## Abstracts –

# From St. Cloud State University

## What this handout is about

This handout provides definitions and examples of the two main types of abstracts: descriptive and informative. It also provides guidelines for constructing an abstract and general tips for you to keep in mind when drafting. Finally, it includes a few examples of abstracts broken down to isolate their component parts.

### What is an abstract?

An abstract is a self-contained, short, and powerful statement that describes a larger work. Components vary according to discipline; an abstract of a social science or scientific work may contain the scope, purpose, results, and contents of the work. An abstract of a humanities work may contain the thesis, background, and conclusion of the larger work. An abstract is not a review, nor does it evaluate the work being abstracted. While it contains key words found in the larger work, the abstract is an original document rather than an excerpted passage.

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## Why write an abstract?

You may write an abstract various reasons. The two most important are selection and indexing. Abstracts allow readers who may be interested in the longer work to quickly decide whether it is worth their time to read it. Also, many online databases use abstracts to index larger works. Therefore, abstracts should contain keywords and phrases that allow for easy searching.

#### Selection

Say you are beginning a research project on how Brazilian newspapers helped Brazil's ultraliberal president Luiz Ignácio da Silva wrest power from the traditional, conservative power base. A good first place to start your research is to search Dissertation Abstracts International for all dissertations that deal with the interaction between newspapers and politics. "Newspapers and politics" returned 569 hits. A more selective search of "newspapers and Brazil" returned 22 hits. That is still a fair number of dissertations. Titles can sometimes help winnow the field, but many titles are not very descriptive. For example, one dissertation is titled "Rhetoric and Riot in Rio de Janeiro." It is unclear from the title what this dissertation has to do newspapers in Brazil. One option would be to download or order the entire dissertation on the chance that it might speak specifically to the topic. A better option is to read the abstract. In this case, the abstract reveals the main focus of the dissertation:

This dissertation examines the role of newspaper editors in the political turmoil and strife that characterized late First Empire Rio de Janeiro (1827-1831). Newspaper editors and their journals helped change the political culture of late First Empire Rio de Janeiro by involving the people in the discussion of state. This change in political culture is apparent in Emperor Pedro I's gradual loss of control over the mechanisms of power. As the newspapers became more numerous and powerful, the Emperor lost his legitimacy in the eyes of the people. To explore the role of the newspapers in the political events of the late First Empire, this dissertation analyzes all available newspapers published in Rio de Janeiro from 1827 to 1831. Newspapers and their editors were leading forces in the effort to remove power from the hands of the ruling elite and place it under the control of the people. In the process, newspapers helped change how politics operated in the constitutional monarchy of Brazil.

From this abstract you now know that although the dissertation has nothing to do with modern Brazilian politics, it does cover the role of newspapers in changing traditional mechanisms of power. After reading the abstract, you can make an informed judgment about whether the dissertation would be worthwhile to read.

### **Indexing**

Besides selection, the other main purpose of the abstract is for indexing. Most article databases in the online catalog of the library enable you to search by abstracts. This allows for quick retrieval by users and limits the extraneous items recalled by a "full-text" search. However, for an abstract to be useful in an online retrieval system it must incorporate the key terms that a potential researcher would use to search. For example, if you search Dissertation Abstracts International, using the keywords "France" "revolution" and "politics," the search engine searched through all the abstracts in the database that included those three words. Without an abstract, the search engine would be forced to only search titles, which, as we have seen, may not be fruitful, or else search the full text. I would bet that a lot more than 60 dissertations have been written with those three words somewhere in the body of the entire work. By incorporating keywords into the abstract, the author emphasizes the central topics of the work and gives prospective readers enough information to make an informed judgment about the applicability of the work.

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## When do people write abstracts?

- when submitting articles to journals, especially online journals
- when applying for research grants
- when writing a book proposal
- when completing the Ph.D. dissertation or MA thesis
- when writing a proposal for a conference paper
- when writing a proposal for a book chapter

Most of the time the author of the entire work (or prospective work) writes the abstract. However, there are professional abstracting services that hire writers to draft abstracts of other people's work. In a work with multiple authors, the first author usually writes the abstract.

