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CONTENT ANALYSIS—A NEW EVIDENTIARY TECHNIQUE*

Content analysis has until recently been deemed a device of limited utility for the social scientist and of little value to the lawyer. But the technique has now been successfully applied to several phases of the law by lawyers and administrative officials. It has been used in wartime criminal sedition trials¹ to demonstrate that utterances by an accused publisher conformed to major axis propaganda themes. It was used in opposition to a petition for license renewal before the Federal Communications Commission wherein the United Auto Workers charged the licensee with employing commentators biased against the labor movement.² A limited form of analysis is in use today by the Commission in measuring station owners' conformity to "bluebook" standards.³ The most recent and most striking application of the device of content analysis occurred when the American Jewish Congress opposed an application for a frequency modulation (FM) broadcasting license made by the New York Daily News to the Federal Communications Commission. The Congress prepared a content analysis of the columns of the News which purported to demonstrate unfavorable bias and prejudice toward minorities on the part of the publisher. The creative imagination employed in this latest and most publicized content analysis suggests the possibility of wide use of the technique elsewhere in the law.

At the risk of garbling a definition by the use of an analogy, content analysis may be considered a sophisticated form of accounting. It may be applied to any series of communications whether assertive (direct expressions of opinion) or nonassertive ("fact" material) extending over a period of time or including a large quantity of material in the form of speeches, broadcasts, publications, movies, or psychoanalytical interviews. Whatever the analyst's study—be it of the treatment of alien groups in pulp magazine fiction, of newspaper attitudes toward a foreign power, or of types of seditious remarks in broadcasts—his technique is to separate the relevant from a huge mass of irrelevant material through rules of analysis that establish categories making possible objective selection.

* The assistance of Mr. Morris Janowitz in the preparation of this note is gratefully acknowledged.

² In re United Broadcasting Co. (WHKC), 10 F.C.C. 515 (1945).
³ Federal Communications Commission, Public Service Responsibilities of Broadcast Licensees (1946). Designated days' broadcasting logs are submitted by all stations so that the Commission may judge them for conformity to prescribed ratios between commercial programs and local live, sustaining, and public issue programs. Ibid., at 55.
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and classification of such material. Conclusions are drawn solely from the incidence of material within the categories. From the entries in such a group of "journal accounts," as it were, inferences may be made about the intent of the publisher and the response of the audience.⁴

In addition to the actual uses already pointed out, many other possible uses in the law for such an evidential device suggest themselves. If as a result of current hearings broadcasters are permitted to editorialize on condition that they allow reply time to those with opposing views, studies of content by interested groups are almost certain to be used to provide material for acquiring reply time or opposing license renewals of those who abuse such a privilege.⁵ The typical case of group defamation is a matter of innuendo and "slant" persisted in over a period of time by the publisher. Content analysis is the key to proof of guilt in such situations, since it can select and collate significant materials from an extended period of publication, the whole of which no judge or jury could peruse.⁶ It would not be surprising if the method comes to figure in current loyalty investigations, either to establish or rebut charges founded on activities susceptible to content analysis, ranging from newspapers through the movies to the most abstract art forms.

It is the purpose of this note to consider the relation of the scientific procedure of content analysis to the law of evidence in a manner that will emphasize the fact that the social scientist's search for validity, the expert judgment of administrative agencies, and the rules for admitting such evidence in courts of law are all based on an identical concern. This concern stems not so much from the novelty of the technique of content analysis as from the possibility of error arising out of the assumptions and subjective reactions and predispositions that figure in a determination of attitude or policy of a publisher or broadcaster via a study of his statements of "facts" and opinion.

The use of content analysis in the recent Federal Communications Commission litigation combined a high degree of ingenuity with some errors in technique, thereby affording an excellent example for study. It will be useful to state the case in some detail.

The News Syndicate Company, Inc., publisher of the New York Daily News, was one of seventeen competing applicants for five frequency modulation (FM) broadcasting channels in the New York metropolitan area who appeared before the Federal Communications Commission in a consolidated hearing. The American Jewish Congress prepared a qualitative and quantitative content analysis of selected issues of the News and secured the status of a public witness in the proceedings. The analysis was presented for the Commission's consideration on the

⁵ Chicago Tribune, Part i, p. 21, col. 1 (Feb. 1, 1948).
⁶ Riesman, Democracy and Defamation: Fair Game and Fair Comment II, 42 Col. L. Rev. 1282, 1307 (1942). It is reported that Dr. H. D. Lasswell plans a content analysis of decisions of justices of the Supreme Court of the United States.
theory that it showed bias and hostility toward Jews and Negroes arising from an editorial policy which, while perhaps not a "conscious and articulate master plan of propaganda" against those minorities, was a sufficient departure from accepted standards of fairness and on such a low level of social responsibility as to preclude the granting of a license to the News in an oligopolistic branch of the communications industry. A motion by the News to strike this evidence was at first granted and thereafter dismissed. The final decision admitted the evidence but found the analysis lacking in probative value and denied the News a license on other grounds.

The Congress presented two analyses, one "qualitative," one "quantitative." The qualitative analysis sought to "convey an image of the Daily News attitude toward the Jewish problem" through a selection of twenty-three Daily News stories, columns, and editorials published during the period 1938-46, a "homogeneous" period covering the war years following Munich. These articles were said to be illustrative of several basic propaganda techniques used to convey the impression that American Jews were a minority who refused to be assimilated and who had, through secret power and constant pressure, forced the United States into a war against Germany to punish the Nazi régime for mistreatment of German Jews. No attempt was made to evaluate the intensity of the bias and no similar analysis was made of favorable utterances toward racial minorities, on the theory that an equal or greater amount of good will material would be an ineffectual antidote for malicious insinuations.

