A study examined the use of background information by native and non-native English-speaking university students in explaining, summarizing, paraphrasing, quoting, and copying information from a reading text. Thirty students in composition courses (10 native speakers and 20 non-native speakers, 10 each from a remedial and a standard class) wrote papers on the same topic using the same background reading text. Information from the source text used in the student papers was categorized as to type (explanations, summaries, paraphrases, quotations, and copied information), function (background, foreground), and section of paper (first paragraph, final paragraph, intervening body paragraphs). Results indicated that students made significantly more use of information in the final paragraphs than in the body paragraphs. In their opening paragraphs, non-native speakers also used significantly more information from the source text than native speakers. In some cases, the student excerpt matched the background text except for slight changes in syntax or lexicon, but insufficient to constitute paraphrase, and more of these "near copies" and explanations of the background text functioned as foreground rather than background. The native speakers received higher mean holistic scores of writing quality than the non-native speakers due to more consistent academic style and tone in their written language. (Author/MSE)
The project presented, or reported herein, was performed pursuant to a contract from the Office of Educational Research and Improvement/Department of Education (OERI/ED) for the Center for Language Education and Research (CLEAR). However, the opinions expressed herein do not necessarily reflect the position or policy of the OERI/ED and no official endorsement by the OERI/ED should be inferred.

Center for Language Education and Research
University of California, L~ Angeles
1987
Center for Language Education and Research

The Center for Language Education and Research (CLEAR) is funded by the Office of Educational Research and Improvement (OERI) to carry out a set of research and professional development activities relevant to the education of limited English proficient students and foreign language students. Located at the University of California, Los Angeles, CLEAR also has branches at the Center for Applied Linguistics in Washington, D.C., Yale University, Harvard University, and the University of California, Santa Barbara.

CLEAR believes that working toward a language-competent society should be among our nation's highest educational priorities. Thus, CLEAR is committed to assisting both non-native and native speakers of English to develop a high degree of academic proficiency in understanding, speaking, reading, and writing in English and a second or native language. To work toward this goal, CLEAR has united researchers from education, linguistics, psychology, anthropology, and sociology with practitioners, parents, and community agencies.

A coordinated set of research, instructional improvement, community involvement, and dissemination activities are oriented around three major themes: (a) improving the English proficiency and academic content knowledge of language minority students; (b) strengthening second language capacities through improved teaching and learning of foreign languages; and (c) improving research and practice in educational programs that jointly meet the needs of language minority and majority students.

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This study examines the use of background information by native and non-native English-speaking university students engaged in explaining, summarizing, paraphrasing, quoting, and copying information from a reading text. Thirty UCLA students enrolled in composition courses (10 native speakers of English, and 20 non-native speakers, 10 each from a remedial and a standard class) wrote papers in class on the same topic using the background reading text. Information from the source text was isolated in the student papers and categorized as to type (explanations, summaries, paraphrases, quotations and copied information), function (background, foreground) and section of paper (first paragraph, final paragraph, intervening body paragraphs). Results indicated that students made significantly more use of information in the final paragraphs of their papers than in the body paragraphs. In their opening paragraphs, non-native speakers also used significantly more information from the source text than native speakers. In some cases, a student excerpt matched the background text except for slight changes in syntax or lexicon, but there were not enough changes to constitute paraphrase. In addition, significantly more of these "near copies" and explanations of the background text functioned as foreground rather than background. Finally, the native speakers received significantly higher mean holistic scores of writing quality than the non-native speakers due to more consistent academic style and tone in their written language.
Academic writing involving the use of background sources is often a new task for students in their first or second year at the university. In the United States, most of these students are undergraduates who have come from U.S. secondary schools where they had little experience writing beyond the paragraph (Applebee, 1981). Some of these are non-native speakers of English who are immigrants to the U.S.; other non-native speakers are foreign students who come to the U.S. for further study. Many of these students experience difficulty with writing in areas other than the traditional concerns of grammar and mechanics. A critical aspect of academic writing is the use of background information to support arguments. Johns (1985b) discusses university students' integration of outside information into their writing in terms of coherence:

Unskilled, or, in our ESL classroom case, unacculturated writers ... often do not know what to do with information to integrate it and make it appropriate for the assignments given. When faced with these types of assignments, my students ... tend to present information on paper as they have originally read or memorized it. Therefore, rather than tangled discourse, my students' writing appears to be coherent in spots, because it has been taken directly from the text or lecture. Yet the whole is not coherent, since the information has not been molded to fit the writer's purposes and the requirements of the assignment. (p. 9)
Here unskilled writers, including ESL writers labeled "unacculturated" in the narrow sense of being unfamiliar with the conventions of academic writing in English, are seen as lacking the skills to coherently synthesize their own ideas and those of others. Considering all that is involved in this process (reading, understanding, planning, writing, revising, editing, and orchestrating the whole composition), it is no surprise that the highly complex task of integrating information from other sources in the production of academic writing is most difficult for students who are new to the university.

It has been suggested that the ability to use written sources appropriately may be developmental. In a report for the Schools Council of Great Britain on the written language of students 11 to 18 years of age, Britton et al. (1978) propose a theoretical scale of "degrees of copying." The scale begins with mechanical copying, and continues with copying for some purpose (e.g., because the writer likes or agrees with the original, or because the writer is required to present information exactly). Actual composing begins further up the scale with summarization and expansion of written ideas, followed by imitation of style, and finally synthesis, which Britton et al. consider "rare in school work" (1978, p.46). They suggest that writers may have to pass through earlier stages before reaching the final stage of synthesis. Hence there is conceptual support for a multi-stage model of skill in using background information.

