Package 'ggsci'

May 8, 2026

Type Package

Title Scientific Journal and Sci-Fi Themed Color Palettes for 'ggplot2'

Version 5.0.0

Maintainer Nan Xiao <me@nanx.me>

Description A collection of 'ggplot2' color palettes inspired by plots in scientific journals, data visualization libraries, science fiction movies, and TV shows.

License GPL (>= 3)

URL https://nanx.me/ggsci/, https://github.com/nanxstats/ggsci

BugReports https://github.com/nanxstats/ggsci/issues

Depends R (>= 3.5.0)

Imports ggplot2 (>= 2.0.0), grDevices, rlang, scales

Suggests gridExtra, knitr, ragg, rmarkdown

VignetteBuilder knitr

Encoding UTF-8

RoxygenNote 7.3.3

NeedsCompilation no

Author Nan Xiao [aut, cre, cph] (ORCID: <https://orcid.org/0000-0002-0250-5673>), Joshua Cook [ctb], Clara Jégousse [ctb], Hui Chen [ctb], Miaozhu Li [ctb], iTerm2-Color-Schemes contributors [ctb, cph] (iTerm2-Color-Schemes project), Winston Chang [ctb, cph] (staticimports.R)

Repository CRAN

Date/Publication 2026-04-17 05:20:02 UTC

Contents

`example_scatterplot` *Example plots for discrete color palettes*

Description

Utility functions that return simple ggplot2 examples to demonstrate discrete color/fill scales.

Usage

```
example_scatterplot()

example_barplot()
```

Details

- `example_scatterplot()` creates a scatter plot of large diamonds (`carat >= 2.2`), mapping `table` to the x-axis, `price` to the y-axis, and `cut` to color.
- `example_barplot()` creates a side-by-side bar chart of diamond counts by `color`, grouped by `cut` via fill.

Value

A `ggplot` object.

Examples

```
example_scatterplot()
example_barplot()
```

`gephi_palettes` *Gephi generative palette names*

Description

Gephi generative palette names

Usage

```
gephi_palettes()
```

Value

Character vector of Gephi generative palette identifiers.

Examples

```
gephi_palettes()
```

`iterm_palettes` *iTerm color palette names*

Description

iTerm color palette names

Usage

```
iterm_palettes()
```

Value

Character vector of palette names.

Examples

```
iterm_palettes()
```

pal_aaas *AAAS journal color palettes*

Description

Color palettes inspired by plots in journals published by American Association for the Advancement of Science (AAAS), such as *Science* and *Science Translational Medicine*.

Usage

```
pal_aaas(palette = c("default"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (10-color palette inspired by *Science*).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_aaas("default")(10))
show_col(pal_aaas("default", alpha = 0.6)(10))
```

pal_atlassian *Atlassian Design System palette*

Description

The Atlassian Design System categorical data visualization palette.

Usage

```
pal_atlassian(palette = c("categorical8"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "categorical8" (8-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

Atlassian (2025). "Atlassian Design System categorical chart colors." https://atlassian.design/foundations/color-new/data-visualization-color

Examples

```
library("scales")
show_col(pal_atlassian("categorical8")(8))
show_col(pal_atlassian("categorical8", alpha = 0.6)(8))
```

---

pal_bmj *BMJ color palettes*

Description

Color palette from the BMJ living style guide.

Usage

```
pal_bmj(palette = c("default"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (9-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Hui Chen | <huichen@zju.edu.cn>

References

https://github.com/BMJ-Ltd/living-style-guide

Examples

```
library("scales")
show_col(pal_bmj("default")(9))
show_col(pal_bmj("default", alpha = 0.6)(9))
```

pal_bs5 *Bootstrap 5 color palettes*

Description

Bootstrap 5 color palettes.

Usage

```
pal_bs5(
 palette = c("blue", "indigo", "purple", "pink", "red", "orange", "yellow", "green",
    "teal", "cyan", "gray"),
  n = 10,
  alpha = 1,
  reverse = FALSE
)
```

Arguments

palette	Palette type. There are 11 available options: • "blue" • "indigo" • "purple" • "pink" • "red" • "orange" • "yellow" • "green" • "teal" • "cyan" • "gray"
n	Number of individual colors to be generated.
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_bs5("indigo")(10))
show_col(pal_bs5("indigo", n = 30, alpha = 0.6, reverse = TRUE)(30))
```

pal_cosmic *COSMIC color palettes*

Description

Color palettes inspired by the colors used in projects from the Catalogue Of Somatic Mutations in Cancers (COSMIC).

Usage

```
pal_cosmic(
  palette = c("hallmarks_light", "hallmarks_dark", "signature_substitutions"),
  alpha = 1
)
```

Arguments

palette	Palette type. Currently there are three available options: • "signature_substitutions" (6-color palette). • "hallmarks_light" (10-color palette). • "hallmarks_dark" (10-color palette). The "hallmarks_light" option is from Hanahan and Weinberg (2011).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Joshua H. Cook | <joshuacook0023@gmail.com> | @jhrcook

Examples

```
library("scales")
show_col(pal_cosmic("hallmarks_light")(10))
show_col(pal_cosmic("hallmarks_light", alpha = 0.6)(10))
show_col(pal_cosmic("hallmarks_dark")(10))
show_col(pal_cosmic("hallmarks_dark", alpha = 0.6)(10))
show_col(pal_cosmic("signature_substitutions")(6))
show_col(pal_cosmic("signature_substitutions", alpha = 0.6)(6))
```

pal_d3 *D3.js color palettes*

Description

Color palettes based on the colors used by D3.js.

Usage

