

Avoiding Common Problems in Scientific Papers:

Technical and Grammatical Aspects

1.

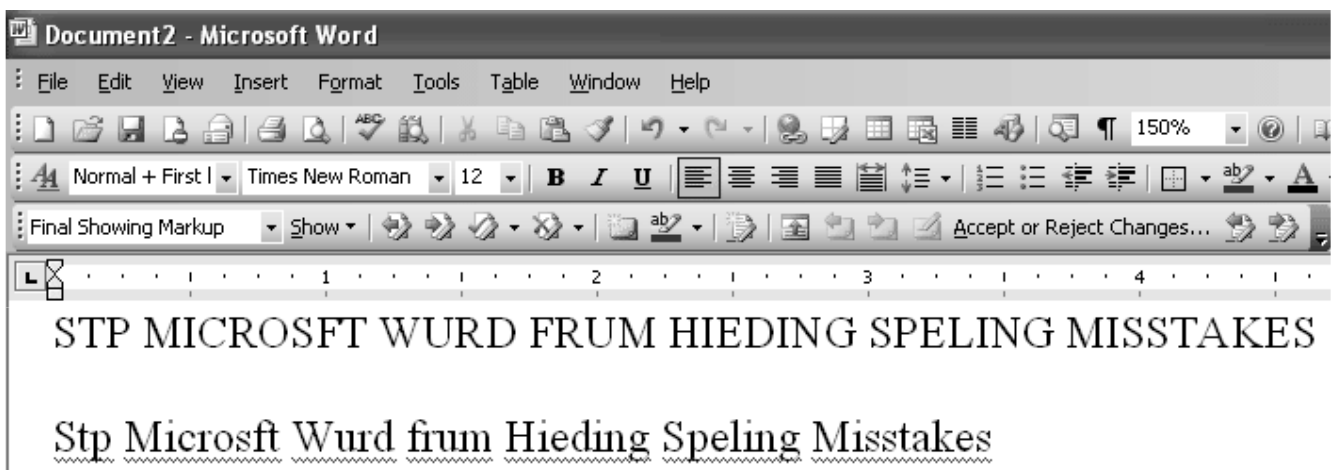
**Stop Microsoft Word from Hiding
Mistakes from You**

In most cases, Word will helpfully point out spelling mistakes by underlining them in red:

Nashunal Helth Resurch Enstitutes

But by default, Word assumes that everything written in all capital letters or in a combination of letters and numbers is spelled correctly.

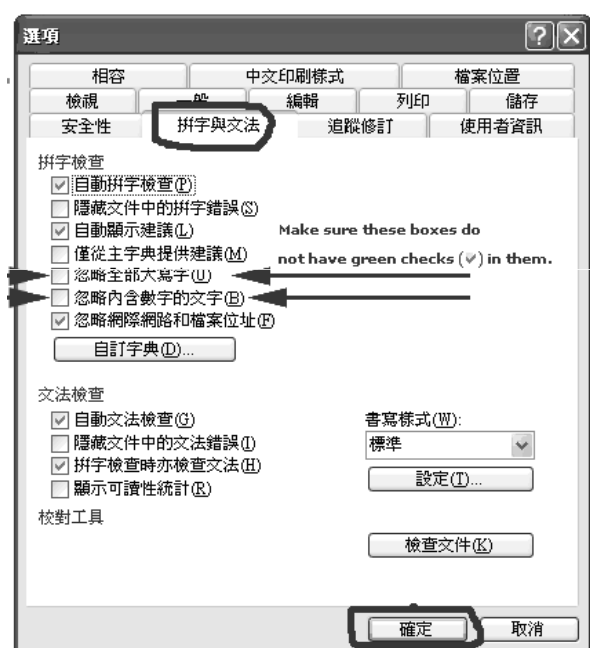
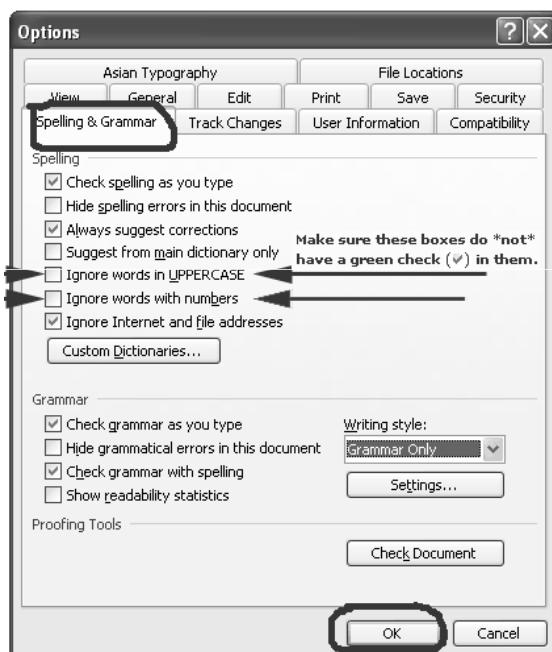
For example:



