Package 'voteR'

May 4, 2018

Title Variety of Open Tools for Electoral Research

Version 0.0.0.9000

Description
> This package contains a variety of tools and datasets that can be used for electoral research.

Depends R (>= 3.4.1),
> ggplot2,
> plyr,
> tidyverse

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Encoding UTF-8

URL schliebs.github.io/voteR

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LazyData true

Imports dplyr,
> ggplot2,
> gtools,
> hrbrthemes,
> magrittr,
> stringr,
> tidyr

RoxygenNote 6.0.1

Collate 'constituencymaps.R'
> 'gles.R'
> 'importFrom.R'
> 'make_dictionary.R'
> 'partycolors.R'
> 'partynames.R'
> 'polling.R'
> 'plotting.R'
> 'scrape_wahlrecht.R'
> 'wahldata.R'

Suggests knitr,
> rmarkdown

VignetteBuilder knitr

R topics documented:

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bundestag_laenderebene

lala

Description

Bundestag election results for the regional laender level 1949-2017

Usage

```
bundestag_laenderebene
```

Format

A data frame with 236 rows and 13 variables:

year election year

land regional level

date election date

... party vote share vector

wbt voter turnout

others other parties

level Level of Election (federal or regional)

| distance_function | *Calculate Distances* |

Description

Calculate Distances from different parties/koalitions

Usage

```
distance_function(data_in = "gles2017_out", who = "schwarzgelb",
  issue = "soz")
```

Value

The vector including all coalitions.

Examples

```
distance_function(data_in = "gles2017_out",
                  who = "schwarzgelb",
                  issue = "soz")
```

| gles_recode_partyvar | *gles_recode_partyvar* |

Description

Recode a multiparty-variable in GESIS-Datasets such as the GERMAN LONGITUDINAL ELECTION STUDY (GLES)

Usage

```
gles_recode_partyvar(year = 2017, dataset_input = "gles2017",
  dataset_output = "gles2017_out", varname = "q52", own = NULL,
  varlabel = "soz", key = c("a", "b", "c", "d", "e", "f", "g"),
  partynames = c("cdu", "csu", "spd", "linke", "gruene", "fdp", "afd"),
  NAs = "<0", plot = TRUE)
```

Arguments

year	year the GLES-study is from. Defaults to 2017.
dataset_input	Character string of the name of a dataframe containing the raw data.
dataset_output	Character string of the name the output data frame (may already exist or not).
varname	Character string of the name of the original variable.
own	May apply: Different variable name for own position (on left-right scales, e.g.)
varlabel	Character string of the to-be-assigned variable label.
key	Character vector containing original alphabetic party keys.
partynames	Character vector containing shortname party keys.
NAs	Numeric vector containing to-be-assigned NAs/Missing values.
plot	Logical T/F: Show relative frequency barplots while plotting.

Value

A data frame containing output dataframe including newly appended new-variables.

Examples

```
gles_recode_partyvar(year = 2017,
                     dataset_input = "gles2017",
                     dataset_output = "gles2017_out",
                     varname = "q52",
                     varlabel = "soz",
                     key = c("a","b","c","d","e","f","g"),
                     partynames = c("cdu","csu","spd","linke","gruene","fdp","afd"),
                     NAs = c(-97,-98,-99))
```

---

intrakoadistanz   *Calculate Intra-Coalition Heterogeneity*

Description

Calculate Intra-Coalition Heterogeneity from different parties/koalitions

Usage

```
intrakoadistanz(who = "schwarzgelb", issue = "lr", input = "gles2017_out",
  year = 2017)
```

Value

The vector including all coalitions.

Examples

```
distance_function(input = "gles2017_out",
                  who = "schwarzgelb",
                  issue = "soz")
```

---

koas   *Get coalitions*

Description

Get all available coalitions

Usage

```
koas(year = 2017)
```

Value

The vector including all coalitions.

Examples

```
koas(year = 2017)
```

---

koa_members   *Get coalition members*

Description

Get parties that are member of a certrain coalition

Usage

```
koa_members(koalition)
```

Arguments

coalition   Character string containing the name of the coalition.
                   Options are c("jamaika","schwarzgelb","rotgruen","groko","rotrotgruen","ampel","schwarzgruen").

Value

A vector containing all parties included in the coalition.

Examples

```
koa_members("schwarzgelb")
```

---

koa_positions   *Get coalition members*

Description

Calculate mean koalition issue position and create new variables

Usage

```
koa_positions(data_in = "gles2017_out", coalition = "schwarzgelb",
  issue = "soz")
```

Arguments

data_in   Character string containing the name the dataset.
coalition   Character string containing the name of the coalition.
issue   Character string containing the issue.

Value

The treated dataset.

Examples

```
koa_members(data_in = "gles2017_out",
            coalition = "schwarzgelb",
            issue = "soz")
```

---

laenderbip   *German regional GDP data*

Description

German regional GDP data

Usage

    laenderbip

Format

A data frame with 27 rows and 18 variables:

year regional level

... name of the bundesland

d Germany total sum

---

landesregierungen   *German regional government cabinets for the whole post-war period*

Description

German regional government cabinets for the whole post-war period

Usage

    landesregierungen

Format

A data frame with 325 rows and 11 variables:

land regional level

cabinet name of the respective cabinet

years years cabinet was in office

dates specific dates cabinet was in office

parties parties forming the coalition

primeminister name of the government leader

party_x name of the forming parties

start year in which gov't started

end year in which it ended

landtagswahlen	*German "Landtagswahlen" election results for the regional laender level 1946-2018*

Description

German "Landtagswahlen" election results for the regional laender level 1946-2018

Usage

```
landtagswahlen
```

Format

A data frame with 233 rows and 13 variables:

year election year

land regional level

date election date

... party vote share vector

wbt voter turnout

others other parties

level Level of Election (federal or regional)

make_dictionary	*Title*

Description

Title

Usage

```
make_dictionary(dataset, format = c("wide", "long"))
```

Arguments

dataset	SPSS dataframe in tbl_df format imported with haven.
format	specify whether you want a wide (each variable one row) or wide format (each value one row).