Research related (though sometimes peripheral) to the use of information from text has been conducted with cognition, reading, or writing as a major focus. Each area suggests different questions.
In cognition, a number of researchers suggest that some college students have not fully entered Piaget's stage of Formal Operations. They cite the inability of college-level remedial writers to analyze and synthesize information adequately, and to discuss issues abstractly (Bradford, 1983; Freedman & Calfee, 1984; Freedman & Pringle, 1980; Hays, 1983; Lunsford, 1979; Sternglass, 1983). Flower discusses writer-based prose, and describes it as the "adult written analogue" to Piaget's and Vygotsky's egocentric speech in children (Flower, 1984, p.19; Piaget, 1932; Vygotsky, 1962). If some college students truly are not cognitively mature, this immaturity could affect the use of information from text because appropriate use demands that the students be able to distinguish their own ideas from the ideas of others and analyze the differences in writing. On the other hand, Rose (1983) believes that if students are not able to abstract, analyze, and synthesize in their writing, the cause of this problem lies in a lack of experience with that sort of writing task, rather than in cognitive immaturity. This point of view is supported by research indicating that the planning and quality of summaries improve with academic experience (Brown & Day, 1983; Brown, Day & Jones, 1983; Taylor, 1984). It is difficult to determine the relative contributions of cognitive maturity or academic writing experience in students' use of background information in writing tasks.

Recent studies present reading as an active process, rather than a receptive or passive skill, involving the use of personal background, or schemata, (also called scripts, or frames) in the construction of meaning from text (Anderson, 1977; Baten & Cornu, 1984; Britton et al.,
1985; Carrell, 1981, 1983; Coady, 1979; Hosenfeld, 1979; Johnson, 1982; Olshavsky, 1976-1977; Schank & Abelson, 1977; Wittrock, 1983). Some of these studies have begun documenting actual reading processes, rather than inferring processes from reading comprehension measures (Ballstaedt & Mandl, 1984; Bird, 1980; Christophersen, Schultz & Waern, 1981; Church & Bereiter, 1983; Goodman, 1965; Hosenfeld, 1979; Olshavsky, 1976-77; Olson, Duffy & Mack, 1984). Results indicate that proficient readers keep the meaning of the entire text in mind, overlook unfamiliar words using context, predictions, and inferences to provide meaning, and backtrack recursively to check or correct difficult sentences or sections. Less proficient readers do not consistently keep the gist of the passage in mind, guess the meanings of difficult words contextually, assess their comprehension along the way, predict, infer, or backtrack recursively (Hosenfeld, 1979; Olshavsky, 1976-1977; Olson et al., 1984). As will be shown below, these differences parallel activities identified in the processes followed by proficient versus less-proficient writers. Furthermore, research on the purpose of reading has some bearing on work in composition. Reading to learn is considered a separate phenomenon from general reading comprehension or recall (Anderson, 1973; Armbruster, 1976; Brown, Campione & Day, 1981; Fischer & Mandl, 1984; Mackay & Mountford, 1979; Raimes, 1983; Smith, 1967). Thus theoretically, use of information from a reading text represents a step beyond purposeful reading to learn; researchers/writers become involved in reading to integrate relevant aspects of that information into their own writing, not simply to learn the material. Other studies have been carried out
involving both reading and writing, some focusing on the relationship between overall reading and writing abilities (Evans, 1979; Bereiter & Scardamalia, 1984; Rubin & Hansen, 1984), and some exploring relationships between reading and writing processes (Atwell, 1981; Bracewell, Frederiksen, & Frederiksen, 1982; Birnbaum, 1982; Blau, 1983; Frederiksen, 1982; Kucer, 1985; Loban, 1976; Moxley, 1984; Page, 1974; Squire, 1983; Tierney & Pearson, 1983; Tierney, LaZansky, Raphael, & Cohen, 1983; Wittrock, 1983). While some studies show that improvement in reading can improve writing quality (Bossone & Quitman, 1976; Eckhoff, 1983; Smith, 1983), others show no such improvement (Calhoun, 1971; Campbell, 1976; Miller, 1974; Schneider, 1971). None of these investigations, however, examined the use of information from a reading source in writing.

Most researchers studying the composing process have examined writing tasks that did not call for the use of information from a reading text (Arthur, 1979; Emig, 1971; Flower & Hayes, 1977; Gaskill, 1986; Heuring, 1984; Jones, 1983; Peitzman, 1981; Perl, 1979; Pianko, 1979; Scarcella, 1984; Sommers, 1979; Stallard, 1974; Zamel, 1982). Subjects in these studies were given composition topics that did not involve background reading material but required them to provide ideas from their own experience. One exception is Rose (1984), who, in his study of writer's block, had his subjects carry out a writing task based on background reading in order to give them an equivalent knowledge base from which to begin. He did not, however, document their use of information from the background text. This and other studies of the composing process show that proficient writers plan
before writing, and deal with global issues such as organization, content, and audience, along with revisions of syntactic and lexical problems. On the other hand, less proficient writers do less planning, and show little concern for global problems; they spend more time on surface-level error correction which often interferes with the flow of their writing (Flower & Hayes, 1977; Pearl, 1979; Rose, 1984; Sommers, 1979; Stallard, 1974). Reading and writing processes are thus similar in that they are both recursive. Also, proficient readers and writers keep the entire text in mind while they work more often than less-proficient readers and writers, who become distracted by individual surface-level difficulties.