```
pal_d3(
  palette = c("category10", "category20", "category20b", "category20c"),
  alpha = 1
)
```

Arguments

palette	Palette type. There are four available options: • "category10" (10-color palette). • "category20" (20-color palette). • "category20b" (20-color palette). • "category20c" (20-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

https://github.com/d3/d3-3.x-api-reference/blob/master/Ordinal-Scales.md

Examples

```
library("scales")
show_col(pal_d3("category10")(10))
show_col(pal_d3("category20")(20))
show_col(pal_d3("category20b")(20))
show_col(pal_d3("category20c")(20))
```

pal_flatui *Flat UI color palettes*

Description

Color palettes inspired by the Flat UI colors.

Usage

```
pal_flatui(palette = c("default", "flattastic", "aussie"), alpha = 1)
```

Arguments

palette	Palette type. Currently there are three available options: • "default" (10-color palette). • "flattastic" (12-color palette). • "aussie" (10-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Clara Jégousse | <cat3@hi.is>

Examples

```
library("scales")
show_col(pal_flatui("default")(10))
show_col(pal_flatui("flattastic")(12))
show_col(pal_flatui("aussie")(10))
show_col(pal_flatui("aussie", alpha = 0.6)(10))
```

pal_frontiers *Frontiers journal color palettes*

Description

Color palettes inspired by the colors used in *Frontiers* journals.

Usage

```
pal_frontiers(palette = c("default"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (10-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Clara Jégousse | <cat3@hi.is>

Examples

```
library("scales")
show_col(pal_frontiers("default")(7))
show_col(pal_frontiers("default", alpha = 0.6)(7))
```

---

pal_futurama *Futurama color palettes*

Description

Color palettes inspired by the colors used in *Futurama*.

Usage

```
pal_futurama(palette = c("planetexpress"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "planetexpress" (12-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_futurama("planetexpress")(12))
show_col(pal_futurama("planetexpress", alpha = 0.6)(12))
```

pal_gephi *Gephi color palettes*

Description

Generative discrete color palettes adapted from the palette engine in Gephi. These palettes are designed to generate visually distinct colors for an arbitrary number of categories.

Usage

```
pal_gephi(palette = gephi_palettes(), alpha = 1)
```

Arguments

palette	Palette type. See gephi_palettes() for available options.
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Details

The Gephi palette generator uses the current R random number state directly. If you need reproducible results, call base::set.seed() before creating a palette or evaluating the scale. To isolate RNG side effects, consider using withr::with_seed().

Examples

```
library("scales")
set.seed(42)
show_col(pal_gephi("default")(10))
show_col(pal_gephi("fancy_light")(20))
```

pal_gsea *The GSEA GenePattern color palettes*

Description

Color palette inspired by the colors used in the heatmaps plotted by GSEA GenePattern.

Usage

```
pal_gsea(palette = c("default"), n = 12, alpha = 1, reverse = FALSE)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (continuous palette with 12 base colors).
n	Number of individual colors to be generated.
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_gsea("default")(12))
show_col(pal_gsea("default", n = 30, alpha = 0.6, reverse = TRUE)(30))
```

---

pal_igv *Integrative Genomics Viewer (IGV) color palettes*

Description

Color palettes based on the colors used by Integrative Genomics Viewer (IGV).

Usage

```
pal_igv(palette = c("default", "alternating"), alpha = 1)
```

Arguments

palette	Palette type. There are two available options: • "default" (51-color palette). • "alternating" (2-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

James T. Robinson, Helga Thorvaldsdóttir, Wendy Winckler, Mitchell Guttman, Eric S. Lander, Gad Getz, Jill P. Mesirov. Integrative Genomics Viewer. *Nature Biotechnology* 29, 24–26 (2011).

Examples

```
library("scales")
show_col(pal_igv("default")(51))
show_col(pal_igv("alternating")(2))
```

`pal_iterm` *iTerm color palettes*

Description

ANSI terminal color palettes sourced from the iterm2-color-schemes project. Each theme provides normal and bright variants.

Usage

```
pal_iterm(
  palette = iterm_palettes(),
  variant = c("normal", "bright"),
  alpha = 1
)
```

Arguments

`palette`	Palette name. See `iterm_palettes()` for available options.
`variant`	Variant of the palette. One of `"normal"`, `"bright"`.
`alpha`	Transparency level, a real number in (0, 1]. See `alpha` in `grDevices::rgb()` for details.

Details

Preview all available iTerm color palettes in ggsci: https://nanx.me/ggsci-iterm/.

References

https://github.com/mbadolato/iTerm2-Color-Schemes

Examples

```
library("scales")
show_col(pal_iterm("Rose Pine")(6))
show_col(pal_iterm("Rose Pine", variant = "bright", alpha = 0.7)(6))
```

pal_jama *Journal of the American Medical Association color palettes*

Description

Color palette inspired by plots in *The Journal of the American Medical Association*.

Usage

```
pal_jama(palette = c("default"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (7-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_jama("default")(7))
show_col(pal_jama("default", alpha = 0.6)(7))
```

pal_jco *Journal of Clinical Oncology color palettes*

Description

Color palette inspired by plots in *Journal of Clinical Oncology*.

Usage

```
pal_jco(palette = c("default"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (10-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_jco("default")(10))
show_col(pal_jco("default", alpha = 0.6)(10))
```

---

pal_lancet *Lancet journal color palettes*

Description

Color palettes inspired by plots in Lancet journals, such as *Lancet Oncology*.

Usage

```
pal_lancet(palette = c("lanonc"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "lanonc" (9-color palette inspired by *Lancet Oncology*).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_lancet("lanonc")(9))
show_col(pal_lancet("lanonc", alpha = 0.6)(9))
```

pal_locuszoom *LocusZoom color palette*

Description

Color palettes based on the colors used by LocusZoom.

