Package ‘harrypotter’

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Type Package
Title Palettes Generated from All ”Harry Potter” Movies
Version 2.1.1
Maintainer Alejandro Jimenez Rico <aljrico@gmail.com>
Description Implementation of characteristic palettes inspired in the Wizarding World and the Harry Potter movie franchise.
License MIT + file LICENSE
Encoding UTF-8
LazyData TRUE
Depends R (>= 2.10)
Suggests hexbin (>= 1.27.0), testthat (>= 2.1.0)
URL https://github.com/aljrico/harrypotter
BugReports https://github.com/aljrico/harrypotter/issues
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Author Alejandro Jimenez Rico [aut, cre], Alfredo Hernandez [ctb]
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Description
This function creates a vector of \( n \) equally spaced colors along the 'HP colour map' of your selection.

Usage

```r
hp(
  n,
  alpha = 1,
  begin = 0,
  end = 1,
  direction = 1,
  option = "Always",
  house = NULL
)
```

```r
hp_pal(
  alpha = 1,
  begin = 0,
  end = 1,
  direction = 1,
  option = "Always",
  house = NULL
)
```

```r
harrypotter(
  n,
  alpha = 1,
  begin = 0,
  end = 1,
  direction = 1,
  option = "Always",
  house = NULL
)
```

Arguments

- **n**: The number of colors (\( \geq 1 \)) to be in the palette.
- **alpha**: The alpha transparency, a number in [0,1], see argument alpha in \texttt{hsv}.
- **begin**: The (corrected) hue in [0,1] at which the hp colormap begins.
- **end**: The (corrected) hue in [0,1] at which the hp colormap ends.
- **direction**: Sets the order of colors in the scale. If 1, the default, colors are ordered from darkest to lightest. If -1, the order of colors is reversed.
hp.map

option
A character string indicating the colourmap from a option to use. Four houses are available: "Gryffindor", "Slytherin", "Ravenclaw" and "Hufflepuff".

house
Depcreated. Use 'option' instead.

Details
Semi-transparent colors \((0 < \alpha < 1)\) are supported only on some devices: see rgb.

Value
hp returns a character vector, cv, of color hex codes. This can be used either to create a user-defined color palette for subsequent graphics by palette(cv), a col = specification in graphics functions or in par.

Author(s)
Alejandro Jiménez Rico <aljrico@gmail.com>, Personal Blog

Examples

library(ggplot2)
library(hexbin)

dat <- data.frame(x = rnorm(1e4), y = rnorm(1e4))
ggplot(dat, aes(x = x, y = y)) +
  geom_hex() +
  coord_fixed() +
  scale_fill_gradientn(colours = hp(128, option = 'Always'))

pal <- hp(256, option = "Ravenclaw")
image(volcano, col = pal)

hp.map

Original 'Harry Potter' colour map

Description
A dataset containing some colour palettes inspired on the Harry Potter Universe

Usage
hp.map
**Format**

A data frame containing all the colours used in the palette:

- V1: Red value
- V2: Green value
- V3: Blue value
- option: It is intended to be a general option for choosing the specific colour palette.

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**hp_palettes**  
*Available Palettes.*

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**Description**

This list contains all the available palettes in the 'harrypotter' package.

**Usage**

```r
hp_palettes
```

**Format**

A list containing all palettes color codes.

---

**scale_color_hp**  
*Harry Potter colour scales*

---

**Description**

Uses the Harry Potter color scale.

**Usage**

```r
scale_color_hp(
    option = "Always",
    ..., alpha = 1, begin = 0, end = 1,  
    direction = 1, discrete = FALSE,  
    house = NULL
)
```

```r
scale_colour_hp(
    option = "Always",
```
scale_color_hp

..., alpha = 1, begin = 0, end = 1, direction = 1, discrete = FALSE, house = NULL
)

scale_colour_hp_d(
  option = "Always",
  ..., alpha = 1, begin = 0, end = 1, direction = 1
)

scale_color_hp_d(
  option = "Always",
  ..., alpha = 1, begin = 0, end = 1, direction = 1
)

scale_fill_hp_d(
  option = "Always",
  ..., alpha = 1, begin = 0, end = 1, direction = 1
)

scale_fill_hp(
  option = "Always",
  ..., alpha = 1, begin = 0, end = 1, direction = 1, discrete = FALSE, house = NULL
)
Arguments

- **option**: A character string indicating the colourmap to use. Four houses are available: "Gryffindor", "Slytherin", "Ravenclaw" and "Hufflepuff".
- **alpha**: parameters to `discrete_scale` or `scale_fill_gradientn` pass through parameter to `hp`
- **begin**: The (corrected) hue in [0,1] at which the hp colormap begins.
- **end**: The (corrected) hue in [0,1] at which the hp colormap ends.
- **direction**: Sets the order of colors in the scale. If 1, the default, colors are as output by `hp_pal`. If -1, the order of colors is reversed.
- **discrete**: generate a discrete palette? (default: FALSE - generate continuous palette)
- **house**: A character string indicating the colourmap from a option to use. This parameter is deprecated, 'option' should be used instead. Four houses are available: "Gryffindor", "Slytherin", "Ravenclaw" and "Hufflepuff".

Details

For `discrete == FALSE` (the default) all other arguments are as to `scale_fill_gradientn` or `scale_color_gradientn`. Otherwise the function will return a `discrete_scale` with the plot-computed number of colors.

Author(s)

Alejandro Jiménez Rico <aljrico@gmail.com>

Examples

```r
library(ggplot2)

ggplot(mtcars, aes(factor(cyl), fill=factor(vs))) + geom_bar() + scale_fill_hp(discrete = TRUE, option = "Ravenclaw")

ggplot(mtcars, aes(factor(gear), fill=factor(carb))) + geom_bar() + scale_fill_hp(discrete = TRUE, option = "Slytherin")

ggplot(mtcars, aes(x = mpg, y = disp, colour = hp)) + geom_point(size = 2) + scale_colour_hp(option = "Gryffindor")
```
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