

nameauth — Name authority mechanism for consistency in text and index*

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Abstract

The `nameauth` package automates the formatting and indexing of names. This aids the use of a **name authority** and the process of textual reordering and revision without needing to retype name references.

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This manual is designed with a text block compatible with both US letter and A4. Macro cross refs are minimized to give a relatively “clean” index that illustrates this package’s indexing functions.

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1 Introduction

1.1 Preliminaries

Books can reference hundreds of names. It takes time and money to check them. This package helps to format and index names consistently and automatically, helping you save time and money. Features include:

- Simultaneously format, display, and index names using fewest keystrokes.
- Context automatically determines the syntactic form of names.
- The default uses longer name forms for the first use and shorter forms thereafter.
- Apply typesetting formats to fit your needs without retyping names.
- Move text in the document without retyping names.
- Show name variants in the text, yet index consistent name forms.
- Handle some cross-cultural naming conventions.
- Allow for different capitalizing and other conventions.
- Index different people with the same name by using tags.
- Process names in list environments and other special environments.

I started using L^AT_EX and wrote this package when translating old German and Latin texts. I learned much more than I expected regarding L^AT_EX typesetting engines, font systems, indexing programs, class and package interactions, and naming conventions. Please consider the following general notes that apply to the development and use of this package:

As of version 2.0 you *can* put control sequences in names, but with a few caveats; see Section 2.5.7. Also, this package is more fault-tolerant and prevents or warns about malformed input.

This manual performs something of a “torture test” on this package. You might want to avoid doing that.

This package depends on `etoolbox`, `ifxetex`, `ifluatex`, `suffix`, `trimspaces`, and `xargs`. It has been tested with `latex`, `lualatex`, `pdflatex`, and `xelatex`. It will work with `makeindex` and `texindy`. This documentation was typeset with `pdflatex` and `makeindex`.

Indexing generally conforms to the standard in Nancy C. Mulvany, *Indexing Books* (Chicago: University of Chicago Press, 1994). This should be suitable for a very wide application across a number of disciplines.

Thanks to MARC VAN DONGEN, ENRICO GREGORIO, PHILIPP STEPHANI, HEIKO OBERDIEK, UWE LUECK, and ROBERT SCHLICHT for their assistance in the early versions of this package.

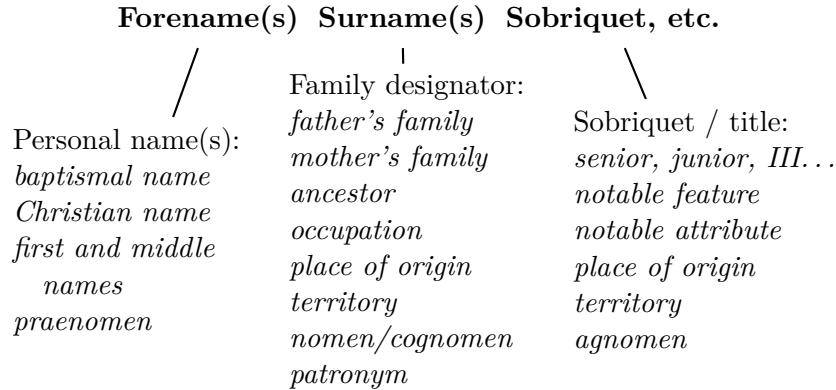
This documentation uses names of living and historical figures because users refer to real people in their projects. At no time do I intend any statement of bias for or against a particular person, culture, or tradition. All names mentioned herein deserve respect for the impact and legacy of their bearers.

1.2 What's In A Name?

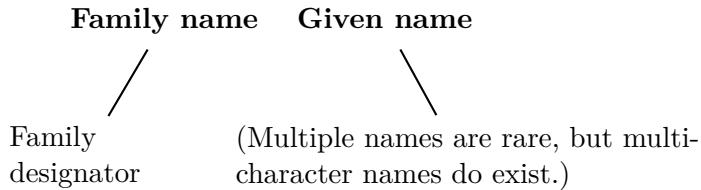
Personal name forms are ambiguous apart from historical and cultural contexts. The `nameauth` package helps you encode names in a way that anticipates and responds automatically to such contexts without the need to retype names.

Below we see three categories of names with suggestions regarding what might be used therein.¹ Professional writing often calls for the full form of a person's name to be used in its first occurrence, with shorter forms used thereafter. This package adapts that principle to all the forms below.

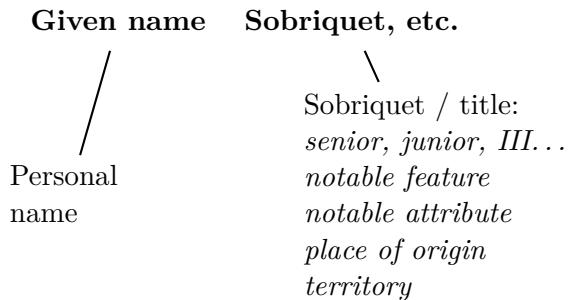
1. Western name:



2. Eastern name:



3. Ancient name:



¹These suggestions are not exhaustive. For special cases, one might have to decide how to handle, for example, Hungarian and Icelandic names as Eastern or Western.

2 Usage

2.1 Package Options

\usepackage[⟨option₁₂

Package options address the following:

1. The way name data are entered
2. Semantic display of names (full/short, commas/none, reversed/caps)
3. Typographic display of names (formatted or not)
4. Indexing and sorting of names in the index

Default options are in boldface.

Show/Hide Affix Commas

nocomma Suppress commas between surnames and affixes, following the *Chicago Manual of Style* and other conventions.

comma Retain commas between surnames and affixes.

This option is set at load time. If you use *modern standards* or Eastern names, choose the default **nocomma** option to get, *e.g.*, JAMES EARL CARTER JR.

If you need to adopt *older standards* that use commas between surnames and affixes, you have two choices:

- First, the **comma** option produces, *e.g.*, JAMES EARL CARTER, JR. Yet it limits the use of macros like \AKA and \PName.²
- Second, Section 2.4.1 shows how one can use \ShowComma with the **nocomma** option to get similar results, but with more flexibility.

Enable/Disable Formatting

mainmatter Enable typographic formatting attributes (see formatting options below), starting at the beginning of a document.

frontmatter Disable typographic formatting, but retain automatic full and short forms.

The default starts formatting names immediately. Use the **frontmatter** option to suppress name formatting until you want it to start via \NamesActive. These options have no additional effects on the index. See Section 2.5.10.

Enable/Disable Indexing

index Create index entries in place with names.

noindex Suppress indexing of names.

The default starts indexing names right away. The **noindex** option disables the indexing of names until \IndexActive enables it. This applies only to naming and indexing macros in the nameauth package. See Section 2.8.5.

²Before version 0.9 the nameauth package assumed the **comma** option.

Enable/Disable Index Sorting

<code>pretag</code>	Create sort keys used with <code>makeindex</code> .
<code>nopretag</code>	Do not create sort keys.

The default allows `\PretagName` to create sort keys used in `makeindex` / `texindy`. Seldom would one change this option. See Section 2.5.8.

Capitalize Entire Surnames

<code>normalcaps</code>	Do not perform any special capitalization.
<code>allcaps</code>	Capitalize entire surnames, such as romanized Eastern names.

This only affects names printed in the body text. See Section 2.5.9 on how to get caps in both the body text and the index—easy with the simplified interface. Section 2.4.2 deals with capitalization on a section-level and per-name basis.

Reverse Name Order

<code>notreversed</code>	Print names in the order specified by <code>\Name</code> and the other macros.
<code>allreversed</code>	Print name forms in “smart” reverse order.
<code>allrevcomma</code>	Print all names in Western “Surname, Forenames” order.

See Sections 2.4.1, 2.4.2, and 2.5.2 for related macros to control name reversing by section or by name. So-called “last-comma-first” lists of names are *not* the same as the `comma` option.

Formatting Attributes

<code>alwaysformat</code>	If formatting is enabled by the <code>mainmatter</code> option or by <code>\NamesActive</code> , this option causes all names to have special typographic formatting.
<code>smallcaps</code>	Set the first use of a name in small caps.
<code>italic</code>	Italicize the first occurrence of a name.
<code>boldface</code>	Set the first use of a name in boldface.
<code>noformat</code>	Do not define a default format. Can be used with custom formatting.

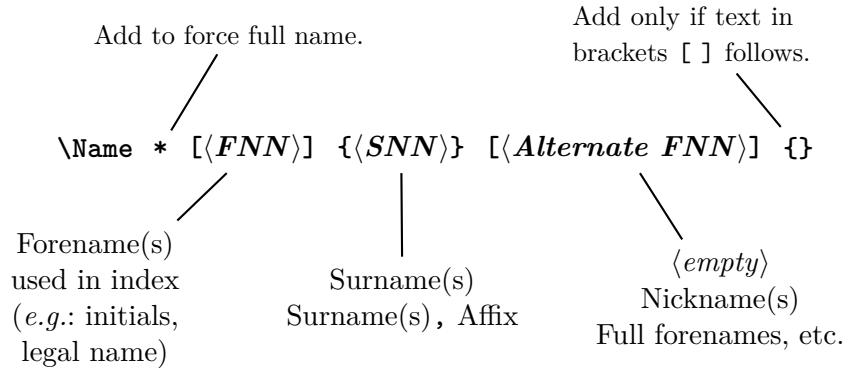
The default is `smallcaps` because this package was developed to aid the editing and translation of older German and Latin documents. Section 2.5.9 details even more possibilities for presenting the first use of names.

2.2 Quick Start Guide

2.2.1 Main Interface

See Section 2.3 for a proper description of \Name. Here we see briefly how to work with the classes of names in Section 1.2. We abbreviate the command parameters $\langle\text{forename}(s)\rangle$ with $\langle FNN \rangle$ and $\langle\text{surname}(s)\rangle$ with $\langle SNN \rangle$. The `nocomma` option works best with affixes, Eastern, and ancient names.

Western Names



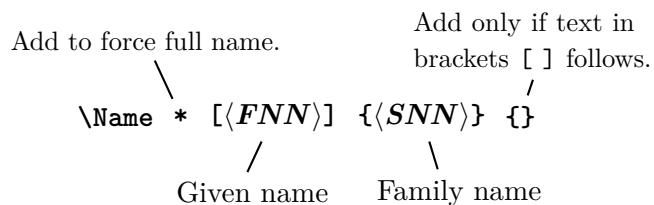
Usual forms:

\Name [*FNN*] \{*SNN*\} \Name [George] {Washington}
\Name [*FNN*] \{*SNN, Affix*\} \Name [John David] {Rockefeller, II}

You must include the $\langle FNN \rangle$ field with alternate forenames. The $\langle Alternate FNN \rangle$ are swapped with the $\langle FNN \rangle$, but only in the body text:

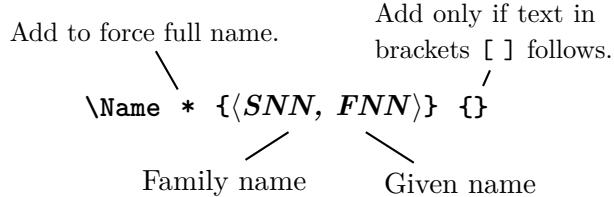
The older syntax is `\Name{\{SNN\}}[\{Affix\}]`. See Section 2.2.3 for its usage and its shortcomings. It remains for backward compatibility.

Eastern Names in the Text, Western-style Index



Technically, these are Western name forms without affixes. The reversing macros (Section 2.4.2) cause them to display in Eastern order in the body text only. The index entries are Western in fashion: $\langle SNN \rangle$, $\langle FNN \rangle$. This “non-native” form of Eastern names excludes all comma-delimited forms and the old syntax.

Eastern Names in the Text, Eastern-style Index



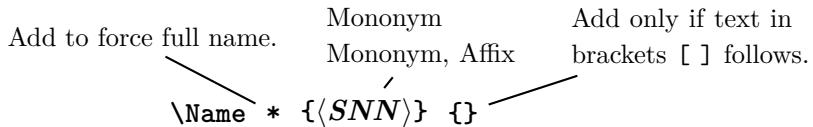
Usual form:

`\Name{<SNN, FNN>}` `\Name{Yamamoto, Isoroku}`

These names truly are Eastern names. They will take the form $\langle SNN FNN \rangle$ in the index even if the reversing macros (Section 2.4.2) put the names in Western order in the body text. We call this the “native” form of Eastern names.

The old form of Eastern names is `\Name{<SNN>}[<FNN>]`. Again, this is retained only for backward compatibility. Cf. Section 2.2.3.

Ancient Names



Usual form:

`\Name{<SNN>}` `\Name{Aristotle}`
`\Name{<SNN, affix>}` `\Name{Elizabeth, I}`

These forms are used for royalty, ancient figures, and other mononyms.³ The older syntax is `\Name{<Mononym>}[<Affix>]`. Cf. Section 2.2.3.

2.2.2 Simplified Interface

nameauth The `nameauth` environment allows one to save typing and aid consistency by using shorthands. It produces control sequences that are fully compatible with the main interface. Although not required, `nameauth` is best used in the document preamble to avoid undefined control sequences.⁴

```

\begin{nameauth}
  \< <cseq1> & <arg1> & <arg2> & <arg3> >
  \< <cseq2> & <arg1> & <arg2> & <arg3> > ...
\end{nameauth}
  
```

Please bear in mind that `\<` in this context is a control sequence. If you forget it or just use `<` without the backslash you will get errors. Leading and trailing spaces in each `&`-delimited field are stripped, as is also the case in the main interface. There *must* be four argument fields (three ampersands) per line.

³Technically, the native Eastern forms and the $\langle Mononym, Affix \rangle$ forms are identical, although used in different contexts. You would not wish to reverse a royal name, for example.

⁴The `nameauth` environment uses `\ignorespaces` to mitigate the need for trailing %.

Each $\langle cseq \rangle$ creates three macros. In the document text, $\backslash\langle cseq \rangle$ itself calls $\backslash\text{Name}$. $\backslash\text{L}\langle cseq \rangle$ (think “Long”) calls $\backslash\text{Name}^*$. $\backslash\text{S}\langle cseq \rangle$ (think “Short”) calls $\backslash\text{FName}$. In the document text, as with $\backslash\text{Name}$, include trailing braces {} if text in brackets [] follows any of the shorthands.

The following example illustrates a fairly complete set of names:

```

\begin{nameauth}
  \< Wash & George & Washington & >           Western
  \< Soto & Hernando & de Soto & >             particle
  \< JRock & John David & Rockefeller, II & >      affix
  \< JayR & John David & Rockefeller, IV & Jay > nickname5
  \< Aris & & Aristotle & >                     ancient
  \< Eliz & & Elizabeth, I & >                   royal
  \< Atil & & Atilla, the Hun & >                 ancient
  \< Konoe & Fumimaro & Konoe & >            Eastern/Western index
  \< Yamt & & Yamamoto, Isoroku & >          Eastern/Eastern index
\end{nameauth}

```

The following control sequences in the body text illustrate how this environment works. Please pay attention to first and subsequent uses, as well as how the L and S versions and other control sequences modify names:

Basic Uses:	GEORGE WASHINGTON	Medieval/Royal:
\Wash	George Washington	ELIZABETH I
\LWash	Washington	Elizabeth
\Wash	George	ATILLA THE HUN
\SWash		Atilla
Western Reversed with Comma:		Western / Western Index:
\RevComma\LWash	Washington, George	\Konoe FUMIMARO KONOKE
Particles:		\LKonoe Fumimaro Konoe
\Soto	HERNANDO DE SOTO	\Konoe Konoe
\Soto	de Soto	
\CapThis\Soto	De Soto	
Affixes:		Eastern / Western Index:
\JRock	JOHN DAVID ROCKEFELLER II	\CapName\RevName\LKonoef †KONOKE Fumimaro
\LJRock	John David Rockefeller II	\CapName\Konoe †KONOKE
\JRock	Rockefeller	
Nicknames: (See Section 2.3.2)		Eastern / Eastern Index:
\JayR	JAY ROCKEFELLER IV	\CapName\Yamt YAMAMOTO ISOROKU
\\$JayR\ \JayR	Jay Rockefeller	\CapName\LYamt YAMAMOTO Isoroku
\CapName\Yamt		\CapName\Yamt YAMAMOTO
Ancient:	ARISTOTLE	Western / Eastern Index:
\Aris	Aristotle	\RevName\LYamt Isoroku Yamamoto
\Aris		\Yamt Yamamoto

In this manual we use a dagger (\dagger) to indicate all Eastern names with Western forms in the index. The user is encouraged to compare the index entries with the body text in order to understand better what the macros are doing.

⁵\\$JayR always gives “Jay.” See Section 2.3.2 for possible difficulties when using this variation. Use \AKA to create a *see* reference from Jay Rockefeller to his full index entry: “Rockefeller, John David, IV.” For more on \AKA see Section 2.7.1.

2.2.3 Older Syntax

An “obsolete” syntax remains for backward compatibility with early versions of `nameauth` and with the `comma` option. Please avoid mixing the older and newer forms. The old form lacks some error checking and robustness contained in the new syntax and limits the use of several macros:

<code>\Name{Dagobert}[I]</code>	<i>royal name</i>
<code>\Name{Yoshida}[Shigeru]</code>	<i>Eastern name</i>
<code>\begin{nameauth}</code>	
<code>\< Dagb & & Dagobert & I ></code>	<i>royal name</i>
<code>\< Yosh & & Yoshida & Shigeru ></code>	<i>Eastern name</i>
<code>\end{nameauth}</code>	

`\Dagb` gives DAGOBERT I, while the next `\Dagb` produces Dagobert. In similar fashion as before, we see `\LDagb` Dagobert I, `\CapName\Yosh` YOSHIDA SHIGERU, and `\CapName\RevName\LYosh` Shigeru YOSHIDA.