Usage

```
pal_locuszoom(palette = c("default"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (7-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

Pruim, Randall J., et al. (2010). LocusZoom: regional visualization of genome-wide association scan results. *Bioinformatics*, 26(18), 2336–2337.

Examples

```
library("scales")
show_col(pal_locuszoom("default")(7))
show_col(pal_locuszoom("default", alpha = 0.6)(7))
```

pal_material *Material Design color palettes*

Description

Material Design 2 color palettes.

Usage

```
pal_material(
  palette = c("red", "pink", "purple", "deep-purple", "indigo", "blue", "light-blue",
    "cyan", "teal", "green", "light-green", "lime", "yellow", "amber", "orange",
    "deep-orange", "brown", "grey", "blue-grey"),
  n = 10,
  alpha = 1,
  reverse = FALSE
)
```

Arguments

palette	Palette type. There are 19 available options: • "red" • "pink" • "purple" • "deep-purple" • "indigo" • "blue" • "light-blue" • "cyan" • "teal" • "green" • "light-green" • "lime" • "yellow" • "amber" • "orange" • "deep-orange" • "brown" • "grey" • "blue-grey"
n	Number of individual colors to be generated.
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_material("indigo")(10))
show_col(pal_material("indigo", n = 30, alpha = 0.6, reverse = TRUE)(30))
```

pal_nejm *NEJM color palettes*

Description

Color palette inspired by plots in *The New England Journal of Medicine*.

Usage

```
pal_nejm(palette = c("default"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (8-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_nejm("default")(8))
show_col(pal_nejm("default", alpha = 0.6)(8))
```

pal_npg *NPG journal color palettes*

Description

Color palettes inspired by plots in journals published by Nature Publishing Group, such as *Nature Reviews Cancer*.

Usage

```
pal_npg(palette = c("nrc"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "nrc" (10-color palette inspired by *Nature Reviews Cancer*).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_npg("nrc")(10))
show_col(pal_npg("nrc", alpha = 0.6)(10))
```

`pal_observable` *Observable 10 color palette*

Description

The Observable 10 palette.

Usage

```
pal_observable(palette = c("observable10"), alpha = 1)
```

Arguments

`palette`	Palette type. Currently there is one available option: `"observable10"` (10-color palette).
`alpha`	Transparency level, a real number in (0, 1]. See `alpha` in `grDevices::rgb()` for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

Pettiross J (2023). "Crafting data colors and staying on brand." *Observable blog*. https://observablehq.com/blog/crafting-data-colors

Examples

```
library("scales")
show_col(pal_observable("observable10")(10))
show_col(pal_observable("observable10", alpha = 0.6)(10))
```

pal_primer *Primer design system palette*

Description

The Primer design system data visualization palette.

Usage

```
pal_primer(palette = c("mark17"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "mark17" (17-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

GitHub (2025). "Primer data visualization colors." https://primer.style/product/ui-patterns/data-visualization/

Examples

```
library("scales")
show_col(pal_primer("mark17")(17))
show_col(pal_primer("mark17", alpha = 0.6)(17))
```

pal_rickandmorty *Rick and Morty color palettes*

Description

Color palettes inspired by the colors used in *Rick and Morty*.

Usage

```
pal_rickandmorty(palette = c("schwifty"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "schwifty" (12-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_rickandmorty("schwifty")(12))
show_col(pal_rickandmorty("schwifty", alpha = 0.6)(12))
```

---

pal_simpsons *The Simpsons color palettes*

Description

Color palettes inspired by the colors used in *The Simpsons*.

Usage

```
pal_simpsons(palette = c("springfield"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "springfield" (16-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_simpsons("springfield")(16))
show_col(pal_simpsons("springfield", alpha = 0.6)(16))
```

pal_startrek *Star Trek color palettes*

Description

Color palettes inspired by the colors used in *Star Trek*.

Usage

```
pal_startrek(palette = c("uniform"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "uniform" (7-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_startrek("uniform")(7))
show_col(pal_startrek("uniform", alpha = 0.6)(7))
```

pal_tron *Tron Legacy color palettes*

Description

Color palettes inspired by the colors used in *Tron Legacy*.

Usage

```
pal_tron(palette = c("legacy"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "legacy" (7-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_tron("legacy")(7))
show_col(pal_tron("legacy", alpha = 0.6)(7))
```

`pal_tw3` *Tailwind CSS color palettes*

Description

Tailwind CSS color palettes.

Usage

```
pal_tw3(
  palette = c("slate", "gray", "zinc", "neutral", "stone", "red", "orange", "amber",
    "yellow", "lime", "green", "emerald", "teal", "cyan", "sky", "blue", "indigo",
     "violet", "purple", "fuchsia", "pink", "rose"),
  n = 10,
  alpha = 1,
  reverse = FALSE
)
```

Arguments

`palette` Palette type. There are 22 available options:

- `"slate"`
- `"gray"`
- `"zinc"`
- `"neutral"`
- `"stone"`
- `"red"`
- `"orange"`
- `"amber"`
- `"yellow"`
- `"lime"`
- `"green"`
- `"emerald"`
- `"teal"`
- `"cyan"`
- `"sky"`

- "blue"
- "indigo"
- "violet"
- "purple"
- "fuchsia"
- "pink"
- "rose"

n	Number of individual colors to be generated.
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_tw3("rose")(10))
show_col(pal_tw3("rose", n = 30, alpha = 0.6, reverse = TRUE)(30))
```

---

pal_uchicago *The University of Chicago color palettes*

Description

Color palettes based on the colors used by the University of Chicago.