Undergraduates, most often in seminar-style classes, are sometimes asked to draft abstracts of books/articles for classmates who have not read the larger work.

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## **Types of abstracts**

There are two types of abstracts: **descriptive** and **informative**. They have different aims, so as a consequence they have different components and styles. There is also a third type called **critical**, but it is rarely used. If you want to find out more about writing a critique or a review of a work, see the UNC Writing Center handout on <u>writing a review</u>. If you are unsure of which type of abstract you should write, ask your instructor if it is for a class, or read other abstracts in your field or in the journal where you are submitting your article.

### **Descriptive abstracts**

A descriptive abstract indicates the type of information found in the work. It makes no judgments about the work, nor does it provide results or conclusions of the research. It does incorporate key words found in the text and may include the purpose, methods, and scope of the research. Essentially, the descriptive abstract describes the work being abstracted. Some people consider it an outline of the work, rather than a summary. Descriptive abstracts are usually very short—100 words or less.

#### **Informative abstracts**

The majority of abstracts are informative. While they still do not critique or evaluate a work, they do more than describe it. A good informative abstract acts as a surrogate for the work itself. That is, the writer presents and explains all the main arguments and the important results and evidence in the complete article/paper/book. An informative abstract includes the information that can be found in a descriptive abstract (purpose, methods, scope) but also includes the results and conclusions of the research and the recommendations of the author. The length varies according to discipline, but an informative abstract is rarely more than 10% of the length of the entire work. In the case of a longer work, it may be much less.

Here are examples of a descriptive and an informative abstract of this handout:

"Abstracts," UNC-CH Writing Center, <a href="http://www.unc.edu/depts/wcweb/handouts/abstracts.html">http://www.unc.edu/depts/wcweb/handouts/abstracts.html</a>

Descriptive abstract:

The two most common abstract types—descriptive and informative—are described and examples of each are provided.

Informative abstract:

Abstracts present the essential elements of a longer work in a short and powerful statement. The purpose of an abstract is to provide prospective readers the opportunity to judge the relevance of the longer work to their project. Abstracts also include the key terms found in the longer work and the purpose and methods of the research. Authors abstract various longer works, including book proposals, dissertations, online journal articles, and internal office communication. There are two main types of abstracts: descriptive and informative. A descriptive abstract briefly describes the longer work while an informative abstract presents all the main arguments and important results. This handout provides examples of various types of abstracts and instructions on how to construct one.

## Which type should I use?

Your best bet in this case is to ask your instructor or refer to the instructions provided by the publisher. You can also make a guess based on the length allowed; i.e., 100-120 words = descriptive; 250+ words = informative.

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## How do I write an abstract?

The format of your abstract will depend on the work being abstracted. An abstract of a scientific research paper will contain elements not found in an abstract of a literature article, and vice versa. However, all abstracts share several mandatory components, and there are also some optional parts that you can decide to include or not. When preparing to draft your abstract, keep the following key process elements in mind:

#### **Key process elements:**

- 1. Reason for writing:
  - What is the importance of the research? Why would a reader be interested in the larger work?
- 2. Problem:
  - What problem does this work attempt to solve? What is the scope of the project? What is the main argument/thesis/claim?
- 3. *Methodology*:
  - An abstract of a scientific work may include specific models or approaches used in the larger study. Other abstracts may describe the types of evidence used in the research.
- 4. Results:
  - Again, an abstract of a scientific work may include specific data that indicates the results of the project. Other abstracts may discuss the findings in a more general way.
- 5. *Implications*:
  - What changes should be implemented as a result of the findings of the work? How does this work add to the body of knowledge on the topic?

(This list of element is adapted with permission from Phil Koopman, "How to Write an Abstract," <a href="http://www.ece.cmu.edu/~koopman/essays/abstract.html">http://www.ece.cmu.edu/~koopman/essays/abstract.html</a>.)