- In the old syntax, `\Name{Henry}[VIII]` prints “HENRY VIII” and “Henry.” If you mix `\Name{Henry}[VIII]` with the newer `\Name{Henry, VIII}` they both print HENRY VIII and Henry in the body text. Yet they generate different control sequences for both first/subsequent uses and index tags.⁶
- Erroneously typing `\Name[Henry]{VIII}` prints “HENRY VIII” and “VIII,” as well as producing a malformed index entry. As of version 2.0, this kind of malformed input creates no side effects for well-formed input.
- Avoid forms like `\Name[Henry]{VIII}[Tudor]` which gives “Tudor VIII” and “VIII.” Again, this classifies as malformed input.
- Also avoid `\Name{Henry, VIII}[Tudor]` unless you really want “HENRY VIII TUDOR” and “Henry” in the body text and “Henry VIII” in the index.
- One solution to incorporate the house designation adds “Tudor” as needed in the text to `\Name{Henry, VIII}` and uses a tag in the index: `\TagName{Henry, VIII}{ Tudor}` (see Section 2.8.2).
- The older syntax will not work with some macros. From the film *Men in Black III*, `\AKA{Boris}[the Animal]{Just Boris}` fails. `\PName` fails for the same reasons. See also Section 2.7.1
- This form does work: `\Name{Boris, the Animal} \AKA{Boris, the Animal}{Just Boris}`. You get BORIS THE ANIMAL being “Just Boris.”

⁶Technically you can mix the two, as I do here. This package is all about offering choices, not restricting authors. Yet you must force first and subsequent uses with `\ForgetName` and `\SubvertName`, and make common index tags, *e.g.*: `\TagName{Henry, VIII}{, king}` and `\TagName{Henry}[VIII]{, king}`. That undermines the time-saving features offered by this package. Since authors have personal styles and workflows, this package tries its best to embrace the horror of inherent ambiguity in names and their usage.

2.2.4 Tips and Warnings

- Keep it simple! Avoid unneeded macros and use the simplified interface.
- Check braces and brackets with naming macros to avoid errors like “Paragraph ended...” and “Missing *grouping token* inserted.”
- For stage names, etc., try using *e.g.*: `\Name[J.]{Kreskin}[The Amazing](\AKA[J.]{Kreskin}{Joseph}{Kresge})`. As a result you get THE AMAZING KRESKIN (Joseph Kresge). The corresponding index entry will be “Kreskin, J.” You must have a name in the first optional field for this to work.
- Let this package help your workflow as you need it, instead of trying to figure out all its intricacies. Special cases like “Iron Mike” Tyson as the nickname for MIKE TYSON may be handled in a number of ways.
 1. Follow ‘‘Iron Mike’’ with `\IndexName[Mike]{Tyson}` and do whatever you want in the text.
 2. `\SubvertName[Mike]{Tyson}\FName[Mike]{Tyson}[Iron Mike]\Name[Mike]{Tyson}` gives “Iron Mike Tyson.” You are responsible for typesetting the first use and you can `\let` the whole thing to a control sequence.
 3. Use ‘‘`\AKA[Mike]{Tyson}{Iron Mike}`’’ to create “Iron Mike” in the text and a *see*-type cross-reference to “Tyson, Mike” in the index. Be sure to have an occurrence of `\Name[Mike]{Tyson}` in the text. See also Section 2.7.1.
- Omit spaces between initials if possible; see also Bringhurst’s *Elements of Typographic Style*. If your publisher wants spaces between initials, use `\frenchspacing`⁷ or put thin spaces `\,`, between them. Consider:

```
\begin{nameauth}
  \< White & E.\,B. & White & >
\end{nameauth}
```

Compare the following:

<code>\White and \LWhite</code>	(E. B. WHITE and E. B. White)
Normal:	E. B. WHITE and E. B. White.

- One way to spot errors is to compare index entries with names in the body text. All macros that produce output also emit meaningful warnings. `\PName` produces warnings via `\Name` and `\AKA`.
- Please pay greater attention to the warnings produced by `\IndexName`, `\TagName`, `\UntagName`, and `\ExcludeName`. Many other warnings are FYI.
- The `nameauth` environment only generates a warning when you overwrite a control sequence designator with a new name.
- Inserting an empty string in a required field will generate an error.

⁷Although there should be no difference between `\frenchspacing` and `\nonfrenchspacing` when it comes to initials, some classes or packages may affect that.

Warnings result from:

- Using a cross-reference [$\langle alternate\ FNN \rangle$] { $\langle alternate\ SNN \rangle$ } [$\langle alt.\ names \rangle$] created by `\AKA` as a name reference in `\Name`, `\FName`, and `\PName`. They merely will print a name in the body text.
- Using a name reference [$\langle FNN \rangle$] { $\langle SNN \rangle$ } [$\langle Alternate\ names \rangle$] created by `\Name`, `\FName`, and `\PName` as a cross-reference in `\AKA`. It merely will print a name in the body text.
- Using `\AKA` to create the same cross-reference multiple times or with a cross-reference created by `\ExcludeName`. It merely will print a name in the body text, but not the index.
- Using `\IndexName` to index a cross-reference made via `\AKA` or via the mechanism in `\ExcludeName` as a main entry. It will do nothing.
- Using `\TagName`, `\UntagName`, and `\PretagName` with cross-references. The first two will do nothing. However, `\PretagName` will “pretag” a cross-reference. This is the desired behavior.
- Using `\ExcludeName` with cross-references. It will do nothing.
- Using `\ExcludeName` to exclude a name that has already been used. Likewise, it will do nothing.
- Using `\Name`, `\FName`, `\PName`, and `\AKA` to refer to names and cross-references excluded by `\ExcludeName`. They merely will print a name in the body text.
- Using the `nameauth` environment to redefine shorthands, such as:

```
\begin{nameauth}
  \< White & E.\,B. & White & >
  \< White & E. B. & White & >
\end{nameauth}
```

2.3 Naming Macros

2.3.1 \Name and \Name*

\Name This macro generates two forms of the name: a printed form in the text and a \Name* form of the name that occurs in the index. The general syntax is:

```
\Name[⟨FNN⟩]{⟨SNN⟩}[⟨Alternate names⟩]
\Name*[⟨FNN⟩]{⟨SNN⟩}[⟨Alternate names⟩]
```

Here we see how the syntax works:

\Name[Albert]{Einstein}	ALBERT EINSTEIN
\Name*[Albert]{Einstein}	Albert Einstein
\Name[Albert]{Einstein}	Einstein
\Name{Confucius}	CONFUCIUS
\Name*[Confucius]	Confucius
\Name{Confucius}	Confucius
\Name[M.T.]{Cicero}[Marcus Tullius]	MARCUS TULLIUS CICERO
\Name*[M.T.]{Cicero}[Marcus Tullius]	Marcus Tullius Cicero
\Name[M.T.]{Cicero}[Marcus Tullius]	Cicero
\Name{Charles, the Bald}	CHARLES THE BALD
\Name*[Charles, the Bald]	Charles the Bald
\Name{Charles, the Bald}	Charles

\Name displays and indexes names, as illustrated in Section 2.10. It always prints the ⟨SNN⟩ field. \Name prints the “full name” at the first occurrence, then the partial form thereafter. \Name* always prints the full name.

The ⟨Alternate names⟩ field replaces the ⟨FNN⟩ field in the text only if the ⟨FNN⟩ field is not empty; see “Cicero” above. One can use a nickname in some instances while keeping the indexed form constant.

Thus, regarding their index entries and first/subsequent uses in nameauth, \Name[M.T.]{Cicero}[Marcus Tullius] and \Name[M.T.]{Cicero} are equivalent, while \Name{Cicero}[Marcus Tullius] and \Name{Cicero} are not. Generally avoid older forms like \Name{Charles}[the Bald].

```
\begin{nameauth}
  \< Einstein & Albert & Einstein & >
  \< Cicero & M.T. & Cicero & >
  \< Confucius & & Confucius & >
  \< CBald & & Charles, the Bald & >
\end{nameauth}
```

Above we see the same setup with the simplified interface. In the body text, \Einstein, \LEinstein, and \Einstein produce ALBERT EINSTEIN, Albert Einstein, and Einstein. \CBald\ and \CBald give CHARLES THE BALD and Charles. The next section demonstrates that \LCicero[Marcus Tullius] allows for M.T. CICERO to be both Marcus Tullius Cicero and M.T. Cicero.

2.3.2 Forenames: \FName

- \FName This casual friend of \Name prints only “first” names, but it will still print a full name when a first use occurs. \FName is intended for Western-style names. \FName* is only a synonym for \FName. The syntax is basically the same:

```
\FName[⟨FNN⟩]{⟨SNN⟩}[⟨Alternate names⟩]
```

The first reference to \FName always is a full name. That prevents a first-name-only reference before a person has been introduced. Intentionally, \FName *never* gives the first name with Eastern names. For examples we see below:

\FName[Albert]{Einstein}	ALBERT EINSTEIN
\FName[Albert]{Einstein}	Albert
\FName{Confucius}	CONFUCIUS
\FName{Confucius}	Confucius
\FName[M.T.]{Cicero}{Marcus Tullius}	MARCUS TULLIUS CICERO
\FName[M.T.]{Cicero}{Marcus Tullius}	Marcus Tullius
\FName{Charles, the Bald}	CHARLES THE BALD
\FName{Charles, the Bald}	Charles

The Cicero example shows how the ⟨Alternate names⟩ field can work. Be careful with nicknames: ‘‘\FName[Chesley B.]{Sullenberger, III}{Sully}’’ produces “SULLY SULLENBERGER III” and “Sully.” This is not a “bug” as such, as the Cicero example illustrates. Names are very context-sensitive.

With \SEinstein, \SConfucius, \SCCicero, and \SCBald we get Albert, Confucius, M.T., and Charles when using the simplified interface example from the previous page. \SCCicero[Marcus Tullius] gives Marcus Tullius. The simplified interface allows you to use a “default nickname.” In Section 2.2.2 \SJayR gives JAY ROCKEFELLER IV and Jay, but the index entry “Rockefeller, John David, IV.” Yet default nicknames are not always what they seem:

```
\begin{nameauth}
  \< Ches & Chesley B. & Sullenberger, III &gt;
  \< Sully & Chesley B. & Sullenberger, III & Sully &gt;
\end{nameauth}
```

The first use \Ches prints “CHESLEY B. SULLENBERGER III.” Later, \SChes and \SSully print “Chesley B.” and “Sully.” While \SChes[Sully] always gives, “Sully,” \SSully[Chesley B.] prints “Sully[Chesley B.]”

\SSully[Chesley B.] expands to what it should be, not what you might expect it to be: \FName[Chesley B.]{Sullenberger, III}{Sully}[Chesley B.]. Thus we prefer \LCcicero[Marcus Tullius] and \SCCicero[Marcus Tullius]:

```
\begin{nameauth}
  \< Cicero & M.T. & Cicero &gt;           preferred
  \< Cicero & M.T. & Cicero & Marcus Tullius &gt; not preferred
\end{nameauth}
```

This package offers preferred choices, but its design does not force you to use them because names and their uses have many variants.

2.4 Affixes and Eastern Names

2.4.1 Affixes Need Commas

Comma-delimited affixes handle several different name types. *Always include a comma as an affix delimiter*, even when the `nocomma` option does not print the comma. Extra spaces and trailing commas are ignored. Other name types include royal, medieval, and Eastern names:

\Name{Oskar}{Hammerstein, II}	OSKAR HAMMERSTEIN II
\Name{Oskar}{Hammerstein, II}	Hammerstein
\Name{Louis, XIV}	LOUIS XIV
\Name{Louis, XIV}	Louis
\Name{Sun, Yat-sen}	SUN YAT-SEN
\Name{Sun, Yat-sen}	Sun

One must use comma-delimited suffixes when cross-referencing affixed Western names, royal names, some medieval names, and Eastern names with \AKA; see Section 2.7.1.

`\KeepAffix` Put `\KeepAffix` before `\Name` or `\AKA` if a line break or page break divides a $\langle SNN, affix \rangle$ pair. This puts a non-breaking space between SNN and $affix$ in the body text, but not in the index. Other options to fix bad breaks include using `\hbox`, kerning and spacing in the `microtype` package, etc.

`\ShowComma` The `comma` option is restrictive and used to reproduce older texts. `\ShowComma` gets the same results on a per-name basis while using the default `nocomma` option. With `\ShowComma\Name{Louis}{Gossett, Jr.}` one gets LOUIS GOSSETT, JR. One must use `\ShowComma` consistently or risk errors in the body text and index.

Avoid using the older syntax, shown below, except with the `comma` option. It does not handle Western names with affixes and some other name types. `\AKA` and `\PName` cannot create cross-references to these forms. These older forms include:

\Name{Henry}{VIII}	HENRY VIII
\Name{Henry}{VIII}	Henry
\Name{Chiang}{Kai-shek}	CHIANG KAI-SHEK
\Name{Chiang}{Kai-shek}	Chiang

These older forms work because no $\langle FNN \rangle$ are present. Otherwise you would get weird nicknames. Again, please avoid using the older syntax.

2.4.2 Eastern Names

The `nameauth` package offers “non-native” and “native” ways to handle romanized Eastern names. `\RevName\Name[⟨Eastern FNN⟩]{⟨Eastern SNN⟩}` will produce an Eastern name in the body text and the Western form ⟨*SNNFNN*

In contrast, both `\Name{⟨Eastern SNN, Eastern FNN⟩}` and the older syntax `\Name{⟨Eastern SNN⟩}[⟨Eastern FNN⟩]` produce an Eastern name form in the body text: ⟨*SNNFNN*

<code>\ReverseActive</code>	The “smart” reverse output mechanism converts between Western and Eastern forms in the text, but not the index. If one wants a Western-format index, then pick non-native mode. If Eastern forms are okay in the index, then pick native mode. In addition to the class options described in Section 2.1, <code>\ReverseActive</code> and <code>\ReverseInactive</code> toggle reversing on a larger scale, while <code>\RevName</code> is used once per <code>\Name</code> .
<code>\ReverseInactive</code>	
<code>\RevName</code>	

This list of Japanese music artists shows `\RevName` in action. Names in Western order, then non-native Eastern order are marked with a dagger (†). All other names are in native Eastern, then Western order. Forms using the old syntax are in parentheses. Name formatting is turned off in order to focus on reversing:

<i>unchanged</i>	<code>\RevName</code>
† <code>\Name*[Aiko]{Nakano}</code>	†Aiko Nakano
<code>\Name*{Arai, Akino}</code>	Arai Akino
(<code>\Name*{Ishida}{Yoko}</code>)	(Ishida Yoko)
<code>\Name*{Yohko}</code>	Yohko

<code>\AllCapsActive</code>	Use <code>\AllCapsActive</code> , <code>\AllCapsInactive</code> , and <code>\CapName</code> for fully-capitalized family names in the body text. These macros are analogous to the reversing macros above and may be used alone or with those and other state-toggling macros, <i>e.g.</i> <code>\CapName\RevName\Name</code> . Names in Western order, then non-native Eastern order are marked with a dagger (†). All other names are in native Eastern, then Western order. Forms using the old syntax are in parentheses. Name formatting is turned off in order to focus on capitalizing and reversing:
<code>\AllCapsInactive</code>	
<code>\CapName</code>	

<i>unchanged</i>	<code>\CapName\RevName</code>
† <code>\Name*[Yoko]{Kanno}</code>	†Yoko KANNO
<code>\Name*{Shikata, Akiko}</code>	SHIKATA Akiko
(<code>\Name*{Nogawa}{Sakura}</code>)	(NOGAWA Sakura)
<code>\Name*{Yohko}</code>	YOHKO

Notice how capitalization is independent of formatting. The reversing and capitalization macros also work with `\AKA`. They affect only the text, not the index. For caps in the text and index see Section 2.5.9.

2.5 Other Naming Topics

2.5.1 Fault Tolerance

Especially since version 2.0, the `nameauth` package tries to prevent malformed input from creating side effects. For example, the malformed `\Name[Henry]{VIII}` and the well-formed `\Name{Henry}{VIII}` used to create the same control sequence and thus affect each other. That no longer happens. Furthermore, we guard against empty required values being passed to naming macros.

To reduce errors, `\Name`, `\FName`, `\AKA`, and `\IndexName` ignore leading and trailing spaces—but not medial spaces—making the following equivalent:

Macro Example	Resulting text
<code>\Name*[Martin Luther]{King, Jr.}</code>	MARTIN LUTHER KING JR.
<code>\Name*[Martin Luther]{King, Jr.}</code>	Martin Luther King Jr.
<code>\Name*[Martin Luther]{King, Jr.}</code>	Martin Luther King Jr.
<code>\Name*[Martin Luther]{ King, Jr.}</code>	Martin Luther King Jr.
<code>\Name*[Martin Luther]{King, Jr. }</code>	Martin Luther King Jr.
<code>\Name*[Martin Luther]{ King, Jr. }</code>	Martin Luther King Jr.

2.5.2 Listing by Surname

`\ReverseCommaActive` The reversing macros `\ReverseCommaActive`, `\ReverseCommaInactive`, and `\RevComma` allow the easy generation of name lists ordered as *(surname), (forename(s))*. The first two are broad toggles, while the third works on a per-name basis. Eastern, medieval, and royal names do not work with these macros. Name formatting has been turned off to focus on reversing and commas:

John Stuart Mill	Mill, John Stuart	OK
Oskar Hammerstein II	Hammerstein II, Oskar	OK
John Eriugena	Eriugena John	incompatible
Mao Tse-tung	Tse-tung Mao	incompatible
Anaximander	Anaximander	OK

2.5.3 Naming Standards

According to the *Chicago Manual of Style*, English names with the particles *de*, *de la*, *d'*, *von*, *van*, and *ten* generally keep them with the last name, using varied capitalization. *Le*, *La*, and *L'* always are capitalized unless preceded by *de*.

`\CapThis` In English, these particles go in the *(SNN)* field of `\Name`, e.g., `WALTER DE LA MARE`. To capitalize *de* when it arises at the beginning of a sentence, use `\CapThis\Name[Walter]{de la Mare}`. *De la Mare* will think it fair. In the rare case where the particle is but one character (unlike all those listed above), the capping macros will eat the space between particle and name. One workaround is to follow such a particle with `\nobreakspace`.

`\AccentCapThis` `\CapThis` works in all cases under `xelatex` and `lualatex`. Using `pdflatex` causes `\CapThis` to fail and halt execution only when the initial character in *(SNN)* is an extended Unicode character; see Section 2.5.7. In this special and infrequent case, either substitute `\AccentCapThis`, or put the extended character in braces, or use control sequences.