A number of studies discuss both reading and writing in terms of summarization, which some scholars (Kintsch & van Dijk, 1978; Rumelhart, 1977) present as a highly structured model for language comprehension and production. Research has shown that academic experience is beneficial in planning and improving the quality of summaries (Brown & Day, 1983; Brown et al., 1983; Taylor, 1984). In a process study comparing professional with student writers, Taylor (1984) found that the professional writers studied the text more carefully, looked for text structure and theme, planned more, checked back to the source text to verify accuracy, took audience into consideration when determining the level of generality of their summary, and generally remained more objective. A possible developmental trend was observed by Winograd (1984), who looked at difficulties in summarizing texts and found that eighth-graders with poor reading ability failed to identify information which should, by
adult standards, have been included in a summary; additionally, there were differences in the quality of the summaries written by these eighth-graders, their more skillful peers, and adults (i.e., the quality of the summaries improved with proficiency). All of these studies report only on the task of summarizing a single piece of writing rather than using summaries from several sources in one's own work. Synthesis of information from multiple sources by proficient and less-proficient readers was the focus of two recent studies. Spivey (1983) asked college students to synthesize information from three different texts on the same topic into their own version and found significant differences in the organization, coherence, and quality of syntheses written by proficient and less-proficient readers. Kennedy (1985) gave college students three related articles and instructed them to write an objective essay using all of the material. She found that the fluent readers were active readers and notetakers (underlining, commenting on and interacting with the text) who even revised their notes before incorporating them into their writing, while the less-proficient readers read passively, did not interact with the text much, and took notes, but simply reread their notes over and over rather than building them into their paper. The fluent readers received higher holistic scores on their papers than the less proficient readers. All of these studies demonstrate that reading ability affects the quality of summaries and syntheses.

Most of the studies cited above concern native speakers of English. Given the large non-native college student population in the United States, there is a practical need for more research on their
academic English language skills in order to develop more relevant pedagogy (Johns, 1985a). From a theoretical standpoint as well, more detailed descriptions of both native and non-native speakers performing the same tasks (Stotsky, 1983) are needed. Some research on non-native speakers of English has begun to address these issues in terms of transfer of high-level first language processes to second language writing (Edelsky, 1982; Gaskill, 1986; Jones 1983; Lay, 1982; Mohan & Lo, 1985). Several studies describe the processes followed by proficient and less-proficient non-native readers and writers (Cooper, 1984; Gaskill, 1986; Heuring, 1983; Hosenfeld, 1984; Jones 1983; Jones, 1985; Raimes, 1985; Zamel, 1982 & 1983), and still other studies document differences between native and non-native speakers carrying out the same reading and writing tasks (Carrell, 1981; Connor, 1984; Connor & McCagg, 1983; Jacobs, 1982; Scarcella, 1984). None of these studies discusses the use of information from reading text in writing.

The purpose of this study is to document how, given the same task, native and non-native English speaking university students use information from a background reading text in their own academic writing. Their use of direct quotations, paraphrases, summaries, or other methods will be described as well as the function and location of textual information in the student papers. Students' attributions of information to the author of the background reading text will also be reported. Finally, instructor evaluations of the students' writing will be discussed.
METHOD

Subjects

The 30 subjects were enrolled in UCLA composition courses during Fall Quarter 1984. Ten subjects were chosen randomly from among 15 students in two sections of English 35, Developmental Composition for ESL Students; ten subjects were chosen randomly from 20 students in two sections of English 36, Intermediate Composition for Foreign Students; ten subjects were chosen randomly from 21 students in one section of English 3, English Composition, Rhetoric and Language. (English 36 and English 3 satisfy the undergraduate composition requirements in UCLA's College of Letters and Sciences, and English 35 is a prerequisite course to English 36.) The students enrolled in English 35 and English 36 had completed the UCLA English as a second language requirement, and were placed in their composition section on the basis of an essay written for the UCLA ESL Section composition placement examination. Students were enrolled in English 3 according to the quality of an essay written for the UCLA Writing Program placement examination. Scholastic Aptitude Test (SAT) scores for students enrolled in these three courses were as follows: the mean verbal SAT score was 241 for English 35 students, 291 for English 36 students, and 467 for the native-speaking English 3 students; the mean SAT English Composition Achievement Test score was 298 for English 35 students, 337 for English 36 students, and 476 for English 3 students. The students from the English 35 class will be referred to as less-proficient non-native speakers, the students from English 36 as more-proficient non-native speakers, and the students from English 3 as native speakers. Table 1
Table 1

Demographic Information on Subjects

<table>
<thead>
<tr>
<th>First Language</th>
<th>Age</th>
<th>Academic Status</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Less-proficient Non-native Speakers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korean</td>
<td>19</td>
<td>sophomore</td>
<td>F</td>
</tr>
<tr>
<td>Korean</td>
<td>21</td>
<td>sophomore</td>
<td>M</td>
</tr>
<tr>
<td>Korean</td>
<td>24</td>
<td>junior</td>
<td>F</td>
</tr>
<tr>
<td>Korean</td>
<td>32</td>
<td>graduate, M.A.</td>
<td>M</td>
</tr>
<tr>
<td>Chinese</td>
<td>25</td>
<td>(not available)</td>
<td>F</td>
</tr>
<tr>
<td>Mandarin</td>
<td>22</td>
<td>sophomore</td>
<td>F</td>
</tr>
<tr>
<td>Indonesian</td>
<td>21</td>
<td>senior</td>
<td>F</td>
</tr>
<tr>
<td>Lao</td>
<td>19</td>
<td>sophomore</td>
<td>M</td>
</tr>
<tr>
<td>Hebrew</td>
<td>23</td>
<td>freshman</td>
<td>M</td>
</tr>
<tr>
<td>Spanish</td>
<td>25</td>
<td>graduate, M.A.</td>
<td>M</td>
</tr>
<tr>
<td><strong>More-proficient Non-native Speakers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farsi</td>
<td>19</td>
<td>undergraduate</td>
<td>F</td>
</tr>
<tr>
<td>Farsi</td>
<td>19</td>
<td>junior</td>
<td>M</td>
</tr>
<tr>
<td>Farsi</td>
<td>20</td>
<td>junior</td>
<td>M</td>
</tr>
<tr>
<td>Korean</td>
<td>21</td>
<td>sophomore</td>
<td>F</td>
</tr>
<tr>
<td>Korean</td>
<td>22</td>
<td>junior</td>
<td>F</td>
</tr>
<tr>
<td>Chinese</td>
<td>21</td>
<td>senior</td>
<td>M</td>
</tr>
<tr>
<td>Chinese</td>
<td>32</td>
<td>senior</td>
<td>M</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>(n.a.)</td>
<td>sophomore</td>
<td>M</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>24</td>
<td>junior</td>
<td>M</td>
</tr>
<tr>
<td>Spanish</td>
<td>21</td>
<td>freshman</td>
<td>M</td>
</tr>
<tr>
<td><strong>Native Speakers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>17</td>
<td>freshman</td>
<td>F</td>
</tr>
<tr>
<td>English</td>
<td>18</td>
<td>freshman</td>
<td>F</td>
</tr>
<tr>
<td>English</td>
<td>18</td>
<td>freshman</td>
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<td>English</td>
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<td>English</td>
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<td>freshman</td>
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</tr>
<tr>
<td>English</td>
<td>19</td>
<td>freshman</td>
<td>F</td>
</tr>
</tbody>
</table>

