

Package ‘dummy’

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Type Package

Title Tools for being a dummy

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Description This is where I test things and don't worry about it all going bad.

Depends R (>= 2.15)

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Collate 'blah.R' 'guy.R' 'dummy-package.R' 'unnamed.R' 'pos.R' 'bracketX.R' 'termco.a.R' 'gantt.R' 'gantt_plot.R' 'gantt_rep.R' 'gantt_wrap.R' 'kullback.leibler.R' 'metaDAT.R' 'pos.R' 'print.POS.R' 'print.POSby.R' 'print.termco_d.R' 'qdap.R' 'syllable.sum.R' 'termco.a.R' 'wfm.R' 'word.count.R'

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automated_readability_index

Readability Measures

Description

automated_readability_index - Apply Automated Readability Index to transcript(s) by zero or more grouping variable(s).

coleman_liau - Apply Coleman Liau Index to transcript(s) by zero or more grouping variable(s).

SMOG - Apply SMOG Readability to transcript(s) by zero or more grouping variable(s).

flesch_kincaid - Flesch-Kincaid Readability to transcript(s) by zero or more grouping variable(s).

fry - Apply Fry Readability to transcript(s) by zero or more grouping variable(s).

linsear_write - Apply Linsear Write Readability to transcript(s) by zero or more grouping variable(s).

Usage

```
automated_readability_index(text.var,
  grouping.var = NULL, rm.incomplete = FALSE, ...)
```

```
coleman_liau(text.var, grouping.var = NULL,
  rm.incomplete = FALSE, ...)
```

```
SMOG(text.var, grouping.var = NULL, output = "valid",
  rm.incomplete = FALSE, ...)
```

```
flesch_kincaid(text.var, grouping.var = NULL,
  rm.incomplete = FALSE, ...)
```

```
fry(text.var, grouping.var = NULL, labels = "automatic",
  rm.incomplete = FALSE, ...)
```

```
linsear_write(text.var, grouping.var = NULL,
  rm.incomplete = FALSE, ...)
```

Arguments

text.var	The text variable
grouping.var	The grouping variables. Default NULL generates one word list for all text. Also takes a single grouping variable or a list of 1 or more grouping variables.
rm.incomplete	logical. If TRUE removes incomplete sentences from the analysis.
...	Other arguments passed to endf.
output	A character vector character string indicating output type. One of "valid" (default and congruent with McLaughlin's intent) or "all".
labels	A character vector character string indicating output type. One of "automatic" (default; adds labels automatically) or "click" (interactive).

Value

Generates a dataframe with selected readability statistic by grouping variable(s). The `frey` function returns a graphic representation of the readability.

Note

Many of the indeices (e.g. Automated Readability Index) are derived from word difficulty (letters per word) and sentence difficulty (words per sentence). If you have not run the `sentSplit` function on your data the results may not be accurate.

References

- Coleman, M. & Liau, T. L. (1975). A computer readability formula designed for machine scoring. *Journal of Applied Psychology*, Vol. 60, pp. 283-284.
- Flesch R. (1948). A new readability yardstick. *Journal of Applied Psychology*. Vol. 32(3), pp. 221-233. doi: 10.1037/h0057532.
- Gunning, T. G. (2003). *Building Literacy in the Content Areas*. Boston: Allyn & Bacon.
- McLaughlin, G. H. (1969). SMOG Grading: A New Readability Formula. *Journal of Reading*, Vol. 12(8), pp. 639-646.
- Senter, R. J., & Smith, E. A.. (1967) Automated readability index. Technical Report AMRLTR-66-220, University of Cincinnati, Cincinnati, Ohio.

Examples

```
## Not run:
with(rajSPLIT, automated_readability_index(dialogue, list(person, act)))
with(rajSPLIT, automated_readability_index(dialogue, list(sex, fam.aff)))

with(rajSPLIT, coleman_liau(dialogue, list(person, act)))
with(rajSPLIT, coleman_liau(dialogue, list(sex, fam.aff)))

with(rajSPLIT, SMOG(dialogue, list(person, act)))
with(rajSPLIT, SMOG(dialogue, list(sex, fam.aff)))

with(rajSPLIT, flesch_kincaid(dialogue, list(person, act)))
with(rajSPLIT, flesch_kincaid(dialogue, list(sex, fam.aff)))

(x <- with(rajSPLIT, fry(dialogue, list(sex, fam.aff))))
with(rajSPLIT, fry(dialogue, list(sex, fam.aff), labels = "click"))

with(rajSPLIT, linsear_write(dialogue, list(person, act)))
with(rajSPLIT, linsear_write(dialogue, list(sex, fam.aff)))

## End(Not run)
```

bracketX

*Bracket Parsing***Description**

`bracketX` - Apply bracket removal to character vectors.

`bracketXtract` - Apply bracket extraction to character vectors.

Usage

```
bracketX(text.var, bracket = "all", missing = NULL,
         names = FALSE)

bracketXtract(text.var, bracket = "all", with = FALSE)
```

Arguments

<code>text.var</code>	The text variable
<code>bracket</code>	The type of bracket (and encased text) to remove. This is one of the strings "curly", "square", "round", "angle" and "all". These strings correspond to: {, [, (, < or all four types.
<code>missing</code>	Value to assign to empty cells.
<code>names</code>	logical. If TRUE the sentences are given as the names of the counts.
<code>with</code>	logical. If TRUE returns the brackets and the bracketed text.