Non-English contexts do not always bind particles to surnames. Using `\Name` and `\FName` with alternate forenames helps address this. See also Section 2.10.2.

2.5.4 Hyphenation

The simplified interface trivializes the consistent insertion of optional hyphens in names, as we see below:

```
\begin{nameauth}
  \< Bier & Johann & Bier\‐mann & >
\end{nameauth}
```

We get JOHANN BIERMANN and Biermann. This should prevent the break “Biermann,” which could happen otherwise. You can even tag and untag such forms. The bad break above was manufactured, while the bad break below is actual.

Bad breaks can be fixed with the `babel` or `polyglossia` packages. JOHN STRIELMEIER can have a bad break in English, as you see. Using `babel`, we can use the following example so that `\de{\Name*[John]{Strietelmeier}}` generates John Strietelmeier and helps prevent bad breaks:

```
\newcommand{\de}[1]{\foreignlanguage{ngerman}{#1}}
```

2.5.5 Indexing and `babel`

`texindy` Using `babel` with Roman page numbers will put `\textlatin` in the index entries if one includes a language that does not use the Latin alphabet—even if the main language does. The `texindy` program will ignore such references. This issue can affect `nameauth`. One workaround for `texindy` could enclose text with any macros that write to the index in an environment or a `\long` macro defined like:

```
\newcommand{\fix}[1]{\def\textlatin##1##1#1}
```

2.5.6 Detecting Punctuation

In Western names, some affixes with full stops could appear at the end of a sentence. Such affixes include “Jr.” (junior), “Sr.” (senior), “d. J.” (*der Jüngere*), and “d. Ä.” (*der Ältere*). Consider this example, where some lines have two full stops and some do not:

<i>Macro Example</i>		<i>Resulting text</i>
<code>\Name[Martin Luther]{King, Jr.}.</code>	<code>2 → 1</code>	MARTIN LUTHER KING JR.
<code>\Name[Martin Luther]{King, Jr.}.</code>	<code>2 → 1</code>	King.
<code>\Name[Martin Luther]{King, Jr.}_</code>	<code>1 → 0</code>	King
<code>\Name*[Martin Luther]{King, Jr.}.</code>	<code>2 → 1</code>	Martin Luther King Jr.
<code>\Name*[Martin Luther]{King, Jr.}_</code>	<code>1 → 1</code>	Martin Luther King Jr.
<code>{\Name*[Martin Luther]{King, Jr.}}.</code>	<code>2 → 2</code>	Martin Luther King Jr. ⁸

`\Name`, `\FName`, and `\AKA` all check for a trailing full stop in the printed name in the text. If it exists, and if the next token is also a full stop, they gobble the trailing full stop. Grouping tokens, among other items, can frustrate this detection, as shown in the previous example.

⁸Example of how to frustrate the full stop detection mechanism.

2.5.7 Accented Names

For texts that contain accented characters, using `xelatex` or `lualatex` with `xindy` (`texindy`) is recommended. Since version 2.1, `nameauth` generally does not require any special treatment for the leading character of the $\langle SNN \rangle$ field. The only exception is when you need to use `\CapThis` under `pdflatex`. That is the case where you substitute `\AccentCapThis` (Section 2.5.3).⁹

Under NFSS and the `utf8` input encoding, the following glyphs generally are available to you:

À Á Â Ã Ä Å Æ	Ç È É Ê Ë	Ì Í Î Ï Ð Ñ	FIRST USE
À Á Â Ã Ä Å Æ	Ç È É Ê Ë	Ì Í Î Ï Ð Ñ	second use
Ò Ó Ô Ö Ö Ø	Ù Ú Û Ü Ý	Þ ss	FIRST USE
Ò Ó Ô Ö Ö Ø	Ù Ú Û Ü Ý	Þ ß	second use
À Á Â Ã Ä Å Æ	Ç È É Ê Ë	Ì Í Î Ï Ð Ñ	FIRST USE
à á â ã ä å æ	ç è é ê ë	ì í î ï ð ñ	second use
Ò ó ô ö ö Ø	Ù ú û ü ý	þ ÿ	FIRST USE
ò ó ô ö ö Ø	Ù ú û ü ý	þ ÿ	second use
Ă Ă Â Ä Ç ď Č ď	Đ Ï Đ Ï E Õ Ë Ĕ	Ğ Ğ İ İ	FIRST USE
Ă Ă Â Ä Ç ď Č ď	Đ Ï Đ Ï E Õ Ë Ĕ	Ğ Ğ İ İ	second use
IJ ij L l Ł Ł	Ń Ñ Ń Ń ÇE œ	Ŕ Ñ Ŕ Ŕ	FIRST USE
IJ ij L l Ł Ł	Ń Ñ Ń Ń ÇE œ	Ŕ Ñ Ŕ Ŕ	second use
Ś Ś ś Ś š T t Ě Ě	Ü Ù Ú Ÿ	Ž Ž Ź Ź	FIRST USE
Ś Ś ś Ś š T t Ě Ě	Ü Ù Ú Ÿ	Ž Ž Ź Ź	second use

These glyphs do not cover some of the extended character sets completely. Unicode characters and control sequences are not interchangeable. Instead of getting long, then short references (if they were the same), you only get long ones below:

\Name[Johann]{André\"a}	JOHANN ANDRÉÄ
\Name[Johann]{Andréä}	JOHANN ANDRÄÄ
\Name{\AE{}thelred, II}	ÆTHELRED II
\Name{Æthelred, II}	ÆTHELRED II

Additional accents and glyphs can be used with Unicode input, NFSS, `inputenc`, and `fontenc` when using fonts with TS1 glyphs, *e.g.*, `\usepackage{lmodern}` (per the table on pages 455–63 in *The Latex Companion*). The example below lets you type, “In Congrefs, July 4, 1776.”

```
\usepackage{newunicodechar}
\DeclareTextSymbolDefault{\textlongs}{TS1}
\DeclareTextSymbol{\textlongs}{TS1}{115}
\newunicodechar{f}{\textlongs}
```

Additionally, `\newunicodechar{ā}{\=a}` allows `\Name{Għazāli}` to generate GħAZĀLI. But be careful! Control sequences like `\=a` fail when using `makeindex`

⁹The root of this problem is shown by this example: `\def\foo#1#2#3\relax{#1#2>#3}`. With `\foo abc\relax` you get `<ab><c>`. With `\foo æbc\relax` you get `<æ><bc>`.

Using `xelatex` and `lualatex` always gives you `<ab><c>` and `<a&b><c>`, thus avoiding the problem. Using `pdflatex` with `\CapThis` yields `Argument of \UTFviii@two@ octets has an extra }`. Many extant word-capitalizing macros and even kernel macros like `\in@... \ifinc` cause errors when used as we do in `nameauth`.

and `gind.ist`, such as with the `ltxdoc` class, because the equal sign is an “actual” character instead of `@`. Using `\index{Gh@\=a}zali}` halts execution. Using `\index{Gh\=azali}` gives an “azali” entry sorted under “Gh” (thanks DAN LUECKING). This issue is not specific to `nameauth` and affects any document where one uses `gind.ist`.

One may use expandable control sequences in names (thanks Robert Schlicht). Also, you can define letters with `\edef` and `\noexpand` to use in names, as some do to “protect” accented letters in names. As of version 2.0 of `nameauth` helpful concerns expressed by PATRICK COUSOT have been addressed.

2.5.8 Index Sorting

The general practice for sorting with `makeindex -s` involves creating your own `.ist` file (pages 659–65 in *The Latex Companion*). Otherwise use the following form that works with both `makeindex` and `texindy`:

```
\index{\langle sortkey\rangle@\langle actual\rangle}
```

Before version 2.0 of `nameauth`, one had to sort and index a name like JAN ŁUKASIEWICZ by putting it between `\IndexInactive` and `\IndexActive` while creating a manual index entry.

`\PretagName` Fortunately, the current versions of `nameauth` have adopted an easier solution. The syntax of `\PretagName` is like that of `\TagName`:

```
\PretagName[\langle FNN\rangle]{\langle SNN\rangle}{\langle Alternate names\rangle}{\langle tag\rangle}
```

The `\PretagName` macro does not work exactly like the `\TagName` and `\UntagName` macros (see Section 2.8.2 and following). The main differences are:

- You can “pretag” any name and any cross-reference.
- You can “tag” and “untag” only names, not cross-references.
- There is no command to undo a “pretag.”

The `\PretagName` macro creates a sort key terminated with the “actual” character, which is `@` by default. Do not include the “actual” character in the pretag. Now, sorting index entries is as simple as:

```
\PretagName[Jan]{Łukasiewicz}{Lukasiewicz, Jan}
\PretagName{@Ethelred, II}{Aethelred 2}
```

One need only pretag names once in the preamble. Every time that one refers to Łukasiewicz or Æthelred, the proper index entry will be created. If you create a cross-reference with `\AKA` and you want to pretag it, see Section 2.7.1.

`\IndexActual` If you need to change the “actual” character, such as with `gind.ist`, put `\IndexActual{=}` in the preamble.

You cannot use index tags if the `nameauth` indexing feature is inactive.

This package tries to work with multiple languages and typesetting engines. The following preamble snippet illustrates how that can be done:

```
\usepackage{ifxetex}
\usepackage{ifluatex}
\ifxetex                                     % uses fontspec
  \usepackage{fontspec}
  \defaultfontfeatures{Mapping=tex-text}
  \usepackage{xunicode}
  \usepackage{xltxtra}
\else
  \ifluatex                                    % also uses fontspec
    \usepackage{fontspec}
    \defaultfontfeatures{Ligatures=TeX}
  \else
    \usepackage[utf8]{inputenc}
    \usepackage[TS1,T1]{fontenc}
  \fi
\fi
\fi
```

The following can be used in the text itself to allow for conditional processing that helps one to document work under multiple engines:

```
\ifxetex <xelatex text>%
\else
  \ifluatex
    \ifpdf <lualatex in pdf mode text>%
    \else <lualatex in dvi mode text>%
    \fi
  \else
    \ifpdf <pdflatex text>%
    \else <latex text>%
    \fi
  \fi
\fi
\fi
```

2.5.9 Custom Formatting

There are two kinds of formatting at work:

1. **Syntactic Formatting:** This includes reversing names, capitalizing the first letter in the $\langle SNN \rangle$ field in the body text, and capitalizing the root when $\langle SNN \rangle$ is a $\langle root, suffix \rangle$ pair.
2. **Typographic Formatting:** This happens after a name has been parsed and reordered as needed into the final form it will take in the text.

Neither type of formatting makes it into the index. However, there are ways around that. One way to get formatting into the text and the index is to make it part of the name arguments, using `\PretagName` to get proper sorting:

```
\PretagName[\normalfont{Mata}]{\textsc{Hari}}{Hari, Mata}%
\Name[\normalfont{Mata}]{\textsc{Hari}}
```

You get Mata HARI, then HARI. But it gets more complicated. If you use a comma-delimited suffix you need to format the name and suffix separately, as we see on the next page.

```

\PretagName{\uppercase{Fukuyama}, T.}{Fukuyama, T.}
\PretagName[\normalfont{Thurston}]%
 {\textsc{Howell}, \textsc{III}}{Howell, Thurston 3}
\begin{nameauth}
 < Fukuyama & & \uppercase{Fukuyama}, T. & >
\end{nameauth}

```

\Name[\normalfont{Thurston}]{\textsc{Howell},\textsc{III}} produces Thurston HOWELL III, then HOWELL. Likewise the simplified \Fukuyama produces FUKUYAMA T. and FUKUYAMA.

\NameauthName These two macros are hooks into the simplified interface. If the method above \NameauthFName will not suffice, you can use the extant macros as building blocks or even create your own naming macros that comply at least to the following template:

```

\makeatletter
\newcommand*\MyName[3] [1=\@empty, 3=\@empty]%
 {\langle Something here\rangle}%
\newcommand*\MyFName[3] [1=\@empty, 3=\@empty]%
 {\langle More stuff here\rangle}%
\makeatother

```

You can plug these macros into the simplified interface thus:

```

\renewcommand*\NameauthName{\MyName}
\renewcommand*\NameauthFName{\MyFName}
\begin{nameauth}
 < Silly & No Particular & Name & >
\end{nameauth}
This is \Silly\ and \SSilly.
This is \langle Something here\rangle and \langle More stuff here\rangle.

```

Like \NamesFormat below, both \NameauthName and \NameauthFName respect scoping. Thus, \Silly now produces NO PARTICULAR NAME.

\NamesFormat When formatting is active, \NamesFormat is called at the first instance of a name, and at every instance of a name when the `alwaysformat` option is used. Beyond using the package options, one also can redefine \NamesFormat to create custom effects. For example, one might change or suppress formatting in all footnotes:

```

\makeatletter
\let\oldfntext\@makefntext
\long\def\@makefntext#1{%
 \renewcommand*\NamesFormat{}{\oldfntext{#1}}
\makeatother

```

This approach will not print the first use of a name in the body text if it already occurred in the footnotes unless one uses \ForgetName to force that. This example takes advantage of the deep scoping of \@makefntext in order to use a localized \def to make a temporary change. The next section shows how one can use a completely independent system of first and subsequent use in the footnotes.

A second example puts the mention of first names in boldface, with additional notations in the margin if possible:

```
\let\oldformat\NamesFormat
\renewcommand*\NamesFormat[1]%
  {\textbf{\#1}\ifinner\else
   \marginpar{\raggedleft\scriptsize \#1}\fi}
\PreTagName{Vlad, Țepeș}{Vlad Tepes}%
\Name{Vlad III, Dracula}, known as \AKA{Vlad III, Dracula}{Vlad, Țepeș},
‘‘\AKA*{Vlad III, Dracula}{Vlad}[the Impaler]’’ after his death, was the
son of \Name{Vlad II, Dracul}, a member of the Order of the Dragon. Later
references to ‘‘\Name{Vlad III, Dracula}’’ appear thus.
```

Vlad III Dracula
Vlad II Dracul

Vlad III Dracula, known as Vlad Tepes, “the Impaler” after his death, was the son of **Vlad II Dracul**, a member of the Order of the Dragon. Later references to “Vlad III” appear thus.

The `quote` environment used above permits local changes to `\NamesFormat` so they revert back to the default: VLAD III DRACULA and Vlad III. For references to “Vlad” instead of “Vlad III” one could use `\Name{Vlad, III Dracula}`.¹⁰

2.5.10 Disable Formatting

- `\NamesActive` Using the `frontmatter` option deactivates formatting until `\NamesActive` occurs.
- `\NamesInactive` Another macro, `\NamesInactive`, will deactivate formatting again. These two macros toggle two independent systems of formatting and first use.

Here we switch to the “front matter” mode with `\NamesInactive`:

<code>\Name[Rudolph]{Carnap}</code>	Rudolph Carnap
<code>\Name[Rudolph]{Carnap}</code>	Carnap
<code>\Name[Nicolas]{Malebranche}</code>	Nicolas Malebranche
<code>\Name[Nicolas]{Malebranche}</code>	Malebranche

Then we switch back to “main matter” mode with `\NamesActive`:

<code>\Name[Rudolph]{Carnap}</code>	RUDOLPH CARNAP
<code>\Name[Rudolph]{Carnap}</code>	Carnap
<code>\Name[Nicolas]{Malebranche}</code>	NICOLAS MALEBRANCHE
<code>\Name[Nicolas]{Malebranche}</code>	Malebranche

Notice that we have two independent cases of “first use” above. Consider the two “species” of names to be “non-formatted” and “formatted,” intended for front matter and main matter. Yet one could use this, *e.g.*, in footnotes:

```
\makeatletter
\let\@oldfntext\@makefntext
\long\def\@makefntext#1{%
  \NamesInactive\@oldfntext{\#1}\NamesActive%
}\makeatother
```

¹⁰Do not mix `\Name{Vlad III, Dracula}` with `\Name{Vlad, III Dracula}` or the old syntax, lest errors bite! You would get multiple index entries with `\Name`, unwanted cross-references with `\AKA` and unexpected forms in the text. The simplified interface helps one to avoid this.

2.6 Tweaks: \ForgetName and \SubvertName

Perhaps the easiest way to avoid the “interspecies clashes” above are the two macros presented here. They are meant for tweaking text at or near final draft stage. They affect both front matter and main matter.

- \ForgetName This macro is a “dirty trick” of sorts that takes the same optional and mandatory parameters used by \Name. It handles its arguments in the same way, except that it ignores the final parameter if $\langle FNN \rangle$ are present. The syntax is:

```
\ForgetName[\langle FNN \rangle]{\langle SNN \rangle}{\langle Alternate names \rangle}
```

This macro causes \Name and friends to “forget” prior uses of a name. The next use of that name will print as if it were a “first use,” even if it is not. Index entries and cross-references are *never* forgotten by this package.

- \SubvertName This macro is the opposite of the one above. It takes the same parameters. It handles its arguments in the same manner. The syntax is:

```
\SubvertName[\langle FNN \rangle]{\langle SNN \rangle}{\langle Alternate names \rangle}
```

This macro causes \Name and friends to think that a prior use of a name already has occurred. The next use of that name will print as if it were a “subsequent use,” even if it is not.

2.7 Name Variant Macros

2.7.1 \AKA

- \AKA \AKA (meaning *also known as*) handles pseudonyms, stage names, *noms de plume*, \AKA* and so on in order to replace typing manual cross-references in the index:

```
\Name{Jean, sans Peur} (\AKA{Jean, sans Peur}{Jean the Fearless})  
was Duke of Burgundy 1404--1419.
```

```
JEAN SANS PEUR (Jean the Fearless) was Duke of Burgundy 1404–1419.
```

Notice that “Jean the Fearless” receives no special formatting. This is intentional, as it reflects the idea of formatting only those names with main index entries. Nevertheless, the reversing and capitalizing mechanisms do work with \AKA. The syntax for \AKA is:

```
\AKA[\langle FNN \rangle]{\langle SNN \rangle}{\langle Alt. FNN \rangle}{\langle Alt. SNN \rangle}{\langle Alt. names \rangle}  
\AKA*[\langle FNN \rangle]{\langle SNN \rangle}{\langle Alt. FNN \rangle}{\langle Alt. SNN \rangle}{\langle Alt. names \rangle}
```

Only the $\langle FNN \rangle$ and $\langle SNN \rangle$ arguments from \Name and friends may be cross-referenced. The new syntax allows \AKA to cross-reference all name types. Both macros create a cross-reference in the index from the $\langle Alt. FNN \rangle$, $\langle Alt. SNN \rangle$, and $\langle Alt. names \rangle$ fields to a name defined by $\langle FNN \rangle$ and $\langle SNN \rangle$, regardless of whether that name has been used.