Note.  \( N = 30 \).
shows the distribution of subjects in each group by first language, age, academic status, and sex.

Materials and Procedures

The instructors of the five composition classes gave the same reading-writing assignment to their classes. The students were given the first chapter of an undergraduate anthropology textbook by Harris (1983) to read for homework. Instructions attached to the chapter advised the students that this was background reading for an upcoming composition assignment, that it was not necessary to learn everything presented in the chapter, but that demonstration of familiarity with anthropological terminology would be necessary. During the next class session, terminology presented in the chapter was discussed with the class as a whole. The students were then given a composition topic that involved the use and explanation of terminology from the anthropology text, which they were allowed to refer to during their composing. The topic required them to relate the anthropology terminology to the topic of fraternities and sororities as a subculture. The topic was pilot tested before the project began to determine the students' degree of familiarity with sororities and fraternities at UCLA. One class hour was given for the students to write the first draft of the composition. It was this draft that was used in the data analysis.

Data Analysis

In each of the 30 compositions, excerpts were isolated where the writer had used information from the anthropology text. The excerpts, (i.e., the examples of use of information from the background text)
were categorized by two researchers as to type, function and documentation. Each example as well as the entire student paper were rated for quality by writing instructors.

Agreement ratings were calculated for the categorizations as well as for the evaluations of writing quality. As a control for composition length, each example was measured according to the number of t-units relative to the total t-units in the corresponding section of the composition, i.e., in the first paragraph in the last paragraph, or in the body (those paragraphs between the first and last). Hunt's (1965) definition was followed of a t-unit being a single independent clause including all modifying dependent clauses. These percentages of t-units were used in conducting an analysis of variance.

**Type.** Each example was categorized as one of the following seven types: quotation, exact copy, near copy, paraphrase, summary, original explanation, or marooned term. The category quotation is self-explanatory. Exact copies were direct quotations without the punctuating quotation marks. Near copies were similar to exact copies except that syntax was rearranged, or synonyms were used for one or two content words. Paraphrases involved more syntactic changes of the original anthropology text than near copies, for example, "Infrastructure consists of the etic and behavioral activities by which each society satisfies minimal requirements for subsistence" (Harris, 1983, p.16) was paraphrased as follows: "The infrastructure of this society consists [sic] of the activities that each sorority and fraternity take part in order to survive." Summaries represented the gist of information from the background reading. For the previous
types, a single excerpt in the anthropology text directly corresponded to the excerpt from the student composition. With summaries, however, the gist of information in the anthropology text was used in the student composition, rather than a single corresponding passage of text. The composition topic called for the students to explain the technical concepts that they would use in an anthropological study of sororities and/or fraternities. It was often found that the students explained information from the anthropology text through their explanation of sororities/fraternities. These types constituted the category called original explanation. As with summaries, it was not possible to pinpoint a specific excerpt from the anthropology text that was used as the basis of these original explanations. The final type of use of information from the background reading text was labeled marooned term, representing the few instances where students used an anthropological term without explaining it anywhere in their composition. For this type, the only information incorporated from the reading text was the single term. This occurred a few times even though the composition topic instructed the students to address their paper to a university audience unfamiliar with anthropology. Marooned terms, along with near copies and exact copies, were considered inappropriate use of information from the background text, whereas quotations, paraphrases, summaries, and original explanations are considered appropriate.

If these types of information from the background text were put on a scale of degrees of integration, then quotations would represent the least amount of integration in the student writing. Quotations would
be least integrated since the exact wording of the source text is transferred to the student writing, signaled (ideally) by punctuation and reference to the author of the source text. **Original explanations** would be most integrated since an idea is taken from the source text and explained in terms of the composition topic regarding fraternities and sororities. The other types of information use would occur on the scale between these two extremes, that is, from least to most integrated, quotations, exact copies, near copies, paraphrases, summaries, and original explanations. The degree of integration of information from the background reading text in the student writing should not be confused with the quality of the integration. The quality of a quotation may be excellent, just as the quality of an original explanation may be. Regardless of quality, a quotation involves exact wording from the background text, and as such is the least integrated information in the student text, whereas an original explanation is the most integrated since the background information is molded to fit the student text. The notation of a scale of degree of integration is presented here as further explanation of the categorization of the data by type which will be referred to in the discussion of the findings.

As a general caveat, it should be noted that this is a study of written products, and no explicit claims are made here regarding writing process. For instance, with examples categorized as **paraphrases** there is no implication intended that the student intentionally paraphrased while he/she was writing. Only direct observation of the student during the writing process would provide
those results. This analysis does not involve the student as he/she is writing, but rather the student's written product. Items are classified as paraphrases because through text analysis of the student composition, the written product, they can be interpreted as paraphrases of specific information from the anthropology text.

