Introduction
Paragraph lengthiness and complexity cause a continuity inexplicity (discontinuity), which can be lessened by using forecasting and backcasting markers of the information pattern. Thus, omission of such continuity markers (e.g., a subheading) impedes immediate comprehension. In this article, examples of continuity marker omission are analysed according to the section of a journal article (experimental, contextual), the conceptual component therein, and the type of omitted marker.

Experimental section
Part 1 – Materials and methods section: method
Example: omitted subheading
At the Chilao study site (San Gabriel Mountains, California), after soil temperature measurement (LaMotte Chemical dial thermometer), small samples of soil (2 m intervals) were collected (trowel), placed into a bag, dried, and mixed. A few table spoons of soil were dried (to the nearest ounce), heated (4 h, 550°C), reweighed (25°C), and the amount expressed as a percentage of total weight.

A LaMotte Deluxe Turf Lab Soil Kit (Model TL-2) was used to determine the following: nitrate nitrogen (mixed acid reagent and nitrate reducing reagent); phosphorus (NF extracting solution and charcoal suspension); potassium (K solution); iron (iron reagent #1 and #2); calcium and magnesium (Schwarzenbach EDTA titration method). Nitrate, phosphorus, and iron were measured colorimetrically.

Part 2 – Materials and methods section: method
Example: omitted determiner
Three hepatoma cell lines were used in this experiment.
Revision
The three hepatoma cell lines were used in this experiment.

Notes
In the Example, the omission of in-text subheadings results in an inexplicit shift from one research activity (collection and processing) to another (chemical analyses). Inclusion of the subheadings facilitates continuity between dense paragraphs of different types of information.

Part 3 – Materials and methods section: method
Example: omitted determiner
Many studies were performed in vitro.
Revision
Many of the studies were performed in vitro.

Notes
Without of the, there is no denotation that the studies were previously mentioned. The usage of the alone as in many the is unconventional. Other indefinite pronoun determiners that require of are none and some. In contrast, all of the sounds conventional, but all of the would be consistent with usage of the others.
Part 1 – Introduction section: research problem pertinent background

Example: omitted end-of-sentence appositives

To obtain the best performance from processors, two essential assistants can be considered. The compilers maximise the parallelisation and balance workloads. The interconnects among clusters improve the processor performance by overcoming the partitioning overhead as inter-cluster communications.

Revision

To obtain the best performance from processors, two essential assistants can be considered: compilers and interconnects among clusters. The compilers maximise the parallelisation and balance workloads. The interconnects among clusters improve the processor performance by overcoming the partitioning overhead as inter-cluster communications.

Notes

Forecasting the assistants (compilers and interconnects among clusters) as appositives at the end of the first sentence provides explicit continuity to the second and third sentences. This forecasting improves inter-sentence continuity.

Part 2 – Introduction section: research problem pertinent background

Example: omitted determiner

Bacteria can spread quickly from cavities to apical through straight root canals of baby teeth, resulting in infected bone and periodontal tissue. Infection will impair craniofacial development.

Revision 1

Bacteria can spread quickly from cavities to apical through straight root canals of baby teeth, resulting in infected bone and periodontal tissue. The infection will impair craniofacial development.

Revision 2

Bacteria can spread quickly from cavities to apical through straight root canals of baby teeth, resulting in infected bone and periodontal tissue. Such infection will impair craniofacial development.

Notes

Inclusion of a determiner fills the continuity gap between the first and second sentence. Some continuity is provided by echo of the word infected as infection. In Revision 1, further continuity is provided by the. In Revision 2, the indefinite pronoun determiner such renders the continuity explicit. Usage of the determiner this (or that) would be a little less emphatic. Thus, there seems to be a hierarchy of determiner-elicited continuity marking: such > this/that > the.

Summary

Forecasting markers (subheadings; end-of-sentence appositives) facilitate comprehension in paragraphs common to a Materials and Methods section. However, backcasting markers (determiners the, such; indefinite pronouns many of the) cohere text in all sections of a journal article. Omission of forecasting or backcasting markers diminishes paragraph continuity, resulting in impeded immediate comprehension.

The taxonomic nomenclature of omission indicates the revision option: addition of the omitted forecasting marker (subheading, end-of-sentence appositives) or backcasting marker (determiner) if they indeed minimise impeded immediate comprehension. Furthermore, there is a sub-option for the usage of determiners: the hierarchy of emphasis among the indefinite backcasting determiners such > this/that > the.

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