Both macros print only the $\langle Alt. FNN \rangle$ and $\langle Alt. SNN \rangle$ fields in the body text. If the $\langle Alt. names \rangle$ field is present, \AKA swaps $\langle Alt. names \rangle$ with $\langle Alt. FNN \rangle$ in the body text. \AKA* just prints $\langle Alt. names \rangle$ (if present) in the body text. See also Section 2.8.2.

For the following name types, \AKA and \AKA* yield the same results, using BOB HOPE, LOUIS XIV, and LAO-TZU as examples:

\AKA[Bob]{Hope}[Leslie Townes]{Hope}	Leslie Townes Hope
\AKA{Louis, XIV}{Sun King}	Sun King
\AKA{Lao-tzu}{Li, Er}	Li Er

\AKA ignores the $\langle Alt. names \rangle$ field with the names above. The $\langle Alt. names \rangle$ field as part of the cross-reference was envisaged for names like GREGORY I:

\AKA{Gregory, I}{Gregory}[the Great]	Gregory the Great
\AKA*[Gregory, I]{Gregory}[the Great]	the Great

Using \Name*\{Gregory, I\} “\AKA*\{Gregory, I\}{Gregory}[the Great]” prints Gregory I “the Great” in the text. The index has a *see* reference from “Gregory the Great” to “Gregory I.”

A few points for \AKA and \AKA* follow:

- With \AKA, [$\langle FNN \rangle$]\{\mathit{SNN}\} is the main name. The cross-reference is [$\langle Alt. FNN \rangle$]\{\mathit{Alt. SNN}\}[\mathit{Alt. names}]. Please do not think that $\langle Alt. FNN \rangle$ belongs to the main name or \AKA will fail.
- \AKA fails with the old syntax: \AKA{Louis}[XIV]{Sun King}. \AKA and \AKA* fail with the old form: \AKA{Gregory}[I]{Gregory}[the Great].
- The $\langle Alt. SNN \rangle$ field uses comma-delimited suffixes.
- The $\langle Alt. names \rangle$ field does not use comma-delimited suffixes.
- Eastern names work: One can refer to LAFCADIO HEARN as KOIZUMI Yakumo: \CapName\AKA[Lafcadio]{Hearn}{Koizumi, Yakumo}.
- Particles work: Du Cange is the alternate name for CHARLES DU FRESNE, which is capitalized via \CapThis\AKA. See also Section 2.10.2.
- Reversing works, *e.g.* \RevComma: Hope, Leslie Townes.
- The name fields of \PretagName correspond with the [$\langle Alt. FNN \rangle$]\{\mathit{Alt. SNN}\}[\mathit{Alt. names}] fields of \AKA: \AKA{Vlad III, Dracula}{Vlad, Tepeş} corresponds with \PretagName{Vlad, Tepeş}{Vlad Tepes}. It fails with \PretagName{Vlad}[Tepeş]{Vlad Tepes}.

\AKA will not create multiple cross-references. Handle the special case where one moniker applies to multiple people with a manual solution, *e.g.*, “Snellius” for both WILLEBRORD SNEL VAN ROYEN and his son RUDOLPH SNEL VAN ROYEN:

```
\index{Snellius!see{Snel van Royen, Rudolph; Snel van Royen, Willebrord}}
```

Cross-references generated by \AKA and \AKA* are meant only to be *see* references, never page entries. See also Section 2.2.4. In certain cases, the alternate name might need to be indexed with page numbers and *see also* references. Do not use \AKA in those cases, rather, consider the following:

- Refer to the person intended, *e.g.*, MAIMONIDES (Moses ben-Maimon):
`\Name{Maimonides} (\AKA{Maimonides}{Moses ben-Maimon})`
- We now have a name and a *see* reference. Now one must refer to the alternate name, *e.g.*, RAMBAM: `\Name{Rambam}`.
- The alternate name must occur before making a cross-reference to the main name, in this case, Maimonides.
- Add `\index{Rambam|seealso{Maimonides}}` at the end of the document to ensure that it is the last entry among the cross-references. Generally, *see also* references follow *see* references in an index entry.¹¹

Even with the new syntax, using `makeindex` may require some manual entries:

```
\index{Doctor Angelicus@\textit{Doctor Angelicus}}%
\see{Thomas Aquinas}}%
\index{Thomas of Aquino|see{Thomas Aquinas}}%
Perhaps the greatest medieval theologian was \Name{Thomas, Aquinas}%
(Thomas of Aquino), also known as \textit{Doctor Angelicus}. "Aquinas"%
is not a surname.
```

Perhaps the greatest medieval theologian was THOMAS AQUINAS (Thomas of Aquino), also known as *Doctor Angelicus*. "Aquinas" is not a surname.

2.7.2 \PName

`\PName` `\PName` is a “convenience macro” meant for Western names. It generates a main name followed by a cross-reference in parentheses with the following syntax:

```
\PName[⟨FNN⟩]{⟨SNN⟩}[⟨other FNN⟩]{⟨other SNN⟩}[⟨other alt.⟩]
```

Although `\PName` creates an easy shortcut, its drawbacks are many. It only can use the $\langle FNN \rangle \langle SNN \rangle$ form of `\AKA`. It cannot use `\AKA*`. `\PName` really is ill-suited to work with `\CapName`, `\CapThis`, `\RevComma`, `\RevName`, and the related package options. Use it as needed, and *caveat auctor*.

The author determines the name that is indexed (the first name) and the subsequent name that only occurs as a *see* reference. That subsequent name is never shortened in the text. To do that, using the table below, one would type, *e.g.*, `Arouet\IndexName{Voltaire}` or use the Rambam example above. `\PName` can generate the following examples:

<code>\PName[Mark]{Twain}{Samuel L.}{Clemens}</code>	MARK TWAIN (Samuel L. Clemens)
<code>\PName*[Mark]{Twain}{Samuel L.}{Clemens}</code>	Mark Twain (Samuel L. Clemens)
<code>\PName[Mark]{Twain}{Samuel L.}{Clemens}</code>	Twain (Samuel L. Clemens)
<code>\PName{Voltaire}{François-Marie}{Arouet}</code>	VOLTAIRE (François-Marie Arouet)
<code>\PName*{Voltaire}{François-Marie}{Arouet}</code>	Voltaire (François-Marie Arouet)
<code>\PName{Voltaire}{François-Marie}{Arouet}</code>	Voltaire (François-Marie Arouet)

If one used `\PName{William, I}{William}{the Conqueror}` the body text would look right but the index cross-reference would be in error. Medieval and Eastern names are not suited for `\PName`. For them use `\AKA`.

¹¹Different standards exist for punctuating index entries and cross-references. Check with your publisher, style guide, docs for `xindy` and `makeindex`, and <http://tex.stackexchange.com>.

2.8 Indexing Macros

2.8.1 \IndexName

- \IndexName This macro creates an index entry like those created by \Name and friends. It prints no text in the body and permits no special formatting. The syntax is:

```
\IndexName[⟨FNN⟩]{⟨SNN⟩}[⟨Alternate names⟩]
```

\IndexName complies with the new syntax. If ⟨FNN⟩ are absent, it indexes ⟨Alternate names⟩ as an affix using the old syntax; otherwise it ignores ⟨Alternate names⟩. If indexing is switched off (see Section 2.8.5), this macro does nothing. It will not create index entries for names used with \AKA as cross-references.

The indexing mechanism in the nameauth package follows *Chicago Manual of Style* standards regarding Western names and affixes. Thus the name Chesley B. Sullenberger III becomes “Sullenberger, Chesley B., III” in the index. This formatting only occurs for Western names (where ⟨FNN⟩ are present).

2.8.2 \TagName

- \TagName This macro creates an index tag that will be appended to all index entries for a corresponding \Name from when it is invoked until the end of the document or a corresponding \UntagName. Both \TagName and \UntagName handle their arguments like \IndexName. If global tags are desired, tag names in the preamble.

```
\TagName[⟨FNN⟩]{⟨SNN⟩}[⟨Alternate names⟩]{⟨tag⟩}
```

Tags created by \TagName can be helpful in the indexes of history texts. Several features of this package are designed for historical research. Suppose you are working with medieval subject matter. The following macros come in handy:

\TagName{Leo, I}{, pope}	(in the preamble)
\TagName{Gregory, I}{, pope}	
...	
\Name*{Leo, I} \Name*{Gregory, I}	(first references to LEO I and GREGORY I)
...	
\Name*{Leo, I} was known as \AKA{Leo, I}{Leo}[the Great].	Leo I was known as Leo the Great.
...	
\Name{Gregory, I} ‘‘\AKA*{Gregory, I}% \{Gregory}[the Great],’’ another major pope.	Gregory “the Great,” an- other major pope.

Here \TagName causes the nameauth indexing macros to append “, pope” to the index entries for Gregory I and Leo I.

Tags are literal text that can be daggers, asterisks, and even specials. For example, all fictional names in the index of this manual have an asterisk without any spaces before it. If space is desired between the entry and the tag, one must add the space at the start of the tag. Tagging aids scholarly indexing and can include life/regnal dates and other information.

\TagName works with all name types, not just medieval names. Back in Section 2.2 we had the example of Jimmy Carter (cross-reference in the index). \TagName adds “, president” to his index entry.

You can use the `{<tag>}` field of `\TagName` to add specials to index entries for names. Every name in this document is tagged with at least `{|hyperpage}` to allow hyperlinks in the index using the `\txdoc` class and `hypdoc` package.

2.8.3 `\UntagName`

`\UntagName` `\TagName` will replace one tag with another tag, but it does not remove a tag from a name. That is the role of `\UntagName`. The syntax is:

```
\UntagName[<FNN>]{<SNN>}[<Alternate names>]
```

By using `\TagName` and `\UntagName`, one can disambiguate different people with the same name. For example:

This refers to <code>\Name*[John]{Smith}</code> .	
Now another <code>\ForgetName[John]{Smith}%</code>	
<code>\TagName[John]{Smith}{(other)}\Name[John]{Smith}</code> .	
Then a third <code>\ForgetName[John]{Smith}%</code>	
<code>\TagName[John]{Smith}{(third)}\Name[John]{Smith}</code> .	
Then the first <code>\UntagName[John]{Smith}\Name*[John]{Smith}</code> .	
This refers to JOHN SMITH.	
Now another JOHN SMITH.	<i>index: Smith, John</i>
Then a third JOHN SMITH.	<i>index: Smith, John (second)</i>
Then the first John Smith.	<i>index: Smith, John (third)</i>
	<i>index: Smith, John</i>

The tweaking macros `\ForgetName` and `\SubvertName` make it seem like you are dealing with three people who have the same name. The index tags will group together those entries with the same tag.¹²

Please remember to note the differences between `\TagName` and `\UntagName` on the one hand and `\PretagName` on the other. See Section 2.5.8.

2.8.4 Global Name Exclusion

`\ExcludeName` This macro globally prevents the indexing of a particular name or cross-reference. If you do not use it at the beginning of the document, you may not exclude any name or cross-reference that has been used already. The syntax is:

```
\ExcludeName[<FNN>]{<SNN>}[<Alternate names>]
```

For example, `\ExcludeName[Kris]{Kringle}` will permit KRIS KRINGLE and Kringle to appear in the body text via `\Name[Kris]{Kringle}`, but no index entry can occur for this name. `\ExcludeName[Santa]{Claus}` will prevent `\AKA[Kris]{Kringle}[Santa]{Claus}` Santa Claus from generating a cross-reference in the index. Instead of the global `\ExcludeName`, it is likelier that you would enclose `\Name`, etc. between `\IndexInactive` and `\IndexActive`.

¹²Since this document, unlike the example above, puts an asterisk by all fictional names in the index, it puts an asterisk at the beginning of the tags above and does not `\UntagName` John Smith, but retags him with an asterisk again.

2.8.5 Indexing Control

\IndexActive Using the `noindex` option deactivates the indexing function of this package until \IndexActive occurs. Another macro, \IndexInactive, will deactivate indexing again. These can be used throughout the document, independently of \ExcludeName. They are global in scope, as are the other toggle macros in this package, so one must be explicit in turning indexing on and off.

2.9 Variant Spellings

This section illustrates why this package is called “nameauth.” Here we get to an example where the macros work together to implement a name authority.

Handling variant name spellings can be complicated. For example, let us assume that you are editing a collection of essays. You might settle on the form W.E.B. Du Bois in your name authority. An essay in that collection might use the alternate spelling W.E.B. DuBois. The author or publisher who owns that work might not grant you permission to alter the spelling. In that case, you could add an alternate spelling. Using the simplified interface, it would be:

```
\begin{nameauth}
  \< DuBois & W.E.B. & Du Bois & >
  \< AltDuBois & W.E.B. & DuBois & >
\end{nameauth}
```

If you wanted to index the alternate spelling with its own entry, the trivial use of \AltDuBois allows that easily. All you need do is make cross-references to each variant in the index so that the reader is aware of them.

Nevertheless, Du Bois and DuBois differ only by spaces. For several good reasons, such as fault tolerance in typing, the first/subsequent use mechanism ignores spaces and sees them as *the same name*. Use \ForgetName[W.E.B.]{Du Bois} to trigger the first use of \AltDuBois in that section.

If you wanted to index the variants under only one name entry, it gets more complicated. You could do the following:

1. Use \ForgetName[W.E.B.]{Du Bois} at the start of the section.
2. Wrap \AltDuBois between \IndexInactive and \IndexActive.
3. Call \IndexName with the authoritative form right after \IndexActive.
4. Create a cross-reference in the index.

This can be automated at the start of the section with something like:

```
\ForgetName[W.E.B.]{DuBois}
\gdef\OtherDuBois{\IndexInactive\AltDuBois\IndexActive%
  \IndexName[W.E.B.]{Du Bois}}
\index{DuBois, W.E.B.|see{Du Bois, W.E.B.}}
```

The alternate section mentions \OtherDuBois starting with a first use: W.E.B. DUBOIS. Subsequent uses of \OtherDuBois print DuBois. Of course, one could get more complex than the example above. The index will only hold the standard entry for W.E.B. Du Bois: “Du Bois, W.E.B.” and a cross-reference from the variant “DuBois, W.E.B.” to the standard entry.

2.10 Naming Pattern Reference

2.10.1 Basic Naming

Western Names

<i>First reference in the text:</i>	\Name*[John]{Smith}
JOHN SMITH	\Name[John]{Smith}
	\FName[John]{Smith}
<i>Subsequent full:</i> John Smith	\Name*[John]{Smith}
<i>Subsequent surname:</i> Smith	\Name[John]{Smith}
<i>Subsequent forename:</i> John	\FName[John]{Smith}
<i>Long first reference:</i>	\Name*[J.Q.]{Public}[Jane Q.]
JANE Q. PUBLIC	\Name[J.Q.]{Public}[Jane Q.]
	\FName[J.Q.]{Public}[Jane Q.]
<i>Subsequent full:</i> J.Q. Public	\Name*[J.Q.]{Public}
<i>Alternate:</i> Jane Qetsiyah Public	\Name*[J.Q.]{Public}[Jane Qetsiyah]
<i>Alternate:</i> Janie	\FName[J.Q.]{Public}[Janie]

Western Plus Affixes

Always use a comma to delimit name/affix pairs.

<i>First reference:</i>	\Name*[George S.]{Patton, Jr.}
GEORGE S. PATTON JR.	\Name[George S.]{Patton, Jr.}
	\FName[George S.]{Patton, Jr.}
<i>Subsequent:</i> George S. Patton Jr.	\Name*[George S.]{Patton, Jr.}
<i>Subsequent surname:</i> Patton	\Name[George S.]{Patton, Jr.}
<i>Subsequent forename:</i> George	\FName[George S.]{Patton, Jr.}[George]

```
\begin{nameauth}
  \< Smith & John & Smith & >
  \< JQP & J.Q. & Public & >
  \< Patton & George S. & Patton, Jr. & >
\end{nameauth}

\Smith, \LSmith, \Smith, and \SSmith:
  JOHN SMITH, John Smith, Smith, and John

\JQP[Jane Q.], \LJQP[Jane Q.], and \JQP[Jane Q.]:
  JANE Q. PUBLIC, Jane Q. Public, and Public

\LJQP[Jane Qetsiyah] \ and \SJQP[Janie]:
  Jane Qetsiyah Public and Janie

\Patton, \LPatton, \Patton, and \SPatton:
  GEORGE S. PATTON JR., George S. Patton Jr., Patton, and George S.

\SPatton[George] prints George.
```

New Syntax: Royal, Eastern, and Ancient

Using `\Name{Demetrius, I Soter}` keeps the number with the affix. To keep the number with the name, use `\Name*{Demetrius I, Soter}`. See also Section 2.4.1.