Value

`bracketX` returns a vector of text with brackets removed.

`bracketXtract` returns a list of vectors of bracketed text.

Author(s)

Martin Morgan and Tyler Rinker <tyler.rinker@gmail.com>.

References

<http://stackoverflow.com/questions/8621066/remove-text-inside-brackets-parens-and-or-braces>

Examples

```
examp2 <- examp2 <- structure(list(person = structure(c(1L, 2L, 1L, 3L),
  .Label = c("bob", "greg", "sue"), class = "factor"), text =
  c("I love chicken [unintelligible]!",
    "Me too! (laughter) It's so good.[interrupting]",
    "Yep it's awesome {reading}."), "Agreed. {is so much fun}")), .Names =
  c("person", "text"), row.names = c(NA, -4L), class = "data.frame")

examp1
bracketX(examp2$text, 'square')
bracketX(examp2$text, 'curly')
bracketX(examp2$text)

examp2
bracketXtract(examp2$text, 'square')
bracketXtract(examp2$text, 'curly')
bracketXtract(examp2$text)
bracketXtract(examp2$text, with = TRUE)

paste2(bracketXtract(examp2$text, 'curly'), " ")
```

cm_r2l*Transform Codes to Start-End Durations*

Description

A helper function for `cm_range2long` that transforms the range coding structure from `cm_range.temp` (in list format) into a data frame of start and end times in long format.

Usage

```
cm_r2l(range.list, v.name = "variable", list.var = TRUE)
```

Arguments

<code>range.list</code>	A complete list object in the form generated by <code>cm_range.temp</code> .
<code>v.name</code>	an optional name for the column created for the <code>list.var</code> argument.
<code>list.var</code>	logical. If <code>TRUE</code> creates a column for the data frame created by each <code>range.list</code> passed to <code>cm_r2l</code> .

Value

Generates a data frame of start and end times for each code.

References

Miles, M. B. & Huberman, A. M. (1994). An expanded sourcebook: Qualitative data analysis. 2nd ed. Thousand Oaks, CA: SAGE Publications.

See Also

[cm2long](#) [cm_range.temp](#) [cm_r2l](#)

common*Prints an common.list*

Description

Prints an `common.list`.

Usage

```
## S3 method for class 'common.list'
print(x, ...)
```

Arguments

<code>x</code>	The <code>common.list</code> object
<code>...</code>	ignored

fun1	<i>Readability stat</i>
------	-------------------------

Description

fun1 - blah 2
 fun2 - blah2
 fun3 - blah 3

Usage

```
fun1(X, ...)

fun2(X, simplify = FALSE, ...)

fun3(X, noargs = TRUE, ...)
```

Arguments

X	Something called X
...	those crazy dots
simplify	shut yo face
noargs	no arguments

gantt	<i>Generate Unit Spans</i>
-------	----------------------------

Description

Generates start and end times of supplied text selections (i.e. text selections are determined by any number of grouping variables).

Usage

```
gantt(text.var, grouping.var, plot = TRUE,
      units = "words", sums = FALSE, plot.colors = NULL,
      box.color = NULL, col.sep = "_")
```

Arguments

text.var	The text variable
grouping.var	The grouping variables. Also takes a single grouping variable or a list of 1 or more grouping variables.
plot	logical. If TRUE plots the start-end times as a gantt plot.
units	The unit of measurement to analyze. One of the strings "character", "syllable", "word", or "sentence".

sums	logical. If TRUE reports and optionally plots the total units used by grouping variable(s).
plot.colors	The colors of the Gantt plot bars. Either a single color or a length equal to the number of grouping variable(s).
box.color	A single color of the box around the Gantt plot bars.

Value

Returns a data frame of start and end times by grouping variable(s) or optionally returns a list of two: (1) A data frame of the total units used by grouping variable(s) and (2) a data frame of start and end times by grouping variable(s). Optionally plots a gantt plot of the returned data.

Note

For repeated measures data output use `gantt_rep`; for a convenient wrapper that takes text and generates plots use `gantt_plot`; and for a flexible gantt plot that works with code matrix functions (cm) use `gantt_wrap`.

Author(s)

DigEmAll (stackoverflow.com) and Tyler Rinker <tyler.rinker@gmail.com>.

