The nameauth package

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Abstract

Using the nameauth package, an author can encode names according to a name authority. Index entries will be consistent if the input parameters are consistent. An author can move blocks of text arbitrarily and the names will be reformatted automatically, making it easier to transition from drafts to a final manuscript. This package mainly supports Western naming conventions, with some basic features for ancient, royal, and Eastern names.

1 Introduction

Suppose you were working on a collection of essays. Different publishers' permissions may force you to accept variance in the spelling of people's names. You would track and index those names using a name authority. Your index might use abbreviated name forms. This package allows the author to encode names so that the time and cost of an editor and proofreader can be minimized. This could make an author more desirable for publication.

1.1 Typesetting, Indexing, and Design

This package depends on etoolbox and xparse. It has been tested with latex, lualatex, pdflatex and xelatex, as well as makeindex and texindy. This file was typeset with pdflatex and makeindex. The default options and design of this package try to minimize keystrokes or trade extra work for benefits in formatting and consistency. The .dtx file is also a good source of information.

1.2 Thanks

Thanks to Marc van Dongen, Enrico Gregorio, Philipp Stephani, Heiko Oberdiek, Uwe Lueck, and Robert Schlicht for their invaluable assistance. Marc showed me the basic structure using the xparse package. Enrico and Philipp helped with generating control sequences and sanitizing. Heiko gave a spaceremoving solution that could be passed as an argument in a macro. Code adapted from Uwe's work on the texhax list and the sagacious advice of Robert enabled the routines to function with the microtype package.

2 Usage

2.1 Package Options

If the default behavior is not desired, the following options easily alter it. The class options are listed with defaults first in each category:

mainmatter	The default behavior triggers special typesetting of the first occurrence of a name, starting at the beginning of a document.
frontmatter	This option suppresses the special typesetting of the first occurrence of a name before the invocation of \NamesActive. This option fits well with front matter from a contributor who may not intend the same formatting and emphasis found in the main matter. The indexing and aliasing features of the package remain operative. Note: One can switch at will between formatted and non-formatted sections; see Section 2.8.
smallcaps	The default behavior when a name is first encountered is to print it in small caps.
italic	This option causes the first occurrence of the name to be italicized.
boldface	This option causes the first occurrence of the name to be set in boldface .
noformat	This option suppresses document formatting after the invocation of \NamesActive if an author wants the indexing and aliasing functions without any special typesetting. Additional formatting options are discussed in Section 2.7. This option is <i>not</i> equivalent to frontmatter, which prevents formatting when in force. The noformat option simply sets the "formatting" to nil, helping one to write the same document for different publishers' style requirements.
nocomma	The default behavior suppresses printing of commas between surnames and suffixes, following modern styles like <i>Chicago Manual of Style</i> . See Section 2.5.7 for additional implications of this behavior.
comma	Print commas between surnames and suffixes, following older styles. Several points throughout the document discuss the limits that this option imposes.
index	The default behavior creates index entries in place with the names.
noindex	Similar to frontmatter, this option prevents indexing until a call to \IndexActive. See also Section 2.9.

2.2 Example Text

We begin with a sample text that attempts to cover the basic features, and even a couple of advanced ones. It is in the genre of a merry wedding reception toast, proving that a serious package can be used lightheartedly.

DISCLAIMER: I use a number of names associated with historical figures throughout this document. This is because I expect that the users of this package will refer to real-world figures. At no time in this document am I intending either to promote, disparage, align with, align against, or make any assertions about any persons living or dead. As far as I am concerned, all names mentioned herein deserve respect for the impact and legacy of their bearers.

Example Text:

This is a toast to \Name[John]{Smith} and his longtime sweetheart, \Name[J.Q.]{Public}[Jane Q.]. \FName[John]{Smith} and
''\FName[J.Q.]{Public}[Janie]'' have finally made it official today! After casual dating as teenagers, they met again in college where they learned about \Name{Aristotle} and all the stuff that I can't keep in my head.
[laughs] Nevertheless, by the time they got to \Name{John}[Duns Scotus] they were definitely a number. They studied medieval history-makers like \Name{Gregory, I} ''\AKA*{Gregory, I}{Gregory}[the Great]'' and by the Renaissance they were engaged. After spending time in separate grad schools, these promising medievalists got faculty positions at adjoining colleges and here we are. As the brother of \FName[J.Q.]{Public}[Jane]
''\AKA*[J.Q.]{Public}{Jane}[the Great]'' I am happy to welcome \FName[John]{Smith}[Sir John] to our raucous family.

This is a toast to John Smith and his longtime sweetheart, Jane Q. Public. John and "Janie" have finally made it official today! After casual dating as teenagers, they met again in college where they learned about Aristotle and all the stuff that I can't keep in my head. [laughs] Nevertheless, by the time they got to John Duns Scotus they were definitely a number. They studied medieval history-makers like Gregory I "the Great" and by the Renaissance they were engaged. After spending time in separate grad schools, these promising medievalists got faculty positions at adjoining colleges and here we are. As the brother of Jane "the Great" I am happy to welcome Sir John to our raucous family.

Here you will notice that one can make a reference to Pope \Name{Gregory, I} followed by "the Great" via ''\AKA*{Gregory, I}{Gregory}[the Great]''. That is achieved by the ambiguous behavior of the default nocomma option plus the "sobriquet only" feature of \AKA*. It is easy to use these features, but can be tricky to debug. Sections 2.5.7 and 2.5.8 have more details.

2.3 Quick Start Guide

This "cheat sheet" engages about 80% of the features in this package.

2.3.1 Rules of Thumb

- 1. \frenchspacing is recommended.
- 2. The indexed forms of the names remain the same if you follow the macro input charts consistently.
- 3. Problematic index entries often lead to correctable mistakes.
- 4. Trade work for consistency.
- 5. Use just the macros you need.

2.3.2 Basic

These examples work predictably under the broadest conditions.

- First reference: JOHN SMITH \Name*[John] {Smith} or \Name[John] {Smith} or \FName[John] {Smith}
- 2. Subsequent full name: John Smith
 \Name*[John]{Smith}
- 3. Subsequent surname: Smith \Name [John] {Smith}
- 4. Subsequent forename: John \FName[John]{Smith}
- 5. First mononym reference: PLATO
 \Name*{Plato} or
 \Name{Plato} or
 \FName{Plato}
- 6. Subsequent references: Plato
 \Name*{Plato} or
 \FName{Plato}

These next examples work with the comma option, not \AKA and \PName. The next page offers a workaround that depends on the nocomma option.

- 7. First Eastern ref: MAO TSE-TUNG \Name*{Mao} [Tse-tung] or \Name{Mao} [Tse-tung]
- 8. Subsequent references: Mao Tse-tung \Name*{Mao}[Tse-tung]

- Subsequent references: Mao \Name{Mao}[Tse-tung] or \FName{Mao}[Tse-tung]
- 10. First royal: LOUIS THE PIOUS
 \Name*{Louis}[the Pious] or
 \FName{Louis}[the Pious]
- 11. Subsequent refs: Louis the Pious \Name*{Louis}[the Pious]
- 12. Subsequent references: Louis
 \Name{Louis}[the Pious] or
 \FName{Louis}[the Pious]
- 13. First ancient: PTOLEMY I SOTER
 \Name*{Ptolemy I}[Soter] or
 \PName{Ptolemy I}[Soter]
- 14. Subsequent refs: Ptolemy I Soter \Name*{Ptolemy I}[Soter]
- 15. Subsequent refs: Ptolemy I
 \Name{Ptolemy I}[Soter] or
 \FName{Ptolemy I}[Soter]
- 16. First royal: HENRY VIII

 \Name*{Henry}[VIII] or
 \Name{Henry}[VIII] or
 \FName{Henry}[VIII]
- 17. Subsequent refs: Henry VIII \Name*{Henry}[VIII]
- 18. Subsequent references: Henry
 \Name{Henry}[VIII] or
 \FName{Henry}[VIII]

2.3.3 Intermediate

The following employ alternate forenames. They keep regular forenames in the index.

 Print an embellished first reference: JANE Q. PUBLIC \Name*[J.Q.]{Public}[Jane Q.] or \Name[J.Q.]{Public}[Jane Q.]
 \FName[J.Q.]{Public}[Jane Q.]

- Subsequent full name, alternate forename, same person in index: Jane Qetsiyah Public
 - \Name*[J.Q.]{Public}[Jane Qetsiyah]
- 3. Subsequent "shorter" full name, same person in index: J.Q. Public \Name*[J.Q.]{Public}
- Subsequent alternate forename, same person in index: Janie \FName[J.Q.]{Public}[Janie]

2.3.4 Advanced

These next examples engage a number of special cases. Many depend on the default nocomma option. Always use a comma to delimit suffixes. Use a space or thin space after the comma. These forms will work with \AKA and \PName. See also Section 2.5.7

- First: GEORGE S. PATTON JR.
 \Name*[George S.]{Patton, Jr.} or
 \FName[George S.]{Patton, Jr.}
- Subsequent full: George S. Patton Jr. \Name*[George S.]{Patton, Jr.}
- 3. Subsequent surname: Patton
 \Name[George S.]{Patton, Jr.}
- 4. Subsequent forename: George \FName[George S.]{Patton, Jr.}% [George]

The next forms take advantage of comma suppression to implement forms of ancient, royal and Eastern names. Adding a final optional parameter is discouraged.