Combinations of letters and numbers are also assumed to be correct

“The two single nucleotide polymorphisms (SNPs) in CYP2C19 that result in poor metabolism — rs4244285 (CYP2C19*2) and rs4986893 (CYP2C19*3) — are found in approximately 20% of the population of ethnic Chinese.”

How to Show Such Things



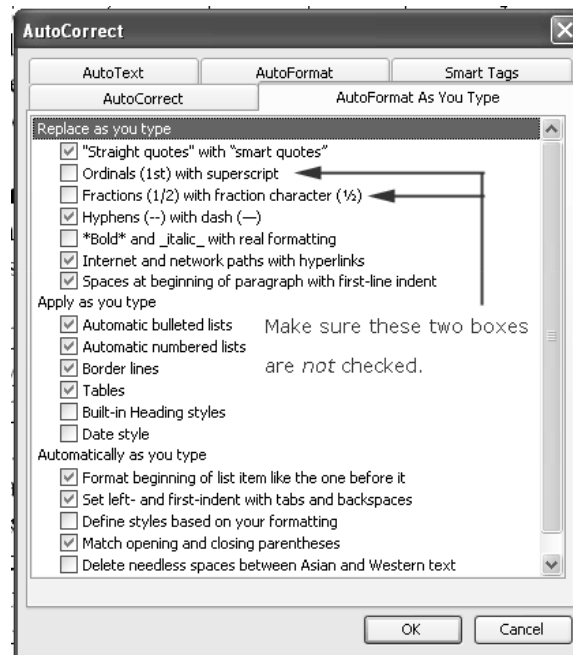
2.

Stop Microsoft Word from “Fixing” Some Things It Shouldn’t

Superscripts and Fractions

- Word will automatically change “1st” to “1st”, “2nd” to “2nd”, “3rd” to “3rd”, etc.
- Word will also automatically change some, *but not all*, fractions to special characters:
 - ❖ $1/2 \rightarrow \frac{1}{2}$, $1/4 \rightarrow \frac{1}{4}$, $3/4 \rightarrow \frac{3}{4}$
 - ❖ but $1/3$, $2/3$, $3/5$, $9/10$, etc.
- These kinds of changes are generally *not* welcomed by journals, etc.

Tools → Autocorrect Options... → AutoFormat As You Type



Tools → Autocorrect Options... → AutoFormat



3.

Get Microsoft Word to Help with Some *Good* Things.

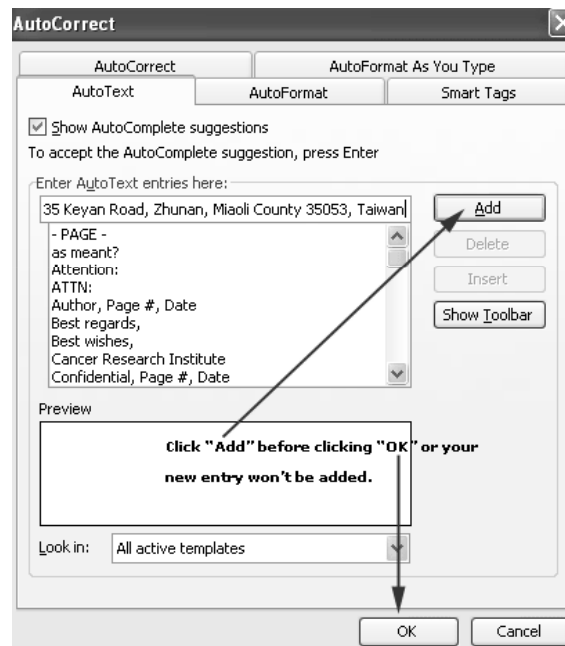
AutoComplete

Some useful additions:

