

Package ‘covfefe’

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Type Package

Title Political Linguistics Toolkit - Gaffes, Phonetics, and Text Transformation

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URL <https://github.com/mkirch/covfefe>

BugReports <https://github.com/mkirch/covfefe/issues>

Description A comprehensive toolkit for political linguistics featuring a museum of famous digital gaffes, phonetic transformation algorithms (Soundex, consonant shifts), QWERTY keyboard geometry for typo simulation, syllable parsing, word blending (portmanteau creation), and text corruption analysis. Originally inspired by the infamous ``covfefe" tweet of 2017.

License GPL (>= 3)

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adjacent_key_typo	<i>Generate adjacent-key typo</i>
-------------------	-----------------------------------

Description

Replaces one or more characters with adjacent keys.

Usage

```
adjacent_key_typo(word, n_typos = 1L)
```

Arguments

word	Character. Word to typo-fy
n_typos	Integer. Number of typos to introduce (default 1)

Value

Character. Word with typos

Examples

```
set.seed(123)
adjacent_key_typo("hello")
```

analyze_gaffe	<i>Analyze a gaffe comprehensively</i>
---------------	--

Description

Analyze a gaffe comprehensively

Usage

```
analyze_gaffe(gaffe, intended)
```

Arguments

gaffe	Character. The typo/gaffe
intended	Character. The intended word

Value

List with comprehensive analysis

Examples

```
analyze_gaffe("covfefe", "coverage")
```

blend_score	<i>Score how well a word is a blend of two others</i>
-------------	---

Description

Score how well a word is a blend of two others

Usage

```
blend_score(blend, word1, word2)
```

Arguments

blend	Character. Potential blend
word1	Character. First source word
word2	Character. Second source word

Value

Numeric. Score from 0 (poor blend) to 1 (perfect blend)

Examples

```
blend_score("brunch", "breakfast", "lunch")
```

blend_words	<i>Blend two words into a portmanteau</i>
-------------	---

Description

Combines the beginning of word1 with the end of word2.

Usage

```
blend_words(word1, word2, overlap = NULL)
```

Arguments

word1	Character. First word (contributes beginning)
word2	Character. Second word (contributes ending)
overlap	Integer. Desired overlap characters (auto-detected if NULL)

Value

Character. Blended word

Examples

```
blend_words("breakfast", "lunch") # "brunch" or similar
blend_words("refute", "repudiate") # "refudiate" or similar
```

consonant_pairs	<i>Phonetically Similar Consonant Pairs</i>
-----------------	---

Description

Pairs of consonants that are phonetically similar and commonly confused.

Usage

```
consonant_pairs
```

Format

A named list mapping consonants to their phonetically similar pairs.

corrupt_text	<i>Corrupt text with specified error type</i>
--------------	---

Description

Corrupt text with specified error type

Usage

```
corrupt_text(text, type = "random", position = NULL)
```

Arguments

text	Character. Text to corrupt
type	Character. Type of corruption: "keyboard", "phonetic", "double", "truncate", "swap", "omit", "random"
position	Integer. Position for positional corruptions (NULL = random)

Value

Character. Corrupted text

Examples

```
set.seed(42)
corrupt_text("hello", type = "keyboard")
corrupt_text("coverage", type = "truncate", position = 3)
```

 covfey

Covfey any word.

Description

Attempt to produce your own historic typos. This function takes a word and performs the following algorithm thanks to [this codegolf thread](#):

1. Include all characters up through the first vowel in the word. (co)
2. Identifies the next consonant after the first vowel in the word. (v)
3. Changes that consonant to a phonetically similar consonant. (f)
4. Finds the next vowel after that consonant. (e)
5. Combines the two, and repeats. (fefe)
6. Puts it all together: covfefe

Usage

```
covfey(str = "coverage")
```

Arguments

str Character string of word to covfey. Defaults to "coverage".

Examples

```
covfey("coverage")
covfey("programming")
covfey("president")
covfey("tropical")
```

 covfeySentence

Covfey any sentence.

Description

Calls covfey() and uses rules to decide which, if any, word is covfeyfied.

Usage

```
covfeySentence(
  sent = paste0("Despite the constant negative", " press coverage we are going ",
    "to Make America Great Again"),
  endSentence = TRUE
)
```

Arguments

sent Character string of sentence to covfey. Defaults to the famous tweet.
 endSentence Boolean where TRUE forces use of punctuation.

Examples

```
covfeySentence(paste0("Despite the constant negative press coverage,",
  "we are going to Make America Great Again"))
```

covfeySpeech	<i>Covfey any speech.</i>
--------------	---------------------------

Description

Calls covfeySentences() and uses rules to decide which, if any, sentences are covfeyfied.

Usage

```
covfeySpeech(
  text = system.file("extdata", "inauguration.txt", package = "covfey"),
  out = file.path(tempdir(), "covfey_inauguration.txt")
)
```

Arguments

text Location of input .txt file.
 out Location of output .txt file.