- 5. First reference: GREGORY I
 \Name*{Gregory, I} or
 \FName{Gregory, I}
- 6. Subsequent full name: Gregory I \Name*{Gregory, I}
- 7. Subsequent name: Gregory \Name{Gregory, I} or \FName{Gregory, I}
- 8. First reference: DEMETRIUS I SOTER \Name*{Demetrius, I Soter} or

- \Name{Demetrius, I Soter} or \FName{Demetrius, I Soter}
- 9. Next full name: Demetrius I Soter \Name*{Demetrius, I Soter}
- 10. Subsequent name: Demetrius
 \Name{Demetrius, I Soter} or
 \FName{Demetrius, I Soter}
- 11. First reference: SUN YAT-SEN
 \Name*{Sun, Yat-sen} or
 \Name{Sun, Yat-sen} or
 \FName{Sun, Yat-sen}
- 12. Subsequent full name: Sun Yat-sen
 \Name*{Sun, Yat-sen}
- 13. Subsequent name: Sun
 \Name{Sun, Yat-sen} or
 \FName{Sun, Yat-sen}

The following illustrate the American style of particulate names.

- 14. First: WALTER DE LA MARE
 \Name*[Walter]{de la Mare} or
 \Name[Walter]{de la Mare}
 \FName[Walter]{de la Mare}
- 15. Next reference: de la Mare \Name[Walter]{de la Mare}
- 16. At start of sentence: De la Mare \CapThis\Name[Walter]{de la Mare}
- 17. Forename: Walter \FName[Walter] {de la Mare}

The following illustrate the Continental style of particulate names. The first keeps particles in the index.

- 18. First: JOHANN WOLFGANG VON
 GOETHE
 - \Name*[Johann Wolfgang von]{Goethe} or \FName[Johann Wolfgang von]{Goethe}
- 19. Subsequent surname: Goethe
 \Name[Johann Wolfgang von]{Goethe}
- 20. Next forename: Johann Wolfgang
 \FName[Johann Wolfgang von]%
 {Goethe}[Johann Wolfgang]

The following Continental forms prevent the indexing of particles.

- 21. First: ADOLF VON HARNACK
 \Name*[Adolf] {Harnack} [Adolf von] or
 \Name[Adolf] {Harnack} [Adolf von]
- 22. Next full name: Adolf von Harnack
 \Name*[Adolf] {Harnack} [Adolf von]

With the following example, the final optional parameter can be dropped.

- 23. Subsequent surname: Harnack \Name[Adolf]{Harnack}[Adolf von]
- 24. Subsequent forename: Adolf \FName[Adolf]{Harnack}

2.3.5 Expert

The following examples deal with complicated or technical macros.

- 1. Index, but do not print a reference to "Public, J.Q."
 - \IndexName[J.Q.]{Public}

Note that in Western names, the final optional parameters are ignored.

2. Index, but do not print a reference to "Plato"

\IndexName{Plato}

- 3. Index, but do not print a reference to "Mao Tse-tung"
 - \IndexName{Mao}[Tse-tung]
- 4. Index, but do not print a reference to "Henry VIII"

\IndexName{Henry}[VIII]

- 5. Index, but do not print a reference to "Ptolemy I Soter"
 - \IndexName{Ptolemy I}[Soter]
 The following only work with the default nocomma option.
- 6. Index, but do not print a reference to "Gregory I"

\IndexName{Gregory, I}

- 7. Index, but do not print a reference to "Sun Yat-sen"
 - \IndexName{Sun, Yat-sen}
- 8. Following a name, print a pseudonym in parentheses: Bob Hope (Leslie Townes Hope)

- \PName[Bob]{Hope}%
 [Leslie Townes]{Hope}
- Print a name that is only a see reference to another: Lester T. Hope
 \AKA[Bob] {Hope} [Lester T.] {Hope}
 - The following only works with the default nocomma option.
- Print a name and "sobriquet" for an ancient name, making it a crossreference: Leo the Great

\AKA{Leo, I}{Leo}[the Great]

11. Print only a "sobriquet" after a
 \Name reference: LEO I "the Great"
 \Name{Leo, I} ''\AKA*{Leo, I}%
 {Leo}[the Great]''

2.3.6 Pitfalls

Avoiding the following pitfalls will save time and frustration:

- Mixing sobriquets with modern forms fails due to the "alternate name" feature, e.g.: \Name[First] {Ancient} [Sobriquet] \Name [King] {Number} [Sobriquet]
- 2. Using \AKA and \PName with sobriquet-based forms will fail unless you use comma-delimited suffixes. See Section 2.5.7.
- 3. Using a forename or first initials can prevent failure in some cases:
 OK: \Name[J.]{Kreskin}[The Amazing]
 (\AKA[J.]{Kreskin}[Joseph]{Kresge})
 FAIL: \Name[]{Kreskin}[The Amazing]
 (\AKA{Kreskin}[Joseph]{Kresge})
 FAIL: \Name{Kreskin}[The Amazing]
 (\AKA{Kreskin}[Joseph]{Kresge})
- 4. \Name can shorten a reference even if you use the full name in the text.
- 5. Unbalanced or incorrect { braces } and [brackets], putting a star * after \FName, and forgetting periods in initials create errors that can be difficult to track. Leading spaces in macro arguments will create incorrectly sorted index entries.

2.4 Basic Macros: \Name and \FName

2.4.1 \Name and \Name*

\Name*

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

```
\label{lambda} $$ \operatorname{Name}[\langle forename(s)\rangle] {\langle surname(s)\rangle} [\langle alternate\ names\rangle] $$ \operatorname{Name} {\langle forename(s)\rangle} {\langle surname(s)\rangle} [\langle alternate\ names\rangle] $$
```

From now on we will abbreviate forename(s) with FNN and surname(s) with SNN at various points. The syntax descriptions do not capture exactly how the \Name macro behaves. The following table helps to show first and subsequent references:

FNN	SNN	Alternate Names	Result
Albert	Einstein	(none)	Albert Einstein
Albert	Einstein	(none)	Einstein
(none)	Confucius	(none)	Confucius
(none)	Confucius	(none)	Confucius
M.T.	Cicero	Marcus Tullius	Marcus Tullius Cicero
M.T.	Cicero	Marcus Tullius	Cicero
(none)	Charles	the Bald	Charles the Bald
(none)	Charles	the Bald	Charles

Basically, \mbox{Name} connects the FNN to the SNN to create respective printed and indexed forms, usually FNN SNN and SNN, FNN. This takes care of most Western names. For those with one name, such as ancient figures or stage names, one can drop the FNN so that \mbox{Name} produces the result SNN for both text and index. \mbox{Name} always prints the surname or "base name."

Sometimes you might want to have the option of using either an alternate set of forenames, like a nickname, or a sobriquet that functions as a surname for ancient figures. These two alternatives are handled by the final, optional field of \mbox{Name} . If "regular" FNN are present, then the alternate names conditionally will replace the FNN in the printed form, but not in the indexed form. If no regular FNN are present, then the alternate names will be appended to the SNN in the printed form and in the indexed form. You may choose to include or exclude nicknames and such, but you must always use the sobriquet form of a name consistently.

I mentioned conditional use. The unstarred form prints the "full name" at the first occurrence, then only the partial form thereafter. The starred form always prints the full name. Both macros usually apply a different "font attribute" to the name when it first appears in the running text.

As long as the "main" FNN are constant in Western-style names, the "alternate names" field can vary, yet the index entries will be constant. Sections 2.2 and 2.3 contain a number of "intermediate" examples that illustrate this ability to swap out forenames. This is useful when dropping out references to middle initials in \FName. Alternate forenames only get printed in subsequent occurrences of \Name* and \FName. The surname argument is always printed in \Name* and \Name.

Another option employs a "sobriquet" feature for royal names and basic Eastern names. \AKA and \PName cannot refer to these forms, although they can

use these forms in the *second* name argument to construct a cross-reference. A workaround is discussed in Section 2.5.7. The following method is the only one that works with the comma option. Valid "sobriquet" forms are:

FN	N .	SNN	Alternate	Result	Function
			Names		
(no	ne) I	Henry	VIII	Henry VIII	\Name{Henry}[VIII]
(no	ne) I	Henry	VIII	Henry	\Name{Henry}[VIII]
(no	ne) (Chiang	Kai-shek	Chiang Kai-shek	\Name{Chiang}[Kai-shek]
(no	ne) (Chiang	Kai-shek	Chiang	\Name{Chiang}[Kai-shek]

Again, alternate forenames override the FNN in the text. Sobriquets are appended to SNN. The presence or absence of FNN triggers this difference between the two actions—this is a central concept.

Note: Throughout this manual I play a "dirty trick" that makes a name print as if it had not yet occurred. In some cases I make a first occurrence print as if the name already had occurred. This trick can be used, for example, to force the formatting of the first name in a chapter or section. See Section 2.10 for more.