References

Wallace Clark and Henry Gantt (1922) The Gantt chart, a working tool of management. New York, Ronald Press

See Also

[gantt_rep](#), [gantt_wrap](#), [gantt_plot](#)

Examples

```
## Not run:
gantt(DATA$state, DATA$person)
gantt(DATA$state, DATA$person, sums = TRUE)
gantt(DATA$state, list(DATA$sex, DATA$adult))
gantt(mraja1$dialogue, mraja1$person) #hard to see without box color
gantt(mraja1$dialogue, mraja1$sex)
gantt(mraja1$dialogue, mraja1$person, box.col = "black")
gantt(mraja1$dialogue, list(mraja1$fam.aff, mraja1$sex), plot.colors = NULL)
gantt(mraja1$dialogue, list(mraja1$fam.aff, mraja1$sex), plot.colors = "black")
gantt(mraja1$dialogue, list(mraja1$fam.aff, mraja1$sex), plot = FALSE)
gantt(mraja1$dialogue, mraja1$person, units = "characters", box.color = "black")
gantt(mraja1$dialogue, list(mraja1$fam.aff, mraja1$sex), units = "characters")
with(mraja1, gantt(dialogue, list(fam.aff, sex, died),
  units = "characters", sums = TRUE))
gantt(mraja1$dialogue, mraja1$person, units = "syllables", box.color = "black", sums = TRUE)
gantt(mraja1$dialogue, list(mraja1$fam.aff, mraja1$sex), units = "syllables")

(dat <- gantt(mraja1$dialogue, list(mraja1$fam.aff, mraja1$sex), units = "sentences",
  plot.colors = 'black', sums = TRUE, col.sep = "_")$gantt.df)
gantt_wrap(dat, fam.aff_sex, title = "Gantt Plot")

## End(Not run)
```

gantt_plot

*Gantt Plot***Description**

A convenience that wraps gantt, gantt_rm and gantt_wrap into a single plotting function.

Usage

```
gantt_plot(text.var, grouping.var, rm.var = NULL,
           fill.var = NULL, xlab = "duration (in words)",
           units = "words", col.sep = "_", ...)
```

Arguments

text.var	The text variable
grouping.var	The grouping variables. Also takes a single grouping variable or a list of 1 or more grouping variables.
rm.var	an optional single vector or list of 1 or 2 of repeated measures to facet by
fill.var	an optional variable to fill the code stips by.
units	The unit of measurement.
col.sep	The column separator.
\ldots	Other arguments passed to gantt_wrap

Value

Returns a Gantt style visualization.

Note

For non repeated measures data/plotting use gantt; for repeated measures data output use gantt_rep; and for a flexible gantt plot that words with code matrix functions (cm) use gantt_wrap.

References

Wallace Clark and Henry Gantt (1922) The Gantt chart, a working tool of management. New York, Ronald Press

See Also

[gantt](#) [gantt_rep](#), [gantt_wrap](#),

Examples

```
## Not run:
with(rajSPLIT, gantt_plot(text.var = dialogue, grouping.var = person, size=4))
with(rajSPLIT, gantt_plot(text.var = dialogue, grouping.var =
  list(fam.aff, sex), rm.var = act,
  title = "Romeo and Juliet's dialogue"))
with(rajSPLIT, gantt_plot(dialogue, list(fam.aff, sex), act, transform=T))
rajSPLIT2 <- rajSPLIT
```



```

rajSPLIT2$newwb <- as.factor(sample(LETTERS[1:2], nrow(rajSPLIT2),
  replace=TRUE))
z <- with(rajSPLIT2, gantt_plot(dialogue, list(fam.aff, sex),
  list(act, newwb), size = 4))
z + theme(panel.margin = unit(1, "lines")) + scale_colour_grey()
z + scale_colour_brewer(palette="Dark2")

## End(Not run)

```

gantt_rep

*Generate Unit Spans for Repeated Measures***Description**

Produces start and end times for occurrences for each repeated measure condition.

Usage

```
gantt_rep(rm.var, text.var, grouping.var,
  units = "words", col.sep = "_")
```

Arguments

rm.var	an optional single vector or list of 1 or 2 of repeated measures to facet by
text.var	The text variable
grouping.var	The grouping variables. Also takes a single grouping variable or a list of 1 or more grouping variables.
units	The unit of measurement to analyze. One of the strings "character", "syllable", "word", or "sentence".

Value

Returns a data frame of start and end times by repeated measure and grouping variable(s)

Note

For non repeated measures data/plotting use `gantt`; for a convenient wrapper that takes text and generates plots use `gantt_plot`; and for a flexible gantt plot that works with code matrix functions (cm) use `gantt_wrap`.

References

Wallace Clark and Henry Gantt (1922) The Gantt chart, a working tool of management. New York, Ronald Press

See Also

[gantt](#), [gantt_wrap](#), [gantt_plot](#)

Examples

```
## Not run:
(dat3 <- with(rajSPLIT, gantt_rep(act, dialogue, list(fam.aff, sex), units = "words",
  col.sep = "_"))
gantt_wrap(dat3, fam.aff_sex, facet.vars = "act", title = "Repeated MeasuresGantt Plot",
  minor.line.freq = 25, major.line.freq = 100)

## End(Not run)
```

gantt_wrap

Gantt Plot

Description

A ggplot2 wrapper that produces a Gantt plot

Usage

```
gantt_wrap(dataframe, plot.var, facet.vars = NULL,
  fill.var = NULL, title = NULL,
  ylab = as.character(plot.var),
  xlab = "duration.default", rev.factor = TRUE,
  transform = FALSE, ncol = NULL, minor.line.freq = NULL,
  major.line.freq = NULL, sig.dig.line.freq = 1,
  hms.scale = NULL, scale = NULL, space = NULL, size = 3,
  rm.horiz.lines = FALSE, x.ticks = TRUE, y.ticks = TRUE,
  legend.position = NULL, bar.color = NULL,
  border.color = NULL, border.size = 2,
  border.width = 0.1, constrain = TRUE)
```

