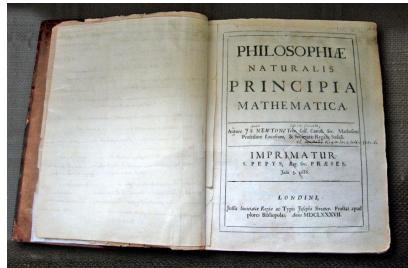


Common Latin Terms in Scientific Writing— *What They Mean When to Use 'em*



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Newton's own first edition of *Philosophiae Naturalis Principia Mathematica*, showing his handwritten corrections for the second edition.
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**“i.e.” (*id est*) means “that is”
or “in other words”**

Use to define, restate, or paraphrase the clause immediately preceding it

“The table includes only those costs that fall under the NSF “Total Project Cost” category; i.e., it does not include the significant contributions being provided by all members of the collaboration and the PSI laboratory.”

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**“e.g.” (*exempli gratia*) means
“for example”**

**Use to give an illustrative example of the
thing just mentioned**

“This phenomenon may indicate trapped
magnetic flux moving in the junction area or
could indicate an intrinsic origin, such as
domain wall motion between regions of
different chiralities (e.g., $p_x + ip_y$ and $p_x - ip_y$).”

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3

“viz.” (*videlicet*) means “namely”*

**Use to introduce specifically the items
comprised by a previously expressed whole**

“The noble gases, viz., helium, neon,
argon, krypton, xenon, and radon, are
a group of six gaseous chemical
elements constituting Group 18 of the
periodic table.”

***Few writers use viz. nowadays, but now you
know what it means**

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i.e. or e.g. or viz.?

To restate an idea in a slightly different way
and include *all* elements—use i.e.

To give a few representative examples of
something—use e.g.

To specify the constituent parts of a
previously named whole—use viz.

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“vs.” (*versus*) means “against”

Use to contrast one thing against another

“The critical current modulation vs. applied
magnetic flux are shown for both
configurations for phase shifts of 0 (*s*-wave)
and π (*d*-wave).”

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6

“etc.” (*et cetera*) means “and so forth”

Use sparingly; it is imprecise and usually adds nothing to the sentence

“Flooding was caused by several factors (e.g., low grade, cutbanks, high water table, ~~etc.~~).”

“et” means “and” in Latin; writing “and etc.” makes you sound like an ignoramus*

*Lat. “we do not know”

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“et al.” (*et alii*) means “and others”

Use exclusively to denote additional authors in reference citations

“The work of Jones **et al.**¹ established the scaling law used to benchmark the present experiment.”

Note that “et” is *not* followed by a period, because it is not an abbreviation; “al.” is an abbreviation

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“N.B.” (*nota bene*) means “note well”

Use to call attention to a point

“**N.B.** Stringent clean-room procedures must be employed to avoid contaminating the samples.”

**Unlike most abbreviations from Latin,
“N.B.” is always capitalized**

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“cf.” (*conferre*) means “compare with”

Use to point out similarities or differences of the thing presently being discussed to another example

“The diffusive model of microwave propagation within a building makes very accurate predictions for the amount of power that is received at a given point (**cf.** experimental results reported by Ullmo and Garanger [3]).”

Does *not* mean “refer to”—a common misuse of the term

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“q.v.” (*quod vide*) means “which see”

Use to point to a reference or another example

“Strongly interacting or “correlated” electrons cannot be described as embedded in a static mean field generated by other electrons [1]. (For an earlier review of fermionic correlations, **q.v.** *Rev. Mod. Phys.* **50**, 99 [1984].)

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Latin abbreviations (not “et”) are always followed by a period (.)

i.e.

e.g.

viz.

N.B.

cf.

et al.

q.v.

Common Latin abbreviations are not italicized in scientific writing

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Latin words and phrases are usually italicized (as are any “foreign” words)

***in situ* = in its original place**

***in vivo* = occurring only in a living body, i.e.,
not under laboratory conditions**

***in vitro* = in an artificial environment
outside a living body (literally, “in glass”)**

***ab initio* = from first principles; predictions
or calculations based entirely on theory**

**“Fig. 3. (a) Side and (b) top view schematic for
a SET on SOI substrate utilizing self-ordered 2D
dopant patterns fabricated *in situ* by STM.”**

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Commas and Latin terms

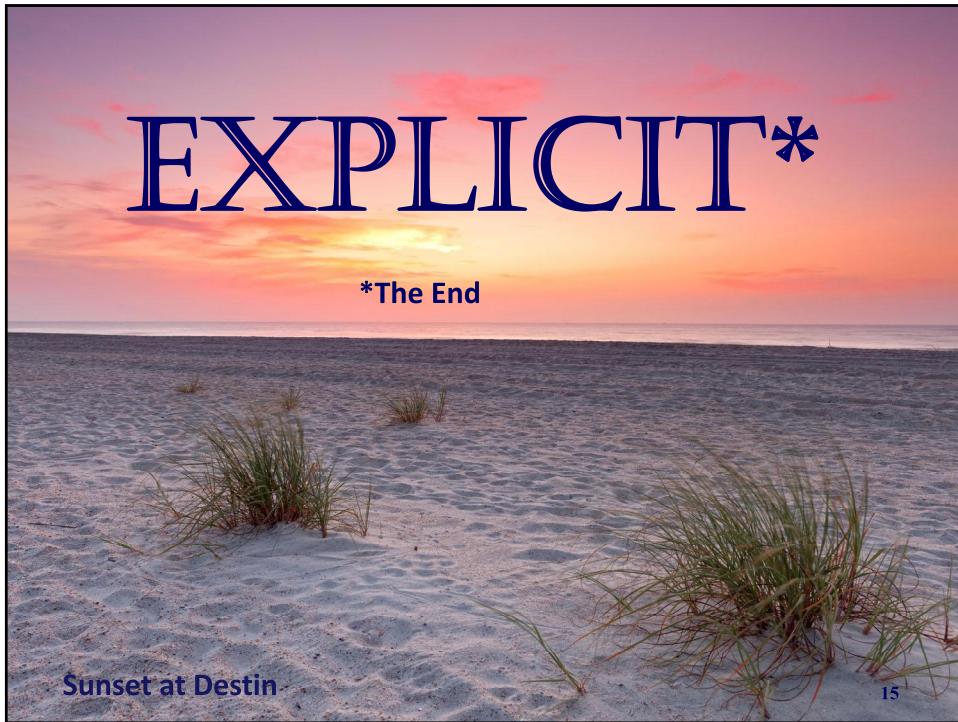
**Set off etc., e.g., i.e., and viz. with preceding
and following commas**

**“Formed by the breakup of meteors entering
Earth’s atmosphere, the sodium atoms in the
layer absorb and then re-emit some of the light,
which appears to an earthbound telescope as an
artificial magnitude 7 star (a factor of 100
weaker than, e.g., Polaris, a magnitude 3 star).”**

Do not use commas after cf., et al., or q.v.

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