels for a discrete linewidth scale. Defaults to TRUE.

linewidth_guide
: Guide for the linewidth scale. Defaults to NULL.

linewidth_labels
: Labels for the linewidth scale.

linewidth_limits
: Limits for the linewidth scale.

linewidth_name
: Name/title for the linewidth scale.

linewidth_oob
: Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

linewidth_palette
: Palette for the linewidth scale.

linewidth_transform
: Transform for the linewidth scale.

linetype_type
: Scale type for linetype. Only "discrete" is supported.

linetype_breaks
: Breaks for the linetype scale.

linetype_drop
: Whether to drop unused levels for the linetype scale. Defaults to TRUE.

linetype_guide
: Guide for the linetype scale. Defaults to NULL.

linetype_labels
: Labels for the linetype scale.

linetype_limits
: Limits for the linetype scale.

linetype_name Name/title for the linetype scale.

linetype_palette
Palette for the linetype scale.

shape_type Scale type for shape. Only "discrete" is supported.

shape_breaks Breaks for the shape scale.

shape_drop Whether to drop unused levels for the shape scale. Defaults to TRUE.

shape_guide Guide for the shape scale. Defaults to NULL.

shape_labels Labels for the shape scale.

shape_limits Limits for the shape scale.

shape_name Name/title for the shape scale.

shape_palette Palette for the shape scale.

facet Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_rows Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_cols Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_axes Which axes to draw on facet panels. Defaults to "margins".

facet_axis_labels
Which axis labels to draw on facet panels. Defaults to "all".

facet_drop Whether to drop unused factor levels in facets. Defaults to TRUE.

facet_labeller Labeller for facet strip labels. Defaults to "label_value".

facet_ncol Number of columns for ggplot2::facet_wrap().

facet_nrow Number of rows for ggplot2::facet_wrap().

facet_scales Whether facet scales are fixed or free. Defaults to "fixed".

facet_space Whether facet space is fixed or free. Defaults to "fixed".

coord_xlim, coord_ylim
Zoom limits within the coordinate system.

coord_clip Whether drawing is clipped to the panel. Either "on" (default) or "off".

coord_reverse Which axes to reverse. One of "none" (default), "x", "y", or "xy".

coord_ratio Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().

title Plot title passed to ggplot2::labs().

subtitle Plot subtitle passed to ggplot2::labs().

caption Plot caption passed to ggplot2::labs().

ggplot A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
gg_blanket(
  data = mtcars,
  geom = "point",
  x = wt,
  y = mpg,
  fill = hp,
)

gg_blanket(
  data = mtcars,
  geom = "point",
  x = wt,
  y = mpg,
  fill = factor(cyl),
  facet = cyl,
)
```

---

gg_boxplot *Boxplot ggplot*

Description

A boxplot ggplot with geom_boxplot() defaults for the geom, stat and position.

Usage

```
gg_boxplot(
  data,
  ...,
  geom = "boxplot",
  stat = "boxplot",
  position = ggplot2::position_dodge2(preserve = "single"),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
```

```
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
```

```
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
```

```
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.

width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().

y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.

`alpha_type` Scale type for alpha. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`alpha_subtype` Scale subtype for alpha. Auto-detected if `NULL`.

`alpha_breaks` Breaks for the alpha scale.

`alpha_drop` Whether to drop unused levels for a discrete alpha scale. Defaults to `TRUE`.

`alpha_guide` Guide for the alpha scale. Defaults to `NULL`.

`alpha_labels` Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

linewidth_palette
: Palette for the linewidth scale.

linewidth_transform
: Transform for the linewidth scale.

linetype_type
: Scale type for linetype. Only "discrete" is supported.

linetype_breaks
: Breaks for the linetype scale.

linetype_drop
: Whether to drop unused levels for the linetype scale. Defaults to TRUE.

linetype_guide
: Guide for the linetype scale. Defaults to NULL.

linetype_labels
: Labels for the linetype scale.

linetype_limits
: Limits for the linetype scale.

linetype_name
: Name/title for the linetype scale.

linetype_palette
: Palette for the linetype scale.

shape_type
: Scale type for shape. Only "discrete" is supported.

shape_breaks
: Breaks for the shape scale.

shape_drop
: Whether to drop unused levels for the shape scale. Defaults to TRUE.

shape_guide
: Guide for the shape scale. Defaults to NULL.

shape_labels
: Labels for the shape scale.

shape_limits
: Limits for the shape scale.

shape_name
: Name/title for the shape scale.

shape_palette
: Palette for the shape scale.

facet
: Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_rows
: Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_cols
: Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_axes
: Which axes to draw on facet panels. Defaults to "margins".

facet_axis_labels
: Which axis labels to draw on facet panels. Defaults to "all".

facet_drop
: Whether to drop unused factor levels in facets. Defaults to TRUE.

facet_labeller
: Labeller for facet strip labels. Defaults to "label_value".

facet_ncol
: Number of columns for ggplot2::facet_wrap().

facet_nrow
: Number of rows for ggplot2::facet_wrap().

facet_scales
: Whether facet scales are fixed or free. Defaults to "fixed".

facet_space
: Whether facet space is fixed or free. Defaults to "fixed".

coord_xlim, coord_ylim
: Zoom limits within the coordinate system.

coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
ggplot2::diamonds |>
  gg_boxplot(
    x = color,
    y = carat,
    y_limits = c(0, NA),
  )

ggplot2::diamonds |>
  gg_boxplot(
    x = color,
    y = carat,
    fill = cut,
    y_limits = c(0, NA),
  )

ggplot2::diamonds |>
  dplyr::filter(cut %in% c("Premium", "Ideal")) |>
  gg_boxplot(
    x = color,
    y = carat,
    facet = ggplot2::vars(cut),
    y_limits = c(0, NA),
  )
```

---

gg_col *Col ggplot*

Description

A col ggplot with geom_col() defaults for the geom, stat and position.

Usage

```
gg_col(
  data,
  ...,
  geom = "col",
  stat = "identity",
  position = ggplot2::position_stack(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
```

```
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
```

```
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
```

```
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.

ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to `TRUE`.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to `ggplot2::waiver()`.
x_labels	Labels for the x scale. Defaults to `scales::label_date_short()` for date/datetime, otherwise `scales::label_number()`.

x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.

fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.
size_breaks	Breaks for the size scale.
size_drop	Whether to drop unused levels for a discrete size scale. Defaults to TRUE.
size_guide	Guide for the size scale. Defaults to NULL.
size_labels	Labels for the size scale.
size_limits	Limits for the size scale.
size_name	Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype`
Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks`
Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
Labels for the linewidth scale.

`linewidth_limits`
Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
Palette for the linewidth scale.

`linewidth_transform`
Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
ggplot2::diamonds |>
  dplyr::count(color) |>
  gg_col(
    x = color,
    y = n,
  )

ggplot2::diamonds |>
  dplyr::count(color, cut) |>
  gg_col(
    x = color,
    y = n,
```

```
    fill = cut,
    position = ggplot2::position_dodge(),
  )

ggplot2::diamonds |>
  dplyr::filter(cut %in% c("Premium", "Ideal")) |>
  dplyr::count(color, cut) |>
  gg_col(
    x = color,
    y = n,
    facet = cut,
  )
```

---

gg_contour *Contour ggplot*

Description

A contour ggplot with geom_contour() defaults for the geom, stat and position.

Usage

```
gg_contour(
  data,
  ...,
  geom = "contour",
  stat = "contour",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
```

```
shape = NULL,
linetype = NULL,
linewidth = NULL,
size = NULL,
stroke = NULL,
label = NULL,
weight = NULL,
group = NULL,
width = NULL,
height = NULL,
slope = NULL,
intercept = NULL,
sample = NULL,
angle = NULL,
radius = NULL,
mapping = ggplot2::aes(),
x_type = NULL,
x_subtype = NULL,
x_breaks = NULL,
x_drop = TRUE,
x_expand = NULL,
x_guide = ggplot2::waiver(),
x_labels = NULL,
x_limits = NULL,
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
y_subtype = NULL,
y_breaks = NULL,
y_drop = TRUE,
y_expand = NULL,
y_guide = ggplot2::waiver(),
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
```

```
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
```

```
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.

...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.

slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.

y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.

`alpha_drop` Whether to drop unused levels for a discrete alpha scale. Defaults to `TRUE`.

`alpha_guide` Guide for the alpha scale. Defaults to `NULL`.

`alpha_labels` Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
: Breaks for the linetype scale.

`linetype_drop`
: Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide`
: Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
: Labels for the linetype scale.

`linetype_limits`
: Limits for the linetype scale.

`linetype_name`
: Name/title for the linetype scale.

`linetype_palette`
: Palette for the linetype scale.

`shape_type`
: Scale type for shape. Only `"discrete"` is supported.

`shape_breaks`
: Breaks for the shape scale.

`shape_drop`
: Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide`
: Guide for the shape scale. Defaults to `NULL`.

`shape_labels`
: Labels for the shape scale.

`shape_limits`
: Limits for the shape scale.

`shape_name`
: Name/title for the shape scale.

`shape_palette`
: Palette for the shape scale.

`facet`
: Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows`
: Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols`
: Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes`
: Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
: Which axis labels to draw on facet panels. Defaults to `"all"`.

`facet_drop`
: Whether to drop unused factor levels in facets. Defaults to `TRUE`.

`facet_labeller`
: Labeller for facet strip labels. Defaults to `"label_value"`.

`facet_ncol`
: Number of columns for `ggplot2::facet_wrap()`.

`facet_nrow`
: Number of rows for `ggplot2::facet_wrap()`.

`facet_scales`
: Whether facet scales are fixed or free. Defaults to `"fixed"`.

`facet_space`
: Whether facet space is fixed or free. Defaults to `"fixed"`.

`coord_xlim`, `coord_ylim`
: Zoom limits within the coordinate system.

`coord_clip`
: Whether drawing is clipped to the panel. Either `"on"` (default) or `"off"`.

`coord_reverse`
: Which axes to reverse. One of `"none"` (default), `"x"`, `"y"`, or `"xy"`.

`coord_ratio`
: Aspect ratio expressed as y / x, for `ggplot2::coord_cartesian()`.

`title`
: Plot title passed to `ggplot2::labs()`.

`subtitle`
: Plot subtitle passed to `ggplot2::labs()`.

`caption`
: Plot caption passed to `ggplot2::labs()`.

`ggplot`
: A base ggplot object to use. Defaults to `NULL`, which uses `\(x) ggplot2::ggplot(x)`.

Value

A ggplot object.

Examples

```
ggplot2::faithfuld |>
  gg_contour(
    x = waiting,
    y = eruptions,
    z = density,
  )
```

`gg_contour_filled` *Contour filled ggplot*

Description

A contour filled ggplot with geom_contour_filled() defaults for the geom, stat and position.

Note `gg_contour_filled` defaults to `colour = NA`.

Usage

```
gg_contour_filled(
  data,
  ...,
  geom = "contour_filled",
  stat = "contour_filled",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = ggplot2::after_stat(.data$level),
  colour = NULL,
```

```
    alpha = NULL,
    shape = NULL,
    linetype = NULL,
    linewidth = NULL,
    size = NULL,
    stroke = NULL,
    label = NULL,
    weight = NULL,
    group = NULL,
    width = NULL,
    height = NULL,
    slope = NULL,
    intercept = NULL,
    sample = NULL,
    angle = NULL,
    radius = NULL,
    mapping = ggplot2::aes(),
    x_type = NULL,
    x_subtype = NULL,
    x_breaks = NULL,
    x_drop = TRUE,
    x_expand = NULL,
    x_guide = ggplot2::waiver(),
    x_labels = NULL,
    x_limits = NULL,
    x_minor_breaks = ggplot2::waiver(),
    x_name = ggplot2::waiver(),
    x_oob = scales::oob_censor,
    x_palette = seq_len,
    x_position = "bottom",
    x_sec_axis = ggplot2::waiver(),
    x_transform = NULL,
    y_type = NULL,
    y_subtype = NULL,
    y_breaks = NULL,
    y_drop = TRUE,
    y_expand = NULL,
    y_guide = ggplot2::waiver(),
    y_labels = NULL,
    y_limits = NULL,
    y_minor_breaks = ggplot2::waiver(),
    y_name = ggplot2::waiver(),
    y_oob = scales::oob_censor,
    y_palette = seq_len,
    y_position = "left",
    y_sec_axis = ggplot2::waiver(),
    y_transform = NULL,
    fill_type = NULL,
```

```
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
```

```
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.

...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.

slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.

y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.

`alpha_drop` Whether to drop unused levels for a discrete alpha scale. Defaults to `TRUE`.

`alpha_guide` Guide for the alpha scale. Defaults to `NULL`.

`alpha_labels` Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
: Breaks for the linetype scale.

`linetype_drop`
: Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide`
: Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
: Labels for the linetype scale.

`linetype_limits`
: Limits for the linetype scale.

`linetype_name`
: Name/title for the linetype scale.

`linetype_palette`
: Palette for the linetype scale.

`shape_type`
: Scale type for shape. Only `"discrete"` is supported.

`shape_breaks`
: Breaks for the shape scale.

`shape_drop`
: Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide`
: Guide for the shape scale. Defaults to `NULL`.

`shape_labels`
: Labels for the shape scale.

`shape_limits`
: Limits for the shape scale.

`shape_name`
: Name/title for the shape scale.

`shape_palette`
: Palette for the shape scale.

`facet`
: Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows`
: Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols`
: Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes`
: Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
: Which axis labels to draw on facet panels. Defaults to `"all"`.

`facet_drop`
: Whether to drop unused factor levels in facets. Defaults to `TRUE`.

`facet_labeller`
: Labeller for facet strip labels. Defaults to `"label_value"`.

`facet_ncol`
: Number of columns for `ggplot2::facet_wrap()`.

`facet_nrow`
: Number of rows for `ggplot2::facet_wrap()`.

`facet_scales`
: Whether facet scales are fixed or free. Defaults to `"fixed"`.

`facet_space`
: Whether facet space is fixed or free. Defaults to `"fixed"`.

`coord_xlim`, `coord_ylim`
: Zoom limits within the coordinate system.

`coord_clip`
: Whether drawing is clipped to the panel. Either `"on"` (default) or `"off"`.

`coord_reverse`
: Which axes to reverse. One of `"none"` (default), `"x"`, `"y"`, or `"xy"`.

`coord_ratio`
: Aspect ratio expressed as y / x, for `ggplot2::coord_cartesian()`.

`title`
: Plot title passed to `ggplot2::labs()`.

`subtitle`
: Plot subtitle passed to `ggplot2::labs()`.

`caption`
: Plot caption passed to `ggplot2::labs()`.

`ggplot`
: A base ggplot object to use. Defaults to `NULL`, which uses `\(x) ggplot2::ggplot(x)`.

Value

A ggplot object.

Examples

```
ggplot2::faithfuld |>
  gg_contour_filled(
    x = waiting,
    y = eruptions,
    z = density,
    fill_palette = scales::pal_viridis(option = "turbo"),
  )
```

---

gg_crossbar *Crossbar ggplot*

Description

A crossbar ggplot with geom_crossbar() defaults for the geom, stat and position.

Usage

```
gg_crossbar(
  data,
  ...,
  geom = "crossbar",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
```

```
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
```

```
    fill_subtype = NULL,
    fill_breaks = ggplot2::waiver(),
    fill_drop = TRUE,
    fill_guide = NULL,
    fill_labels = NULL,
    fill_limits = NULL,
    fill_name = ggplot2::waiver(),
    fill_oob = scales::oob_censor,
    fill_rescaler = scales::rescale,
    fill_palette = NULL,
    fill_transform = NULL,
    colour_type = NULL,
    colour_subtype = NULL,
    colour_breaks = NULL,
    colour_drop = NULL,
    colour_guide = NULL,
    colour_labels = NULL,
    colour_limits = NULL,
    colour_name = fill_name,
    colour_oob = NULL,
    colour_rescaler = NULL,
    colour_palette = NULL,
    colour_transform = NULL,
    alpha_type = NULL,
    alpha_subtype = NULL,
    alpha_breaks = ggplot2::waiver(),
    alpha_drop = TRUE,
    alpha_guide = NULL,
    alpha_labels = NULL,
    alpha_limits = NULL,
    alpha_name = ggplot2::waiver(),
    alpha_oob = scales::oob_censor,
    alpha_palette = NULL,
    alpha_transform = NULL,
    size_type = NULL,
    size_subtype = NULL,
    size_breaks = ggplot2::waiver(),
    size_drop = TRUE,
    size_guide = NULL,
    size_labels = NULL,
    size_limits = NULL,
    size_name = ggplot2::waiver(),
    size_oob = scales::oob_censor,
    size_palette = NULL,
    size_transform = NULL,
    linewidth_type = NULL,
    linewidth_subtype = NULL,
    linewidth_breaks = ggplot2::waiver(),
```

```
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.