Arguments

dataframe	a data frame with plotting variable(s) and a column of start and end times.
plot.var	a factor plotting variable (y axis)
facet.vars	an optional single vector or list of 1 or 2 to facet by
fill.var	an optional variable to fill the code stips by.
title	an optional title for the plot.
ylab	an optional y label.
xlab	an optional x label.
rev.factor	logical. if TRUE reverse the current plotting order so the first element in the plotting variable's levels is plotted on top.
ncol	if an integer value is passed to this gantt_wrap uses facet_wrap rather than facet_grid
transform	logical. if TRUE the repeated facets will be transformed from stacked to side by side.
minor.line.freq	a numeric value for frequency of minor grid lines.

major.line.freq	a numeric value for frequency of major grid lines.
sig.dig.line.freq	An internal rounding factor for minor and major line freq. Generally, default value of 1 suffices for larger range of x scale may need to be set to -2..
hms.scale	logical. If TRUE converts scale to h:m:s format. Default NULL attempts to detect if object is a <code>cm_time2long</code> object
scale	should scales be fixed ("fixed", the default), free ("free"), or free in one dimension ("free_x", "free_y")
space	if "fixed", the default, all panels have the same size. If "free_y" their height will be proportional to the length of the y scale; if "free_x" their width will be proportional to the length of the x scale; or if "free" both height and width will vary. This setting has no effect unless the appropriate scales also vary.
size	the width of the plot bars.
rm.horiz.lines	logical. if TRUE the horizontal lines will be removed
x.ticks	logical. if TRUE the x ticks will be displayed
y.ticks	logical. if TRUE the y ticks will be displayed
legend.position	the position of legends. ("left", "right", "bottom", "top", or two-element numeric vector)
bar.color	optional color to constrain all bars
border.color	the color to plot border around Gantt bars (default is NULL)
border.size	an integer value for the size to plot borders around Gantt bars. Controls length (width also controlled if not specified).
border.width	controls border width around Gantt bars. Use a numeric value in addition to border size if plot borders appear disproportional.
constrain	logical. If TRUE the Gantt bars touch the edge of the graph.

Value

Returns a Gantt style visualization.

Note

For non repeated measures data/plotting use `gantt`; for repeated measures data output use `gantt_rep`; and for a convenient wrapper that takes text and generates plots use `gantt_plot`.

Author(s)

Andrie de Vries and Tyler Rinker <tyler.rinker@gmail.com>.

References

Wallace Clark and Henry Gantt (1922) The Gantt chart, a working tool of management. New York, Ronald Press

See Also

[gantt](#), [gantt_plot](#), [gantt_rep](#)

Examples

```
## Not run:
(dat <- gantt(mraja1$dialogue, list(mraja1$fam.aff, mraja1$sex),
  units = "sentences", plot.colors = 'black', sums = TRUE,
  col.sep = "_")$gantt.df)
gantt_wrap(dat, fam.aff_sex, title = "Gantt Plot")
dat$codes <- sample(LETTERS[1:3], nrow(dat), TRUE)
gantt_wrap(dat, fam.aff_sex, fill.var = "codes", legend.position = "bottom")

(dat3 <- with(rajSPLIT, gantt_rep(act, dialogue, list(fam.aff, sex),
  units = "words", col.sep = "_")))
x <- gantt_wrap(dat3, fam.aff_sex, facet.vars = "act",
  title = "Repeated MeasuresGantt Plot")
x + scale_color_manual(values=rep("black", length(levels(dat3$fam.aff_sex))))

## End(Not run)
```

kullback.leibler	<i>Kullback Leibler Statistic</i>
------------------	-----------------------------------

Description

A proximatey measure between two probability distributions applied to speech.

Usage

```
kullback.leibler(x, y = NULL, digits = 3)
```

Arguments

x	A numeric vector, matrix or data frame.
y	A second numeric vector if x is also a vector. Default is NULL.
digits	Number of dicimal places to round.

Details

Uses Kullback & Leibler's (1951) formula:

$$D_{KL}(P||Q) = \sum_i \ln \left(\frac{P_i}{Q_i} \right) P_i$$

Value

Returns a matrix of the Kullback Leibler measure between each vector of probabiltiies.