<i>First reference:</i> FRANCIS I	<code>\Name*{Francis, I}</code> <code>\Name{Francis, I}</code> <code>\FName{Francis, I}</code>
<i>Subsequent full:</i> Francis I	<code>\Name*{Francis, I}</code>
<i>Subsequent name:</i> Francis	<code>\Name{Francis, I}</code> <code>\FName{Francis, I}</code>
<i>First reference:</i> DEMETRIUS I SOTER	<code>\Name*{Demetrius, I Soter}</code> <code>\Name{Demetrius, I Soter}</code> <code>\FName{Demetrius, I Soter}</code>
<i>Subsequent full:</i> Demetrius I Soter	<code>\Name*{Demetrius, I Soter}</code>
<i>Subsequent name:</i> Demetrius	<code>\Name{Demetrius, I Soter}</code> <code>\FName{Demetrius, I Soter}</code>
<i>First reference:</i> SUN YAT-SEN	<code>\Name*{Sun, Yat-sen}</code> <code>\Name{Sun, Yat-sen}</code> <code>\FName{Sun, Yat-sen}</code>
<i>Subsequent full:</i> Sun Yat-sen	<code>\Name*{Sun, Yat-sen}</code>
<i>Subsequent name:</i> Sun	<code>\Name{Sun, Yat-sen}</code> <code>\FName{Sun, Yat-sen}</code>
<i>First mononym reference:</i> PLATO	<code>\Name*{Plato}</code> <code>\Name{Plato}</code> <code>\FName{Plato}</code>
<i>Subsequent:</i> Plato	<code>\Name*{Plato}</code> <code>\Name{Plato}</code> <code>\FName{Plato}</code>

```

\begin{nameauth}
  \< Francis & & Francis, I & >
  \< Dem & & Demetrius, I Soter & >
  \< Sun & & Sun, Yat-sen & >
  \< Plato & & Plato & >
\end{nameauth}

\Francis, \LFrancis, \Francis, and \SFrancis:
  FRANCIS I, Francis I, Francis, and Francis

\Dem, \LDem, \Dem, and \SDem:
  DEMETRIUS I SOTER, Demetrius I Soter, Demetrius, and Demetrios

\Sun, \LSun, \Sun, and \SSun:
  SUN YAT-SEN, Sun Yat-sen, Sun, and Sun

\Plato, \LPlato, \Plato, and \SPlato:
  PLATO, Plato, Plato, and Plato.

```

You also can “stack” `\CapThis`, `\CapName`, `\RevName`, `\KeepAffix`, and so on in front of these control sequences. `\CapName\LSun` generates SUN Yat-sen.

Old Syntax: Royal and Eastern

Avoid these forms except with the `comma` option. `\Name{Ptolemy}[I Soter]` keeps the number with the affix. Use `\Name{Ptolemy I}[Soter]` to keep the number with the name. See also Section 2.4.1.

<i>First reference:</i> HENRY VIII	<code>\Name*[Henry][VIII]</code> <code>\Name{Henry}[VIII]</code> <code>\FName{Henry}[VIII]</code>
<i>Subsequent full:</i> Henry VIII	<code>\Name*[Henry][VIII]</code>
<i>Subsequent name:</i> Henry	<code>\Name{Henry}[VIII]</code> <code>\FName{Henry}[VIII]</code>
<i>First reference:</i> PTOLEMY I SOTER	<code>\Name*[Ptolemy][I Soter]</code> <code>\Name{Ptolemy}[I Soter]</code> <code>\FName{Ptolemy}[I Soter]</code>
<i>Subsequent full:</i> Ptolemy I Soter	<code>\Name*[Ptolemy][I Soter]</code>
<i>Subsequent name:</i> Ptolemy	<code>\Name{Ptolemy}[I Soter]</code> <code>\FName{Ptolemy}[I Soter]</code>
<i>First reference:</i> MAO TSE-TUNG	<code>\Name*[Mao][Tse-tung]</code> <code>\Name{Mao}[Tse-tung]</code>
<i>Subsequent full:</i> Mao Tse-tung	<code>\Name*[Mao][Tse-tung]</code>
<i>Subsequent name:</i> Mao	<code>\Name{Mao}[Tse-tung]</code> <code>\FName{Mao}[Tse-tung]</code>

```
\begin{nameauth}
  \< Henry & & Henry & VIII >
  \< Ptol & & Ptolemy & I Soter >
  \< Mao & & Mao & Tse-tung >
\end{nameauth}

\Henry, \LHenry, \Henry, and \SHenry:
  HENRY VIII, Henry VIII, Henry, and Henry

\Ptol, \LPtol, \Ptol, and \SPtol:
  PTOLEMY I SOTER, Ptolemy I Soter, Ptolemy, and Ptolemy

\Mao, \LMao, \Mao, and \SMao:
  MAO TSE-TUNG, Mao Tse-tung, Mao, and Mao
```

Avoid mixing old and new syntax. In the body text, `\Name{Antiochus, IV}` and `\Name{Antiochus, IV}[Epiphanes]` look alike, but their index entries differ.

- Use `\Name{Antiochus, IV Epiphanes}` to get ANTIOCHUS IV EPIPHANES and Antiochus in the text and “Antiochus IV Epiphanes” in the index.
- Use `\Name{Antiochus~IV, Epiphanes}` to get ANTIOCHUS IV EPIPHANES and Antiochus IV in the text and “Antiochus IV Epiphanes” in the index.
- Use `\Name{Antiochus, IV}` to get ANTIOCHUS IV and Antiochus in the text. Use something like `\TagName{Antiochus, IV}{ Epiphanes}` to get “Antiochus IV Epiphanes” in the index and add “Epiphanes” in the text.

2.10.2 Particles

The following illustrate the American style of particulate names.

<i>First:</i> WALTER DE LA MARE	\Name*[Walter]{de la Mare} \Name[Walter]{de la Mare} \FName[Walter]{de la Mare}
<i>Subsequent:</i> de la Mare	\Name[Walter]{de la Mare}
<i>Start of sentence:</i> De la Mare	\CapThis\Name[Walter]{de la Mare}
<i>Forename:</i> Walter	\FName[Walter]{de la Mare}

The Continental style differs slightly. These first three forms below put the particles in the index. Long macros are split for readability.

<i>The (admittedly long) first use:</i> JOHANN WOLFGANG VON GOETHE	\Name*[Johann Wolfgang von]{Goethe} \Name[Johann Wolfgang von]{Goethe} \FName[Johann Wolfgang von]{Goethe}
<i>Subsequent:</i> Goethe	\Name[Johann Wolfgang von]{Goethe}
<i>Forenames:</i> Johann Wolfgang	\FName[Johann Wolfgang von]{Goethe}% [Johann Wolfgang]

These latter examples of the Continental style use the nickname feature to omit the particles from the index.

<i>First:</i> ADOLF VON HARNACK	\Name*[Adolf]{Harnack}[Adolf von] \Name[Adolf]{Harnack}[Adolf von] \FName[Adolf]{Harnack}[Adolf von]
<i>Subsequent full:</i> Adolf von Harnack	\Name*[Adolf]{Harnack}[Adolf von]
<i>Subsequent surname:</i> Harnack	\Name[Adolf]{Harnack}[Adolf von] \Name[Adolf]{Harnack}
<i>Subsequent forename:</i> Adolf	\FName[Adolf]{Harnack}

```
\begin{nameauth}
< DLM & Walter & de la Mare & >
< JWG & Johann Wolfgang von & Goethe & >
< Harnack & Adolf & Harnack & >
\end{nameauth}
```

\DLM\ and \CapThis\dLM:
WALTER DE LA MARE and De la Mare.

\JWG\ and \JWG:
JOHANN WOLFGANG VON GOETHE and Goethe.

\Harnack[Adolf von]\ and \Harnack:
ADOLF VON HARNACK and Harnack

You will not see Harnack's "von" in the index because it was used only in the alternate forenames field.

3 Implementation

3.1 Boolean Values

Affix Commas

The `comma` and `nocomma` options toggle the first value below, while `\ShowComma` toggles the second. Each instance of `\Name` and `\AKA` reset `@nameauth@ShowComma`.

```
1 \newif\if@nameauth@AlwaysComma  
2 \newif\if@nameauth@ShowComma
```

Toggle Formatting

This value is toggled with `\NamesActive` and `\NamesInactive` or the `mainmatter` and `frontmatter` options.

```
3 \newif\if@nameauth@DoFormat
```

Indexing

`\IndexActive` and `\IndexInactive`, with the `index` and `noindex` options, toggle the value below.

```
4 \newif\if@nameauth@DoIndex
```

The `pretag` and `nopretag` options toggle the value below.

```
5 \newif\if@nameauth@Pretag
```

Name Formatting

The next Boolean values govern full name capitalization, name reversing, and name reversing with commas.

```
6 \newif\if@nameauth@AllCaps  
7 \newif\if@nameauth@AllThis  
8 \newif\if@nameauth@RevAll  
9 \newif\if@nameauth@RevThis  
10 \newif\if@nameauth@RevAllComma  
11 \newif\if@nameauth@RevThisComma
```

`@nameauth@FirstFormat` toggles the formatting of first occurrences of names.

`@nameauth@AlwaysFormat` forces name formatting whenever formatting is active.

```
12 \newif\if@nameauth@FirstFormat  
13 \newif\if@nameauth@AlwaysFormat
```

`@nameauth@FullName` toggles long or short forms in subsequent name uses.

`@nameauth@FirstName` is used when printing only first names. `@nameauth@AltAKA` is toggled by either `\AKA` or `\AKA*` to print a longer or shorter name.

```
14 \newif\if@nameauth@FullName  
15 \newif\if@nameauth@FirstName  
16 \newif\if@nameauth@AltAKA
```

`\KeepAffix` toggles the value below. Each instance of `\Name` and `\AKA` reset it.

```
17 \newif\if@nameauth@NBSP
```

This Boolean value is used for detection of affixes and final periods.

```
18 \newif\if@nameauth@Punct
```

This Boolean value is triggered by `\CapThis`. Each instance of `\Name` and `\AKA` reset it.

```
19 \newif\if@nameauth@DoCaps
```

This Boolean value is triggered by `\AccentCapThis` to handle special cases of extended Unicode particle caps. Each instance of `\Name` and `\AKA` reset it.

```
20 \newif\if@nameauth@Accent
```

3.2 Hooks

\NamesFormat	Change formatting of final complete name form in text. See Section 2.5.9. 21 \newcommand*{\NamesFormat}{}{}
\NameauthName	Hook into the simplified interface. See Section 2.5.9. 22 \newcommand*{\NameauthName}{\Name}
\NameauthFName	Hook into the simplified interface. See Section 2.5.9. 23 \newcommand*{\NameauthFName}{\FName}

3.3 Package Options

The following package options interact with many of the prior Boolean values.

```
24 \DeclareOption{comma}{\@nameauth@AlwaysCommatrue}
25 \DeclareOption{nocomma}{\@nameauth@AlwaysCommafalso}
26 \DeclareOption{mainmatter}{\@nameauth@DoFormattrue}
27 \DeclareOption{frontmatter}{\@nameauth@DoFormatfalse}
28 \DeclareOption{index}{\@nameauth@DoIndextrue}
29 \DeclareOption{noindex}{\@nameauth@DoIndexfalse}
30 \DeclareOption{pretag}{\@nameauth@Pretagtrue}
31 \DeclareOption{nopretag}{\@nameauth@Pretagfalse}
32 \DeclareOption{allcaps}{\@nameauth@AllCapstrue}
33 \DeclareOption{normalcaps}{\@nameauth@AllCapsfalse}
34 \DeclareOption{allreversed}%
35 {\@nameauth@RevAlltrue\@nameauth@RevAllCommafalso}
36 \DeclareOption{allrevcomma}%
37 {\@nameauth@RevAlltrue\@nameauth@RevAllCommatrue}
38 \DeclareOption{notreversed}%
39 {\@nameauth@RevAllfalse\@nameauth@RevAllCommafalso}
40 \DeclareOption{alwaysformat}{\@nameauth@AlwaysFormattrue}
41 \DeclareOption{smallcaps}{\renewcommand*{\NamesFormat}{\scshape}}
42 \DeclareOption{italic}{\renewcommand*{\NamesFormat}{\itshape}}
43 \DeclareOption{boldface}{\renewcommand*{\NamesFormat}{\bfseries}}
44 \DeclareOption{noformat}{\renewcommand*{\NamesFormat}{}}
45 \ExecuteOptions%
46 {nocomma,%
47 mainmatter,%
48 index,%
49 pretag,%
50 normalcaps,%
51 notreversed,%
52 smallcaps}
53 \ProcessOptions\relax
```

Now we load the required packages. They facilitate the first/subsequent name uses, the parsing of arguments, and the implementation of starred forms.

```
54 \RequirePackage{etoolbox}
55 \RequirePackage{ifluatex}
56 \RequirePackage{ifxetex}
57 \RequirePackage{suffix}
58 \RequirePackage{trimspaces}
59 \RequirePackage{xargs}
```

This macro determines the “actual” character for index sorting.

```
60 \newcommand*{\@nameauth@Actual}{@}
```

3.4 Internal Macros

\@nameauth@Clean Thanks to Heiko Oberdiek, this macro produces a “sanitized” string, even using accented characters, based on the parameters of \Name and friends. With this we can construct a control sequence name and test for it to determine the existence of pseudonyms and the first or subsequent occurrences of a name.

```
61 \newcommand*{\@nameauth@Clean}[1]%
62   {\expandafter\zap@space\detokenize{#1} \empty}
```

\@nameauth@Root The following two macros parse $\langle SNN \rangle$ into a radix and a comma-delimited suffix, returning only the radix. They (and their parameters) are expandable in order to facilitate proper indexing functionality. They form the kernel of the suffix removal and comma suppression features.

```
63 \newcommand*{\@nameauth@Root}[1]%
64   {\@nameauth@TrimRoot#1,\empty\relax}
```

\@nameauth@TrimRoot Throw out the comma and suffix, return the radix.

```
65 \def\@nameauth@TrimRoot#1,#2\relax{\trim@spaces{#1}}
```

\@nameauth@CapRoot The next two macros implement the particulate name capitalization mechanism by returning a radix where the first letter is capitalized. In `xelatex` and `lualatex` this is trivial and causes no problems. In `pdflatex` we have to account for “double-wide” accented Unicode characters.

```
66 \newcommand*{\@nameauth@CapRoot}[1]%
67 {%
68   \ifxetex
69     \@nameauth@CRii#1\relax%
70   \else
71     \ifluatex
72       \@nameauth@CRii#1\relax%
73     \else
74       \if@nameauth@Accent
75         \@nameauth@CRii#1\relax%
76       \else
77         \@nameauth@CRii#1\relax%
78       \fi
79     \fi
80   \fi
81 }
```

\@nameauth@CRii Grab the first letter as one parameter, and everything before \relax as the second. Capitalize the first and return it with the second.

```
82 \def\@nameauth@CRii#1#2\relax{\uppercase{#1}\@nameauth@Root{#2}}
```

\@nameauth@CRiii This is called in `pdflatex` under `inputenc` where an accented Unicode character takes the first two parameters. Grab the first “letter” as two parameters and cap it, then everything before \relax as the third. Capitalize the first and return it with the second.

```
83 \def\@nameauth@CRiii#1#2#3\relax{\uppercase{#1#2}\@nameauth@Root{#3}}
```

\@nameauth@AllCapRoot This macro returns a fully-capitalized radix. It is used for generating capitalized Eastern family names in the body text.

```
84 \newcommand*{\@nameauth@AllCapRoot}[1]%
85   {\uppercase{\@nameauth@Root{#1}}}
```

\@nameauth@Suffix	The following two macros parse $\langle SNN \rangle$ into a radix and a comma-delimited suffix, returning only the suffix. Anything before a comma is stripped off by \@nameauth@Suffix, but a comma must be present in the parameter. Leading spaces are removed to allow consistent formatting.
	<pre> 86 \newcommand*{\@nameauth@Suffix}[1]% 87 {\@nameauth@TrimSuffix#1\relax} </pre>
\@nameauth@TrimSuffix	Throw out the radix, comma, and \relax; return the suffix with no leading spaces.
	<pre> 88 \def\@nameauth@TrimSuffix#1,#2\relax{\trim@spaces{#2}} </pre>
\@nameauth@TestDot	This macro, based on a snippet by Uwe Lueck, checks for a period at the end of its parameter. It determines whether we need to call \@nameauth@CheckDot below.
	<pre> 89 \newcommand*{\@nameauth@TestDot}[1]% 90 {% 91 \def\TestDot##1.\TestEnd##2\TestStop{\TestPunct{##2}}% 92 \def\TestPunct##1{% 93 \ifx\TestPunct##1\TestPunct\else\@nameauth@Puncttrue\fi}% 94 \@nameauth@Punctfalse% 95 \TestDot#1\TestEnd.\TestEnd\TestStop% 96 } </pre>
\@nameauth@CheckDot	We assume that \expandafter precedes the invocation of \@nameauth@CheckDot, which only is called if the terminal character of the input is a period. We evaluate the lookahead \ctoken while keeping it on the list of input tokens.
	<pre> 97 \newcommand*{\@nameauth@CheckDot}% 98 {\futurelet\ctoken\@nameauth@EvalDot} </pre>
\@nameauth@EvalDot	If \ctoken is a full stop, we gobble the token.
	<pre> 99 \newcommand*{\@nameauth@EvalDot}% 100 {\let\@period=.\ifx\ctoken\@period\expandafter\gobble\fi} </pre>
\@nameauth@FmtName	The following macros format the output of \Name, etc. \@nameauth@FmtName prints names in the body text, either formatted or not. Notice how \NamesFormat (Section 2.5.9) sits between a \bgroup and an \egroup to localize the font change. \@nameauth@AlwaysFormat will force formatting when possible.
	<pre> 101 \newcommand*{\@nameauth@FmtName}[1]% 102 {% 103 \if@\@nameauth@AlwaysFormat\@nameauth@FirstFormattrue\fi 104 \@nameauth@TestDot{#1}% 105 \if@\@nameauth@DoFormat 106 \if@\@nameauth@FirstFormat 107 \bgroup\NamesFormat{#1}\egroup% 108 \else 109 #1% 110 \fi 111 \else 112 #1% 113 \fi 114 } </pre>

\@nameauth@Index If the indexing flag is true, create an index entry, otherwise do nothing.

```
115 \newcommand*{\@nameauth@Index}[2]{%
116 {%
117   \def\cseq{#1}%
118   \ifcsname\cseq!TAG\endcsname
119     \ifcsname\cseq!PRE\endcsname
120       \if@nameauth@DoIndex
121         \index{\csname\cseq!PRE\endcsname#2\csname\cseq!TAG\endcsname}%
122       \fi
123     \else
124       \if@nameauth@DoIndex\index{#2\csname\cseq!TAG\endcsname}\fi
125     \fi
126   \else
127     \ifcsname\cseq!PRE\endcsname
128       \if@nameauth@DoIndex\index{\csname\cseq!PRE\endcsname#2}\fi
129     \else
130       \if@nameauth@DoIndex\index{#2}\fi
131     \fi
132   \fi
133 }
```

