Package 'crayons'

March 21, 2024

Title Color Palettes from Crayon Boxes

Version 0.0.3

Description Provides color palettes based on crayon colors since the early 1900s.
Colors are based on various crayon colors, sets, and promotional palettes, most of
which can be found at <https://en.wikipedia.org/wiki/List_of_Crayola_crayon_colors>. All
palettes are discrete palettes and are not necessarily color-blind friendly.
Provides scales for 'ggplot2' for discrete coloring.

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Encoding UTF-8

RoxygenNote 7.3.1

URL <https://github.com/christopherkenny/crayons>,
<http://christophertkenny.com/crayons/>

BugReports <https://github.com/christopherkenny/crayons/issues>

Imports ggplot2, grDevices, palette

NeedsCompilation no

Author Christopher T. Kenny [aut, cre]
(<https://orcid.org/0000-0002-9386-6860>)

Maintainer Christopher T. Kenny <christopherkenny@fas.harvard.edu>

Repository CRAN

Date/Publication 2024-03-21 21:20:02 UTC

R topics documented:

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crayons   *Crayons Color Palettes*

Description

Crayon colors, based on common Crayola colors. Palettes build from Wikipedia

Usage

```
crayons
```

Format

list of palette::palette vectors

Details

Included palettes:

- **billionth**, celebrates the 100 billionth crayon
- **color_n_smell**, scented colors
- **colors_of_the_world**, additional human colors
- **construction_paper**, colors for construction paper
- **fluorescent**, neon colors
- **gel_fx**, gel colors
- **gem_tones**, gemstones
- **heads_n_tails**, double sided colors
- **magic_scent**, scented colors
- **metallic_fx**, metal colors
- **mini_twistables**, colors, but twistable
- **modern**, historical colors since 1990
- **munsell**, historical colors 1926-1944
- **multicultural**, skin colors
- **no_48**, historical crayons 48-pack in 1949
- **no_64**, historical crayons 64-pack in 1958
- **original**, historical crayons original in 1903
- **pearl**, updated perlescent colors
- **pearl_brite**, pearlescent colors
- **silly_scents**, scented in reality but not in R
- **silver_swirls**, colors with a tinge of silver
- **standard**, a large set of standard colors

- **standard16**, colors for a 16 pack of crayons
- **standard24**, colors for a 24 pack of crayons
- **standard32**, colors for a 32 pack of crayons
- **standard64**, colors for a 64 pack of crayons
- **star_brite**, colors from 1997

Examples

```
plot(crayons$billionth)
plot(crayons$color_n_smell)
plot(crayons$colors_of_the_world)
plot(crayons$construction_paper)
plot(crayons$fluorescent)
plot(crayons$gel_fx)
plot(crayons$gem_tones)
plot(crayons$heads_n_tails)
plot(crayons$magic_scent)
plot(crayons$metallic_fx)
plot(crayons$mini_twistables)
plot(crayons$modern)
plot(crayons$munsell)
plot(crayons$multicultural)
plot(crayons$no_48)
plot(crayons$no_64)
plot(crayons$original)
plot(crayons$pearl)
plot(crayons$pearl_brite)
plot(crayons$silly_scents)
plot(crayons$silver_swirls)
plot(crayons$standard)
plot(crayons$standard16)
plot(crayons$standard24)
plot(crayons$standard32)
plot(crayons$standard64)
plot(crayons$star_brite)
```

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pick_colors   *Heuristics for Color Distances and Locations*

Description

- `pick_colors()` places each color into RGB space, clusters them with k-means, and returns the colors nearest each cluster center.
- `color_order()` reorders colors so that subsequent colors are far from each other in RGB space.
- `color_distance()` calculates pairwise distances in RGB space between colors.

Usage

```
pick_colors(hex, n)

color_distance(hex)

color_order(hex)
```

Arguments

hex	a character vector of hexadecimal colors
n	the integer number of desired colors

Value

a character vector that is a subset of hex, or a matrix of distances for `color_distance()`

Examples

```
pick_colors(crayons$standard, 10)
color_order(crayons$standard)
color_distance(crayons$standard[1:4])
```

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scale_color_crayons   *Crayon Color Scales for* ggplot2

Description

Crayon Color Scales for ggplot2

Usage

```
scale_color_crayons(palette = "standard16", which = NULL, ..., reverse = FALSE)

scale_fill_crayons(palette = "standard16", which = NULL, ..., reverse = FALSE)

scale_colour_crayons(
  palette = "standard16",
  which = NULL,
  ...,
  reverse = FALSE
)
```

Arguments

palette	palette from `names(crayons)` to use
which	numeric indices of colors to use. `NULL` by default.
...	arguments passed on to `ggplot2::discrete_scale()`
reverse	Should the vector be reversed? Default is `FALSE`.

Value

A [ggplot2::Scale](#)

Examples

```
library(ggplot2)
ggplot2::mpg |>
  ggplot() +
   geom_point(aes(displ, hwy, colour = class)) +
   scale_color_crayons(palette = 'original')

ggplot2::mpg |>
  ggplot() +
   geom_point(aes(displ, hwy, fill = class), pch = 23, color = 'transparent') +
   scale_fill_crayons(palette = 'original')
```

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