Berelson provided a classic definition of content analysis as a research technique for the objective, systematic, and quantitative description of the manifest content of communication.\(^1\) Ole Holsti (1961) defined content analysis as “any technique for making inferences by objectively and systematically identifying specified characteristics of messages.”

The key to understanding content analysis and performing it competently lies in understanding the meaning of objective, systematic, quantitative, and manifest content.

Objectivity is achieved by having the categories of analysis defined so precisely that different persons can apply them to the same content and get the same results. If content analysis were subjective instead of objective, each person would have his own content analysis. That it is objective means that the results depend upon the procedure and not the analyst.

Systematic means, first, that a set procedure is applied in the same way to all the content being analyzed. Second, it means that categories are set up so that all relevant content is analyzed. Finally, it means that the analyses are designed to secure data relevant to a research question or hypothesis.

Quantitative means simply the recording of numerical values or the frequencies with which the various defined types of content occur.

Manifest content means the apparent content, which means that content must be coded as it appears rather than as the content analyst feels it is intended.

**Content analysis procedure**

1. Determine the universe of the content to be analyzed (newspapers, books, magazines, letters, radio scripts, radio tapes, comics, film, video tapes, songs, etc.).

2. Obtain the sample to be analyzed.

3. Code the data. Specify the unit of analysis. There are 5 major recording units of analysis:
   1) single word or symbol
   2) theme
   3) character
   4) sentence or paragraph
   5) item (entire article, etc.)

4. Decide on the system of enumeration or quantification. Methods of measurement include:
   1) space - measures column inches in print materials
   2) time - measures duration or length of time in audio and video materials, e.g., radio, TV, film, video tape

3) presence or absence of the content unit
4) frequency count in which every occurrence of the content units counted

### Content analysis research designs

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Types of comparisons</th>
<th>Questions</th>
<th>Research Problem</th>
</tr>
</thead>
</table>
| To describe characteristics of communication | Message source A  
1. Variable X across time  
2. Variable X across situations  
3. Variable X across audiences  
4. Variable X and Y within same universe of document | What? | To describe trends in communication  
To relate known characteristics of sources to the messages they produce  
To audit communication content against standards |
| | Message, source type A/ | How? | To analyze techniques of persuasion |
| | Message, source type B | | To analyze style |
| | Messages/standard | To whom? | To relate known characteristics of audience to messages produced for them  
To describe patterns of communication |
| | 1. A priori  
2. Content  
3. Noncontent | | To analyze psychological traits of individuals |
| To make inferences as to the antecedents of communication | Messages/nonsymbolic behavioral data  
1. Direct  
2. Indirect | Why? | To infer aspects of culture and culture change  
To provide legal evidence  
To secure political and military intelligence |
| | | | To answer questions of disputed authorship |
| To make inferences as to the effects of information | Sender messages/recipient | With what effect? | To measure readability  
To measure the flow of communication |
Uses/applications of content analysis

A survey of the field done by Berelson (1952) enumerates the following uses/applications of content analysis. The uses of content analysis are ordered under major headings which refer to (1) characteristics of communication content, (2) the producers or causes of content, and (3) the audiences and consequences of content.

A. Characteristics of content

1. To describe trends in communication content - Trend studies on the content of the communication media provide a valuable historical perspective against which the current content can be more fully understood.

2. To trace the development of scholarship - Content analysis or extensive reviews of the literature in various scholarly and scientific fields have been used to describe their development.

3. To disclose international differences in communication content - Systematic analysis can disclose differences in the focus of audiences of communications available in various countries.

4. To compare media or "levels" of communication - Different media and different "levels" of communication not only attract different audiences but they also treat the same topics in different ways. Example: A comparative analysis of a book or a comic serial and its film translation.

5. To audit communication content against objectives - Every communication outlet has an objective or set of objectives, whether implicit or explicit. One measure of the quality of content is the extent to which it faithfully expresses such objectives.

6. To construct and apply communication standards - During the past years, there has been considerable debate on the standards of performance of the communication media.

7. To aid in technical research operations - In this application, the function of content analysis has been used, for instance, in the coding of qualitative materials secured through sample surveys or experimental methods.

8. To expose propaganda techniques - A majority of content studies can be considered propaganda analysis, if by propaganda is meant the deliberate attempt to influence attitudes or behavior on controversial issues.

9. To measure the "readability" of communication materials - What are the concrete factors that distinguish the easy book from the hard book? What elements in the communication content make it easy or hard to read and comprehend?

10. To discover stylistic features - The problems of literary and oratorical styles have attracted students since ancient times, and countless volumes have been written about them.

B. Producers or causes of content
11. **To identify the intentions and other characteristics of the communicators** - This has been a major use of content analysis. The basic logic of this application of content analysis is this: The content has such-and-such characteristics; therefore the communicators have such-and-such intentions.

12. **To determine the psychological state of persons and groups** - A basis for inferences dealing with the psychological state of individuals and groups is provided by analysis of materials produced by persons about whom inferences are drawn. This involves the analyses of the social work or the therapeutic interview, or personality tests, or fictional creations, or of letters, diaries, or other personal documents.