Usage

```
pal_uchicago(palette = c("default", "light", "dark"), alpha = 1)
```

Arguments

palette	Palette type. There are three available options:
	• "default" (9-color palette);
	• "light" (9-color light palette);
	• "dark" (9-color dark palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

https://news.uchicago.edu/sites/default/files/UCM_UniversityIdentityGuidelines_2-2020.pdf

Examples

```
library("scales")
show_col(pal_uchicago("default")(9))
show_col(pal_uchicago("light")(9))
show_col(pal_uchicago("dark")(9))
```

---

pal_ucscgb *UCSC Genome Browser color palette*

Description

Color palette from UCSC Genome Browser chromosome colors.

Usage

```
pal_ucscgb(palette = c("default"), alpha = 1)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (26-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_ucscgb("default")(26))
show_col(pal_ucscgb("default", alpha = 0.6)(26))
```

rgb_bs5 *Bootstrap 5 color palettes*

Description

Bootstrap 5 color palettes.

Usage

```
rgb_bs5(
 palette = c("blue", "indigo", "purple", "pink", "red", "orange", "yellow", "green",
    "teal", "cyan", "gray"),
  n = 10,
  alpha = 1,
  reverse = FALSE
)
```

Arguments

palette	Palette type. There are 11 available options: • "blue" • "indigo" • "purple" • "pink" • "red" • "orange" • "yellow" • "green" • "teal" • "cyan" • "gray"
n	Number of individual colors to be generated.
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

https://getbootstrap.com/docs/5.3/customize/color/#all-colors

Examples

```
library("scales")
show_col(pal_bs5("indigo")(10))
show_col(pal_bs5("indigo", n = 30, alpha = 0.6, reverse = TRUE)(30))
```

---

rgb_gsea *The GSEA GenePattern color palettes*

Description

Color palette inspired by the colors used in the heatmaps plotted by GSEA GenePattern.

Usage

```
rgb_gsea(palette = c("default"), n = 12, alpha = 1, reverse = FALSE)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (continuous palette with 12 base colors).
n	Number of individual colors to be generated.
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?

Note

The 12 base colors used in this palette are derived from the HeatMapImage documentation.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("scales")
show_col(pal_gsea("default")(12))
show_col(pal_gsea("default", n = 30, alpha = 0.6, reverse = TRUE)(30))
```

rgb_material *Material Design color palettes*

Description

Material Design 2 color palettes.

Usage

```
rgb_material(
 palette = c("red", "pink", "purple", "deep-purple", "indigo", "blue", "light-blue",
   "cyan", "teal", "green", "light-green", "lime", "yellow", "amber", "orange",
   "deep-orange", "brown", "grey", "blue-grey"),
 n = 10,
 alpha = 1,
 reverse = FALSE
)
```

Arguments

palette	Palette type. There are 19 available options: • "red" • "pink" • "purple" • "deep-purple" • "indigo" • "blue" • "light-blue" • "cyan" • "teal" • "green" • "light-green" • "lime" • "yellow" • "amber" • "orange" • "deep-orange" • "brown" • "grey" • "blue-grey"
n	Number of individual colors to be generated.
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

https://m2.material.io/design/color/the-color-system.html

Examples

```
library("scales")
show_col(pal_material("indigo")(10))
show_col(pal_material("indigo", n = 30, alpha = 0.6, reverse = TRUE)(30))
```

---

rgb_tw3 *Tailwind CSS color palettes*

Description

Tailwind CSS color palettes.

Usage

```
rgb_tw3(
 palette = c("slate", "gray", "zinc", "neutral", "stone", "red", "orange", "amber",
   "yellow", "lime", "green", "emerald", "teal", "cyan", "sky", "blue", "indigo",
    "violet", "purple", "fuchsia", "pink", "rose"),
  n = 10,
  alpha = 1,
  reverse = FALSE
)
```

Arguments

palette Palette type. There are 22 available options:

- "slate"
- "gray"
- "zinc"
- "neutral"
- "stone"
- "red"
- "orange"
- "amber"
- "yellow"
- "lime"
- "green"

- "emerald"
- "teal"
- "cyan"
- "sky"
- "blue"
- "indigo"
- "violet"
- "purple"
- "fuchsia"
- "pink"
- "rose"

n	Number of individual colors to be generated.
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

https://tailwindcss.com/docs/customizing-colors

Examples

```
library("scales")
show_col(pal_tw3("rose")(10))
show_col(pal_tw3("rose", n = 30, alpha = 0.6, reverse = TRUE)(30))
```

---

scale_color_aaas *AAAS journal color scales*

Description

See pal_aaas() for details.

Usage

```
scale_color_aaas(palette = c("default"), alpha = 1, ...)

scale_colour_aaas(palette = c("default"), alpha = 1, ...)

scale_fill_aaas(palette = c("default"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (10-color palette inspired by *Science*).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_aaas()
example_barplot() + scale_fill_aaas()
```

---

scale_color_atlassian *Atlassian Design System color scales*

Description

See pal_atlassian() for details.

Usage

```
scale_color_atlassian(palette = c("categorical8"), alpha = 1, ...)

scale_colour_atlassian(palette = c("categorical8"), alpha = 1, ...)

scale_fill_atlassian(palette = c("categorical8"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "categorical8" (8-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

Atlassian (2025). "Atlassian Design System categorical chart colors." https://atlassian.design/foundations/color-new/data-visualization-color

Examples

```
example_scatterplot() + scale_color_atlassian()
example_barplot() + scale_fill_atlassian()
```

`scale_color_bmj` *BMJ color scales*

Description

See `pal_bmj()` for details.

Usage

```
scale_color_bmj(palette = c("default"), alpha = 1, ...)

scale_colour_bmj(palette = c("default"), alpha = 1, ...)