References

Kullback, S., & Leibler, R.A. (1951). On Information and sufficiency. *Annals of Mathematical Statistics* 22 (1): 79-86. doi:10.1214/aoms/1177729694

Examples

```
## Not run:
p.df <- word.freq.df(DATA$state, DATA$person)
p.mat <- wfm(text.var = DATA$state, grouping.var = DATA$person)

kullback.leibler(p.mat)
kullback.leibler(p.df)
kullback.leibler(p.df$greg, p.df$sam)

p.df2 <- word.freq.df(raj$dialogue, raj$person)
kullback.leibler(p.df2)

## End(Not run)
```

metaDAT

*metaDAT: Tools for Data Management in Meta-Analysis***Description**

This package automates many of the tasks associated with quantitative discourse analysis of transcripts containing discourse including frequency counts of sentence types, words, sentence, turns of talk, syllable counts and other assorted analysis tasks. The package provides parsing tools for preparing transcript data. Many functions enable the user to aggregate data by any number of grouping variables providing analysis and seamless integration with other R packages that undertake higher level analysis and visualization of text. This provides the user with a more efficient and targeted analysis.

pos

*Transcript Apply Parts of Speech Tagging***Description**

pos - Apply part of speech tagger to transcript(s).

pos.by - Apply part of speech tagger to transcript(s) by zero or more grouping variable(s).

pos.tags - Useful for interpreting the parts of speech tags created by pos and pos.by.

Usage

```
pos(text.var, parallel = FALSE, na.omit = FALSE,
    digits = 2, progress.bar = TRUE, gc.rate = 10)

pos.by(text.var, grouping.var = NULL, digits = 2, ...)

pos.tags(type = "pretty")
```

Arguments

<code>text.var</code>	The text variable
<code>parallel</code>	logical. If TRUE attempts to run the function on multiple cores. Note that this may not mean a speed boost if you have one core or if the data set is smaller as the cluster takes time to create.
<code>na.omit</code>	logical. If TRUE missing values (JcodeNA) will be omitted.
<code>digits</code>	integer indicating the number of decimal places (round) or significant digits (signif) to be used. Negative values are allowed
<code>progress.bar</code>	logical. If TRUE attempts to provide a OS appropriate progress bar. If parallel is TRUE this argument is ignored. Note that setting this argument to TRUE may slow down the function.
<code>gc.rate</code>	An integer value. This is a necessary argument because of a problem with the garbage collection in the openNLP function that pos wraps. Consider adjusting this argument upward if the error <code>java.lang.OutOfMemoryError</code> occurs.
<code>grouping.var</code>	The grouping variables. Default NULL generates one word list for all text. Also takes a single grouping variable or a list of 1 or more grouping variables.
<code>...</code>	Other argument supplied to pos.
<code>type</code>	An optional character string giving the output of the pos tags. This must be one of the strings "pretty" (a left justified version of the output optimized for viewing but not good for export), "matrix" (a matrix version of the output), "dataframe" "df" (a dataframe version of the output), "all" (a list of all three of the previous output types).

Value

pos returns a list of 4:

<code>text</code>	The original text
<code>POSTagged</code>	The original words replaced with parts of speech in context.
<code>POSprop</code>	Dataframe of the proportion of parts of speech by row.
<code>POSfreq</code>	Dataframe of the frequency of parts of speech by row.

pos.by returns a list of 6:

<code>text</code>	The original text
<code>POSTagged</code>	The original words replaced with parts of speech in context.
<code>POSprop</code>	Dataframe of the proportion of parts of speech by row.
<code>POSfreq</code>	Dataframe of the frequency of parts of speech by row.
<code>pos.by.prop</code>	Dataframe of the proportion of parts of speech by grouping variable.
<code>pos.by.freq</code>	Dataframe of the frequency of parts of speech by grouping variable.

References

openNLP <http://opennlp.apache.org>

See Also

[tagPOS](#)

Examples

```
## Not run:
posdat <- pos(DATA$state)
str(posdat)
names(posdat)
posdat$text      #original text
posdat$POStagged #words replaced with parts of speech
posdat$POSprop   #proportion of parts of speech by row
posdat$POSfreq   #frequency of parts of speech by row

pos(DATA$state, parallel = TRUE) # not always useful

## End(Not run)

#use pos.tags to interpret part of speech tags used by pos & pos.by
pos.tags()
pos.tags("matrix")
pos.tags("dataframe")
pos.tags("df")
pos.tags("all")

## Not run:
posbydat <- with(DATA, pos.by(state, sex))
names(posbydat)
posbydat
posbydat$pos.by.prop
with(DATA, pos.by(state, list(adult, sex)))

## End(Not run)
```

print.POS	<i>Prints a POS object</i>
-----------	----------------------------

Description

Prints a POS object.

Usage

```
## S3 method for class 'POS'
print(x, ...)
```

Arguments

x	The POS object
...	ignored

<code>print.POSby</code>	<i>Prints a POSby object</i>
--------------------------	------------------------------

Description

Prints a POSby object.

Usage

```
## S3 method for class 'POSby'
print(x, ...)
```

Arguments

<code>x</code>	The POSby object
<code>...</code>	ignored

<code>print.termco_d</code>	<i>Prints an termco_d object.</i>
-----------------------------	-----------------------------------

Description

Prints an termco_d object.

Usage

```
## S3 method for class 'termco_d'
print(x, ...)
```

Arguments

<code>x</code>	The termco_d object
<code>...</code>	ignored

<code>qdap</code>	<i>qdap: Quantitative Discourse Analysis Package</i>
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Description

This package automates many of the tasks associated with quantitative discourse analysis of transcripts containing discourse including frequency counts of sentence types, words, sentence, turns of talk, syllable counts and other assorted analysis tasks. The package provides parsing tools for preparing transcript data. Many functions enable the user to aggregate data by any number of grouping variables providing analysis and seamless integration with other R packages that undertake higher level analysis and visualization of text. This provides the user with a more efficient and targeted analysis.

syllable.sum

*Syllabication***Description**

syllable.sum - Count the number of syllables per row of text.

syllable.count - Count the number of syllables in a single text string.

polysyllable.sum - Count the number of polysyllables per row of text.

combo_syllable.sum - Count the number of both syllables and polysyllables per row of text.

