

# visHexBarplot

January 18, 2018

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| visHexBarplot | <i>Function to visualise codebook matrix using barplot for all hexagons or a specific one</i> |
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## Description

visHexBarplot is supposed to visualise codebook matrix using barplot for all hexagons or a specific one

## Usage

```
visHexBarplot(sObj, which.hexagon = NULL, which.hexagon.highlight =  
NULL,  
height = 7, margin = rep(0.1, 4), colormap = c("customized", "bwr",  
"jet", "gbr", "wyr", "br", "yr", "rainbow", "wb"), customized.color =  
"red",  
zeropattern.color = "gray", gp = grid::gpar(cex = 0.7, font = 1, col =  
"black"), bar.text.cex = 0.8, bar.text.srt = 90, newpage = TRUE)
```

## Arguments

|                         |  |
|-------------------------|--|
| sObj                    | an object of class "sMap" or "sTopol" or "sInit"   |
| which.hexagon           | the integer specifying which hexagon to display. If NULL, all hexagons will be visualised  |
| which.hexagon.highlight | an integer vector specifying which hexagons are labelled. If NULL, all hexagons will be labelled   |
| height                  | a numeric value specifying the height of device  |
| margin                  | margins as units of length 4 or 1  |
| colormap                | short name for the predefined colormap, and "customized" for custom input (see the next 'customized.color'). The predefined colormap can be one of "jet" (jet colormap), "bwr" (blue-white-red colormap), "gbr" (green-black-red colormap), "wyr" (white-yellow-red colormap), "br" (black-red colormap), "yr" (yellow-red colormap), "wb" (white-black colormap), and "rainbow" (rainbow colormap, that is, red-yellow-green-cyan-blue-magenta). Alternatively, any hyphen-separated HTML color names, e.g. "blue-black-yellow", "royalblue-white-sandybrown", "darkgreen-white-darkviolet". A list of standard color names can be found in <a href="http://html-color-codes.info/color-names">http://html-color-codes.info/color-names</a> |

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| customized.color  | the customized color for pattern visualisation  |
| zeropattern.color | the color for zero horizontal line  |
| gp                | an object of class "gpar". It is the output from a call to the function "gpar" (i.e., a list of graphical parameter settings) |
| bar.text.cex      | a numerical value giving the amount by which bar text should be magnified relative to the default (i.e., 1)                   |
| bar.text.srt      | a numerical value giving the angle by which bar text should be orientated   |
| newpage           | logical to indicate whether to open a new page. By default, it sets to true for opening a new page                            |

**Value**

invisible

**Note**

none

**See Also**

[sPipeline](#), [visColormap](#)

**Examples**

```
# 1) generate data with an iid matrix of 1000 x 9
data <- cbind(matrix(rnorm(1000*3,mean=0,sd=1), nrow=1000, ncol=3),
matrix(rnorm(1000*3,mean=0.5,sd=1), nrow=1000, ncol=3),
matrix(rnorm(1000*3,mean=-0.5,sd=1), nrow=1000, ncol=3))
colnames(data) <- c("S1","S1","S1","S2","S2","S2","S3","S3","S3")

# 2) sMap resulted from using by default setup
sMap <- sPipeline(data=data)

# 3) plot codebook patterns using different types
# 3a) for all hexagons
visHexBarplot(sMap)
# 3b) only for the first hexagon
visHexBarplot(sMap, which.hexagon=1)
```