scale_fill_bmj(palette = c("default"), alpha = 1, ...)
```

Arguments

`palette`	Palette type. Currently there is one available option: `"default"` (9-color palette).
`alpha`	Transparency level, a real number in (0, 1]. See `alpha` in `grDevices::rgb()` for details.
`...`	Additional parameters for `ggplot2::discrete_scale()`.

Author(s)

Hui Chen | <huichen@zju.edu.cn>

References

https://github.com/BMJ-Ltd/living-style-guide

Examples

```
example_scatterplot() + scale_color_bmj()
example_barplot() + scale_fill_bmj()
```

scale_color_bs5 *Bootstrap 5 color scales*

Description

See pal_bs5() for details.

Usage

```
scale_color_bs5(
 palette = c("blue", "indigo", "purple", "pink", "red", "orange", "yellow", "green",
    "teal", "cyan", "gray"),
  alpha = 1,
  reverse = FALSE,
  ...
)

scale_colour_bs5(
 palette = c("blue", "indigo", "purple", "pink", "red", "orange", "yellow", "green",
    "teal", "cyan", "gray"),
  alpha = 1,
  reverse = FALSE,
  ...
)

scale_fill_bs5(
 palette = c("blue", "indigo", "purple", "pink", "red", "orange", "yellow", "green",
    "teal", "cyan", "gray"),
  alpha = 1,
  reverse = FALSE,
  ...
)
```

Arguments

palette Palette type. There are 11 available options:

- "blue"
- "indigo"
- "purple"
- "pink"
- "red"
- "orange"
- "yellow"
- "green"
- "teal"

- "cyan"
- "gray"

alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("ggplot2")

data("mtcars")
cor <- abs(cor(mtcars))
cor_melt <- data.frame(
  Var1 = rep(seq_len(nrow(cor)), times = ncol(cor)),
  Var2 = rep(seq_len(ncol(cor)), each = nrow(cor)),
  value = as.vector(cor)
)

ggplot(
  cor_melt,
  aes(x = Var1, y = Var2, fill = value)
) +
  geom_tile(colour = "black", size = 0.3) +
  theme_bw() +
  scale_fill_bs5("teal")
```

---

scale_color_cosmic *COSMIC color scales*

Description

See pal_cosmic() for details.

Usage

```
scale_color_cosmic(
  palette = c("hallmarks_light", "hallmarks_dark", "signature_substitutions"),
  alpha = 1,
  ...
)

scale_colour_cosmic(
  palette = c("hallmarks_light", "hallmarks_dark", "signature_substitutions"),
```

```
  alpha = 1,
  ...
)

scale_fill_cosmic(
  palette = c("hallmarks_light", "hallmarks_dark", "signature_substitutions"),
  alpha = 1,
  ...
)
```

Arguments

palette	Palette type. Currently there are three available options: • "signature_substitutions" (6-color palette). • "hallmarks_light" (10-color palette). • "hallmarks_dark" (10-color palette). The "hallmarks_light" option is from Hanahan and Weinberg (2011).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Joshua H. Cook | <joshuacook0023@gmail.com> | @jhrcook

Examples

```
example_scatterplot() + scale_color_cosmic()
example_barplot() + scale_fill_cosmic()
```

---

scale_color_d3 *D3.js color scales*

Description

See pal_d3() for details.

Usage

```
scale_color_d3(
  palette = c("category10", "category20", "category20b", "category20c"),
  alpha = 1,
  ...
)

scale_colour_d3(
```

```
  palette = c("category10", "category20", "category20b", "category20c"),
  alpha = 1,
  ...
)

scale_fill_d3(
  palette = c("category10", "category20", "category20b", "category20c"),
  alpha = 1,
  ...
)
```

Arguments

palette	Palette type. There are four available options: • "category10" (10-color palette). • "category20" (20-color palette). • "category20b" (20-color palette). • "category20c" (20-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

https://github.com/d3/d3-3.x-api-reference/blob/master/Ordinal-Scales.md

Examples

```
p1 <- example_scatterplot()
p2 <- example_barplot()

p1 + scale_color_d3()
p2 + scale_fill_d3()

p1 + scale_color_d3(palette = "category20")
p2 + scale_fill_d3(palette = "category20")

p1 + scale_color_d3(palette = "category20b")
p2 + scale_fill_d3(palette = "category20b")

p1 + scale_color_d3(palette = "category20c")
p2 + scale_fill_d3(palette = "category20c")
```

scale_color_flatui *Flat UI color scales*

Description

See pal_flatui() for details.

Usage

```
scale_color_flatui(
  palette = c("default", "flattastic", "aussie"),
  alpha = 1,
  ...
)

scale_colour_flatui(
  palette = c("default", "flattastic", "aussie"),
  alpha = 1,
  ...
)

scale_fill_flatui(
  palette = c("default", "flattastic", "aussie"),
  alpha = 1,
  ...
)
```

Arguments

palette	Palette type. Currently there are three available options: • "default" (10-color palette). • "flattastic" (12-color palette). • "aussie" (10-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Clara Jégousse | <cat3@hi.is>

Examples

```
p1 <- example_scatterplot()
p2 <- example_barplot()
```

```
p1 + scale_color_flatui()
p2 + scale_fill_flatui()

p1 + scale_color_flatui(palette = "default")
p2 + scale_fill_flatui(palette = "default")

p1 + scale_color_flatui(palette = "flattastic")
p2 + scale_fill_flatui(palette = "flattastic")

p1 + scale_color_flatui(palette = "aussie")
p2 + scale_fill_flatui(palette = "aussie")
```

`scale_color_frontiers` *Frontiers journal color scales*

Description

See `pal_frontiers()` for details.

