THE USE OF CITATIONS IN LITERARY RESEARCH: A PRELIMINARY CLASSIFICATION OF CITATION FUNCTIONS[1]

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Citation studies have been concerned primarily with the properties of cited works. The analysis of citation functions is undoubtedly more complex than this, but it can reveal information about research processes. A key problem in such an analysis is the design of categories to be used to classify citation functions. A few schemes have been created for the classification of citation functions in scientific publications. This article examines these schemes and considers differences in research methods between scientific and humanistic disciplines which might have an influence on citation practices. A scheme for the classification of citations in literary research is proposed as a preliminary model. Findings are presented from the results of the application of this scheme to a sample of publications in German literary research.

Since the pioneering work of Gross and Gross [2] in 1927, a number of citation analyses have been made. In these works, the word "citation" has been understood to mean "work cited," yet "citation" refers not only to the work cited but also to the action of citing.[2] Such actions are, like the object of the action, susceptible to analysis, but it is far less clear how we might go about analyzing them. The analysis of a cited work typically involves properties suggested by its bibliographic description—author, title, place, and date of publication—a description which is relatively standardized. In the analysis of the action of citing, however, no such convenient indicators exist to enable us to distinguish between different

categories of citation activity. Data about the motives, purposes, and functions of citations must be inferred from the context in which the citations appear. The relationship of the cited to citing work must be determined from clues given by the citing author. Although conventions exist for describing *what* is being cited, explicit guidelines as to when and why a citation is made are conspicuously lacking.[3]

Relatively few analyses of the process of citing have been undertaken. It is also true that the majority of citation analyses have dealt with the literature of the physical and social sciences. It may be assumed that citations (in both senses) in humanistic scholarship frequently have different aims from those in other areas of scholarly research. It is the function of this article to establish a set of categories for analyzing the use or function of citations in one branch of the humanities. These categories are used as the basis for studying the process of citing, not cited works. The emphasis shifts from *materials* used in scholarly research to the *use* of such materials, from *objects* employed as instruments of scholarly research to the *process* of scholarship itself.

In this paper, I first discuss some generally recognized functions of citations, which are important in the initial stage of the design of categories. Next, existing schemes which analyze citation functions are described. Since these schemes have been designed for analysis of scientific publications, I will explore the question of how differences between the methodologies of scientific and humanistic research may affect the characteristics of citation behavior. A scheme for the classification of citations in German literary research, a subject discipline which is part of humanistic scholarship, is presented.

The Meaning of Citing

Dictionary definitions of the activity of citing in the general sense include "to refer to or mention by way of example," "to mention for bravery," and "to summon to a court of justice." These definitions suggest some basic uses of citations in the more specific context of documenting a reference discussed in the citing text. In this documentary dimension of the citation, a means is provided for the interested reader to test the conclusions of the writer and to verify the source of a challengeable statement. As Louis Gottschalk suggests, the footnote thus takes the place of the summons to a witness in a court of law [5, p. 19].

3. Swanson [4, p. 146] suggests that the author make the nature of a citation relationship explicit by providing each reference with a brief description of its relation to the citing article.

A second basic function of citing is to acknowledge work previously done by others. Undoubtedly, the acknowledgment of previous research and the expression of intellectual indebtedness constitute major reasons for citing in scientific and, perhaps to a lesser extent, in other kinds of research. Weinstock explains that "scientific tradition requires that when a reputable scientist or technologist publishes an article, he should refer to earlier articles which relate to his theme. These references are supposed to identify those earlier researchers whose concepts, methods, apparatus, etc., inspired or were used by the author in developing his own article" [6, p. 19].

In both of the citation functions discussed above, what is cited can be assumed to relate in some intellectual way to the citing work. Thus, for example, one may "mention by way of example" work on a similar subject, or "refer to" work which provides a background for the topic discussed, or "mention for bravery" (that is, acknowledge) pioneering work on which the citing work was based or which provided a stimulus for an idea. Making citations serves the additional function of "providing the future investigators of related subjects with bibliographical leads" [5, p. 19]. In addition, Swanson recognizes that the "relevance bridge" constructed between citing and cited documents is not always topic- or subject-oriented: relevance can also be seen as "a creative, subjective mental act by the requester expressing whether a document fulfills whatever information need prompted his request" [4, p. 129].

