

# The Effect of Reading in Shaping Undergraduates' Academic Research Topic

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**Abstract**—Existing evidence has proved that reading is integral in academic writing process and served different purposes at various junctures of students' writing journey. Yet, few empirical studies investigate the effect of reading in shaping topic selection and formulation. This study aims to explore the process of undergraduate researchers determined their research topic through several rounds of reading. A qualitative research method was adopted in this research and six sophomore students were interviewed respectively. Results suggest that the novel researchers perused assorted literature in the phase of topic selection, and they showed a proclivity on certain types of literature according to distinct topic selection principles. Academic journals, monologues, textbooks were chosen by participants. In the phase of topic formulation, reading literature journals helped them identify their possible topics' academic significance and pervasive research method, through which they could locate a board research area, then monographs and books assisted them to apprehend relevant knowledge and to assess research method so that they could narrow down their key terms and research context and finally they could formulate an appropriate research topic. The alteration of reading materials was caused by their insufficient knowledge of their research. Pedagogical implications are also discussed.

**Index Terms**—Reading, academic writing, topic selection.

## I. INTRODUCTION

As the first and foremost step of conducting an academic research, determining a research topic, no matter to a novel or an experienced researcher, requires a significant amount of time to read literature [1]. However, the relation between reading and selecting a topic is still underexplored. Compared to L1 writers, L2 writers usually spent more time on formulation in academic context [2], [3]. Nevertheless, to many students, particularly undergraduates, reading literature is such an exhausting experience not only because of difficulties to find the 'right' direction that can have direct bearings on both their study and writing research papers, but also ineffectiveness of identifying appropriate and 'key' literature among the mountainous sources. Unfortunately, there exists little literature explicitly revealing the effect of reading on research topic selection, even less instruction to guide undergraduates how efficaciously and sufficiently read literature in order to determine an academically significant and feasible research topic in which they are interested. Therefore, this paper explores how does the perusal of literature shape research topic selection of L2 undergraduate

research learners, through interviewing six English major sophomores in a Chinese university, as it was the first time for them to complete a standard academic research on their own. The term "topic selection" and "topic formulation" in this research are interchangeable. Research questions are listed as follows:

1. What kind of literature do undergraduates read when they select a research topic?
2. How does reading literature help them shape their topic?

## II. LITERATURE REVIEW

### A. Academic Writing Process

Paltridge *et al.* [4] proposed an academic writing model based on the non-academic ones (e.g. [5], [6]), and it regards the academic writing as a single, individual cognitive behaviour, and it explicitly describes the involving sub-processes in writing and how the ways they influence the writing production. The involving sub-processes in writing are: conceptualizing, formulating, revising, and reading. Conceptualizing involves generating, selecting ideas to be used and organizing them into structured text [4], and trying out different goals and means until a satisfactory combination or a final framework produced, often rejection of those unsatisfactory goals and paths included [7]. Reading, as the fourth sub-process of the whole process, frequently recurs in the overall process and has multiple functions in the other three. Considerable reading is involved in academic writing: read for instructions about their tasks; read resources like articles, books and digital resources and (re)read their own written production [4]. Differing from non-academic writing, academic writing is a medium where knowledge is constructed and requires the writer to respond to information which generated from integrating and synthesizing the current literature [4]. It was integral to the idea-generating process which leads to the conceptualization of a written product in an academic context [8].

### B. Topic Selection Principles

A large number of textbooks and handbooks instruct rules and strategies of every individual chapter consisting of a successful thesis or dissertation (e.g. [9]-[11]). Among them, Lunenburg and Irby concluded a set of more detailed and clearer principles which are considered important for doctoral candidates to examine appropriateness of their topic selection, including "(a) interest, (b) significance, (c) available data, (d) knowledge and skills, (e) manageability, and (f) funding" (p.10) [10]. Firstly, they believed that an interesting topic could inspire substantial curiosity and even

passion through the arduous academic journey. Significance refers to the research should have academic meaning and significantly contribute to the field. Also, researchers need to ascertain the data will be available and accessible when coming to the collect phase. What is more, consistency of topics and researcher's knowledge and technical skills was important, for researchers need to transform their background and document knowledge to interpret, evaluate, analyze and argue [12]. If the topic is too broad, student is unable to complete the research in the time-limited program. Finally, though most thesis and dissertation are not funded, financial constraints to some extent may limit the scope of the research a student can undertake.

