

Chapter 1

Carrying On

Three modes ¹ :

1. **paragraph mode** input as a sequence of words and sentences to be broken into lines, paragraphs and pages.
2. **math mode** Math mode begins with a command like `$` or `\(` or `\[` or `\begin{equation}`, and leaves when finding the corresponding command that ends the formula.
3. **left-to-right mode or LR mode** LR mode considers your input to be a string of words with spaces between them. It keeps going from left to right; it never starts a new line.

1.1 Changing the Type Style

Type style is used to indicate logical structure. In this book, emphasized text appears in *italic* style type and L^AT_EX input in **typewriter** style. In L^AT_EX, a type style is specified by three components: shape, series, and family.

Shapes

- Upright shape (default). `\textup{Upright shape...}`
- *Italic shape*. `\textit{Italic shape...}`
- *Slanted shape*. `\textsl{Slanted shape...}`
- SMALL CAPS SHAPE. `\textsc{Small caps shape...}`

Series

- Medium series (default). `\textmd{Medium series...}`
- **Boldface series**. `\textbf{Boldface series...}`

Family

- Roman family (default). `\textrm{Roman family...}`
- Sans serif family. `\textsf{Sans serif family...}`
- Typewriter family. `\texttt{Typewriter family...}`

These commands can be combined in a logical fashion to produce a wide vaiety of type styles.

Who on Earth is *ever* going to use boldface sans serif or an italic typewriter type style?

¹Paragraph mode corresponds to the vertical and ordinary horizontal modes in *The T_EXbook*, and LR mode is called restricted horizontal mode there. L^AT_EX also has a restricted form of LR mode called *picture* mode that is described in Section 7.1.

Each of the text-style commands described above has a corresponding declaration. Boldface text can be obtained with either the `\textbf` text-producing command or the `\bfseries` declaration.

More and **more** armadillos are crossing the road.

The declarations corresponding to the text-producing commands are:

- **cmd decl**
- `\textup \upshape`
- `\textit \itshape`
- `\textsl \slshape`
- `\textsc \scshape`
- `\textmd \upshape`
- `\textbf \upshape`
- `\textrm \upshape`
- `\textsf \upshape`
- `\texttt \upshape`
- `\textup \upshape`

None of test text-producing commands or declarations can be used in math mode. Section 3.3.8 explains how to change type style in a mathematical formula.

Type style is a visual property. Commands to specify visual properties belong not in the text, but in the definitions of commands that describe logical structure. L^AT_EX provides the `\emph` command for emphasized text; Section 3.4 explains how to define your own commands for the logical structure in your document.

1.2 Symbols from Other Languages

The `babel` package allows you to produce documents in languages other than English, as well as multilanguage documents.

1.2.1 Accents

Note: While L^AT_EX accents annotations work, .tex files also support Unicode. This file is UTF-8.

El señor está bien, garçon.

El señor está bien, garçon.

The letters i and j need special treatment because they should lose their dots when accented. The commands `\i` and `\j` produce a dotless i and j , respectively.

Él está aquí.

1.2.2 Symbols

The commands in Table 3.2 can appear only in paragraph and LR modes; use an `amsmath` command to put one inside a mathematical formula.

The following six special punctuation symbols can be used in any mode:

- `\dag`
- `\ddag`
- `\S`
- `\P`
- `\copyright`
- `\pounds`