

Package: g2r (via r-universe)

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URL <https://g2r.opifex.org/>, <https://github.com/devOpifex/g2r/>

BugReports <https://github.com/devOpifex/g2r/issues/>

Repository <https://devopifex.r-universe.dev>

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action_filter_data	<i>Filter Data</i>
--------------------	--------------------

Description

Filter data.

Usage

```
action_filter_data(g, input, asp, operator = ">")
```

Arguments

g	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
input	The id of the input that triggers the filter, either <code>input_select()</code> or <code>input_slider()</code> .
asp	Aspect (column) to filter.
operator	Operator of the filter, this is combined with the value from the input and the asp to form a filter statement with the following template; <code>asp operator inputValue</code> . For instance, a filter on input id = "theFilter" on the column speed (of the cars dataset) with the operator <code>></code> (greater than) will create the following filter statement: <code>speed > inputValue</code>

Examples

```
# works in Rmarkdown
input_slider(
  "yFilter",
  "Filter Y >",
  value = 50,
  min = 40,
  max = 70,
  step = 5
)

## Not run:
g2(cars, asp(speed, dist)) %>%
  fig_point() %>%
  fig_smooth() %>%
  action_filter_data(
    "yFilter",
    dist,
    operator = ">"
  )

## End(Not run)
```

action_select_data *Select Data*

Description

Select a dataset with an [input_select\(\)](#).

Usage

```
action_select_data(g, input, datasets)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by g2() or g2_proxy() .
<code>input</code>	Id of the input_select() used to choose the dataset.
<code>datasets</code>	A key value pair list where the key is the name of the dataset as listed in the choices of the input_select() .

Examples

```
# works in Rmarkdown
input_select(
  "selector",
  "Select a dataset",
  c("Cars", "More Cars")
)
```

```
)

cars1 <- cars
cars2 <- cars + c(1, -4)

g2(cars, asp(dist, speed)) %>%
  fig_point() %>%
  action_select_data(
    "selector",
    datasets = list(
      "Cars" = cars1,
      "More Cars" = cars2
    )
  )
)
```

```
action_toggle_visibility
      Toggle Visibility
```

Description

Toggle the visibility of a chart.

Usage

```
action_toggle_visibility(g, btn)
```

Arguments

g An object of class `g2r` or `g2Proxy` as returned by `g2()` or `g2_proxy()`.

btn Id of the `input_button` that toggles the visibility.

Examples

```
# works in Rmarkdown
input_button("toggle", "Show/hide chart")

g2(mtcars, asp(qsec, mpg)) %>%
  fig_point() %>%
  action_toggle_visibility("toggle")
```

adjust	<i>Adjust</i>
--------	---------------

Description

Adjust a figure.

Usage

```
adjust(type, margin = NULL, dodge_by = NULL)
```

Arguments

type	A vector of types of adjustment to apply to the figure, see the "types" section below for valid values.
margin	Margin, between 0 and 1.
dodge_by	Bare column name to use as group for dodge.

Types

Valid values for the type argument.

- stack
- dodge
- jitter
- symmetric

Examples

```
df <- data.frame(  
  x = c(letters, letters),  
  y = runif(52),  
  grp = rep(c("A", "Z"), each = 2)  
)  
  
g2(df, asp(x, y, color = grp)) %>%  
  fig_interval(adjust("stack"))
```

aka	<i>Aliases</i>
-----	----------------

Description

Aliases an aspect, this changes the name of the aspects when displayed in axis titles, tooltips, labels, and other places.

Usage

```
aka(g, asp, alias)
```

Arguments

g	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
asp	Bare name of aspect to alias.
alias	A string defining the alias.

Examples

```
# see tooltip
g2(cars, asp(speed, dist)) %>%
  fig_point() %>%
  aka(dist, "SO FAR")
```

animation	<i>Animations</i>
-----------	-------------------

Description

Helper function to build animations.

Methods

Public methods:

- `Animation$enter()`
- `Animation$leave()`
- `Animation$appear()`
- `Animation$update()`
- `Animation$print()`
- `Animation$retrieve()`
- `Animation$clone()`

Method `enter()`:

Usage:

```
Animation$enter(animation = NULL, easing = NULL, delay = NULL, duration = NULL)
```

Arguments:

animation Name of animation; clipIn, zoomIn, pathIn, scaleInY, scaleInX, fanIn, or fadeIn.

easing Name of easing function.

delay, duration Delay and duration in milliseconds.

Details: Animation to use on enter

Method leave():*Usage:*

```
Animation$leave(animation = NULL, easing = NULL, delay = NULL, duration = NULL)
```

Arguments:

animation Name of animation; lineWidthOut, zoomOut, pathOut, or fadeOut.

easing Name of easing function.

delay, duration Delay and duration in milliseconds.

Details: Animation to use on leave

Method appear():*Usage:*

```
Animation$appear(  
  animation = NULL,  
  easing = NULL,  
  delay = NULL,  
  duration = NULL  
)
```

Arguments:

animation Name of animation; clipIn, zoomIn, pathIn, scaleInY, scaleInX, fanIn, or fadeIn.

easing Name of easing function.

delay, duration Delay and duration in milliseconds.

Details: Animation to use on appear

Method update():*Usage:*

```
Animation$update(  
  animation = NULL,  
  easing = NULL,  
  delay = NULL,  
  duration = NULL  
)
```

Arguments:

animation Name of animation; fadeIn, or fanIn.

easing Name of easing function.
 delay, duration Delay and duration in milliseconds.

Details: Animation to use on appear

Method print():

Usage:

Animation\$print()

Details: Print

Method retrieve():

Usage:

Animation\$retrieve()

Details: Retrieve the animation list

Method clone(): The objects of this class are cloneable with this method.

Usage:

Animation\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Examples

```
# create animation
anim <- Animation$
  new()$
  appear(
    duration = 2000,
    delay = 500
  )

iris %>%
  g2(asp(Sepal.Length, Sepal.Width, color = Species)) %>%
  fig_point(anim)
```

 asp

Aspects

Description

Define aspects of a visualisation.

Usage

asp(x, y, ...)

Arguments

x, y	Defines values to map to cartesian coordinates.
...	Any other key value pair of aspect.

Figure aspects

- x, y
- ymin, ymax
- size
- color
- shape
- label
- tooltip
- style
- interaction
- color

Info aspects

- x, y
- start, end
- content
- top

axis

Axes

Description

Configure the axes.

Customise the legend.

Usage

axis_x(g, ...)

axis_y(g, ...)

axis_asps(g, asps, ...)

axis_hide(g)

legend_color(g, ...)

```
legend_size(g, ...)
```

```
legend_asps(g, asps, ...)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the legend, pass <code>FALSE</code> to hide the axis. Visit the official documentation for the full list of options.
<code>asps</code>	Aspect (column names) to change the legend.

Functions

- `axis_x`: Customise the x axis.
- `axis_y`: Customise the y axis.
- `axis_asps`: Customise the axis by aspects (column names).
- `axis_hide`: Hide all axis.
- `legend_color`: Customise the x axis.
- `legend_size`: Customise the y axis.
- `legend_asps`: Customise the axis by aspects (column names).