A quantitative analysis and comparison was made of all news stories about Jews and Negroes in the general news columns of the five New York daily morning papers for six different months chosen at random. The analysis proceeded on three assumptions set forth by the Congress. First, that news may be classi-

9 WBNX Broadcasting Co. et al., Docket No. 6013, Decision, April 8, 1948. The decision of November 1947 was set aside because one of the Commissioners was disqualified. The rehearing enabled the American Jewish Congress to make further exceptions to the first memorandum opinion. Another writer suggests that the evidence rejected in the decision of November 1947 had "tangible, if hidden, results" in that the News in that decision was denied a license because of the monopolistic effect of joint newspaper-radio ownership, a characteristic that has been rarely determinative in picking the most worthy applicant. Radio Program Controls: A Network of Inadequacy, 57 Yale L.J. 275, 285 (1947). Other aspects of the decision of November 1947 are considered in a note in 96 U. of Pa. L. Rev. 563 (1948).
10 Among the techniques ascribed to the News were those of lie and retraction, elaborate reports of what others said, and a judicious mixture of favorable and unfavorable statements.
11 Docket No. 6175, Memorandum in the Nature of Proposed Findings 27, American Jewish Congress (1946). Among the more sensational stories were the Patton slapping incident and the rumor that the President had asked four Supreme Court justices to resign. The Congress brief also referred to such statements as, "Plenty of people are exercising their right to dislike Jews," and unnecessary identifying phrases such as "Sidney Hillman, the foreign-born ex-rabbinical student."
fied as favorable, unfavorable, or neutral not in terms of the analyst’s opinions but in terms of the “value judgments” of society, i.e., the probable community reaction to such material.1 Second, that a story about one individual, identified by race through color, description, or name, may be favorable or unfavorable to the entire ethnic group to which he belongs. Finally, that the total of such stories, in number, length, and ratios (accounting for differences in size of the newspapers studied) will reveal significant variations in policies of news selection among those journals.

The coder’s task in the quantitative analysis was to select items pertaining to Jews and Negroes, subject to several rules of exclusion,2 and thereafter place them in one of eight categories.3 The selection obtained was reviewed by a single expert4 who made the final judgment of the favorable or unfavorable nature of the statements and rejected neutral and irrelevant items. The mathematical results in number, length, and ratio of stories purported to show that the News was quantitatively less favorable toward minorities than the other papers.5

The News’s objections and counter-arguments were many. Those confined to the technique of content analysis contested both the underlying assumptions made and the accuracy of the analysis. The qualitative study was met by an argument in rebuttal of the inferences made from the twenty-three stories coupled with an assertion that the News was “an outstanding and outspoken advocate of racial and religious tolerance.” Objections to method pointed out the limited

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1 Ibid., at 52. The memorandum emphasized that the total figures and not the classification of individual stories were used to imply that the publisher was biased. Nor were the stories classified in terms of the event being favorable or not—i.e., a story about group persecution condemning the persecutors would be favorable to the persecuted.

2 Coders had some freedom of choice in that they were to select stories using the symbols “Jewish” or “Negro” or their equivalents, or stories or pictures that made clear that these groups were discussed. Obituaries were excluded from general news unless connection with the group was obvious from the headline, or from the text if the text exceeded five column inches in length. In all other stories Jews or Negroes had to be mentioned in the first two paragraphs to be coded. Proposed Findings of Fact, News Syndicate Co., Inc., App. V, Rules for Coding Procedure (1946).

3 Five categories of favorable news were created: 1) achievements of individuals, 2) political and community activities, 3) persecution and discrimination, 4) intergroup goodwill activities, 5) miscellaneous favorable. Three categories were unfavorable: 6) crime, 7) intergroup antagonism and clashes, 8) miscellaneous unfavorable. Quantitative Analysis, Exhibit 19, Section 12, Table 40 (1946).

4 The late Dr. Alexander H. Pekelis, New School for Social Research, New York City.

5 Quantitative Analysis, Exhibit 19, Section 12 (1946). Some of the more significant findings are presented. The number of favorable stories was: Daily News, 95; average of the other papers, 260. The number of unfavorable stories was: Daily News, 51; average of the other newspapers, 31 (Table 3). The ratio of inches of favorable and unfavorable material about Jews and Negroes to the newspapers’ total news coverage: favorable stories: Daily News, .0067; average of other papers, .0078; unfavorable stories: Daily News, .0028; average of other papers, .0028 (Table 15). The ratio of favorable and unfavorable news stories about Jews and Negroes in the same paper was: in the Daily News, 65% favorable to 35% unfavorable. The average of the other papers was 89% favorable to 11% unfavorable (Table 25). About 75% of the unfavorable material came from the “crime” category.
period covered, the small number of stories used, and the failure to analyze qualitatively favorable statements made by the *News*.

Objections made to the quantitative analysis were more sweeping. The *News* through cross examination and a survey of its own revealed errors and omissions; the Congress conceded these errors\(^7\) and prepared a second survey of the same material. Further, the *News* objected to the exclusion of sports and entertainment columns, to a comparison between tabloid and standard-sized newspapers, to the small amount of relevant material compared with the total content in inches, to the qualifications of the coder and "judge," and to the code rules as unfavorable to the *News* because of its format and condensed style.\(^8\)

The Commission issued two memorandum opinions on a motion to strike the evidence. In the first it granted the motion, saying that the qualitative study lacked probative value and the quantitative content analysis lacked evidentiary meaning.\(^9\) In the second, which followed a rehearing, it denied the motion and recognized the fact that a body of experts need not be insulated from evidence of doubtful value, since experts can accurately judge its worth.