Other reasons for citation have been suggested which are not likely to be readily accepted by the scholar: personal allegiances and organizational ambitions may lead scholars to cite the works of colleagues or superiors [7, pp. 179, 180, 182]. Citations may also be used by the author as "window dressing," with references to prestigious or arcane sources designed to impress the reader. In this article, while recognizing motivations for citation which are nonscholarly in nature, such as window dressing, I will be concerned either with ostensible reasons for citation or with reasons which can be adduced from the context of the citing work.

Previous Analyses of Citation Functions

Only a few studies have classified different types of citation usage, and these have been concerned with scientific disciplines. In devising a classification scheme for citations in literary research, lists of citation functions that have been devised for scientific scholarship were examined in order to determine if generic categories could be discerned which could be applied to research in general. One starting point was Weinstock's list of ostensible reasons for citations in scientific research [6,

p. 19]. Many of Weinstock's categories appeared to have a cross-disciplinary application and were analogous to those eventually developed for this study. For example, the function of acknowledgment of the work previously done by other scholars is recognizable in Weinstock's categories of "paying homage to pioneers," "giving credit for related work," and "identifying the original publications in which an idea or concept was discussed." The function of indicating bibliographical leads can be seen in his categories of "alerting researchers to forthcoming work" and "providing leads to poorly disseminated work."

Some of Weinstock's categories are clearly not directly applicable to humanistic research but might be considered analogous if viewed in a more general sense: "identifying methodology, equipment, etc.," "authenticating data and classes of fact—physical constants, etc." Though the humanist's "equipment" and "classes of fact" may differ considerably from those of the scientist, the processes of identifying methodology and authenticating data are, in fact, common to both areas of research.

Three studies were found which developed and applied classification schemes for citation functions. The earliest study (1965), by Lipetz [8], was primarily concerned with developing codes which not only would identify the relationships between citing and cited documents but also would provide a means for improving the selectivity of citation indexes. The precedent for Lipetz's study was Shepard's citation index of judicial decisions which informs the searcher, by means of a code, of the disposition of a cited legal decision—for example, whether it was affirmed, overruled, etc., by a later citing decision. Lipetz used Shepard "only as a suggestive guide," recognizing the differences in professional problems and working practices between scientists and lawyers. His citation relationships include a set of categories which "indicate a disposition relationship—what the citing publication has done about the cited publication." These categories are all expressed in terms of an action and retain the basic notion of Shepard's categories (for example, "accept," "reject") but modify them to suit scientific research: "Noted only; Distinguished; Reviewed or compared; Applied; Improved or modified; Replaced; Changed the precision (plus or minus); Questioned; Affirmed; Refuted" [8, p. 83].

Herlach's study created a classification scheme that describes and categorizes possible relationships between citing and cited papers [9]. Her interest is in associations between these categories of relationships and "mechanistically identifiable" links such as the multiple mention of a reference within the same paper. Her categories, in the form of descriptive statements, document in detail citation usages specifically related to the scientific research process.

In the third study, Magee analyzes citations to determine "what information scientists need, and more exactly, how they use the information they have found in . . . published sources" [10, p. 3]. Thus Magee's categories do not describe an explicit relationship between cited and citing documents but instead specify the use of each bit of information found in a cited source. This scheme, like Herlach's, was too specifically oriented to scientific research to be of value in the development of my own scheme.

Humanistic and Scientific Scholarship

A central assumption of this study of citation patterns in German literary research is that citations in published research reflect both the types of materials used in scholarship and the way in which these materials are used. Because of differences in their methodologies, one might expect that the kinds of works cited, as well as the kinds of uses to which these works are put, would vary from field to field. Empirical evidence, for example, while present, does not play as large a role in humanistic research as in the natural and social sciences; that is, it is not knowledge derived from empirical data on which the essential part of humanistic study scholarship is concentrated. While objectivity in *method* of investigation is recognized as a desirable attribute (as it is of scholarship in general), "objectivity" toward the *object* of study is neither required nor desirable in humanistic scholarship. Thus opinion, or the subjective views of other scholars, more than factual evidence, may be used by the humanist to support his argument.