**Function.** The function of each example within the student paper was also part of the categorization system. It proved to be the most difficult feature to differentiate. The attempt was made to focus on function from two different angles, the first involving rhetorical terms. Because the writing assignment required the students to explain the anthropological concepts that they would use in a study of fraternities or sororities, most of the examples functioned as definitions of anthropological concepts. A few examples provided an expansion of a previously defined concept, or explained a relationship between two concepts (e.g., the relationship between emic and etic viewpoints, or mental and behavioral aspects of culture).

The second way of describing the function of each example involved notions of backgrounding and foregrounding (Hopper, 1979). Hopper and Thompson (1980) define "that part of a discourse which does not immediately and crucially contribute to the speaker's goal, but which merely assists, amplifies, or comments on it...as background. By contrast, the material which supplies the main points of the discourse is known as foreground" (p. 280). Using this distinction as a guideline, each example was categorized as either background or foreground.
Documentation. Each example was also categorized as showing either: (1) no reference to the author, Harris, or to his text; (2) reference by a prose phrase, for example, "according to Harris," "in the book Cultural Anthropology it is stated that...," or "in the chapter 'Anthropology and the Study of Culture' I read that..."; (3) reference by a footnote, or; (4) reference by both a phrase and a footnote.

Agreement of raters. After having coded all 30 compositions for the type, function and documentation of each example of use of information from the reading text, the researcher randomly selected 10 of the 30 compositions and coded them a second time. The intra-rater agreement of these two coding sessions was calculated to be .73. One reason for the rather low index of .73 is the complexity of the categorization system. With several variables (type, function, location, documentation) and different subdivisions of each, the task of analyzing student papers is a complicated one. In addition, there may have been problems with some of the categories themselves. Cohen claims that nominal categories must be independent, mutually exclusive, and exhaustive (1960, p.33). Although type is likely independent from function and documentation, perhaps the categories presented here within the area of type of use of information from text are not absolutely independent, but rather fall on a continuum. In the description of the categories above, reference was made to quotations in the description of exact copies, reference was made to exact copies in the description of near copies, reference was made to near copies in the description of paraphrases, and so forth. Whether a coder
categorizes an example as an exact copy or a near copy may depend on the proportion of words copied to words in the entire example. Because there was no clear distinction between one category and the next, these examples were probably coded differently in the first coding session than in the second coding session. There may have been a similar problem in the categorization of near copies and paraphrases, and even paraphrases and summaries. The categories may not be strictly independent, which likely affected the intra-rater agreement percentage; however, we feel that they do present an exhaustive categorization of the use of information from the reading text in the compositions.

For calculating inter-rater agreement, an experienced university composition instructor was trained in the categorization system and given 10 randomly selected compositions to code. The inter-rater percentage agreement was found to be .75.

Instructor evaluations. A standard measure of the overall writing quality of each composition was provided by an analytic scale, the ESL Composition Profile (Jacobs et al., 1981). The 30 compositions were rated by two experienced university composition instructors. The Pearson product-moment correlation coefficient was used to calculate the reliability of the two sets of ratings and was found to be .82, a medium-high figure indicating an overlap of 67%. It must be noted that the Jacobs Profile was developed for the rating of non-native speakers' compositions, and in this case one-third of the compositions were written by native speakers. This is not considered problematic, however, for two reasons. First, the 30 compositions were rated
without indication of the nationality of the writer. And second, the Jacobs Profile is comparable to most analytic scales developed for the evaluation of compositions by native speakers, as it is weighted 30% for content (quality of analysis, thesis, evidence), 20% for organization (logic, sequencing, clarity), 25% for grammar and style (correctness, complexity, variation), 20% for vocabulary (diction), and 5% for mechanics (punctuation, spelling).

RESULTS

Findings and Discussion

Type and function. In the 30 student compositions, 180 examples were isolated involving the use of information from the background reading text. As explained above, each example was categorized according to type and function, as well as documentation, which will be discussed later in this section. For one of the seven categories, marooned terms, only nine examples were found; they were split between the two non-native groups. In other words, in less than 5% of the total isolated cases, the non-native speakers used only terminology from the text without providing any further information. These few examples were eliminated from the statistical analyses to be presented in this section, making the total number of examples 171. In order to understand the issue of function, it should be noted that the writing task called for the students to take on the role of anthropologist and explain the anthropological concepts that they would apply to a study of fraternities or sororities. Regarding function from a rhetorical perspective, 88% of the total examples of use of information from the background reading text functioned within the
### Table 2

Mean Percentages of Use of Information from the Reading Text in T-units per Section of Composition

<table>
<thead>
<tr>
<th>Function (Back- or Foreground)</th>
<th>Section*</th>
<th>Less-proficient</th>
<th>More-proficient</th>
<th>Native Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Non-native</td>
<td>Non-native</td>
<td>Native Speakers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speakers</td>
<td>Speakers</td>
<td>Speakers</td>
</tr>
<tr>
<td>Appropriate Types</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Original Explanations</td>
<td>First</td>
<td>.32</td>
<td>.44</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>Body</td>
<td>.12</td>
<td>.16</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Last</td>
<td>0</td>
<td>.10</td>
<td>.60</td>
</tr>
<tr>
<td>Summaries</td>
<td>First</td>
<td>0</td>
<td>.07</td>
<td>.18</td>
</tr>
<tr>
<td></td>
<td>Body</td>
<td>.11</td>
<td>.09</td>
<td>.08</td>
</tr>
<tr>
<td></td>
<td>Last</td>
<td>0</td>
<td>.14</td>
<td>.58</td>
</tr>
<tr>
<td>Paraphrases</td>
<td>First</td>
<td>0</td>
<td>.25</td>
<td>.13</td>
</tr>
<tr>
<td></td>
<td>Body</td>
<td>0</td>
<td>.14</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>Last</td>
<td>.50</td>
<td>.14</td>
<td>0</td>
</tr>
<tr>
<td>Quotations</td>
<td>First</td>
<td>0</td>
<td>0</td>
<td>.24</td>
</tr>
<tr>
<td></td>
<td>Body</td>
<td>.05</td>
<td>.12</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>Last</td>
<td>.50</td>
<td>.33</td>
<td>0</td>
</tr>
<tr>
<td>Inappropriate Types</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Near Copies</td>
<td>First</td>
<td>.19</td>
<td>0</td>
<td>.12</td>
</tr>
<tr>
<td></td>
<td>Body</td>
<td>0</td>
<td>.04</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>Last</td>
<td>0</td>
<td>0</td>
<td>.05</td>
</tr>
<tr>
<td>Exact Copies</td>
<td>First</td>
<td>.20</td>
<td>0</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>Body</td>
<td>0</td>
<td>.04</td>
<td>.12</td>
</tr>
<tr>
<td></td>
<td>Last</td>
<td>0</td>
<td>0</td>
<td>.25</td>
</tr>
</tbody>
</table>