When the final evaluation was made the evidence was found wanting. The qualitative analysis, according to the Commission, offered too sparse a selection of material to have probative value in demonstrating unfair treatment of minority groups in the *News*. The quantitative analysis had "technical deficiencies... so serious as to vitiate any real value the analysis might otherwise have had."\(^20\)

Some of the technical deficiencies noted in the first memorandum included the lack of an established standard of content for "unbiased" newspapers, the lack of an independent check of the favorable and unfavorable characterizations, and the use of personal and inexpert opinion in determining the reaction of a "decent American community" to the published material.\(^21\) Commissioner Durr insisted in both opinions that the evidence sufficed to establish the contentions of the Congress.

The final memorandum opinion on the motion to strike contains two distinct rulings. In unmistakable terms it states that content analysis is acceptable to the Commission as an evidential technique. This holding cannot be expanded to imply that content analysis would be acceptable to a judge and jury who do not have expert qualifications. A ruling on the technique at common law would

\(^7\) Docket No. 6175, Proposed Findings of Fact 32, News Syndicate Co., Inc. (1946), quoting transcript at 2778: "We admit that the first analysis was in error. That is why we had it done over."

\(^8\) Ibid., at 13. The News emphasized that the proportions of space it devoted to crime, sports, and entertainment differed from those of the standard-sized newspapers.


\(^20\) WBNX Broadcasting Co. et al., Docket No. 6013, Final Decision, (April 8, 1948).

\(^21\) WBNX Broadcasting Co. et al., Docket 6013, Memorandum Opinion (April 9, 1947), aff'd Nov. 4, 1947.
involve a discussion of problems of expert testimony, hearsay, and probative value.\textsuperscript{22}

Second, the Commission has announced that it may explore aspects of the past conduct of applicants which would cast light upon their social responsibility and ability to hold a position of trust. It may concern itself with the "character" of applicants as well as their technical qualifications. While not germane to the theme of this note, it may be stated in passing that the ruling does no violence to the pattern of development which the Communications Act's standard of "public interest, convenience and necessity" has assumed in twenty years of amplification by the Commission and the courts.\textsuperscript{23}

\textsuperscript{22} To be recognized at the bar a scientific discovery must cease to be a matter of dispute in its own field. Scientific Gadgets in the Law of Evidence, \textit{53} Harv. L. Rev. 285, n. 1 (1939); Morgan and Maguire, \textit{Cases on Evidence} 576, n. 8 (1942). An obvious corollary is that the expert who uses the device must be available for cross-examination to establish that he understood its theories and correctly applied its methods. Morgan, Hearsay and Non-hearsay, \textit{48} Harv. L. Rev. 1138, 1157 (1935). Next, it would seem that content analysis must have inherent scientific validity (the ability to determine a state of mind) and reliability (the ability to measure states of mind repeatedly and accurately) if it is to avoid classification as a form of hearsay, which is not to say that it thereby becomes inadmissible per se. "A comprehensive definition of hearsay would include... 2) all conduct of a person, verbal or non-verbal, not intended by him to operate as an assertion, when offered either to prove both his state of mind and the external event or condition which caused him to have that state of mind, or to prove that his state of mind was truly reflected by that conduct." Ibid., at 1144-45.

If it appears that the method involves judgments open to question, the fundamental problem of evidence emerges—is the material relevant, has it sufficient probative value? Rulings on such a question in courts of law are made subject to two considerations: 1) On the level of policy, matter is excluded that might cause undue prejudice, unfair surprise or confusion of mind. 1 Wigmore, Evidence 412, 640 (3d ed., 1940). 2) On the level of worth, the court sits as a preliminary tester who requires that in order to get to the jury the matter must have "a plus value... something more than a minimum of probative value" in demonstrating the advocate's assertions. Ibid., at 410, 516.

\textsuperscript{23} The standard, first stated in the Radio Act of 1927 and incorporated unchanged into the Communications Act of 1934, \textit{48 Stat.} 1064 (1934), \textit{47} U.S.C.A., c. 5 (Supp., 1947) was not explicitly defined by Congress. Compare the remarks of Senator Dill quoted in \textit{National Broadcasting Co. v. United States}, 319 U.S. 190, at 221 n. 5 (1943), with those of Senator White in \textit{T. P. Robinson, Radio Networks and the Federal Government} 94, 95 (1943). But it is clear that the powers assumed by the Commission in order to enforce a minimum of social responsibility upon those who use radio in the pursuit of gain have increased with the age and complexity of the industry.

In the first years of the Act, when one of several stations on the same frequency had to go, there was concern for "the public who are obliged to submit to whatever is sent out for their reception," \textit{United States v. American Bond and Mortgage Co.}, 31 F. 2d 448, 455 (D.C. Ill., 1929). In the cleanup campaign of the thirties when it became necessary to justify the elimination of racketeering stations, it was said that it was necessary "to consider the character and quality of the services rendered." \textit{KFKB Broadcasting Ass'n v. FCC}, 47 F. 2d 679, 672 (D.C., 1931). Authority to subpoena and conduct independent investigations was strengthened by court decision so that the agency "might more intelligently determine the question of public interest and convenience presented when such factors are present." \textit{FCC v. Stahlman}, 49 F. Supp. 338, 339 (D.C., 1942). The regulations governing chain broadcasting (47 C.F.R. 3.101-108) which brought about separation of the Red and Blue networks and curbed chain controls over their outlets were affirmed by the Supreme Court. \textit{National Broadcasting Company v. United States}, 319 U.S. 190 (1943). The famous assertion by Justice Frankfurter that the Communications Act "puts upon the Commission the burden of determining the composition of [broadcasting] traffic" (ibid., at 216) as well as technical, legal,
Although elementary studies of the amount of space allotted to various subjects in newspapers began in 1890, the present form of content analysis is an outgrowth of a technique of attitude testing devised by psychologists about twenty years ago. L. L. Thurstone and others became interested in measuring individual appraisals of objects, colors, ideas, and general notions of worth or attitude.\(^{24}\) Political scientists such as Quincy Wright adapted the idea to studies of national or group attitude.\(^{25}\) Finally, specialists in the field of opinion re-