3.5 User Interface Macros

\CapThis	Tells the root capping macro to cap an unaccented character.
	134 \newcommand*{\CapThis}{\@nameauth\@DoCapstrue}
\AccentCapThis	Tells the root capping macro to cap an accented Unicode character.
	135 \newcommand*{\AccentCapThis}{\@nameauth\@Accenttrue\@nameauth\@DoCapstrue}
\CapName	Capitalize entire name.
	136 \newcommand*{\CapName}{\@nameauth\@AllThistrue}
\RevName	Reverse name order.
	137 \newcommand*{\RevName}{\@nameauth\@RevThistrue}
\RevComma	Last name, comma, first name.
	138 \newcommand*{\RevComma}% { \@nameauth\@RevThistrue\@nameauth\@RevThisCommatrue}
\ShowComma	Put comma between name and suffix one time.
	140 \newcommand*{\ShowComma}{\@nameauth\@ShowCommatrue}
\KeepAffix	Trigger a name-suffix pair to be separated by a non-breaking space.
	141 \newcommand*{\KeepAffix}{\@nameauth\@NBSPtrue}
\NamesInactive	Switch to the “non-formatted” species of names.
	142 \newcommand*{\NamesInactive}{\@nameauth\@DoFormatfalse}
\NamesActive	Switch to the “formatted” species of names.
	143 \newcommand*{\NamesActive}{\@nameauth\@DoFormattrue}
\AllCapsInactive	Turn off global surname capitalization.
	144 \newcommand*{\AllCapsInactive}{\@nameauth\@AllCapsfalse}
\AllCapsActive	Turn on global surname capitalization.
	145 \newcommand*{\AllCapsActive}{\@nameauth\@AllCapstrue}
\ReverseInactive	Turn off global name reversing.
	146 \newcommand*{\ReverseInactive}{\@nameauth\@RevAllfalse}
\ReverseActive	Turn on global name reversing.
	147 \newcommand*{\ReverseActive}{\@nameauth\@RevAlltrue}
\ReverseCommaInactive	Turn off global “last-name-comma-first.”
	148 \newcommand*{\ReverseCommaInactive}% { \@nameauth\@RevAllfalse\@nameauth\@RevAllCommafalso}
\ReverseCommaActive	Turn on global “last-name-comma-first.”
	150 \newcommand*{\ReverseCommaActive}% { \@nameauth\@RevAlltrue\@nameauth\@RevAllCommatrue}
\IndexInactive	turn off global indexing of names.
	152 \newcommand*{\IndexInactive}{\@nameauth\@DoIndexfalse}
\IndexActive	turn on global indexing of names.
	153 \newcommand*{\IndexActive}{\@nameauth\@DoIndextrue}

\IndexActual Change the “actual” character from the default.

```
154 \newcommand*\IndexActual[1]%
155   {\global\renewcommand*\@nameauth{\IndexActual{#1}}}
```

\Name Here is the heart of the package. Marc van Dongen provided the basic structure. Parsing, indexing, and formatting are in discrete elements.

```
156 \newcommandx*\Name[3] [1=\@empty, 3=\@empty]%
157 {%
158   \let\ex\expandafter%
159   \leavevmode\hbox{}%
```

Names occur in horizontal mode; we ensure that. Next we make copies of the arguments to test them and make parsing decisions

```
160 \protected@edef\testa{#1}%
161 \protected@edef\arga{\trim@spaces{#1}}%
162 \protected@edef\testb{\trim@spaces{#2}}%
163 \protected@edef\testbr{\@nameauth@Root{#2}}%
164 \protected@edef\testc{#3}%
165 \protected@edef\argc{\trim@spaces{#3}}%
166 \def\csb{\@nameauth@Clean{#2}}%
167 \def\csbc{\@nameauth@Clean{#2#3}}%
168 \def\csab{\@nameauth@Clean{#1!#2}}%
```

Test for malformed input.

```
169 \ifx\testb\@empty
170   \PackageError{\nameauth}%
171   {macro \Name: Essential name missing}%
172 \else
173   \ifx\csb\@empty
174     \PackageError{\nameauth}%
175     {macro \Name: Essential name malformed}%
176   \fi
177 \fi
```

If global caps. reversing, and commas are true, set the local flags true.

```
178 \if@nameauth@AllCaps\@nameauth@AllThistrue\fi
179 \if@nameauth@RevAll\@nameauth@RevThistrue\fi
180 \if@nameauth@RevAllComma\@nameauth@RevThisCommatrue\fi
```

The code below handles non-breaking and regular spaces, as well as commas, in the text and the index by setting up which kind we want to use. These will be inserted as appropriate as the output is formatted.

```
181 \protected@edef\ISpace{\space}%
182 \protected@edef\Space{\space}%
183 \if@nameauth@NBSP\protected@edef\Space{\nobreakspace}\fi
184 \if@nameauth@AlwaysComma
185   \protected@edef\ISpace{,\space}%
186   \protected@edef\Space{,\space}%
187   \if@nameauth@NBSP\protected@edef\Space{,\nobreakspace}\fi
188 \fi
189 \if@nameauth@ShowComma
190   \protected@edef\ISpace{,\space}%
191   \protected@edef\Space{,\space}%
192   \if@nameauth@NBSP\protected@edef\Space{,\nobreakspace}\fi
193 \fi
```

The section below parses any “surnames” into name/suffix pairs and figures out how to capitalize and reverse them as needed, storing the results for the main parser.

```

194 \protected@edef\RawShort{\nameauth@Root{#2}}%
195 \if@nameauth@DoCaps
196   \protected@edef\CapShort{\nameauth@CapRoot{#2}}%
197 \else
198   \let\CapShort\RawShort%
199 \fi
200 \protected@edef\AllCapShort{\nameauth@AllCapRoot{#2}}%
201 \let\IndexShort\RawShort%
202 \ifx\testb\testbr
203   \protected@edef\Suff{\empty}%
204   \let\IndexSNN\RawShort%
205   \let\Reversed\RawShort%
206   \let\SNN\RawShort%
207   \let\PrintShort\RawShort%
208   \if@nameauth@DoCaps
209     \let\Reversed\CapShort%
210     \let\SNN\CapShort%
211     \let\PrintShort\CapShort%
212   \fi
213 \if@nameauth@AllThis
214   \let\Reversed\AllCapShort%
215   \let\SNN\AllCapShort%
216   \let\PrintShort\AllCapShort%
217 \fi
218 \else
219   \protected@edef\Suff{\nameauth@Suffix{#2}}%
220   \protected@edef\IndexSNN{\RawShort\ISpace\Suff}%
221   \protected@edef\Reversed{\Suff\Space\RawShort}%
222   \protected@edef\SNN{\RawShort\Space\Suff}%
223   \if@nameauth@RevThis
224     \let\PrintShort\Suff%
225   \else
226     \let\PrintShort\RawShort%
227   \fi
228 \if@nameauth@DoCaps
229   \protected@edef\Reversed{\Suff\Space\CapShort}%
230   \protected@edef\SNN{\CapShort\Space\Suff}%
231   \if@nameauth@RevThis
232     \let\PrintShort\Suff%
233   \else
234     \let\PrintShort\CapShort%
235   \fi
236 \fi
237 \if@nameauth@AllThis
238   \protected@edef\Reversed{\Suff\Space\AllCapShort}%
239   \protected@edef\SNN{\AllCapShort\Space\Suff}%
240   \if@nameauth@RevThis
241     \let\PrintShort\Suff%
242   \else
243     \let\PrintShort\AllCapShort%
244   \fi
245 \fi
246 \fi

```

Here we parse names.

```
247 \ifx\testa\@empty
248     \ifx\testc\@empty
```

This is the section for momonyms, royal name/suffix pairs, and native Eastern names where comma-delimited suffixes are used. The first conditional below checks if we are trying to use an alternate name cross-reference as a main name (code !PN for pseudonym). If we are using a legitimate name, we generate an index entry.

```
249     \ifcsname\csb!PN\endcsname
250         \PackageWarning{nameauth}%
251             {macro \Name: Xref: #2 cannot be a page reference}%
252     \else
253         \nameauth@Index{\csb}{\IndexSNN}%
254     \fi
```

If formatting is active, we handle first and subsequent formatting of names in the main matter (code !MN for main matter name). First we handle subsequent uses. We need `\expandafter` to enable the punctuation detection.

```
255     \if@nameauth@DoFormat
256         \ifcsname\csb!MN\endcsname
257             \if@nameauth@FirstName
258                 \nameauth@FullNamefalse%
259                 \nameauth@FirstNamefalse%
260             \fi
261             \if@nameauth@FullName
262                 \nameauth@FullNamefalse%
263                 \if@nameauth@RevThis
264                     \ex\nameauth@FmtName\ex{\Reversed}%
265                 \else
266                     \ex\nameauth@FmtName\ex{\SNN}%
267                 \fi
268             \else
269                 \ex\nameauth@FmtName\ex{\PrintShort}%
270             \fi
271         \else
```

Handle first uses.

```
272     \nameauth@FirstFormattrue%
273     \nameauth@FullNamefalse%
274     \nameauth@FirstNamefalse%
275     \csgdef{\csb!MN}{}%
276     \if@nameauth@RevThis
277         \ex\nameauth@FmtName\ex{\Reversed}%
278     \else
279         \ex\nameauth@FmtName\ex{\SNN}%
280     \fi
281 \fi
282 \else
```

Take care of names in the front matter (code !NF for non-formatted). First handle subsequent uses.

```

283      \ifcsname\csb!NF\endcsname
284          \if@nameauth@FirstName
285              \c@nameauth@FullNamefalse%
286              \c@nameauth@FirstNamefalse%
287          \fi
288          \if@nameauth@FullName
289              \c@nameauth@FullNamefalse%
290              \if@nameauth@RevThis
291                  \ex\c@nameauth@FmtName\ex{\Reversed}%
292              \else
293                  \ex\c@nameauth@FmtName\ex{\$NN}%
294              \fi
295          \else
296              \ex\c@nameauth@FmtName\ex{\PrintShort}%
297          \fi
298      \else

```

Handle first uses.

```

299          \csgdef{\csb!NF}{}
300          \c@nameauth@FirstNamefalse%
301          \c@nameauth@FullNamefalse%
302          \if@nameauth@RevThis
303              \ex\c@nameauth@FmtName\ex{\Reversed}%
304          \else
305              \ex\c@nameauth@FmtName\ex{\$NN}%
306          \fi
307      \fi
308  \fi
309 \else

```

This is the section that handles the old syntax for royal names and native Eastern names. The first conditional below checks if we are trying to use an alternate name cross-reference as a main name (code !PN for pseudonym). If we are using a legitimate name, we generate an index entry.

```

310      \ifcsname\csbc!PN\endcsname
311          \PackageWarning{nameauth}%
312          {macro \Name: Xref: #2 #3 cannot be a page reference}%
313      \else
314          \c@nameauth@Index{\csbc}{\IndexSNN\ISpace\argc}%
315      \fi

```

If formatting is active, we handle first and subsequent formatting of names in the main matter (code !MN for main matter name). First we handle subsequent uses.

```

316      \if@nameauth@DoFormat
317          \ifcsname\csbc!MN\endcsname
318              \if@nameauth@FirstName
319                  \c@nameauth@FullNamefalse%
320                  \c@nameauth@FirstNamefalse%
321              \fi
322              \if@nameauth@FullName
323                  \c@nameauth@FullNamefalse%
324                  \if@nameauth@RevThis
325                      \ex\c@nameauth@FmtName\ex{\ex\argc\ex\space\SNN}%
326                  \else
327                      \ex\c@nameauth@FmtName\ex{\ex\SNN\ex\space\argc}%
328                  \fi
329              \else
330                  \if@nameauth@RevThis
331                      \ex\c@nameauth@FmtName\ex{\argc}%
332                  \else
333                      \ex\c@nameauth@FmtName\ex{\PrintShort}%
334                  \fi
335              \fi
336          \else

```

Handle first uses.

```

337              \c@nameauth@FirstFormattrue%
338              \c@nameauth@FullNamefalse%
339              \c@nameauth@FirstNamefalse%
340              \csgdef{\csbc!MN}{ }%
341              \if@nameauth@RevThis
342                  \ex\c@nameauth@FmtName\ex{\ex\argc\ex\space\SNN}%
343              \else
344                  \ex\c@nameauth@FmtName\ex{\ex\SNN\ex\space\argc}%
345              \fi
346          \fi
347      \else

```

Take care of names in the front matter (code !NF for non-formatted). First handle subsequent uses.

```
348      \ifcsname\csbc!NF\endcsname
349          \if@nameauth@FirstName
350              \c@nameauth@FullNamefalse%
351              \c@nameauth@FirstNamefalse%
352          \fi
353          \if@nameauth@FullName
354              \c@nameauth@FullNamefalse%
355              \if@nameauth@RevThis
356                  \ex\c@nameauth@FmtName\ex{\ex\argc\ex\space\SNN}%
357              \else
358                  \ex\c@nameauth@FmtName\ex{\ex\SNN\ex\space\argc}%
359              \fi
360          \else
361              \if@nameauth@RevThis
362                  \ex\c@nameauth@FmtName\ex{\argc}%
363              \else
364                  \ex\c@nameauth@FmtName\ex{\PrintShort}%
365              \fi
366          \fi
367      \else
```

Handle first uses.

```
368          \c@nameauth@FullNamefalse%
369          \c@nameauth@FirstNamefalse%
370          \csgdef{\csbc!NF}{}
371          \if@nameauth@RevThis
372              \ex\c@nameauth@FmtName\ex{\ex\argc\ex\space\SNN}%
373          \else
374              \ex\c@nameauth@FmtName\ex{\ex\SNN\ex\space\argc}%
375          \fi
376      \fi
377  \fi
378 \fi
379 \else
```

This is the section that handles Western names and non-native Eastern names. The first pair of conditionals handle the `\evThisComma`, and alternate forenames. The next conditional below checks if we are trying to use an alternate name cross-reference as a main name (code `!PN` for pseudonym). If we are using a legitimate name, we generate an index entry.

```

380      \if@nameauth@RevThisComma
381          \protected@edef\ISpace{,\space}%
382          \protected@edef\Space{,\space}%
383          \if@nameauth@\NBSP\protected@edef\Space{,\nobreakspace}\fi
384      \fi
385      \ifx\testc\empty
386          \let\FNN\arga%
387      \else
388          \let\FNN\argc%
389      \fi
390      \ifcsname\csab!PN\endcsname
391          \PackageWarning{\nameauth}%
392          {macro \Name: Xref: #1 #2 cannot be a page reference}%
393      \else
394          \ifx\Suff\empty
395              \cnameauth@Index{\csab}{\IndexShort,\space\arga}%
396          \else
397              \cnameauth@Index{\csab}{\IndexShort,\space\arga,\space\Suff}%
398          \fi
399      \fi

```

If formatting is active, we handle first and subsequent formatting of names in the main matter (code `!MN` for main matter name). First we handle subsequent uses.

```

400      \if@nameauth@DoFormat
401          \ifcsname\csab!MN\endcsname
402              \if@nameauth@FirstName
403                  \cnameauth@FullNamefalse%
404                  \cnameauth@FirstNamefalse%
405                  \let\PrintShort\FNN%
406              \fi
407              \if@nameauth@FullName
408                  \cnameauth@FullNamefalse%
409                  \if@nameauth@RevThis
410                      \ex\cnameauth@FmtName\ex{\ex\SNN\ex\Space\FNN}%
411                  \else
412                      \ex\cnameauth@FmtName\ex{\ex\FNN\ex\space\SNN}%
413                  \fi
414              \else
415                  \ex\cnameauth@FmtName\ex{\PrintShort}%
416              \fi
417          \else

```

Handle first uses.

```
418      \csgdef{\csab!MN}{}
419      \if@nameauth@RevThis
420          \ex{\csgdef{\csab!MN}{}}%
421      \else
422          \ex{\csgdef{\csab!MN}{}}%
423      \fi
424      \else
425      \fi
426      \else
```

Take care of names in the front matter (code !NF for non-formatted). First handle subsequent uses.

```
429      \if\csname\csab!NF\endcsname
430          \if@nameauth@FirstName
431              \csgdef{\csab!NF}{}
432              \if@nameauth@FirstNamefalse%
433                  \let\PrintShort\FNN%
434              \fi
435          \if@nameauth@FullName
436              \csgdef{\csab!NF}{}
437              \if@nameauth@RevThis
438                  \ex{\csgdef{\csab!NF}{}}%
439              \else
440                  \ex{\csgdef{\csab!NF}{}}%
441              \fi
442          \else
443              \ex{\csgdef{\csab!NF}{}}%
444          \fi
445      \else
```

Handle first uses.

```
446      \csgdef{\csab!NF}{}
447      \if@nameauth@FirstNamefalse%
448      \else
449          \if@nameauth@RevThis
450              \ex{\csgdef{\csab!NF}{}}%
451          \else
452              \ex{\csgdef{\csab!NF}{}}%
453          \fi
454      \fi
455      \fi
456  \fi
```

Reset all the “per name” Boolean values.

```
457 \cnameauth@FirstFormatfalse%
458 \cnameauth@NBSPfalse%
459 \cnameauth@DoCapsfalse%
460 \cnameauth@Accentfalse%
461 \cnameauth@AllThisfalse%
462 \cnameauth@ShowCommafalse%
463 \cnameauth@RevThisfalse%
464 \cnameauth@RevThisCommafalse%
```

Call the full stop detection.

```
465 \ifcnameauth@Punct\expandafter\cnameauth@CheckDot\fi
466 }
```

\Name* \Name* sets a Boolean value and calls \Name.

```
467 \WithSuffix\def\Name*{\cnameauth@FullNametrue\Name}
```

\FName \FName sets a Boolean value and calls \Name.

```
468 \def\FName{\cnameauth@FirstNametrue\Name}
```

\FName* \FName and \FName* are identical.

```
469 \WithSuffix\def\FName*{\cnameauth@FirstNametrue\Name}
```

\AKA \AKA prints an alternate name and creates index cross-references. It prevents multiple generation of cross-references and suppresses double periods.

```
470 \newcommandx*\AKA[5][1=\empty, 3=\empty, 5=\empty]{%
471   \let\ex\expandafter%
472   \leavevmode\hbox{}%
```