Usage

```
syllable.sum(text.var, parallel = FALSE)
```

```
syllable.count(text, remove.bracketed = TRUE,
  algorithm.report = FALSE)
```

```
polysyllable.sum(text.var, parallel = FALSE)
```

```
combo_syllable.sum(text.var, parallel = FALSE)
```

Arguments

text.var The text variable

parallel logical. If TRUE attempts to run the function on multiple cores. Note that this may not mean a speed boost if you have one core or if the data set is smaller as the cluster takes time to create.

text A single character vector of text.

remove.bracketed logical. If TRUE brackets are removed from the analysis.

algorithm.report logical. If TRUE generates a report of words not found in the dictionary (i.e. syllables were calculated with an algorithm).

Value

syllable.sum returns a vector of syllable counts per row.

syllable.count returns a dataframe of syllable counts and algorithm/dictionary uses and, optionally, a report of words not found in the dictionary.

polysyllable.sum returns a vector of polysyllable counts per row.

combo_syllable.sum returns a dataframe of syllable and polysyllable counts per row.

Note

The worker of all the syllable functions is syllable.count though it is not intended for direct use on a transcript. This function relies on a dual dictionary lookup (based on the Nettalk Corpus (Sejnowski & Rosenberg, 1987)) and backup algorithm method.

References

Sejnowski, T.J., and Rosenberg, C.R. (1987). "Parallel networks that learn to pronounce English text" in *Complex Systems*, 1, 145-168.

Examples

```
## Not run:
syllable.count("Robots like Dason lie.")
syllable.count("Robots like Dason lie.", algorithm.report = TRUE)
syllable.sum(DATA$state)
polysyllable.sum(DATA$state)
combo_syllable.sum(DATA$state)

## End(Not run)
```

termco.a

Search For and Count Terms

Description

termco.a - Search a transcript by any number of grouping variables for categories (themes) of grouped root terms. While there are other termco functions in the termco family (i.e. termco.d) termco.a is a wrapper for general use.

termco.d - Search a transcript by any number of grouping variables for root terms.

term.match - Search a transcript for words that exactly match term(s).

termco2mat - Convert a termco dataframe to a matrix for use with visualization functions (e.g. heatmap2 of the gplots package).

Usage

```
termco.a(text.var, grouping.var = NULL, match.list,
  short.term = TRUE, ignore.case = TRUE, elim.old = TRUE,
  output = "percent", digits = 2,
  apostrophe.remove = FALSE, char.keep = NULL,
  digit.remove = NULL, ...)
```

```
termco.d(text.var, grouping.var = NULL, match.string,
  short.term = FALSE, ignore.case = TRUE,
  zero.replace = 0, output = "percent", digits = 2,
  apostrophe.remove = FALSE, char.keep = NULL,
  digit.remove = TRUE, ...)
```

```
term.match(text.var, terms, return.list = TRUE,
  apostrophe.remove = FALSE)
```

```
termco2mat(dataframe, drop.wc = TRUE, short.terms = TRUE,
  rm.zerocol = FALSE, no.quote = TRUE, transform = TRUE,
  trim.terms = TRUE)
```

Arguments

<code>text.var</code>	The text variable.
<code>grouping.var</code>	The grouping variables. Default NULL generates one word list for all text. Also takes a single grouping variable or a list of 1 or more grouping variables.
<code>match.list</code>	a list of named character vectors
<code>short.term</code>	logical. If TRUE column names are trimmed versions of the match list, otherwise the terms are wrapped with <code>'term(phrase)'</code>
<code>ignore.case</code>	logical. If TRUE case is ignored.
<code>elim.old</code>	logical. If TRUE eliminates the columns that are combined together by the named <code>match.list</code> .
<code>output</code>	Type of proportion output; either "proportion" (decimal format) or "percent". Default is percent.
<code>digits</code>	integer indicating the number of decimal places (round) or significant digits (signif) to be used. Negative values are allowed.
<code>apostrophe.remove</code>	logical. If TRUE removes apostrophes from the text before examining.
<code>char.keep</code>	A character vector of symbol character (i.e. punctuation) that strip should keep. The default is to strip everything except apostrophes.
<code>digit.remove</code>	logical. If TRUE strips digits from the text.
<code>...</code>	Other argument supplied to strip.
<code>match.string</code>	A vector of terms to search for. When using inside of <code>term.match</code> the term(s) must be words or partial words but do not have to be when using <code>termco.d</code> (i.e. they can be phrases, symbols etc.).
<code>zero.replace</code>	Value to replace 0 values with.
<code>return.list</code>	logical. If TRUE returns the output for multiple terms as a list by term rather than a vector.
<code>dataframe</code>	A <code>termco.a</code> (or <code>termco.d</code>) dataframe or object.
<code>drop.wc</code>	logical. If TRUE the word count column will be dropped.
<code>short.colnames</code>	logical. If TRUE the "term()" portion of column names will be dropped.
<code>no.quote</code>	logical. If TRUE the matrix will be printed without quotes if it's character.
<code>transform</code>	logical. If TRUE the matrix will be transformed.