2.4.2 \FName

\FName

This casual friend of \Name prints only "first" names except if a first use occurs, whereupon it prints a full, formatted name as set by the class options or the formatting macros. \FName is intended for Western-style names. The syntax is basically the same:

$$\FName[\langle FNN \rangle] \{\langle SNN \rangle\} [\langle alternate\ names \rangle]$$

Remember that \FName has no starred form. Next we see what it does:

FNN	SNN	Alternate Names	Result
Albert	Einstein	(none)	Albert
(none)	Confucius	(none)	Confucius
M.T.	Cicero	Marcus Tullius	Marcus Tullius
(none)	Charles	the Bald	Charles

If one accidentally referred to \FName[Max]{Planck} as a first reference, that would appear as MAX PLANCK. otherwise it would just be Max. For nicknames use the "alternate names" option. For example, aviation hero CHESLEY B. SULLENBERGER III can be noted as:

A good way to cut keystrokes would be to assign the above macro to the control sequence \Sully. With comma-delimited suffixes we note special cases governed by the nocomma class option (see Section 2.5.7). These include names like like J.D. ROCK III and CHARLES V:

\FName suppresses extra periods if a forename with initials occurs at the end of a sentence, as in the plot-line "who shot J.D." See also Section 2.5.7.

2.5 Advanced Topics

2.5.1 Error Handling

Except for \ExcludeName, the macros silently print any erroneous arguments in the text and emit warnings. Sometimes a warning is just a warning. \PName produces warnings via \Name and \AKA. Warnings result from:

- 1. Using a cross-reference $[\langle alternate\ FNN \rangle] \{\langle alternate\ SNN \rangle\} [\langle alt.\ names \rangle]$ created by \AKA as a reference in \Name, \FName, and \PName.
- 2. Using a reference $[\langle FNN \rangle] \{\langle SNN \rangle\} [\langle alternate\ names \rangle]$ created by \Name, \FName, and \PName as a cross-reference in \AKA.
- 3. Using \AKA to create the same xref multiple times.
- 4. Using \ExcludeName to exclude a name that has already been used.

2.5.2 Naming Conventions

\CapThis

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' are capitalized unless preceded by de. In English, these particles go in the SNN field of \mbox{Name} , e.g., Walter De La Mare. To capitalize the first particle in a subsequent \mbox{Name} reference at the beginning of a sentence, use $\mbox{CapThis}\mbox{Name}[Walter]{de la Mare}$. De la Mare will think it fair.

Names foreign to English usually put these particles in the FNN field of \Name. Yet these particles are not first names. Using \FName with alternate forenames overcomes this issue. Section 2.3 likely has the best illustration of this.

2.5.3 Hyphenation

I find it helpful to use respectively the babel or polyglossia packages with name hyphenation. If one is using English as the main language, the default hyphenation patterns may not suffice. For example, the name JOHN STRIETELMEIER may break thus: "Stri-etelmeier." That is fixed by creating a \de macro equivalent to \newcommand{\de}[1]{\foreignlanguage{ngerman}{#1}} (using babel) and writing \de{\Name[John]{Strietelmeier}}.

One can insert optional hyphens in the arguments of \Name and friends but that must be done *consistently* to avoid variants being treated as different names.

2.5.4 \IndexName

\IndexName

This macro creates an index entry like \Name and friends. It prints no text in the body and includes no special formatting. The syntax is similar to \Name:

```
\IndexName[\langle FNN \rangle] \{\langle SNN \rangle\} [\langle alternate\ names \rangle]
```

\IndexName does not index the alternate names unless FNN are absent, like \Name using the sobriquet feature. See also Section 2.9 for switching indexing on and off.

2.5.5 \ExcludeName

\ExcludeName

This prevents \Name, etc. from both formatting and indexing a specific name, but only if that name has not been used. See also Section 2.5.1. The syntax is:

```
\texttt{\cludeName} [\langle FNN \rangle] \{\langle SNN \rangle\} [\langle alternate\ names \rangle]
```

To suppress only indexing but retain formatting, enclose \Name, etc. between \IndexInactive and \IndexActive.

2.5.6 Manual Index Entries

Name and friends produce index entries compatible with manual index entries since version 0.9. The .idx file is a helpful reference when linking manual entries with nameauth entries, although it is usually unnecessary to consult.

2.5.7 Suffix Removal

\Name—not \Name*—truncates comma-delimited suffixes from last names. For example, it prints the name Oskar Hammerstein II the first time and Hammerstein thereafter. One must always use a comma to activate this, e.g., \Name[Oskar]{Hammerstein, II}. The space after the comma is literal, but not manipulated by the package in case one wants to use a thin space.

Again, the comma is not optional with suffixes. It is how this feature works. More than one comma in the *SNN* argument of \Name and friends will cause unwanted results. Fortunately, that is unlikely.

These macros keep track of whether the name ends with the period of an abbreviation like "Jr." and "Sr." That should also work with abbreviations like "d. Ä." (*der Ältere*). Two periods are not printed when the full name is printed at the end of a sentence. The following example shows possible combinations:

```
\Name[Martin Luther]{King, Jr.}. MARTIN LUTHER KING JR. \Name[Martin Luther]{King, Jr.}. King. \Name*[Martin Luther]{King, Jr.}. King (e.g., in a sentence) \Name*[Martin Luther]{King, Jr.}. Martin Luther King Jr. \Name*[Martin Luther]{King, Jr.}. Martin Luther King Jr.
```

Using the default class option nocomma with suffix removal, one can take advantage of the suffix feature to tweak more possibilities out of \Name. Instead of the sobriquet feature, one could use the following variants:

FNN	SNN	Alternate	Result	Function
		Names		
(none)	Louis, XIV	(none)	Louis XIV	\Name{Louis, XIV}
(none)	Louis, XIV	(none)	Louis	\Name{Louis, XIV}
(none)	Sun, Yat-sen	(none)	Sun Yat-sen	\Name{Sun, Yat-sen}
(none)	Sun, Yat-sen	(none)	Sun	\Name{Sun, Yat-sen}

The benefit to using this form is that one can type \Name*{Louis, XIV}, the "\AKA{Louis, XIV}{Sun King}" and get Louis XIV, the "Sun King" in the text with an appropriate reference from "Sun King" to "Louis XIV" in the index. The sobriquet feature would otherwise prevent such usage.

Even though suffix and sobriquet features look like they produce the same *output* in the body text using the nocomma option, they are internally *different*. They will not respect each other regarding "first use," although they will (tentatively) cooperate in the index. Use each approach consistently. An example of "dangerous" use of these features occurs in Section 2.7. The comma option will cause these forms above to have commas and behave differently. Again, *caveat auctor*.

2.5.8 Pen Names: An Introduction

The macro \AKA deals with pseudonyms, stage names, noms de plume, etc. We already saw the suffix feature above as a workaround for sobriquets and Eastern names when using \AKA. Before we examine its function in detail, we touch on the only solution for some name forms, especially if one chooses the comma option:

```
\index{Jean the Fearless|see{Jean sans Peur}}% \Name{Jean}[sans Peur] (Jean the Fearless) was Duke of Burgundy from 1404 to 1419.
```

Jean sans Peur (Jean the Fearless) was Duke of Burgundy from 1404 to 1419

The suffix workaround also can work with the above example, but be careful; see Section 2.7. A more complicated example is:

```
\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}. His name "Aquinas" is not a surname, so many modern scholars simply refer to him as \Name{Thomas}[Aquinas].

Perhaps the greatest medieval theologian was Thomas Aquinas (Thomas of Aquino), also known as *Doctor Angelicus*. His name "Aquinas" is not a surname, so many modern scholars simply refer to him as Thomas.

2.5.9 \AKA

\AKA The primary macro that handles aliases is **\AKA**. Its syntax is: **\AKA***

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

Notice that the FNN and SNN arguments do not accept the third argument field of \AKA to create a see reference to a

name with a sobriquet or to an Eastern name unless one uses the suffix feature mentioned previously. Here is a quick review of what works and what fails:

FNN	SNN	Alt. FNN	Alt. SNN	Alt. names	Result
Bob	Норе	Leslie Townes	Норе	(none)	success
†Bob	Норе	Leslie Townes	Норе	Lester T.	success
(none)	Louis	XIV	Sun King	(none)	FAIL
‡(none)	Louis, XIV	(none)	Sun King	(none)	success
(none)	Gregory	I	Gregory	the Great	FAIL
§(none)	Gregory, I	(none)	Gregory	the Great	success

- † This succeeds, but replaces "Leslie Townes" with "Lester T."
- ‡ This form uses the nocomma feature.
- § This produces different output, depending on whether \AKA or \AKA* is used.

Since \AKA is designed to handle a number of otherwise incompatible needs, its use may be the most complex of all macros in this package. \AKA creates a cross reference. The target of this cross-reference is either SNN, FNN or just SNN. The main entry in which the cross-reference occurs is constructed exactly like \Name handles its arguments. The $alternate\ FNN$ are replaced by the $alternate\ names$ if both exist. The $alternate\ names$ follow the $alternate\ SNN$ otherwise.

The twist is the starred form AKA*. If the starred form is used with the template (none) { $\langle alternate\ SNN \rangle$ } [$\langle alt.\ names \rangle$], it only prints the [$\langle alt.\ names \rangle$]. This allows it to be used in the manner of the example text in Section 2.2. AKA prints { $\langle alternate\ SNN \rangle$ } followed by [$\langle alt.\ names \rangle$]. A difference between this macro and Name using sobriquets is that this macro creates a cross-reference and allows the "sobriquet" to be printed separately.

\AKA only prints the alternate name. It assumes that a \Name macro occurs somewhere to create the page-indexed target of a cross-reference. No error checking otherwise occurs for this. The macro also prevents double periods.

A brief example follows:

Today we consider \AKA[George]{Eliot}[Mary Anne]{Evans} and her literary contributions as \Name[George]{Eliot}.

Today we consider Mary Anne Evans and her literary contributions as George Eliot.

The alternate name references generated by \AKA and \AKA* only work as cross-references and cannot be used with \Name and \FName, which print the alternate names and emit a warning. See also Section 2.5.1.

In certain cases, the alternate name might need to be indexed with page numbers. Do not use \AKA if that is so. Use \Name for both the main and the alternate names. Then create manual cross-references with \index, e.g.:

Authoritative	Alternate Name	Example of Use
Name		
Maimonides	Moses ben-Maimon	\AKA{Maimonides}{Moses ben-Maimon}
Maimonides	Rambam	\Name{Rambam}%
		<pre>\index{Rambam seealso{Maimonides}}</pre>

\AKA will not create multiple instances of a cross-reference. This allows the macro \ExcludeName to work, but it also prevents the special case where one moniker applies to multiple people, e.g.: WILLEBRORD SNEL VAN ROYEN (Snellius) and his son RUDOLPH SNEL VAN ROYEN (Snellius). \AKA produces the first cross-reference; the user manually creates the second:

\index{Snellius|see{Snel van Royen, Rudolph}}

2.5.10 \PName

\PName

\PName is a "convenience macro" that sacrifices flexibility for simplicity. It does not implement \AKA* and it works best with Western-style names. It calls \Name or \Name* and prints a Western-style "main" name. It then always calls \AKA with a full alternate name and prints it in parentheses. The syntax is:

```
\label{eq:lesser-known} $$\Pr[\langle FNN \rangle] {\langle SNN \rangle} [\langle lesser-known \ FNN \rangle] {\langle lesser-known \ SNN \rangle} $$
```

The author determines the name that is indexed (the first name) and the subsequent name that only occurs as a *see* reference. For example:

```
\PName*[Mark]{Twain}[Samuel L.]{Clemens} compared to \PName[Mark]{Twain}[Samuel L.]{Clemens}

Print Mark Twain (Samuel L. Clemens) the first time it appears. Later, print Mark Twain (Samuel L. Clemens). The form \PName later just prints Twain (Samuel L. Clemens).

\PName*{Voltaire}[François-Marie]{Arouet} and \PName{Voltaire}[François-Marie]{Arouet}

Print Voltaire (François-Marie Arouet) the first time it appears. Later, print Voltaire (François-Marie Arouet).
```

If you use the unstarred forms \PName and \Name, you must remember that, just because you include a full name as a parameter does not mean that the full name will print. You could end up with ambiguous references to the same last name, e.g., "Snel van Royen." You are responsible for checking this.

2.6 Accented Names

The snippet on the next page from the preamble allows this document to be typeset with multiple engines. I used the following test in the text itself:

```
\ifxetex\textsf{xelatex}%
\else\ifluatex%
  \ifpdf\textsf{lualatex} in \texttt{pdf} mode%
  \else\textsf{lualatex} in \texttt{dvi} mode\fi%
\else%
  \ifpdf\textsf{pdflatex}%
  \else\textsf{latex}\fi\fi%
\fi{}
```

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

The following Unicode characters are available using inputenc/fontenc:

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Ç È É Ê Ë Ç È É Ê Ë	ÌÍÎÏĐÑ ÌÍÎÏĐÑ	FIRST USE second use
Ò Ó Ô Õ Ö Ø Ò Ó Ô Õ Ö Ø	Ù Ú Û Ü Ý Ù Ú Û Ü Ý	Þss Þß	FIRST USE second use
$ \stackrel{}{\mathbf{A}} \stackrel{}{\mathbf{A}} \stackrel{}{\mathbf{A}} \stackrel{}{\mathbf{A}} \stackrel{}{\mathbf{A}} \stackrel{}{\mathbf{E}} $ $ \stackrel{}{\mathbf{A}} \stackrel{}{\mathbf{A}} \stackrel{}{\mathbf{A}} \stackrel{}{\mathbf{A}} \stackrel{}{\mathbf{A}} \stackrel{}{\mathbf{E}} $	Ç È É Ê Ë ç è é ê ë	ÌÍÎÏÐÑ ìíîïðñ	FIRST USE second use
Ò Ó Ô Õ Ö ØÒ Ó Ô Õ Ö Ø	Ù Ú Û Ü Ý ù ú û ü ý	ь ў þ ÿ	FIRST USE second use
$ \begin{tabular}{ll} \v{A} & \v{A} & \v{A} & \v{A} & \v{C} & \v{C} & \v{C} & \v{C} \\ \v{A} & \v{a} & \v{A} & \v{Q} & \v{C} & \v{C} & \v{C} \\ \end{tabular} $	Ď Ď Đ Đ Ę Ę Ě Ě Ď ď Đ đ Ę ę Ě ě	ĞĞİı Ğğİı	FIRST USE second use
IJ IJ Ľ E Ł Ł IJ ij Ľ ľ Ł ł	\acute{N} \acute{N} \check{N} \acute{E} \acute{E} \acute{N} \acute{n} \check{N} \check{n} \acute{E} \acute{e}	ŔŔŘŘ ŔŕŘř	FIRST USE second use
ŚŞŞŠŠŢŢŤŤ ŚŞŞŠšŢţŤť	Ů ů Ű ű Ů ů Ű ű	Ź ź Ż ż Ž ž Ź ź Ż ż Ž ž	FIRST USE second use

One may add control sequences to names, thanks to the help of Robert Schlicht. The next example adds more accented characters under inputenc/fontenc:

```
\label{thm:linear_loss} $$ \DeclareTextSymbolDefault{\textlongs}_{TS1} $$ \DeclareTextSymbol{\textlongs}_{TS1}_{115} $$ \evenicodechar{f}{\textlongs} $$ \evenicodechar{\bar{a}}{=a} $$ \evenicodechar{\bar{m}}{d m} $$
```

For some glyphs you will need fonts with TS1 glyphs, e.g., \usepackage{lmodern}. See also pages 455-63 in *The Latex Companion*. This allows \Name{Ghazāli} to generate Ghazāli. Control sequences like \=a fail even in manual index entries when using makeindex and gind.ist because the equal sign is interpreted as a "literal" character, as mentioned by DAN LUECKING. I stopped \Name from indexing Ghazāli to prevent the entry "ali" sorted under "Ghaz".

2.7 Name Formatting

\NamesFormat

The first time a name is printed, it is formatted with the font attribute stored in \NamesFormat. This is set with the class options or manually. \NamesFormat can use either the command form or the declaration form of selecting font attributes, e.g., \textsc or \scshape. By redefining this macro, one can "hook" into the special typesetting of the first occurrence of a name. Consider the following:

```
\renewcommand{\NamesFormat}[1]{\textbf{#1}%
\ifinner\else\marginpar{\scriptsize #1}\fi}
```

If we \let the value of \NamesFormat to save the current value and implement a temporary change like the above, we get:

```
\Name{Vlad III}[Dracula] became known as Vlad Ţepeş, "The Impaler," after his death. He 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 became known as Vlad Ţepeş, "The Impaler," after his death. He was the son of Vlad II Dracul, a member of the Order of the Dragon. Later references to Vlad III appear thus.

After using \let to revert \NamesFormat, a first occurrence again takes the form: VLAD III DRACULA, while subsequent references are to Vlad III.

Let me again stress that the forms above do not work with \PName and \AKA. Consistently use either the suffix mechanism (Section 2.5.7) or use as a guide the examples above for Jean sans Peur and Thomas Aquinas. If you use the suffix mechanism, you would use the following forms:

```
\Name{Vlad III, Dracula} became known as
\AKA{Vlad III, Dracula}{Vlad}[Tepes],
''\AKA{Vlad III, Dracula}{Vlad}[the Impaler],'' after his death.
He 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 became known as Vlad Ţepeş, "the Impaler," after his death. He was the son of VLAD II DRACUL, a member of the Order of the Dragon. Later references to Vlad III appear thus.

NOTE: The "Dracula" example is complex and the usual "first use" feature has been manipulated extensively to produce these results. If you mix casually the sobriquet and suffix forms, errors may "bite." Puns aside, Vlad III was a complex historical figure, as was his father, living in the no-man's land between the Ottoman Empire and the Holy Roman Empire.

Vlad III Dracula Vlad II Dracul

2.8 Formatting Certain Sections

\NamesActive \NamesInactive Using the frontmatter option deactivates formatting until \NamesActive occurs. Another macro, \NamesInactive, will deactivate formatting again. These two macros toggle formatting on and off. The mechanism works in a complementary, yet independent manner. It can be used throughout the document.

Here we switch to the "front matter" mode with \NamesInactive:

\Name[Rudolph]{Carnap} Rudolph Carnap

\Name[Rudolph]{Carnap} Carnap

\Name[Nicolas] {Malebranche} Nicolas Malebranche

\Name[Nicolas]{Malebranche} Malebranche

Then we switch back to "main matter" mode with \NamesActive:

\Name [Rudolph] {Carnap} RUDOLPH CARNAP

\Name[Rudolph]{Carnap} Carnap

\Name[Nicolas] {Malebranche} NICOLAS MALEBRANCHE

\Name[Nicolas]{Malebranche} Malebranche

2.9 Indexing Certain Sections

\IndexActive \IndexInactive

Using the noindex option deactivates indexing until \IndexActive occurs. Another macro, \IndexInactive, will deactivate indexing again. These can be used throughout the document, independently of \ExcludeName.

2.10 Tweaks: \ForgetName and \SubvertName

Using these two macros may hinder the arbitrary rearrangement of text. I suggest that one wait until the final draft before implementing them.

\ForgetName

This macro is a "dirty trick" of sorts that takes the same optional and mandatory parameters used by \mbox{Name} . It handles its arguments in the same way, except that it ignores the final parameter if FNN are present. The syntax is:

This macro causes \Name and friends to "forget" prior uses of a name with respect to typesetting. The next use will print as if it were a "first use." Index entries and pseudonyms (see above) are *never* forgotten.

\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 will print as if it were a "subsequent use."

3 Implementation

3.1 Class Options and Required Packages

- 1 \newif\if@nameauth@DoFormat
- 2 \newif\if@nameauth@DoIndex
- 3 \newif\if@nameauth@DoComma

These Boolean values are used to control formatting, index suppression, and comma suppression. They all may be set with class options, but the first two can be toggled with the user interface macros \NamesActive—\NamesInctive and \IndexActive—\IndexInctive.

- 4 \newif\if@nameauth@Comma
- 5 \newif\if@nameauth@Punct

These Boolean values are used internally for detection of suffixes and final periods.

6 \newif\if@nameauth@DoCaps

This Boolean triggers select first letter capitalization of names preceded by particles like *de la* that may need occasional initial capitalization. That first letter capitalization happens only in \Name.

