Package ‘Redmonder’

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Title   Microsoft(r)-Inspired Color Palettes
Version 0.2.0
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Depends R (>= 2.0.0)
Description Provide color schemes for maps (and other graphics) based on the color palettes of several Microsoft(r) products. Forked from 'RColorBrewer' v1.1-2.
License Apache License 2.0
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Redmonder Redmonder palettes

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Description

Creates nice-looking color palettes based on colour schemes inspired by Microsoft(r) applications. Redmonder is a fork of RColorBrewer. See RColorBrewer documentation for more information.

The fundamental difference between RColorBrewer and Redmonder is the included color palettes. RColorBrewer is based on the design principles established by the Color Brewer project, while Redmonder does not. Redmonder is not designed as a replacement for RColorBrewer, but as an alternative for when the design principles of ColorBrewer are not required.

Usage

redmonder.pal(n, name)
display.redmonder.pal(n, name)
display.redmonder.all(n=NULL, type="all", select=NULL, exact.n=TRUE, colorblindFriendly=FALSE)
redmonder.pal.info

Arguments

n Number of different colors in the palette, minimum 3, maximum depending on palette
name A palette name from the lists below
type One of the string "div", "qual", "seq", or "all"
select A list of names of existing palettes
exact.n If TRUE, only display palettes with a color number given by n
colorblindFriendly
if TRUE, display only colorblind friendly palettes

Details

redmonder.pal makes the color palettes from Redmonder available as R palettes.
display.redmonder.pal() displays the selected palette in a graphics window.
display.redmonder.all() displays the a few palettes simultaneously in a graphics window.
redmonder.pal.info returns information about the available palettes as a dataframe. redmonder.pal.info is not a function, it is a variable. This might change in the future.

There are 3 types of palettes, sequential, diverging, and qualitative:

1. Sequential palettes are suited to ordered data that progress from low to high. Lightness steps dominate the look of these schemes, with light colors for low data values to dark colors for high data values. All sequential palette names start with a lowercase s.

2. Diverging palettes put equal emphasis on mid-range critical values and extremes at both ends of the data range. The critical class or break in the middle of the legend is emphasized with light colors and low and high extremes are emphasized with dark colors that have contrasting hues. All diverging palette names start with a lowercase d.
3. Qualitative palettes do not imply magnitude differences between legend classes, and hues are used to create the primary visual differences between classes. Qualitative schemes are best suited to representing nominal or categorical data. All qualitative palette names start with a lowercase q.

The sequential palettes names are:

```
sPBIGn sPBIGy1 sPBIRd sPBIY1 sPBIGy2 sPBIBu sPBIOr sPBIPu sPBIY1Gn sPBIRdPu
```

All the sequential palettes are available in variations from 3 different values up to 9 different values.

The diverging palettes are:

```
dPBIY1Bu dPBIY1Pu dPBIPuGn dPBIPuOr dPBIOrGy dPBIOrGn
```

All the diverging palettes are available in variations from 3 different values up to 11 different values.

For qualitative palettes, the lowest number of distinct values available always is 3 and the larger is 8, except for the palette qMSOStd which ranges from 3 to 10. The qualitative palettes are:

```
qMSOStd qMSO12 qMSO15 qMSOBuWarm qMSOBu qMSOBuGn qMSOBuOr qMSOBuOrRd qMSOOrRd qMSOOrBu qMSOOr
```

## Value

A palette

You will get an error when you ask for a nonexisting palette, and you will get a warning if a palette you asked for exists but not with as many different levels as you asked for.

## Note

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## Author(s)

Pedro Mac Dowell Innecco, De Montfort University, <dmu@pedroinnecco.com>. Redmonder is a fork of RColorBrewer by Erich Neuwirth, University of Vienna with with contributions by John Maindonald, Australian National University. See RColorBrewer documentation for more information, including additional contributors.

## Examples

```
## create a sequential palette for usage and show colors
mypalette<-redmonder.pal(7,"sPBIOrGn")
image(1:7,1,as.matrix(1:7),col=mypalette,xlab="sPBIOrGn (sequential)",ylab="",xaxt="n",yaxt="n",btty="n")

## display a divergent palette
display.redmonder.pal(7,"dPBIY1Bu")
devAskNewPage(ask=TRUE)

## display a qualitative palette
display.redmonder.pal(7,"qPBI")
devAskNewPage(ask=TRUE)
```
## display all palettes simultaneously
display.redmonder.all()

## display the first 10 colors of all palettes
display.redmonder.all(n=10, exact.n=FALSE)
devAskNewPage(ask=TRUE)

## display all palettes that have a minimum of 10 colors
display.redmonder.all(n=10)
devAskNewPage(ask=TRUE)

## display only diverging palettes
display.redmonder.all(type="div")
devAskNewPage(ask=TRUE)

## display only sequential palettes
display.redmonder.all(type="seq")
devAskNewPage(ask=TRUE)

## display only qualitative palettes
display.redmonder.all(type="qual")
devAskNewPage(ask=TRUE)

## display the first 5 colors of all diverging palettes
display.redmonder.all(n=5, type="div", exact.n=TRUE)
devAskNewPage(ask=TRUE)

## display palettes that are colorblind friendly
display.redmonder.all(colorblindFriendly=TRUE)
devAskNewPage(ask=TRUE)

## lists information for all palettes
redmonder.pal.info

## produces information for palette sPBIRdPu only
redmonder.pal.info["sPBIRdPu",]

## produces the maximum number of color values for palette sPBIRdPu only
redmonder.pal.info["sPBIRdPu",]$maxcolors
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