Examples

```
g <- g2(cars, asp(speed, dist)) %>%
  fig_point()

# hide axis
g %>% axis_x(FALSE)

# same as above
g %>% axis_asps("speed", FALSE)

# change position
g %>% axis_x(position = "top")
g <- g2(mtcars, asp(mpg, qsec, color = gear)) %>%
  fig_point()

g %>% legend_color(position = "top")
g %>% legend_color(FALSE)
```

axis_title	<i>Axis Title</i>
------------	-------------------

Description

Add axis titles.

Usage

```
axis_title_x(g, title, ..., fontSize = 10, offset = 30)
```

```
## S3 method for class 'g2r'
```

```
axis_title_x(g, title, ..., fontSize = 10, offset = 30)
```

```
axis_title_y(g, title, ..., fontSize = 10, offset = 50)
```

```
## S3 method for class 'g2r'
```

```
axis_title_y(g, title, ..., fontSize = 10, offset = 50)
```

Arguments

g	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
title	Title to use on the axis.
...	Options to customise the title.
fontSize	Size of the font of the label.
offset	Offset between title and axis, if 0 the title is not visible.

capture_event	<i>Events</i>
---------------	---------------

Description

Capture events in shiny.

Usage

```
capture_event(g, event, callback = NULL, when = c("on", "once", "off"))
```

Arguments

g	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
event	Name of event to trigger the callback.
callback	A callback function to run when the event is fired, if NULL then a default one is created, see details.
when	When the event should be triggered.

Details

The callback function should accept a single argument; the event data. If no callback function is passed (NULL) then one is generated. The generated callback function sets a shiny input `<chartId>_<eventName>` with the event data.

Examples

```
g2(iris, asp(Sepal.Width, Sepal.Length)) %>%
  fig_point() %>%
  capture_event("point:click")
```

 change_data

Change the data

Description

Dynamically change the data of a shiny plot.

Usage

```
change_data(g, data)
```

Arguments

`g` An object of class `g2r` or `g2Proxy` as returned by `g2()` or `g2_proxy()`.
`data` New dataset to replaced the one used to currently plot the data.

Examples

```
library(shiny)

makeData <- function(){
  data.frame(
    x = runif(100),
    y = runif(100),
    size = runif(100)
  )
}

ui <- fluidPage(
  g2Output("plot"),
  actionButton("change", "Change data")
)

server <- function(input, output){

  output$plot <- renderG2({
    g2(makeData(), asp(x, y, size = size)) %>%
    fig_point()
  })
}
```

```

    })

    observeEvent(input$change, {
      g2_proxy("plot") %>%
        change_data(makeData())
    })
  }

  if(interactive()){
    shinyApp(ui, server)
  }

```

 config

Configure Figure

Description

Configure a figure.

Usage

```

config(
  id = NULL,
  visible = NULL,
  region = NULL,
  padding = NULL,
  theme = NULL,
  ...
)

```

Arguments

id	Id of figure.
visible	Whether the figure is visible.
region	Region that the figure should occupy on the canvas.
padding	Padding around the figure.
theme	Theme of the figure.
...	Any other options from the official documentation .

Examples

```

mtcars %>%
  g2(asp(qsec)) %>%
  fig_point(
    asp(y = mpg),
    config(

```

```

        region = list(
            start = list(x = 0, y = 0),
            end = list(x = 0.5, y = 1)
        )
    )
) %>%
fig_point(
  asp(y = wt),
  config(
    region = list(
      start = list(x = 0.5, y = 0),
      end = list(x = 1, y = 1)
    )
  )
)
)

```

 coord

Coordinates

Description

Configure chart coordinates axis.

Usage

```
coord_type(g, type = c("rect", "polar", "theta", "helix"), ...)
```

```
coord_rotate(g, angle = 90)
```

```
coord_scale(g, x, y)
```

```
coord_reflect(g, axis = "xy")
```

```
coord_transpose(g)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>type</code>	Type of coordinate axis.
<code>...</code>	Any other options.
<code>angle</code>	Angle of axis rotation.
<code>x, y</code>	Scale of axis along x and y axis.
<code>axis</code>	Axis to reflect (reverse).

Functions

- `coord_type`: Type of coordinates to use where `rect` corresponds to cartesian.
- `coord_rotate`: Rotate the coordinates by a certain angle.
- `coord_scale`: Rescale the coordinates.
- `coord_reflect`: Mirror the axis along the x, y, or xy (both) axes.
- `coord_transpose`: x, y axes displacement.

Examples

```
g2(cars, asp(speed, dist, color = dist)) %>%
  fig_point() %>%
  coord_type("helix")
```

<code>crosstalk_select</code>	<i>Crosstalk Customisation</i>
-------------------------------	--------------------------------

Description

Customise the crosstalk selection handle.

Usage

```
crosstalk_select(g, attribute, on, off = NULL)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>attribute</code>	Attribute to customise, e.g.: <code>stroke</code> , <code>fill</code> , <code>strokeOpacity</code> , etc.
<code>on, off</code>	Value to set the attribute to if the selected is on or off.

<code>elements</code>	<i>Element</i>
-----------------------	----------------

Description

Function to use in `motif()` and style specific elements.

Usage

```
element(  
  ...,  
  shape = NULL,  
  figure = c("point", "area", "edge", "line", "interval", "polygon", "schema"),  
  state = c("default", "active", "inactive", "selected")  
)  
  
elementPoint(  
  ...,  
  shape = c("hollow-circle", "cross", "hyphen", "line", "plus", "tick", "circle",  
    "square", "bowtie", "diamond", "hexagon", "triangle", "triangle-down",  
    "hollow-square", "hollow-bowtie", "hollow-triangle-down"),  
  state = c("default", "active", "inactive", "selected")  
)  
  
elementLine(  
  ...,  
  shape = c("line", "dot", "dash", "smooth", "hv", "vh", "hvh", "vhv"),  
  state = c("default", "active", "inactive", "selected")  
)  
  
elementArea(  
  ...,  
  shape = c("area", "smooth", "line", "smooth-line"),  
  state = c("default", "active", "inactive", "selected")  
)  
  
elementEdge(  
  ...,  
  shape = c("line", "vhv", "smooth", "arc"),  
  state = c("default", "active", "inactive", "selected")  
)  
  
elementInterval(  
  ...,  
  shape = c("rect", "hollow-rect", "line", "tick", "funnel", "pyramid"),  
  state = c("default", "active", "inactive", "selected")  
)  
  
elementPolygon(..., state = c("default", "active", "inactive", "selected"))  
  
elementSchema(  
  ...,  
  shape = c("box", "candle"),  
  state = c("default", "active", "inactive", "selected")  
)
```

Arguments

...	Key value pairs to pass to style.
shape	Shape to modify, if NULL selects a common default based on the figure, e.g.: hollow-circle for the point shape.
figure	Figure to modify.
state	State of the shape to modify.

Functions

`element()` will work for any figure, but other functions may be more convenient to use.

- `element`: Customise any element.
- `elementPoint`: Customise point.
- `elementLine`: Customise line.
- `elementArea`: Customise area.
- `elementEdge`: Customise edge.
- `elementInterval`: Customise interval.
- `elementPolygon`: Customise polygon.
- `elementSchema`: Customise schema.