While there are differences in goals and methods which distinguish humanistic from scientific scholarship, there are some aspects of scientific endeavor which are also characteristic of humanistic research. Methods borrowed from the sciences, however, one would assume to be primarily of auxiliary or "service" value and would be subordinate to the primary object of humanistic study.

Literary scholarship is one example of humanistic inquiry. There are some aspects of literary study which are scientific in that they depend upon "factual" evidence. Editions that try to establish a "correct" text, that is, one which is as close as possible to what the editor believes to be the author's final intention and which is essential to the literary scholar before he can begin an analysis of the work's artistic content, can involve the analysis of evidence of an empirical nature such as the watermark of paper or the age of printer's ink in order to establish the chronology of versions of a work. Here, the physical work itself would serve as empiri-

cal evidence from which one could then proceed to make "objective" statements as to the composition or content of a manuscript or edition. Other branches of literary study, often subsumed under the term "literary history," are concerned with the external circumstances of a work's creation, such as a biographical study of an author; the chronology of a work's creation, its sources and origins, its effect on later work, and its authenticity.

Citation in Science and the Humanities

While the sets of citation categories described earlier in this paper could serve as a basis or starting point for a classification applicable to scholarship in the humanities, they reflect, in varying degrees, scientific research. Are there, in fact, citation usages common to both literary and scientific research, and are there usages peculiar to literary research? It becomes apparent that there are some usages of citations which appear to be common to all disciplines—for example, the use of a citation to refer the reader to additional literature, to call attention to forthcoming works, and to document the state of present research. In scientific usage the number and variety of citations by which the scientist documents factual evidence are particularly noticeable. The categories of classification of citations developed by Magee [10] and Herlach [9] contain a large proportion of citations of this kind. As we have seen, the documentation of factual evidence has a counterpart in humanistic research, but the part played by factual evidence is far less important than in the sciences.

In creating for this study an initial scheme for the classification of citations for use in the humanities from the studies described above, I included relatively few categories for documenting factual evidence. Two important ones, however, were: (1) disposition of the evidence, that is, whether it was accepted or disputed; and (2) the two types of sources—primary and secondary—from which the factual evidence was drawn.

Nonempirical or "circumstantial" evidence—the use of opinions or ideas from which the scholar then makes statements that are not subject to empirical proof—can likewise come from both primary and secondary works. Evaluative statements may be ideas or opinions based either on the literary work itself or on the opinions of other scholars. A scholar reads a literary work to make statements concerning such matters as literary style, "meaning," and the like, and he may call upon the opinions of others for support; this serves to strengthen his argument, though it cannot add empirically determined evidence in support of it. The classification scheme here propounded includes this usage.

Scholarship in the humanities is to some extent cumulative, though not nearly to the same degree as in scientific scholarship. To indicate what is cumulative as represented in citation practice, I provide categories for citations which acknowledge the pioneering work of others or which show that the author has built upon the previous work of another scholar.

While the development of a classification scheme for citations in the humanities can make use of some of the general categories found in models developed for the sciences, there appears to be one major category for which there is no analog in science—the use of primary literature in which the printed work itself is the subject of the investigation rather than just a source of information about the subject—and it is precisely this kind of citation which is the most essential for many types of literary research.

A detailed scheme of classification of citations for German literary study was developed in an a priori way, and a pilot study was undertaken to test the reliability of the classification's categories. Five scholars in different areas of specialization in German literature were asked to use the scheme to classify citations in articles in their subject field. There was general agreement on the categorizations (average percentage of agreement—82 percent), but some problems were identified. Upon a reexamination of the scheme, a few similar categories were combined into single units. The final scheme, described below, is thus basically the same as that tested in the pilot study but more compactly organized.

A Citation Classification for Literary Research

The classification scheme developed for the analysis of citations in literary research is presented in outline form with definitions and examples. The scheme outlined organizes the citation usages into related groups. Three considerations govern the establishment of these groups: (1) whether a cited work is used as a primary or secondary source; (2) whether the work is used as a basis for a statement of fact or of opinion; and (3) where we are dealing with secondary works, whether the disposition of the cited work was positive or negative (Does the citing author agree or disagree with his source?).