Usage

```
scale_color_frontiers(palette = c("default"), alpha = 1, ...)

scale_colour_frontiers(palette = c("default"), alpha = 1, ...)

scale_fill_frontiers(palette = c("default"), alpha = 1, ...)
```

Arguments

`palette`	Palette type. Currently there is one available option: `"default"` (10-color palette).
`alpha`	Transparency level, a real number in (0, 1]. See `alpha` in `grDevices::rgb()` for details.
`...`	Additional parameters for `ggplot2::discrete_scale()`.

Author(s)

Clara Jégousse | <cat3@hi.is>

Examples

```
example_scatterplot() +
  ggplot2::theme_dark() +
  ggplot2::theme(
    panel.background = ggplot2::element_rect(fill = "#2D2D2D"),
    legend.key = ggplot2::element_rect(fill = "#2D2D2D")
  ) +
  scale_color_frontiers()
```

```
example_barplot() +
  ggplot2::theme_dark() +
  ggplot2::theme(
    panel.background = ggplot2::element_rect(fill = "#2D2D2D")
  ) +
  scale_fill_frontiers()
```

`scale_color_futurama` *Futurama color scales*

Description

See `pal_futurama()` for details.

Usage

```
scale_color_futurama(palette = c("planetexpress"), alpha = 1, ...)

scale_colour_futurama(palette = c("planetexpress"), alpha = 1, ...)

scale_fill_futurama(palette = c("planetexpress"), alpha = 1, ...)
```

Arguments

`palette`	Palette type. Currently there is one available option: `"planetexpress"` (12-color palette).
`alpha`	Transparency level, a real number in (0, 1]. See `alpha` in `grDevices::rgb()` for details.
`...`	Additional parameters for `ggplot2::discrete_scale()`.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_futurama()
example_barplot() + scale_fill_futurama()
```

scale_color_gephi *Gephi color scales*

Description

See pal_gephi() for details.

Usage

```
scale_color_gephi(palette = gephi_palettes(), alpha = 1, ...)

scale_colour_gephi(palette = gephi_palettes(), alpha = 1, ...)

scale_fill_gephi(palette = gephi_palettes(), alpha = 1, ...)
```

Arguments

palette	Palette type. See gephi_palettes() for available options.
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Examples

```
set.seed(42)
example_scatterplot() + scale_color_gephi()
example_barplot() + scale_fill_gephi("fancy_light")
```

scale_color_gsea *The GSEA GenePattern color scales*

Description

See pal_gsea() for details.

Usage

```
scale_color_gsea(palette = c("default"), alpha = 1, reverse = FALSE, ...)

scale_colour_gsea(palette = c("default"), alpha = 1, reverse = FALSE, ...)

scale_fill_gsea(palette = c("default"), alpha = 1, reverse = FALSE, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (continuous palette with 12 base colors).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("ggplot2")

data("mtcars")
cor <- cor(mtcars)
cor_melt <- data.frame(
  Var1 = rep(seq_len(nrow(cor)), times = ncol(cor)),
  Var2 = rep(seq_len(ncol(cor)), each = nrow(cor)),
  value = as.vector(cor)
)

ggplot(
  cor_melt,
  aes(x = Var1, y = Var2, fill = value)
) +
  geom_tile(colour = "black", size = 0.3) +
  theme_bw() +
  scale_fill_gsea()
```

---

scale_color_igv *Integrative Genomics Viewer (IGV) color scales*

Description

See pal_igv() for details.

Usage

```
scale_color_igv(palette = c("default", "alternating"), alpha = 1, ...)

scale_colour_igv(palette = c("default", "alternating"), alpha = 1, ...)

scale_fill_igv(palette = c("default", "alternating"), alpha = 1, ...)
```

Arguments

palette	Palette type. There are two available options: • "default" (51-color palette). • "alternating" (2-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
p1 <- example_scatterplot()
p2 <- example_barplot()

p1 + scale_color_igv()
p2 + scale_fill_igv()

p1 + ggplot2::scale_colour_manual(
  values = rep(pal_igv("alternating")(2), times = 3)
)
p2 + ggplot2::scale_fill_manual(
  values = rep(pal_igv("alternating")(2), times = 3)
)
```

---

scale_color_iterm *iTerm color scales*

Description

See pal_iterm() for details.

Usage

```
scale_color_iterm(
  palette = iterm_palettes(),
  variant = c("normal", "bright"),
  alpha = 1,
  ...
)

scale_colour_iterm(
  palette = iterm_palettes(),
  variant = c("normal", "bright"),
  alpha = 1,
```

```
  ...
)

scale_fill_iterm(
  palette = iterm_palettes(),
  variant = c("normal", "bright"),
  alpha = 1,
  ...
)
```

Arguments

palette	Palette name. See iterm_palettes() for available options.
variant	Variant of the palette. One of "normal", "bright".
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Details

Preview all available iTerm color palettes in ggsci: https://nanx.me/ggsci-iterm/.

Examples

```
example_scatterplot() + scale_color_iterm("Rose Pine")
example_barplot() + scale_fill_iterm("Rose Pine")
```

---

scale_color_jama *Journal of the American Medical Association color scales*

Description

See pal_jama() for details.

Usage

```
scale_color_jama(palette = c("default"), alpha = 1, ...)

scale_colour_jama(palette = c("default"), alpha = 1, ...)

scale_fill_jama(palette = c("default"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (7-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_jama()
example_barplot() + scale_fill_jama()
```

`scale_color_jco` *Journal of Clinical Oncology color scales*

Description

See `pal_jco()` for details.