### *C. Empirical Studies on Topic Selection*

However, even though topic selection is so vital to researchers, it draws relatively little attention from scholars to conduct empirical research. Lunenburg and Irby suggest possible topics may be generated from assorted professional sources including textbooks, professional journals, dissertations, theories, current employment, and existing database [10]. For L2 undergraduate researchers, by instance of providing support for their own opinion, authoritativeness and reliability are the most common reason of selection of reading materials, then follows the readability and relevance. As a result, materials like lecture, course guides and textbooks, provided by subject, are frequently used and read [13]. In the formulation level, supervisor's preferences, field trend, projected career benefits, departmental research agenda, and core courses were the major influencing factors in dissertation topic [14], [15]. Talking about barriers of topic selection, lack of conceptual clarity, poor time management, and lacks of research culture were the major difficulties faced by 28 postgraduates in three Pakistan universities [16]. However, the subjects of such research are focused on graduate students' thesis or dissertation topic selection, removing from most undergraduate's research motivations and needs, in particular L2 undergraduate researchers, who may not have clear and specific academic goal, adequate disciplinary knowledge or research experience, nor a supervisor who do exactly the same jobs as those being done to postgraduates.

## III. METHODOLOGY

This study is based on a quasi-non-directional interview with six Chinese English major sophomores. All the informants conformed to three major topic selection criteria instructed in class, involving personal interest, academic significance and manageability & availability, which were similar to Lunenburg and Irby's criteria [10]. None of informants had participated in any academic project before; therefore, it was the first time for them to complete a standard research paper from selecting a topic to writing the whole paper. Since it was the second year of their major learning, their course lessons yet did not cover all the major domains of linguistics. Though they had several linguistic courses last and this semester, the lessons were just brief introduction to the according realm; consequently, all informants lacked of adequate disciplinary knowledge when doing their research.

In addition, their instructor is also a supervisor of several linguistic postgraduates, which means informants had relatively less time to communicate with her. Each of them had three to four times individual conferences on average. In order to supervise students' progress on their research paper, the instructor required them to keep a topic selection journal. In this study, after receiving informants' agreement, the researcher showed informants' the journal they provided during interview, and adjusted the sequence of the interview questions to let the informants recall their experience chronologically and to ask correspondingly.

An interview guide was constructed (See Appendix) and slightly adapted for every interview according to their journal. The interview can be divided into three parts: Part I contains questions about the literature informants had read. Part II raises questions on the influence of reading in shaping their research topic. All the interviews were conducted in Mandarin and each of them lasted for approximately twenty minutes. The follow-up interviews were also conducted with all the informants two days later to acquire further information according to their first interview. The conversations in all the interviews were transcribed verbatim into the English texts, including fillers, discourse markers, repetitions.

Based on current reading of the transcripts, a coding scheme was developed to analyze the interviews. Three major categories of topic selection principles were adapted from Lunenburg and Irby's built on current reading of the transcripts, including academic significance, manageability & availability and time management [10]. Academic significance refers to the topic should at least have the potential to achieve one of the following academic aims: (a) contribute to a newly developed theory, (b) test the existing theory or research, (c) apply the theory to phenomena or (d) uncover new facts or principles. Manageability & availability require students should select the topics that they can retrieve and use their disciplinary knowledge and practical skills. Time management demands the topic should not be too broad and should be completed in time.

## IV. FINDINGS AND DISCUSSION

The data analysis revealed that during the topic selection process, all three principles influenced the informants' decision. Their emphasis on principles varied from their sorts of research. Professional literature they chose also underwent some changes.

### *A. Academic Significance*

Academic significance usually was the very first criterion informants ascertained when they came up with possible topics. The initial topics of every informant were those they had great personal interests in, but they need to read related literature to determine whether the topics were underexplored and worthwhile to study, otherwise they would abandon the over-researched topics and turned to another one.

All informants read some literature to ascertain academic significance of their promising research topics, while the means they proved were slightly different. Fanny and Yanny

read a lot of journals, then figured out the existing literature of their initial topics may be so saturated that they could hardly make a further contribution to it, thus they gave up. Fanny altered her context, changed one of the key terms in her topic but Yanny directly changed into the other research direction. Another informant, Wendy developed her research paper based on one of her last term papers. She was fascinated by the power relation shift in news interview and tried to use Critical Discourse Analysis (CDA) approach to analyze four TV interviews. She mentioned the issue itself was where the significance lied. Quennie also adopted CDA to investigate female images in Chinese media so she shared some similarity with Wendy in methodology. In consequence, both of them determined their research topics' significance through reading journals. Sherry and Tyra both read journal first from which they received a fundamental impression on their topic. After that, they fortunately encountered the monographs that directly showed the future direction of their topics, so that they could more firmly insist on their initial topics. In this period, their topics were all general and board.