13. **To detect the existence of propaganda (primarily for legal purposes)** - This concerns comparison of content under study with that of other content explicitly identified with a certain propaganda position, or with explicitly formulated standards. Example: A study of NPA or CPP literature against standard communist literature.

14. **To secure political and military intelligence** - This concerns the questions: What is the foreign policy of a particular nation as articulated in its communication media? How is the enemy reacting to our propaganda? Example: Media imperialism in Philippine television.

C. **Audience and consequences of content**

15. **To reflect attitudes, interests, and values (cultural patterns) of population groups** - Here, cultural patterns are derived from analysis of communication widely distributed in the community, as a kind of consumption habit study. Example: Attitudes toward family life as reflected in local magazines.

16. **To reveal the focus of attention** - Content analysis has been used to describe in a systematic fashion the focus of a attention of various groups of people on different subjects, or the subject matter distribution of what appeared in the selected media of communication.

17. **To describe attitudinal and behavioral responses to communications** - Under certain conditions, content analysis can contribute to the investigation of effects. Examples: Effect of TV advertisements on buying behavior, effects of TV violence on children.

**Methodological concerns in content analysis**

Words, statements (theme/assertion), sentences, paragraphs, or entire articles may be used as units of content analysis. What to use must be related to the purpose of the study.

1. **Word**. The word may be used as the unit of analysis if the researcher's concern, for example, is with whether Aquino or Marcos received more favorable coverage by Asian newspapers. In this case, he probably would want to use words. Most stories about these arch-rivals would contain both favorable and unfavorable references seen in words used in news and/or feature stories, like "dictator" for Marcos and "martyr" for Aquino.
2. **Theme.** An assertion about a subject matter may be used as the unit of analysis as in Nicanor Tiongson's study of four Philippine values in the Filipino film. Tiongson studied a number of Filipino films using as basis these four themes or assertions:

   a. "Ang maputi ay maganda."
   b. "Masaya ang may palabas."
   c. "Mabuti ang naaapi."
   d. "Maganda pa ang buhay."

   The theme is the most useful unit of content analysis, particularly for the study of the effects of communications upon public opinion, because it takes the form in which issues and attitudes are usually discussed. But it is at the same time among the most difficult units of analysis from the standpoint of reliability.

   As Tiongson pointed out in his study, these themes stem from a colonial past and continue to be reinforced in a repressive society that was the Philippines at the time he did the study.

3. **Character.** Use of the fictional or historical character as a unit is appropriate in analysis of stories, drama, and biographical sketches. An entire story or sketch may provide the basis for specific classifications: education, economic status, religion, race, nationality.

4. **Item.** A book, a magazine article, a story, a speech, a radio program, a letter, a news story, an editorial, or any other self-contained expression would constitute an item.

B. **Category construction**

Content analysis stands or falls by its categories. The content analyst may devise his own categories or use an existing set already tested in a previous study. In creating a set of categories, the researcher must keep three things in mind:

1. Categories must be pertinent to the objectives of the study.
2. Categories should be functional.
3. The system of categories must be manageable.

**Suggested Content Analysis Projects**

To apply the content analysis procedure suggested by Berelson, students can undertake any of these suggested projects:

**Content analysis of print materials**

Conduct a content analysis of a national newspaper or weekly magazine of your choice which are available at the Serials Section of your university library. Analyze the content of any of the following (Choose only one): Headline stories for 2 weeks based on your constructed calendar or comic strips by Filipino cartoonists or any other relevant topic.

1. Pick a national newspaper of your choice.
2. Take a random sample of issues of the newspaper of your choice, representing 50% of one month’s issues (15 issues); indicate how you selected your sample and show your constructed calendar.

3. Categorize content of all the headline stories (politics, economics, agriculture, finance, peace and order, foreign affairs, etc.)

4. Determine the space allocation by measuring the number of column inches of stories and cuts (photographs, sketches).

5. Develop your own format for recording and reporting your data.

6. Write up your results

**Sample content analysis tables**

Table 1. Classification of headline stories according to content.

<table>
<thead>
<tr>
<th>Content</th>
<th>Col. in. or col. cm.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Politics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics/Finance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peace and order</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign affairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Content analysis of broadcast materials**

Do a content analysis of the programming of your favorite radio station with a news-music format.

1. Present a daily program schedule
   - classify radio programs according to:
     1.1 type (news, music, commentary, etc.)
     1.2 proportion of development content to other types of content, e.g., entertainment
     1.3 primary audience of each program
     1.4 total program duration (in min/week) for each audience type

**Sample content analysis tables**

Table 1. Types of radio programs broadcast over radio station ______.

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>News</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drama</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Total duration of radio programs for each audience type.

<table>
<thead>
<tr>
<th>Audience Type</th>
<th>Duration</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General public</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Proportion of development programs to other types of programs.

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Duration</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entertainment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>