LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

Seminar "Scientific and Technical English for Computer Scientists" Winter Semester 2025/26

Lecture 7 Punctuation, Part 2

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Commas

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A common misconception is that a comma corresponds to a pause in speech. Most commas are required based on **grammatical** and **logical criteria**. Commas (,) are, together with hyphens, the most troublesome punctuation mark. The rules governing comma placement in English are complex and vary across the Atlantic, and some commas are optional.

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We distinguish between eight correct types and two controversial types of commas. **Other commas are wrong.**

Correct types:

- listing;
- ► joining;
- serial;
- bracketing;
- introductory;
- separating;
- gapping;
- vocative.

Controversial types:

splice;

discretionary.

Listing Commas

Listing commas are used to separate items in **enumerations** together with *and* or *or*—e.g.:

They have offices in New York, Paris and Tokyo. The ink cartridge is available in cyan, magenta, yellow or black. Listing commas are used to separate items in **enumerations** together with *and* or *or*—e.g.:

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They are also used in "quick lists"—e.g.:

Let x, y be real numbers.

Most Polynesian languages have five vowels: a, e, i, o, u. A radical, comprehensive plan was conceived. She believed in the one, holy, universal, apostolic church of Haskell. Listing commas are used to separate items in **enumerations** together with *and* or *or*—e.g.:

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Nonparallel adjectives require no commas, as in the second example below:

Our method solves complex, third-order, nonlinear differential equations. Our method solves complex third-order nonlinear differential equations.

The joining comma (also called the "conjunction comma") is used between two **independent clauses** connected by *and*, *or*, or *but*. Such commas are standard in formal writing—e.g.:

Addition is denoted by +, and subtraction is denoted by -. The data are incomplete, but we can already form a plausible conjecture.

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Joining commas can be used together with listing commas—e.g.:

Jane talked, Brian listened, and Alice read her emails.

The serial comma (also called the "Oxford comma") is **optionally** used before *and* (or *et*) and *or* in an **enumeration of three or more items**—e.g.:

They have offices in New York, Paris, and Tokyo. The ink cartridge is available in cyan, magenta, yellow, or black. We refer to Bartos, Bassalat, et al. for details.

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Serial commas are widespread in American English, especially in formal, nonjournalistic writing. In British English, they tend to be used mostly when they help parsing. Compare:

I admire my parents, Gandhi and Mother Teresa. I admire my parents, Gandhi, and Mother Teresa.

Bracketing commas (also called "interruptive commas") set off a **nonrestrictive phrase**—a phrase that could be removed without breaking the sentence. They mark the phrase as parenthetical, although not as strongly as parentheses, and they emphasize less than long dashes—e.g.:

Peter Hitchens's brother, Christopher, wrote a popular but controversial book.

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Sometimes the opening or the closing comma *is* left out, if it coincides with the start or end of the sentence or with another punctuation mark.

Bracketing commas can be used **around subordinate clauses**—e.g.:

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They can also be used around complements that we want to **parenthesize**—e.g.:

This is, indeed, not the only possible scenario. For example, the numbers 49999 and 33333331 are prime. Justice Ruth Bader Ginsburg died, of pancreatic cancer, in 2020. Bracketing commas can be used **around subordinate clauses**—e.g.:

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In coordinations, bracketing commas can be used around the second term to mark it as a **parenthetical addition** or **afterthought**—e.g.:

General relativity is hard to understand, and even harder to explain. The integers \mathbb{Z} are an abelian, or commutative, group under addition. Introductory commas are used after an adverb, adverbial phrase, or dependent clause placed at the **beginning of a clause**—e.g.:

If R is Noetherian, then R' is Noetherian. Even before she was elected, the president targeted journalists she disliked. Introductory commas are used after an adverb, adverbial phrase, or dependent clause placed at the **beginning of a clause**—e.g.:

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These commas are more frequent in American English than in British English. But even in British English, they are sometimes necessary for clarity. This is hard to parse:

According to the mine worker standard safety procedures are ineffective.

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There is no introductory comma if a sentence is inverted (with the subject after the verb). This is wrong:

Between the Forum and the Campus Martius, is the Capitoline Hill.