```
7 \DeclareOption{mainmatter}{\@nameauth@DoFormattrue}
8 \DeclareOption{frontmatter}{\@nameauth@DoFormatfalse}
9 \DeclareOption{smallcaps}{\newcommand{\NamesFormat}{\scshape}}
10 \DeclareOption{italic}{\renewcommand{\NamesFormat}{\bfseries}}
11 \DeclareOption{boldface}{\renewcommand{\NamesFormat}{\bfseries}}
12 \DeclareOption{noformat}{\renewcommand{\NamesFormat}{\}}
13 \DeclareOption{comma}{\@nameauth@DoCommatrue}}
14 \DeclareOption{nocomma}{\@nameauth@DoCommafalse}}
15 \DeclareOption{index}{\@nameauth@DoIndextrue}}
16 \DeclareOption{noindex}{\@nameauth@DoIndexfalse}}
17 \ExecuteOptions{smallcaps,mainmatter,nocomma,index}}
18 \ProcessOptions\relax
19 \RequirePackage{etoolbox}
20 \RequirePackage{xparse}
```

The options above interact with the prior Boolean values. Suppressing and showing commas is set at load time and should not be changed in the document or else significant errors will result. Most options can be changed with user interface macros.

3.2 Internal Macros

\@nameauth@CleanName

```
21 \newcommand*{\@nameauth@CleanName}[1]%
22 {%
23 \expandafter\zap@space\detokenize{#1} \@empty%
24 }
```

Thanks to Heiko Oberdiek, this macro produces a "sanitized" string based on the forename/surname parameters of \Name and friends. With this we can construct a control sequence name. Testing for the presence of that control sequence determines the existence of pseudonyms and the first occurrence of a name.

The following macros parse a "base" name into a radix and a suffix. They are designed so that their function occurs at the time of macro expansion, not execution. This expandability is key to the proper indexing function of this package. They form the kernel of the suffix removal and comma suppression features.

\@nameauth@Root

```
25 \newcommand*{\@nameauth@Root}[1]%
26 {%
27 \@nameauth@TrimRoot#1\relax%
28 }
```

Anything starting with a comma and ending with the end of the name is stripped off. That includes "Sr.," "Jr.," "III," and so on. An extra comma is included at the end of the parameter when \Onameauth@Root is called directly from \Name and friends so that the delimiter list will always be correct. By using \Onameauth@CheckComma below, one can call this macro only when the parameter takes the form <a,b>. This allows one to select the root and suffix without having a trailing comma hanging about.

\@nameauth@TrimRoot

```
29 \def\@nameauth@TrimRoot#1,#2\relax{#1}
```

This delimited-parameter macro strips off the second parameter as it returns the first.

\@nameauth@Suffix

```
30 \newcommand*{\@nameauth@Suffix}[1]%
31 {%
32 \@nameauth@TrimSuffix#1\relax%
33 }
```

Anything before a comma is stripped off by \@nameauth@Suffix, but it should be called only in a conditional governed by @nameauth@Comma and \@nameauth@CheckComma or else errors will result. This macro calls its auxiliary macro below.

\@nameauth@TrimSuffix

```
34 \def\@nameauth@TrimSuffix#1,#2\relax{#2}
```

This delimited-parameter macro strips off the first parameter and returns the second.

\@nameauth@CheckComma

```
35 \newcommand*{\@nameauth@CheckComma}[1]%
36 {%
37 \@nameauth@CheckSuffix#1,\relax%
38 }
```

This macro checks for a comma-delimited suffix. It calls the auxiliary macro below.

\Onameauth@CheckSuffix

```
 39 \left(\frac{9 \right)^{9} \left(\frac{9 \right)^{9}} \\ 40 \left(\frac{9}{40}\right)^{9} \\ 41 \left(\frac{9 \right)^{9}} \\ 42 \left(\frac{9 \right)^{9}} \\ 43 \left(\frac{9 \right)^{9}} \\ 43 \left(\frac{9 \right)^{9}} \\ 43 \left(\frac{9 \right)^{9}} \\ 40 \left(\frac{9 \right)^{9}} \\ 41 \left(\frac{9 \right)^{9}} \\ 42 \left(\frac{9 \right)^{9}} \\ 43 \left(\frac{9 \right)^{9}} \\ 43 \left(\frac{9 \right)^{9}} \\ 43 \left(\frac{9 \right)^{9}} \\ 40 \left(\frac{9 \right)^{9}} \\ 40 \left(\frac{9 \right)^{9}} \\ 41 \left(\frac{9 \right)^{9}} \\ 42 \left(\frac{9 \right)^{9}} \\ 43 \left(\frac{9 \right)^{9}} \\ 43 \left(\frac{9 \right)^{9}} \\ 44 \left(\frac{9 \right)^{9}} \\ 45 \left(\frac{9 \right)^{9}} \\ 47 \left(\frac{9 \right)^{9}} \\ 47 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{9}} \\ 48 \left(\frac{9 \right)^{
```

This macro checks for a comma-delimited suffix and sets the Boolean QnameauthQComma true if the suffix is not equal to the empty string.

The next macros check whether the next token is a period. They are only called if the terminal character produced within \Name and \FName is itself a period.

\@nameauth@CheckDot

 $44 \end{CheckDot{futurelet@token@nameauth@EvalDot}}$

This macro assigns the lookahead token \Otoken to be evaluated by \OnameauthOEvalDot while keeping \Otoken non-destructively on the list of input tokens. This does not gobble spaces like \Onextchar.

\@nameauth@EvalDot

```
45 \def\@nameauth@EvalDot%
46 {%
47 \let\@period=.\ifx\@token\@period\expandafter\@gobble \fi%
48 }
```

\@nameauth@EvalDot checks if \@token is a period. If so it gobbles it by using \expandafter to get past the grouping. Another \expandafter occurs immediately before the invocation of \@nameauth@CheckDot in \Name, \FName, and \AKA.

\@nameauth@TestDot

```
49 \newcommand*{\@nameauth@TestDot}[1]%
50 {%
51    \def\TestDot##1.\TestEnd##2\TestStop{\TestPunct{##2}}%
52    \def\TestPunct##1%
53         {\ifx\TestPunct##1\TestPunct\else\@nameauth@Puncttrue\fi}%
54    \@nameauth@Punctfalse%
55    \TestDot#1\TestEnd.\TestEnd\TestStop%
56 }
```

While \@nameauth@CheckDot looks ahead for a period, \@nameauth@TestDot—based on a snippet by Uwe Lueck—checks for a terminal period in the name passed to it, ignoring medial periods. It always resets the Boolean value before making its test, making it unnecessary to reset elsewhere.

The following macros format the output for \Name and friends.

\@nameauth@FmtName

```
57 \DeclareDocumentCommand\@nameauth@FmtName{s m}%
58 {%
59 \@nameauth@DoCapsfalse%
60 \@nameauth@TestDot{#2}%
61 \IfBooleanTF{#1}%
62 {#2}%
63 {\bgroup\NamesFormat{#2}\egroup}%
64 }
```

\@nameauth@FmtName is where the first occurrences of a name are formatted. Notice how \NamesFormat sits between a \bgroup and an \egroup to localize the font change. The \NamesFormat hook has been discussed above.

\@nameauth@Index

```
65 \newcommand{\@nameauth@Index}[1]{%
66 \if@nameauth@DoIndex\index{#1}\fi%
67}
```

If the indexing flag is true, create an index entry, otherwise do nothing.

\@nameauth@CapRoot

```
68 \newcommand*{\@nameauth@CapRoot}[1]%
69 {%
70 \@nameauth@CR#1\relax%
71 }
```

This macro implements the particulate name capitalization mechanism. All of the macros that manipulate strings through parametrized expansion appear to work best when called immediately in \Name and \FName.

\@nameauth@CR