Names occur in horizontal mode; we ensure that. Next we make copies of the arguments to test them and make parsing decisions.

```
474 \protected@edef\testa{#1}%
475 \protected@edef\arg{|\trim@spaces{#1}|}%
476 \protected@edef\testb{|\trim@spaces{#2}|}%
477 \protected@edef\testbr{\cnameauth@Root{#2}}%
478 \protected@edef\testc{#3}%
479 \protected@edef\argc{|\trim@spaces{#3}|}%
480 \protected@edef\testd{|\trim@spaces{#4}|}%
481 \protected@edef\testdr{\cnameauth@Root{#4}}%
482 \protected@edef\teste{#5}%
483 \protected@edef\arge{|\trim@spaces{#5}|}%
484 \def\csd{\cnameauth@Clean{#4}}%
485 \def\csde{\cnameauth@Clean{#4#5}}%
486 \def\cscd{\cnameauth@Clean{#3!#4}}%
```

Test for malformed input.

```
487 \ifx\testb\@empty
488     \PackageError{nameauth}%
489     {macro \AKA: Essential name missing}%
490 \else
491     \ifx\csb\@empty
492         \PackageError{nameauth}%
493         {macro \AKA: Essential name malformed}%
494     \fi
495 \fi
496 \ifx\testd\@empty
497     \PackageError{nameauth}%
498     {macro \AKA: Essential name missing}%
499 \else
500     \ifx\csd\@empty
501         \PackageError{nameauth}%
502         {macro \AKA: Essential name malformed}%
503     \fi
504 \fi
```

If global caps, reversing, and commas are true, set the local flags true.

```
505 \if@nameauth@AllCaps@\nameauth@AllThistrue\fi
506 \if@nameauth@RevAll@\nameauth@RevThistrue\fi
507 \if@nameauth@RevAllComma@\nameauth@RevThisCommattrue\fi
```

The code below handles non-breaking and regular spaces, as well as commas, in the text and the index by setting up which kind we want to use. These will be inserted as appropriate as the output is formatted.

```
508 \protected@edef\ISpace{\space}%
509 \protected@edef\Space{\space}%
510 \if@nameauth@NBSP\protected@edef\Space{\nobreakspace}\fi
511 \if@nameauth@AlwaysComma
512     \protected@edef\ISpace{,\space}%
513     \protected@edef\Space{,\space}%
514     \if@nameauth@NBSP\protected@edef\Space{,\nobreakspace}\fi
515 \fi
516 \if@nameauth>ShowComma
517     \protected@edef\ISpace{,\space}%
518     \protected@edef\Space{,\space}%
519     \if@nameauth@NBSP\protected@edef\Space{,\nobreakspace}\fi
520 \fi
```

The section below parses any “surnames” into name/suffix pairs and figures out how to capitalize and reverse them as needed, storing the results for the main parser. We have to handle several more combinations here than with \Name above.

```

521  \protected@edef\Shortb{\@nameauth@Root{#2}}%
522  \protected@edef\Shortd{\@nameauth@Root{#4}}%
523  \if@nameauth@DoCaps
524    \protected@edef\CapShort{\@nameauth@CapRoot{#4}}%
525  \else
526    \let\CapShort\Shortd
527  \fi
528  \protected@edef\AllCapShort{\@nameauth@AllCapRoot{#4}}%
529  \ifx\testb\testbr
530    \let\SNNb\Shortb%
531    \protected@edef\Suffb{\@empty}%
532  \else
533    \protected@edef\Suffb{\@nameauth@Suffix{#2}}%
534    \protected@edef\SNNb{\Shortb\ISpace\Suffb}%
535  \fi
536  \ifx\testd\testdr
537    \protected@edef\Suffd{\@empty}%
538    \let\ISNNd\Shortd%
539    \let\Reversed\Shortd%
540    \let\SNNd\Shortd%
541    \if@nameauth@DoCaps
542      \let\SNNd\CapShort%
543      \let\Reversed\CapShort%
544    \fi
545    \if@nameauth@AllThis
546      \let\SNNd\AllCapShort%
547      \let\Reversed\AllCapShort%
548    \fi
549  \else
550    \protected@edef\Suffd{\@nameauth@Suffix{#4}}%
551    \protected@edef\ISNNd{\Shortd\ISpace\Suffd}%
552    \protected@edef\Reversed{\Suffd\Space\Shortd}%
553    \protected@edef\SNNd{\Shortd\Space\Suffd}%
554    \if@nameauth@DoCaps
555      \protected@edef\Reversed{\Suffd\Space\CapShort}%
556      \protected@edef\SNNd{\CapShort\Space\Suffd}%
557    \fi
558    \if@nameauth@AllThis
559      \protected@edef\Reversed{\Suffd\Space\AllCapShort}%
560      \protected@edef\SNNd{\AllCapShort\Space\Suffd}%
561    \fi
562  \fi

```

Here we parse names.

```
563 \ifx\testc\@empty
564     \ifx\teste\@empty
```

For mononyms and name/suffix pairs: If a pseudonym has not been generated by \AKA or \ExcludeName, and if the proposed pseudonym is not already a mainmatter or frontmatter name, then generate a *see* reference from the pseudonym to a name that will appear in the index.

```
565     \ifcsname\csd!PN\endcsname
566         \PackageWarning{nameauth}%
567         {macro \AKA: XRef: #4 exists}%
568     \else
569         \ifcsname\csd!MN\endcsname
570             \PackageWarning{nameauth}%
571             {macro \AKA: Name reference: #4 exists; no xref}%
572     \else
573         \ifcsname\csd!NF\endcsname
574             \PackageWarning{nameauth}%
575             {macro \AKA: Name reference: #4 exists; no xref}%
576     \else
577         \csgdef{\csd!PN}{}%
578         \ifx\testa\@empty
579             \@nameauth@Index{\csd}%
580             {\ISNNd|see{\$SNNb}}%
581     \else
582         \ifx\Suffb\@empty
583             \@nameauth@Index{\csd}%
584             {\ISNNd|see{\$SNNb,\space\arga}}%
585     \else
586         \@nameauth@Index{\csd}%
587             {\ISNNd|see{\$Shortb,\space\arga,\space\Suffb}}%
588     \fi
589     \fi
590     \fi
591     \fi
592 \fi
```

Print an appropriate version of the pseudonym (capped, reversed, etc.) in the text with no special formatting even if no cross-reference was generated in the index. Again, \expandafter is used for the punctuation detection.

```
593 \if@nameauth@RevThisComma
594     \protected@edef\ISpace{,\space}%
595     \protected@edef\Space{,\space}%
596     \if@nameauth@NBSP
597         \protected@edef\Space{,\nobreakspace}%
598     \fi
599 \fi
600 \if@nameauth@RevThis
601     \ex@\nameauth@FmtName\ex{\Reversed}%
602 \else
603     \ex@\nameauth@FmtName\ex{\$SNNd}%
604 \fi
605 \else
```

For name/affix using the old syntax: If a pseudonym has not been generated by \AKA or \ExcludeName, and if the proposed pseudonym is not already a mainmatter or frontmatter name, then generate a *see* reference from the pseudonym to a name that will appear in the index.

```

606      \ifcsname\csde!PN\endcsname
607          \PackageWarning{nameauth}%
608          {macro \AKA: XRef: #4 #5 exists}%
609      \else
610          \ifcsname\csde!MN\endcsname
611              \PackageWarning{nameauth}%
612              {macro \AKA: Name reference: #4 #5 exists; no xref}%
613      \else
614          \ifcsname\csde!NF\endcsname
615              \PackageWarning{nameauth}%
616              {macro \AKA: Name reference: #4 #5 exists; no xref}%
617      \else
618          \csgdef{\csde!PN}{}
619          \ifx\test@{\empty}
620              \nameauth@Index{\csde}%
621              {\ISNNd\ISpace\arge|see{\SNNb}}%
622          \else
623              \ifx\Suffb{\empty}
624                  \nameauth@Index{\csde}%
625                  {\ISNNd\ISpace\arge|see{\SNNb,\space\arga}}%
626          \else
627              \nameauth@Index{\csde}%
628              {\ISNNd\ISpace\arge|see{\Shortb,\space\arga,\space\Suffb}}%
629          \fi
630      \fi
631      \fi
632      \fi
633  \fi

```

Print an appropriate version of the pseudonym (capped, reversed, etc.) in the text with no special formatting even if no cross-reference was generated in the index.

```

634      \if@nameauth@RevThisComma
635          \protected@edef\ISpace{,\space}%
636          \protected@edef\Space{,\space}%
637          \if@nameauth@NBSP
638              \protected@edef\Space{,\nobreakspace}%
639          \fi
640      \fi
641      \if@nameauth@AltAKA
642          \ex\nameauth@FmtName\ex{\arge}%
643      \else
644          \if@nameauth@RevThis
645              \ex\nameauth@FmtName\ex{\ex\arge\ex\Space\SNNd}%
646          \else
647              \ex\nameauth@FmtName\ex{\ex\SNNd\ex\space\arge}%
648          \fi
649      \fi
650  \fi
651 \else

```

For Western names and affixes: If a pseudonym has not been generated by \AKA or \ExcludeName, and if the proposed pseudonym is not already a mainmatter or frontmatter name, then generate a *see* reference from the pseudonym to a name that will appear in the index.

```

652      \ifcsname\cscd!PN\endcsname
653          \PackageWarning{nameauth}%
654          {macro \AKA: XRef: #3 #4 exists}%
655      \else
656          \ifcsname\cscd!MN\endcsname
657              \PackageWarning{nameauth}%
658              {macro \AKA: Name reference: #3 #4 exists; no xref}%
659      \else
660          \ifcsname\cscd!NF\endcsname
661              \PackageWarning{nameauth}%
662              {macro \AKA: Name reference: #3 #4 exists; no xref}%
663      \else
664          \csgdef{\cscd!PN}{}
665          \ifx\testa\@empty
666              \ifx\Suffd\@empty
667                  \@nameauth@Index{\cscd}%
668                  {\ISNNd,\space\argc|see{\SNNb}}%
669              \else
670                  \@nameauth@Index{\cscd}%
671                  {\Shortd,\space\argc,\space\Suffd|see{\SNNb}}%
672          \fi
673      \else
674          \ifx\Suffb\@empty
675              \ifx\Suffd\@empty
676                  \@nameauth@Index{\cscd}%
677                  {\ISNNd,\space\argc|see{\SNNb,\space\arga}}%
678              \else
679                  \@nameauth@Index{\cscd}%
680                  {\Shortd,\space\argc,\space\Suffd|see{\SNNb,\space\arga}}%
681          \fi
682      \else
683          \ifx\Suffd\@empty
684              \@nameauth@Index{\cscd}%
685              {\ISNNd,\space\argc|see{\Shortb,\space\arga,\space\Suffb}}%
686          \else
687              \@nameauth@Index{\cscd}%
688              {\Shortd,\space\argc,\space\Suffd|see{\Shortb,\space\arga,\space\Suffb}}%
689          \fi
690      \else
691          \fi
692      \fi
693  \fi
694 \fi

```

Print an appropriate version of the pseudonym (capped, reversed, etc.) in the text with no special formatting even if no cross-reference was generated in the index.

```
695      \if@nameauth@RevThisComma
696          \protected@edef\ISpace{,\space}%
697          \protected@edef\Space{,\space}%
698          \if@nameauth@NBSP\protected@edef\Space{,\nobreakspace}\fi
699      \fi
700      \ifx\teste\@empty
701          \let\FNN\argc%
702      \else
703          \let\FNN\arge%
704      \fi
705      \if@nameauth@RevThis
706          \ex\@nameauth@FmtName\ex{\ex\SNNd\ex\Space\FNN}%
707      \else
708          \ex\@nameauth@FmtName\ex{\ex\FNN\ex\space\SNNd}%
709      \fi
710  \fi
```

Reset all the “per name” Boolean values.

```
711  \@nameauth@NBSPfalse%
712  \@nameauth@AltAKAfalse%
713  \@nameauth@DoCapsfalse%
714  \@nameauth@Accentfalse%
715  \@nameauth@AllThisfalse%
716  \@nameauth@ShowCommafalse%
717  \@nameauth@RevThisfalse%
718  \@nameauth@RevThisCommafalse%
```

Call the full stop detection.

```
719  \if@nameauth@Punct\expandafter\@nameauth@CheckDot\fi
720 }
```

\AKA* This starred form sets a Boolean to print only the alternate name parameter, if that exists, and calls \AKA.

```
721 \WithSuffix\def\AKA*{\@nameauth@AltAKAtrue\AKA}
```

\PName \PName is a convenience macro that calls \Name, then \AKA.

```
722 \newcommandx*\PName[5][1=\@empty,3=\@empty,5=\@empty]{%
723   \Name[#1]{#2}\space(\AKA[#1]{#2}{#3}{#4}{#5})%
724 }
725 }
```

\PName* This just calls \Name*, then \AKA.

```
726 \WithSuffix\def\PName*{\@nameauth@FullNametrue\PName}
```

\TagName This creates an index entry tag that is applied to a name that is not already used as a cross reference via \AKA.

```

727 \newcommandx*\TagName[4] [1=\@empty, 3=\@empty]%
728 {%
729   \protected@edef\testa{#1}%
730   \protected@edef\testb{\trim@spaces{#2}}%
731   \protected@edef\testc{#3}%
732   \def\csb{\@nameauth@Clean{#2}}%
733   \def\csbc{\@nameauth@Clean{#2#3}}%
734   \def\csab{\@nameauth@Clean{#1!#2}}%

```

We make copies of the arguments to test them and then we parse the arguments, defining the tag control sequences.

```

735   \ifx\testb\@empty
736     \PackageError{nameauth}%
737     {macro \TagName: Essential name missing}%
738   \else
739     \ifx\csb\@empty
740       \PackageError{nameauth}%
741       {macro \TagName: Essential name malformed}%
742     \fi
743   \fi
744   \ifx\testa\@empty
745     \ifx\testc\@empty
746       \ifcsname\csb!PN\endcsname
747         \PackageWarning{nameauth}%
748         {macro \TagName: not tagging xref: #2}%
749     \else
750       \csgdef{\csb!TAG}{#4}%
751     \fi
752   \else
753     \ifcsname\csbc!PN\endcsname
754       \PackageWarning{nameauth}%
755       {macro \TagName: not tagging xref: #2 #3}%
756     \else
757       \csgdef{\csbc!TAG}{#4}%
758     \fi
759   \fi
760 \else
761   \ifcsname\csab!PN\endcsname
762     \PackageWarning{nameauth}%
763     {macro \TagName: not tagging xref: #1 #2}%
764   \else
765     \csgdef{\csab!TAG}{#4}%
766   \fi
767 \fi
768 }
```

```

\UntagName This deletes an index entry tag.
769 \newcommandx*\UntagName[3] [1=\@empty, 3=\@empty]%
770 {%
771   \protected@edef\testa{#1}%
772   \protected@edef\testb{\trim@spaces{#2}}%
773   \protected@edef\testc{#3}%
774   \def\csb{\@nameauth@Clean{#2}}%
775   \def\csbc{\@nameauth@Clean{#2#3}}%
776   \def\csab{\@nameauth@Clean{#1!#2}}%

```

We make copies of the arguments to test them and then we parse the arguments, undefining the tag control sequences.

```

777   \ifx\testb\@empty
778     \PackageError{nameauth}%
779     {macro \UntagName: Essential name missing}%
780   \else
781     \ifx\csb\@empty
782       \PackageError{nameauth}%
783       {macro \UntagName: Essential name malformed}%
784   \fi
785 \fi
786 \ifx\testa\@empty
787   \ifx\testc\@empty
788     \global\csundef{\csb!TAG}%
789   \else
790     \global\csundef{\csbc!TAG}%
791   \fi
792 \else
793   \global\csundef{\csab!TAG}%
794 \fi
795 }

```

\PretagName This creates an index entry tag that is applied before a name.

```

796 \newcommandx*\PretagName[4] [1=\@empty, 3=\@empty]%
797 {%
798   \protected@edef\testa{#1}%
799   \protected@edef\testb{\trim@spaces{#2}}%
800   \protected@edef\testc{#3}%
801   \def\csb{\@nameauth@Clean{#2}}%
802   \def\csbc{\@nameauth@Clean{#2#3}}%
803   \def\csab{\@nameauth@Clean{#1!#2}}%

```

We make copies of the arguments to test them and then we parse the arguments, defining the tag control sequences.

```

804   \ifx\testb\@empty
805     \PackageError{nameauth}%
806     {macro \TagName: Essential name missing}%
807   \else
808     \ifx\csb\@empty
809       \PackageError{nameauth}%
810       {macro \TagName: Essential name malformed}%
811     \fi
812   \fi
813   \ifx\testa\@empty
814     \ifx\testc\@empty
815       \ifcsname\csb!PN\endcsname
816         \PackageWarning{nameauth}%
817         {macro \PretagName: tagging xref: #2}%
818       \fi
819       \if@nameauth@Pretag\csgdef{\csb!PRE}{#4\@nameauth@Actual}\fi
820     \else
821       \ifcsname\csbc!PN\endcsname
822         \PackageWarning{nameauth}%
823         {macro \PretagName: tagging xref: #2 #3}%
824       \fi
825       \if@nameauth@Pretag\csgdef{\csbc!PRE}{#4\@nameauth@Actual}\fi
826     \fi
827   \else
828     \ifcsname\csab!PN\endcsname
829       \PackageWarning{nameauth}%
830       {macro \PretagName: tagging xref: #1 #2}%
831     \fi
832     \if@nameauth@Pretag\csgdef{\csab!PRE}{#4\@nameauth@Actual}\fi
833   \fi
834 }

```

\IndexName This creates an index entry that is not already a pseudonym. It prints nothing. It does ensure consistent formatting.

```

835 \newcommandx*\IndexName[3] [1=\@empty, 3=\@empty]%
836 {%
837   \protected@edef\testa{#1}%
838   \protected@edef\arga{\trim@spaces{#1}}%
839   \protected@edef\testb{\trim@spaces{#2}}%
840   \protected@edef\testbr{\@nameauth@Root{#2}}%
841   \protected@edef\testc{#3}%
842   \protected@edef\argc{\trim@spaces{#3}}%
843   \def\csb{\@nameauth@Clean{#2}}%
844   \def\csbc{\@nameauth@Clean{#2#3}}%
845   \def\csab{\@nameauth@Clean{#1!#2}}%

