Package 'ltc'

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Title Collection of Artistic and Nature-Inspired Color Palettes

Version 0.3.0

Description Offers a variety of color palettes inspired by art, nature, and personal inspirations. Each palette is accompanied by a unique backstory, enriching the understanding and significance of the colors.

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Encoding UTF-8

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URL https://github.com/loukesio/ltc-color-palettes

BugReports https://github.com/loukesio/ltc-color-palettes/issues

Imports dplyr, ggforce, ggplot2, colorspace

Language en-US

Suggests spelling

NeedsCompilation no

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adjust_ltc *Adjust Lightness of Palette Colors*

Description

Darken or lighten an entire palette or specific colors within it. Uses the colorspace package for perceptually uniform adjustments.

Usage

```
adjust_ltc(palette_name, amount = 0, which = NULL)
```

Arguments

palette_name	Character. Name of the ltc palette to adjust.
amount	Numeric. Amount to adjust lightness (-100 to 100). Negative values darken, positive values lighten. Default is 0 (no change).
which	Integer vector. Which colors to adjust (e.g., c(1, 3) for 1st and 3rd). If NULL (default), adjusts all colors.

Value

A vector of adjusted hex color codes with class "palette"

Examples

```
## Not run:
# Darken entire palette by 20
dark_alger <- adjust_ltc("alger", amount = -20)
pltc(dark_alger)

# Lighten entire palette by 30
light_maya <- adjust_ltc("maya", amount = 30)
pltc(light_maya)

# Darken only the 2nd and 4th colors
mixed <- adjust_ltc("remains", amount = -25, which = c(2, 4))
pltc(mixed)

# Use in plotting
library(ggplot2)
ggplot(iris, aes(Sepal.Length, Sepal.Width, color = Species)) +
  geom_point(size = 3) +
  scale_color_manual(values = adjust_ltc("shuggie", -15, c(1,3)))

## End(Not run)
```

bird *Plot a Colour Palette as a Bird*

Description

Visualizes a selected colour palette in the form of a bird drawing.

Usage

```
bird(chrom)
```

Arguments

chrom	A vector of colours from one of the ltc palettes.

Value

A ggplot2 object showing a bird drawing using the selected colours.

Examples

```
## Not run:
paloma <- ltc("paloma")
bird(paloma)

## End(Not run)
```

custom_adjust_ltc *Create Custom Palette with Individual Color Adjustments*

Description

Apply different lightness adjustments to each color in a palette.

Usage

```
custom_adjust_ltc(palette_name, adjustments)
```

Arguments

palette_name	Character. Name of the ltc palette.
adjustments	Numeric vector. Lightness adjustments for each color (-100 to 100). Length must match the palette length.

Value

A vector of adjusted hex color codes with class "palette"

Examples

```
## Not run:
# Darken first color, lighten third, leave others unchanged
custom <- custom_adjust_ltc("remains", c(-30, 0, 40, 0))
pltc(custom)

# Create gradient effect
gradient <- custom_adjust_ltc("maya", c(-40, -20, 0, 20, 40))
pltc(gradient)

## End(Not run)
```

`desaturate_ltc` *Desaturate Palette Colors*

Description

Reduce color saturation (make colors more gray).

Usage

```
desaturate_ltc(palette_name, amount = 0.5, which = NULL)
```

Arguments

`palette_name`	Character. Name of the ltc palette.
`amount`	Numeric. Desaturation amount (0 to 1). 0 = no change, 1 = completely gray.
`which`	Integer vector. Which colors to desaturate. If NULL (default), affects all colors.

Value

A vector of desaturated hex color codes

Examples

```
## Not run:
# Desaturate entire palette by 50%
gray_ish <- desaturate_ltc("luminaries", 0.5)
pltc(gray_ish)

# Desaturate only first two colors
mixed <- desaturate_ltc("heatmap2", 0.7, which = c(1, 2))

## End(Not run)
```

info *Information about the Colour Palettes*

Description

This dataframe contains the backstory or inspiration behind each color palette.

Usage

```
info
```

Format

An object of class `data.frame` with 33 rows and 2 columns.

ltc *List of colour palettes*

Description

A list containing predefined colour palettes with artistic backstories.

This function provides the desired colour palette by name.

Usage

```
palettes

ltc(name, n, type = c("discrete", "continuous"))
```

Arguments

`name`	Character. The name of the desired palette.
`n`	Integer. The number of colors you want from the palette. If omitted, it uses all colors from the palette.
`type`	The type of palette. Either "discrete" or "continuous".

Format

An object of class `list` of length 33.

Details

ltc: A Collection of Art-inspired Colour Palettes

This package provides a collection of color palettes inspired by art, nature, and personal preferences. Each palette has a backstory, providing context and meaning to the colors.

Value

A vector of hex color codes

Examples

```
## Not run:
ltc("paloma")
ltc("dora", n = 3)

## End(Not run)
```

`pltc` *Plot a Colour Palette*

Description

Visualizes a selected colour palette as a bar of colours.

Usage

```
pltc(chromata, ...)
```

Arguments

`chromata`	A vector of colours from one of the `ltc` palettes.
`...`	Additional arguments passed on to ggplot functions.

Value

A ggplot2 object showing the selected colours.

Examples

```
## Not run:
paloma <- ltc("paloma")
pltc(paloma)

## End(Not run)
```

`plts` *Plot a Colour Palette as a Sinus Curve*

Description

Visualizes a selected colour palette as a sinusoidal curve.

Usage

```
plts(chromata, ...)
```

Arguments

`chromata`	A vector of colours from one of the `ltc` palettes.
`...`	Additional arguments passed on to ggplot functions.

Value

A sinusoidal curve with the selected colors.

Examples

```
## Not run:
paloma <- ltc("paloma")
plts(paloma)

## End(Not run)
```