Examples

```
g2(iris, asp(Sepal.Width, Sepal.Length)) %>%
  fig_point(
    asp(color = Species, shape = "circle")
  ) %>%
  motif(
    brandColor = "orange",
    backgroundColor = "black",
    elementPoint(
      shape = "circle",
      stroke = "white",
      fillOpacity = .7
    )
  )
)
```

 figures

Interval

Description

Add an interval figure.

Usage

```
fig_interval(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects paseed to <code>g2()</code> initialisation function.

Examples

```
g2(sleep, asp(ID, extra, color = group)) %>%
  fig_interval()

df <- data.frame(
  cat = letters[1:5],
  value = c(0.15, .3, .65, .75, .9)
)

g2(df, asp(cat, value, color = cat, shape = "funnel")) %>%
  fig_interval(adjust("symmetric")) %>%
  coord_type("rect") %>%
  coord_transpose() %>%
  coord_scale(-1, 1) %>%
  axis_hide()
```

<code>fig_area</code>	<i>Area</i>
-----------------------	-------------

Description

Add an area figure.

Usage

```
fig_area(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects paseed to <code>g2()</code> initialisation function.

Examples

```
g2(Orange, asp(age, circumference, color = Tree)) %>%
  fig_area(adjust("stack"))
```

 fig_bin
*Bin***Description**

Add a bin figure to the chart.

Usage

```
fig_bin(
  g,
  ...,
  type = c("rectangle", "hexagon"),
  bins = c(10, 10),
  size_count = TRUE,
  sync = TRUE,
  data = NULL,
  inherit_asp = TRUE,
  alias = "count"
)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>type</code>	The shape of bin to create.
<code>bins</code>	Number of bins by dimension (width, height).
<code>size_count</code>	Whether to size the binds by count.
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects paseed to <code>g2()</code> initialisation function.
<code>alias</code>	Name of the range to display on tooltips, labels, etc.

Details

Requires the x and y aspects.

Examples

```
g2(cars, asp(speed, dist)) %>%
  fig_bin(size_count = FALSE)

g2(cars, asp(speed, dist)) %>%
  fig_bin(type = "hexagon")
```

fig_boxplot	<i>Boxplot</i>
-------------	----------------

Description

Add a boxplot figure to the chart.

Usage

```
fig_boxplot(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.

Examples

```
# wide to long
# tidyr::pivot_longer(iris, -Species)
df <- reshape(
  iris,
  varying = names(iris)[1:4],
  direction = "long",
  v.names = "value",
  idvar = "Species",
  new.row.names = 1:600,
  timevar = "var",
  times = names(iris)[1:4]
)

g2(df, asp(var, value, color = Species)) %>%
  fig_boxplot(adjust("dodge"))

g2(iris, asp(y = Sepal.Length, color = Species)) %>%
```

```

fig_boxplot(adjust("dodge"))

g2(iris, asp(x = Species, y = Sepal.Length, color = Species)) %>%
  fig_boxplot(adjust("dodge"))

```

fig_candle

Candle

Description

Add a candle figure to the chart.

Usage

```

fig_candle(
  g,
  ...,
  sync = TRUE,
  data = NULL,
  inherit_asp = TRUE,
  alias = "range"
)

```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (<code>align</code>) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.
<code>alias</code>	Name of the range to display on tooltips, labels, etc.

Details

Requires the following aspects defined:

- `open`
- `close`
- `high`
- `low`

If no `color` argument is passed the candles are colored according to their trend (`open > close = "up"`).

Examples

```

stock <- structure(
  list(
    date = structure(c(18626, 18627, 18631, 18632), class = "Date"),
    open = c(39.52, 39.330002, 40.169998, 41.5),
    high = c(
      39.73,
      40,
      41.560001,
      42.040001
    ),
    low = c(
      39.200001,
      39.029999,
      39.939999,
      40.77
    ),
    close = c(
      39.34,
      39.880001,
      41.400002,
      41.16
    )
  ),
  row.names = c(NA, -4L),
  class = c(
    "tbl_df",
    "tbl",
    "data.frame"
  )
)

g2(stock, asp(date, open = open, close = close, high = high, low = low)) %>%
  fig_candle() %>%
  gauge_x_time_cat()

```

 fig_contour

 Contour

Description

Add a contour line figure to the chart.

Usage

```

fig_contour(
  g,
  ...,
  sync = TRUE,

```

```

data = NULL,
inherit_asp = TRUE,
colors = NULL,
nlevels = 10,
binwidth,
levels,
criticalRatio = 5,
type = c("line", "filled")
)

```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.
<code>colors</code>	A palette of colors to define the stroke of each path.
<code>nlevels</code>	Passed to <code>contoureR::getContourLines</code> . An integer number of bins to split the data into <i>iff</i> ‘levels’ or ‘binwidth’ have not been specified.
<code>binwidth</code>	Passed to <code>contoureR::getContourLines</code> . The desired width of the bins, if specified, will override ‘nlevels’.
<code>levels</code>	Passed to <code>contoureR::getContourLines</code> . A numeric vector of the explicitly specified levels (zvalues) to contour, by specifying this argument, it will override ‘nlevels’ and/or ‘binwidth’. If this argument is provided, the stacking order of the contours will be preserved in the order of first occurrence within the supplied vector.
<code>criticalRatio</code>	Passed to <code>contoureR::getContourLines</code> . When producing the Delaunay Mesh, the quality of the mesh can be poor in the proximity to the convex hull, Del’s that have an aspect ratio greater than this value are not considered when producing the contours. In this context, the aspect ratio is defined as the circumradius to twice its inradius, equilateral triangles have an aspect ratio of 1, everything else is larger.
<code>type</code>	Whether to draw the lines or polygons.

Details

Requires the x, y and z aspects, the width of the error bars can be changed with the `size` aspect.

Examples

```

data(volcano)

x <- 1:nrow(volcano)

```

```

y <- 1:ncol(volcano)
df <- expand.grid(x = x, y = y)
df$z <- apply(df, 1, function(x) {
  volcano[x[1], x[2]]
})

g <- g2(df, asp(x, y, z = z))

fig_contour(g)

fig_contour(g, colors = c("red", "blue"))

fig_contour(g, type = "filled", colors = c("darkblue", "white"))

```

fig_density	<i>Density</i>
-------------	----------------

Description

Add a density figure to the chart.

Usage

```

fig_density(
  g,
  ...,
  sync = TRUE,
  data = NULL,
  inherit_asp = TRUE,
  alias = "density"
)

```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.
<code>alias</code>	Name of the density curve.

Details

Requires the x aspects.

Examples

```
g2(cars, asp(speed)) %>%
  fig_density()

g2(iris, asp(Sepal.Width, color = Species)) %>%
  fig_density()
```

fig_edge	<i>Edge</i>
----------	-------------

Description

Add an edge figure.

Usage

```
fig_edge(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (<code>align</code>) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.

fig_error	<i>Error</i>
-----------	--------------

Description

Add an error bar figure to the chart.

Usage

```
fig_error(
  g,
  ...,
  sync = TRUE,
  data = NULL,
  inherit_asp = TRUE,
  alias = "error"
)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.
<code>alias</code>	Name of the range to display on tooltips, labels, etc.