```

We make copies of the arguments to test them and make parsing decisions. Below we handle the types of spaces or commas that will be inserted into the index entries.

```

846 \ifx\testb\@empty
847   \PackageError{\nameauth}%
848   {macro \IndexName: Essential name missing}%
849 \else
850   \ifx\csb\@empty
851     \PackageError{\nameauth}%
852     {macro \IndexName: Essential name malformed}%
853   \fi
854 \fi
855 \protected@edef\Space{\space}%
856 \if@nameauth@AlwaysComma
857   \protected@edef\Space{,\space}%
858 \fi
859 \if@nameauth@ShowComma
860   \protected@edef\Space{,\space}%
861 \fi

```

Now we deal with suffixes, and whether to handle them for Western or Eastern names.

```

862 \let\Short\testbr%
863 \ifx\testb\testbr
864   \let\SNN\Short%
865   \protected@edef\Suff{\@empty}%
866 \else
867   \protected@edef\Suff{\@nameauth@Suffix{#2}}%
868   \protected@edef\SNN{\Short\Space\Suff}%
869 \fi

```

We create the appropriate index entries with tags, letting the internal indexing macro sort that out. We do not create an index entry in the case that a name has been used as a pseudonym by \AKA or \ExcludeName.

```

870  \ifx\test{\empty}
871    \ifx\testc{\empty}
872      \ifcsname\csb!PN\endcsname
873        \PackageWarning{nameauth}%
874        {macro \IndexName: XRef: #2 exists}%
875      \else
876        \nameauth@Index{\csb}{\$NN}%
877      \fi
878    \else
879      \ifcsname\csbc!PN\endcsname
880        \PackageWarning{nameauth}%
881        {macro \IndexName: XRef: #2 #3 exists}%
882      \else
883        \nameauth@Index{\csbc}{\$NN\Space\argc}%
884      \fi
885    \fi
886  \else
887    \ifcsname\csab!PN\endcsname
888      \PackageWarning{nameauth}%
889      {macro \IndexName: XRef: #1 #2 exists}%
890    \else
891      \ifx\Suff{\empty}
892        \nameauth@Index{\csab}{\Short,\space\arga}%
893      \else
894        \nameauth@Index{\csab}{\Short,\space\arga,\space\Suff}%
895      \fi
896    \fi
897  \fi
898 \nameauth@ShowCommafalse%
899 }
```

\ExcludeName This macro prevents a name from being formatted or indexed, making \Name and friends print their arguments, emit a warning, and continue.

```

900 \newcommandx*\ExcludeName[3] [1=\empty, 3=\empty]%
901 {%
902   \protected@edef\testa{#1}%
903   \protected@edef\testb{\trim@spaces{#2}}%
904   \protected@edef\testc{#3}%
905   \def\csb{\nameauth@Clean{#2}}%
906   \def\csbc{\nameauth@Clean{#2#3}}%
907   \def\csab{\nameauth@Clean{#1#2}}%
```

We make copies of the arguments to test them and make parsing decisions. Below we parse the name arguments and create a pseudonym control sequence if it does not exist.

```

908 \ifx\testb{\empty}
909   \PackageError{nameauth}%
910   {macro \ExcludeName: Essential name missing}%
911 \else
912   \ifx\csb{\empty}
913     \PackageError{nameauth}%
914     {macro \ExcludeName: Essential name malformed}%
915   \fi
916 \fi
```

```

917 \ifx\testa\@empty
918   \ifx\testc\@empty
919     \ifcsname\csb!PN\endcsname
920       \PackageWarning{nameauth}%
921       {macro \ExcludeName: Xref: #2 already exists}%
922     \else
923       \ifcsname\csb!MN\endcsname
924         \PackageWarning{nameauth}%
925         {macro \ExcludeName: Reference: #2 exists; no exclusion}%
926     \else
927       \ifcsname\csb!NF\endcsname
928         \PackageWarning{nameauth}%
929         {macro \ExcludeName: Reference: #2 exists; no exclusion}%
930     \else
931       \csgdef{\csb!PN}{}
932     \fi
933   \fi
934 \fi
935 \else
936   \ifcsname\csbc!PN\endcsname
937     \PackageWarning{nameauth}%
938     {macro \ExcludeName: Xref: #2 #3 already exists}%
939   \else
940     \ifcsname\csbc!MN\endcsname
941       \PackageWarning{nameauth}%
942       {macro \ExcludeName: Reference: #2 #3 exists; no exclusion}%
943   \else
944     \ifcsname\csbc!NF\endcsname
945       \PackageWarning{nameauth}%
946       {macro \ExcludeName: Reference: #2 #3 exists; no exclusion}%
947   \else
948     \csgdef{\csbc!PN}{}
949   \fi
950 \fi
951 \fi
952 \fi
953 \else
954   \ifcsname\csab!PN\endcsname
955     \PackageWarning{nameauth}%
956     {macro \ExcludeName: XRef: #1 #2 already exists}%
957   \else
958     \ifcsname\csab!MN\endcsname
959       \PackageWarning{nameauth}%
960       {macro \ExcludeName: Reference: #1 #2 exists; no exclusion}%
961   \else
962     \ifcsname\csab!NF\endcsname
963       \PackageWarning{nameauth}%
964       {macro \ExcludeName: Reference: #1 #2 exists; no exclusion}%
965   \else
966     \csgdef{\csab!PN}{}
967   \fi
968 \fi
969 \fi
970 \fi
971 }

```

\ForgetName This undefines a control sequence to force the “first use” option of \Name.

```
972 \newcommandx*\ForgetName[3] [1=\@empty, 3=\@empty]%
973 {%
974   \protected@edef\testa{#1}%
975   \protected@edef\testb{\trim@spaces{#2}}%
976   \protected@edef\testc{#3}%
977   \def\csb{\@nameauth@Clean{#2}}%
978   \def\csbc{\@nameauth@Clean{#2#3}}%
979   \def\csab{\@nameauth@Clean{#1!#2}}%
```

We make copies of the arguments to test them and then we parse the arguments, undefining the control sequences.

```
980   \ifx\testb\@empty
981     \PackageError{nameauth}%
982     {macro \ForgetName: Essential name missing}%
983   \else
984     \ifx\csb\@empty
985       \PackageError{nameauth}%
986       {macro \ForgetName: Essential name malformed}%
987     \fi
988   \fi
989   \ifx\testc\@empty
990     \ifx\testc\@empty
991       \global\csundef{\csb!MN}%
992       \global\csundef{\csb!NF}%
993     \else
994       \global\csundef{\csbc!MN}%
995       \global\csundef{\csbc!NF}%
996     \fi
997   \else
998     \global\csundef{\csab!MN}%
999     \global\csundef{\csab!NF}%
1000   \fi
1001 }
```

```

\SubvertName This defines a control sequence to suppress the “first use” of \Name.
1002 \newcommandx*\SubvertName[3] [1=\@empty, 3=\@empty]%
1003 {%
1004   \protected@edef\testa{#1}%
1005   \protected@edef\testb{\trim@spaces{#2}}%
1006   \protected@edef\testc{#3}%
1007   \def\csb{\@nameauth@Clean{#2}}%
1008   \def\csbc{\@nameauth@Clean{#2#3}}%
1009   \def\csab{\@nameauth@Clean{#1!#2}}%

```

We make copies of the arguments to test them and then we parse the arguments, defining the control sequences.

```

1010   \ifx\testb\@empty
1011     \PackageError{nameauth}%
1012     {macro \SubvertName: Essential name missing}%
1013   \else
1014     \ifx\csb\@empty
1015       \PackageError{nameauth}%
1016       {macro \SubvertName: Essential name malformed}%
1017     \fi
1018   \fi
1019   \ifx\testa\@empty
1020     \ifx\testc\@empty
1021       \csgdef{\csb!MN}{}%
1022       \csgdef{\csb!NF}{}%
1023     \else
1024       \csgdef{\csbc!MN}{}%
1025       \csgdef{\csbc!NF}{}%
1026     \fi
1027   \else
1028     \csgdef{\csab!MN}{}%
1029     \csgdef{\csab!NF}{}%
1030   \fi
1031 }

```

nameauth The `nameauth` environment provides a means to implement shorthand references to names in a document.

```

1032 \newenvironment{nameauth}{%
1033   \begin{group}%
1034   \let\ex\expandafter%
1035   \csdef{<}##1##2##3##4{%
1036     \protected@edef\arga{\trim@spaces{##1}}%
1037     \protected@edef\testb{\trim@spaces{##2}}%
1038     \protected@edef\testc{\trim@spaces{##3}}%
1039     \protected@edef\testd{\trim@spaces{##4}}%
1040     \newtoks\tokb%
1041     \newtoks\tokc%
1042     \newtoks\tokd%
1043     \tokb\expandafter{##2}%
1044     \tokc\expandafter{##3}%
1045     \tokd\expandafter{##4}%
1046     \ifx\arga\empty%
1047       \PackageError{nameauth}%
1048       {environment nameauth: Control sequence missing}%
1049     \else
1050       \ifx\testc\empty%
1051         \PackageError{nameauth}%
1052         {environment nameauth: Essential name missing}%
1053     \else
1054       \ifcsname\arga\endcsname
1055         \PackageWarning{nameauth}%
1056         {environment nameauth: Redefinition of shorthands}%
1057       \fi
1058       \ifx\testd\empty%
1059         \ifx\testb\empty%
1060           \ex\csgdef\ex{\ex\arga\ex}\ex{\ex\NameauthName\ex{\the\tokc}}%
1061           \ex\csgdef\ex{\ex L\ex\arga\ex}\ex{\ex\NameauthName\ex*\ex{\the\tokc}}%
1062           \ex\csgdef\ex{\ex S\ex\arga\ex}\ex{\ex\NameauthFName\ex{\the\tokc}}%
1063         \else
1064           \ex\ex\ex\csgdef\ex\ex{\ex\ex\ex\arga\ex\ex\ex}%
1065             \ex\ex\ex{\ex\ex\ex\NameauthName\ex\ex\ex[\ex\the\ex\tokb\ex]}%
1066             \ex{\the\tokc}%
1067           \ex\ex\ex\csgdef\ex\ex{\ex\ex\ex L\ex\ex\ex\arga}%
1068             \ex\ex\ex{\ex\ex\ex\NameauthName\ex\ex\ex*}%
1069             \ex\ex\ex[\ex\the\ex\tokb\ex]\ex{\the\tokc}%
1070           \ex\ex\ex\csgdef\ex\ex{\ex\ex\ex S\ex\ex\ex\arga}%
1071             \ex\ex\ex{\ex\ex\ex\NameauthFName\ex\ex\ex[%
1072               \ex\the\ex\tokb\ex]\ex{\the\tokc}}%
1073         \fi
1074     \else
1075       \ifx\testb\empty%
1076         \ex\ex\ex\csgdef\ex\ex{\ex\ex\ex\arga\ex\ex\ex}%
1077           \ex\ex\ex{\ex\ex\ex\NameauthName\ex\ex\ex[\ex\the\ex\tokc\ex]}%
1078           \ex[\the\tokd]%
1079         \ex\ex\ex\csgdef\ex\ex{\ex\ex\ex L\ex\ex\ex\arga}%
1080           \ex\ex\ex{\ex\ex\ex\NameauthName}%
1081           \ex\ex\ex*\ex\ex\ex{\ex\the\ex\tokc\ex}\ex[\the\tokd]%
1082         \ex\ex\ex\csgdef\ex\ex{\ex\ex\ex S\ex\ex\ex\arga}%
1083           \ex\ex\ex{\ex\ex\ex\NameauthFName\ex\ex\ex[%
1084             \ex\the\ex\tokc\ex]\ex[\the\tokd]}%
1085     \else

```

```

1086          \ex\ex\ex\ex\ex\ex\csgdef\ex\ex\ex\ex\ex\ex{%
1087              \ex\ex\ex\ex\ex\ex\ex\arga\ex\ex\ex\ex\ex\ex}%
1088              \ex\ex\ex\ex\ex\ex\ex{\ex\ex\ex\ex\ex\ex\ex\ex\NameauthName}%
1089              \ex\ex\ex\ex\ex\ex\ex[\ex\ex\ex\the\ex\ex\ex\tokb]%
1090              \ex\ex\ex]\ex\ex\ex{\ex\the\ex\tokc\ex}\ex[\the\tokd]}%
1091          \ex\ex\ex\ex\ex\ex\csgdef\ex\ex\ex\ex\ex\ex{%
1092              \ex\ex\ex\ex\ex\ex\ex L\ex\ex\ex\ex\ex\ex\ex\ex\arga}%
1093              \ex\ex\ex\ex\ex\ex\ex{\ex\ex\ex\ex\ex\ex\ex\ex\ex}%
1094              \ex\ex\ex\ex\ex\ex\ex\NameauthName\ex\ex\ex\ex\ex\ex\ex*%%
1095              \ex\ex\ex\ex\ex\ex\ex[\ex\ex\ex\the\ex\ex\ex\tokb]%
1096              \ex\ex\ex]\ex\ex\ex{\ex\the\ex\tokc\ex}\ex[\the\tokd]}%
1097          \ex\ex\ex\ex\ex\ex\csgdef\ex\ex\ex\ex\ex\ex{%
1098              \ex\ex\ex\ex\ex\ex\ex S\ex\ex\ex\ex\ex\ex\ex\arga}%
1099              \ex\ex\ex\ex\ex\ex\ex{\ex\ex\ex\ex\ex\ex\ex\ex}%
1100              \ex\ex\ex\ex\ex\ex\ex\NameauthFName\ex\ex\ex\ex\ex\ex\ex[%%
1101              \ex\ex\ex\the\ex\ex\ex\tokb\ex\ex\ex]%
1102              \ex\ex\ex{\ex\the\ex\tokc\ex}\ex[\the\tokd]}%
1103      \fi
1104  \fi
1105  \fi
1106  \fi
1107  \ignorespaces%
1108 }{\ignorespaces%
1109 }{\endgroup\ignorespaces}

```

4 Change History

v0.7	General: Initial release	1	v1.0	General: Works fully with <i>microtype</i> and <i>memoir</i>	1
v0.75	\ForgetName: New parameter added	59	v1.1	General: Bugfixes	1
	\IndexName: Use current parameters	57	v1.2	\TagName: Added	54
v0.8	General: Add features, bugfixes . . .	1		\UntagName: Added	55
v0.85	\nameauth@FmtName: Add comma suppression	36	v1.26	\nameauth@CRii: Fixed	35
	General: Add package options	1		\AKA: Fix sorting of name suffixes	47
	\AKA: Add comma suppression	47		\IndexName: Fix name suffix sorting	57
	\IndexName: Add comma suppression	57	v1.4	\nameauth@Root: Made more robust	35
	\Name: Add comma suppression	39		General: Add features, bugfixes	1
	\PName: Add comma suppression	53		\FName: Refactored	47
	\PName*: Add comma suppression	53		\FName*: Refactored	47
v0.86	General: Fix regressions	1		\Name*: Refactored	47
v0.9	\nameauth@Suffix: Added	36		\ShowComma: Added	38
	\nameauth@TrimRoot: Suffix handling expandable	35	v1.5	\nameauth@AllCapRoot: Added	35
	\nameauth@TrimSuffix: Added	36		\nameauth@TrimSuffix: Trim spaces	36
	General: Add first name formatting; affix handling expandable	1		General: Add features, options	1
	\AKA: Add starred mode; redesigned	47		\AKA: Add reversing and caps	47
	\AKA*: Added	53		\AllCapsActive: Added	38
	\FName: Added	47		\AllCapsInactive: Added	38
	\SubvertName: Added	61		\CapName: Added	38
v0.94	\nameauth@FmtName: Add particle caps	36		\Name: Add reversing and caps	39
	\nameauth@Index: Added	37		\RevComma: Added	38
	General: Add index suppression, error checking, name particle caps	1		\ReverseActive: Added	38
	\CapThis: Added	38		\ReverseCommaActive: Added	38
	\ExcludeName: Added	58		\ReverseCommaInactive: Added	38
	\IndexActive: Added	38		\ReverseInactive: Added	38
	\IndexInactive: Added	38		\RevName: Added	38
v0.95	\nameauth@CRii: Added	35	v1.6	\nameauth: Added	62
	\nameauth@CapRoot: Added	35			
	\nameauth@FmtName: Works with microtype	36	v1.7	General: Fix options processing	1
	General: Bugfixes	1	v1.8	General: Update docs	1
v0.96	General: Bugfixes	1	v1.9	\ForgetName: Ensure global undef	59
	\Name: Works w/ microtype, memoir	39		\KeepAffix: Added	38
				\TagName: Fix cs collisions	54
				\UntagName: Ensure global undef, fix cs collisions	55
v2.0	\nameauth@FmtName: One macro instead of two	36			

\@nameauth@Index:	Redesigned tagging	37	\SubvertName:	Isolate malformed input	61
\@nameauth@TrimRoot:	trim spaces	35	\TagName:	Isolate malformed input; redesign tagging	54
General:	Use dtxgen template instead of dtxtut; update docs	1	\UntagName:	Isolate malformed input; redesign tagging	55
\AKA:	Isolate malformed input; trim spaces; redesign tagging	47	v2.1		
\nameauth:	Redesigned argument handling	62	\@nameauth@CRiii:	added	35
\ExcludeName:	Isolate malformed input	58	\@nameauth@CapRoot:	Handle Unicode better	35
\ForgetName:	Isolate malformed input	59	General:	Isolate Unicode issues	1
\IndexActual:	Added	39	\AccentCapThis:	Added	38
\IndexName:	Isolate malformed input; trim spaces; redesign tagging	57	\AKA:	Isolate Unicode issues	47
\Name:	Isolate malformed input; trim spaces; redesign tagging	39	\Name:	Isolate Unicode issues	39
\PretagName:	Added	56	v2.11		
			\nameauth:	Bugfix	62
			v2.2		
			General:	Add interface hooks and docs; fix bugs	1
			\NameauthFName:	Added	34
			\NameauthName:	Added	34

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