Value

both `termco.a` and `termco.d` return a list, of class "termco.d", of data frames and information regarding word counts:

<code>raw</code>	raw word counts by grouping variable
<code>prop</code>	proportional word counts by grouping variable; proportional to each individual's word use
<code>rnp</code>	a character combination data frame of raw and proportional
<code>zero_replace</code>	value to replace zeros with; mostly internal use
<code>output</code>	character value for output type (either "proportion" or "percent"; mostly internal use)
<code>digits</code>	integer value of number of digits to display; mostly internal use

`term.match` returns a list or vector of possible words that match a term.

`termco2mat` returns a matrix of term counts.

Note

The `match.list/match.string` is (optionally) case and character sensitive. Spacing is an important way to grab specific words and requires careful thought. Using "read" will find the words "bread", "read" "reading", and "ready". If you want to search for just the word "read" you'd supply a vector of `c(" read ", " reads", " reading", " reader")`. To search for non character arguments (i.e. numbers and symbols) additional arguments from `strip` must be passed.

See Also

See Also as [termco.d](#) See Also as [term.match](#) See Also as [termco2matrix](#)

Examples

```
## Not run:
#termco.a examples:

# General form for match.list
#
# ml <- list(
#   cat1 = c(),
#   cat2 = c(),
#   catn = c()
# )

ml <- list(
  cat1 = c(" the ", " a ", " an "),
  cat2 = c(" I' " ),
  "good",
  the = c("the", " the ", " the", "the")
)

(dat <- with(raj.act.1, termco.a(dialogue, person, ml)))
names(dat)
dat$rn timer #useful for presenting in tables
dat$raw #prop and raw are useful for performing calculations
dat$prop
dat <- with(raj.act.1, termco.a(dialogue, person, ml,
  short.term = FALSE, elim.old=FALSE))

dat2 <- data.frame(dialogue=c("@bryan is bryan good @br",
  "indeed", "@ brian"), person=qcv(A, B, A))

ml <- list(wrds=c("bryan", "indeed"), bryan=c("bryan", "@ br", "@br"))

with(dat2, termco.a(dialogue, person, match.list=ml, char.keep="@"))

with(dat2, termco.a(dialogue, person, match.list=ml,
  char.keep="@", output="proportion"))

DATA$state[1] <- "12 4 rgfr r0ffrg0"
termco.a(DATA$state, DATA$person, '0', digit.remove=FALSE)

#Using with term.match and exclude
exclude(term.match(DATA$state, qcv(th), FALSE), "truth")
termco.a(DATA$state, DATA$person, exclude(term.match(DATA$state, qcv(th),
FALSE), "truth"))
```

```

MTCH.LST <- exclude(term.match(DATA$state, qcv(th, i)), qcv(truth, stinks))
termco.a(DATA$state, DATA$person, MTCH.LST)

#termco.d examples:
term.match(DATA$state, qcv(i, the))
termco.d(DATA$state, DATA$person, c(" the", " i'"))
termco.d(DATA$state, DATA$person, c(" the", " i'"), ignore.case=FALSE)
termco.d(DATA$state, DATA$person, c(" the ", " i'"))

# termco2mat example:
MTCH.LST <- exclude(term.match(DATA$state, qcv(a, i)), qcv(is, it, am, shall))
termco_obj <- termco.a(DATA$state, DATA$person, MTCH.LST)
termco2mat(termco_obj)

# as a visual
dat <- termco2mat(termco_obj)
library(gplots)
heatmap.2(dat, trace="none")

## End(Not run)

```

wfm

Word Frequency Matrix

Description

wfm - Generate a word frequency matrix by grouping variable(s).

wfdf - Generate a word frequency data frame by grouping variable.

wfm.expanded - Expand a word frequency matrix to have multiple rows for each word.

wf.combine - Combines words (rows) of a word frequency data frame (wfdf) together.

Usage

```
wfm(text.var = NULL, grouping.var = NULL, wfdf = NULL,
    output = "raw", stopwords = NULL, digits = 2)
```

```
wfdf(text.var, grouping.var = NULL, stopwords = NULL,
    margins = FALSE, output = "raw", digits = 2)
```

```
wfm.expanded(text.var, grouping.var = NULL, ...)
```

```
wf.combine(wf.obj, word.lists, matrix = FALSE)
```

Arguments

text.var	The text variable
grouping.var	The grouping variables. Default NULL generates one word list for all text. Also takes a single grouping variable or a list of 1 or more grouping variables.
wfdf	A word frequency data frame given instead of raw text.var and optional grouping.var. Basically converts a word frequency dataframe (wfdf) to a word frequency matrix (wfm). Default is NULL.