...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.

slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.

y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.

`alpha_drop` Whether to drop unused levels for a discrete alpha scale. Defaults to `TRUE`.

`alpha_guide` Guide for the alpha scale. Defaults to `NULL`.

`alpha_labels` Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

linetype_breaks
: Breaks for the linetype scale.

linetype_drop
: Whether to drop unused levels for the linetype scale. Defaults to TRUE.

linetype_guide
: Guide for the linetype scale. Defaults to NULL.

linetype_labels
: Labels for the linetype scale.

linetype_limits
: Limits for the linetype scale.

linetype_name
: Name/title for the linetype scale.

linetype_palette
: Palette for the linetype scale.

shape_type
: Scale type for shape. Only "discrete" is supported.

shape_breaks
: Breaks for the shape scale.

shape_drop
: Whether to drop unused levels for the shape scale. Defaults to TRUE.

shape_guide
: Guide for the shape scale. Defaults to NULL.

shape_labels
: Labels for the shape scale.

shape_limits
: Limits for the shape scale.

shape_name
: Name/title for the shape scale.

shape_palette
: Palette for the shape scale.

facet
: Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_rows
: Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_cols
: Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_axes
: Which axes to draw on facet panels. Defaults to "margins".

facet_axis_labels
: Which axis labels to draw on facet panels. Defaults to "all".

facet_drop
: Whether to drop unused factor levels in facets. Defaults to TRUE.

facet_labeller
: Labeller for facet strip labels. Defaults to "label_value".

facet_ncol
: Number of columns for ggplot2::facet_wrap().

facet_nrow
: Number of rows for ggplot2::facet_wrap().

facet_scales
: Whether facet scales are fixed or free. Defaults to "fixed".

facet_space
: Whether facet space is fixed or free. Defaults to "fixed".

coord_xlim, coord_ylim
: Zoom limits within the coordinate system.

coord_clip
: Whether drawing is clipped to the panel. Either "on" (default) or "off".

coord_reverse
: Which axes to reverse. One of "none" (default), "x", "y", or "xy".

coord_ratio
: Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().

title
: Plot title passed to ggplot2::labs().

subtitle
: Plot subtitle passed to ggplot2::labs().

caption
: Plot caption passed to ggplot2::labs().

ggplot
: A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
iris |>
  dplyr::group_by(Species) |>
  dplyr::summarise(
    mean = mean(Sepal.Length),
    lower = mean(Sepal.Length) - sd(Sepal.Length),
    upper = mean(Sepal.Length) + sd(Sepal.Length),
  ) |>
  gg_crossbar(
    x = Species,
    y = mean,
    ymin = lower,
    ymax = upper,
  )

ggplot2::mpg |>
  dplyr::group_by(class, drv) |>
  dplyr::summarise(
    mean_hwy = mean(hwy),
    lower = mean_hwy - sd(hwy),
    upper = mean_hwy + sd(hwy),
  ) |>
  gg_crossbar(
    x = class,
    y = mean_hwy,
    ymin = lower,
    ymax = upper,
    fill = drv,
    position = ggplot2::position_dodge2(preserve = "single"),
  )

ggplot2::mpg |>
  dplyr::group_by(class, drv) |>
  dplyr::summarise(
    mean_hwy = mean(hwy),
    lower = mean_hwy - sd(hwy),
    upper = mean_hwy + sd(hwy),
  ) |>
  gg_crossbar(
    x = drv,
    y = mean_hwy,
    ymin = lower,
    ymax = upper,
    facet = class,
  )
```

gg_density *Density ggplot*

Description

A density ggplot with geom_density() defaults for the geom, stat and position.

Usage

```
gg_density(
  data,
  ...,
  geom = "density",
  stat = "density",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
```

```
angle = NULL,
radius = NULL,
mapping = ggplot2::aes(),
x_type = NULL,
x_subtype = NULL,
x_breaks = NULL,
x_drop = TRUE,
x_expand = NULL,
x_guide = ggplot2::waiver(),
x_labels = NULL,
x_limits = NULL,
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
y_subtype = NULL,
y_breaks = NULL,
y_drop = TRUE,
y_expand = NULL,
y_guide = ggplot2::waiver(),
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
```

```
    colour_drop = NULL,
    colour_guide = NULL,
    colour_labels = NULL,
    colour_limits = NULL,
    colour_name = fill_name,
    colour_oob = NULL,
    colour_rescaler = NULL,
    colour_palette = NULL,
    colour_transform = NULL,
    alpha_type = NULL,
    alpha_subtype = NULL,
    alpha_breaks = ggplot2::waiver(),
    alpha_drop = TRUE,
    alpha_guide = NULL,
    alpha_labels = NULL,
    alpha_limits = NULL,
    alpha_name = ggplot2::waiver(),
    alpha_oob = scales::oob_censor,
    alpha_palette = NULL,
    alpha_transform = NULL,
    size_type = NULL,
    size_subtype = NULL,
    size_breaks = ggplot2::waiver(),
    size_drop = TRUE,
    size_guide = NULL,
    size_labels = NULL,
    size_limits = NULL,
    size_name = ggplot2::waiver(),
    size_oob = scales::oob_censor,
    size_palette = NULL,
    size_transform = NULL,
    linewidth_type = NULL,
    linewidth_subtype = NULL,
    linewidth_breaks = ggplot2::waiver(),
    linewidth_drop = TRUE,
    linewidth_guide = NULL,
    linewidth_labels = NULL,
    linewidth_limits = NULL,
    linewidth_name = ggplot2::waiver(),
    linewidth_oob = scales::oob_censor,
    linewidth_palette = NULL,
    linewidth_transform = NULL,
    linetype_type = NULL,
    linetype_breaks = ggplot2::waiver(),
    linetype_drop = TRUE,
    linetype_guide = NULL,
    linetype_labels = NULL,
    linetype_limits = NULL,
```

```
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().

x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.

x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.

fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks` Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels` Labels for the linetype scale.

`linetype_limits` Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette` Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

shape_breaks	Breaks for the shape scale.
shape_drop	Whether to drop unused levels for the shape scale. Defaults to TRUE.
shape_guide	Guide for the shape scale. Defaults to NULL.
shape_labels	Labels for the shape scale.
shape_limits	Limits for the shape scale.
shape_name	Name/title for the shape scale.
shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
iris |>
  gg_density(
    x = Sepal.Width,
  )

iris |>
  gg_density(
    x = Sepal.Width,
    fill = Species,
  )

iris |>
  gg_density(
    x = Sepal.Width,
    facet = Species,
  )
```

---

gg_density2d *Density 2d ggplot*

Description

A density 2d ggplot with geom_density_2d() defaults for the geom, stat and position.

Usage

```
gg_density2d(
  data,
  ...,
  geom = "density2d",
  stat = "density2d",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
```

```
    yintercept = NULL,
    z = NULL,
    fill = NULL,
    colour = NULL,
    alpha = NULL,
    shape = NULL,
    linetype = NULL,
    linewidth = NULL,
    size = NULL,
    stroke = NULL,
    label = NULL,
    weight = NULL,
    group = NULL,
    width = NULL,
    height = NULL,
    slope = NULL,
    intercept = NULL,
    sample = NULL,
    angle = NULL,
    radius = NULL,
    mapping = ggplot2::aes(),
    x_type = NULL,
    x_subtype = NULL,
    x_breaks = NULL,
    x_drop = TRUE,
    x_expand = NULL,
    x_guide = ggplot2::waiver(),
    x_labels = NULL,
    x_limits = NULL,
    x_minor_breaks = ggplot2::waiver(),
    x_name = ggplot2::waiver(),
    x_oob = scales::oob_censor,
    x_palette = seq_len,
    x_position = "bottom",
    x_sec_axis = ggplot2::waiver(),
    x_transform = NULL,
    y_type = NULL,
    y_subtype = NULL,
    y_breaks = NULL,
    y_drop = TRUE,
    y_expand = NULL,
    y_guide = ggplot2::waiver(),
    y_labels = NULL,
    y_limits = NULL,
    y_minor_breaks = ggplot2::waiver(),
    y_name = ggplot2::waiver(),
    y_oob = scales::oob_censor,
    y_palette = seq_len,
```

```
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
```

```
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
```

```
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.

weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.

y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.

`alpha_type` Scale type for alpha. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`alpha_subtype` Scale subtype for alpha. Auto-detected if `NULL`.

`alpha_breaks` Breaks for the alpha scale.

`alpha_drop` Whether to drop unused levels for a discrete alpha scale. Defaults to `TRUE`.

`alpha_guide` Guide for the alpha scale. Defaults to `NULL`.

`alpha_labels` Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
: Palette for the linewidth scale.

`linewidth_transform`
: Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
: Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
: Labels for the linetype scale.

`linetype_limits`
: Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
: Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

`shape_palette` Palette for the shape scale.

`facet` Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows` Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols` Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes` Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
: Which axis labels to draw on facet panels. Defaults to `"all"`.

`facet_drop` Whether to drop unused factor levels in facets. Defaults to `TRUE`.

`facet_labeller` Labeller for facet strip labels. Defaults to `"label_value"`.

`facet_ncol` Number of columns for `ggplot2::facet_wrap()`.

`facet_nrow` Number of rows for `ggplot2::facet_wrap()`.

`facet_scales` Whether facet scales are fixed or free. Defaults to `"fixed"`.

`facet_space` Whether facet space is fixed or free. Defaults to `"fixed"`.

`coord_xlim`, `coord_ylim`
: Zoom limits within the coordinate system.

coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
iris |>
  gg_density2d(
    x = Sepal.Width,
    y = Sepal.Length,
  )

iris |>
  gg_density2d(
    x = Sepal.Width,
    y = Sepal.Length,
    fill = Species,
  )
```

---

gg_density2d_filled *Density 2d filled ggplot*

Description

A density 2d filled ggplot with geom_density_2d_filled() defaults for the geom, stat and position.

Note gg_density2d_filled defaults to colour = NA.

Usage

```
gg_density2d_filled(
  data,
  ...,
  geom = "density2d_filled",
  stat = "density2d_filled",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
```

```
polygon = FALSE,
theme = NULL,
refine = NULL,
x = NULL,
xmin = NULL,
xmax = NULL,
xend = NULL,
xintercept = NULL,
y = NULL,
ymin = NULL,
ymax = NULL,
yend = NULL,
yintercept = NULL,
z = NULL,
fill = ggplot2::after_stat(.data$level),
colour = NULL,
alpha = NULL,
shape = NULL,
linetype = NULL,
linewidth = NULL,
size = NULL,
stroke = NULL,
label = NULL,
weight = NULL,
group = NULL,
width = NULL,
height = NULL,
slope = NULL,
intercept = NULL,
sample = NULL,
angle = NULL,
radius = NULL,
mapping = ggplot2::aes(),
x_type = NULL,
x_subtype = NULL,
x_breaks = NULL,
x_drop = TRUE,
x_expand = NULL,
x_guide = ggplot2::waiver(),
x_labels = NULL,
x_limits = NULL,
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
```

```
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
```

```
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
shape_palette = NULL,
facet = NULL,
facet_rows = NULL,
facet_cols = NULL,
facet_axes = "margins",
facet_axis_labels = "all",
facet_drop = TRUE,
facet_labeller = "label_value",
facet_ncol = NULL,
```

```
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.

colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().

x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.

colour_guide Guide for the colour scale. Inherits from fill_guide if NULL.

colour_labels Labels for the colour scale. Inherits from fill_labels if NULL.

colour_limits Limits for the colour scale. Inherits from fill_limits if NULL.

colour_name Name/title for the colour scale. Inherits from fill_name if NULL.

colour_oob Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.

colour_rescaler
Rescaler for the colour scale. Inherits from fill_rescaler if NULL.

colour_palette Palette for the colour scale.

colour_transform
Transform for the colour scale. Inherits from fill_transform if NULL.

alpha_type Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

alpha_subtype Scale subtype for alpha. Auto-detected if NULL.

alpha_breaks Breaks for the alpha scale.

alpha_drop Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.

alpha_guide Guide for the alpha scale. Defaults to NULL.

alpha_labels Labels for the alpha scale.

alpha_limits Limits for the alpha scale.

alpha_name Name/title for the alpha scale.

alpha_oob Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

alpha_palette Palette for the alpha scale.

alpha_transform
Transform for the alpha scale.

size_type Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

size_subtype Scale subtype for size. Auto-detected if NULL.

size_breaks Breaks for the size scale.

size_drop Whether to drop unused levels for a discrete size scale. Defaults to TRUE.

size_guide Guide for the size scale. Defaults to NULL.

size_labels Labels for the size scale.

size_limits Limits for the size scale.

size_name Name/title for the size scale.

size_oob Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

size_palette Palette for the size scale.

size_transform Transform for the size scale.

linewidth_type Scale type for linewidth. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

linewidth_subtype
Scale subtype for linewidth. Auto-detected if NULL.

`linewidth_breaks`
: Breaks for the linewidth scale.

`linewidth_drop`
: Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
: Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
: Labels for the linewidth scale.

`linewidth_limits`
: Limits for the linewidth scale.

`linewidth_name`
: Name/title for the linewidth scale.

`linewidth_oob`
: Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
: Palette for the linewidth scale.

`linewidth_transform`
: Transform for the linewidth scale.

`linetype_type`
: Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
: Breaks for the linetype scale.

`linetype_drop`
: Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide`
: Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
: Labels for the linetype scale.

`linetype_limits`
: Limits for the linetype scale.

`linetype_name`
: Name/title for the linetype scale.

`linetype_palette`
: Palette for the linetype scale.

`shape_type`
: Scale type for shape. Only `"discrete"` is supported.

`shape_breaks`
: Breaks for the shape scale.

`shape_drop`
: Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide`
: Guide for the shape scale. Defaults to `NULL`.

`shape_labels`
: Labels for the shape scale.

`shape_limits`
: Limits for the shape scale.

`shape_name`
: Name/title for the shape scale.

`shape_palette`
: Palette for the shape scale.