```
72 \end{CR} 1 \end{CR} 1 \end{CR} 1 \end{CR} 2 \end{CR} 1 \end{CR} 2 \end{CR} 1 \end{CR} 2 \end{CR} 2 \end{CR} 2 \end{CR} 2 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 4 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 4 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{CR} 3 \end{C
```

This delimited-parameter macro caps the first parameter and strips suffixes on the second.

3.3 User Interface Macros

111

112 113

114

\fi%

\else%

```
\CapThis
          73 \newcommand{\CapThis}%
          74 {%
          75
                  \@nameauth@DoCapstrue%
          76 }
          Toggle the capitalizing of particles. \Onameauth@FmtName always reverts the
          Boolean to false, thus localizing any changes until this is called again.
   \Name
          77 \DeclareDocumentCommand\Name{s o m o}%
          78 {%
                  \protected@edef\Surnames{#3}%
          79
                  \if@nameauth@DoCaps%
          80
                       \protected@edef\Shortnames{\@nameauth@CapRoot{#3,}}%
          81
          82
                  \else%
                       \protected@edef\Shortnames{\@nameauth@Root{#3,}}%
          83
                  \fi%
          84
                  \if@nameauth@DoComma\else%
          85
                       \@nameauth@CheckComma{#3}%
          86
                       \if@nameauth@Comma%
                             \protected@edef\Surnames{\@nameauth@Root{#3}\@nameauth@Suffix{#3}}%
                       \fi%
          89
                  \fi%
          90
                  \IfValueTF{#2}%
          91
                  {\IfValueTF{#4}%
          92
                       {\left\{ \left( Forenames \right\} \right\} \right\} } 
          93
                  \ifcsname\@nameauth@CleanName{#2#3!PN!}\endcsname%
          94
                       \expandafter\@nameauth@FmtName\expandafter*\expandafter{%
          95
                             \expandafter\Forenames\expandafter\space\Surnames}%
          96
                       \PackageWarning{nameauth}%
          97
                       {macro Name Cross-reference: #2 #3 cannot be a page reference.}%
          98
                  \else%
          99
          100
                       \if@nameauth@DoFormat%
                             \ifcsname\@nameauth@CleanName{#2#3!MN!}\endcsname%
         101
                             \IfBooleanTF{#1}%
         102
                                  {\expandafter\@nameauth@FmtName\expandafter*\expandafter{%
         103
                                       \expandafter\Forenames\expandafter\space\Surnames}%
         104
                                       \@nameauth@Index{\Surnames, #2}}%
         105
                                  {\expandafter\@nameauth@FmtName\expandafter*\expandafter{\Shortnames}%
         106
                                       \@nameauth@Index{\Surnames, #2}}%
         107
                             \else%
         108
                                  \csgdef{\@nameauth@CleanName{#2#3!MN!}}{}%
         109
                                  \expandafter\@nameauth@FmtName\expandafter{%
         110
```

\@nameauth@Index{\Surnames, #2}%

\expandafter\Forenames\expandafter\space\Surnames}%

```
\ifcsname\@nameauth@CleanName{#2#3!NF!}\endcsname%
115
                 \IfBooleanTF{#1}%
116
                      {\expandafter\@nameauth@FmtName\expandafter*\expandafter{%
117
                          \expandafter\Forenames\expandafter\space\Surnames}%
118
                          \OnameauthOIndex{\Surnames, #2}}%
119
120
                      {\expandafter\@nameauth@FmtName\expandafter*\expandafter{\Shortnames}%
121
                          \@nameauth@Index{\Surnames, #2}}%
122
                 \else%
                      \csgdef{\@nameauth@CleanName{#2#3!NF!}}{}%
123
                      \verb|\expandafter|@nameauth@FmtName| expandafter*| expandafter {\% } \\
124
                          \expandafter\Forenames\expandafter\space\Surnames}%
125
126
                          \@nameauth@Index{\Surnames, #2}%
                 \fi%
127
            \fi%
128
       \fi}%
129
       {\IfValueTF{#4}
130
            131
                 \expandafter\@nameauth@FmtName\expandafter*%
132
133
                      \expandafter{\Surnames\space#4}%
134
                 \PackageWarning{nameauth}%
                 {macro Name Cross-reference: #3 #4 cannot be a page reference.}%
135
            \else%
136
                 \if@nameauth@DoFormat%
137
                      \ifcsname\@nameauth@CleanName{#3#4!MN!}\endcsname%
138
                      \IfBooleanTF{#1}%
139
                          {\expandafter\@nameauth@FmtName\expandafter*%
140
                               \expandafter{\Surnames\space#4}%
141
                               \@nameauth@Index{\Surnames\space#4}}%
142
                          143
                               \@nameauth@Index{\Surnames\space#4}}%
144
                      \else%
145
146
                          \csgdef{\@nameauth@CleanName{#3#4!MN!}}{}%
147
                          \expandafter\@nameauth@FmtName\expandafter{%
148
                               \Surnames\space#4}%
                               \@nameauth@Index{\Surnames\space#4}%
149
                      \fi%
150
                 \else%
151
152
                      \ifcsname\@nameauth@CleanName{#3#4!NF!}\endcsname%
                      \IfBooleanTF{#1}%
153
                          {\expandafter\@nameauth@FmtName\expandafter*%
154
                               \expandafter{\Surnames\space#4}%
155
                               \@nameauth@Index{\Surnames\space#4}}%
156
                          157
                               \@nameauth@Index{\Surnames\space#4}}%
158
159
                      \else%
160
                          \csgdef{\@nameauth@CleanName{#3#4!NF!}}{}%
161
                          \expandafter\@nameauth@FmtName\expandafter*%
162
                               \expandafter{\Surnames\space#4}%
                               \@nameauth@Index{\Surnames\space#4}%
163
```

\fi%

164

```
\fi%
165
                                    fi}%
166
                                    {\ifcsname\@nameauth@CleanName{#3!PN!}\endcsname%
167
                                                  \expandafter\@nameauth@FmtName\expandafter*%
168
                                                                \expandafter{\Surnames}%
169
170
                                                  \PackageWarning{nameauth}%
171
                                                  {macro Name Cross-reference: #3 cannot be a page reference.}%
172
                                    \else%
                                                  \if@nameauth@DoFormat%
173
                                                                \ifcsname\@nameauth@CleanName{#3!MN!}\endcsname%
174
                                                                \IfBooleanTF{#1}%
175
                                                                              {\expandafter\@nameauth@FmtName\expandafter*%
176
                                                                                            \expandafter{\Surnames}%
177
                                                                                            \@nameauth@Index{\Surnames}}%
178
                                                                              {\@nameauth@FmtName*{\Shortnames}%
179
                                                                                            \@nameauth@Index{\Surnames}}%
180
                                                                \else%
181
                                                                              \csgdef{\@nameauth@CleanName{#3!MN!}}{}%
182
183
                                                                              \expandafter\@nameauth@FmtName\expandafter{\Surnames}%
184
                                                                                            \@nameauth@Index{\Surnames}%
185
                                                                   \fi%
                                                  \else%
186
                                                                \ifcsname\@nameauth@CleanName{#3!NF!}\endcsname%
187
                                                                \IfBooleanTF{#1}%
188
                                                                              {\expandafter\@nameauth@FmtName\expandafter*%
189
                                                                                            \expandafter{\Surnames}%
190
                                                                                            \@nameauth@Index{\Surnames}}%
191
                                                                              {\@nameauth@FmtName*{\Shortnames}%
192
                                                                                            \@nameauth@Index{\Surnames}}%
193
                                                                   \else%
194
                                                                              \label{lem:csgdef(Cnameauth@CleanName{#3!NF!}}{} % % $$ \csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csgdef(\csg
195
196
                                                                              \expandafter\@nameauth@FmtName\expandafter*%
197
                                                                                            \expandafter{\Surnames}%
                                                                                            \@nameauth@Index{\Surnames}%
198
                                                                \fi%
199
                                                  \fi%
200
                                    fi}%
201
                      }%
202
203
                      \if@nameauth@Punct\expandafter\@nameauth@CheckDot\fi%
204 }
```

Name is the heart of this package. Marc van Dongen provided the basic structure.

The reason why one sees seven outcomes repeated three times for twenty-one variations is because one must make different decisions based on the dynamic interaction of many factors beyond mere input. Three choices occur when one tries to use an "alternate name" defined by \AKA as an argument to \Name. The latter prints the arguments with comma suppression if appropriate, emits a warning, and exits. One cannot use \ForgetName to expunge a pen name. This is a deliberate decision to avoid corruption of the index cross-references.

Regarding the remaining eighteen branches, one cannot assume that the name will terminate with a suffix like "Jr." until a check has been run to determine if the suffix should be truncated. The Boolean and value parameters offer eight valid patterns of input. The first or subsequent use are two more, as are front or main matter use. Operations on suffixes are governed by the first or subsequent use. The formatting or non-formatting of output is governed both by a formatting Boolean and by first/subsequent use. A final choice deals with handling alternate names in the \Forenames macro.

Here is how these many factors interrelate: \Name first checks for comma suppression. if so it stores a comma-suppressed version of the third parameter in \Surnames. Otherwise it stores an unchanged version in \Surnames and \Surnames. The former needs to be fully expanded for the double-period checking to work, thus using \edef. The latter should not be fully expanded when using the memoir class with the utf8 option of inputenc. This will be passed respectively to \@nameauth@FmtName and \@nameauth@Index.

Name then checks for the forenames argument. Two outcomes are possible.

- 1. Forenames are present. In this case, the alternate names argument creates two choices.
 - (a) The alternate names replace the forenames in the printed form, not the indexed form.
 - (b) The absence of alternate names will result in the forenames being used for both forms.
- 2. Forenames are absent. In that case, the alternate names argument creates two different choices.
 - (a) The alternate names are appended to the surnames in both printed and indexed forms.
 - (b) Only the surnames are used.

The next branch involves the Boolean value @nameauth@DoFormat, which is controlled by \NamesActive and \NamesInactive. If formatting is active, choose the unstarred form of \@nameauth@FmtName, which applies the formatting hook. Otherwise use the starred form that applies no formatting.

The state of @nameauth@DoFormat also controls the suffix used in the control sequences: !MN! for main name or !NF! for no format. This is the heart of the frontmatter / mainmatter mechanism.

Where longer and shorter versions of names are printed, there the star parameter controls those outcomes. Comma suppression is used or not, as appropriate, in the index entries. Note again that one must always use commas with suffixes in the input, even if commas are suppressed in the output.

The use of \expandafter before \@nameauth@CheckDot works with the other use of \expandafter mentioned with \@nameauth@EvalDot above to move past the closing brace and fetch the period as lookahead. That is only done when the check for a terminal period in the name succeeds.