Details

Requires the `ymin` and `ymax` aspects, the width of the error bars can be changed with the `size` aspect.

Examples

```
df <- data.frame(
  x = as.factor(c(1:10, 1:10)),
  y = runif(20, 10, 15),
  grp = rep(c("A", "B"), each = 2)
)

df$ymin <- df$y - runif(20, 1, 2)
df$ymax <- df$y + runif(20, 1, 2)

g2(df, asp(x = x, color = grp)) %>%
  fig_error(asp(ymin = ymin, ymax = ymax), adjust("dodge")) %>%
  fig_interval(
    asp(y = y),
    adjust("dodge"),
    fillOpacity = .4
  )
```

 fig_heatmap

Heatmap

Description

Add a path figure.

Usage

```
fig_heatmap(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (<code>align</code>) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects paseed to <code>g2()</code> initialisation function.

`fig_histogram`
*Histogram***Description**

Add a histogram figure to the chart.

Usage

```
fig_histogram(
  g,
  ...,
  bin_width = 5,
  sync = TRUE,
  data = NULL,
  inherit_asp = TRUE,
  alias = "count"
)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>bin_width</code>	Width of bin.
<code>sync</code>	Whether to sync the axis data (<code>align</code>) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects paseed to <code>g2()</code> initialisation function.
<code>alias</code>	Name of the range to display on tooltips, labels, etc.

Examples

```
df <- data.frame(
  grp = rep(c("A", "B"), each = 200),
  val = c(
    rnorm(200, mean = 57, sd = 5),
    rnorm(200, mean = 53, sd = 5)
  )
)

g2(df, asp(val, color = grp)) %>%
  fig_histogram(adjust("stack"), bin_width = 1)
```

 fig_line

Line

Description

Add a line figure.

Usage

```
fig_line(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

g	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
...	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
sync	Whether to sync the axis data (<code>align</code>) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
data	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
inherit_asp	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.

Examples

```
g2(CO2, asp(conc, uptake, color = Plant)) %>%
  fig_line()
```

 fig_map

Map

Description

Add a map figure.

Usage

```
fig_map(g, ..., inherit_asp = TRUE, sync = TRUE, map = get_world_map())
```

Arguments

g	An object of class g2r or g2Proxy as returned by <code>g2()</code> or <code>g2_proxy()</code> .
...	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
inherit_asp	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.
sync	Whether to sync the axis data (align) with that used in other figures, set to FALSE to not sync or set to a character string to use as name of sync group.
map	Name of map to pass to the region argument of the <code>get_map_data()</code> function, or map object as returned by <code>get_world_map()</code> , <code>get_gadm_data()</code> , or <code>get_map_data()</code> , or a <code>SpatialPolygonsDataFrame</code> as returned by <code>raster::getData()</code> , or a <code>geo_list</code> as obtained from <code>geojsonio::geojson_list()</code> , or MULTIPOLYGON of the <code>classsf</code> as obtained from reading shapefiles.

Examples

```
g2() %>%
  fig_map(stroke = "#fff", fill = "gray") %>%
  axis_hide()
```

 fig_path

Path

Description

Add a path figure.

Usage

```
fig_path(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (<code>align</code>) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects paseed to <code>g2()</code> initialisation function.

Examples

```
df <- data.frame(
  x = runif(100),
  y = runif(100)
)

g2(df, asp(x, y)) %>%
  fig_path()
```

<code>fig_pie</code>	<i>Pie</i>
----------------------	------------

Description

Add a pie figure to the chart.

Usage

```
fig_pie(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (<code>align</code>) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects paseed to <code>g2()</code> initialisation function.

Examples

```
df <- data.frame(
  label = letters[1:5],
  value = runif(5)
)

g2(df, asp(y = value, color = label)) %>%
  fig_pie()
```

 fig_point

Point

Description

Add a point figure.

Usage

```
fig_point(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

g	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
...	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
sync	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
data	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
inherit_asp	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.

Examples

```
g2(cars) %>%
  fig_point(asp(speed, dist))

g2(mtcars, asp(mpg, disp, size = qsec)) %>%
  fig_point(asp(color = "red", shape = "square"))
```

`fig_polygon`*Polygon*

Description

Add a polygon figure.

Usage

```
fig_polygon(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.

`fig_range`*Range*

Description

Add a range figure to the chart.

Usage

```
fig_range(  
  g,  
  ...,  
  type = c("interval", "area"),  
  sync = TRUE,  
  data = NULL,  
  inherit_asp = TRUE,  
  alias = "range"  
)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>type</code>	Type of figure to use.
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.
<code>alias</code>	Name of the range to display on tooltips, labels, etc.

Details

Requires the `ymin` and `ymax` aspects.

Examples

```
df <- data.frame(
  x = 1:100,
  ymin = runif(100, 1, 5),
  ymax = runif(100, 6, 13)
)

g2(df, asp(x, ymin = ymin, ymax = ymax)) %>%
  fig_range()
```

fig_ribbon

Ribbon

Description

Add a ribbon figure to the chart.

Usage

```
fig_ribbon(
  g,
  ...,
  sync = TRUE,
  data = NULL,
  inherit_asp = TRUE,
  alias = "ribbon"
)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.
<code>alias</code>	Name of the range to display on tooltips, labels, etc.

Details

Requires the `ymin` and `ymax` aspects.

Examples

```
df <- data.frame(
  x = 1:100,
  ymin = runif(100, 1, 5),
  ymax = runif(100, 6, 13)
)

g2(df, asp(x, ymin = ymin, ymax = ymax)) %>%
  fig_ribbon()
```

fig_rug

Rug

Description

Add a rug figure to the chart.

Usage

```
fig_rug(
  g,
  ...,
  strokeOpacity = 0.5,
  axis = c("x", "y"),
  sync = TRUE,
  data = NULL,
  inherit_asp = TRUE
)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>strokeOpacity</code>	Opacity of rug marks.
<code>axis</code>	Axis to place the rug marks on.
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects paseed to <code>g2()</code> initialisation function.

Details

Requires the x and y aspects.

Examples

```
g2(mtcars, asp(wt, mpg)) %>%
  fig_point() %>%
  fig_rug() %>%
  fig_rug(asp(size = 10), axis = "y")
```

fig_schema	<i>Schema</i>
------------	---------------

Description

Add a schema figure.

Usage

```
fig_schema(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (align) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects paseed to <code>g2()</code> initialisation function.

fig_segment	<i>Segment</i>
-------------	----------------

Description

Add a segments figure to the chart.

Usage

```
fig_segment(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

g	An object of class g2r or g2Proxy as returned by <code>g2()</code> or <code>g2_proxy()</code> .
...	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
sync	Whether to sync the axis data (align) with that used in other figures, set to FALSE to not sync or set to a character string to use as name of sync group.
data	A dataset (data.frame or tibble) to use to draw the figure.
inherit_asp	Whether to inherit the aspects paseed to <code>g2()</code> initialisation function.

fig_smooth	<i>Smooth</i>
------------	---------------

Description

Add a smooth(ing) figure to the chart.