`facet`
: Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows`
: Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols`
: Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes`
: Which axes to draw on facet panels. Defaults to `"margins"`.

facet_axis_labels
: Which axis labels to draw on facet panels. Defaults to "all".

facet_drop
: Whether to drop unused factor levels in facets. Defaults to TRUE.

facet_labeller
: Labeller for facet strip labels. Defaults to "label_value".

facet_ncol
: Number of columns for ggplot2::facet_wrap().

facet_nrow
: Number of rows for ggplot2::facet_wrap().

facet_scales
: Whether facet scales are fixed or free. Defaults to "fixed".

facet_space
: Whether facet space is fixed or free. Defaults to "fixed".

coord_xlim, coord_ylim
: Zoom limits within the coordinate system.

coord_clip
: Whether drawing is clipped to the panel. Either "on" (default) or "off".

coord_reverse
: Which axes to reverse. One of "none" (default), "x", "y", or "xy".

coord_ratio
: Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().

title
: Plot title passed to ggplot2::labs().

subtitle
: Plot subtitle passed to ggplot2::labs().

caption
: Plot caption passed to ggplot2::labs().

ggplot
: A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
iris |>
  gg_density2d_filled(
    x = Sepal.Width,
    y = Sepal.Length,
    fill_palette = scales::pal_viridis(option = "turbo"),
  )

iris |>
  gg_density2d_filled(
    x = Sepal.Width,
    y = Sepal.Length,
    facet = Species,
    fill_palette = scales::pal_viridis(option = "turbo"),
  )
```

gg_errorbar *Errorbar ggplot*

Description

An errorbar ggplot with geom_errorbar() defaults for the geom, stat and position.

Usage

```
gg_errorbar(
  data,
  ...,
  geom = "errorbar",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
```

```
angle = NULL,
radius = NULL,
mapping = ggplot2::aes(),
x_type = NULL,
x_subtype = NULL,
x_breaks = NULL,
x_drop = TRUE,
x_expand = NULL,
x_guide = ggplot2::waiver(),
x_labels = NULL,
x_limits = NULL,
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
y_subtype = NULL,
y_breaks = NULL,
y_drop = TRUE,
y_expand = NULL,
y_guide = ggplot2::waiver(),
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
```

```
    colour_drop = NULL,
    colour_guide = NULL,
    colour_labels = NULL,
    colour_limits = NULL,
    colour_name = fill_name,
    colour_oob = NULL,
    colour_rescaler = NULL,
    colour_palette = NULL,
    colour_transform = NULL,
    alpha_type = NULL,
    alpha_subtype = NULL,
    alpha_breaks = ggplot2::waiver(),
    alpha_drop = TRUE,
    alpha_guide = NULL,
    alpha_labels = NULL,
    alpha_limits = NULL,
    alpha_name = ggplot2::waiver(),
    alpha_oob = scales::oob_censor,
    alpha_palette = NULL,
    alpha_transform = NULL,
    size_type = NULL,
    size_subtype = NULL,
    size_breaks = ggplot2::waiver(),
    size_drop = TRUE,
    size_guide = NULL,
    size_labels = NULL,
    size_limits = NULL,
    size_name = ggplot2::waiver(),
    size_oob = scales::oob_censor,
    size_palette = NULL,
    size_transform = NULL,
    linewidth_type = NULL,
    linewidth_subtype = NULL,
    linewidth_breaks = ggplot2::waiver(),
    linewidth_drop = TRUE,
    linewidth_guide = NULL,
    linewidth_labels = NULL,
    linewidth_limits = NULL,
    linewidth_name = ggplot2::waiver(),
    linewidth_oob = scales::oob_censor,
    linewidth_palette = NULL,
    linewidth_transform = NULL,
    linetype_type = NULL,
    linetype_breaks = ggplot2::waiver(),
    linetype_drop = TRUE,
    linetype_guide = NULL,
    linetype_labels = NULL,
    linetype_limits = NULL,
```

```
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().

x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.

x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.

fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks` Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels` Labels for the linetype scale.

`linetype_limits` Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette` Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

shape_breaks Breaks for the shape scale.

shape_drop Whether to drop unused levels for the shape scale. Defaults to TRUE.

shape_guide Guide for the shape scale. Defaults to NULL.

shape_labels Labels for the shape scale.

shape_limits Limits for the shape scale.

shape_name Name/title for the shape scale.

shape_palette Palette for the shape scale.

facet Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_rows Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_cols Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_axes Which axes to draw on facet panels. Defaults to "margins".

facet_axis_labels
Which axis labels to draw on facet panels. Defaults to "all".

facet_drop Whether to drop unused factor levels in facets. Defaults to TRUE.

facet_labeller Labeller for facet strip labels. Defaults to "label_value".

facet_ncol Number of columns for ggplot2::facet_wrap().

facet_nrow Number of rows for ggplot2::facet_wrap().

facet_scales Whether facet scales are fixed or free. Defaults to "fixed".

facet_space Whether facet space is fixed or free. Defaults to "fixed".

coord_xlim, coord_ylim
Zoom limits within the coordinate system.

coord_clip Whether drawing is clipped to the panel. Either "on" (default) or "off".

coord_reverse Which axes to reverse. One of "none" (default), "x", "y", or "xy".

coord_ratio Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().

title Plot title passed to ggplot2::labs().

subtitle Plot subtitle passed to ggplot2::labs().

caption Plot caption passed to ggplot2::labs().

ggplot A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
iris |>
  dplyr::group_by(Species) |>
  dplyr::summarise(
    mean = mean(Sepal.Length),
    lower = mean(Sepal.Length) - sd(Sepal.Length),
    upper = mean(Sepal.Length) + sd(Sepal.Length),
  ) |>
  gg_errorbar(
    x = Species,
    y = mean,
    ymin = lower,
    ymax = upper,
  )

ggplot2::mpg |>
  dplyr::group_by(class, drv) |>
  dplyr::summarise(
    mean_hwy = mean(hwy),
    lower = mean_hwy - sd(hwy),
    upper = mean_hwy + sd(hwy),
  ) |>
  gg_errorbar(
    x = class,
    y = mean_hwy,
    ymin = lower,
    ymax = upper,
    fill = drv,
    position = ggplot2::position_dodge2(preserve = "single"),
  )

ggplot2::mpg |>
  dplyr::group_by(class, drv) |>
  dplyr::summarise(
    mean_hwy = mean(hwy),
    lower = mean_hwy - sd(hwy),
    upper = mean_hwy + sd(hwy),
  ) |>
  gg_errorbar(
    x = drv,
    y = mean_hwy,
    ymin = lower,
    ymax = upper,
    facet = class,
  )
```

`gg_freqpoly` *Freqpoly ggplot*

Description

A freqpoly ggplot with geom_freqpoly() defaults for the geom, stat and position.

Usage

```
gg_freqpoly(
  data,
  ...,
  geom = "freqpoly",
  stat = "bin",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
```

```
x_breaks = NULL,
x_drop = TRUE,
x_expand = NULL,
x_guide = ggplot2::waiver(),
x_labels = NULL,
x_limits = NULL,
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
y_subtype = NULL,
y_breaks = NULL,
y_drop = TRUE,
y_expand = NULL,
y_guide = ggplot2::waiver(),
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
```

```
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
```

```
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.

xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to `TRUE`.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.

x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.

fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.
size_breaks	Breaks for the size scale.
size_drop	Whether to drop unused levels for a discrete size scale. Defaults to TRUE.
size_guide	Guide for the size scale. Defaults to NULL.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks` Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels` Labels for the linetype scale.

`linetype_limits` Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette` Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

shape_labels	Labels for the shape scale.
shape_limits	Limits for the shape scale.
shape_name	Name/title for the shape scale.
shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
ggplot2::diamonds |>
  gg_freqpoly(
    x = carat,
  )

ggplot2::diamonds |>
  gg_freqpoly(
    x = carat,
```

```
    fill = cut,
  )

ggplot2::diamonds |>
  gg_freqpoly(
    x = carat,
    facet = cut,
  )
```

---

gg_hex *Hex ggplot*

Description

A hex ggplot with geom_hex() defaults for the geom, stat and position.

Note gg_hex defaults to `colour = NA`.

Usage

```
gg_hex(
  data,
  ...,
  geom = "hex",
  stat = "binhex",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = ggplot2::after_stat(.data$count),
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
```

```
    linewidth = NULL,
    size = NULL,
    stroke = NULL,
    label = NULL,
    weight = NULL,
    group = NULL,
    width = NULL,
    height = NULL,
    slope = NULL,
    intercept = NULL,
    sample = NULL,
    angle = NULL,
    radius = NULL,
    mapping = ggplot2::aes(),
    x_type = NULL,
    x_subtype = NULL,
    x_breaks = NULL,
    x_drop = TRUE,
    x_expand = NULL,
    x_guide = ggplot2::waiver(),
    x_labels = NULL,
    x_limits = NULL,
    x_minor_breaks = ggplot2::waiver(),
    x_name = ggplot2::waiver(),
    x_oob = scales::oob_censor,
    x_palette = seq_len,
    x_position = "bottom",
    x_sec_axis = ggplot2::waiver(),
    x_transform = NULL,
    y_type = NULL,
    y_subtype = NULL,
    y_breaks = NULL,
    y_drop = TRUE,
    y_expand = NULL,
    y_guide = ggplot2::waiver(),
    y_labels = NULL,
    y_limits = NULL,
    y_minor_breaks = ggplot2::waiver(),
    y_name = ggplot2::waiver(),
    y_oob = scales::oob_censor,
    y_palette = seq_len,
    y_position = "left",
    y_sec_axis = ggplot2::waiver(),
    y_transform = NULL,
    fill_type = NULL,
    fill_subtype = NULL,
    fill_breaks = ggplot2::waiver(),
    fill_drop = TRUE,
```

```
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
```

```
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.

stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.

sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().

y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.

`alpha_labels` Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks` Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
: Labels for the linetype scale.

`linetype_limits`
: Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
: Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

`shape_palette` Palette for the shape scale.

`facet` Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows` Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols` Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes` Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
: Which axis labels to draw on facet panels. Defaults to `"all"`.

`facet_drop` Whether to drop unused factor levels in facets. Defaults to `TRUE`.

`facet_labeller` Labeller for facet strip labels. Defaults to `"label_value"`.

`facet_ncol` Number of columns for `ggplot2::facet_wrap()`.

`facet_nrow` Number of rows for `ggplot2::facet_wrap()`.

`facet_scales` Whether facet scales are fixed or free. Defaults to `"fixed"`.

`facet_space` Whether facet space is fixed or free. Defaults to `"fixed"`.

`coord_xlim`, `coord_ylim`
: Zoom limits within the coordinate system.

`coord_clip` Whether drawing is clipped to the panel. Either `"on"` (default) or `"off"`.

`coord_reverse` Which axes to reverse. One of `"none"` (default), `"x"`, `"y"`, or `"xy"`.

`coord_ratio` Aspect ratio expressed as y / x, for `ggplot2::coord_cartesian()`.

`title` Plot title passed to `ggplot2::labs()`.

`subtitle` Plot subtitle passed to `ggplot2::labs()`.

`caption` Plot caption passed to `ggplot2::labs()`.

`ggplot` A base ggplot object to use. Defaults to `NULL`, which uses `\(x) ggplot2::ggplot(x)`.

Value

A ggplot object.

Examples

```
ggplot2::diamonds |>
  gg_hex(
    x = carat,
    y = price,
  )

ggplot2::diamonds |>
  gg_hex(
    x = carat,
    y = price,
    facet = cut,
  )
```

---

gg_histogram *Histogram ggplot*

Description

A histogram ggplot with geom_histogram() defaults for the geom, stat and position.

Usage

```
gg_histogram(
  data,
  ...,
  geom = "histogram",
  stat = "bin",
  position = ggplot2::position_stack(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
```

```
    yintercept = NULL,
    z = NULL,
    fill = NULL,
    colour = NULL,
    alpha = NULL,
    shape = NULL,
    linetype = NULL,
    linewidth = NULL,
    size = NULL,
    stroke = NULL,
    label = NULL,
    weight = NULL,
    group = NULL,
    width = NULL,
    height = NULL,
    slope = NULL,
    intercept = NULL,
    sample = NULL,
    angle = NULL,
    radius = NULL,
    mapping = ggplot2::aes(),
    x_type = NULL,
    x_subtype = NULL,
    x_breaks = NULL,
    x_drop = TRUE,
    x_expand = NULL,
    x_guide = ggplot2::waiver(),
    x_labels = NULL,
    x_limits = NULL,
    x_minor_breaks = ggplot2::waiver(),
    x_name = ggplot2::waiver(),
    x_oob = scales::oob_censor,
    x_palette = seq_len,
    x_position = "bottom",
    x_sec_axis = ggplot2::waiver(),
    x_transform = NULL,
    y_type = NULL,
    y_subtype = NULL,
    y_breaks = NULL,
    y_drop = TRUE,
    y_expand = NULL,
    y_guide = ggplot2::waiver(),
    y_labels = NULL,
    y_limits = NULL,
    y_minor_breaks = ggplot2::waiver(),
    y_name = ggplot2::waiver(),
    y_oob = scales::oob_censor,
    y_palette = seq_len,
```

```
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
```

```
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
shape_palette = NULL,
facet = NULL,
facet_rows = NULL,
facet_cols = NULL,
facet_axes = "margins",
facet_axis_labels = "all",
facet_drop = TRUE,
facet_labeller = "label_value",
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
coord_xlim = NULL,
coord_ylim = NULL,
coord_clip = NULL,
coord_reverse = "none",
coord_ratio = NULL,
title = NULL,
subtitle = NULL,
caption = NULL,
ggplot = NULL
```

```
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.

weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.

y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.

`alpha_type` Scale type for alpha. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`alpha_subtype` Scale subtype for alpha. Auto-detected if `NULL`.

`alpha_breaks` Breaks for the alpha scale.

`alpha_drop` Whether to drop unused levels for a discrete alpha scale. Defaults to `TRUE`.

`alpha_guide` Guide for the alpha scale. Defaults to `NULL`.

`alpha_labels` Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
: Palette for the linewidth scale.

`linewidth_transform`
: Transform for the linewidth scale.

`linetype_type`
: Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
: Breaks for the linetype scale.

`linetype_drop`
: Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide`
: Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
: Labels for the linetype scale.

`linetype_limits`
: Limits for the linetype scale.

`linetype_name`
: Name/title for the linetype scale.

`linetype_palette`
: Palette for the linetype scale.

`shape_type`
: Scale type for shape. Only `"discrete"` is supported.

`shape_breaks`
: Breaks for the shape scale.

`shape_drop`
: Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide`
: Guide for the shape scale. Defaults to `NULL`.

`shape_labels`
: Labels for the shape scale.

`shape_limits`
: Limits for the shape scale.

`shape_name`
: Name/title for the shape scale.

`shape_palette`
: Palette for the shape scale.

`facet`
: Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows`
: Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols`
: Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes`
: Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
: Which axis labels to draw on facet panels. Defaults to `"all"`.

`facet_drop`
: Whether to drop unused factor levels in facets. Defaults to `TRUE`.

`facet_labeller`
: Labeller for facet strip labels. Defaults to `"label_value"`.

`facet_ncol`
: Number of columns for `ggplot2::facet_wrap()`.

`facet_nrow`
: Number of rows for `ggplot2::facet_wrap()`.

`facet_scales`
: Whether facet scales are fixed or free. Defaults to `"fixed"`.

`facet_space`
: Whether facet space is fixed or free. Defaults to `"fixed"`.

`coord_xlim`, `coord_ylim`
: Zoom limits within the coordinate system.

coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
iris |>
  gg_histogram(
    x = Sepal.Width,
  )

iris |>
  gg_histogram(
    x = Sepal.Width,
    fill = Species,
  )

iris |>
  gg_histogram(
    x = Sepal.Width,
    facet = Species,
  )
```

---

gg_jitter *Jitter ggplot*

Description

A jitter ggplot with geom_jitter() defaults for the geom, stat and position.