A. Documentation of primary sources—references to literary texts, letters, etc.
   1. to support an opinion or factual statement on the specific literary author(s) or work(s) discussed in the citing work;
   2. to support an opinion outside the central topic of the citing work; or
   3. to support a factual statement outside the central topic of the citing work.

In the first broad set of categories, the citation identifies a primary source which is the basis of a statement made by the citing author. The set is further divided into citations to sources which either support a factual statement or which support an opinion. Example—statement of opinion: "Illustrations for my theory on Thomas Mann's narrative technique will be cited from *Der Zauberberg* [The Magic Mountain], (Frankfurt, 1956)."[4] Example—statement of fact: "Goethe's acquaintance with the count can be dated from about 1803, when mention of the count first occurs in his correspondence (see *Goethes Briefe* [Stuttgart, 1834])."

In considering whether a citation was to be categorized as a primary or as a secondary source, attention was paid to the function of the citation rather than to the nature of the cited work as a whole. Although primary sources are usually found in works in which primary material constitutes the major portion, it is not uncommon for primary material to be quoted extensively in works which are basically secondary in nature. A biography of an author may contain excerpts from works by that author, and these excerpts may be used as a source of primary material. On the other hand, an edition of an author's works may contain an introduction or scholarly commentary which is used as a source of secondary material. In this study, a citation referring to primary material occurring in a secondary work was still considered as documenting a primary source.

B. Documentation of secondary sources—references to previous scholarship
   1. independent of approval or disapproval of the citing author
      a) to acknowledge the pioneering work of other scholars;
      b) to indicate the state of present research, a range of opinions, or prevailing views on a topic; or
      c) to discuss the meaning of a term or refer to a work in which a given term or symbol first appears.

The second broad set of categories includes a number of citation usages which can be organized into subgroups both according to the way the citing author disposed of them and according to whether they are the basis for statements of fact or opinion. The first subgroup is made up of citations to sources which are independent of approval or disapproval of the citing author (B.1). Categories in this subgroup often occur in conjunction with categories which express approval or disapproval. In one category, the citing author explicitly acknowledges the pioneering work of another (B.1.*a*). This acknowledgment is independent of whether or not the citing author agrees with the earlier work. Example: "Brown's work, *Medieval Lyric and the Latin Tradition* (New York, 1923),

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4. All examples given are fictitious.

was the first to address the question of Latin influences upon Walther's lyric."

A second category in B.1 identifies sources of the views of other scholars in order to give an indication of prevailing views on a given topic, to show representative opinions, or to indicate a range of opinions (B.1.*b*). The citing author may agree or disagree with these views, which would result in the application of other appropriate citation categories as well. The distinguishing characteristic of this category is that the works cited are an indicator of existing scholarship. This category frequently occurs when the citing author either gives a brief history of the scholarship on a given topic or begins a discussion of a topic by describing what previous work has been done. Example: "Brown was not alone in his belief that the medieval lyric had its roots in Latin sources. Heinrich Schmidt (*Geschichte der mittelalterlichen Lyrik* [Zurich, 1893]), maintained this view as well, although the arguments against this influence (for example, Helmut Oldenburg, *Lyrik des deutschen Mittelalters* [Stuttgart, 1900]), held sway at the time."

In the third category (B.1.*c*), the citation identifies a source which discusses the meaning of a specific term used in the citing work, or refers to a work in which a given term or symbol first appears. This type of citation often occurs in scientific literature, and it was of interest to see if it occurred frequently in literary research as well. Example: "The term 'strophic dialogue' first appeared in reference to classical lyric and is explained in Horst Dietering's *Dialog im klassischen Lyrik* ([Frankfurt, 1952], pp. 214–16)."

B. 2. representing the approval of the cited scholar
    a) to support an opinion of the citing author;
    b) to support a factual statement of the citing author;
    c) to take an idea a step further; or
    d) to acknowledge intellectual indebtedness.