To answer the first research question, concluded from interviews, the selection of reading sources is correspondent to Lueneburg and Irby's guidance [10]. Additionally, they preferred reading professional literature than other reading sources like textbook, theory, existing database etc. What is more, it is evident to find that no matter informants were in hesitation or not, in the phase that selecting a research direction, they all gave priority to professional journals rather than books. Professional literature indeed may be the most recommended way to identify a possible research topic [9] but to undergraduate students, more specifically speaking, journal is a better choice through which students can have a fundamental understanding on their research principles on the outset. As Fanny admitted, "I cannot read the original work of this field from the onset, because I don't have any conception of it, even the most basic one." Other informants stated that the unfamiliarity to the research field was the principal factor of choosing journal to read. In terms of the effect of reading, it helped informants to determine the potential realm and give up the insignificant choices. After stepped in the significant research area, journals not only showed them recently what controversial questions in this area have been discussed most, assisted them understand the significance of these argumentations, guided them where the research gap hid, also identified the habitual methodology which paved to the next criterion. In that case, undergraduate researchers, lacking of an overall comprehension of academic sphere, can conclude and circle some key terms with a combination of their personal interests to form their primary research topics.

### *B. Manageability and Availability*

Manageability and availability were the major criteria informants worried about. In this semester, methodology course was informants' compulsory course where they learnt how to adopt quantitative and qualitative method in linguistic research. Relatively speaking, manageability and availability are the most decisive factors influencing informants' topic selection. Academic significance helped informants locate the potential key terms of their topic, but in order to formulate

an appropriate topic, it is necessity to put manageability and availability in consideration. Insufficient knowledge about key terms of their topic, relevant theory and analytical framework hindered informants from deciding their final research topic. With limited theoretical knowledge, informants could not have a comprehensive grip of the development of the research field they were going to study [17]. Varied from their research' requirement, informants had, to learn new background knowledge, to comprehend alien theories, and to design feasible research instrument in their spare time. The effect of reading literature in this period can be divided into three sub-categories, actively positive, passively positive and negative. Actively positive effect refers to informants assure their topics are researchable and manageable through reading literature, while passively positive effect refers to informants exclude the unmanageable topic, but remaining doubts on their own topics. Negative effect means informants get more confused and even abandon it and return back to the first phase. The result also showed that, at this period, the selection of reading material of every informant has changed. Informants commenced to read more monographs and book, the basal literature, and read fewer journals than the prior period. Having different sort of impact from reading, reasons of such changes varied.

From interviews, informants evaluated basic concepts and key terms of their topics, relevant methodology and analytical framework in their research. Through reading literature, informants eliminated unfeasible research instruments, selected more understandable framework, gradationally narrowed down their topics and adjust them into a more suitable one. Unsurprisingly, the rest informants all experienced the alteration of reading materials. They shared some similar reasons about changing reading materials as Sherry and Tyra. They all reflected that through reading journals, it was unlikely to well comprehend the key terms, after all the words which authors wrote down more or less differed to the original meaning they quoted. At the instigation of her supervisor, Yanny took a textbook about language planning and policy as her reading material. She appreciated this book for its readability. Moreover, it is worth noting that some of them began to read Chinese literature instead of English which can avoid most linguistic barriers. Wendy said, "I read a book about CDA in Chinese, mentioning some classic theories and schools, and I feel it so clear...even clearer than any relevant literature I read before." With mother tongue, informants could accelerate their reading speed, and more handily to comprehend the critical content.

### *C. Time Management*

Time management requires informants assess how feasible their topics are in the time available, which directly affect the scope and depth of the research [18]. Since the research they conducted were term paper, they only had at most two months to finish. Informants anticipated the time might be needed in each stage: doing the research, collecting and analyzing the data or reading the literature and documents. Manageability and availability were the inert constraining factors of a research whereas time limitation was the overt

factors that informants had to consider. Yanny believed that given more time, concluded from literature, more variables could be added in her research to enhance her research. Sherry stated, “With longer time, I can do a larger scope research, or maybe an experiment. In that case, I can study the effect of writing feedback, the thing I want to study most.” Time management also worked as a push to urge informants to decide their topic. This influence affected informants’ reading behaviour. Fanny recalled that, “In order to select the topic as quickly as possible, I have to read more intensively so that I can understand the key term to decide to keep it or delete.” After scanning a variety of literature, Fanny seized upon the definition she wanted to adopt and finally decided the topic.

V. CONCLUSION

A. Summary of Major Findings

Three tables above show the results of six interviews. Four different types of reading materials are represented by Arabic number 1, 2, 3, and 4. Academic journals in this case were all empirical studies and case analysis, represented as 1; reviewed essay as 2, monologue as 3, textbook as 4.