Usage

```
fig_smooth(
  g,
  ...,
  method = c("linear", "gaussian", "cosine", "epanechnikov", "quartic", "triangular",
    "tricube", "triweight", "uniform", "polynomial", "logarithmic", "boxcar", "power",
    "exponential"),
  band_width = 1,
  sync = TRUE,
  data = NULL,
  inherit_asp = TRUE
)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>method</code>	Smoothing method to use.
<code>band_width</code>	Step size for Silverman's algorithm.
<code>sync</code>	Whether to sync the axis data (<code>align</code>) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.

Details

Requires the x and y aspects.

This is a convenience function for a quick smoothing, see the online documentation to see how to use your own model for more control.

Examples

```
g2(cars, asp(speed, dist)) %>%
  fig_point() %>%
  fig_smooth(method = "gaussian")

g2(iris, asp(Sepal.Width, Sepal.Length, color = Species)) %>%
  fig_point() %>%
  fig_smooth()
```

<code>fig_voronoi</code>	<i>Voronoi</i>
--------------------------	----------------

Description

Add a voronoi figure to the chart.

Usage

```
fig_voronoi(g, ..., sync = TRUE, data = NULL, inherit_asp = TRUE)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>sync</code>	Whether to sync the axis data (<code>align</code>) with that used in other figures, set to <code>FALSE</code> to not sync or set to a character string to use as name of sync group.
<code>data</code>	A dataset (<code>data.frame</code> or <code>tibble</code>) to use to draw the figure.
<code>inherit_asp</code>	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.

Details

Requires the x, y, and color arguments.

Examples

```
df <- data.frame(
  x = runif(25, 1, 500),
  y = runif(25, 1, 500),
  value = runif(25, 1, 500)
)

g2(df, asp(x, y, color = value)) %>%
  fig_voronoi()
```

 fig_waffle

Waffle

Description

Add a waffle figure to the chart.

Usage

```
fig_waffle(
  g,
  ...,
  n = 500,
  rows = 10,
  size = c(1, 1),
  gap = 0.1,
  min_size = 15,
  sync = TRUE,
  data = NULL,
  inherit_asp = TRUE
)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the figure, including <code>asp()</code> , and <code>adjust()</code> , <code>active()</code> , <code>selected()</code> , and <code>config()</code> , other key value pairs of are passed to <code>style</code> .
<code>n</code>	Number of squares to use.
<code>rows</code>	Number of rows.
<code>size</code>	Size of squares.
<code>gap</code>	Gap between squares.
<code>min_size</code>	Minimum size of squares.

sync	Whether to sync the axis data (align) with that used in other figures, set to FALSE to not sync or set to a character string to use as name of sync group.
data	A dataset (data.frame or tibble) to use to draw the figure.
inherit_asp	Whether to inherit the aspects passed to <code>g2()</code> initialisation function.

Details

Requires the x and color aspects.

Examples

```
fruits <- data.frame(
  fruit = c("Apples", "Bananas", "Pears", "Oranges"),
  value = c(.45, .15, .35, .05) * 100
)

g2(fruits, asp(value, color = fruit)) %>%
  fig_waffle() %>%
  motif(padding = 50) %>%
  axis_hide()
```

g2

Initialise

Description

Initialise a chart.

Usage

```
g2(
  data = NULL,
  ...,
  width = NULL,
  height = NULL,
  elementId = NULL,
  digits = NULL,
  reorder = TRUE
)
```

Arguments

data	A data.frame or tibble containing data to chart, an object of class <code>igraph</code> , an object of class <code>ts</code> , or as <code>crossstalk::sharedDataset</code> .
...	Aspects of the chart, see <code>asp()</code> .
width, height	Dimensions of the chart, accepts any valid CSS unit e.g.: 100%, numerics are treated as pixels, e.g.: 400 = 400px.

elementId	Valid CSS id attribute.
digits	Maximum number of digits after the comma to show on the chart.
reorder	Whether to internally reorder the data, namely the x and color. The x axis must be reordered in a descending order for most data type since G2.js plots data as-is. Moreover, color order of all data.frames passed either to this function or subsequent fig_* layers must be identical or the colors will match the legends on the plot. However, one may sometimes not want the data to be reordered.

Examples

```
g2(cars) %>%
  fig_point(asp(speed, dist))
```

g2r-shiny

Shiny Bindings

Description

Output and render functions for using g2r within Shiny applications and interactive Rmd documents.

Usage

```
g2Output(outputId, width = "100%", height = "400px")
renderG2(expr, env = parent.frame(), quoted = FALSE)
```

Arguments

outputId	output variable to read from
width, height	Must be a valid CSS unit (like '100%', '400px', 'auto') or a number, which will be coerced to a string and have 'px' appended.
expr	An expression that generates a g2r
env	The environment in which to evaluate expr.
quoted	Is expr a quoted expression (with quote())? This is useful if you want to save an expression in a variable.

g2_action	<i>Plot Action</i>
-----------	--------------------

Description

Include dynamic elements in Rmarkdown.

Usage

```
g2_action(plot_id, btn_id, ..., data = NULL, reorder = TRUE)
```

Arguments

plot_id	Id of chart to interact with.
btn_id	Id of the <code>input_button()</code> that triggers the action.
...	Aspects, see <code>asp()</code> .
data	Data.frame containing data to plot.
reorder	Whether to internally reorder the data, namely the x and color. The x axis must be reordered in a descending order for most data type since G2.js plots data as-is. Moreover, color order of all data.frames passed either to this function or subsequent <code>fig_*</code> layers must be identical or the colors will might match the legends on the plot. However, one may sometimes not want the data to be reordered.

g2_proxy	<i>Shiny Proxy</i>
----------	--------------------

Description

Proxy to dynamically interact with the chart in shiny.

Usage

```
g2_proxy(id, ..., data = NULL, session = shiny::getDefaultReactiveDomain())
```

Arguments

id	Id of chart to interact with.
...	Aspects, see <code>asp()</code> .
data	Data.frame containing data to plot.
session	A valid shiny session.

Examples

```
library(shiny)

dataset <- data.frame(x = 1:100, y = runif(100, 1, 100))

ui <- fluidPage(
  g2Output("plot"),
  actionButton("add", "Add figure")
)

server <- function(input, output, session) {
  output$plot <- renderG2({
    g2(dataset, asp(x, y)) %>%
      fig_point()
  })

  observeEvent(input$add, {
    df <- data.frame(x = 1:100, y = runif(100, 1, 100))
    g2_proxy("plot", data = df) %>%
      fig_point(asp(x, y)) %>%
      render()
  })
}

if (interactive()) {
  shinyApp(ui, server)
}
```

gauge

Gauge Grid

Description

Gauge the variables (aspects) used to define axis and grid of the plot.

Usage

```
gauge(
  g,
  asp,
  ...,
  nice = TRUE,
  range = NULL,
  min = NULL,
  max = NULL,
  min_limit = NULL,
  max_limit = NULL,
  alias = NULL,
  tick_count = NULL,
```

