

Package ‘ggokabeito’

October 13, 2022

Title 'Okabe-Ito' Scales for 'ggplot2' and 'ggraph'

Version 0.1.0

Description Discrete scales for the colorblind-friendly 'Okabe-Ito' palette, including 'color', 'fill', and 'edge_colour'. 'ggokabeito' provides 'ggplot2' and 'ggraph' scales to easily use the 'Okabe-Ito' palette in your data visualizations.

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URL <https://github.com/malcolmbarrett/ggokabeito>,
<https://malcolmbarrett.github.io/ggokabeito/>

BugReports <https://github.com/malcolmbarrett/ggokabeito/issues>

Depends R (>= 4.0.0)

Imports ggplot2, grDevices

Suggests covr, ggraph, igraph, spelling, testthat (>= 3.0.0), vdiff

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RoxygenNote 7.1.2

NeedsCompilation no

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palette_okabe_ito *Okabe-Ito Palette*

Description

palette_okabe_ito() is a wrapper around palette.colors() that returns the Okabe-Ito palette in R 4.0.0 or greater. palette_okabe_ito() returns an unnamed vector of colors for better use with ggplot2. Additionally, black is the last color returned by palette_okabe_ito() when 9 colors are needed instead of the first, as in palette.colors().

Usage

```
palette_okabe_ito(order = 1:9, alpha = NULL, recycle = FALSE)
```

Arguments

order	A numeric vector, the order of the colors
alpha	an alpha-transparency level in the range [0,1] (0 means transparent and 1 means opaque).
recycle	logical indicating what happens in case $n > \text{length}(\text{palette}(\cdot))$. By default (recycle = FALSE), the result is as for $n = \text{NULL}$, but with a warning.

Value

A character vector of hex codes

Examples

```
palette_okabe_ito()
palette_okabe_ito(order = c(2, 3, 5), alpha = 0.9)
```

scale_okabe_ito *Okabe-Ito Scales for ggplot2 and ggraph*

Description

Discrete scales for the colorblind-friendly Okabe-Ito palette, including color, fill, and edge_colour. See [palette_okabe_ito](#) for details.

Usage

```
scale_okabe_ito(aesthetics, order = 1:9, alpha = 1, ...)  
  
scale_colour_okabe_ito(aesthetics = "colour", order = 1:9, alpha = NULL, ...)  
  
scale_color_okabe_ito(aesthetics = "colour", order = 1:9, alpha = NULL, ...)  
  
scale_fill_okabe_ito(aesthetics = "fill", order = 1:9, alpha = NULL, ...)  
  
scale_edge_colour_okabe_ito(  
  aesthetics = "edge_colour",  
  order = 1:9,  
  alpha = NULL,  
  ...  
)  
  
scale_edge_color_okabe_ito(  
  aesthetics = "edge_colour",  
  order = 1:9,  
  alpha = NULL,  
  ...  
)
```

Arguments

aesthetics	The names of the aesthetics that this scale works with.
order	A numeric vector, the order of the colors
alpha	an alpha-transparency level in the range [0,1] (0 means transparent and 1 means opaque).
...	Additional arguments passed to <code>ggplot2::discrete_scale()</code>

Value

A ggplot or ggraph scale

Examples

```
library(ggplot2)  
  
ggplot(mpg, aes(cty, hwy, color = class)) +  
  geom_point() +  
  scale_color_okabe_ito()  
  
ggplot(mpg, aes(cty, hwy, color = factor(cyl))) +  
  geom_point(alpha = 0.7) +  
  scale_color_okabe_ito(name = "Cylinders", alpha = .9)  
  
ggplot(mpg, aes(hwy, color = class, fill = class)) +  
  geom_density() +
```

```
scale_fill_okabe_ito(name = "Class", alpha = .9) +  
scale_color_okabe_ito(name = "Class")
```

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