The next subgroup is comprised of citation of secondary sources representing approval. Again a distinction is made between fact and opinion. The first category in the subgroup B.2 identifies the source of an opinion, point of view, or expression which has been accepted and incorporated into an argument by the citing author (B.2.*a*). The sources cited are those which presumably support a statement made in the citing work; the opinion of someone else may be paraphrased or quoted in such a manner as to suggest that the author of the citing text is in agreement. Example: "Brown is undoubtedly correct when he states that the medieval lyric had its roots in the Latin tradition (*Medieval Lyric and the Latin Tradition* [New York, 1923])." Example: "It can certainly be said that the medieval lyric had its roots in the Latin tradition[1]." (Brown's work is then cited in footnote 1.)

The second category of subgroup B.2 identifies a source of factual information. Here, as in the preceding category, the citing author agrees with a statement in the cited work; but whereas in the previous category the statement agreed with is an opinion, in B.2.*b* the statement is in principle capable of proof or disproof. Generally, in the application of this category, statements giving biographical data or addressing questions on textual editions were considered as providing "factual" information (that is, information which may or may not be true and which is capable of proof or disproof, at least in principle), while value judgments and interpretations of the "meaning" of literary works were treated as "opinion." Example: "Williams demonstrated that the first edition of this poem was published in 1820 (see George Williams, *Goethes Lyrik* [London, 1935])."

Two further categories of approval (B.2.*c* and B.2.*d*) are those which always occur in conjunction with either of the categories of approval described above (B.2.*a* or B.2.*b*). In B.2.*c*, the citation identifies the source of an idea or methodology which has been accepted and taken a step further. The citing scholar either builds on an idea in the cited work or applies the idea to another problem. This category was applied only if the application relationship was explicitly stated. No attempt was made to infer such a relationship from the context. Example: "Brown's arguments by which he proposes that the medieval lyric was influenced by the Latin tradition (*Medieval Lyric and the Latin Tradition* [New York, 1923]) are of value not only for the study of lyric but for other medieval genres as well. In this paper I will apply Brown's approach to the courtly epic."

In B.2.*d* the citation explicitly acknowledges intellectual indebtedness to a cited work or states that the cited work has been of particular value. Example: "Brown's book on the origins of the medieval lyric (*Medieval Lyric and the Latin Tradition* [New York, 1923]) represents the soundest scholarship thus far on this topic, and my own survey of the medieval lyric is taken from Brown's research."

B. 3. representing the disapproval of the citing author
    a) to disagree with an opinion of the cited scholar,
    b) to disagree with a factual statement of the cited scholar, or
    c) by expressing a mixed opinion.

Group B.3, consisting of citations to secondary sources with which the citing author disagrees, is also divided according to fact and opinion. Citations in category B.3.*a* identify a source which adopts a different viewpoint from that of the citing work; the citing source finds fault with another's opinion. Example: "John Duncan's view that this poem evokes an aura of mysticism is essentially wrongheaded and unfounded ("Imagery and Imagination in Mörike's Lyric," *Modern Language* [April 1962], pp. 253–60)."

In B.3.*b*, the citation identifies a statement represented as fact with which the citing author disagrees. The citing author finds evidence to support this view. Example: "In his book *Hofmannsthal and His Audience* (New Haven, 1946), Carter states that the first performance of the play was in 1903, but new evidence has since revealed that it actually took place ten years earlier."

In B.3.*c*, the citing author identifies a statement about which he has a mixed opinion; he agrees with the cited work only to a point or accepts another's work with some reservations. Example: "Brown's interpretation of the poem is wrongheaded and confused, but his analysis of the poem's relation to earlier sources is convincing (see *Medieval Lyric and the Latin Tradition* [New York, 1923])."

C. Documentation of sources either primary or secondary
   1. to refer to further reading; or
   2. to provide bibliographic information on a specific edition.

Group C includes citations documenting sources which can be either primary or secondary. They may occur in conjunction with other citation usages. In category C.1, the citation refers the reader to further material. Often this purpose is explicitly stated; in other cases the cited work—judging from the extent of pages indicated or the portion referred to—can provide additional reading even if this purpose has not been specifically indicated. In the application of this category, I looked for explicit statements by the authors that the works were intended as further reading. Example: "Brown has provided extensive documentation for this theory. For further information, see his book *Medieval Lyric and the Latin Tradition* (New York, 1923)."