Usage

```
gg_jitter(
  data,
  ...,
  geom = "jitter",
  stat = "identity",
  position = ggplot2::position_jitter(),
```

```
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
```

```
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
y_subtype = NULL,
y_breaks = NULL,
y_drop = TRUE,
y_expand = NULL,
y_guide = ggplot2::waiver(),
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
```

```
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
shape_palette = NULL,
facet = NULL,
facet_rows = NULL,
facet_cols = NULL,
facet_axes = "margins",
facet_axis_labels = "all",
facet_drop = TRUE,
```

```
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.

fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.

x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.

colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.
size_breaks	Breaks for the size scale.
size_drop	Whether to drop unused levels for a discrete size scale. Defaults to TRUE.
size_guide	Guide for the size scale. Defaults to NULL.
size_labels	Labels for the size scale.
size_limits	Limits for the size scale.
size_name	Name/title for the size scale.
size_oob	Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.
size_palette	Palette for the size scale.
size_transform	Transform for the size scale.
linewidth_type	Scale type for linewidth. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

`linewidth_subtype`
: Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks`
: Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
: Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
: Labels for the linewidth scale.

`linewidth_limits`
: Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
: Palette for the linewidth scale.

`linewidth_transform`
: Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
: Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
: Labels for the linetype scale.

`linetype_limits`
: Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
: Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

`shape_palette` Palette for the shape scale.

`facet` Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows` Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
iris |>
  gg_jitter(
    x = Sepal.Width,
    y = Sepal.Length,
  )

iris |>
  gg_jitter(
    x = Sepal.Width,
    y = Sepal.Length,
    fill = Species,
  )

iris |>
  gg_jitter(
    x = Sepal.Width,
    y = Sepal.Length,
    facet = Species,
  )
```

gg_line *Line ggplot*

Description

A line ggplot with geom_line() defaults for the geom, stat and position.

Usage

```
gg_line(
  data,
  ...,
  geom = "line",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
```

```
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
```

```
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
```

```
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().

x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.

x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.

fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks` Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels` Labels for the linetype scale.

`linetype_limits` Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette` Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

shape_breaks	Breaks for the shape scale.
shape_drop	Whether to drop unused levels for the shape scale. Defaults to TRUE.
shape_guide	Guide for the shape scale. Defaults to NULL.
shape_labels	Labels for the shape scale.
shape_limits	Limits for the shape scale.
shape_name	Name/title for the shape scale.
shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
library(dplyr)
library(ggplot2)



ggplot2::economics |>
  gg_line(
    x = date,
    y = unemploy,
    y_limits = \(x) range(x, 0),
  )

ggplot2::economics_long |>
  gg_line(
    x = date,
    y = value01,
    fill = variable,
  )

ggplot2::economics_long |>
  gg_line(
    x = date,
    y = value01,
    facet = variable,
  )

ggplot2::economics_long |>
  group_by(variable) |>
  slice_head(n = 10) |>
  filter(variable != "psavert") |>
  gg_point(
    x = date,
    y = value01,
    fill = variable,
    before = geom_line(),
  )
```

---

gg_linerange *Linerange ggplot*

Description

A linerange ggplot with geom_linerange() defaults for the geom, stat and position.

Usage

```
gg_linerange(
```

```
  data,
  ...,
  geom = "linerange",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
```

```
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
y_subtype = NULL,
y_breaks = NULL,
y_drop = TRUE,
y_expand = NULL,
y_guide = ggplot2::waiver(),
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
alpha_type = NULL,
alpha_subtype = NULL,
```

```
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
shape_palette = NULL,
facet = NULL,
```

```
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.

yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to `TRUE`.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to `ggplot2::waiver()`.
x_labels	Labels for the x scale. Defaults to `scales::label_date_short()` for date/datetime, otherwise `scales::label_number()`.
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.

x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.

colour_type Scale type for colour. Inherits from fill_type if NULL.

colour_subtype Scale subtype for colour. Inherits from fill_subtype if NULL.

colour_breaks Breaks for the colour scale. Inherits from fill_breaks if NULL.

colour_drop Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.

colour_guide Guide for the colour scale. Inherits from fill_guide if NULL.

colour_labels Labels for the colour scale. Inherits from fill_labels if NULL.

colour_limits Limits for the colour scale. Inherits from fill_limits if NULL.

colour_name Name/title for the colour scale. Inherits from fill_name if NULL.

colour_oob Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.

colour_rescaler
Rescaler for the colour scale. Inherits from fill_rescaler if NULL.

colour_palette Palette for the colour scale.

colour_transform
Transform for the colour scale. Inherits from fill_transform if NULL.

alpha_type Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

alpha_subtype Scale subtype for alpha. Auto-detected if NULL.

alpha_breaks Breaks for the alpha scale.

alpha_drop Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.

alpha_guide Guide for the alpha scale. Defaults to NULL.

alpha_labels Labels for the alpha scale.

alpha_limits Limits for the alpha scale.

alpha_name Name/title for the alpha scale.

alpha_oob Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

alpha_palette Palette for the alpha scale.

alpha_transform
Transform for the alpha scale.

size_type Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

size_subtype Scale subtype for size. Auto-detected if NULL.

size_breaks Breaks for the size scale.

size_drop Whether to drop unused levels for a discrete size scale. Defaults to TRUE.

size_guide Guide for the size scale. Defaults to NULL.

size_labels Labels for the size scale.

size_limits Limits for the size scale.

size_name Name/title for the size scale.

size_oob Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

size_palette Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype`
Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks`
Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
Labels for the linewidth scale.

`linewidth_limits`
Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
Palette for the linewidth scale.

`linewidth_transform`
Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

`shape_palette` Palette for the shape scale.

`facet` Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
library(ggplot2)

iris |>
  dplyr::group_by(Species) |>
  dplyr::summarise(
    mean = mean(Sepal.Length),
    lower = mean(Sepal.Length) - sd(Sepal.Length),
    upper = mean(Sepal.Length) + sd(Sepal.Length),
  ) |>
  gg_linerange(
    x = Species,
    y = mean,
    ymin = lower,
    ymax = upper,
  )
```

```
mpg |>
  dplyr::group_by(class, drv) |>
  dplyr::summarise(
    mean = mean(hwy),
    lower = mean - sd(hwy),
    upper = mean + sd(hwy),
  ) |>
  gg_linerange(
    x = class,
    ymin = lower,
    y = mean,
    ymax = upper,
    fill = drv,
    position = position_dodge2(width = 0.25),
  )

mpg |>
  dplyr::group_by(class, drv) |>
  dplyr::summarise(
    mean = mean(hwy),
    lower = mean - sd(hwy),
    upper = mean + sd(hwy),
  ) |>
  gg_linerange(
    x = drv,
    y = mean,
    ymin = lower,
    ymax = upper,
    facet = class,
  )

mpg |>
  dplyr::group_by(class, drv) |>
  dplyr::summarise(
    mean = mean(hwy),
    lower = mean - sd(hwy),
    upper = mean + sd(hwy),
  ) |>
  gg_point(
    x = class,
    ymin = lower,
    y = mean,
    ymax = upper,
    fill = drv,
    position = position_dodge2(width = 0.25),
    before = geom_linerange(
      position = position_dodge2(width = 0.25),
    )
  )

penguins |>
  dplyr::count(species, sex) |>
  tidyr::drop_na() |>
```

```
  gg_point(
    x = species,
    y = n,
    fill = sex,
    position = position_dodge(width = 0.2),
    before = ggplot2::geom_linerange(
      aes(ymin = 0, ymax = n),
      position = position_dodge(width = 0.2),
    ),
  )
```

---

gg_path *Path ggplot*

Description

A path ggplot with geom_path() defaults for the geom, stat and position.

Usage

```
gg_path(
  data,
  ...,
  geom = "path",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
```

```
    size = NULL,
    stroke = NULL,
    label = NULL,
    weight = NULL,
    group = NULL,
    width = NULL,
    height = NULL,
    slope = NULL,
    intercept = NULL,
    sample = NULL,
    angle = NULL,
    radius = NULL,
    mapping = ggplot2::aes(),
    x_type = NULL,
    x_subtype = NULL,
    x_breaks = NULL,
    x_drop = TRUE,
    x_expand = NULL,
    x_guide = ggplot2::waiver(),
    x_labels = NULL,
    x_limits = NULL,
    x_minor_breaks = ggplot2::waiver(),
    x_name = ggplot2::waiver(),
    x_oob = scales::oob_censor,
    x_palette = seq_len,
    x_position = "bottom",
    x_sec_axis = ggplot2::waiver(),
    x_transform = NULL,
    y_type = NULL,
    y_subtype = NULL,
    y_breaks = NULL,
    y_drop = TRUE,
    y_expand = NULL,
    y_guide = ggplot2::waiver(),
    y_labels = NULL,
    y_limits = NULL,
    y_minor_breaks = ggplot2::waiver(),
    y_name = ggplot2::waiver(),
    y_oob = scales::oob_censor,
    y_palette = seq_len,
    y_position = "left",
    y_sec_axis = ggplot2::waiver(),
    y_transform = NULL,
    fill_type = NULL,
    fill_subtype = NULL,
    fill_breaks = ggplot2::waiver(),
    fill_drop = TRUE,
    fill_guide = NULL,
```

```
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
```

```
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.

position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.

angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.

y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks` Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

`shape_palette` Palette for the shape scale.

`facet` Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows` Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols` Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes` Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
Which axis labels to draw on facet panels. Defaults to `"all"`.

`facet_drop` Whether to drop unused factor levels in facets. Defaults to `TRUE`.

`facet_labeller` Labeller for facet strip labels. Defaults to `"label_value"`.

`facet_ncol` Number of columns for `ggplot2::facet_wrap()`.

`facet_nrow` Number of rows for `ggplot2::facet_wrap()`.

`facet_scales` Whether facet scales are fixed or free. Defaults to `"fixed"`.

`facet_space` Whether facet space is fixed or free. Defaults to `"fixed"`.

`coord_xlim, coord_ylim`
Zoom limits within the coordinate system.

`coord_clip` Whether drawing is clipped to the panel. Either `"on"` (default) or `"off"`.

`coord_reverse` Which axes to reverse. One of `"none"` (default), `"x"`, `"y"`, or `"xy"`.

`coord_ratio` Aspect ratio expressed as y / x, for `ggplot2::coord_cartesian()`.

`title` Plot title passed to `ggplot2::labs()`.

`subtitle` Plot subtitle passed to `ggplot2::labs()`.

`caption` Plot caption passed to `ggplot2::labs()`.

`ggplot` A base ggplot object to use. Defaults to `NULL`, which uses `\(x) ggplot2::ggplot(x)`.

Value

A ggplot object.

Examples

```
library(dplyr)
library(ggplot2)

ggplot2::economics |>
  gg_path(
    x = date,
    y = unemploy,
    y_limits = \(x) range(x, 0),
  )

ggplot2::economics_long |>
  gg_path(
    x = date,
    y = value01,
    fill = variable,
  )

ggplot2::economics_long |>
  gg_path(
    x = date,
    y = value01,
    facet = variable,
  )

ggplot2::economics_long |>
  group_by(variable) |>
  slice_head(n = 10) |>
  filter(variable != "psavert") |>
  gg_point(
    x = date,
    y = value01,
    fill = variable,
    before = geom_path(),
  )
```

---

gg_point *Point ggplot*

Description

A point ggplot with geom_point() defaults for the geom, stat and position.

Usage

```
gg_point(
  data,
  ...,
  geom = "point",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
```

```
x_labels = NULL,
x_limits = NULL,
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
y_subtype = NULL,
y_breaks = NULL,
y_drop = TRUE,
y_expand = NULL,
y_guide = ggplot2::waiver(),
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
```

```
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
```

```
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.

ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to `TRUE`.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to `ggplot2::waiver()`.
x_labels	Labels for the x scale. Defaults to `scales::label_date_short()` for date/datetime, otherwise `scales::label_number()`.

x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.

fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.
size_breaks	Breaks for the size scale.
size_drop	Whether to drop unused levels for a discrete size scale. Defaults to TRUE.
size_guide	Guide for the size scale. Defaults to NULL.
size_labels	Labels for the size scale.
size_limits	Limits for the size scale.
size_name	Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype`
Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks`
Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
Labels for the linewidth scale.

`linewidth_limits`
Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
Palette for the linewidth scale.

`linewidth_transform`
Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
library(dplyr)
library(ggplot2)

iris |>
  gg_point(
    x = Sepal.Width,
    y = Sepal.Length,
  )

iris |>
  gg_point(
    x = Sepal.Width,
```

```
    y = Sepal.Length,
    fill = Species,
  )

iris |>
  gg_point(
    x = Sepal.Width,
    y = Sepal.Length,
    facet = Species,
  )

mpg |>
  group_by(class, drv) |>
  summarise(
    mean = mean(hwy),
    lower = mean - sd(hwy),
    upper = mean + sd(hwy),
  ) |>
  gg_point(
    x = class,
    ymin = lower,
    y = mean,
    ymax = upper,
    fill = drv,
    position = position_dodge2(width = 0.25),
    before = geom_linerange(
      position = position_dodge2(width = 0.25),
    )
  )

penguins |>
  count(species, sex) |>
  tidyr::drop_na() |>
  gg_point(
    x = species,
    y = n,
    fill = sex,
    position = position_dodge(width = 0.2),
    before = geom_linerange(
      aes(ymin = 0, ymax = n),
      position = position_dodge(width = 0.2),
    ),
  )
```

---

gg_polygon *Polygon ggplot*

Description

A polygon ggplot with geom_polygon() defaults for the geom, stat and position.

Usage

```
gg_polygon(
  data,
  ...,
  geom = "polygon",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
```

```
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
```

```
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
```

```
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.

ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to `TRUE`.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to `ggplot2::waiver()`.
x_labels	Labels for the x scale. Defaults to `scales::label_date_short()` for date/datetime, otherwise `scales::label_number()`.

x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.

fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.
size_breaks	Breaks for the size scale.
size_drop	Whether to drop unused levels for a discrete size scale. Defaults to TRUE.
size_guide	Guide for the size scale. Defaults to NULL.
size_labels	Labels for the size scale.
size_limits	Limits for the size scale.
size_name	Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype`
Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks`
Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
Labels for the linewidth scale.

`linewidth_limits`
Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
Palette for the linewidth scale.

