

Package ‘ChineseNames’

November 29, 2021

Title Chinese Name Database 1930-2008

Version 1.1.1

Date 2021-11-29

Author Han-Wu-Shuang Bao [aut, cre]

Maintainer Han-Wu-Shuang Bao <baohws@foxmail.com>

Description A database of Chinese surnames and Chinese given names (1930-2008).

This database contains nationwide frequency statistics of 1,806 Chinese surnames and 2,614 Chinese characters used in given names, covering about 1.2 billion Han Chinese population (96.8% of the Han Chinese household-registered population born from 1930 to 2008 and still alive in 2008).

This package also contains a function for computing multiple features of Chinese surnames and Chinese given names for scientific research (e.g., name uniqueness, name gender, name valence, and name warmth/competence).

License GPL-3

Encoding UTF-8

LazyData true

URL <https://github.com/psychbruce/ChineseNames>

BugReports <https://github.com/psychbruce/ChineseNames/issues>

Depends R (>= 3.6.0)

Imports bruceR, data.table

Suggests babynames, car, dplyr

RoxygenNote 7.1.2

NeedsCompilation no

Repository CRAN

Date/Publication 2021-11-29 16:40:02 UTC

R topics documented:

ChineseNames	2
compute_name_index	3
familynname	5
givennname	6
population	7
top1000name.prov	7
top100name.year	7
top50char.year	8

Index	9
--------------	----------

ChineseNames	<i>ChineseNames: Chinese Name Database 1930-2008</i>
--------------	--

Description

A database of Chinese surnames and Chinese given names (1930-2008). This database contains nationwide frequency statistics of 1,806 Chinese surnames and 2,614 Chinese characters used in given names, covering about 1.2 billion Han Chinese population (96.8% of the Han Chinese household-registered population born from 1930 to 2008 and still alive in 2008). This package also contains a function for computing multiple features of Chinese surnames and Chinese given names for scientific research (e.g., name uniqueness, name gender, name valence, and name warmth/competence).

Details

Details are described in <https://github.com/psychbruce/ChineseNames>

Citation

Bao, H.-W.-S. (2021). ChineseNames: Chinese Name Database 1930-2008. R package version 1.1.1. <https://CRAN.R-project.org/package=ChineseNames>

Bao, H.-W.-S., Cai, H., Jing, Y., & Wang, J. (2021). Novel evidence for the increasing prevalence of unique names in China: A reply to Ogihara (2020). *Frontiers in Psychology*, 12, 731244. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.731244/full>

Note

This database does not contain any individual-level information (so it does not leak personal privacy). All data are at the name level or character level. Extremely rare characters are not included.

Source

This database was provided by Beijing Meiming Science and Technology Company (in collaboration) and originally obtained from the National Citizen Identity Information Center (NCIIC) of China in 2008.

compute_name_index *Compute multiple features of surnames and given names.*

Description

Compute all available name features (indices) based on `familyname` and `givenname`. You can either input a data frame with a variable of Chinese full names (and a variable of birth years, if necessary) or just input a vector of full names (and a vector of birth years, if necessary).

- Usage 1: Input a single value or a vector of name [and birth, if necessary].
- Usage 2: Input a data frame of data and the variable name of `var.fullname` (or `var.surname` and/or `var.givenname`) [and `var.birthyear`, if necessary].

Caution. Name-character uniqueness (NU) for birth year ≥ 2010 is estimated by forecasting and thereby may not be accurate.

Usage

```
compute_name_index(
  data = NULL,
  var.fullname = NULL,
  var.surname = NULL,
  var.givenname = NULL,
  var.birthyear = NULL,
  name = NA,
  birth = NA,
  index = c("NLen", "SNU", "SNI", "NU", "CCU", "NG", "NV", "NW", "NC"),
  NU.approx = TRUE,
  digits = 4,
  return.namechar = TRUE,
  return.all = FALSE
)
```

Arguments

<code>data</code>	Data frame.
<code>var.fullname</code>	Variable name of Chinese full names (e.g., "name").
<code>var.surname</code>	Variable name of Chinese surnames (e.g., "surname").
<code>var.givenname</code>	Variable name of Chinese given names (e.g., "givenname").
<code>var.birthyear</code>	Variable name of birth year (e.g., "birth").
<code>name</code>	If no data, you can just input a vector of full name(s).
<code>birth</code>	If no data, you can just input a vector of birth year(s).
<code>index</code>	Which indices to compute? By default, it computes all available name indices:

- NLen: full-name length (2~4).
- SNU: surname uniqueness (1~6).
- SNI: surname initial (1~26).
- NU: name-character uniqueness (1~6).
- CCU: character-corpus uniqueness (1~6).
- NG: name gender (-1~1).
- NV: name valence (1~5).
- NW: name warmth (1~5).
- NC: name competence (1~5).