In C.2 the citation provides information about a specific edition or translation of a work. In this case, the purpose of the citation is to provide bibliographic information rather than support an opinion or act on the basis of a factual statement. Example: "Clark's biography of Luther first appeared in 1921 under a different title: *Triumph of a Titan; Life and Works of Martin Luther* (London)."

Application of the Classification Scheme

The scheme described above was applied to citations in a sample of articles and monographs on the subject of German literature in order to determine how frequently the citation categories described above would appear in actual citation practice. Because the scheme was complex and required analysis of the citing work as well as of the citations and references, a relatively small sample was used. Monographs as well as

journal publications were included, since monographs are an important part of the research of humanists. Because one part of the study focused on a comparison of research across time and national spans, the sample included works from different time periods and from different countries.

The time periods 1935, 1956, and 1972 were selected so as to represent distinctive periods of research in the history of German literary study. Thus it was possible to assess the extent to which trends outside of literary scholarship, and scholarship in general, influenced citation patterns. The place of origin of a piece of research may also influence the nature of its citations. For this reason the sample of citation sources included items from pre–World War II Germany, the German Federal Republic, the German Democratic Republic, and the United States.

In selecting journal articles for the sample, a single journal was used for each place of origin represented in the study. The requirements formulated for the journals which generated the source articles were: (1) the scope of the journals should emphasize the subject matter of German literature rather than methods of teaching language or literature; (2) they should ensure a broad coverage of topics within the subject literature and should not focus on specialized areas of German literature; and (3) because the study concerned secondary literature, that is, scholarly research *about* German literature, the source materials should not include a substantial amount of primary literature. The *Germanic Review* was selected as the source journal for the United States, *Euphorion* as the source journal for both pre–World War II Germany and the German Federal Republic, and *Weimarer Beiträge* for the German Democratic Republic.

A list was drawn up of articles in the journals chosen excluding (1) reviews of the literature, (2) book reviews, (3) interviews, (4) lectures, and (5) articles with no citations. A total of approximately sixty articles was taken from this list. The distribution of articles are as follows. For the year 1935, eight articles were taken from the American journal *Germanic Review* and six articles from the German journal *Euphorion*. For the year 1956, eight articles were taken from *Germanic Review*, seven from *Euphorion* (German Federal Republic), and five from the *Weimarer Beiträge* (German Democratic Republic). For 1972, seven articles were taken from *Germanic Review*, ten from *Euphorion*, and ten from the *Weimarer Beiträge*.

Approximately forty was considered, arbitrarily, to be an adequate sample of monographs, with an equal number of items from each place of origin and the time periods represented. The requirements of scope, time coverage, and national origin used in the selection of the journal

articles were also applied to the source monographs. It was thought best that the sample of monographs for each place of origin include only publications written by authors who were professionally active primarily in that country. It was not possible to enforce such a restriction when selecting journal articles, since the necessary biographical information was not always available. *Festschriften* and collections of essays were excluded from the sample, since an essay or article in a collection is more closely related to an article contained in a journal than in a monograph.

Three-year time spans, 1935–37, 1955–57, and 1970–72, were chosen for the monograph sample because of the limited output of monographs on German literature published in the United States and the German Democratic Republic. Bibliographies in the field of German literature were used as the source of monograph titles. To ensure against a possible national bias in the listing of titles, I used, as the source for the monographs for each country, a bibliography of the same national origin. The *Bibliographie der deutschen Sprach- und Literaturwissenschaft (1945–)* was chosen as the bibliography for the German Federal Republic and the *Deutsche Nationalbibliographie, Reihe A* for the German Democratic Republic. The *Jahresbericht über die wissenschaftlichen Erscheinungen auf dem Gebiete der germanischen Philologie,* which covers older literature only, was used for 1935–37 German titles; its counterpart for titles in modern literature was the *Jahresbericht über die wissenschaftlichen Erscheinungen auf dem Gebiete der neueren deutschen Literatur.* For the United States, the *MLA International Bibliography* was chosen. A random sample was then taken from each bibliography of titles falling within the scope of the study. Five titles were taken from the bibliography of the United States for each of the three time spans, five from the German bibliography for the period 1935–37, and five each from the bibliographies of the German Federal Republic and the German Democratic Republic for the periods 1955–57 and 1970–72.