Note.  N = 171.

*For each cell, the first of the three figures indicates the mean percentage in t-units of information use in the first paragraphs of the student compositions, the third figure indicates the mean percentage of information use in the last paragraphs of the student compositions, and the second figure indicates the mean percentage of information use in the body paragraphs (those between the first and last paragraphs).
student compositions as definitions of anthropological concepts. The few remaining examples comprised instances of an expansion of a previously defined concept (8%) and a relationship being drawn between two concepts (4%). The rhetorical function of the use of information from source materials obviously varies with the writing task. When students are presented with materials representing opposing views for use in an academic paper, the major rhetorical function of their examples of background information use will be argument rather than definition. The background-foreground distinction in function seems more useful in analyzing the findings of this study than does a parallel rhetorical distinction, thus the latter was eliminated from further analysis. Table 2 displays the remaining percentages of use of information from the reading text as measured in t-units for each of the three student groups.

A 3x3x6x2 repeated-measures analysis of variance was conducted to test differences in the students' use of information from the background text. Results are presented in descriptive statistics in Table 2, according to the following factors: 1) group (less-proficient non-native speakers, more-proficient non-native speakers, native speakers); 2) section of composition (first paragraph, body paragraphs, last paragraph); 3) type (original explanations, summaries, paraphrases, quotations, near copies, exact copies); and 4) function (background, foreground). Significant pairs of means provided by the four-way analysis of variance were further tested by the Newman-Keuls studentized range statistic, with p < .05.
Two significant interaction effects were found, the first regarding student group and section of composition (F = 3.92, df = 3, 113, p < .05). All three student groups used significantly more information from the background text in the final paragraph of their compositions than in the body paragraphs (those between the first and final paragraphs). However, regarding the first paragraph of the students' compositions, the two non-native-speaker groups used significantly more information from the background text than the native speakers. In other words, the non-native speakers relied on the background text significantly more than the native speakers for getting started in their writing. In the body paragraphs, all of the students used some information from the background text as well as many of their own ideas. In the final paragraphs, all of the students returned to the background text incorporating significantly more information from that source than they had in their body paragraphs.

The second significant effect indicated an interaction among three factors: type, function, and section of composition (F = 5.08, df = 2, 113, p < .05). Significantly more information from the background text was presented as original explanations and near copies, foregrounded, in the first paragraphs of the student compositions, than any other combination of factors. Figure 1 displays this significant difference.

Figure 1 also shows less use of information from the background text in the body paragraphs than in the first and last paragraphs, and little difference across types regarding backgrounding and foregrounding in body paragraphs. It can also be seen that for first and last paragraphs of the compositions, all of the types were
Figure 1. Types of use of information from the reading text by t-unit measure, function, and section of composition. N = 171.

OE = Original Explanations
S = Summaries
P = Paraphrases
NC = Near Copies
Q = Quotations
EC = Exact Copies

*Significantly higher percentage
foregrounded more than backgrounded (albeit not significantly), except for quotations and exact copies. The latter two types behaved similarly to each other; in fact, exact copies might be considered faulty quotations in that the punctuation is lacking. Quotations and exact copies were more often backgrounded than foregrounded since within the student written discourse they seemed to serve as background for an upcoming point, which was then foregrounded. Original explanations, on the other hand, represent information from the reading text that is explained through the student's view of fraternities or sororities. Recalling that on a theoretical scale of degree of integration, original explanations represent the most integration (as opposed to quotations, the least integrated type, in which the exact wording of the source text is transferred to the student writing.) As the most highly integrated type found in the student papers, original explanations related directly to fraternities and sororities, which information which was most often foregrounded in first paragraphs. Summaries, paraphrases, and near copies were foregrounded more than backgrounded, as were original explanations.

Near copies represent a borderline between word-for-word copying and paraphrasing, and Figure 1 indicates that near copies behave more like paraphrases than exact copies. They might be considered faulty paraphrases in that they exhibited inappropriately few syntactic or semantic changes from the original reading text. This study did not examine the students' meta-awareness of or attitudes toward copying or plagiarism. The copies may have been made by students without the knowledge that copied information and wording is generally
unacceptable, or with disregard for this knowledge. However, in the absence of any further evidence, I prefer to assume that writing is such a complex process that attention cannot easily be given to everything at the same time. Given time constraints and the physical constraints of a full classroom, most of us find it difficult to produce quality writing and the choice of strategies for incorporating text information into writing may reflect these constraints. To include information from written sources without violating conventions of acceptability is even more difficult. The possibility exists that some of these students might have even intended to eliminate near copies in later revisions of their papers. As Pianko (1979) points out, in-class writing may control for time, place and topic, but it fosters work that is done with less commitment and possibly with less effort than out-of-class writing. As such, in-class writing may be less of a measure of actual writing ability than of other factors, such as the student's ability to follow instructions. These students may have the ability to incorporate information from a background reading text without copying, but that ability may not emerge under the constraints of the classroom. When faced with the prospect of expressing information from the source text either by using "their own words" which may reflect a colloquial style, or by making slight syntactic or semantic changes in the wording of the background text (constituting near copies), thereby maintaining an academic style, the students may have opted for the latter for stylistic reasons. Although they demonstrated their ability to adequately paraphrase, as well as summarize, etc. in various isolated examples from the papers, given the
time constraints and classroom writing conditions, they may have lapsed occasionally, allowing near copies, to reflect a less colloquial, more academic style.