`linewidth_transform`
Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
tibble::tibble(
  x = c(0, 1, 1, 0, 2, 3, 3, 2),
  y = c(0, 0, 1, 1, 0, 0, 1, 1),
  group = c("a", "a", "a", "a", "b", "b", "b", "b"),
) |>
  gg_polygon(
    x = x,
    y = y,
    group = group,
  )

tibble::tibble(
```

```
  x = c(0, 1, 1, 0, 2, 3, 3, 2),
  y = c(0, 0, 1, 1, 0, 0, 1, 1),
  group = c("a", "a", "a", "a", "b", "b", "b", "b"),
) |>
  gg_polygon(
    x = x,
    y = y,
    group = group,
    fill = group,
  )

tibble::tibble(
  x = c(0, 1, 1, 0, 2, 3, 3, 2),
  y = c(0, 0, 1, 1, 0, 0, 1, 1),
  group = c("a", "a", "a", "a", "b", "b", "b", "b"),
) |>
  gg_polygon(
    x = x,
    y = y,
    group = group,
    facet = group,
  )
```

---

gg_qq *QQ ggplot*

Description

A qq ggplot with geom_qq() defaults for the geom, stat and position. defaults for the geom, stat and position.

Usage

```
gg_qq(
  data,
  ...,
  geom = "qq",
  stat = "qq",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
```

```
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
```

```
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
```

```
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
shape_palette = NULL,
facet = NULL,
facet_rows = NULL,
facet_cols = NULL,
facet_axes = "margins",
facet_axis_labels = "all",
facet_drop = TRUE,
facet_labeller = "label_value",
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
coord_xlim = NULL,
coord_ylim = NULL,
coord_clip = NULL,
coord_reverse = "none",
```

```
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.

size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().

y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.

colour_palette Palette for the colour scale.

colour_transform
Transform for the colour scale. Inherits from fill_transform if NULL.

alpha_type Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

alpha_subtype Scale subtype for alpha. Auto-detected if NULL.

alpha_breaks Breaks for the alpha scale.

alpha_drop Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.

alpha_guide Guide for the alpha scale. Defaults to NULL.

alpha_labels Labels for the alpha scale.

alpha_limits Limits for the alpha scale.

alpha_name Name/title for the alpha scale.

alpha_oob Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

alpha_palette Palette for the alpha scale.

alpha_transform
Transform for the alpha scale.

size_type Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

size_subtype Scale subtype for size. Auto-detected if NULL.

size_breaks Breaks for the size scale.

size_drop Whether to drop unused levels for a discrete size scale. Defaults to TRUE.

size_guide Guide for the size scale. Defaults to NULL.

size_labels Labels for the size scale.

size_limits Limits for the size scale.

size_name Name/title for the size scale.

size_oob Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

size_palette Palette for the size scale.

size_transform Transform for the size scale.

linewidth_type Scale type for linewidth. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

linewidth_subtype
Scale subtype for linewidth. Auto-detected if NULL.

linewidth_breaks
Breaks for the linewidth scale.

linewidth_drop Whether to drop unused levels for a discrete linewidth scale. Defaults to TRUE.

linewidth_guide
Guide for the linewidth scale. Defaults to NULL.

linewidth_labels
Labels for the linewidth scale.

linewidth_limits
Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
Palette for the linewidth scale.

`linewidth_transform`
Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

`shape_palette` Palette for the shape scale.

`facet` Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows` Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols` Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes` Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
Which axis labels to draw on facet panels. Defaults to `"all"`.

`facet_drop` Whether to drop unused factor levels in facets. Defaults to `TRUE`.

`facet_labeller` Labeller for facet strip labels. Defaults to `"label_value"`.

`facet_ncol` Number of columns for `ggplot2::facet_wrap()`.

`facet_nrow` Number of rows for `ggplot2::facet_wrap()`.

`facet_scales` Whether facet scales are fixed or free. Defaults to `"fixed"`.

facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
library(ggplot2)

iris |>
  gg_qq(
    sample = Sepal.Width,
    before = geom_qq_line()
  )

iris |>
  gg_qq(
    sample = Sepal.Width,
    fill = Species,
    before = geom_qq_line()
  )

iris |>
  gg_qq(
    sample = Sepal.Width,
    facet = Species,
    before = geom_qq_line()
  )
```

---

gg_quantile *Quantile ggplot*

Description

A quantile ggplot with geom_quantile() defaults for the geom, stat and position.

Usage

```
gg_quantile(
  data,
  ...,
  geom = "quantile",
  stat = "quantile",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
```

```
x_labels = NULL,
x_limits = NULL,
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
y_subtype = NULL,
y_breaks = NULL,
y_drop = TRUE,
y_expand = NULL,
y_guide = ggplot2::waiver(),
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
```

```
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
```

```
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.

ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to `TRUE`.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to `ggplot2::waiver()`.
x_labels	Labels for the x scale. Defaults to `scales::label_date_short()` for date/datetime, otherwise `scales::label_number()`.

x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.

fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.
size_breaks	Breaks for the size scale.
size_drop	Whether to drop unused levels for a discrete size scale. Defaults to TRUE.
size_guide	Guide for the size scale. Defaults to NULL.
size_labels	Labels for the size scale.
size_limits	Limits for the size scale.
size_name	Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype`
Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks`
Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
Labels for the linewidth scale.

`linewidth_limits`
Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
Palette for the linewidth scale.

`linewidth_transform`
Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
if (requireNamespace("quantreg", quietly = TRUE)) {
  iris |>
    gg_quantile(
      x = Sepal.Width,
      y = Sepal.Length,
    )

  iris |>
    gg_quantile(
      x = Sepal.Width,
      y = Sepal.Length,
      fill = Species,
```

```
  )

iris |>
  gg_quantile(
    x = Sepal.Width,
    y = Sepal.Length,
    facet = Species,
  )
}
```

---

gg_raster *Raster ggplot*

Description

A raster ggplot with geom_raster() defaults for the geom, stat and position.

Note `gg_raster` defaults to `colour = NA`.

Usage

```
gg_raster(
  data,
  ...,
  geom = "raster",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
```

```
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
```

```
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
```

```
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.

geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.

intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.

y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.

`alpha_guide` Guide for the alpha scale. Defaults to `NULL`.

`alpha_labels` Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

linetype_breaks
: Breaks for the linetype scale.

linetype_drop
: Whether to drop unused levels for the linetype scale. Defaults to TRUE.

linetype_guide
: Guide for the linetype scale. Defaults to NULL.

linetype_labels
: Labels for the linetype scale.

linetype_limits
: Limits for the linetype scale.

linetype_name
: Name/title for the linetype scale.

linetype_palette
: Palette for the linetype scale.

shape_type
: Scale type for shape. Only "discrete" is supported.

shape_breaks
: Breaks for the shape scale.

shape_drop
: Whether to drop unused levels for the shape scale. Defaults to TRUE.

shape_guide
: Guide for the shape scale. Defaults to NULL.

shape_labels
: Labels for the shape scale.

shape_limits
: Limits for the shape scale.

shape_name
: Name/title for the shape scale.

shape_palette
: Palette for the shape scale.

facet
: Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_rows
: Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_cols
: Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_axes
: Which axes to draw on facet panels. Defaults to "margins".

facet_axis_labels
: Which axis labels to draw on facet panels. Defaults to "all".

facet_drop
: Whether to drop unused factor levels in facets. Defaults to TRUE.

facet_labeller
: Labeller for facet strip labels. Defaults to "label_value".

facet_ncol
: Number of columns for ggplot2::facet_wrap().

facet_nrow
: Number of rows for ggplot2::facet_wrap().

facet_scales
: Whether facet scales are fixed or free. Defaults to "fixed".

facet_space
: Whether facet space is fixed or free. Defaults to "fixed".

coord_xlim, coord_ylim
: Zoom limits within the coordinate system.

coord_clip
: Whether drawing is clipped to the panel. Either "on" (default) or "off".

coord_reverse
: Which axes to reverse. One of "none" (default), "x", "y", or "xy".

coord_ratio
: Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().

title
: Plot title passed to ggplot2::labs().

subtitle
: Plot subtitle passed to ggplot2::labs().

caption
: Plot caption passed to ggplot2::labs().

ggplot
: A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
ggplot2::faithfuld |>
  gg_raster(
    x = waiting,
    y = eruptions,
    fill = density,
  )

ggplot2::faithfuld |>
  gg_raster(
    x = waiting,
    y = eruptions,
    fill = density,
  )

ggplot2::faithfuld |>
  dplyr::mutate(group = ifelse(waiting <= 65, "short", "long")) |>
  gg_raster(
    x = waiting,
    y = eruptions,
    fill = density,
    facet = group,
    facet_scales = "free_x",
  )
```

---

gg_rect *Rect ggplot*

Description

A rect ggplot with geom_rect() defaults for the geom, stat and position.

Usage

```
gg_rect(
  data,
  ...,
  geom = "rect",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
```

```
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
```

```
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
```

```
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
shape_palette = NULL,
facet = NULL,
facet_rows = NULL,
facet_cols = NULL,
facet_axes = "margins",
facet_axis_labels = "all",
facet_drop = TRUE,
facet_labeller = "label_value",
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
```

```
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.

alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.

y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.

colour_labels Labels for the colour scale. Inherits from fill_labels if NULL.

colour_limits Limits for the colour scale. Inherits from fill_limits if NULL.

colour_name Name/title for the colour scale. Inherits from fill_name if NULL.

colour_oob Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.

colour_rescaler
Rescaler for the colour scale. Inherits from fill_rescaler if NULL.

colour_palette Palette for the colour scale.

colour_transform
Transform for the colour scale. Inherits from fill_transform if NULL.

alpha_type Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

alpha_subtype Scale subtype for alpha. Auto-detected if NULL.

alpha_breaks Breaks for the alpha scale.

alpha_drop Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.

alpha_guide Guide for the alpha scale. Defaults to NULL.

alpha_labels Labels for the alpha scale.

alpha_limits Limits for the alpha scale.

alpha_name Name/title for the alpha scale.

alpha_oob Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

alpha_palette Palette for the alpha scale.

alpha_transform
Transform for the alpha scale.

size_type Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

size_subtype Scale subtype for size. Auto-detected if NULL.

size_breaks Breaks for the size scale.

size_drop Whether to drop unused levels for a discrete size scale. Defaults to TRUE.

size_guide Guide for the size scale. Defaults to NULL.

size_labels Labels for the size scale.

size_limits Limits for the size scale.

size_name Name/title for the size scale.

size_oob Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

size_palette Palette for the size scale.

size_transform Transform for the size scale.

linewidth_type Scale type for linewidth. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

linewidth_subtype
Scale subtype for linewidth. Auto-detected if NULL.

linewidth_breaks
Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
Labels for the linewidth scale.

`linewidth_limits`
Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
Palette for the linewidth scale.

`linewidth_transform`
Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

`shape_palette` Palette for the shape scale.

`facet` Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows` Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols` Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes` Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
Which axis labels to draw on facet panels. Defaults to `"all"`.

facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
tibble::tibble(
  xmin = c(1, 3),
  xmax = c(2, 4),
  ymin = c(1, 3),
  ymax = c(2, 4),
) |>
  gg_rect(
    xmin = xmin,
    xmax = xmax,
    ymin = ymin,
    ymax = ymax,
  )

tibble::tibble(
  xmin = c(1, 3),
  xmax = c(2, 4),
  ymin = c(1, 3),
  ymax = c(2, 4),
  group = c("a", "b"),
) |>
  gg_rect(
    xmin = xmin,
    xmax = xmax,
    ymin = ymin,
    ymax = ymax,
```

```
    fill = group,
  )

tibble::tibble(
  xmin = c(1, 3),
  xmax = c(2, 4),
  ymin = c(1, 3),
  ymax = c(2, 4),
  group = c("a", "b"),
) |>
  gg_rect(
    xmin = xmin,
    xmax = xmax,
    ymin = ymin,
    ymax = ymax,
    facet = group,
  )
```

---

gg_ribbon *Ribbon ggplot*

Description

A ribbon ggplot with geom_ribbon() defaults for the geom, stat and position.

Usage

```
gg_ribbon(
  data,
  ...,
  geom = "ribbon",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
```

```
yintercept = NULL,
z = NULL,
fill = NULL,
colour = NULL,
alpha = NULL,
shape = NULL,
linetype = NULL,
linewidth = NULL,
size = NULL,
stroke = NULL,
label = NULL,
weight = NULL,
group = NULL,
width = NULL,
height = NULL,
slope = NULL,
intercept = NULL,
sample = NULL,
angle = NULL,
radius = NULL,
mapping = ggplot2::aes(),
x_type = NULL,
x_subtype = NULL,
x_breaks = NULL,
x_drop = TRUE,
x_expand = NULL,
x_guide = ggplot2::waiver(),
x_labels = NULL,
x_limits = NULL,
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
y_subtype = NULL,
y_breaks = NULL,
y_drop = TRUE,
y_expand = NULL,
y_guide = ggplot2::waiver(),
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
```

```
    y_position = "left",
    y_sec_axis = ggplot2::waiver(),
    y_transform = NULL,
    fill_type = NULL,
    fill_subtype = NULL,
    fill_breaks = ggplot2::waiver(),
    fill_drop = TRUE,
    fill_guide = NULL,
    fill_labels = NULL,
    fill_limits = NULL,
    fill_name = ggplot2::waiver(),
    fill_oob = scales::oob_censor,
    fill_rescaler = scales::rescale,
    fill_palette = NULL,
    fill_transform = NULL,
    colour_type = NULL,
    colour_subtype = NULL,
    colour_breaks = NULL,
    colour_drop = NULL,
    colour_guide = NULL,
    colour_labels = NULL,
    colour_limits = NULL,
    colour_name = fill_name,
    colour_oob = NULL,
    colour_rescaler = NULL,
    colour_palette = NULL,
    colour_transform = NULL,
    alpha_type = NULL,
    alpha_subtype = NULL,
    alpha_breaks = ggplot2::waiver(),
    alpha_drop = TRUE,
    alpha_guide = NULL,
    alpha_labels = NULL,
    alpha_limits = NULL,
    alpha_name = ggplot2::waiver(),
    alpha_oob = scales::oob_censor,
    alpha_palette = NULL,
    alpha_transform = NULL,
    size_type = NULL,
    size_subtype = NULL,
    size_breaks = ggplot2::waiver(),
    size_drop = TRUE,
    size_guide = NULL,
    size_labels = NULL,
    size_limits = NULL,
    size_name = ggplot2::waiver(),
    size_oob = scales::oob_censor,
    size_palette = NULL,
```

```
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
shape_palette = NULL,
facet = NULL,
facet_rows = NULL,
facet_cols = NULL,
facet_axes = "margins",
facet_axis_labels = "all",
facet_drop = TRUE,
facet_labeller = "label_value",
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
coord_xlim = NULL,
coord_ylim = NULL,
coord_clip = NULL,
coord_reverse = "none",
coord_ratio = NULL,
title = NULL,
subtitle = NULL,
caption = NULL,
ggplot = NULL
```

```
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.

weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.

y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.

`alpha_type` Scale type for alpha. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`alpha_subtype` Scale subtype for alpha. Auto-detected if `NULL`.

`alpha_breaks` Breaks for the alpha scale.

`alpha_drop` Whether to drop unused levels for a discrete alpha scale. Defaults to `TRUE`.

`alpha_guide` Guide for the alpha scale. Defaults to `NULL`.

`alpha_labels` Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
: Palette for the linewidth scale.

`linewidth_transform`
: Transform for the linewidth scale.

`linetype_type`
: Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
: Breaks for the linetype scale.

`linetype_drop`
: Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide`
: Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
: Labels for the linetype scale.

`linetype_limits`
: Limits for the linetype scale.

`linetype_name`
: Name/title for the linetype scale.

`linetype_palette`
: Palette for the linetype scale.

`shape_type`
: Scale type for shape. Only `"discrete"` is supported.

`shape_breaks`
: Breaks for the shape scale.

`shape_drop`
: Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide`
: Guide for the shape scale. Defaults to `NULL`.