```
\FName
```

```
205 \DeclareDocumentCommand\FName{o m o}%
206 {%
207
        \protected@edef\Surnames{#2}%
208
        \if@nameauth@DoComma\else%
209
             \@nameauth@CheckComma{#2}%
             \if@nameauth@Comma%
210
                   \protected@edef\Surnames{\@nameauth@Root{#2}\@nameauth@Suffix{#2}}%
211
             \fi%
212
        \fi%
213
       \IfValueTF{#1}%
214
        {\TF{#3}{\edef\Forenames{#3}}}{\edef\Forenames{#1}}%
215
        \ifcsname\@nameauth@CleanName{#1#2!PN!}\endcsname%
216
             \expandafter\@nameauth@FmtName\expandafter*%
217
                   \expandafter{\Forenames}%
218
             \PackageWarning{nameauth}%
219
             {macro FName Cross-reference: #1 #2 cannot be a page reference.}%
220
221
        \else%
222
             \if@nameauth@DoFormat%
                   \ifcsname\@nameauth@CleanName{#1#2!MN!}\endcsname%
223
                        \expandafter\@nameauth@FmtName\expandafter*%
224
                             \expandafter{\Forenames}%
225
                        \@nameauth@Index{\Surnames, #1}%
226
                   \else%
227
228
                        \csgdef{\@nameauth@CleanName{#1#2!MN!}}{}%
                        \expandafter\@nameauth@FmtName\expandafter{%
229
                            \expandafter\Forenames\expandafter\space\Surnames}%
230
                        \OnameauthOIndex{\Surnames, #1}%
231
                   \fi%
232
             \else%
233
234
                   \ifcsname\@nameauth@CleanName{#1#2!NF!}\endcsname%
235
                       \expandafter\@nameauth@FmtName\expandafter*%
                             \expandafter{\Forenames}%
236
                       \@nameauth@Index{\Surnames, #1}%
237
                   \else%
238
                        \csgdef{\@nameauth@CleanName{#1#2!NF!}}{}%
239
                        \expandafter\@nameauth@FmtName\expandafter*%
240
241
                             \expandafter{\Forenames\expandafter\space\Surnames}%
                        \OnameauthOIndex{\Surnames, #1}%
242
                   \fi%
243
             \fi%
244
        \fi}%
245
        {\IfValueTF{#3}
246
247
             {\ifcsname\@nameauth@CleanName{#2#3!PN!}\endcsname%
                   \expandafter\@nameauth@FmtName\expandafter*%
                        \expandafter{\Surnames\space#3}%
                   \PackageWarning{nameauth}%
250
                   {macro FName Cross-reference: #2 #3 cannot be a page reference.}%
251
             \else%
252
```

```
\if@nameauth@DoFormat%
253
                                                     \ifcsname\@nameauth@CleanName{#2#3!MN!}\endcsname%
254
                                                                 \@nameauth@FmtName*{\@nameauth@Root{#2,}}%
255
                                                                \@nameauth@Index{\Surnames\space#3}%
256
257
                                                     \else%
                                                                 258
259
                                                                \expandafter\@nameauth@FmtName%
260
                                                                            \expandafter{\Surnames\space#3}%
                                                                \@nameauth@Index{\Surnames\space#3}%
261
                                                       \fi%
262
                                         \else%
263
                                                     \ifcsname\@nameauth@CleanName{#2#3!NF!}\endcsname%
264
                                                                 \@nameauth@FmtName*{\@nameauth@Root{#2,}}%
265
                                                                \@nameauth@Index{\Surnames\space#3}%
266
                                                     \else%
267
                                                                \csgdef{\@nameauth@CleanName{#2#3!NF!}}{}%
268
                                                                            \expandafter\@nameauth@FmtName\expandafter*%
269
                                                                \expandafter{\Surnames\space#3}%
270
271
                                                                 \@nameauth@Index{\Surnames\space#3}%
272
                                                        \fi%
                                          \fi%
273
                              \fi}%
274
                              {\ifcsname\@nameauth@CleanName{#2!PN!}\endcsname%
275
                                          \expandafter\@nameauth@FmtName\expandafter*%
276
277
                                                     \expandafter{\Surnames}%
278
                                          \PackageWarning{nameauth}%
                                          {macro FName Cross-reference: #2 cannot be a page reference.}%
279
280
                              \else%
                                          \if@nameauth@DoFormat%
281
                                                     \ifcsname\@nameauth@CleanName{#2!MN!}\endcsname%
282
                                                                283
284
                                                                \OnameauthOIndex{\Surnames}%
285
                                                     \else%
                                                                 \csgdef{\@nameauth@CleanName{#2!MN!}}{}%
286
                                                                \expandafter\@nameauth@FmtName\expandafter{\Surnames}%
287
                                                                 \@nameauth@Index{\Surnames}%
288
                                                       \fi%
289
                                          \else%
290
291
                                                     \ifcsname\@nameauth@CleanName{#2!NF!}\endcsname%
                                                                 \@nameauth@FmtName*{\@nameauth@Root{#2,}}%
292
293
                                                                 \@nameauth@Index{\Surnames}%
                                                        \else%
294
                                                                \csgdef{\csgdef{\csgdef}} \csgdef{\csgdef{\csgdef}} \label{csgdef} $$\csgdef{\csgdef} \csgdef{\csgdef} \cs
295
                                                                \expandafter\@nameauth@FmtName\expandafter*%
296
297
                                                                            \expandafter{\Surnames}%
298
                                                                 \@nameauth@Index{\Surnames}%
299
                                                     \fi%
                                         \fi%
300
                              \fi}%
301
                  }%
302
```

```
303 \if@nameauth@Punct\expandafter\@nameauth@CheckDot\fi% 304 }
```

\FName is derived from \Name and uses its logic to print forename(s) in a subsequent use. It obeys the nocomma option and eliminates double periods.

\AKA

```
305 \DeclareDocumentCommand\AKA{s o m o m o}\%
306 {%
307
        \protected@edef\Surnamesi{#3}%
308
        \protected@edef\Surnamesii{#5}%
        \if@nameauth@DoComma\else%
309
             \@nameauth@CheckComma{#3}%
310
             \if@nameauth@Comma%
311
                  312
             \fi%
313
             \@nameauth@CheckComma{#5}%
314
             \if@nameauth@Comma%
315
                  \protected@edef\Surnamesii{\@nameauth@Root{#5}\@nameauth@Suffix{#5}}%
316
             \fi%
317
        \fi%
318
        \IfValueTF{#4}%
319
320
        {\IfValueTF{#6}%
321
             {\edef\Forenames{#6}}{\edef\Forenames{#4}}%
             \expandafter\@nameauth@FmtName\expandafter*\expandafter{%
322
                  \expandafter\Forenames\expandafter\space\Surnamesii}%
323
             \ifcsname\@nameauth@CleanName{#4#5!PN!}\endcsname%
324
                  \PackageWarning{nameauth}%
325
                  {macro AKA XRef: #4 #5 exists.}%
326
             \else%
327
                  \ifcsname\@nameauth@CleanName{#4#5!MN!}\endcsname%
328
329
                       \PackageWarning{nameauth}%
                       {macro AKA Name reference: #4 #5 already exists; no see ref.}%
330
                  \else%
331
                       \ifcsname\@nameauth@CleanName{#4#5!NF!}\endcsname%
332
333
                            \PackageWarning{nameauth}%
334
                            {macro AKA Name reference: #4 #5 already exists; no see ref.}%
                       \else%
335
                            \csgdef{\@nameauth@CleanName{#4#5!PN!}}{}%
336
                            \IfValueTF{#2}%
337
                                 {\@nameauth@Index{\Surnamesii, #4|see{\Surnamesi, #2}}}%
338
                                 {\@nameauth@Index{\Surnamesii, #4|see{\Surnamesi}}}%
339
                       \fi%
340
                  \fi%
341
             fi}%
342
        {\IfValueTF{#6}%
343
             {\IfBooleanTF{#1}%
344
                  {\@nameauth@FmtName*{#6}}%
345
346
                  {\expandafter\@nameauth@FmtName\expandafter*%
347
                       \expandafter{\Surnamesii\space#6}}%
```