and financial qualifications of broadcasters undoubtedly is the foundation upon which the latest burgeoning of Commission power is based. The “Bluebook” rules [Federal Communications Commission, Public Service Responsibilities of Broadcasters, 55 (1946)] require broadcasters to maintain a balance between local live, sustaining, and public service programs and network commercial programs.

In two situations analogous to the Daily News case the Commission has consistently denied licenses. A refusal to grant a permit to a publisher who had published libelous articles was framed in these terms: “[H]e has been a source of discord and dissension . . . inimical to the general welfare of the community.” In the Matter of Bellingham Publishing Co., 6 F.C.C. 37 (1938). Nor has the Commission granted licenses to those whose broadcasting activities would be for the most part devoted to advocacy of a minority point of view. “If one group or organization is entitled to a station facility for the dissemination of its principles, then other associations of equal magnitude would be entitled to station licenses on the same grounds. Obviously, there are not enough broadcasting channels. . . . “In the Matter of Young People’s Association for the Propagation of the Gospel, 6 F.C.C. 178, 181 (1938).

\(^{24}\) Thurstone’s method involves the construction of an attitude scale. A great number of opinions on a given problem, such as the church or prohibition, are gathered and submitted to three hundred judges who compare one statement with another (the method of paired comparisons) and arrange all in a continuum extending from the least favorable through the neutral to the most favorable. The distribution curve of the three hundred judgments of each opinion statement is plotted and, if the dispersion of judgments is not too broad because of ambiguity or irrelevance, each statement can be assigned a position in the attitude hierarchy. Groups of statements from the resulting scale may be selected to test various groups in society. Their approval of the propositions fixes their position on this standard of comparison. “The true allocation of an individual to a position on an attitude scale is an abstraction, just as the true length of a chalk line or the true temperature of a room. . . . We estimate the true length of a line, the true temperature of a room, by means of various indices and it is a commonplace in measurement that all indices do not agree exactly. In allocating an individual to a point on the attitude continuum we may use various indices, such as the opinions that he indorses, his overt acts, and his past history, and it is to be expected that discrepancies will appear as the true attitude of the individual is measured.” Thurstone, Attitudes Can Be Measured, 33 Am. J. of Soc. 529, 530 (1928).

\(^{25}\) “The method of paired comparisons is the most accurate, but it requires much labor, not only in making the judgments, but in the statistical analysis of the data when there are many attitude statements.” Russell and Wright, National Attitudes in the Far Eastern Controversy, 27 Am. Pol. Sci. Rev. 555, 572 (1933). For this reason Quincy Wright and his associates modified the Thurstonian technique in their studies of editorial statements in leading newspapers of given countries, which were made to ascertain attitudes of, say, the Japanese and Chinese toward each other during the Manchurian crisis or of the American people toward Spain prior to the Spanish-American War. Ibid.; Wright and Nelson, American Attitudes toward Japan and China, 1937–38, 3 Pub. Op. Qtrly. 46 (1939); Thompson, Quantitative Analysis of Newspaper Opinion Prior to the Spanish-American War, unpublished master’s thesis, Univ. of Chicago (1946). A small number of presumably competent judges studied selected statements and allocated them “to eleven piles representing equal appearing intervals of intensity of attitude.” Russell and Wright, supra, at 573. A mean intensity was determined and plotted for the period studied to indicate the degree of pro, anti, or neutral sentiment toward the situation at any given moment.
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search, especially Dr. H. D. Lasswell, who first used the term "content analysis," developed the present forms of content study.

Dr. Lasswell’s most noteworthy use of the method was with the Experimental Division of the Library of Congress For the Study of Wartime Communications, which monitored the whole communications industry and, through precise analysis of certain suspect publications, gathered evidence to aid in prosecuting the publishers for sedition. United States v. Pelley offers a clear-cut example of the successful use of content analysis in legal proceedings. A scale or list of major Axis propaganda themes was prepared after a study of enemy broadcasts and publications. Of 1,240 statements culled from Pelley’s newspaper 1,195 were in accord with these themes, down to similarity of phrasing in some instances. Other work of the Experimental Division included publication of a number of monographs devoted to aspects of the theory of content analysis.

With this background in mind the Daily News study may be used as a means of considering four general problems of content analysis that are of special relevance to its uses in the law: 1) Are the selected categories and general rules of coding furnished the coder, preliminary to the making of an analysis, of such a nature that they cannot be devoid of serious ambiguity and the possibility of subjective interpretation? 2) What amount of accuracy must be sacrificed in an effort to achieve significance in an analysis and, conversely, what amount of significance must be sacrificed in order to achieve accuracy? 3) How may the content analyst recognize and control the influence of his background and predispositions when he applies the rules of analysis to items found in the communications medium under scrutiny? 4) What amount of significant material must be found in a publication before valid conclusions may be drawn in terms of statistical standards of minimum quantity?


