## The structure of a name

The author and editor fields contain a list of names. The exact format in which these names are typeset is decided by the bibliography style. The entry in the .bib database tells  $BirT_EX$  what the name is. You should always type names exactly as they appear in the cited work, even when they have slightly different forms in two works. For example:

```
author = "Donald E. Knuth" author = "D. E. Knuth"
```

If you are sure that both authors are the same person, then you could list both in the form that the author prefers (say, Donald E. Knuth), but you should always indicate (e.g., in our second case) that the original publication had a different form.

```
author = "D[onald] E. Knuth"
```

BBT<sub>E</sub>X alphabetizes this as if the brackets were not there, so that no ambiguity arises as to the identity of the author.

Most names can be entered in the following two equivalent forms:

```
"John Chris Smith" "Smith, John Chris"
"Thomas von Neumann" "von Neumann, Thomas"
```

The second form, with a comma, should always be used for people who have multiple last names that are capitalized. For example,

```
"Parra Benavides, Miguel"
```

If you enter "Miguel Parra Benavides", BBTEX will take "Parra" as the middle name, which is wrong in this case. When the other parts are not capitalized, no such problem occurs (e.g., "Johann von Bergen" or "Pierre de la Porte").

If several words of a name have to be grouped, they should be enclosed in braces. BbTFX treats everything inside braces as a single name, as shown below.

```
"{Boss and Friends, Inc.} and {Snoozy and Boys, Ltd.}"
```

In this case, Inc. and Ltd. are not mistakenly considered as first names.

In general,  $B_BT_EX$  names can have four distinct parts, denoted as First, von, Last, and Jr. Each part consists of a list of name tokens, and any list but Last can be empty. Thus, the two entries below are different:

```
"von der Schmidt, Alex" "{von der Schmidt}, Alex"
```

The first has von, Last, and First parts, while the second has only First and Last parts (von der Schmidt), resulting possibly in a different sorting order.

A "Junior" part can pose a special problem. Most people with "Jr." in their name precede it with a comma, thus entering it as follows:

```
"Smith, Jr., Robert"
```

Certain people do not use the comma, and these cases are handled by considering the "Jr." as part of the last name:

```
"{Lincoln Jr.}, John P." "John P. {Lincoln Jr.}"
```

Recall that in the case of "Miguel Parra Benavides, you should specify

```
"Parra Benavides, Miguel"
```

The First part of his name has the single token "Miguel"; the Last part has two tokens, "Parra and "Benavides; and the von and Jr parts are empty.

A complex example is

```
"Johannes Martinus Albertus van de Groene Heide"
```

This name has three tokens in the First part, two in the von part, and two in the Last part. BeTeX knows where one part ends and the other begins because the tokens in the von part begin with lowercase letters (van de in this example).

In general, von tokens have the first letter at brace-level 0 in lowercase. Technically speaking, everything in a "special character" is at brace-level 0 (see page 768), so you can decide how BBTEX treats a token by inserting a dummy special character whose first letter past the TEX control sequence is in the desired case, upper or lower. For example, in

```
Maria {\MakeUppercase{d}e La} Cruz
```

BBTEX will take the uppercase "De La" as the von part, since the first character following the control sequence is lowercase. With the abbrv style you will get the correct abbreviation M. De La Cruz, instead of the incorrect M. D. L. Cruz if you did not use this trick.

BBTFX handles hyphenated names correctly. For example, an entry like

```
author = "Maria-Victoria Delgrande",
```

with the abbrv style, results in "M.-V. Delgrande".

When multiple authors are present, their names should be separated with the word "and", where the "and" must not be enclosed in braces.

```
author = "Frank Mittelbach and Rowley, Chris"
editor = "{Lion and Noble, Ltd.}"
```

There are two authors, Frank Mittelbach and Chris Rowley, but only one editor, since the "and" is enclosed in braces. If the number of authors or editors is too large to be typed *in extenso*, then the list of names can be ended with the string "and others", which is converted by the standard styles into the familiar "et al."

To summarize, you can specify names in BBTEX using three possible forms (the double quotes and curly braces can be used in all cases):

```
"First von Last" e.g. {Johan van der Winden}
"von Last, First" e.g. "von der Schmidt, Alexander"
"von Last, Jr, First" e.g. {de la Porte, Fils, {\'Emile}}
```

The first form can almost always be used. It is, however, not suitable when there is a Jr part, or when the Last part has multiple tokens and there is no von part.

## The format of the title

The bibliography style decides whether a title is capitalized. Usually, titles of books are capitalized, but those for articles are not. A title should always be typed as it appears in the original work. For example:

```
TITLE = "A Manual of Style"

TITLE = "Hyphenation patterns for ancient Greek and Latin"
```

Different languages and styles have their own capitalization rules. If you want to override the decisions of the bibliography style, then you should enclose the parts that should remain unchanged inside braces. Note that this will not be sufficient when the first character after the left brace is a backslash (see below). It is usually best to enclose whole words in braces, because otherwise LATEX may lose kerning or ligatures when typesetting the word. In the following example, the first version is preferable over the second:

```
TITLE = "The Towns and Villages of {Belgium}"
TITLE = "The Towns and Villages of {B}elgium"
```

## Accented and special characters

BibTfX accepts accented characters. If you have an entry with two fields

```
author = "Kurt G{\"o}del",
year = 1931,
```

then the alpha bibliography style will yield the label [Göd31], which is probably what you want. As shown in the example above, the entire accented character must be placed in braces; in this case either {\"o} or {\"{o}} will work. These braces must not themselves be enclosed in braces (other than the ones that might

This feature handles accented characters and foreign symbols used with LATEX. It also allows user-defined "accents". For purposes of counting letters in labels, BusteX considers everything inside the braces to be a single letter. To BusteX, an accented character is a special case of a "special character", which consists of everything from a left brace at the topmost level, immediately followed by a backslash, up through the matching right brace. For example, the field

```
author = \OE\{le\} {\ightarrow} {Ren\ightarrow} van R{\ightarrow} den
```

has two special characters: " $\{\'\{E\}\)$ " and " $\{\i\}'$ ".

In general, BBTEX does not process TEX or LATEX control sequences inside a special character, but it will process other characters. Thus, a style that converts all titles to lowercase transforms

```
"The {\TeX BOOK\NOOP} Saga" into "The {\TeX book\NOOP} saga"
```

The article "The" remains capitalized because it is the first word in the title.

The special character scheme has its uses for handling accented characters (although the introduction of additional braces may upset the generation of ligatures and kerns). It may help to make BbTeX's alphabetizing do what you want, but again with some caveats; see the discussion of the \SortNoop command on page 771. Also, since BbTeX counts an entire special character as just one letter, you can force extra characters inside labels.