```

    max_tick_count = NULL
  )
gauge_x_time(g, ..., show_last = FALSE)
gauge_y_time(g, ..., show_last = FALSE)
gauge_x_linear(g, ..., tick_interval = NULL)
gauge_y_linear(g, ..., tick_interval = NULL)
gauge_x_cat(g, ...)
gauge_y_cat(g, ...)
gauge_x_time_cat(g, ...)
gauge_y_time_cat(g, ...)
gauge_x_log(g, ..., base = 10)
gauge_y_log(g, ..., base = 10)
gauge_x_pow(g, ...)
gauge_y_pow(g, ...)
gauge_x_quantile(g, ...)
gauge_y_quantile(g, ...)
gauge_x_quantize(g, ...)
gauge_y_quantize(g, ...)
gauge_x_identity(g, ...)
gauge_y_identity(g, ...)
gauge_asp(g, ...)

```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>asp</code>	Bare column name of aspect to apply the gauge to.
<code>...</code>	Options to gauge variables (aspects defined by <code>asp()</code>).
<code>nice</code>	Automatically adjust min, and max.
<code>range</code>	A vector of length 2 giving the minimum, and maximum.

min, max	Range of the gauge.
min_limit, max_limit	Strict range of the ticks.
alias	Alias name of the gauge and variable to display.
tick_count	Maximum number of ticks.
max_tick_count	Maximum number of ticks.
show_last	Whether to force show the last tick (only for time gauges).
tick_interval	Minimum tick interval, only applies to linear type of gauge.
base	Base of log.

Types

- cat: Categorical.
- timeCat: Categorical time.
- linear: Linear.
- time: Date, time, etc.
- log: Logarithmic.
- pow: Exponential.
- quantize: Manual quantiles.
- quantile: Auto-generated quantiles.
- identity: Constant.

Examples

```
g <- g2(cars, asp(speed, dist)) %>%
  fig_point()

g %>% gauge(speed, min = 0)
g %>% gauge_y_log(title = "Log")
g %>% gauge(dist, tickCount = 10)
```

Description

Customise aspects of the chart.

Usage

```

gauge_color(g, ...)
gauge_size(g, ...)
gauge_shape(g, ...)
gauge_tooltip(g, ...)
gauge_label(g, ...)
gauge_style(g, ...)
gauge_interplay(g, ...)

```

Arguments

`g` An object of class `g2r` or `g2Proxy` as returned by `g2()` or `g2_proxy()`.

`...` Arguments to customise the gauge. Generally, key value pairs of options, a vector of hex colors, or a JavaScript function (wrapped in `htmlwidgets::JS()`).

See Also

[gauge](#) to gauge aspects of the grid and axis.

Examples

```

# base plot
g <- g2(cars, asp(speed, dist)) %>%
  fig_point(asp(color = speed))

# color with vector
g %>% gauge_color(c("red", "white", "blue"))

# color with callback
cb <- "function(speed){
  if(speed > 10){
    return 'blue';
  }
  return 'red';
}"

g %>% gauge_color(htmlwidgets::JS(cb))

```

global_digits	<i>Digits</i>
---------------	---------------

Description

Maximum number of digits to show on charts.

Usage

```
global_digits(n = 16L)
```

Arguments

n	Maximum number of digits.
---	---------------------------

info	<i>Text</i>
------	-------------

Description

Add a point figure.

Usage

```
info_text(g, ..., style = NULL, data = NULL)
info_image(g, ..., style = NULL, data = NULL)
info_arc(g, ..., style = NULL, data = NULL)
info_line(g, ..., style = NULL, data = NULL)
info_vline(g, ..., style = NULL, data = NULL)
info_hline(g, ..., style = NULL, data = NULL)
info_abline(g, ..., style = NULL, data = NULL, direction = c(1, 2))
info_region(g, ..., style = NULL, data = NULL)
info_region_filter(g, ..., style = NULL, data = NULL)
info_marker(g, ..., style = NULL, data = NULL)
info_data_region(g, ..., style = NULL, data = NULL)
```

```
info_shape(g, ..., style = NULL, data = NULL)
```

```
info_html(g, ..., style = NULL, data = NULL)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> as returned by <code>g2()</code> .
<code>...</code>	Options to pass to the informational annotation.
<code>style</code>	A list of options defining the style.
<code>data</code>	A dataset to use with <code>asp()</code> .
<code>direction</code>	Direction of diagonal line.

Details

`info_vline`, and `info_hline` use the `x`, and `y` `asp()` for placement.

See Also

[Official annotation documentation](#) for details on what to pass to `...`, and `asp()`.

Examples

```
df <- head(cars, 5)

g2(cars, asp(speed, dist)) %>%
  fig_point() %>%
  info_text(
    position = c(20, 35),
    content = "Look here!"
  ) %>%
  info_text(
    asp(speed, dist),
    content = "Using aspects",
    data = df
  )

g2(cars, asp(speed, dist)) %>%
  fig_point() %>%
  info_vline(asp(x = 20)) %>%
  info_hline(asp(y = 20))
```

input_button	<i>Button Input</i>
--------------	---------------------

Description

Add a button input.

Usage

```
input_button(id, label, class = "default")
```

Arguments

id	Id of the button.
label	Label to display.
class	Class of the button.

Details

The class argument defines the style of the button in Bootstrap 3, generally accepts:for

- default
- info
- success
- warning
- danger

input_select	<i>Select Input</i>
--------------	---------------------

Description

Select Input

Usage

```
input_select(id, label, choices)
```

Arguments

id	Valid CSS id of the element.
label	Label to display.
choices	Vector of choices

input_slider	<i>Slider Input</i>
--------------	---------------------

Description

Add a slider to an R markdown document.

Usage

```
input_slider(id, label, value, min, max, step = 1)
```

Arguments

id	Valid CSS id of the element.
label	Label to display.
value	Initial value of the slider.
min, max	Minimum and maximum value the slider can be set.
step	Interval between steps.

Examples

```
input_slider(  
  "mySlider",  
  "The label",  
  value = 5,  
  min = 0,  
  max = 10  
)
```

interplay	<i>Interplay</i>
-----------	------------------

Description

Configure global interplay (interactions) for the chart. See [gauge_interplay\(\)](#) to customise figure-level interplay.

Usage

```
interplay(g, ...)  
  
remove_interplay(g, ...)  
  
register_interplay(g, name, ...)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	String(s) defining interactions.
<code>name</code>	Name of interaction to register

Examples

```
# global interaction on chart
df <- data.frame(
  x = letters,
  y = runif(26)
)

g2(df, asp(x, y)) %>%
  fig_interval(
    selected(fill = "orange")
  ) %>%
  interplay("element", "selected")

# brush
g2(cars, asp(speed, dist)) %>%
  fig_point(asp(interplay = "brush"))

# register
df <- data.frame(
  x = c(letters, letters),
  y = runif(52),
  grp = c(rep("a", 26), rep("b", 26))
)

g2(df, asp(x, y, color = grp)) %>%
  fig_interval(
    asp(interplay = "element-highlight-by-color"),
    adjust("dodge")
  ) %>%
  register_interplay(
    "element-highlight-by-color",
    start = list(
      list(
        trigger = "element:mouseenter",
        action = "element-highlight-by-color:highlight"
      )
    ),
    end = list(
      list(
        trigger = "element:mouseleave",
        action = "element-highlight-by-color:reset"
      )
    )
  )
)
```

 layout_arc

Layout Arc

Description

Layout as arc using the alter package.

Usage

```
layout_arc(
  g,
  sourceWeight = NULL,
  targetWeight = NULL,
  thickness = 0.05,
  marginRatio = 0.1
)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>sourceWeight</code> , <code>targetWeight</code>	Bare name of column containing weights of source and target in the edges data.frame.
<code>thickness</code>	Node height, between 0 and 1.
<code>marginRatio</code>	Space ratio, between 0 and 1.