#### All abstracts include:

- 1. The full citation of the source preceding the abstract.
- 2. The most important information first.
- 3. The same level of language found in the original, including technical language.
- 4. Key words and phrases that quickly identify the content and focus of the work.
- 5. Clear, concise, and powerful language.

#### **Abstracts may include:**

- 1. The thesis of the work in the first sentence.
- 2. The background that places the work in the larger body of literature.
- 3. The same chronological structure of the original work.

#### How not to write a abstract:

- 1. Do not refer extensively to other works.
- 2. Do not add information not contained in the original work.
- 3. Do not define terms.

## If you are abstracting your own writing

When abstracting your own work it may be difficult to condense a piece of writing that you agonized over for weeks (or months, or even years) into a 250-word statement. There are some tricks that you could use to make it easier, however.

#### Reverse outlining:

This technique is commonly used when you are having trouble organizing your own writing. The process involves writing down the one main idea that is in each paragraph on a separate piece of paper. For the purposes of writing an abstract, try grouping the main ideas of each section of the paper into a single sentence. For a scientific paper, you may have sections titled Purpose, Methods, Results, and Discussion. Each one of these sections will be longer than one paragraph, but they are grouped around a central idea. Use reverse outlining to discover the several ideas in each section and then distill them into one statement.

#### *Cut and paste:*

To create a **first draft** of an abstract of your own work you can read through the entire paper and cut and paste sentences that particularly capture key passages. This technique is useful for social science research with findings that cannot be encapsulated by neat numbers or concrete results. A well-written humanities draft will have a clear and direct thesis statement and informative topic sentences for paragraphs or sections. Isolate these sentences in a separate document and work on revising these disparate sentences into a unified paragraph.

### If you are abstracting someone else's writing

When abstracting something you have not written you do not have the luxury of cutting and pasting. Instead, it is up to you to divine what a prospective reader would want to know about the work. There are a few techniques that will help you in this process:

*Identify key terms:* 

Search through the entire document for key terms that identify the purpose, scope, and methods of the work. Pay close attention to the Introduction (or Purpose) and the Conclusion (or Discussion). These sections should contain all the main ideas and key terms in the paper. When writing the abstract be sure to incorporate the key terms.

*Highlight key phrases and sentences:* 

Instead of cutting and pasting the actual words, try highlighting sentences or phrases that appear to be central to the work. Then, in a separate document, re-write the sentences and phrases in your own words.

Don't look back:

After reading the entire work, put it aside and write a paragraph about the work without referring to it. In the first draft you may not remember all the key terms or the results, but you will remember what the main point of the work was. Remember not to include any information you did not get from the work being abstracted.

## Revise, revise, revise

No matter what type of abstract you are writing, or whether you are abstracting your own work or someone else's, the most important step in writing an abstract is to revise early and often. When revising, delete all extraneous words and incorporate meaningful and powerful words. The idea is to be as clear and complete as possible in the shortest amount of space. The Word Count feature of MS Word can help you keep track of how long your abstract is and help you hit your target length.

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## **Example 1: Humanities abstract**

Kenneth Tait Andrews, "'Freedom is a constant struggle': The dynamics and consequences of the Mississippi Civil Rights Movement, 1960-1984" Ph.D. State University of New York at Stony Brook, 1997 DAI-A 59/02, p. 620, Aug 1998

This dissertation examines the impacts of social movements through a multi-layered study of the Mississippi Civil Rights Movement from its peak in the early 1960s through the early 1980s. By examining this historically important case, I clarify the process by which movements transform social structures and the constraints' movements face when they try to do so. The time period

studied in this dissertation includes the expansion of voting rights and gains in black political power, the desegregation of public schools and the emergence of white-flight academies, and the rise and fall of federal anti-poverty programs. I use two major research strategies: (1) a quantitative analysis of county-level data and (2) three case studies. Data have been collected from archives, interviews, newspapers and published reports. This dissertation challenges the argument that movements are inconsequential. Indeed, some view federal agencies, courts, political parties, or economic elites as the agents driving institutional change. Typically these groups acted in response to movement demands and the leverage brought to bear by the civil rights movement. The Mississippi movement attempted to forge independent structures for sustaining challenges to local inequities and injustices. By propelling change in an array of local institutions, movement infrastructures had an enduring legacy in Mississippi.