Value

a data.fram with meta information which can by querried with R-Studio functionalities.

---

parties   *Get parties*

Description

Get main parties for Gles analysis

Usage

```
parties(year = 2017)
```

Value

The vector including all parties

Examples

```
parties(year = 2017)
```

---

plot_poll   *Plot a multiparty poll*

Description

...

Usage

```
plot_poll(vote = c(cdu = 0.33, spd = 0.2, fdp = 0.11, linke = 0.09, gruene =
  0.09, afd = 0.12, sonstige = 0.05), order = "alphabetical",
  sample_confidence_bounds = TRUE, sample_n = 1000, n_draw = 10000,
  show_quantiles = c(0.05, 0.95), round = 1, xlab = "Party",
  ylab = "Voteshare", title = "Title", subtitle = "Subtitle",
  caption = "Caption", theme_ipsum = FALSE, grid = "Y")
```

Arguments

vote	A labeled party vote share vector.
order	Method to order parties (Default is "alphabetical"; also takes "descending" and "ascending" as well as manual specification of party vector)
sample_confidence_bounds	
	Logical T/F: add empirical dirichlet quantiles
sample_n	The number of observations in the poll sample.
n_draw	How many samples to draw from the dirichlet distribution.
show_quantiles	Vector of quantiles/confidence boundaries to calculate.
round	Round to k decimals after comma
xlab	x-label string

ylab	y-label string
title	title string
subtitle	subtitle string
caption	caption string
theme_ipsum	Pre-applies nice theme from the hrbrthemes-package.(Attention: possible font-issues when Roboto font is not installed on your computer.)
grid	(Applies only if theme_ipsum == T) Add a grid (options: "none","Y")

Value

A data frame containing n rows of samples for each party.

Warning

Do not operate heavy machinery within 8 hours of using this function.

Examples

```
sample_dirichlet_quantiles(vote = c(cdu = 0.33,....
```

---

sample_dirichlet	*Dirichlet-sample of a multinomial election poll*

Description

Calculate a dirichlet-sample of a multinomial election poll

Usage

```
sample_dirichlet(vote = c(cdu = 0.5, spd = 0.4, fdp = 0.1), sample_n = 1000,
  n_draw = 10000)
```

Arguments

vote	A labeled party vote share vector.
sample_n	The number of observations in the poll sample.
n_draw	How many samples to draw from the dirichlet distribution.

Value

A data frame containing n rows of samples for each party.

Warning

Do not operate heavy machinery within 8 hours of using this function.

Examples

```
sample_dirichlet(vote = c(cdu = 0.33,
                          spd = 0.20,
                          fdp = 0.11,
                          linke = 0.09,
                          gruene = 0.09,
                          afd = 0.12,
                          sonstige = 0.05),
                 sample_n = 1000,
                 n_draw = 10000)
```

---

sample_dirichlet_quantiles

Empirical Dirichlet Quantiles from Multinomial Election Poll

Description

Calculate empirical quantiles from a sample created by sample_dirichlet of a multinomial election poll

Usage

```
sample_dirichlet_quantiles(vote = c(cdu = 0.5, spd = 0.4, fdp = 0.1),
  sample_n = 1000, n_draw = 10000, show_mean = TRUE,
  show_quantiles = c(0.05, 0.95), round = 2)
```

Arguments

vote	A labeled party vote share vector.
sample_n	The number of observations in the poll sample.
n_draw	How many samples to draw from the dirichlet distribution.
show_mean	Logical T/F: Show sample mean.
show_quantiles	Vector of quantiles/confidence boundaries to calculate.
round	Logical T/F Round Results to k decimal digits.

Value

A data frame containing n rows of samples for each party.

Warning

Do not operate heavy machinery within 8 hours of using this function.

Examples

```
sample_dirichlet_quantiles(vote = c(cdu = 0.33,
                            spd = 0.20,
                            fdp = 0.11,
                            linke = 0.09,
                            gruene = 0.09,
                            afd = 0.12,
                            sonstige = 0.05),
                  sample_n = 1000,
                  n_draw = 10000,
                  show_mean = TRUE,
                  show_quantiles = c(0.05,0.95))
```

---

structural_modeldata   *Input Data for structural model*

Description

Input Data for structural model

Usage

```
structural_modeldata
```

Format

A data frame with 1864 rows and 25 variables:

year election year

land regional level

date election date

wbt voter turnout

party party name

vote vote share

partytype classification in spd/union/small and others

lag_ltw one-period lag of landtagswahl result

lag_btw one-period lag of bundestagswahl result (of that party in that state)

date_btw date of the last bundestagswahl

cabinet name of the cabinet

primeminister_name name of the incumbent prime minister

party_x 1st to 3rd party listing coalition members (1st party is party of PM)

start year that the incumbent government was formed

end year it was replaced

primeminister Logical T/F if party is holding incumbency of PM

gov Logical T/F if party is incumbent coalition member

juniorpartner T/F if party is junior partner (gov but not PM)

bip absolute bip in billion €

bipchange change in bip in the last 2 years prior to the election

firsttime Logical T/F if party is firsttime contender

distance_btw_lag distance to last Bundestagswahl in days

others other parties

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