Separating commas stand before or after **direct speech**, together with a verb such as *say* or *write*—e.g.:

Oscar Wilde wrote, "There is no such thing as a moral or an immoral book." "There is no such thing as a moral or an immoral book," he wrote. Separating commas stand before or after **direct speech**, together with a verb such as *say* or *write*—e.g.:

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No commas are needed when the quotation is **embedded** in the sentence—e.g.:

Yugoslavia's motto was "Brotherhood and Unity." She claimed that "technology has no value unless it makes people's lives better." The gapping comma indicates that some **words are omitted**. In the following example, the comma stands for *is known*:

Bangalore is known as the city of gardens; Mumbai, as the city of dreams.

The sentence would be harder to parse without the comma.

The vocative comma is used to **address** or **invoke** someone or something—e.g.:

I know, Kim, I know. Yes, minister. Let's eat, grandma!

The need for this comma hardly ever arises in scientific and technical English.

The splice comma **separates two clauses**. In Caesar's *I came, I saw, I conquered*, two splice commas separate three clauses. Comma splice is widely considered poor style, but sometimes it is unavoidable—e.g.:

It is peculiar, is it not? The King is dead, long live the Queen! Not all tires should be replaced, just the ones that are worn out. The splice comma **separates two clauses**. In Caesar's *I came, I saw, I conquered*, two splice commas separate three clauses. Comma splice is widely considered poor style, but sometimes it is unavoidable—e.g.:

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Most splice commas should be replaced by **periods** (.) or **semicolons** (;). In the following examples, the replacement is easy:

Let a = b, then $a^k = b^k$.

You must register in time, otherwise you cannot take the examination. We apologize for the repetition, however we do need your cooperation. As a rule, there should be no comma between the **subject** and the **verb**. The last comma below is wrong:

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There are nevertheless circumstances where a discretionary comma is desirable to **help parsing**—e.g.:

Those who can, do; those who can't, teach. Those responsible for sacking the people who have just been sacked, have been sacked.

Hyphens

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We distinguish between two main types of hyphens:

- The intraword hyphen joins two parts of a word. One part will usually be a prefix or suffix—e.g., co-axial, un-English, mid-1990s, tax-free, 20-fold.
- The interword hyphen connects two words. The combined words then form a compound adjective (e.g., well-designed, customer-oriented), noun (e.g., right-winger), or verb (e.g., binge-eat).

Most hyphens can be avoided by joining the two word components directly (e.g., *coaxial*) or by leaving a space (e.g., *well designed*).

- ► The American tendency is to avoid intraword hyphens by joining words directly.
- ▶ The British tendency is to avoid interword hyphens by using a space.
- Thus, a nonaddictive second-generation drug is mainly American, and a non-addictive second generation drug is mainly British.

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Each hyphen plays a small role:

- In non-addictive, the hyphen cleanly separates the prefix non- from the familiar word addictive, making this uncommon combination easier to parse.
- In second-generation drug, the hyphen prevents the misreading second generation-drug.

Other combinations that require a hyphen involve the combining forms *all-, cross-*, and *self-*—e.g., *all-important, cross-examiner, self-delusion*. To a literal mind, a *cross examiner* might conjure the image of a crucifix inspector.

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To avoid awkward symbol combinations, use a hyphen when attaching a prefix to a capitalized word or a number, even if the prefix normally does not require a hyphen—e.g., *un-Pythonic*, *pre-1984*.

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Hyphens can also help avoid ambiguity.

Distinguish between *re-prove* ("prove again") and *reprove* ("reprimand"), between *co-op* ("cooperative," two syllables) and *coop* ("cage," one syllable).

Optional intraword hyphens are predominant in British English and older varieties of American English but rarely seen in modern American texts. Thus, *anti-clockwise*, *element-wise*, *non-empty*, *pre-war*, and *rat-like* are mainly British, whereas *counterclockwise*, *elementwise*, *nonempty*, *prewar*, and *ratlike* are mainly American.

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Finally, intraword hyphens are inserted between two syllables of a word split across two lines. When building compounds, we must often choose between three options:

- hyphenated compounds (e.g., copy-editor);
- closed compounds (e.g., copyeditor);
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Below, we review some general principles, but they are no substitute for a good dictionary, search engines, word frequency viewers, and sound judgment.