Related to this issue is the theory of Britton et al. (1978) that the elimination of copying is developmental. Perhaps university composition students are still going through the stage of being able to paraphrase, quote, summarize, and expand in academic style without copying, and with continued academic experience they will progress to a higher stage. Theoretically, those students who continue to write research reports and theses, will also continue to pass through these developmental stages, their own academic style will improve, and copying will be eliminated from their writing. For students who do not pursue studies involving writing, the issue is largely irrelevant. The pedagogical dilemma this process poses is in helping student writers who, when faced with a term paper or other writing task involving the use of information from a background text, continue to copy, rather than develop skill in paraphrasing, summarizing, and incorporating information in other appropriate ways. For a related discussion of university students' difficulties with approximating complex academic discourse, see Bartholomae (1985).

Documentation. Table 3 shows the frequency distribution of the students' footnotes and phrases within the text that acknowledged the author or reading text as the source of the information presented in their compositions. In general, very little reference was made to the author or text. If students made any such attribution at all, it was for quotations, in a few cases for paraphrases, and in isolated cases
Table 3
Frequency of Documentation Made of the Author or Text for Quotations and Paraphrases a

<table>
<thead>
<tr>
<th>Group</th>
<th>Less-proficient</th>
<th>More-proficient</th>
<th>Native Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-native Speakers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quotations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phrases</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Footnotes</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Both</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>n quotations</td>
<td>8</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Paraphrases</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phrases</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Footnotes</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Both</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>n paraphrases</td>
<td>4</td>
<td>10</td>
<td>21</td>
</tr>
</tbody>
</table>

Note. By collapsing phrases and footnotes, proportions of general reference to the author/text to a combined total of quotations and paraphrases was calculated. For both non-native speaking groups, the proportion of quotations and paraphrases complete with reference to the author or text was .42. For the native speaking group the figure was far lower, at .16. The overall proportion for the three student groups was .27.

a Three examples of footnotes made by non-native speaking standard writers were not included in this table. One example was a footnote of a summary, another of an exact copy, and the third of a near copy.

b This indicates a phrase within the text of the composition acknowledging the author or text, e.g., "according to Harris."

c All footnotes displayed a superscript number within the text and a corresponding note at the bottom of the page.
for other categories (see footnote a in Table 3). The non-native speaking groups provided more documentation in footnotes, and the native speakers in phrases acknowledging the author or reading text. In fact, the native speakers used no footnotes at all, and only two such phrases were used by the non-native writers. Together, the non-native speaking groups acknowledged the anthropology author or text in some form for 42% of their combined quotations and paraphrases, while the native speakers only provided such acknowledgement 16% of the time.

Experienced academic writers with plenty of time for revision acknowledge the author/text for every quotation and most paraphrases in their work. There was little acknowledgement made of the anthropology author or text as the source of information in the writing of all three groups, as seen in Table 3. This may have been due to unfamiliarity with this convention of academic writing. It may even reflect the cognitive immaturity of the students: if cognitively immature students produce egocentric writing, that egocentrism may keep them from attributing ideas in their compositions to another author; they may believe that using information from another author somehow diminishes their own writing, and that avoiding reference to that other author makes the information more their own. It seems more likely, however, that students made little reference to the anthropology author or text simply because they lack experience with the convention or because they overlooked it. Writing is so complex that it is not possible to attend to everything at once, especially when the entire task is done during one hour in class. Also the students relied on a single source, and they knew that their instructors were familiar with the source. It may
have seemed to the students that referencing the source was obvious, unnecessary information. Even though the students were instructed to write for a general university audience, they still knew that their composition instructor was the immediate audience. If these same students were given another writing task involving the use of a number of sources presenting conflicting views, they might provide more documentation to clarify the sources of the various views.

Table 3 shows that in the few cases where native speakers referenced the author or text, they used a phrase within their composition rather than footnotes. The non-native speakers referenced the author or text more often than the native speakers, but they did this by means of footnotes more often than phrases. The U.S. university community expects attribution of sources in any case, but generally considers footnotes unnecessary in in-class writing. Naturally, instructors expect citations in term papers, depending on the style/format of the academic field. The non-native speakers may not realize this. They may use footnotes because footnotes are a more salient form of reference to another author than phrases within the text (especially the type of footnote used by the students in this study which displayed a superscript within the text and a corresponding note at the bottom of the page). Apparently some of the non-native speakers had learned to use formal footnotes following MLA conventions (not widely used in the social sciences) and they have not mastered other ways to acknowledge another author, or the appropriateness of the various forms. In fact, none of the students in this study, native or
non-native, seems to have a mastery of the appropriate acknowledgment of another author.