```
\ifcsname\@nameauth@CleanName{#5#6!PN!}\endcsname%
348
                   \PackageWarning{nameauth}%
349
                   {macro AKA XRef: #5 #6 exists.}%
350
              \else%
351
                   \ifcsname\@nameauth@CleanName{#5#6!MN!}\endcsname%
352
353
                        \PackageWarning{nameauth}%
354
                        {macro AKA Name reference: #5 #6 already exists; no see ref.}%
355
                   \else%
                        \ifcsname\@nameauth@CleanName{#5#6!NF!}\endcsname%
356
                             \PackageWarning{nameauth}%
357
                             {macro AKA Name reference: #5 #6 already exists; no see ref.}%
358
359
                        \else%
                             \csgdef{\@nameauth@CleanName{#5#6!PN!}}{}%
360
                             \IfValueTF{#2}%
361
                                  {\@nameauth@Index{\Surnamesii\space#6|see{\Surnamesi, #2}}}%
362
                                  \label{locality} $$ \operatorname{\normalfootnotesin}}% $$
363
                        \fi
364
                   \fi%
365
366
             fi}%
367
              {\expandafter\@nameauth@FmtName\expandafter*\expandafter{\Surnamesii}}
              \ifcsname\@nameauth@CleanName{#5!PN!}\endcsname%
368
                   \PackageWarning{nameauth}%
369
                   {macro AKA XRef: #5 exists.}%
370
             \else%
371
                   \ifcsname\@nameauth@CleanName{#5!MN!}\endcsname%
372
                        \PackageWarning{nameauth}%
373
                        {macro AKA Name reference: #5 already exists; no see ref.}%
374
375
                   \else%
                        \ifcsname\@nameauth@CleanName{#5!NF!}\endcsname%
376
                             \PackageWarning{nameauth}%
377
                             {macro AKA Name reference: #5 already exists; no see ref.}%
378
379
                        \else%
380
                             \csgdef{\@nameauth@CleanName{#5!PN!}}{}%
                             \IfValueTF{#2}%
381
                                   {\@nameauth@Index{\Surnamesii|see{\Surnamesi, #2}}}%
382
                                   {\@nameauth@Index{\Surnamesii|see{\Surnamesi}}}%
383
                        \fi%
384
                   \fi
385
386
             fi}%
387
388
        \if@nameauth@Punct\expandafter\@nameauth@CheckDot\fi%
389 }
```

\AKA prints a pseudonym and creates index cross-references. Its starred form prints only the alternate name parameter, if that exists. It prevents multiple generation of cross-references and suppresses double periods.

\PName

```
390\ \ensuremath{\mbox{Name}\{s\ o\ m\ o\ m\ o\}\%} 391\ \%
```

```
392 \IfBooleanTF{#1}{\Name*[#2]{#3}}{\Name[#2]{#3}}%
393 {\space}(\AKA[#2]{#3}[#4]{#5}[#6])%
394}
```

\PName is a convenience macro whose starred and unstarred forms call the respective versions of \Name, followed only by \AKA.

\IndexName

```
395 \DeclareDocumentCommand\IndexName{o m o}%
396 {%
       \protected@edef\Surnames{#2}%
397
398
       \if@nameauth@DoComma\else%
           \@nameauth@CheckComma{#2}%
399
           \if@nameauth@Comma%
400
               401
           \pi\%
402
       \fi%
403
       \IfValueTF{#1}%
404
           {\ifcsname\@nameauth@CleanName{#1#2!PN!}\endcsname%
405
406
               \else%
407
                    \@nameauth@Index{\Surnames, #1}%
               \fi}%
408
           {\IfValueTF{#3}
409
               410
               \else%
411
                    \@nameauth@Index{\Surnames\space#3}%
412
413
               {\ifcsname\@nameauth@CleanName{#2!PN!}\endcsname%
414
               \else%
415
                    \@nameauth@Index{\Surnames}%
416
               fi}%
417
           }%
418
419 }
```

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

\ExcludeName

```
420 \DeclareDocumentCommand\ExcludeName{o m o}%
421 {%
        \If Value TF {#1}%
422
423
        {%
             \ifcsname\@nameauth@CleanName{#1#2!PN!}\endcsname%
424
                   \PackageWarning{nameauth}%
425
                   {macro ExcludeName XRef: #1 #2 exists.}%
426
             \else%
427
                   \ifcsname\@nameauth@CleanName{#1#2!MN!}\endcsname%
428
                        \PackageWarning{nameauth}%
429
430
                        {macro ExcludeName Reference: #1 #2 already exists; no exclusion.}%
431
                   \else%
```

```
\ifcsname\@nameauth@CleanName{#1#2!NF!}\endcsname%
432
                            \PackageWarning{nameauth}%
433
                            {macro ExcludeName Reference: #1 #2 already exists; no exclusion.} \%
434
                       \else%
435
                            \csgdef{\@nameauth@CleanName{#1#2!PN!}}{}%
436
437
                       fi%
                  \fi%
438
             fi}%
439
        {\IfValueTF{#3}%
440
             441
             \else%
442
                  \ifcsname\@nameauth@CleanName{#2#3!MN!}\endcsname%
443
                       \PackageWarning{nameauth}%
444
                       {macro ExcludeName Reference: #2 #3 already exists; no exclusion.}%
445
                  \else%
446
                       \ifcsname\@nameauth@CleanName{#2#3!NF!}\endcsname%
447
                            \PackageWarning{nameauth}%
448
                            {macro ExcludeName Reference: #2 #3 already exists; no exclusion.}%
449
450
                       \else%
451
                            \csgdef{\@nameauth@CleanName{#2#3!PN!}}{}%
                       \fi%
452
                  \fi%
453
             \fi}%
454
             {\ifcsname\@nameauth@CleanName{#2!PN!}\endcsname\relax%
455
456
             \else%
                  \ifcsname\@nameauth@CleanName{#2!MN!}\endcsname%
457
                       \PackageWarning{nameauth}%
458
                       {macro ExcludeName Reference: #2 already exists; no exclusion.}%
459
                  \else%
460
                       \ifcsname\@nameauth@CleanName{#2!NF!}\endcsname%
461
                            \PackageWarning{nameauth}%
462
463
                            {macro ExcludeName Reference: #2 already exists; no exclusion.}%
464
                            \csgdef{\@nameauth@CleanName{#2!PN!}}{}%
465
                       \fi%
466
                  \fi%
467
             fi}%
468
        }%
469
470 }
```

This macro prevents a name from being indexed by using the exclusion mechanism of \AKA to prevent the other macros from indexing a name. The result is that \Name and friends will print their arguments, emit a warning, and continue.

```
\ForgetName
                                         471 \DeclareDocumentCommand\ForgetName{o m o}%
                                         472 {%
                                         473
                                                                \IfValueTF{#1}%
                                         474
                                                                              {\csundef{\@nameauth@CleanName{#1#2!MN!}}%
                                          475
                                                                               \csundef{\@nameauth@CleanName{#1#2!NF!}}}%
                                                                               {\IfValueTF{#3}%
                                         476
                                                                                            {\csundef{\@nameauth@CleanName{#2#3!MN!}}%
                                         477
                                                                                            \csundef{\@nameauth@CleanName{#2#3!NF!}}}%
                                         478
                                                                                            {\csundef{\@nameauth@CleanName{#2!MN!}}%
                                         479
                                                                                            \csundef{\@nameauth@CleanName{#2!NF!}}}%
                                         480
                                          481
                                                                              }%
                                         482 }
                                            \ForgetName undefines control sequences to force the "first use" option of \Name.
      \SubvertName
                                         483 \DeclareDocumentCommand\SubvertName{o m o}%
                                         484 {%
                                         485
                                                                \IfValueTF{#1}%
                                         486
                                                                              {\csgdef{\@nameauth@CleanName{#1#2!MN!}}%
                                          487
                                                                              \csgdef{\@nameauth@CleanName{#1#2!NF!}}}%
                                          488
                                                                               {\IfValueTF{#3}%
                                                                                            {\csgdef{\@nameauth@CleanName{#2#3!MN!}}%
                                          489
                                                                                            \csgdef{\@nameauth@CleanName{#2#3!NF!}}}%
                                         490
                                                                                            {\csgdef{\@nameauth@CleanName{#2!MN!}}%
                                         491
                                                                                            \csgdef{\@nameauth@CleanName{#2!NF!}}}%
                                         492
                                                                              }%
                                          493
                                         494 }
                                            \SubvertName defines control sequences to suppress the "first use" of \Name.
                                            The following macros toggle formatting and indexing.
\NamesInactive
                                         495 \ensuremath \verb| Cname auth @DoFormatfalse| | \ensuremath | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \ensuremath| | \e
      \NamesActive
                                         496 \verb|\newcommand{\NamesActive}{\Cnameauth@DoFormattrue}|
\IndexInactive
                                          497 \newcommand{\IndexInactive}{\@nameauth@DoIndexfalse}
```

\IndexActive

498 \newcommand{\IndexActive}{\@nameauth@DoIndextrue}

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