Examples

```
ig <- igraph::erdos.renyi.game(100, 1 / 100)

g2(ig, asp(x, y)) %>%
  layout_arc() %>%
  fig_edge(asp(color = source, shape = "arc"), opacity = .3) %>%
  fig_point(asp(color = id, shape = "circle", size = value)) %>%
  coord_type("polar") %>%
  coord_reflect("y") %>%
  axis_hide()

g2(ig, asp(x, y)) %>%
  layout_arc() %>%
  fig_edge(asp(color = source, shape = "arc"), opacity = .3) %>%
  fig_point(asp(color = id, shape = "circle", size = value))
```

layout_igraph	<i>Layout with igraph</i>
---------------	---------------------------

Description

Layout the graph using an igraph layout function. This function only works with the graph was initialised with an object of class igraph.

Usage

```
layout_igraph(g, ..., method = igraph::layout_nicely)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Any options to pass to the method function.
<code>method</code>	An igraph layout function to compute the nodes and edges (source and target) position on the canvas.

Details

The function runs the method to obtain the x and y coordinates. These are added to the nodes data.frame (extracted from initial graph) and to the edges data.frame, as x and y *nested* columns, e.g.: `c(source_x, target_x)`. These x and y coordinates can be used in `asp()` (see example).

Examples

```
ig <- igraph::make_ring(100)

# use x and y for positioning
g2(ig, asp(x, y)) %>%
  layout_igraph() %>%
  fig_edge() %>%
  fig_point(asp(shape = "circle")) %>%
  axis_hide()
```

map_data	<i>Get Map</i>
----------	----------------

Description

Retrieve map data to pass to the `maps` argument of the `fig_map()` function.

Usage

```
get_gadm_data(iso3c, level = c(0, 1, 2, 3, 4), keep = 0.05)

get_map_data(region = ".", level = c("region", "subregion"), name = "world")

get_world_map()
```

Arguments

iso3c	Iso3c code of the country to retrieve, e.g.: USA.
level	Level of the polygons to draw, either the region or subregion.
keep	Proportion of points to retain, it is highly recommended to reduce the detail of the map or it will take too long to load in the browser. Set to NULL to not reduce the amount of details.
region	Character vector that names the polygons to draw.
name	Name of the database to use.

Functions

- `get_gadm_data`: Retrieves country-level data from gadm.org.
- `get_map_data`: Uses the `maps::map()` function to retrieve the map data, similar to `ggplot2::map_data`.
- `get_world_map`: Retrives a world map (from GeoJSON).

motif

Motif

Description

Set the motif of the chart, defaults to light.

Usage

```
motif(
  g,
  ...,
  brandColor = NULL,
  backgroundColor = "transparent",
  renderer = c("canvas", "svg"),
  padding = "auto",
  visible = TRUE
)

global_motif(
  ...,
  brandColor = NULL,
```

```

    backgroundColor = "transparent",
    renderer = c("canvas", "svg"),
    padding = "auto",
    visible = TRUE
  )

motif_from_json(g, path)

motif_from_list(g, motif)

motif_as_list(..., brandColor = NULL, backgroundColor = "transparent")

```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Key value pair defining style, or <code>element()</code> .
<code>brandColor</code>	Main default color.
<code>backgroundColor</code>	Plot background color.
<code>renderer</code>	Renderer to use, defaults to <code>canvas</code> .
<code>padding</code>	An integer, or a vector of length 4.
<code>visible</code>	Whether the chart is visible.
<code>path</code>	Path to JSON file.
<code>motif</code>	List defining the theme, similar to JSON.

Details

The function `motif_from_json()` can be used to define the theme from a JSON file of theme, to see the default theme file: `system.file("theme.json", package = "g2r")`.

Functions

- `motif`: Defines the motif of a visualisation.
- `motif_from_json`: Defines the motif from a JSON file of theme, see the theme file. `system.file("theme.json", package = "g2r")`
- `motif_from_list`: Defines the motif from a list, derived from the JSON file.
- `motif_as_list`: Returns a motif as a list to use with `motif_from_list()`.
- `global_motif`: Define a global motif that will be used by all subsequent charts.

Examples

```

g2(iris, asp(Sepal.Width, Sepal.Length)) %>%
  fig_point(
    asp(color = Species, shape = "circle")
  ) %>%
  motif(

```

```
brandColor = "orange",
backgroundColor = "black",
elementPoint(
  shape = "circle",
  stroke = "white",
  fillOpacity = .7
)
)
```

new_animation

New Animation

Description

Convenience function to create a new animation, equivalent to `Animation$new()`.

Usage

```
new_animation()
```

See Also

[Animation](#)

palettes

Color Palettes

Description

Convenience function to easily apply colors palettes.

Usage

```
gauge_color_viridis(g)
```

```
gauge_color_plasma(g)
```

```
gauge_color_inferno(g)
```

```
gauge_color_magma(g)
```

```
gauge_color_accent(g)
```

```
gauge_color_dark2(g)
```

```
gauge_color_paired(g)
```

gauge_color_pastel1(g)
gauge_color_pastel2(g)
gauge_color_set1(g)
gauge_color_set2(g)
gauge_color_set3(g)
gauge_color_neon(g)
gauge_color_std(g)
gauge_color_pink(g)
gauge_color_orange(g)
gauge_color_lime(g)
gauge_color_blue(g)
gauge_color_aw(g)
gauge_color_g2rq(g)
gauge_color_g2rc(g)
gauge_color_g2rd(g)
gauge_color_brbg(g)
gauge_color_piyg(g)
gauge_color_prgn(g)
gauge_color_puor(g)
gauge_color_rdbu(g)
gauge_color_rdgy(g)
gauge_color_rdylbu(g)
gauge_color_rdylgn(g)
gauge_color_spectral(g)

`gauge_color_flashy(g)`

`gauge_color_red(g)`

`gauge_color_ryb(g)`

`gauge_color_bwg(g)`

Arguments

`g` An object of class `g2r` or `g2Proxy` as returned by `g2()` or `g2_proxy()`.

Palettes

Palettes from the `viridisLite` package, ideal for: continuous data.

- `gauge_color_viridis` (continuous)
- `gauge_color_plasma` (continuous)
- `gauge_color_inferno` (continuous)
- `gauge_color_magma` (continuous)

Palettes from color brewer:

- `gauge_color_accent` (qualitative)
- `gauge_color_dark2` (qualitative)
- `gauge_color_paired` (qualitative)
- `gauge_color_pastel1` (qualitative)
- `gauge_color_pastel2` (qualitative)
- `gauge_color_set1` (qualitative)
- `gauge_color_set2` (qualitative)
- `gauge_color_set3` (qualitative)
- `gauge_color_brbg` (diverging)
- `gauge_color_piyg` (diverging)
- `gauge_color_prgn` (diverging)
- `gauge_color_puor` (diverging)
- `gauge_color_rdbu` (diverging)
- `gauge_color_rdg` (diverging)
- `gauge_color_rdy1bu` (diverging)
- `gauge_color_rdy1gn` (diverging)
- `gauge_color_spectral` (diverging)

Palettes taken from [colors.co](https://colorbrewer2.org/):

- `gauge_color_neon` (continuous)

- gauge_color_std (continuous)
- gauge_color_orange (continuous)
- gauge_color_pink (continuous)
- gauge_color_lime (continuous)
- gauge_color_blue (continuous)
- gauge_color_red (discrete)
- gauge_color_flashy (discrete)
- gauge_color_ryb (discrete)
- gauge_color_bwg (diverging)

Palettes from awtools package:

- gauge_color_aw (qualitative)

Custom:

- gauge_color_g2rc (continuous)
- gauge_color_g2rq (qualitative)
- gauge_color_g2rd (diverging)

planes

Planes

Description

Split the chart into planes according to variables.

Usage