Footnotes infra contain citations to major articles on method and history. Smith, Lasswell, and Casey, Propaganda, Communication and Public Opinion (1946), and Propaganda and Promotional Activities (1933) offer the most extensive bibliography in this field. Additions to it are made in each edition of the Public Opinion Quarterly. A comprehensive bibliography devoted exclusively to content analysis may be found in Berelson and Lazarsfeld, The Analysis of Communication Content 137–49 (preliminary draft, mimeo, 1948).

Smith, Lasswell, and Casey, Propaganda, Communication and Public Opinion 75 (1946). "This evidence was receivable for a double purpose. It shed light on defendants' intentions. It also supplied evidence of the making of false reports or statements which gave the jury a basis for a verdict that defendants were 'interfering' with 'the operation or success' of the military forces of the United States." United States v. Pelley, 132 F. 2d 170, 178 (C.C.A. 7th, 1942).

The theme, "United States is weak," 317 statements in accord, 5 contra; "United States is corrupt," 279 accord, 29 contra. Each of the other themes emphasized the morally reprehensible conduct and nature of the Allies and the power and justice of the Axis position. Smith, Lasswell, and Casey, Propaganda, Communication and Public Opinion 75 (1946). "This evidence was receivable for a double purpose. It shed light on defendants' intentions. It also supplied evidence of the making of false reports or statements which gave the jury a basis for a verdict that defendants were 'interfering' with 'the operation or success' of the military forces of the United States." United States v. Pelley, 132 F. 2d 170, 178 (C.C.A. 7th, 1942).

Although an analyst's conclusions stem from a study of statements made over a long period of time or with great frequency, his task is analogous to that of a prosecutor proving a state of mind at the instant of the crime solely through assertive or nonassertive conduct, without benefit of examination of the actor. The conscientious scientist is deeply concerned over the fact that he measures only opinions and not actual attitudes and that, despite the most careful planning, his assumptions and rules of analysis can become a semantic quagmire in difficult situations.

The News brief offers many illustrations of this difficulty. Under the rules a Jewish surname sufficed to identify a news subject with the group. Three stories about a murder were handled in this fashion. The first was ignored because the name was misspelled, Gruenwald for Greenwald. So was the second because it was a story about a clemency appeal. The last story described the imposition of sentence and excoriated the clemency move as "mob action"; nonetheless the analyst's reaction was that the story reflected some doubt as to whether the man committed the crime, so it too was counted out.

In another instance two pages of pictures in the News of a battle between American Negro troops and Filipino guerillas emerge as an example of "inter-group antagonism and clashes," unfavorable category seven. The rule, excluding obituaries of less than five inches if their identification with Negro or Jewish groups was apparent only from the text, produced a News objection because scarcely any of its obituaries exceeded that length.

An actual story suggests an illustrative example of the more subtle problems raised by the rules and assumptions when a story is classified. Assume that the coder discovers a story, the substance of which is that X, a person of Jewish descent, identifiable as such by his name only, was arrested for the "fiendish" murder of his "beautiful" wife. This would be classified as an unfavorable story of crime in category six. The steps in the judging process are several. Every analyst considers content from three aspects: the causal condition (here the intent of the publisher), the characteristics of the published symbols themselves,

31 "Neither opinions nor overt acts constitute in any sense an infallible guide to the subjective inclinations and preferences that constitute attitude. Therefore, we must remain content to use opinions or other forms of action, merely as indices of attitude." Thurstone, Attitudes Can Be Measured, 33 Am. J. of Soc. 529, 532 (1928).


33 Ibid., at 42. Classification of these pictures and the story accompanying it in this manner accounted for one-third of the unfavorable items published by the News in category seven (see note 14 supra) and 150 out of 222 "unfavorable" inches in that category. Deletion of this story would have put the News on a par in category seven with the other papers studied.

34 Ibid., App. V, rule 2.

35 The Feldman murder case, ibid., at 48.

36 Note 14 supra.
and the consequence or response that the symbols evoke. 37 "Crime," then, was selected as a category because associating an individual member of a group with a criminal act reflects unfavorably upon the whole group. That being so, the presence of a large number of these stories in a publication is indicative of the publisher's state of mind. 38 The next step is to fill the category with examples of such stories. What, then, has been proved? As to the publisher's state of mind, no demonstration has been made of which of the aspects of the crime story, jointly or severally, influenced the city editor in deciding to run the story: the Jewish "angle," the sensational details, or the opportunity to spread many pictures of the murdered beauty on the front page. As to reader reaction, the assumption that readers make unfavorable inferences about races from such stories remains a subjective judgment unverified by studies, polls, or investigation of any sort. 39 The category tells us something of the theory of the Congress analysts but nothing of the attitude of publisher or reader. 40 Conversion of the results of this theory into any statistical grouping relating to the total volume of crime stories in the News or the incidence of similar stories in other New York papers will not explain why each story was published or verify the theory of reader reaction implicit in the category. 41 In short, each article makes necessary a separate and complex judging operation.

37 Leites and de Sola Pool, On Content Analysis 3, Experimental Division for the Study of Wartime Communications (Doc. no. 26, mimeo, 1942).

38 In technical terms, "crime" was chosen because it is a category in which there are united "significant similarities of intention and/or responses related to the symbol characteristics." Ibid., at 5.

