

# Package ‘hpackedbubble’

August 19, 2019

**Title** Create Split Packed Bubble Charts

**Version** 0.1.0

**Description** By binding R functions and the 'Highcharts' <<http://www.highcharts.com/>> charting library, 'hpackedbubble' package provides a simple way to draw split packed bubble charts.

**License** MIT + file LICENSE

**Date** 2019-08-18

**Encoding** UTF-8

**Depends** R (>= 3.0.0)

**LazyData** true

**Imports** htmlwidgets

**Suggests** knitr, rmarkdown, shiny, colourpicker

**VignetteBuilder** knitr

**URL** <https://github.com/czxa/hpackedbubble>

**BugReports** <https://github.com/czxa/hpackedbubble/issues>

**RoxygenNote** 6.1.1

**NeedsCompilation** no

**Author** Zhenxing Cheng [aut, cre]

**Maintainer** Zhenxing Cheng <[czxjnu@163.com](mailto:czxjnu@163.com)>

**Repository** CRAN

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| CO2 | <i>Carbon emissions around the world (2014)</i> |
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**Description**

Carbon emissions around the world (2014)

**Usage**

CO2

**Format**

A tibble data frame with 116 rows and 3 variables.

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|               |  |
|---------------|--|
| hpackedbubble | <i>Create Split Packed Bubble Charts</i> |
|---------------|--|

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**Description**

By binding R functions and the 'Highcharts' <http://www.highcharts.com/> charting library, 'hpacked-bubble' package provides a simple way to draw split packed bubble charts.

**Usage**

```
hpackedbubble(cat, name, value, theme = "sandsignika", width = NULL,
  height = NULL, title = "", titleAlign = "center",
  titleSize = "20px", titleColor = "#333333", subtitle = "",
  subtitleAlign = "center", subtitleSize = "",
  subtitleColor = "#666666",
  pointFormat = "<b>{point.name}</b> {point.y}", split = 1,
  packedbubbleMinSize = "50%", packedbubbleMaxSize = "250%",
  packedbubbleZMin = 0, packedbubbleZmax = 1000,
  gravitational = 0.0625, seriesInteraction = 1,
  dragBetweenSeries = 1, parentNodeLimit = 1, dataLabels = 1,
  dataLabelsformat = "{point.name}", dataLabelsFilter = 250,
  dataLabelsColor = "black")
```

**Arguments**

|       |   |
|-------|---|
| cat   | category vector;  |
| name  | name vector;  |
| value | value vector;   |
| theme | chart theme, you can use these themes: darkgreen/darkblue/avocado/darkunica/gray/<br>gridlight/grid/sandsignika/sunset; |

|                     |   |
|---------------------|---|
| width               | chart width, for example, "100%";   |
| height              | chart height, for example, "400px";   |
| title               | title;  |
| titleAlign          | title alignment, left/center/right;   |
| titleSize           | title size, like "20px";  |
| titleColor          | title color, like "#333333";  |
| subtitle            | subtitle;   |
| subtitleAlign       | subtitle alignment, left/center/right;  |
| subtitleSize        | subtitle size, like "16px";   |
| subtitleColor       | subtitle color, like "#666666"  |
| pointFormat         | The HTML of the point's line in the tooltip.  |
| split               | Whether to split series into individual groups or to mix all series together. 1 means to split, 0 means to not, defaults to split;  |
| packedbubbleMinSize | Minimum bubble size. Defaults to '50%';   |
| packedbubbleMaxSize | Maximum bubble size. Defaults to '250%';  |
| packedbubbleZMin    | The minimum for the Z value range. Defaults to 0, you can use the lowest Z value in the data;   |
| packedbubbleZmax    | The maximum for the Z value range. Defaults to 1000, you can use the highest Z value in the data;   |
| gravitational       | Gravitational const used in the barycenter force of the algorithm. Defaults to 0.0625.  |
| seriesInteraction   | Whether series should interact with each other or not. 1 means to true, 0 means to false, defaults to 1;  |
| dragBetweenSeries   | In case of split series, this option allows user to drag and drop points between series, for changing point related series. 1 means to true, 0 means to false, defaults to 1; |
| parentNodeLimit     | Whether bubbles should interact with their parentNode to keep them inside. 1 means to true, 0 means to false, defaults to 1;  |
| dataLabels          | Options for the series data labels, appearing next to each data point. 1 means to true, 0 means to false, defaults to 1;  |
| dataLabelsformat    | Data labels' format   |
| dataLabelsFilter    | Show data labels while 'value' larger than dataLabelsFilter. defaults to 250.   |
| dataLabelsColor     | Data labels' color, defaults to black.  |

## Examples

```
library(hpackedbubble)
if (interactive()) {
  hpackedbubble(CO2$continent, CO2$country, CO2$CO2)
}
```

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hpackedbubble-shiny    *Shiny bindings for hpackedbubble*

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## Description

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

## Usage

```
hpackedbubbleOutput(outputId, width = "100%", height = "400px")
renderHpackedbubble(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 hpackedbubble   |
| 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.                    |

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