`shape_labels`
: Labels for the shape scale.

`shape_limits`
: Limits for the shape scale.

`shape_name`
: Name/title for the shape scale.

`shape_palette`
: Palette for the shape scale.

`facet`
: Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows`
: Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols`
: Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes`
: Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
: Which axis labels to draw on facet panels. Defaults to `"all"`.

`facet_drop`
: Whether to drop unused factor levels in facets. Defaults to `TRUE`.

`facet_labeller`
: Labeller for facet strip labels. Defaults to `"label_value"`.

`facet_ncol`
: Number of columns for `ggplot2::facet_wrap()`.

`facet_nrow`
: Number of rows for `ggplot2::facet_wrap()`.

`facet_scales`
: Whether facet scales are fixed or free. Defaults to `"fixed"`.

`facet_space`
: Whether facet space is fixed or free. Defaults to `"fixed"`.

`coord_xlim`, `coord_ylim`
: Zoom limits within the coordinate system.

coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
tibble::tibble(year = 1875:1972, level = as.vector(LakeHuron)) |>
  dplyr::mutate(lower = level - 1, upper = level + 1) |>
  gg_ribbon(
    x = year,
    ymin = lower,
    ymax = upper,
    x_labels = \(x) x,
  )

ggplot2::economics_long |>
  dplyr::mutate(lower = value01 - 0.05, upper = value01 + 0.05) |>
  gg_ribbon(
    x = date,
    ymin = lower,
    ymax = upper,
    fill = variable,
  )

ggplot2::economics_long |>
  dplyr::mutate(lower = value01 - 0.05, upper = value01 + 0.05) |>
  gg_ribbon(
    x = date,
    ymin = lower,
    ymax = upper,
    facet = variable,
  )
```

---

gg_segment *Segment ggplot*

Description

A segment ggplot with geom_segment() defaults for the geom, stat and position.

Usage

```
gg_segment(
  data,
  ...,
  geom = "segment",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
```

```
x_labels = NULL,
x_limits = NULL,
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
y_subtype = NULL,
y_breaks = NULL,
y_drop = TRUE,
y_expand = NULL,
y_guide = ggplot2::waiver(),
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
```

```
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
```

```
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.

ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to `TRUE`.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to `ggplot2::waiver()`.
x_labels	Labels for the x scale. Defaults to `scales::label_date_short()` for date/datetime, otherwise `scales::label_number()`.

x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.

fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.
size_breaks	Breaks for the size scale.
size_drop	Whether to drop unused levels for a discrete size scale. Defaults to TRUE.
size_guide	Guide for the size scale. Defaults to NULL.
size_labels	Labels for the size scale.
size_limits	Limits for the size scale.
size_name	Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype`
Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks`
Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
Labels for the linewidth scale.

`linewidth_limits`
Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
Palette for the linewidth scale.

`linewidth_transform`
Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
iris |>
  gg_point(
    x = Sepal.Width,
    y = Sepal.Length,
  )

iris |>
  gg_point(
    x = Sepal.Width,
    y = Sepal.Length,
    fill = Species,
  )
```

```
iris |>
  gg_point(
    x = Sepal.Width,
    y = Sepal.Length,
    facet = Species,
  )

tibble::tibble(
  x = c(1, 3),
  xend = c(2, 4),
  y = c(1, 3),
  yend = c(2, 4),
) |>
  gg_segment(
    x = x,
    xend = xend,
    y = y,
    yend = yend,
  )

tibble::tibble(
  x = c(1, 3),
  xend = c(2, 4),
  y = c(1, 3),
  yend = c(2, 4),
  group = c("a", "b"),
) |>
  gg_segment(
    x = x,
    xend = xend,
    y = y,
    yend = yend,
    fill = group,
  )

tibble::tibble(
  x = c(1, 3),
  xend = c(2, 4),
  y = c(1, 3),
  yend = c(2, 4),
  group = c("a", "b"),
) |>
  gg_segment(
    x = x,
    xend = xend,
    y = y,
    yend = yend,
    facet = group,
  )
```

gg_sf *Sf ggplot*

Description

A sf ggplot with geom_sf() defaults for the geom, stat and position.

Usage

```
gg_sf(
  data,
  ...,
  geom = "sf",
  stat = "sf",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
```

```
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
```

```
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
```

```
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().

x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.

x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.

fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.

size_breaks Breaks for the size scale.

size_drop Whether to drop unused levels for a discrete size scale. Defaults to TRUE.

size_guide Guide for the size scale. Defaults to NULL.

size_labels Labels for the size scale.

size_limits Limits for the size scale.

size_name Name/title for the size scale.

size_oob Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

size_palette Palette for the size scale.

size_transform Transform for the size scale.

linewidth_type Scale type for linewidth. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

linewidth_subtype
Scale subtype for linewidth. Auto-detected if NULL.

linewidth_breaks
Breaks for the linewidth scale.

linewidth_drop Whether to drop unused levels for a discrete linewidth scale. Defaults to TRUE.

linewidth_guide
Guide for the linewidth scale. Defaults to NULL.

linewidth_labels
Labels for the linewidth scale.

linewidth_limits
Limits for the linewidth scale.

linewidth_name Name/title for the linewidth scale.

linewidth_oob Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

linewidth_palette
Palette for the linewidth scale.

linewidth_transform
Transform for the linewidth scale.

linetype_type Scale type for linetype. Only "discrete" is supported.

linetype_breaks
Breaks for the linetype scale.

linetype_drop Whether to drop unused levels for the linetype scale. Defaults to TRUE.

linetype_guide Guide for the linetype scale. Defaults to NULL.

linetype_labels
Labels for the linetype scale.

linetype_limits
Limits for the linetype scale.

linetype_name Name/title for the linetype scale.

linetype_palette
Palette for the linetype scale.

shape_type Scale type for shape. Only "discrete" is supported.

shape_breaks	Breaks for the shape scale.
shape_drop	Whether to drop unused levels for the shape scale. Defaults to TRUE.
shape_guide	Guide for the shape scale. Defaults to NULL.
shape_labels	Labels for the shape scale.
shape_limits	Limits for the shape scale.
shape_name	Name/title for the shape scale.
shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
if (requireNamespace("sf", quietly = TRUE)) {

  d <- sf::st_read(system.file("shape/nc.shp", package = "sf"))

  d |>
    sf::st_centroid() |>
    gg_sf()

  d |>
    gg_sf(
      fill = AREA,
    )

}
```

---

gg_smooth *Smooth ggplot*

Description

A smooth ggplot with geom_smooth() defaults for the geom, stat and position.

Usage

```
gg_smooth(
  data,
  ...,
  geom = "smooth",
  stat = "smooth",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
```

```
    colour = NULL,
    alpha = NULL,
    shape = NULL,
    linetype = NULL,
    linewidth = NULL,
    size = NULL,
    stroke = NULL,
    label = NULL,
    weight = NULL,
    group = NULL,
    width = NULL,
    height = NULL,
    slope = NULL,
    intercept = NULL,
    sample = NULL,
    angle = NULL,
    radius = NULL,
    mapping = ggplot2::aes(),
    x_type = NULL,
    x_subtype = NULL,
    x_breaks = NULL,
    x_drop = TRUE,
    x_expand = NULL,
    x_guide = ggplot2::waiver(),
    x_labels = NULL,
    x_limits = NULL,
    x_minor_breaks = ggplot2::waiver(),
    x_name = ggplot2::waiver(),
    x_oob = scales::oob_censor,
    x_palette = seq_len,
    x_position = "bottom",
    x_sec_axis = ggplot2::waiver(),
    x_transform = NULL,
    y_type = NULL,
    y_subtype = NULL,
    y_breaks = NULL,
    y_drop = TRUE,
    y_expand = NULL,
    y_guide = ggplot2::waiver(),
    y_labels = NULL,
    y_limits = NULL,
    y_minor_breaks = ggplot2::waiver(),
    y_name = ggplot2::waiver(),
    y_oob = scales::oob_censor,
    y_palette = seq_len,
    y_position = "left",
    y_sec_axis = ggplot2::waiver(),
    y_transform = NULL,
```

```
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
```

```
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.

width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().

y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.

`alpha_type` Scale type for alpha. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`alpha_subtype` Scale subtype for alpha. Auto-detected if `NULL`.

`alpha_breaks` Breaks for the alpha scale.

`alpha_drop` Whether to drop unused levels for a discrete alpha scale. Defaults to `TRUE`.

`alpha_guide` Guide for the alpha scale. Defaults to `NULL`.

`alpha_labels` Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
: Palette for the linewidth scale.

`linewidth_transform`
: Transform for the linewidth scale.

`linetype_type`
: Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
: Breaks for the linetype scale.

`linetype_drop`
: Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide`
: Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
: Labels for the linetype scale.

`linetype_limits`
: Limits for the linetype scale.

`linetype_name`
: Name/title for the linetype scale.

`linetype_palette`
: Palette for the linetype scale.

`shape_type`
: Scale type for shape. Only `"discrete"` is supported.

`shape_breaks`
: Breaks for the shape scale.

`shape_drop`
: Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide`
: Guide for the shape scale. Defaults to `NULL`.

`shape_labels`
: Labels for the shape scale.

`shape_limits`
: Limits for the shape scale.

`shape_name`
: Name/title for the shape scale.

`shape_palette`
: Palette for the shape scale.

`facet`
: Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows`
: Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols`
: Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes`
: Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
: Which axis labels to draw on facet panels. Defaults to `"all"`.

`facet_drop`
: Whether to drop unused factor levels in facets. Defaults to `TRUE`.

`facet_labeller`
: Labeller for facet strip labels. Defaults to `"label_value"`.

`facet_ncol`
: Number of columns for `ggplot2::facet_wrap()`.

`facet_nrow`
: Number of rows for `ggplot2::facet_wrap()`.

`facet_scales`
: Whether facet scales are fixed or free. Defaults to `"fixed"`.

`facet_space`
: Whether facet space is fixed or free. Defaults to `"fixed"`.

`coord_xlim`, `coord_ylim`
: Zoom limits within the coordinate system.

coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
iris |>
  gg_smooth(
    x = Sepal.Width,
    y = Sepal.Length,
  )

iris |>
  gg_smooth(
    x = Sepal.Width,
    y = Sepal.Length,
    fill = Species,
  )

iris |>
  gg_smooth(
    x = Sepal.Width,
    y = Sepal.Length,
    facet = Species,
  )
```

---

gg_spoke *Spoke ggplot*

Description

A spoke ggplot with geom_spoke() defaults for the geom, stat and position.

Usage

```
gg_spoke(
  data,
  ...,
  geom = "spoke",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
```

```
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
```

```
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
```

```
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.

ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from `ggplot2::aes()`, merged with individual aesthetic arguments.
x_type	Scale type for x. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.
x_subtype	Scale subtype for x. One of `"date"`, `"datetime"`, `"time"`, or `NA`. Auto-detected if `NULL`.
x_breaks	Breaks for the x scale. Defaults to `scales::breaks_pretty()` for date/datetime subtypes, otherwise `scales::breaks_extended()`.
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to `TRUE`.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to `ggplot2::waiver()`.
x_labels	Labels for the x scale. Defaults to `scales::label_date_short()` for date/datetime, otherwise `scales::label_number()`.

x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.

fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.
alpha_guide	Guide for the alpha scale. Defaults to NULL.
alpha_labels	Labels for the alpha scale.
alpha_limits	Limits for the alpha scale.
alpha_name	Name/title for the alpha scale.
alpha_oob	Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.
alpha_palette	Palette for the alpha scale.
alpha_transform	Transform for the alpha scale.
size_type	Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
size_subtype	Scale subtype for size. Auto-detected if NULL.
size_breaks	Breaks for the size scale.
size_drop	Whether to drop unused levels for a discrete size scale. Defaults to TRUE.
size_guide	Guide for the size scale. Defaults to NULL.
size_labels	Labels for the size scale.
size_limits	Limits for the size scale.
size_name	Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype`
Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks`
Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
Labels for the linewidth scale.

`linewidth_limits`
Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
Palette for the linewidth scale.

`linewidth_transform`
Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
Labels for the linetype scale.

`linetype_limits`
Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

shape_palette	Palette for the shape scale.
facet	Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_rows	Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_cols	Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.
facet_axes	Which axes to draw on facet panels. Defaults to "margins".
facet_axis_labels	Which axis labels to draw on facet panels. Defaults to "all".
facet_drop	Whether to drop unused factor levels in facets. Defaults to TRUE.
facet_labeller	Labeller for facet strip labels. Defaults to "label_value".
facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
expand.grid(x = 1:10, y = 1:10) |>
  tibble::as_tibble() |>
  dplyr::mutate(
    angle = runif(100, 0, 2 * pi),
    speed = runif(100, 0, sqrt(0.1 * x)),
  ) |>
  gg_spoke(
    x = x,
    y = y,
    angle = angle,
    radius = speed,
  )
```

```
expand.grid(x = 1:10, y = 1:10) |>
  tibble::as_tibble() |>
  dplyr::mutate(
    angle = runif(100, 0, 2 * pi),
    speed = runif(100, 0, sqrt(0.1 * x)),
  ) |>
  gg_spoke(
    x = x,
    y = y,
    angle = angle,
    radius = speed,
    fill = speed,
  )

expand.grid(x = 1:10, y = 1:10) |>
  tibble::as_tibble() |>
  dplyr::mutate(
    angle = runif(100, 0, 2 * pi),
    speed = runif(100, 0, sqrt(0.1 * x)),
    group = ifelse(x <= 5, "left", "right"),
  ) |>
  gg_spoke(
    x = x,
    y = y,
    angle = angle,
    radius = speed,
    facet = group,
  )
```

---

gg_step *Step ggplot*

Description

A step ggplot with geom_step() defaults for the geom, stat and position.

Usage

```
gg_step(
  data,
  ...,
  geom = "step",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = FALSE,
```

```
theme = NULL,
refine = NULL,
x = NULL,
xmin = NULL,
xmax = NULL,
xend = NULL,
xintercept = NULL,
y = NULL,
ymin = NULL,
ymax = NULL,
yend = NULL,
yintercept = NULL,
z = NULL,
fill = NULL,
colour = NULL,
alpha = NULL,
shape = NULL,
linetype = NULL,
linewidth = NULL,
size = NULL,
stroke = NULL,
label = NULL,
weight = NULL,
group = NULL,
width = NULL,
height = NULL,
slope = NULL,
intercept = NULL,
sample = NULL,
angle = NULL,
radius = NULL,
mapping = ggplot2::aes(),
x_type = NULL,
x_subtype = NULL,
x_breaks = NULL,
x_drop = TRUE,
x_expand = NULL,
x_guide = ggplot2::waiver(),
x_labels = NULL,
x_limits = NULL,
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
```

```
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
  y_labels = NULL,
  y_limits = NULL,
  y_minor_breaks = ggplot2::waiver(),
  y_name = ggplot2::waiver(),
  y_oob = scales::oob_censor,
  y_palette = seq_len,
  y_position = "left",
  y_sec_axis = ggplot2::waiver(),
  y_transform = NULL,
  fill_type = NULL,
  fill_subtype = NULL,
  fill_breaks = ggplot2::waiver(),
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
```

```
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
shape_palette = NULL,
facet = NULL,
facet_rows = NULL,
facet_cols = NULL,
facet_axes = "margins",
facet_axis_labels = "all",
facet_drop = TRUE,
facet_labeller = "label_value",
facet_ncol = NULL,
facet_nrow = NULL,
```

```
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.

colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().

x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.

colour_guide Guide for the colour scale. Inherits from fill_guide if NULL.

colour_labels Labels for the colour scale. Inherits from fill_labels if NULL.

colour_limits Limits for the colour scale. Inherits from fill_limits if NULL.

colour_name Name/title for the colour scale. Inherits from fill_name if NULL.

colour_oob Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.

colour_rescaler
Rescaler for the colour scale. Inherits from fill_rescaler if NULL.

colour_palette Palette for the colour scale.

colour_transform
Transform for the colour scale. Inherits from fill_transform if NULL.

alpha_type Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

alpha_subtype Scale subtype for alpha. Auto-detected if NULL.

alpha_breaks Breaks for the alpha scale.

alpha_drop Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.

alpha_guide Guide for the alpha scale. Defaults to NULL.

alpha_labels Labels for the alpha scale.

alpha_limits Limits for the alpha scale.

alpha_name Name/title for the alpha scale.

alpha_oob Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

alpha_palette Palette for the alpha scale.

alpha_transform
Transform for the alpha scale.

size_type Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

size_subtype Scale subtype for size. Auto-detected if NULL.

size_breaks Breaks for the size scale.

size_drop Whether to drop unused levels for a discrete size scale. Defaults to TRUE.

size_guide Guide for the size scale. Defaults to NULL.

size_labels Labels for the size scale.

size_limits Limits for the size scale.

size_name Name/title for the size scale.

size_oob Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

size_palette Palette for the size scale.

size_transform Transform for the size scale.

linewidth_type Scale type for linewidth. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

linewidth_subtype
Scale subtype for linewidth. Auto-detected if NULL.