39 "We do not need special information to tell us that most Americans who are loyal to their country want it to be treated with respect by people of other countries.... But for many investigations it is important to have rather special information about predispositions of the audience. Only a careful psychological investigation, for instance, can justify us in considering certain 'upper class' intonations of voice in a radio program as deprivational [diminishing the favorable personal estimate of the subject matter in the minds of the listeners] of an audience composed, for example, of middlewestern farmers." Smith, Lasswell, and Casey, Propaganda, Communication and Public Opinion 92 (1946).

40 Illustrative of the principle that a survey is characterized by the approach and interest of he who makes it is the following: "Thus it may be alleged that the 'utility' of a given commodity tends to covary with the amount of advertising given to it. In testing this hypothesis the economist would proceed by defining 'utility' in terms of alternative choices made on the market; the market analyst by defining 'utility' in terms of 'yes' responses to some such question as 'Do you prefer soap X to soap Y?'; whereas the content analyst would draw up a list of symbols which refer favorably and unfavorably to the given commodity, and define utility thereby. The results of the investigations proceeding from each of these definitions are valid or invalid in terms of the particular definition involved alone." Leites and de Sola Pool, op. cit. supra note 37, at 12.

41 The criticism made herein may be summarized as follows: "It may be added that if symbols [language or 'objective' statements] are classified according to the same intention or response to which the results of the classification are related, and if at both stages of the operation the same evidence of intention or response is used, then the conclusions are not only irrelevant to a theory of propaganda, but also circular." Ibid., at 6.
If one considers the application of the rules of coding as a search for significance, another problem is revealed. The experts concede that the subtle judgments needed to achieve significance in a study involve a sacrifice of reliability—the degree of accuracy of measurement determined by the consistency of results between one measurement and succeeding ones. Apparently the only aspect of content analysis approximating the ideal of objectivity is in the coder's act of discovering relevant items, assuming that his instructions are confined to a mechanical tabulation of symbol occurrence; i.e., he is to record the exact term specified in his instructions each time he finds it in the publication. Even that process can become a difficult valuing operation if the code directions are flexible and "common equivalents" or "inferences" may be tabulated. This is not to say that the moment that more than elementary tabulating is attempted reliability ceases.

The ability of coders and readers to do purely clerical work may be checked. Subdividing an analysis into categories, such as was done in this study, offers a quick means of comparing coders' results and their ability to follow directions. If several coders cover the same material, standard error can be determined. In this connection the News counter-analysis purported to add 464 stories overlooked by the Congress to the original total of 846, a clerical error in excess of the 15 per cent variation which, according to the News, the Congress stated to be standard.

A series of enlightened assumptions seems to be the limit of precision that the analysts can achieve in their own judging process which succeeds the coder's task. Psychologists point out the basic problems of any evaluating activity. Thurstone in his attitude studies, it has been noted, takes refuge in numbers, a minimum of three hundred judges being necessary to construct an attitude

42 "In general a recurring problem of content analysis is the proper balance to be struck between reliability and significance. We can be completely reliable about the frequency of occurrence of any selected word, but this may be of very trivial importance. On the other hand we may welcome 'insightful' remarks about the style or the 'propaganda intention' or the 'subtle implications' of a body of editorials and news articles, yet the task of pinning these expressions down to consistent observations may be exceedingly difficult. To some extent we must rely on the judgments expressed by experts like political scientists or historians who tell us that a certain trend is manifesting itself in a stream of communication." Geller, Kaplan, and Lasswell, The Differential Use of Flexible and Rigid Procedure of Content Analysis 1, 2, Experimental Division for the Study of Wartime Communications (mimeo, 1942).

43 Various accepted tests for clerical ability are available, including the Minnesota clerical test, University of Minnesota, and the Accounting Aptitude Worksample of the Human Engineering Laboratories. O'Connor, Unsolved Business Problems 30-46 (1940).

44 Leites and de Sola Pool, op. cit. supra note 37, at 23.

scale.\textsuperscript{47} In his original formulation of the law of comparative judgments he warns that his herd of judges will yield a statistically normal distribution of judgments about something only "if the group is not split in some curious way with prejudices for or against particular elements of the specimen."\textsuperscript{48} He further states that although it is known that men have attitudes creating a frame of mind, there is no way of knowing whether a judge in a generous mood will distribute his generosity among all shades of attitude expressed or only in the area in harmony with his views when he judges the statements submitted to him. Finally he notes that one must assume that the degree of excellence which an observer perceives in one of the specimens has no influence on the degree of excellence that he perceives in the succeeding specimens that are compared.\textsuperscript{49}

Most of the explanations for observed differences in judging the same material have been made in terms of the judges, rather than in terms of the material judged. One study suggests, "Among the factors to be taken into consideration in accounting for differences are . . . level of political interest and knowledge, general and special mental abilities; and these may be related to position in the social structure."\textsuperscript{50} Wright observes that attitudes lose the emotional aspects they possessed when nascent and become accepted as "facts" in the mind. "One's conception of the 'facts' influences profoundly one's judgment as to whether a statement is or is not an attitude statement and how it should be classified."\textsuperscript{51} The observation made in one study that a good deal of knowledge and inference goes into the act of distinguishing a "sarcastic" from a "serious" affirmation, or a "rhetorical" from a "genuine" question,\textsuperscript{52} applies with equal force to the effect of predispositions in interpreting the ambiguous or ostensibly pro-Jewish editorials in the Congress' qualitative analysis of the News. Except