Usage

```
scale_color_jco(palette = c("default"), alpha = 1, ...)

scale_colour_jco(palette = c("default"), alpha = 1, ...)

scale_fill_jco(palette = c("default"), alpha = 1, ...)
```

Arguments

`palette`	Palette type. Currently there is one available option: `"default"` (10-color palette).
`alpha`	Transparency level, a real number in (0, 1]. See `alpha` in `grDevices::rgb()` for details.
`...`	Additional parameters for `ggplot2::discrete_scale()`.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_jco()
example_barplot() + scale_fill_jco()
```

scale_color_lancet *Lancet journal color scales*

Description

See pal_lancet() for details.

Usage

```
scale_color_lancet(palette = c("lanonc"), alpha = 1, ...)

scale_colour_lancet(palette = c("lanonc"), alpha = 1, ...)

scale_fill_lancet(palette = c("lanonc"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "lanonc" (9-color palette inspired by *Lancet Oncology*).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_lancet()
example_barplot() + scale_fill_lancet()
```

scale_color_locuszoom *LocusZoom color scales*

Description

See pal_locuszoom() for details.

Usage

```
scale_color_locuszoom(palette = c("default"), alpha = 1, ...)

scale_colour_locuszoom(palette = c("default"), alpha = 1, ...)

scale_fill_locuszoom(palette = c("default"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (7-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_locuszoom()
example_barplot() + scale_fill_locuszoom()
```

---

scale_color_material *Material Design color scales*

Description

See pal_material() for details.

Usage

```
scale_color_material(
  palette = c("red", "pink", "purple", "deep-purple", "indigo", "blue", "light-blue",
    "cyan", "teal", "green", "light-green", "lime", "yellow", "amber", "orange",
    "deep-orange", "brown", "grey", "blue-grey"),
  alpha = 1,
  reverse = FALSE,
  ...
)

scale_colour_material(
  palette = c("red", "pink", "purple", "deep-purple", "indigo", "blue", "light-blue",
    "cyan", "teal", "green", "light-green", "lime", "yellow", "amber", "orange",
    "deep-orange", "brown", "grey", "blue-grey"),
  alpha = 1,
  reverse = FALSE,
  ...
)

scale_fill_material(
  palette = c("red", "pink", "purple", "deep-purple", "indigo", "blue", "light-blue",
    "cyan", "teal", "green", "light-green", "lime", "yellow", "amber", "orange",
    "deep-orange", "brown", "grey", "blue-grey"),
```

```
  alpha = 1,
  reverse = FALSE,
  ...
)
```

Arguments

palette	Palette type. There are 19 available options: • "red" • "pink" • "purple" • "deep-purple" • "indigo" • "blue" • "light-blue" • "cyan" • "teal" • "green" • "light-green" • "lime" • "yellow" • "amber" • "orange" • "deep-orange" • "brown" • "grey" • "blue-grey"
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("ggplot2")

data("mtcars")
cor <- abs(cor(mtcars))
cor_melt <- data.frame(
  Var1 = rep(seq_len(nrow(cor)), times = ncol(cor)),
  Var2 = rep(seq_len(ncol(cor)), each = nrow(cor)),
  value = as.vector(cor)
```

```
)

ggplot(
  cor_melt,
  aes(x = Var1, y = Var2, fill = value)
) +
  geom_tile(colour = "black", size = 0.3) +
  theme_bw() +
  scale_fill_material("blue-grey")
```

`scale_color_nejm` *NEJM color scales*

Description

See `pal_nejm()` for details.

Usage

```
scale_color_nejm(palette = c("default"), alpha = 1, ...)

scale_colour_nejm(palette = c("default"), alpha = 1, ...)

scale_fill_nejm(palette = c("default"), alpha = 1, ...)
```

Arguments

`palette`	Palette type. Currently there is one available option: `"default"` (8-color palette).
`alpha`	Transparency level, a real number in (0, 1]. See `alpha` in `grDevices::rgb()` for details.
`...`	Additional parameters for `ggplot2::discrete_scale()`.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_nejm()
example_barplot() + scale_fill_nejm()
```

scale_color_npg *NPG journal color scales*

Description

See pal_npg() for details.

Usage

```
scale_color_npg(palette = c("nrc"), alpha = 1, ...)

scale_colour_npg(palette = c("nrc"), alpha = 1, ...)

scale_fill_npg(palette = c("nrc"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "nrc" (10-color palette inspired by *Nature Reviews Cancer*).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_npg()
example_barplot() + scale_fill_npg()
```

scale_color_observable *Observable 10 color scales*

Description

See pal_observable() for details.

Usage

```
scale_color_observable(palette = c("observable10"), alpha = 1, ...)

scale_colour_observable(palette = c("observable10"), alpha = 1, ...)

scale_fill_observable(palette = c("observable10"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "observable10" (10-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

Pettiross J (2023). "Crafting data colors and staying on brand." *Observable blog*. https://observablehq.com/blog/crafting-data-colors

Examples

```
example_scatterplot() + scale_color_observable()
example_barplot() + scale_fill_observable()
```

---

scale_color_primer *Primer color scales*

Description

See pal_primer() for details.

Usage

```
scale_color_primer(palette = c("mark17"), alpha = 1, ...)

scale_colour_primer(palette = c("mark17"), alpha = 1, ...)

scale_fill_primer(palette = c("mark17"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "mark17" (17-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

GitHub (2025). "Primer data visualization colors." https://primer.style/product/ui-patterns/data-visualization/

Examples

```
example_scatterplot() + scale_color_primer()
example_barplot() + scale_fill_primer()
```

---

scale_color_rickandmorty

Rick and Morty color scales

Description

See pal_rickandmorty() for details.

Usage

```
scale_color_rickandmorty(palette = c("schwifty"), alpha = 1, ...)

scale_colour_rickandmorty(palette = c("schwifty"), alpha = 1, ...)

scale_fill_rickandmorty(palette = c("schwifty"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "schwifty" (12-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_rickandmorty()
example_barplot() + scale_fill_rickandmorty()
```

scale_color_simpsons *The Simpsons color scales*

Description

See pal_simpsons() for details.

Usage

