



The style files

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Favour the present tense

I recommend the rule “if in doubt use the present tense”.

Higham (1998), [1], §4.29

The present tense works well for scientific writing. The eternal truths we present in an article should all be in the present tense: instead of “experiments have shown that”, prefer “experiments show that”. The present tense helps make more active writing.

Write derivations in the present tense: not the past tense of “where we have assumed $R = \{k_1, \dots, k_r\}$ ” but instead “where we assume $R = \{k_1, \dots, k_r\}$ ”; nor the future tense of “As we will scale later the Hamiltonian with the inverse temperature”, but instead “As we scale the Hamiltonian with the inverse temperature, Section 4.”. Generally avoid “will”: prefer “The potential in Example 2 is central” to “The potential in Example 2 will be central”.

In summarizing the action of a drama, the writer should always use the present tense. In summarizing a poem, story, or novel, he should preferably use the present,

Strunk Jr (1918) [2], §17

However, report actions undertaken in computational experiments using the past tense. For example, “All simulations used a fine lattice of size $N = 512$ ”. Similarly, instead of “we solve the linear equations (4.9)–(4.12) with $\Delta t = 0.0063$ and 8192 FFT points”, prefer “we solved the linear equations ...”.

Refer to previous work in an earlier article using either the past tense or the present tense. Choose depending upon whether your main emphasis is the historical development (use the past tense) or whether your emphasis is the eternal truths in the work (use the present tense). In this fragment the emphasis is on the result, “theoretical studies [10, 11] have shown that”, so prefer the present tense of “theoretical studies [10, 11] show that”. However, the past tense suitably fits the historical aspect in “Nolasco and Dahlen [15] and Guevara et al. [16] demonstrated that”.

Use future tense to refer to future work—that is, work forecast to be in a different article. Such discussion usually only occurs in the conclusion.

Other than in conclusions, future tense is rarely used in science writing.

Zobel (2004) [3], p.40

Summary. This quote say it all.

Facts are true: use the present tense to denote unchanging truths. When telling what the authors or other researchers did, use the past tense. For what is being done in the paper, use the past tense for referring back (“in Section 5 it was shown that...”). For referring ahead, use ... the present tense if the writer is thinking of how the paper is set out (“in Section 7 it is shown that...”).¹

Garrett (2000) [4]

¹But remember to write actively, not passively. In particular, avoid “it was/is”. I recommend the two parenthetical examples in this quote be “Section 5 showed that...” and “Section 7 shows that...”.

References

- [1] N.J. Higham, *Handbook of writing for the mathematical sciences*, 2nd edn (SIAM 1988).
- [2] W. Strunk Jr, *The Elements of Style* W.P. Humphrey <http://www.bartleby.com/141>.
- [3] J. Zober, *Writing for computer science* (Springer 2004).
- [4] A. Garrett, Principles of science writing, Technical report, Scitext Cambridge, <http://www.scitext.com/writing.php> (2 October 2006).