\textsuperscript{47} Thurstone, op. cit. supra note 31, at 552.
\textsuperscript{49} Ibid., at 276. These observations are applicable in the Congress' analysis to the judgments made in selecting categories and to the whole of the qualitative analysis.
\textsuperscript{50} Geller, Kaplan, and Lasswell, op. cit. supra note 42, at 9. No material could be found indicating the ideal qualifications that a content analyst should possess. What level of social consciousness is desired? Should an advocate or a disinterested expert do the readings? Is training in logic, semantics, and psychology desirable? Estimates of public opinion by unskilled, skilled, and professional classes have been compared with Gallup poll results and suggest one method of approaching the problem. Meier and Lewinski, Occupational Variation in Judging Trends in Public Opinion, 2 Pub. Op. Qtrly. 442 (1938).
\textsuperscript{51} Wright and Nelson, op. cit. supra note 25, at 56. A strikingly similar analysis was made of the nature of Federal Communications Commission decisions by one of its members. "The determination of need is a subjective process. There is no yardstick which can be applied against any given set of statistics with the invariable result that the need for another broadcast station is or is not demonstrated. The best the Commission can do is to receive such testimony as is offered and announce its opinion as to the need. The opinion may be dignified by calling it a conclusion or finding of fact, but nevertheless it remains an opinion, a kind of enlightened and informed guess." In the Matter of Roderick, 3 F.C.C. 623 (1937), dissent of Commissioner Stewart.
\textsuperscript{52} Leites and de Sola Pool, op. cit. supra note 37, at 6.
for its description of patently anti-Jewish statements, the bulk of that study is identical with any brief at the stage where the fact situation is construed by means of a vigorous argument and judicious emphasis on favorable material to further one's cause.53

To achieve a meaningful content analysis an important judgment must be made concerning the point at which the quantity of assertive or nonassertive statements becomes significant. One authority notes that it is meaningless to say that a given paper refers twice as often to a given subject as does another journal when the total number of references is three. He then suggests that the basis of comparison be the "total number of words in the content described." This rests upon what he concedes to be the completely unverified assumption that "there is a constant relationship between the number of words and the magnitude . . . of meaning that they convey."54 Wright suggests that there is a point at which group attitude becomes so intense as to precipitate action.55 Another study points out that broad categories give a greater number of examples within the category and thus, from that standpoint, greater statistical validity.56 The gist of these observations seems to be that there is need for a determination of a minimum significant quantity of material in any analysis, whether it seeks to establish the publisher's state of mind or the effect upon the reader. In legal proceedings the decision maker, rather than the content analyst, must rule on this point. In such terms the Commission's rejection of the Congress' qualitative analysis as deficient in weight is justifiable in that twenty-three articles in eight years formed the basis for the argument; it might well have similarly considered the quantity factor in rejecting the quantitative analysis, since the significant matter in various categories often dropped to as low as one ten-thousandth of the total content of a given newspaper and never rose above one one-hundredth of such a total.57

It is true that the News's columnist, O'Donnell, and its editorial writers made some outrageously offensive statements that the Commission should have considered. The feeling that they engender might make one less critical of the quantity of material found, were it not for the fact that quantity does have significance in these terms: "Many suspect papers and radio stations were absolved (in wartime) from suspicion by the results obtained when issues and broadcasts were quantitatively analyzed. They were protected from the all too frequent practice of condemning an entire publication on the basis of a few colorful examples of bias in news handling and editorial content."58

53 One content study wherein different analysts evaluated assertions about war symbols concludes that the effect of personal bias is small because the amount of disagreement between judges was about the same in judging assertions about familiar (national) and unfamiliar (international) issues. Janis, Fadner, and Janowitz, The Reliability of a Content Analysis Technique, 7 Pub. Op. Qtrly. 293, 296 (1943).
55 2 Wright, A Study of War 1472 (1942); Thompson, op. cit. supra note 25, at 7.
56 Leites and de Sola Pool, op. cit. supra note 37, at 16. 57 Note 16 supra.
In assembling opinion material it has been found that the degree of analyst bias is most emphasized by coding according to article instead of paragraph, sentence, or word units except in the case of "objective" news stories, since they do not have degrees of opinion within the article. These studies yielded the further significant fact that matters of style and size require tailoring of one's analysis to the publication studied, which lends an element of validity to the News assertion that tabloid and standard-sized newspapers cannot be compared under identical rules.

Most of the "technical deficiencies" in the study presented by the American Jewish Congress were pointed out and used as illustrations in the foregoing discussion. In addition it should be noted that certain steps were not taken that certainly would have improved, if not saved, the Congress' case.

Given the same categories, a verbal analysis might have been done of a number of stories of each type which spelled out what the Congress deemed significant differences in treatment of the same news story or same editorial topic in the several papers. The result might have persuaded the Commission that the underlying assumptions were meaningful and more than personal opinion. Thereafter a collection of clippings of groups of related stories and tentative mathematical summaries presented for the Commission's own analysis in terms of the examples might have been accorded a favorable reception.

Although the survey mentions the possibility of neutral stories about minority groups, it does not develop its concept of neutrality or give any figures on neutral stories. Nor did it consider the ambivalent story, one containing both favorable and unfavorable elements. Obviously the Congress did not consider every item which it found to be either black or white and nothing else. It is impossible to ascertain what standards the analyst employed in making neutral rulings. Despite its insistence that it was not concerned with intensity of attitude, the Congress missed another opportunity to clarify its theories of analysis.

A convincing demonstration of the social irresponsibility of the publisher might have been made through an intensive study of O'Donnell's columns, in which most of the clearly anti-semitic material appeared. The pious assertion of publishers that their squads of columnists are emancipated souls hired to present all shades of opinion somehow does not ring true, especially on payday. There is a difference between minority baiting and fair comment that a responsible editor would be the first to recognize and conscientiously employ in editing his publication.