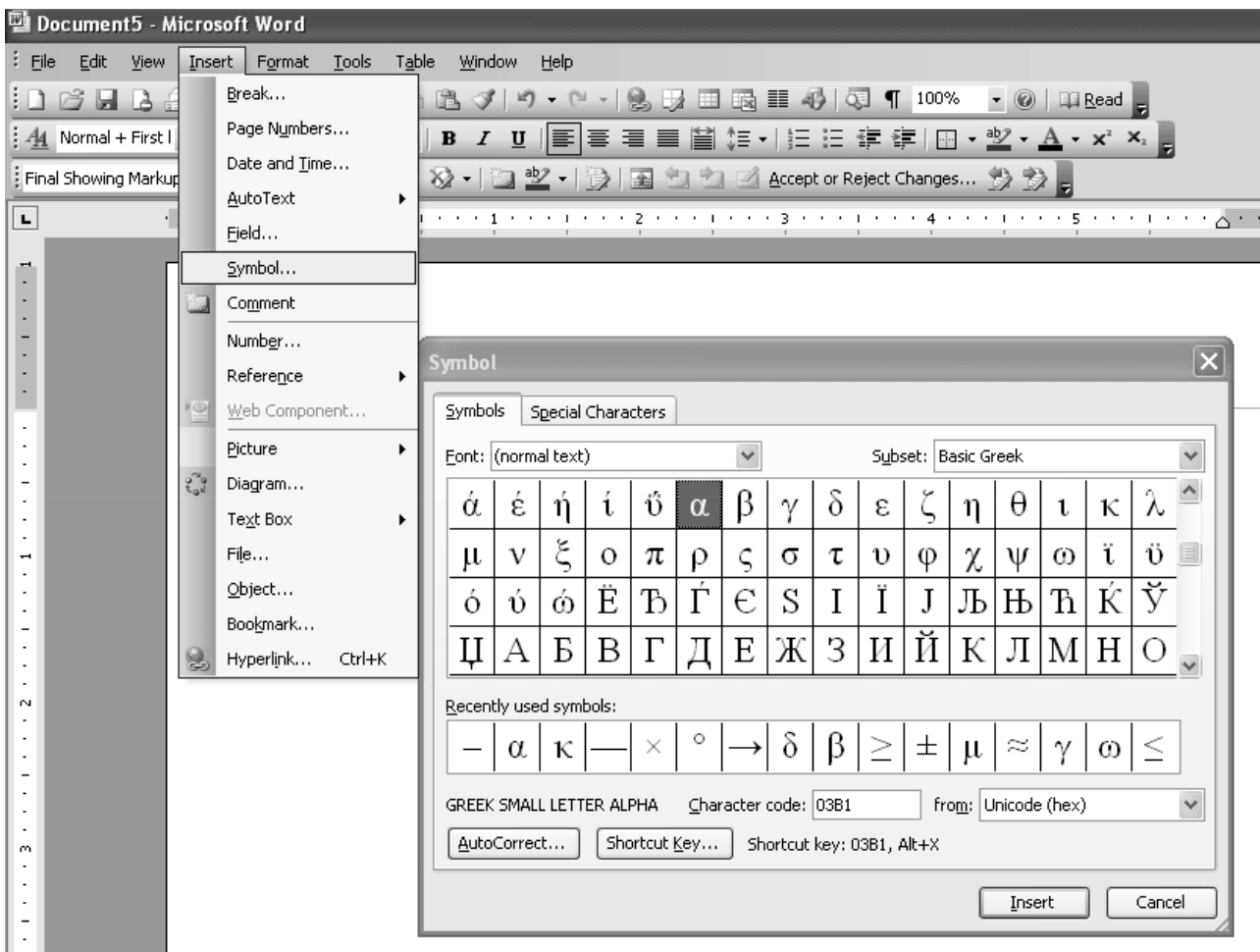
- your name
- your institute/center/division
- “National Health Research Institutes”
- NHRI address: “35 Keyan Road, Zhunan, Miaoli County 35053, Taiwan”
- any long, specialized terms you use in your research

You may want to delete some entries later.

Tools → Autocorrect Options... → AutoText



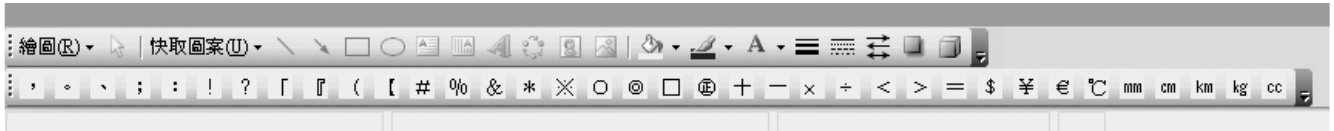
4. Special Characters



Symbol font

- Don't use the "Symbol" font (unless your journal specifically instructs you to).
 - ❖ α β γ δ Times New Roman
 - ❖ < ® © ™ the same letters in "Symbol"

don't use the punctuation bar



Chinese fonts are for Chinese, not English

- Don't ever use a Chinese font (e.g., PMingLiU, SimSun) for English text, or Greek text, or just about anything except for Chinese characters.