output	Output type (either "proportion", "proportion" or "percent").
stopwords	A vector of stop words to remove.
digits	An integer indicating the number of decimal places (round) or significant digits (signif) to be used. Negative values are allowed
margins	logical. If TRUE provides grouping.var and word variable totals.
...	Other arguments supplied to wfm.
wf.obj	A wfm or wfdf object.
word.lists	A list of character vectors of words to pass to wf.combine
matrix	logical. If TRUE returns the output as a wfm rather than a wfdf object

Value

wfm returns a word frequency of the class matrix.

wfdf returns a word frequency of the class data.frame with a words column and optional margin sums.

wfm.expanded returns a matrix similar to a word frequency matrix (wfm)but the rows are expanded to represent the maximum usages of the word and cells are dummy coded to indicate that number of uses.

wf.combine returns a word frequency matrix (wfm) or dataframe (wfdf) with counts for the combined word.lists merged and remaining terms(else).

Examples

```
## Not run:
#word frequency matrix (wfm) example:
with(DATA, wfm(state, list(sex, adult)))
dat <- with(DATA, wfm(state, person))

#word frequency dataframe (wfdf) example:
with(DATA, wfdf(state, list(sex, adult)))
with(DATA, wfdf(state, person))

#wfm.expanded example:
z <- wfm(DATA$state, DATA$person)
wfm.expanded(z)
wfm.expanded(DATA$state, DATA$person)
wfm.expanded(DATA$state, list(DATA$sex, DATA$adult))

#wf.combine example:
#raw no margins (will work)
x <- wfm(DATA$state, DATA$person)

#raw with margin (will work)
y <- wfdf(DATA$state, DATA$person, margins = TRUE)

#porportion (will not work)
z <- wfdf(DATA$state, DATA$person, output = "proportion")

WL1 <- c(y[, 1])
WL2 <- list(c("read", "the", "a"), c("you", "your", "your're"))
WL3 <- list(bob = c("read", "the", "a"), yous = c("you", "your", "your're"))
WL4 <- list(bob = c("read", "the", "a"), yous = c("a", "you", "your", "your're"))
```

```

WL5 <- list(yous = c("you", "your", "your're"))
WL6 <- list(c("you", "your", "your're")) #no name so will be called words 1
WL7 <- c("you", "your", "your're")

wf.combine(z, WL2) #Won't work not a raw frequency matrix
wf.combine(x, WL2) #Works (raw and no margins)
wf.combine(y, WL2) #Works (raw with margins)
wf.combine(y, c("you", "your", "your're"))
wf.combine(y, WL1)
wf.combine(y, WL3)
wf.combine(y, WL4) #Error b/c there's overlapping words in the word lists
wf.combine(y, WL5)
wf.combine(y, WL6)
wf.combine(y, WL7)

worlis <- c("you", "it", "it's", "no", "not", "we")
y <- wfdf(DATA$state, list(DATA$sex, DATA$adult), margins = TRUE)
z <- wfdf.combine(y, worlis, matrix = TRUE)

chisq.test(z)
chisq.test(wfm(wfdf = y))

## End(Not run)

```

word.count

Word Counts

Description

word.count - Transcript Apply Word Counts

character.count - Transcript Apply Character Counts

character.table - Computes a table of character counts by grouping variable(s).

Usage

```
word.count(text.var, byrow = TRUE, missing = NA,
           digit.remove = TRUE, names = FALSE)
```

```
wc(text.var, byrow = TRUE, missing = NA,
   digit.remove = TRUE, names = FALSE)
```

```
character.count(text.var, byrow = TRUE, missing = NA,
                apostrophe.remove = TRUE, digit.remove = TRUE,
                count.space = FALSE)
```

```
character.table(text.var, grouping.var)
```

```
char.table(text.var, grouping.var)
```

Arguments

<code>text.var</code>	The text variable
<code>byrow</code>	logical. If TRUE counts by row, if FALSE counts all words.
<code>missing</code>	Value to insert for missing values (empty cells).
<code>digit.remove</code>	logical. If TRUE removes digits before counting words.
<code>names</code>	logical. If TRUE the sentences are given as the names of the counts.
<code>apostrophe.remove</code>	= TRUE logical. If TRUE apostrophes will be counted in the character count.
<code>count.space</code>	logical. If TRUE spaces are counted as characters.

Value

`word.count` returns a word count by row or total.

`character.count` returns a character count by row or total.

`character.table` returns a dataframe of character counts by grouping variable.

Note

`wc` is a convenient short hand for `word.count`.

See Also

[syllable.count](#)

Examples

```
# WORD COUNT
word.count(DATA$state)
wc(DATA$state)
word.count(DATA$state, names = TRUE)
word.count(DATA$state, byrow=FALSE, names = TRUE)
sum(word.count(DATA$state))

# CHARACTER COUNTS
character.count(DATA$state)
character.count(DATA$state, byrow=FALSE)
sum(character.count(DATA$state))

# CHARACTER TABLE
character.table(DATA$state, DATA$person)
char.table(DATA$state, DATA$person)
character.table(DATA$state, list(DATA$sex, DATA$adult))
colsplit2df(character.table(DATA$state, list(DATA$sex, DATA$adult)))
```


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