Now let's break down this abstract into its component parts to see how the author has distilled his entire dissertation into a ~200 word abstract.

#### What the dissertation does

This dissertation examines the impacts of social movements through a multi-layered study of the Mississippi Civil Rights Movement from its peak in the early 1960s through the early 1980s. By examining this historically important case, I clarify the process by which movements transform social structures and the constraints' movements face when they try to do so.

#### How the dissertation does it

The time period studied in this dissertation includes the expansion of voting rights and gains in black political power, the desegregation of public schools and the emergence of white-flight academies, and the rise and fall of federal anti-poverty programs. I use two major research strategies: (1) a quantitative analysis of county-level data and (2) three case studies.

#### What materials are used

Data have been collected from archives, interviews, newspapers, and published reports.

#### Conclusion

This dissertation challenges the argument that movements are inconsequential. Indeed, some view federal agencies, courts, political parties, or economic elites as the agents driving institutional change. Typically these groups acted in response to movement demands and the leverage brought to bear by the civil rights movement. The Mississippi movement attempted to forge independent structures for sustaining challenges to local inequities and injustices. By propelling change in an array of local institutions, movement infrastructures had an enduring legacy in Mississippi.

#### **Keywords**

Civil Rights Movement Mississippi voting rights desegregation

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## **Example 2: Science abstract**

Luis Lehner, "Gravitational radiation from black hole spacetimes" Ph.D. University of Pittsburgh, 1998 DAI-B 59/06, p. 2797, Dec 1998

The problem of detecting gravitational radiation is receiving considerable attention with the construction of new detectors in the United States, Europe and Japan. The theoretical modeling of the wave forms that would be produced in particular systems will expedite the search and analysis of the detected signals. The characteristic formulation of GR is implemented to obtain an algorithm capable of evolving black holes in 3D asymptotically flat spacetimes. Using compactification techniques, future null infinity is included in the evolved region, which enables the unambiguous calculation of the radiation produced by some compact source. A module to calculate the waveforms is constructed and included in the evolution algorithm. This code is shown to be second-order convergent and to handle highly non-linear spacetimes. In particular, we have shown that the code can handle spacetimes whose radiation is equivalent to a galaxy converting its whole mass into gravitational radiation in one second. We further use the characteristic formulation to treat the region close to the singularity in black hole spacetimes. The code carefully excises a region surrounding the singularity and accurately evolves generic black hole spacetimes with apparently unlimited stability.

This science abstract covers much of the same ground as the humanities one, but it asks slightly different questions.

## Why do this study

The problem of detecting gravitational radiation is receiving considerable attention with the construction of new detectors in the United States, Europe and Japan. The theoretical modeling of the wave forms that would be produced in particular systems will expedite the search and analysis of the detected signals.

## What the study does

The characteristic formulation of GR is implemented to obtain an algorithm capable of evolving black holes in 3D asymptotically flat spacetimes. Using compactification techniques, future null infinity is included in the evolved region, which enables the unambiguous calculation of the radiation produced by some compact source. A module to calculate the waveforms is constructed and included in the evolution algorithm.

#### **Results**

This code is shown to be second-order convergent and to handle highly non-linear spacetimes. In particular, we have shown that the code can handle spacetimes whose radiation is equivalent to a

galaxy converting its whole mass into gravitational radiation in one second. We further use the characteristic formulation to treat the region close to the singularity in black hole spacetimes. The code carefully excises a region surrounding the singularity and accurately evolves generic black hole spacetimes with apparently unlimited stability.

#### **Keywords**

gravitational radiation (GR) spacetimes black holes

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## Works consulted

We consulted these works while writing the original version of this handout. This is not a comprehensive list of resources on the handout's topic, and we encourage you to do your own research to find the latest publications on this topic. Please do not use this list as a model for the format of your own reference list, as it may not match the citation style you are using. For guidance on formatting citations, please see the <u>UNC Libraries citation tutorial</u>.

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