`linewidth_breaks`
: Breaks for the linewidth scale.

`linewidth_drop`
: Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide`
: Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels`
: Labels for the linewidth scale.

`linewidth_limits`
: Limits for the linewidth scale.

`linewidth_name`
: Name/title for the linewidth scale.

`linewidth_oob`
: Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
: Palette for the linewidth scale.

`linewidth_transform`
: Transform for the linewidth scale.

`linetype_type`
: Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
: Breaks for the linetype scale.

`linetype_drop`
: Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide`
: Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
: Labels for the linetype scale.

`linetype_limits`
: Limits for the linetype scale.

`linetype_name`
: Name/title for the linetype scale.

`linetype_palette`
: Palette for the linetype scale.

`shape_type`
: Scale type for shape. Only `"discrete"` is supported.

`shape_breaks`
: Breaks for the shape scale.

`shape_drop`
: Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide`
: Guide for the shape scale. Defaults to `NULL`.

`shape_labels`
: Labels for the shape scale.

`shape_limits`
: Limits for the shape scale.

`shape_name`
: Name/title for the shape scale.

`shape_palette`
: Palette for the shape scale.

`facet`
: Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows`
: Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols`
: Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes`
: Which axes to draw on facet panels. Defaults to `"margins"`.

facet_axis_labels
: Which axis labels to draw on facet panels. Defaults to "all".

facet_drop
: Whether to drop unused factor levels in facets. Defaults to TRUE.

facet_labeller
: Labeller for facet strip labels. Defaults to "label_value".

facet_ncol
: Number of columns for ggplot2::facet_wrap().

facet_nrow
: Number of rows for ggplot2::facet_wrap().

facet_scales
: Whether facet scales are fixed or free. Defaults to "fixed".

facet_space
: Whether facet space is fixed or free. Defaults to "fixed".

coord_xlim, coord_ylim
: Zoom limits within the coordinate system.

coord_clip
: Whether drawing is clipped to the panel. Either "on" (default) or "off".

coord_reverse
: Which axes to reverse. One of "none" (default), "x", "y", or "xy".

coord_ratio
: Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().

title
: Plot title passed to ggplot2::labs().

subtitle
: Plot subtitle passed to ggplot2::labs().

caption
: Plot caption passed to ggplot2::labs().

ggplot
: A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
library(dplyr)
library(ggplot2)

ggplot2::economics |>
  gg_step(
    x = date,
    y = unemploy,
    y_limits = \(x) range(x, 0),
  )

ggplot2::economics_long |>
  gg_step(
    x = date,
    y = value01,
    fill = variable,
  )

ggplot2::economics_long |>
  gg_step(
    x = date,
    y = value01,
    facet = ggplot2::vars(variable),
  )
```

```
ggplot2::economics_long |>
  group_by(variable) |>
  slice_head(n = 10) |>
  filter(variable != "psavert") |>
  gg_point(
    x = date,
    y = value01,
    fill = variable,
    before = geom_step(),
  )
```

---

gg_tile *Tile ggplot*

Description

A tile ggplot with geom_tile() defaults for the geom, stat and position.

Usage

```
gg_tile(
  data,
  ...,
  geom = "tile",
  stat = "identity",
  position = ggplot2::position_identity(),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
```

```
linetype = NULL,
linewidth = NULL,
size = NULL,
stroke = NULL,
label = NULL,
weight = NULL,
group = NULL,
width = NULL,
height = NULL,
slope = NULL,
intercept = NULL,
sample = NULL,
angle = NULL,
radius = NULL,
mapping = ggplot2::aes(),
x_type = NULL,
x_subtype = NULL,
x_breaks = NULL,
x_drop = TRUE,
x_expand = NULL,
x_guide = ggplot2::waiver(),
x_labels = NULL,
x_limits = NULL,
x_minor_breaks = ggplot2::waiver(),
x_name = ggplot2::waiver(),
x_oob = scales::oob_censor,
x_palette = seq_len,
x_position = "bottom",
x_sec_axis = ggplot2::waiver(),
x_transform = NULL,
y_type = NULL,
y_subtype = NULL,
y_breaks = NULL,
y_drop = TRUE,
y_expand = NULL,
y_guide = ggplot2::waiver(),
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
```

```
  fill_drop = TRUE,
  fill_guide = NULL,
  fill_labels = NULL,
  fill_limits = NULL,
  fill_name = ggplot2::waiver(),
  fill_oob = scales::oob_censor,
  fill_rescaler = scales::rescale,
  fill_palette = NULL,
  fill_transform = NULL,
  colour_type = NULL,
  colour_subtype = NULL,
  colour_breaks = NULL,
  colour_drop = NULL,
  colour_guide = NULL,
  colour_labels = NULL,
  colour_limits = NULL,
  colour_name = fill_name,
  colour_oob = NULL,
  colour_rescaler = NULL,
  colour_palette = NULL,
  colour_transform = NULL,
  alpha_type = NULL,
  alpha_subtype = NULL,
  alpha_breaks = ggplot2::waiver(),
  alpha_drop = TRUE,
  alpha_guide = NULL,
  alpha_labels = NULL,
  alpha_limits = NULL,
  alpha_name = ggplot2::waiver(),
  alpha_oob = scales::oob_censor,
  alpha_palette = NULL,
  alpha_transform = NULL,
  size_type = NULL,
  size_subtype = NULL,
  size_breaks = ggplot2::waiver(),
  size_drop = TRUE,
  size_guide = NULL,
  size_labels = NULL,
  size_limits = NULL,
  size_name = ggplot2::waiver(),
  size_oob = scales::oob_censor,
  size_palette = NULL,
  size_transform = NULL,
  linewidth_type = NULL,
  linewidth_subtype = NULL,
  linewidth_breaks = ggplot2::waiver(),
  linewidth_drop = TRUE,
  linewidth_guide = NULL,
```

```
  linewidth_labels = NULL,
  linewidth_limits = NULL,
  linewidth_name = ggplot2::waiver(),
  linewidth_oob = scales::oob_censor,
  linewidth_palette = NULL,
  linewidth_transform = NULL,
  linetype_type = NULL,
  linetype_breaks = ggplot2::waiver(),
  linetype_drop = TRUE,
  linetype_guide = NULL,
  linetype_labels = NULL,
  linetype_limits = NULL,
  linetype_name = ggplot2::waiver(),
  linetype_palette = NULL,
  shape_type = NULL,
  shape_breaks = ggplot2::waiver(),
  shape_drop = TRUE,
  shape_guide = NULL,
  shape_labels = NULL,
  shape_limits = NULL,
  shape_name = ggplot2::waiver(),
  shape_palette = NULL,
  facet = NULL,
  facet_rows = NULL,
  facet_cols = NULL,
  facet_axes = "margins",
  facet_axis_labels = "all",
  facet_drop = TRUE,
  facet_labeller = "label_value",
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  coord_xlim = NULL,
  coord_ylim = NULL,
  coord_clip = NULL,
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.

geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.
linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.

intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.

y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.
colour_oob	Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.
colour_rescaler	Rescaler for the colour scale. Inherits from fill_rescaler if NULL.
colour_palette	Palette for the colour scale.
colour_transform	Transform for the colour scale. Inherits from fill_transform if NULL.
alpha_type	Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
alpha_subtype	Scale subtype for alpha. Auto-detected if NULL.
alpha_breaks	Breaks for the alpha scale.
alpha_drop	Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.

`alpha_guide` Guide for the alpha scale. Defaults to `NULL`.

`alpha_labels` Labels for the alpha scale.

`alpha_limits` Limits for the alpha scale.

`alpha_name` Name/title for the alpha scale.

`alpha_oob` Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

`alpha_palette` Palette for the alpha scale.

`alpha_transform` Transform for the alpha scale.

`size_type` Scale type for size. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`size_subtype` Scale subtype for size. Auto-detected if `NULL`.

`size_breaks` Breaks for the size scale.

`size_drop` Whether to drop unused levels for a discrete size scale. Defaults to `TRUE`.

`size_guide` Guide for the size scale. Defaults to `NULL`.

`size_labels` Labels for the size scale.

`size_limits` Limits for the size scale.

`size_name` Name/title for the size scale.

`size_oob` Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

`size_palette` Palette for the size scale.

`size_transform` Transform for the size scale.

`linewidth_type` Scale type for linewidth. One of `"continuous"`, `"discrete"`, or `"binned"`. Auto-detected if `NULL`.

`linewidth_subtype` Scale subtype for linewidth. Auto-detected if `NULL`.

`linewidth_breaks` Breaks for the linewidth scale.

`linewidth_drop` Whether to drop unused levels for a discrete linewidth scale. Defaults to `TRUE`.

`linewidth_guide` Guide for the linewidth scale. Defaults to `NULL`.

`linewidth_labels` Labels for the linewidth scale.

`linewidth_limits` Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette` Palette for the linewidth scale.

`linewidth_transform` Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

linetype_breaks
: Breaks for the linetype scale.

linetype_drop
: Whether to drop unused levels for the linetype scale. Defaults to TRUE.

linetype_guide
: Guide for the linetype scale. Defaults to NULL.

linetype_labels
: Labels for the linetype scale.

linetype_limits
: Limits for the linetype scale.

linetype_name
: Name/title for the linetype scale.

linetype_palette
: Palette for the linetype scale.

shape_type
: Scale type for shape. Only "discrete" is supported.

shape_breaks
: Breaks for the shape scale.

shape_drop
: Whether to drop unused levels for the shape scale. Defaults to TRUE.

shape_guide
: Guide for the shape scale. Defaults to NULL.

shape_labels
: Labels for the shape scale.

shape_limits
: Limits for the shape scale.

shape_name
: Name/title for the shape scale.

shape_palette
: Palette for the shape scale.

facet
: Variables to facet by, passed to ggplot2::facet_wrap(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_rows
: Row variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_cols
: Column variables for ggplot2::facet_grid(). Accepts a bare variable name or ggplot2::vars() for multiple variables.

facet_axes
: Which axes to draw on facet panels. Defaults to "margins".

facet_axis_labels
: Which axis labels to draw on facet panels. Defaults to "all".

facet_drop
: Whether to drop unused factor levels in facets. Defaults to TRUE.

facet_labeller
: Labeller for facet strip labels. Defaults to "label_value".

facet_ncol
: Number of columns for ggplot2::facet_wrap().

facet_nrow
: Number of rows for ggplot2::facet_wrap().

facet_scales
: Whether facet scales are fixed or free. Defaults to "fixed".

facet_space
: Whether facet space is fixed or free. Defaults to "fixed".

coord_xlim, coord_ylim
: Zoom limits within the coordinate system.

coord_clip
: Whether drawing is clipped to the panel. Either "on" (default) or "off".

coord_reverse
: Which axes to reverse. One of "none" (default), "x", "y", or "xy".

coord_ratio
: Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().

title
: Plot title passed to ggplot2::labs().

subtitle
: Plot subtitle passed to ggplot2::labs().

caption
: Plot caption passed to ggplot2::labs().

ggplot
: A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
ggplot2::faithfuld |>
 gg_tile(
   x = waiting,
   y = eruptions,
   fill = density,
   colour = NA,
 )

ggplot2::faithfuld |>
 dplyr::mutate(group = ifelse(waiting <= 65, "short", "long")) |>
 gg_tile(
   x = waiting,
   y = eruptions,
   fill = density,
   facet = ggplot2::vars(group),
   facet_scales = "free_x",
   colour = NA,
 )
```

---

gg_violin *Violin ggplot*

Description

A violin ggplot with geom_violin() defaults for the geom, stat and position.

Usage

```
gg_violin(
  data,
  ...,
  geom = "violin",
  stat = "ydensity",
  position = ggplot2::position_dodge(preserve = "single"),
  before = NULL,
  with = NULL,
  polygon = TRUE,
  theme = NULL,
  refine = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
```

```
  xend = NULL,
  xintercept = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  yintercept = NULL,
  z = NULL,
  fill = NULL,
  colour = NULL,
  alpha = NULL,
  shape = NULL,
  linetype = NULL,
  linewidth = NULL,
  size = NULL,
  stroke = NULL,
  label = NULL,
  weight = NULL,
  group = NULL,
  width = NULL,
  height = NULL,
  slope = NULL,
  intercept = NULL,
  sample = NULL,
  angle = NULL,
  radius = NULL,
  mapping = ggplot2::aes(),
  x_type = NULL,
  x_subtype = NULL,
  x_breaks = NULL,
  x_drop = TRUE,
  x_expand = NULL,
  x_guide = ggplot2::waiver(),
  x_labels = NULL,
  x_limits = NULL,
  x_minor_breaks = ggplot2::waiver(),
  x_name = ggplot2::waiver(),
  x_oob = scales::oob_censor,
  x_palette = seq_len,
  x_position = "bottom",
  x_sec_axis = ggplot2::waiver(),
  x_transform = NULL,
  y_type = NULL,
  y_subtype = NULL,
  y_breaks = NULL,
  y_drop = TRUE,
  y_expand = NULL,
  y_guide = ggplot2::waiver(),
```

```
y_labels = NULL,
y_limits = NULL,
y_minor_breaks = ggplot2::waiver(),
y_name = ggplot2::waiver(),
y_oob = scales::oob_censor,
y_palette = seq_len,
y_position = "left",
y_sec_axis = ggplot2::waiver(),
y_transform = NULL,
fill_type = NULL,
fill_subtype = NULL,
fill_breaks = ggplot2::waiver(),
fill_drop = TRUE,
fill_guide = NULL,
fill_labels = NULL,
fill_limits = NULL,
fill_name = ggplot2::waiver(),
fill_oob = scales::oob_censor,
fill_rescaler = scales::rescale,
fill_palette = NULL,
fill_transform = NULL,
colour_type = NULL,
colour_subtype = NULL,
colour_breaks = NULL,
colour_drop = NULL,
colour_guide = NULL,
colour_labels = NULL,
colour_limits = NULL,
colour_name = fill_name,
colour_oob = NULL,
colour_rescaler = NULL,
colour_palette = NULL,
colour_transform = NULL,
alpha_type = NULL,
alpha_subtype = NULL,
alpha_breaks = ggplot2::waiver(),
alpha_drop = TRUE,
alpha_guide = NULL,
alpha_labels = NULL,
alpha_limits = NULL,
alpha_name = ggplot2::waiver(),
alpha_oob = scales::oob_censor,
alpha_palette = NULL,
alpha_transform = NULL,
size_type = NULL,
size_subtype = NULL,
size_breaks = ggplot2::waiver(),
size_drop = TRUE,
```