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A hyphen can be inserted if it **eases reading** or for **consistency**. It is good style, especially in American English, to write *oil-based paint*, *this so-called nutritionist*, and *a step-by-step method*. The last example is hard to parse when written as *a step by step method*. But in *We proceed step-by-step*, the hyphens are useless.

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What should you do about *middle school physical science curriculum*? Since the phrases *middle school* and *physical science* are established, they can be left as is. *Middle-school physical-science curriculum* would be correct but distractingly ugly.

Interword Hyphens

English allows the formation of arbitrary **adjectival phrases**, as in *her you-are-charming-but-useless look*. Hyphens are then necessary, unless you use quotes: *her "you are charming but useless" look*. Such expressions inflect the text with informality.

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In **Latin expressions** such as *ad hoc, de facto,* and *ex post facto,* which are understood as a whole, hyphens are unwelcome. Unlike *free college plan, de facto standard* can be parsed in only one way. Forms such as *de-facto standard* do occur, but they are nonstandard. English allows the formation of arbitrary **adjectival phrases**, as in *her you-are-charming-but-useless look*. Hyphens are then necessary, unless you use quotes: *her 'you are charming but useless'' look*. Such expressions inflect the text with informality.

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A similar case is that of **adverbs modifying adjectives qualifying nouns**. On the model of *free-college plan*, you may be tempted to write *highly-sensitive information* or *ever-stronger union*. But since adverbs modify adjectives but not nouns, these hyphens resolve no ambiguities and are therefore undesirable. *Sensitive information* cannot be *highly*, and a *stronger union* cannot be *ever*.

Hyphens are used to form compounds that seem to **defy the laws of grammar**. A phrase such as *to stress test* is disallowed because a noun (*stress*) cannot modify a verb (*test*)—this would be the role of an adverb. To solve this, use a hyphen: *to stress-test, stress-tested*, etc. The hyphen usually disappears in related forms when it is not needed (e.g., *a stress test, stress testers, stress testing*). Hyphens are used to form compounds that seem to **defy the laws of grammar**. A phrase such as *to stress test* is disallowed because a noun (*stress*) cannot modify a verb (*test*)—this would be the role of an adverb. To solve this, use a hyphen: *to stress-test, stress-tested*, etc. The hyphen usually disappears in related forms when it is not needed (e.g., *a stress test, stress testers, stress testing*).

Besides "noun + verb," other problematic combinations include "adjective + verb" (e.g., *double-check*, *dry-clean*), "noun + adjective" (e.g., *vendor-specific*), and "noun + adverb" (e.g., *carbon-neutrally*). For some commonly used combinations, dictionaries record closed compounds (e.g., *to copyedit*, *to proofread*, *to spellcheck*).

Besides enhancing readability, interword hyphens can also be used to build a **new concept** whose meaning might not be obvious from the constituent words.

Accordingly, a *bee-eater* is a bird and not just any eater of bees, and a *man-hater* is a person who hates men and not a hater who is a man. A similar convention explains *editor-in-chief, parent-in-law,* and *tug-of-war*. However, for some established phrases such as *black box* and *blue ice,* the hyphen is curiously missing.

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Hyphenated compounds used to be common. They appeared in *hay-stack*, *Oxford-street*, *tea-pot*, *to-day*, etc. The preference nowadays is for closed and open compounds—e.g., *haystack*, *Oxford Street*, *teapot*, *today*. Besides enhancing readability, interword hyphens can also be used to build a **new concept** whose meaning might not be obvious from the constituent words.

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Dictionaries can often help, and for compounds that are not recorded in them, **the preferable form is almost always the open compound**.

What should you do when faced with a specific expression?

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Consider *farm boy*. It could also plausibly be written as *farm-boy* or *farmboy*. But:

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The closed compound is not established, and the hyphenated form offers no benefits. By exclusion, we have *farm boy*, which is indeed about 20 times more frequent in print than either of the other two forms according to **Google Books Ngram Viewer**. (In retrospect, we could have started with that tool and saved ourselves some work.) There remains a pair of **special cases**.

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An analogous but worse construction works in reverse: *Anglo-Welsh, -Scottish, and -Irish* abbreviates *Anglo-Welsh, Anglo-Scottish, and Anglo-Irish*. When spoken, the phrase is indistinguishable from *Anglo-Welsh, Scottish, and Irish,* which is not what we mean. This alone is enough to discredit it.