**Instructor evaluations.** The means and standard deviations of the holistic scores of overall writing quality were as follows: the native speakers received a higher mean score (M = 87.15, SD = 3.44) than the non-native speakers (more-proficient M = 76.65, SD = 7.79; less-proficient M = 74.1, SD = 3.7) (Maximum score = 100.) The standard deviation around the group mean of more-proficient non-native speaker scores is rather high, indicating less homogeneity in this group than in the other two groups. Six of the ten students in the more-proficient non-native group had combined holistic scores of overall writing quality below the group mean (along with all ten less-proficient non-natives) and the remaining four had scores above the mean (as did all ten native speakers). The native speaker holistic score proved to be significantly higher than the non-native speaker scores, as revealed by an analysis of variance, F = 16.61, df = 2, 27, \( p < .01 \), and a posthoc Scheffe test demonstrating no significant difference between non-native group scores. The native speaker compositions received significantly higher holistic scores than non-native speaker compositions because the language, style, and tone were more consistent and more academic. Incorporation of the background reading text was smoother for the native speakers; there was a closer match between the level of sophistication of their language and that of the background text. The general style and tone of the non-native speakers' compositions were less academic than those of the native speakers. The non-native speakers' paraphrases, near copies,
quotations, and exact copies seemed to swell in sophistication, in comparison with their otherwise simpler language.

Further Research

This study represents only a beginning in the investigation of use of information from reading text in the academic writing of university students. Similar studies done with different writing tasks should eventually clarify the categorization of the function of information from background text and its effect on documentation. For example, as suggested earlier, students carrying out a writing task involving background reading presenting two or more authors with opposing views might document the source of their background information more often than in this study. Another way of examining the function of background information use might be through text analysis of academic writing in a number of disciplines.

From this study it can be seen that language proficiency affects the use of information from background reading text in academic writing. Would non-native speakers rely on background text, using more source text information than native speakers in their initial paragraphs of other writing tasks under other circumstances? Further study of this issue would be worthwhile, with subjects carefully selected according to proficiency, in order to avoid the variability found in this study's more-proficient non-native speaker group.

Exploring the effect of reading skills on the use of information from source texts in composition is another potential area for study. Correlating students' use of information from text with either their measured reading ability or comprehension tests of the specific reading
text used in their compositions might prove significant since this was found in studies of summarization (Kennedy, 1985; Spivey, 1983; Winograd, 1984).

Cultural differences regarding use of text information warrant investigation especially in the area of attitude. Attitudinal studies with native and non-native speakers on the appropriateness or quality of use of information from reading texts would be interesting. Cross-cultural attitudes regarding plagiarism could be collected by having subjects rate discourse passages including the types of use of information from text found in this study, both with and without reference made to the author or text.

Some of these areas might better be investigated by means of process studies. An interesting issue to consider would be the decision-making that occurs during the reading and writing processes of students completing a writing task involving the use of information from a text. This could be compared to the decision-making that has been documented involving other writing tasks.

Teaching Implications

The results of this study show that when these university students integrated information from the anthropology text into their in-class compositions, they copied too much and they referenced the anthropology author or text too little. These students have the ability to paraphrase, summarize, quote and integrate information from a source text into their original examples and explanations; they need to be given ample opportunity to practice this type of writing in order to train themselves to edit out instances of copying. They also need to
be trained in the various methods of documenting sources, from a simple phrasal reference, for example, "according to the author" which is likely sufficient for in-class essay writing, to brief footnotes within parentheses in a text, such as (Harris, 1983), which would be more appropriate for formal term papers. It is most likely that the students in this study did not realize how simple it would have been for them to reference their background source. Writing handbooks are rarely helpful in this matter, in that they usually either avoid the issue of documentation altogether or present an anxiety-producing harangue about plagiarism, followed by confusing rules about the punctuation of footnotes and bibliographical citations. For an exception, see Spatt (1987).

Writing instructors working with non-native speakers need to emphasize that source material is most often used as background and support for students' own written ideas. Non-native composition students may require the inspiration of confidence in their own language and ideas to help them avoid an over-reliance on background sources. Non-native speakers also need to develop academic style and tone in their writing. Although the language, style and tone of the non-native speakers' work was considered inconsistent and inferior to that of the native speakers in this study, informal observations by the instructors of the non-native students suggest that their writing here was more academic than in previous assignments that did not involve background text. More assignments of this sort would encourage the development of academic language by non-native speakers.
All composition instructors at the university level, and even those at the college-bound secondary level, should provide their students with assignments which develop better awareness and skill in using information from background reading texts and acknowledging the authors. Initial assignments might involve structured practice in the use of quotations, paraphrases, summaries, and references to authors/texts (Edge, 1983). Other assignments might require the students to read and incorporate information from reading texts in their writing. Johns (1985b) presents a useful top-down approach to working with students on a research paper, and Hill, Soppelsa, and West (1982) offer suggestions for helping students read and write research papers. Spack (1985) discusses literary criticism as a focus in the curriculum of writing classes. Regarding the teaching of reading in English for Specific Purposes (ESP), Johns and Davies (1983) discuss using text as a vehicle for information rather than as a linguistic object, thus emphasizing practice in the process of purposeful reading. The freshman composition textbook that currently addresses the use of information in academic papers most directly is Spatt's Writing from Sources (1987).

Along with more writing assignments that use information from background reading texts, composition students could also benefit from reading and analyzing academic pieces that involve reference to other academic works. Bereiter and Scardamalia (1984), Smith (1983), and others suggest that students can learn much about writing from reading. University students do a great deal of reading for their content courses, but that reading primarily involves learning content, rather
than the style of the material. Undergraduates may not take sufficient notice of how their content course textbook authors incorporate information from sources. Composition instructors need to direct students' attention to how academicians reference their sources, when they provide quotations rather than paraphrases or summaries of information and, probably most importantly, how these references support rather than govern the writer’s content. In this way students will develop the awareness of and respect for other authors and academic text, enabling them to use information from background text appropriately in their own writing.
REFERENCES


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ABOUT THE AUTHOR

On the faculty of UCLA Writing Programs, Cherry Campbell specializes in teaching English to non-native speakers. Her research pursuits continue in reading and writing processes.