For details, see <https://github.com/psychbruce/ChineseNames>

NU.approx	Whether to <i>approximately</i> compute name-character uniqueness (NU) using <i>the nearest two birth cohorts with relative weights</i> (which would be more precise than just using a single birth cohort). Default is TRUE.
digits	Number of decimal places. Default is 4.
return.namechar	Whether to return separate name characters. Default is TRUE.
return.all	Whether to return all temporary variables in the computation of the final variables. Default is FALSE.

Value

A new data frame (of class `data.table`) with name indices appended. Full names are split into `name0` (surnames, with compound surnames automatically detected), `name1`, `name2`, and `name3` (given-name characters).

Citation

Bao, H.-W.-S. (2021). ChineseNames: Chinese Name Database 1930-2008. R package version 1.1.1. <https://CRAN.R-project.org/package=ChineseNames>

Bao, H.-W.-S., Cai, H., Jing, Y., & Wang, J. (2021). Novel evidence for the increasing prevalence of unique names in China: A reply to Ogihara (2020). *Frontiers in Psychology*, 12, 731244. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.731244/full>

Note

For details and examples, see <https://github.com/psychbruce/ChineseNames>

Examples

```
## Prepare ##
sn=familyname$surname[1:12]
gn=c(top100name.year$name.all.1960[1:6],
     top100name.year$name.all.2000[1:6],
     top100name.year$name.all.1960[95:100],
     top100name.year$name.all.2000[95:100])
demodata=data.frame(name=paste0(sn, gn),
                    birth=c(1960:1965, 2000:2005,
```

```
                                1960:1965, 2000:2005))
# View(demodata)

## Compute ##
newdata=compute_name_index(demodata,
                             var.fullname="name",
                             var.birthyear="birth")
# View(newdata)
```

familyname	<i>1,806 Chinese surnames and nationwide frequency.</i>
------------	---

Description

1,806 Chinese surnames and nationwide frequency.

Usage

```
data(familyname)
```

Format

A data frame with 7 variables:

surname surname (in Chinese)

compound 0 = single surname, 1 = compound surname

initial initial letter (a-z)

initial.rank initial order (1-26)

n.1930_2008 total counts in the database

ppm.1930_2008 proportion in population (ppm = parts per million)

surname.uniqueness surname uniqueness

Details

<https://github.com/psychbruce/ChineseNames>

givenname	<i>2,614 Chinese characters used in given names and nationwide frequency.</i>
-----------	---

Description

2,614 Chinese characters used in given names and nationwide frequency.

Usage

`data(givenname)`

Format

A data frame with 25 variables:

`character` character used in given names (in Chinese)

`pinyin` pinyin (pronunciation)

`bihua` number of strokes in a character

`n.male` total counts in male

`n.female` total counts in female

`name.gender` difference in proportions of a character used by male vs. female

`n.1930_1959`, `n.1960_1969`, `n.1970_1979`, `n.1980_1989`, `n.1990_1999`, `n.2000_2008` total counts in a birth cohort

`ppm.1930_1959`, `ppm.1960_1969`, `ppm.1970_1979`, `ppm.1980_1989`, `ppm.1990_1999`, `ppm.2000_2008` proportion (parts per million) in a birth cohort

`name.ppm` average ppm (parts per million) across all cohorts

`name.uniqueness` name-character uniqueness (in naming practices)

`corpus.ppm` proportion (parts per million) in contemporary Chinese corpus

`corpus.uniqueness` character-corpus uniqueness (in contemporary Chinese corpus)

`name.valence` name valence (positivity of character meaning) (based on subjective ratings from 16 raters, ICC = 0.921)

`name.warmth` name warmth/morality (based on subjective ratings from 10 raters, ICC = 0.774)

`name.competence` name competence/assertiveness (based on subjective ratings from 10 raters, ICC = 0.712)

Details

<https://github.com/psychbruce/ChineseNames>

population	<i>Population statistics for the Chinese name database.</i>
------------	---

Description

Population statistics for the Chinese name database.

Usage

```
data(population)
```

Details

<https://github.com/psychbruce/ChineseNames>

top1000name.prov	<i>Top 1,000 given names in 31 Chinese mainland provinces.</i>
------------------	--

Description

Top 1,000 given names in 31 Chinese mainland provinces.

Usage

```
data(top1000name.prov)
```

Details

<https://github.com/psychbruce/ChineseNames>

top100name.year	<i>Top 100 given names in 6 birth cohorts.</i>
-----------------	--

Description

Top 100 given names in 6 birth cohorts.

Usage

```
data(top100name.year)
```

Details

<https://github.com/psychbruce/ChineseNames>

top50char.year	<i>Top 50 given-name characters in 6 birth cohorts.</i>
----------------	---

Description

Top 50 given-name characters in 6 birth cohorts.

Usage

```
data(top50char.year)
```

Details

<https://github.com/psychbruce/ChineseNames>

Index

ChineseNames, [2](#)
compute_name_index, [3](#)

familyname, [3, 5](#)

givenname, [3, 6](#)

population, [7](#)

top1000name.prov, [7](#)
top100name.year, [7](#)
top50char.year, [8](#)