```
scale_color_simpsons(palette = c("springfield"), alpha = 1, ...)

scale_colour_simpsons(palette = c("springfield"), alpha = 1, ...)

scale_fill_simpsons(palette = c("springfield"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "springfield" (16-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_simpsons()
example_barplot() + scale_fill_simpsons()
```

scale_color_startrek *Star Trek color scales*

Description

See pal_startrek() for details.

Usage

```
scale_color_startrek(palette = c("uniform"), alpha = 1, ...)

scale_colour_startrek(palette = c("uniform"), alpha = 1, ...)

scale_fill_startrek(palette = c("uniform"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "uniform" (7-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_startrek()
example_barplot() + scale_fill_startrek()
```

---

scale_color_tron *Tron Legacy color scales*

Description

See pal_tron() for details.

Usage

```
scale_color_tron(palette = c("legacy"), alpha = 1, ...)

scale_colour_tron(palette = c("legacy"), alpha = 1, ...)

scale_fill_tron(palette = c("legacy"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "legacy" (7-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() +
  ggplot2::theme_dark() +
  ggplot2::theme(
    panel.background = ggplot2::element_rect(fill = "#2D2D2D"),
    legend.key = ggplot2::element_rect(fill = "#2D2D2D")
  ) +
  scale_color_tron()

example_barplot() +
  ggplot2::theme_dark() +
  ggplot2::theme(
    panel.background = ggplot2::element_rect(fill = "#2D2D2D")
  ) +
  scale_fill_tron()
```

`scale_color_tw3` *Tailwind CSS color scales*

Description

See `pal_tw3()` for details.

Usage

```
scale_color_tw3(
  palette = c("slate", "gray", "zinc", "neutral", "stone", "red", "orange", "amber",
    "yellow", "lime", "green", "emerald", "teal", "cyan", "sky", "blue", "indigo",
    "violet", "purple", "fuchsia", "pink", "rose"),
  alpha = 1,
  reverse = FALSE,
  ...
)

scale_colour_tw3(
  palette = c("slate", "gray", "zinc", "neutral", "stone", "red", "orange", "amber",
    "yellow", "lime", "green", "emerald", "teal", "cyan", "sky", "blue", "indigo",
    "violet", "purple", "fuchsia", "pink", "rose"),
  alpha = 1,
  reverse = FALSE,
  ...
)

scale_fill_tw3(
  palette = c("slate", "gray", "zinc", "neutral", "stone", "red", "orange", "amber",
    "yellow", "lime", "green", "emerald", "teal", "cyan", "sky", "blue", "indigo",
    "violet", "purple", "fuchsia", "pink", "rose"),
  alpha = 1,
```

```
  reverse = FALSE,
  ...
)
```

Arguments

palette	Palette type. There are 22 available options: • "slate" • "gray" • "zinc" • "neutral" • "stone" • "red" • "orange" • "amber" • "yellow" • "lime" • "green" • "emerald" • "teal" • "cyan" • "sky" • "blue" • "indigo" • "violet" • "purple" • "fuchsia" • "pink" • "rose"
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
reverse	Logical. Should the order of the colors be reversed?
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
library("ggplot2")

data("mtcars")
cor <- abs(cor(mtcars))
cor_melt <- data.frame(
```

```
  Var1 = rep(seq_len(nrow(cor)), times = ncol(cor)),
  Var2 = rep(seq_len(ncol(cor)), each = nrow(cor)),
  value = as.vector(cor)
)

ggplot(
  cor_melt,
  aes(x = Var1, y = Var2, fill = value)
) +
  geom_tile(colour = "black", size = 0.3) +
  theme_bw() +
  scale_fill_tw3("slate")
```

`scale_color_uchicago` *The University of Chicago color scales*

Description

See `pal_uchicago()` for details.

Usage

```
scale_color_uchicago(palette = c("default", "light", "dark"), alpha = 1, ...)

scale_colour_uchicago(palette = c("default", "light", "dark"), alpha = 1, ...)

scale_fill_uchicago(palette = c("default", "light", "dark"), alpha = 1, ...)
```

Arguments

`palette`	Palette type. There are three available options: • `"default"` (9-color palette); • `"light"` (9-color light palette); • `"dark"` (9-color dark palette).
`alpha`	Transparency level, a real number in (0, 1]. See `alpha` in `grDevices::rgb()` for details.
`...`	Additional parameters for `ggplot2::discrete_scale()`.

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

References

https://news.uchicago.edu/sites/default/files/UCM_UniversityIdentityGuidelines_2-2020.pdf

Examples

```
p1 <- example_scatterplot()
p2 <- example_barplot()

p1 + scale_color_uchicago()
p2 + scale_fill_uchicago()

p1 + scale_color_uchicago(palette = "light")
p2 + scale_fill_uchicago(palette = "light")

p1 + scale_color_uchicago(palette = "dark")
p2 + scale_fill_uchicago(palette = "dark")
```

---

scale_color_ucscgb *UCSC Genome Browser color scales*

Description

See pal_ucscgb() for details.

Usage

```
scale_color_ucscgb(palette = c("default"), alpha = 1, ...)

scale_colour_ucscgb(palette = c("default"), alpha = 1, ...)

scale_fill_ucscgb(palette = c("default"), alpha = 1, ...)
```

Arguments

palette	Palette type. Currently there is one available option: "default" (26-color palette).
alpha	Transparency level, a real number in (0, 1]. See alpha in grDevices::rgb() for details.
...	Additional parameters for ggplot2::discrete_scale().

Author(s)

Nan Xiao | <me@nanx.me> | https://nanx.me

Examples

```
example_scatterplot() + scale_color_ucscgb()
example_barplot() + scale_fill_ucscgb()
```

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