```
planes(
  g,
  asp,
  ...,
  type = c("rect", "list", "matrix", "circle", "tree", "mirror"),
  sync = TRUE
)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>asp</code>	Aspects that define split, these must be defined as a formula, e.g.: $\sim x+y$.
<code>...</code>	Any other option.
<code>type</code>	Type of planes to use.
<code>sync</code>	Whether to sync the aspects used for the planes with others used elsewhere, similar to that of <code>fig_point()</code> .

Examples

```
g2(iris, asp(Sepal.Length, Sepal.Width, color = Species)) %>%
  fig_point() %>%
  planes(~Species, type = "tree")
```

qg2

Quick Plot

Description

Draw a quick plot.

Usage

```
qg2(object, ..., conf_level = 0.95, intercept = FALSE, names = NULL)
```

Arguments

object	An object containing data to plot, often a model.
...	Ignored
conf_level	Confidence level.
intercept	Whether to display the intercept.
names	Names of the models.

radio

Checkbox and Radio

Description

Add a checkbox or radio input.

Usage

```
input_checkbox(id, label, choices, selected = NULL, inline = TRUE)
```

```
input_radio(id, label, choices, selected = NULL, inline = TRUE)
```

Arguments

id	Id of input.
label	Label of the input.
choices	Vector of choices to define either the checkboxes or radio inputs.
selected	Vector of choices that are selected by default.
inline	Whether the input is inline.

remove_figure	<i>Remove a figure</i>
---------------	------------------------

Description

Remove a figure from the plot.

Usage

```
remove_figure(g, index)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>index</code>	Index of figure to remove. Either the numeric index of figure (layer number in order it was added to the visualisation), or the id of the figure as set by <code>config()</code> (see examples).

Examples

```
g <- g2(mtcars, asp(qsec, wt)) %>%
  fig_point(config(id = "myPoints")) %>%
  fig_point(asp(y = drat))

# all figures
g

# remove figure
remove_figure(g, "myPoints")

library(shiny)

df <- data.frame(
  x = 1:100,
  y = runif(100),
  z = runif(100)
)

ui <- fluidPage(
  g2Output("plot"),
  actionButton("rm", "Randomly remove a figure")
)

server <- function(input, output) {
  output$plot <- renderG2({
    g2(df, asp(x, y)) %>%
      fig_point() %>%
      fig_line(asp(y = z))
  })
}
```

```

observeEvent(input$rm, {
  g2_proxy("plot") %>%
    remove_figure(sample(1:2, 1))
})
}

if (interactive()) {
  shinyApp(ui, server)
}

```

render	<i>Render</i>
--------	---------------

Description

Render proxy calls.

Usage

```
render(g, update = TRUE)
```

Arguments

<code>g</code>	An object of class <code>g2Proxy</code> as returned by <code>g2_proxy()</code> .
<code>update</code>	Whether to trigger the update process.

scrollbar	<i>Scrollbar</i>
-----------	------------------

Description

Add a scrollbar to the chart.

Usage

```
scrollbar(g, ...)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the slider.

See Also

The [official documentation](#) for the list options to pass to `...`

slider	<i>Slider</i>
--------	---------------

Description

Add a slider to the chart.

Usage

```
slider(g, ...)
```

Arguments

<code>g</code>	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
<code>...</code>	Options to pass to the slider.

See Also

The [official documentation](#) for the list options to pass to

state	<i>State</i>
-------	--------------

Description

Customise the styles of figures given states (active or selected).

Usage

```
active(...)
```

```
selected(...)
```

Arguments

<code>...</code>	Key value pair passed to styles.
------------------	----------------------------------

Examples

```
g2(iris, asp(Sepal.Width, Sepal.Length)) %>%
  fig_point(
    selected(fill = "red")
  ) %>%
  interplay("element", "selected")
```

subject	<i>Subject</i>
---------	----------------

Description

Add a subject to the plot.

Usage

```
subject(g, subject, tag = htmltools::h3)
```

Arguments

g	An object of class <code>g2r</code> or <code>g2Proxy</code> as returned by <code>g2()</code> or <code>g2_proxy()</code> .
subject	Subject of chart to display.
tag	<code>htmltools</code> tag function to use.

Examples

```
g2(cars, asp(speed, dist)) %>%
  fig_point() %>%
  subject("Points")
```

template	<i>Tooltip Template</i>
----------	-------------------------

Description

Convenience function to create tooltip templates (`itemTp` argument in `tooltip()` function).

Usage

```
tpl(...)

tpl_item(name, value, marker = TRUE)
```

Arguments

...	One or more <code>tpl_item()</code> .
name, value	Name and value of the tooltip item.
marker	Whether to include the color marker (dot) in the tooltip.

Details

The arguments `title`, `name`, and `value` accept either a bare column name from the data to use as `{mustache}/{handlebar}` in the template. If a string is passed then it is treated as constant.

Examples

```
template <- tpl(
  tpl_item(
    island,
    bill_depth_mm
  )
)
```

tooltip	<i>Tooltip</i>
---------	----------------

Description

Configure the tooltip applied to the entire chart. See [gauge_tooltip\(\)](#) to customise a specific tooltip (the tooltip of a specific figure).

Usage

```
tooltip(g, ...)
```

Arguments

`g` An object of class `g2r` or `g2Proxy` as returned by [g2\(\)](#) or [g2_proxy\(\)](#).

`...` Options to pass to the axis, pass `FALSE` to hide the axis. Visit the [official documentation](#) for the full list of options.

Examples

```
g2(mtcars, asp(drat, qsec, color = hp)) %>%
  fig_point() %>%
  tooltip(
    showCrosshairs = TRUE,
    crosshairs = list(type = "xy")
  )
```

to_g2r	<i>Convert to Tibble</i>
--------	--------------------------

Description

Converts objects to objects g2r can work with, generally a `tibble::tibble`.

Usage

```
to_g2r(data = NULL)
```

Arguments

`data` An object to convert.

Details

This is exposed so the user can understand what happens under the hood and which variables/columns can subsequently be used in figures with [asp\(\)](#).

These methods are used in the [g2\(\)](#) function to preprocess data objects.

Examples

```
## Not run:  
to_g2r(AirPassengers)  
  
## End(Not run)
```

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