Abstracting the essence

The most important part of a paper may be its abstract. Effective abstracts
• are concise,
• summarize conclusions and recommendations, and
• are efficient in terms of computer storage and retrieval.

In terms of the number of readers, an abstract is easily the most essential part of a paper. It is like the bouillon cube’s wrapper: the true essence is not in the list of ingredients.

Two views of abstracts follow. The first is Kenneth K. Landes’s 1966 classic, A Scrutiny of the Abstract, II:

A partial biography of the writer is given. The inadequate abstract is discussed. What should be covered by an abstract is considered. The importance of the abstract is described. Dictionary definitions of abstract are quoted. At the conclusion a revised abstract is presented.

For many years I have been annoyed by inadequate abstracts. This became acute while I was serving a term as editor of the Bulletin of the American Association of Petroleum Geologists. In addition to returning manuscripts to authors for rewriting of abstracts, I also took 30 minutes in which to lower my ire by writing A Scrutiny of the Abstract. This little squib has had fantastic distribution. If only one of my scientific outpourings would do as well! Now the editorial board of the Association has requested a revision. This is it.

An inadequate abstract is illustrated at the top of the page. Passive voice is positively screaming at the reader! It is an outline, with each item in the outline expanded into a sentence. The reader is told what the paper is about, but not what it contributes. Such abstracts are merely overgrown titles. They are produced by writers who are either (1) beginners, (2) lazy, or (3) have not written the paper yet.

To many writers, the preparation of an abstract is an unwanted chore required at the last minute by an editor or insisted upon even before the paper has been written by a deadline-bedeviled program chairman. However, in terms of market reached, the abstract is the most important part of the paper. For every individual who reads or listens to your entire paper, from 10 to 500 will read your abstract.

My dictionary describes an abstract as “a summary of a document” and that which “concentrates in itself the essential information of a paper or article.” The definition I prefer has been set in italics. May all writers learn the art (it is not easy) of preparing an abstract containing the essential information in their compositions. With this goal in mind, I append an abstract that should be an improvement over the one appearing at the beginning of this discussion.

Revised abstract

The abstract is of utmost importance, for it is read by 10 to 500 times more people than hear or read the entire article. It should not be a mere recital of the subjects covered. Expressions such as ‘is discussed’ end ‘is described’ should never be included! The abstract should be a condensation and concentration of the essential information in the paper.

The second view is illustrated by excerpts from Standards for writing abstracts by B.H. Well:

Abstract defined

An abstract, as defined here, is an abbreviated, accurate representation of a document. The following recommendations are made for the guidance of authors and editors, so that abstracts in primary documents may be both helpful to their readers and reproducible with little or no change in secondary publications and services.

Make the abstract as informative as the document will permit, so that readers may decide whether they need to read the entire document. State the purpose, methods, results, and conclusions presented in the document, either in that order or with initial emphasis on findings.

In the proposed standard, the term abstract signifies an abbreviated accurate representation of a document without added interpretation or criticism and without distinction as to who wrote the abstract. Thus, an abstract differs from a brief review of a document in that, while a review often takes on much of the character of an informative or informative-indicative abstract, its writer is expected to include suitable criticism and interpretation.

Abstract to inform

An abstract should be as informative as is permitted by the type and style of the document; that is, it should present as much as possible of the quantitative and/or qualitative information contained in the document. Informative abstracts are especially desirable for texts describing experimental work and documents devoted to a single theme. However, some discursive or lengthy texts, such as broad overviews, review papers,
and entire monographs, may permit the preparation of an abstract that is only
an indicative or descriptive guide to the type of document and what it is about.
A combined informative-indicative abstract must often be prepared when
limitations on the length of the abstract or the type and style of the document
make it necessary to confine informative statements to the primary elements
of the document and to relegate other aspects to indicative statements.

Abstracts should not be confused with the related, but distinct terms
annotation, extract, and summary.
- An annotation is a note added to the title or other bibliographic
  information of a document by way of comment or explanation.
- An extract signifies one or more portions of a document selected to
  represent the whole.
- A summary is a restatement within a document (usually at the end) of
  its salient findings and conclusions, and is intended to complete the
  orientation of a reader who has studied the preceding text.

Because other vital portions of the document (for example, purpose,
methods) are not usually condensed into this summary, the term should not
be used synonymously with abstract (that is, an abstract as defined above
should not be called a summary).

A well-prepared abstract enables readers to identify the basic context of a
document quickly and accurately, to determine its relevance to their interests,
and thus to decide whether they need to read the document in its entirety.
Readers for whom the document is of fringe interest often obtain enough
information from the abstract to make their reading of the whole document
unnecessary. Therefore, every primary document should include a good
abstract. Secondary publications and services that provide bibliographic
citations of pertinent documents should also include good abstracts if at all
possible.

Completeness and accuracy
For most papers and portions of monographs, an abstract of fewer than
250 words will be adequate. For short communications, fewer than 100
words should suffice. Editorials and Letters to the Editor often will require
only a single-sentence abstract. For long documents such as reports and
theses, an abstract generally should not exceed 500 words and preferably
should appear on a single page.

Begin the abstract with a topic sentence that is a central statement
of the document’s major thesis, but avoid repeating the words of the
document’s title if that is nearby.

In abstracts specifically written or modified for secondary use, state the
type of the document early in the abstract when this is not evident from the
title or publisher of the document or will not be clear from the remainder of the
abstract. Explain either the author’s treatment of the subject or the nature of
the document (for example, theoretical treatment, case history, state-of-the-
art report, historical review, report of original research, Letter to the Editor,
literature survey).

Write a short abstract as a single, unified paragraph, but use more
than one paragraph for long abstracts (for example, those in reports and
theses).

Write the abstract in complete sentences, and use transitional
words and phrases for coherence.

Avoid unfamiliar terms, acronyms, abbreviations, or symbols; or
define them the first time they occur in the abstract.

An excerpt from:
Cochran, Wendell. 1984. Geowriting: a guide to writing, editing, and