Examples

```
covfeySpeech()
```

detect_blend	<i>Detect possible source words for a blend</i>
--------------	---

Description

Detect possible source words for a blend

Usage

```
detect_blend(blend, candidates)
```

Arguments

- blend Character. The blended word
- candidates Character vector. Possible source words

Value

Character vector. Most likely source words

Examples

```
detect_blend("brunch", c("breakfast", "lunch", "dinner"))
```

detect_typo_type	<i>Detect likely typo type</i>
------------------	--------------------------------

Description

Detect likely typo type

Usage

```
detect_typo_type(typo, intended = NULL)
```

Arguments

- typo Character. The typo'd word
- intended Character. The intended word (if known)

Value

List with possible_types and confidence scores

Examples

```
detect_typo_type("tesy", "test")
```

gaffes	<i>Political Linguistics Museum Data</i>
--------	--

Description

A data frame containing 13 famous digital gaffes and typos from political figures.

Usage

```
gaffes
```

Format

A data frame with 13 rows and 8 variables:

id Unique identifier for the gaffe

original The intended word or phrase

gaffe The actual typo or gaffe

person The person who made the gaffe

year Year the gaffe occurred

platform Platform where the gaffe appeared (Twitter, Truth Social, etc.)

typo_type Classification of the typo type

context Brief description of the context

Source

Various news sources and social media archives

garble_sentence	<i>Garble a sentence with random corruptions</i>
-----------------	--

Description

Garble a sentence with random corruptions

Usage

```
garble_sentence(sentence, corruption_rate = 0.3)
```

Arguments

sentence Character. Sentence to garble

corruption_rate Numeric. Fraction of words to corrupt (0-1)

Value

Character. Garbled sentence

Examples

```
set.seed(42)
garble_sentence("This is a test", corruption_rate = 0.5)
```

get_phonetic_group	<i>Get phonetic group for a consonant</i>
--------------------	---

Description

Get phonetic group for a consonant

Usage

```
get_phonetic_group(consonant)
```

Arguments

consonant	Character. Single consonant
-----------	-----------------------------

Value

Character. Group name (labial, dental, velar, etc.)

Examples

```
get_phonetic_group("b") # "labial"
```

is_keyboard_adjacent	<i>Check if two keys are adjacent</i>
----------------------	---------------------------------------

Description

Check if two keys are adjacent

Usage

```
is_keyboard_adjacent(key1, key2)
```

Arguments

key1	Character. First key
key2	Character. Second key

Value

Logical

Examples

```
is_keyboard_adjacent("a", "s") # TRUE
is_keyboard_adjacent("a", "p") # FALSE
```

keyboard_mash	<i>Simulate keyboard mash (extra characters)</i>
---------------	--

Description

Adds random adjacent characters to simulate accidental key presses.

Usage

```
keyboard_mash(word, n_extra = 3L)
```

Arguments

word	Character. Base word
n_extra	Integer. Number of extra characters to add

Value

Character. Word with extra characters

Examples

```
set.seed(456)
keyboard_mash("powerful") # Might produce "powerfulnnz"
```

museum_by_person	<i>Filter gaffes by person</i>
------------------	--------------------------------

Description

Filter gaffes by person

Usage

```
museum_by_person(pattern)
```

Arguments

pattern	Character. Regex pattern to match person name
---------	---

Value

Data frame of matching gaffes

Examples

```
museum_by_person("Trump")
```

museum_by_type	<i>Filter gaffes by typo type</i>
----------------	-----------------------------------

Description

Filter gaffes by typo type

Usage

```
museum_by_type(type)
```

Arguments

type Character. Type of typo (e.g., "blend", "keyboard_mash")

Value

Data frame of matching gaffes

Examples

```
museum_by_type("blend")
```

museum_by_year	<i>Filter gaffes by year</i>
----------------	------------------------------

Description

Filter gaffes by year

Usage

```
museum_by_year(year)
```

Arguments

year Integer. Year to filter by

Value

Data frame of matching gaffes

Examples

```
museum_by_year(2017)
```

museum_list	<i>List all gaffes in the museum</i>
-------------	--------------------------------------

Description

List all gaffes in the museum

Usage

```
museum_list()
```

Value

Character vector of gaffe IDs

Examples

```
museum_list()
```

museum_lookup	<i>Look up a specific gaffe</i>
---------------	---------------------------------

Description

Look up a specific gaffe

Usage

```
museum_lookup(id)
```

Arguments

id	Character. The gaffe ID (e.g., "covfefe", "potatoe")
----	--

Value

List with gaffe details

Examples

```
museum_lookup("covfefe")
```

museum_random	<i>Get a random gaffe from the museum</i>
---------------	---

Description

Get a random gaffe from the museum

Usage

```
museum_random()
```

Value

List with gaffe details

Examples

```
set.seed(42)
museum_random()
```

onset_nucleus_coda	<i>Parse syllable into onset, nucleus, coda</i>
--------------------	---

Description

Parse syllable into onset, nucleus, coda

Usage

```
onset_nucleus_coda(syllable)
```

Arguments

syllable	Character. Single syllable
----------	----------------------------

Value

List with onset, nucleus, coda components

Examples

```
onset_nucleus_coda("cat") # list(onset="c", nucleus="a", coda="t")
```

phonetic_distance	<i>Calculate phonetic distance between words</i>
-------------------	--

Description

Uses Soundex codes to measure phonetic similarity.