```
size_guide = NULL,
size_labels = NULL,
size_limits = NULL,
size_name = ggplot2::waiver(),
size_oob = scales::oob_censor,
size_palette = NULL,
size_transform = NULL,
linewidth_type = NULL,
linewidth_subtype = NULL,
linewidth_breaks = ggplot2::waiver(),
linewidth_drop = TRUE,
linewidth_guide = NULL,
linewidth_labels = NULL,
linewidth_limits = NULL,
linewidth_name = ggplot2::waiver(),
linewidth_oob = scales::oob_censor,
linewidth_palette = NULL,
linewidth_transform = NULL,
linetype_type = NULL,
linetype_breaks = ggplot2::waiver(),
linetype_drop = TRUE,
linetype_guide = NULL,
linetype_labels = NULL,
linetype_limits = NULL,
linetype_name = ggplot2::waiver(),
linetype_palette = NULL,
shape_type = NULL,
shape_breaks = ggplot2::waiver(),
shape_drop = TRUE,
shape_guide = NULL,
shape_labels = NULL,
shape_limits = NULL,
shape_name = ggplot2::waiver(),
shape_palette = NULL,
facet = NULL,
facet_rows = NULL,
facet_cols = NULL,
facet_axes = "margins",
facet_axis_labels = "all",
facet_drop = TRUE,
facet_labeller = "label_value",
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
coord_xlim = NULL,
coord_ylim = NULL,
coord_clip = NULL,
```

```
  coord_reverse = "none",
  coord_ratio = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  ggplot = NULL
)
```

Arguments

data	A data frame.
...	Arguments passed to the geom layer, including geom params.
geom	A geom as a string ("point"). Note relevant geom library must be loaded.
stat	A stat as a string ("identity"). Note relevant stat library must be loaded.
position	A position as a function (ggplot2::position_identity()).
before	A ggplot2 layer to add before the geom layer. Unaffected by polygon transformations.
with	A function to apply to the geom layer.
polygon	Whether to apply polygon colour and linewidth. TRUE forces polygon on, FALSE forces off.
theme	A complete theme object. Defaults to the global theme set with ggplot2::set_theme().
refine	A function with arguments discrete and orientation to refine the theme based on these. Defaults to that globally set with set_refine().
x	Variable mapped to x.
xmin	Variable mapped to xmin.
xmax	Variable mapped to xmax.
xend	Variable mapped to xend.
xintercept	Variable mapped to xintercept.
y	Variable mapped to y.
ymin	Variable mapped to ymin.
ymax	Variable mapped to ymax.
yend	Variable mapped to yend.
yintercept	Variable mapped to yintercept.
z	Variable mapped to z.
fill	Variable mapped to fill, or a set value. When mapped, colour inherits the same mapping unless colour is specified separately.
colour	Variable mapped to colour, or a set value. When not specified and fill is mapped, colour inherits from fill.
alpha	Variable mapped to alpha, or a set value.
shape	Variable mapped to shape, or a set value.
linetype	Variable mapped to linetype, or a set value.

linewidth	Variable mapped to linewidth, or a set value.
size	Variable mapped to size, or a set value.
stroke	Variable mapped to stroke, or a set value.
label	Variable mapped to label, or a set value.
weight	Variable mapped to weight, or a set value.
group	Variable mapped to group, or a set value.
width	Variable mapped to width, or a set value.
height	Variable mapped to height, or a set value.
slope	Variable mapped to slope, or a set value.
intercept	Variable mapped to intercept, or a set value.
sample	Variable mapped to sample, or a set value.
angle	Variable mapped to angle, or a set value.
radius	Variable mapped to radius, or a set value.
mapping	Additional aesthetic mappings from ggplot2::aes(), merged with individual aesthetic arguments.
x_type	Scale type for x. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
x_subtype	Scale subtype for x. One of "date", "datetime", "time", or NA. Auto-detected if NULL.
x_breaks	Breaks for the x scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
x_drop	Whether to drop unused levels for a discrete x scale. Defaults to TRUE.
x_expand	Expansion for the x scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
x_guide	Guide for the x scale. Defaults to ggplot2::waiver().
x_labels	Labels for the x scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
x_limits	Limits for the x scale. Accepts a vector or a function.
x_minor_breaks	Minor breaks for the x scale.
x_name	Name/title for the x scale. Defaults to ggplot2::waiver().
x_oob	Out-of-bounds handler for the x scale. Defaults to scales::oob_censor.
x_palette	Palette for a discrete x scale. Defaults to seq_len.
x_position	Position of the x axis. Either "bottom" (default) or "top".
x_sec_axis	Secondary axis for x. Defaults to ggplot2::waiver().
x_transform	Transform for the x scale. Auto-detected from subtype if NULL.
y_type	Scale type for y. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
y_subtype	Scale subtype for y. One of "date", "datetime", "time", or NA. Auto-detected if NULL.

y_breaks	Breaks for the y scale. Defaults to scales::breaks_pretty() for date/datetime subtypes, otherwise scales::breaks_extended().
y_drop	Whether to drop unused levels for a discrete y scale. Defaults to TRUE.
y_expand	Expansion for the y scale. Defaults to zero expansion where the limit is zero, otherwise 5% expansion.
y_guide	Guide for the y scale. Defaults to ggplot2::waiver().
y_labels	Labels for the y scale. Defaults to scales::label_date_short() for date/datetime, otherwise scales::label_number().
y_limits	Limits for the y scale. Accepts a vector or a function.
y_minor_breaks	Minor breaks for the y scale.
y_name	Name/title for the y scale. Defaults to ggplot2::waiver().
y_oob	Out-of-bounds handler for the y scale. Defaults to scales::oob_censor.
y_palette	Palette for a discrete y scale. Defaults to seq_len.
y_position	Position of the y axis. Either "left" (default) or "right".
y_sec_axis	Secondary axis for y. Defaults to ggplot2::waiver().
y_transform	Transform for the y scale. Auto-detected from subtype if NULL.
fill_type	Scale type for fill. One of "continuous", "discrete", or "binned". Auto-detected if NULL.
fill_subtype	Scale subtype for fill. Auto-detected if NULL.
fill_breaks	Breaks for the fill scale.
fill_drop	Whether to drop unused levels for a discrete fill scale. Defaults to TRUE.
fill_guide	Guide for the fill scale.
fill_labels	Labels for the fill scale.
fill_limits	Limits for the fill scale.
fill_name	Name/title for the fill scale.
fill_oob	Out-of-bounds handler for the fill scale. Defaults to scales::oob_censor.
fill_rescaler	Rescaler for the fill scale. Defaults to scales::rescale.
fill_palette	Palette for the fill scale.
fill_transform	Transform for the fill scale. Auto-detected from subtype if NULL.
colour_type	Scale type for colour. Inherits from fill_type if NULL.
colour_subtype	Scale subtype for colour. Inherits from fill_subtype if NULL.
colour_breaks	Breaks for the colour scale. Inherits from fill_breaks if NULL.
colour_drop	Whether to drop unused levels for a discrete colour scale. Inherits from fill_drop if NULL.
colour_guide	Guide for the colour scale. Inherits from fill_guide if NULL.
colour_labels	Labels for the colour scale. Inherits from fill_labels if NULL.
colour_limits	Limits for the colour scale. Inherits from fill_limits if NULL.
colour_name	Name/title for the colour scale. Inherits from fill_name if NULL.

colour_oob Out-of-bounds handler for the colour scale. Inherits from fill_oob if NULL.

colour_rescaler
Rescaler for the colour scale. Inherits from fill_rescaler if NULL.

colour_palette Palette for the colour scale.

colour_transform
Transform for the colour scale. Inherits from fill_transform if NULL.

alpha_type Scale type for alpha. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

alpha_subtype Scale subtype for alpha. Auto-detected if NULL.

alpha_breaks Breaks for the alpha scale.

alpha_drop Whether to drop unused levels for a discrete alpha scale. Defaults to TRUE.

alpha_guide Guide for the alpha scale. Defaults to NULL.

alpha_labels Labels for the alpha scale.

alpha_limits Limits for the alpha scale.

alpha_name Name/title for the alpha scale.

alpha_oob Out-of-bounds handler for the alpha scale. Defaults to scales::oob_censor.

alpha_palette Palette for the alpha scale.

alpha_transform
Transform for the alpha scale.

size_type Scale type for size. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

size_subtype Scale subtype for size. Auto-detected if NULL.

size_breaks Breaks for the size scale.

size_drop Whether to drop unused levels for a discrete size scale. Defaults to TRUE.

size_guide Guide for the size scale. Defaults to NULL.

size_labels Labels for the size scale.

size_limits Limits for the size scale.

size_name Name/title for the size scale.

size_oob Out-of-bounds handler for the size scale. Defaults to scales::oob_censor.

size_palette Palette for the size scale.

size_transform Transform for the size scale.

linewidth_type Scale type for linewidth. One of "continuous", "discrete", or "binned". Auto-detected if NULL.

linewidth_subtype
Scale subtype for linewidth. Auto-detected if NULL.

linewidth_breaks
Breaks for the linewidth scale.

linewidth_drop Whether to drop unused levels for a discrete linewidth scale. Defaults to TRUE.

linewidth_guide
Guide for the linewidth scale. Defaults to NULL.

`linewidth_labels`
: Labels for the linewidth scale.

`linewidth_limits`
: Limits for the linewidth scale.

`linewidth_name` Name/title for the linewidth scale.

`linewidth_oob` Out-of-bounds handler for the linewidth scale. Defaults to scales::oob_censor.

`linewidth_palette`
: Palette for the linewidth scale.

`linewidth_transform`
: Transform for the linewidth scale.

`linetype_type` Scale type for linetype. Only `"discrete"` is supported.

`linetype_breaks`
: Breaks for the linetype scale.

`linetype_drop` Whether to drop unused levels for the linetype scale. Defaults to `TRUE`.

`linetype_guide` Guide for the linetype scale. Defaults to `NULL`.

`linetype_labels`
: Labels for the linetype scale.

`linetype_limits`
: Limits for the linetype scale.

`linetype_name` Name/title for the linetype scale.

`linetype_palette`
: Palette for the linetype scale.

`shape_type` Scale type for shape. Only `"discrete"` is supported.

`shape_breaks` Breaks for the shape scale.

`shape_drop` Whether to drop unused levels for the shape scale. Defaults to `TRUE`.

`shape_guide` Guide for the shape scale. Defaults to `NULL`.

`shape_labels` Labels for the shape scale.

`shape_limits` Limits for the shape scale.

`shape_name` Name/title for the shape scale.

`shape_palette` Palette for the shape scale.

`facet` Variables to facet by, passed to `ggplot2::facet_wrap()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_rows` Row variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_cols` Column variables for `ggplot2::facet_grid()`. Accepts a bare variable name or `ggplot2::vars()` for multiple variables.

`facet_axes` Which axes to draw on facet panels. Defaults to `"margins"`.

`facet_axis_labels`
: Which axis labels to draw on facet panels. Defaults to `"all"`.

`facet_drop` Whether to drop unused factor levels in facets. Defaults to `TRUE`.

`facet_labeller` Labeller for facet strip labels. Defaults to `"label_value"`.

facet_ncol	Number of columns for ggplot2::facet_wrap().
facet_nrow	Number of rows for ggplot2::facet_wrap().
facet_scales	Whether facet scales are fixed or free. Defaults to "fixed".
facet_space	Whether facet space is fixed or free. Defaults to "fixed".
coord_xlim, coord_ylim	Zoom limits within the coordinate system.
coord_clip	Whether drawing is clipped to the panel. Either "on" (default) or "off".
coord_reverse	Which axes to reverse. One of "none" (default), "x", "y", or "xy".
coord_ratio	Aspect ratio expressed as y / x, for ggplot2::coord_cartesian().
title	Plot title passed to ggplot2::labs().
subtitle	Plot subtitle passed to ggplot2::labs().
caption	Plot caption passed to ggplot2::labs().
ggplot	A base ggplot object to use. Defaults to NULL, which uses \(x) ggplot2::ggplot(x).

Value

A ggplot object.

Examples

```
ggplot2::diamonds |>
  gg_violin(
    x = color,
    y = carat,
    y_limits = c(0, NA),
  )

ggplot2::diamonds |>
  gg_violin(
    x = color,
    y = carat,
    fill = cut,
    y_limits = c(0, NA),
  )

ggplot2::diamonds |>
  dplyr::filter(cut %in% c("Premium", "Ideal")) |>
  gg_violin(
    x = color,
    y = carat,
    facet = ggplot2::vars(cut),
    y_limits = c(0, NA),
  )
```

set_colour_blend *Set the ggblanket colour blend function*

Description

When `polygon = TRUE`, `colour_blend` is a function applied to the `fill` and `fill_palette` to derive the colour. Only one of the colour blend and fill blend can be active: setting a non-`NULL` colour blend clears any fill blend (last call wins), and the fill blend then defaults to identity.

Usage

```
set_colour_blend(new = NULL)
```

Arguments

`new`	A function of one argument (a colour vector), e.g. `blends::multiply()`. `NULL` (default) resets to the default: if no fill blend is set, `blends::multiply()` for light panels and `blends::screen()` for dark panels; otherwise identity.

Value

Invisibly, the previous value of the option.

Examples

```
set_colour_blend(\(x) blends::multiply(x))
```

set_fill_blend *Set the ggblanket fill blend function*

Description

When `polygon = TRUE`, `fill_blend` is a function applied to the `colour` and `colour_palette` to derive the fill. Only one of the colour blend and fill blend can be active: setting a non-`NULL` fill blend clears any colour blend (last call wins), and the colour blend then defaults to identity.

Usage

```
set_fill_blend(new = NULL)
```

Arguments

`new`	A function of one argument (a colour vector), e.g. `\(x) scales::alpha(x, 0.75)`. `NULL` (default) resets to the default of identity.

Value

Invisibly, the previous value of the option.

Examples

```
set_fill_blend(\(x) scales::alpha(x, 0.75))
```

`set_refine` *Set the ggblanket refine function*

Description

`set_refine()` sets a global function that refines the theme depending on the plot's scale types. All other defaults (fill, colour, linewidth, palettes, etc.) are controlled through the theme, e.g. with `ggplot2::set_theme()`, `ggplot2::theme()` and `ggplot2::element_geom()`.

Usage

```
set_refine(new = NULL)
```

Arguments

`new`	A function with arguments `discrete` and `orientation` that returns a theme refinement. `NULL` (default) resets to `\(discrete, orientation) refine_axis_grid(discrete, orient`

Value

Invisibly, the previous value of the option.

Examples

```
set_refine(\(discrete, orientation) refine_axis_grid(discrete, orientation))
```

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