60 Leites and de Sola Pool, op. cit. supra note 37, at 16.
It must be emphasized that a significant residue remains in the Congress' brief even if one denies any evidential meaning on grounds of scientific unreliability to the quantitative analysis and suspends judgment or disagrees with the inferences drawn from the interpretation of ambiguous or ostensibly pro-Jewish statements in the qualitative analysis. Commissioner Durr's dissent made clear that the Congress study presented several statements made by the News that were shockingly unfair to persons of Jewish descent. Whether or not they were excesses of what is euphemistically termed "hairy-chested" journalism is beside the point. A propensity for intemperate utterances that rawhide a minority should suffice to exclude one from a field of other applicants for an FM outlet who are equally well qualified technically, legally, and financially. On second reading the gravamen of the plaints of the News seems not so much to be a defense of freedom of the press as a chagrined realization that they are damned by their own recorded utterances while the other sixteen applicants enjoy the benefit of the doubt. However small the number of such statements, they possess some probative value and, since they are subject to none of the criticisms raised about the rest of the material, might well have figured in the determination of those best fit to hold broadcasting licenses.

On the level of general criticism of content analysis, certain objections to its use in the law may be met by pointing out that if they are recognized and anticipated, they may be controlled. Errors in statistical method are not intrinsic to the technique. The influence of the personal qualifications of coders and judges upon a survey is not beyond the pale of scientific measurement and correction. It is true that the science is still in its infancy; its most ardent advocates employ it cautiously and concede that to proceed at all requires the making of a great many assumptions. But content analysis is unlike expert testimony founded on what judges consider to be the "occult arts" of ballistics, chemistry, and physiology. Its assumptions can be fairly tested by one accustomed to logical reasoning. Finally, judicial reaction to novelty will disappear with repeated use of the device. As the argument in the News case so well demonstrates, when a novel technique is used before a judging body it finds itself on trial, while the matter in issue which it seeks to convey is relegated to the status of a waif tugging at the judicial robes for a sign of recognition.

The fundamental problem facing a litigant who seeks to employ content analysis may be stated as follows: A study involving a preliminary original judgment by the advocate about the nature of the offense, in terms of publisher intent and reader response, presented to prove or merely give notice to bias, under the assumption that it has independent "scientific" validity, comes perilous-

63 Note 16 supra.

64 State v. Bohner, 210 Wis. 651, 659, 246 N.W. 314, 317 (1933) (lie detector); Scientific Gadgets in the Law of Evidence, 53 Harv. L. Rev. 285, 293 (1939). In the instant case 77 of 99 pages of the American Jewish Congress, proposed findings were devoted to defense of the method and 18 of 92 pages of text plus all 19 pages of appendices in the Daily News' proposed findings consisted of attack on and counter-analysis of the study.
ly close to what Bentham described as "dog law."65 The objection goes not to the degree of proof involved but to the usurpation of the role of decision maker through prejudgment of a major issue behind a façade of statistics. This is not to say that the advocate proceeds in bad faith; but as author and master of rules untried and devoid of the embellishments of precedent, his will be the only authoritative interpretation extant that can serve as a guide in their application. Whatever success the method has achieved has been in terms of a one-to-one matching of a given content to an unambiguous standard determined by extensive preliminary research. Thurstone measures attitude in terms of a carefully prepared continuum of significant opinions. Wright assumes the competence of his judges and is content with agreement among them. In the Pelley66 case the tabulations were matched against the well-nigh perfect standard of what the enemy was uttering. In its annual survey of station logs the Federal Communications Commission compares the programs broadcast with ideal ratios which it has announced.67

If some agreement about standards can be achieved, content analysis can bring to decision makers facts heretofore beyond their ken. In some types of private litigation, parties could agree in advance of trial to the rules for a content analysis and incidentally gain the additional benefits of eliminating loud protests about surprise and an atmosphere of unproductive hostility. More complex issues involving sanctions in the form of loss of broadcast licenses, mailing privileges, or damages in a civil action, could be served by content analysis if legislatures, with due regard for the constitutional questions involved, declared certain types of utterances contrary to the phase of public policy in issue. As judicial interpretation gave form and scope to such statutes, they would become the yardsticks of content analysis and make that technique an invaluable means of separating relevant matter from the voluminous and thus judicially unmanageable remainder.68

65 "When your dog does anything you want to break him of, you wait till he does it, and then beat him for it. This way you make laws for your dog; and this is the way the judges make law for you and me." Truth v. Ashhurst, in 5 Bentham, Works 235 (1843).

66 United States v. Pelley, 132 F. 2d 170 (C.C.A. 3d, 1940), cert. den. 318 U.S. 764 (1943). A further factor that facilitated the Pelley study is revealed in the court's observation, "We do not believe the utterances to have even a glimmer of ambiguity which might redeem their obvious connotation." Ibid., at 18r.


68 "I think that it goes near to the root of the matter [to say] that the cost and bother are endured because these elections and polls provide one way of arriving at 'value judgments'—one of the very few ways which are available in a world which offers no absolutes of good or bad. ... The quantitative or statistical method of arriving at value judgments is best exemplified, of course, in the Western democracies; but it is not a simple demonstration, because the influence of qualitative leadership is recognized also to be an essential part of the democratic process. ... But in the main, it must be conceded, the deference to public opinion which we are accustomed to observe in our public men stems from an honest distrust on their part of the unsupported value judgments of heroic individuals." Poole, Public Opinion and "Value Judgments," 3 Pub. Op. Qtrly. 371, 373, 374 (1939).