Usage

```
phonetic_distance(word1, word2)
```

Arguments

word1	Character. First word
word2	Character. Second word

Value

Numeric. Distance (0 = identical, higher = more different)

Examples

```
phonetic_distance("coverage", "covfefe")
```

phonetic_groups	<i>Phonetic Consonant Groups</i>
-----------------	----------------------------------

Description

Consonants grouped by place of articulation.

Usage

```
phonetic_groups
```

Format

A named list with groups: labial, dental, velar, sibilant, liquid, glide.

phonetic_shift	<i>Shift consonant to phonetically similar consonant</i>
----------------	--

Description

Shift consonant to phonetically similar consonant

Usage

phonetic_shift(word, target)

Arguments

- word Character. Word to transform
- target Character. Consonant to shift (if found)

Value

Character. Transformed word

Examples

phonetic_shift("coverage", "v") # "coferage"

qwerty_adjacency	<i>QWERTY Keyboard Adjacency Data</i>
------------------	---------------------------------------

Description

A list containing adjacent keys for each letter on a QWERTY keyboard.

Usage

qwerty_adjacency

Format

A named list with 26 elements (a-z), each containing a character vector of adjacent key letters.

qwerty_adjacent	<i>Get adjacent keys on QWERTY keyboard</i>
-----------------	---

Description

Get adjacent keys on QWERTY keyboard

Usage

```
qwerty_adjacent(key)
```

Arguments

key	Character. Single lowercase letter
-----	------------------------------------

Value

Character vector of adjacent keys

Examples

```
qwerty_adjacent("f")
```

qwerty_distance	<i>Calculate QWERTY distance between two keys</i>
-----------------	---

Description

Uses Euclidean distance based on key positions.

Usage

```
qwerty_distance(key1, key2)
```

Arguments

key1	Character. First key (single lowercase letter)
key2	Character. Second key (single lowercase letter)

Value

Numeric distance

Examples

```
qwerty_distance("a", "s") # Adjacent = 1  
qwerty_distance("a", "p") # Far apart
```

qwerty_layout	<i>QWERTY Keyboard Layout Data</i>
---------------	------------------------------------

Description

A list containing row and column positions for each letter on a QWERTY keyboard.

Usage

```
qwerty_layout
```

Format

A named list with 26 elements (a-z), each containing a named numeric vector with 'row' and 'col' positions.

soundex	<i>Calculate Soundex code</i>
---------	-------------------------------

Description

American Soundex algorithm for phonetic encoding.

Usage

```
soundex(word)
```

Arguments

word	Character. Word to encode
------	---------------------------

Value

Character. 4-character Soundex code

Examples

```
soundex("Robert")      # "R163"
soundex("Rupert")       # "R163" (same as Robert)
soundex("Washington")   # "W252"
```

soundex_map	<i>Soundex Encoding Map</i>
-------------	-----------------------------

Description

Mapping of consonants to their Soundex digit codes.

Usage

soundex_map

Format

A named character vector mapping consonants to digits 1-6.

suggest_corrections	<i>Suggest corrections for a typo</i>
---------------------	---------------------------------------

Description

Suggest corrections for a typo

Usage

suggest_corrections(typo, dictionary = NULL)

Arguments

- typo Character. The typo'd word
- dictionary Character vector. Optional custom dictionary

Value

Character vector of suggested corrections

Examples

suggest_corrections("tesy")

syllabify	<i>Split word into syllables</i>
-----------	----------------------------------

Description

Uses a simplified vowel-based algorithm.

Usage

```
syllabify(word)
```

Arguments

word	Character. Word to syllabify
------	------------------------------

Value

Character vector of syllables

Examples

```
syllabify("hello")      # c("hel", "lo")
syllabify("coverage")   # c("cov", "er", "age")
```

syllable_count	<i>Count syllables in a word</i>
----------------	----------------------------------

Description

Count syllables in a word

Usage

```
syllable_count(word)
```

Arguments

word	Character. Word to count
------	--------------------------

Value

Integer. Number of syllables

Examples

```
syllable_count("hello") # 2
```

syllable_swap	<i>Swap syllables between two words</i>
---------------	---

Description

Swap syllables between two words

Usage

```
syllable_swap(word1, word2, position = 1L)
```

Arguments

word1	Character. First word
word2	Character. Second word
position	Integer. Which syllable to swap (1-indexed)

Value

Character vector of length 2 with swapped words

Examples

```
syllable_swap("coverage", "president", 1)
```

vowel_shift	<i>Shift vowels in a word</i>
-------------	-------------------------------

Description

Shift vowels in a word

Usage

```
vowel_shift(word, from, to)
```

Arguments

word	Character. Word to transform
from	Character. Vowel to replace
to	Character. Replacement vowel

Value

Character. Transformed word

Examples

```
vowel_shift("test", "e", "i") # "tist"
```

vowel_shifts

Vowel Shift Mappings

Description

Possible vowel shifts inspired by historical sound changes.

Usage

```
vowel_shifts
```

Format

A named list mapping vowels to possible shift targets.

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