Once the source works were selected, the citations in these sources were sampled as follows. The text of each monograph was divided into five sections, and a sample of five citations was taken from each section. Citations which appeared within the body of the citing text rather than in the form of a footnote were also included in the sample. In cases where a single footnote contained more than one citation, each citation was regarded as independent for purposes of sampling.

For journal articles, the number of eligible citations was counted or estimated, and if the number was twenty-five or less, all of the citations in the article were taken. If the number was greater than twenty-five, random sampling procedures were used so that a number of approximately twenty-five citations would result.

Results

When the categories of citation analysis were applied to the sample of publications, it was found that the following kinds of citation usage appeared most frequently (all figures are percentages):

1. reference to the views of other scholars
   a) to indicate the state of present research, a range of opinions, or prevailing views (category B.1.b)
      (monographs, 18.10; journals, 22.00);
2. reference to factual evidence disclosed by other scholars to support an argument (category B.2.b)
   (monographs, 19.60; journals, 13.80);
3. reference to a primary literary text
   a) to support an evaluative opinion (categories A.1, A.2),
   b) to support a factual statement (categories A.1, A.3)
      (monographs, 14.00; journals, 8.25);
4. reference to any of the above for further reading (C.1)
   (monographs, 13.17; journals, 15.88).

Less frequent were those categories indicating disapproval or criticism:

5. reference to previous scholarship
   a) to disagree with an opinion (category B.3.a)
      (monographs, 6.79; journals, 8.34);
   b) to disagree with a factual statement (category B.3.b)
      (monographs, 2.38; journals, 3.20);
   c) to express a mixed opinion (category B.3.c)
      (monographs, 1.30; journals, 3.00).

Some categories commonly associated with scientific research, but amenable in principle to humanistic research, were seldom used:

6. reference to previous scholarship
   a) to acknowledge the pioneering work of other scholars (category B.1.a)
      (monographs, .59; journals, .67);
   b) to acknowledge intellectual indebtedness (category B.2.d)
      (monographs, 1.10; journals, .67);
   c) to take an idea a step further (category B.2.c)
      (monographs, 0.0; journals, .19).

Category C.2, "to provide bibliographic information about a specific edition" which was thought to be appropriate to literary scholarship, appeared relatively infrequently (monographs, 2.50; journals, 3.98).

Discussion of Results

It was assumed that scholars of literature would make most frequent use of the citation category which made reference to a primary literary text

in order to support an opinion or interpretation made by the scholar (A.1, A.2). A small sampling of these citations made it clear that this was in fact the case. Because of this, discussion of these percentages would not be fruitful or relevant to the findings of this paper.

Other categories of citation frequently used include those which generate or support the scholar's own views (B.2.a, B.2.b), and those which show the range of opinions on a subject (B.1.b) and indicate what further material on a subject has been written (C.1). It thus becomes apparent that the work of other scholars—to the extent that such work is cited—is used more often for the positive purposes of supporting the work of the citing author or referring the reader to additional reading, than it is used to supply an object for rebuttal.

No real comparison can be made linking these findings with those for a scientific discipline, since the scheme has been applied only to a single discipline. However, the findings do suggest some differences between scientific and humanistic research alluded to earlier in this paper. Humanists frequently document opinion, and they probably use factual information less frequently than might be expected in scientific literature. In addition to differences related to the nature of the intellectual content of the two areas of research, some differences in research tradition or custom occurred: the acknowledgment of pioneering work and of intellectual indebtedness assumed to be a part of the scientific tradition, and the process of building upon previous research or ideas, are conspicuously lacking in the discipline investigated for this study.

It must be stressed, however, that the classification scheme discussed in this study was applied to a small segment of literary research. Different findings might well result from a study of other aspects of literary scholarship and of other disciplines in the humanities. Further investigation is needed.

The major purpose of this study has been to explore possibilities for the analysis of citation functions, and it is hoped the future investigations might further consider the design of appropriate categories of analysis as well as the application of such categories to a variety of research disciplines. While the major thrust of citation analysis will undoubtedly remain the analysis of cited *works,* the analysis of citation *process* should provide a valuable contribution to our knowledge of research method.

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