Never use “full-width” marks in English

- “What’s so horrible about using characters from Chinese fonts?” you ask. Well, I’ll tell you: They look horrible! (Even if you don’t realize it.)
- “What’s so horrible about using characters from Chinese fonts?” you ask. Well, I’ll tell you: They look horrible in English! (Even if you don’t realize it.)
-

multiplication

Use the multiplication sign (\times), not the letter x, even if you think they look exactly the same in the font you’re using.

wrong: $5 \text{ x } 7 = 35$

right: $5 \times 7 = 35$

temperature

Use the *real* degree sign, not a superscript (i.e., ^{raised}) letter o or the number 0, even if you think they look exactly the same in the font you're using.

wrong: 15°C

wrong: 15^oC

right: 15° C

ranges

People here tend to use a tilde (~) to indicated ranges. Thus, for “from 5 to 10” people write “5~10”. But this is a Taiwan thing, not a Western one.

Use an en dash:

Burgers JS, Grol R, Klazinga NS, Makela M, Zaat J. Towards evidence-based clinical practice: an international survey of 18 clinical guideline programs. *Int J Qual Health Care* 2003;**15**:31–45.

But if you're not sure about the en dash, stick with a hyphen.

5. Making Educated Guesses

“If you’re not sure....”

If you’re not sure...

whether to capitalize a word, use lower case.

wrong: “The Director presented her new paper.”

right: “The director presented her new paper.”

If you're not sure...

whether to include the word “that,” include it. Sometimes a sentence may sound better without the “that,” but it will almost never be *wrong* to include it.

“These findings suggest that previous studies were wrong, wrong, wrong.”

“She said that she would check on the mice this evening.”

“We propose that Illudium Phosdex can cure the common cold.”

If you're not sure...

whether to use a comma or use no punctuation, use a comma.

- Thus, the hypothesis was confirmed.
- After the mixture cooled, we added NaCl.

If you're not sure...

whether to use “who” or “whom,” use “who.”

- “Whom” is slowly dying.
- It sounds much worse to use “whom” where “who” is called for than to use “who” where some might call for “whom.”

If you're not sure...

whether to hyphenate a compound modifier, hyphenate it.

- a drug-transporter gene
- high-resolution magnetic resonance imaging

But don't hyphenate most adverbs (e.g., “very” or almost anything ending in -ly).

- a very great difference
- an enormously successful program

If you're not sure...

whether to use a *the*, an *a*, or an *an* in front of a singular noun, use it.

- cells comprising the blood-brain barrier
- inhibited the cellular targets of Aurora kinase in the HCT-116 colon cancer cell line
- These should form an H-bond.

If you're not sure...

Google is your friend.

- Be sure to use quotation marks if you need your query to be exact.

6. punctuation

commas

British vs. U.S. usage

British: x, y and z

U.S.: x, y, and z

Use the “serial comma” (U.S. style).

semicolons

Semicolons aren't just to separate two independent sentences. They're especially useful for making clear the divisions in sentences with lots of commas.

“To the mixture we added three compounds: *a*, which consisted of lime juice and gin; *b*, which consisted of tonic water, ice, and lemon peel; and *c*, a small paper umbrella.”

em dashes

Useful for clarifying boundaries and marking sets.

- “Finally, various analyses — including luciferase activity experiments, electrophoretic mobility shift assays, and *in vivo* chromatin immunoprecipitation — verified the direct binding of NRF-2 and YY-1 onto the shared intergenic region.”

7. miscellaneous

spaces and alignment

Don't use multiple spaces.

- Only one space after a period, not two.
- Use tabs to get things to line up with each other. Set tabs for entire sections, not line by line.

tables and figures

References to tables and figures should always be in present tense:

- “Table 1 presents [not *presented*] the data from the experiment.”
- “Figure 3b shows [not *showed*] how the concentration increased with time.”

which/that

Do not use “which” where you could use “that”.

In most cases, which should be preceded by a comma, that should not.

phone and fax numbers

Use the following format:

+886-37-246-166

+886-2-2653-4401

+886-2-2653-4401 ext. 21040

If this is not for an international audience but just a Taiwan one:

(37) 246-166

(02) 2653-4401

0952-888-888

“NHRI” in sentences

- wrong: the National Health Research Institute
- right: the National Health Research Institutes

- “NHRI is”, not “NHRI are....”
- “NHRI is”, not “The NHRI is....”