TABLE I: THE EFFECT OF READING ON ACADEMIC SIGNIFICANCE

	Chosen literature	Effect	Result
Fanny	1	Failed to find a research gap	Changed key terms & research context
Yanny	1	Failed to find research significance	Abandoned initial topic
Sherry	1,3	Succeeded to find significance Figured out research field	Insisted in initial realm
Tyra	1,3	Succeeded to find significance	Insisted in initial realm
Wendy	1	Succeeded to find significance	Insisted in initial topic
Queenie	1	Succeeded to find significance	Insisted in initial topic

TABLE II: THE EFFECT OF READING ON MANAGEABILITY & AVAILABILITY

	Chosen literature	Effect	Result
Fanny	1,3	Confused by different definition and analytic framework Determined definition and analytic framework to be used	Narrowed down the topic
Yanny	1,4	Determined analytic framework	Identified research field; Narrowed down the topic
Sherry	1,2,3	Excluded impractical research instrument; Clearer about key words	Altered key terms Narrowed down the topic
Tyra	1,2,3	Identified research instrument; Excluded impractical research instrument; Confused by different analytical framework	Narrowed down the topic; Deleted one unmanageable key term
Wendy	1,3	Excluded impractical research instrument; Confused by assorted analytical framework; Aggravated negative	Abandoned one possible research realm; Narrowed down the topic

Queenie	1,3	emotion Failed to find relevant literature; Excluded impractical research instrument; Determined data	Changed research context; Narrowed research topic
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TABLE II: THE EFFECT OF READING ON TIME ARRANGEMENT

	Chosen literature	Effect	Result
Fanny	1,3	Read more intensively	Determined the key terms
Yanny	1,3	Read more intensively; Aggravated negative emotion	Abandoned initial topic; Intentionally neglected some potential influenced factors in key terms;
Sherry	1,3	Excluded impractical research instrument	Abandoned impractical research focus
Tyra	1,3	(Relatively less influential)	No direct major change
Wendy	1,3	Gave up some points discovered from reading; Intentionally neglected some variables	Deleted some key terms; Abandoned one possible topic
Queenie	1,3	Less influential	No direct major change

Premised on the interaction view of academic writing as proposed by Paltridge *et al.* [4], this paper showcased a study that examined the rapport of reading and topic formulation. Based on interviews of six Chinese undergraduates, the study reveals that reading shaped topics according to three selection principles. The entire selection process tends to be a linear model including three steps: identify research direction, specify key concept and decide methodology. Reading functioned in the whole process but served to three principles in different phases. Meanwhile, professional literature informants chose also experienced alteration and somehow contradicted with Thompson *et al.*'s study [13]. Generally speaking, the first phase was to locate a board academic area, during which academic significance played the most prominent role. Time management to some extent brought into play to eliminate areas that needed time-consuming research instruments. In this period, all the informants read academic journals to acquaint to the recent hit argumentation and pervasive research method, and a more specific direction emerged. Having a rough research direction, informants embarked on select their research focus. Manageability and availability were the major concerns of informants in this phase. The means of assuring this principle was different. Four of them experienced actively positive effect, and two experienced passively positive effect. Two informants even had the notion that giving up the half-formulated topic due to the negative effect. Informants selected the most manageable key terms in their topics. Beneath most topic adjustments occurred in this phase lied the insufficient knowledge of discipline background, theoretical framework and research experience. In this period, informants commenced to read monographs where the basic key concepts, theory and framework are introduced. They also turned to Chinese literature to comprehend better. For undergraduate

researchers, it was too demanding to understand to original works in linguistic field written in English relied on their own second language proficiency. Chinese literature can help them transform the knowledge into a more comprehensible version. The final phase was to choose a feasible research method. Manageability and time management were equally essential in this phase. Informants first assessed whether they were capable to use the ideal method, taking their personal ability, access to data into account, then they assessed the scope of their research which determined by the time management. Commonly, once informants successfully arrange method, their topics were settled.

### B. Pedagogical Implications

Considering of the insufficient knowledge of undergraduates, instructors can provide advice on students' reading for topic selection, by encouraging them to read review paper and journals written in their first language, which may decrease the comprehensive difficulties in reading, hence they can have a general understanding on their interest research realm. Unlike master thesis or doctoral dissertation writing, the expectation of academic significance can be lower, and encourage undergraduates to take manageability and time management into consideration, both of which requires more time in reading literature. Significance can be approximately regarded as a light to a broad academic sphere, and manageability and time management functioning in narrowing down the topic.

### C. Limitation and Further Research

Topic selection is not merely involved of reading, but also others cognitive and social construction such as past experience [19], motivation [9], academic committee [20] [21] etc. According to informants, advice received from instructor was also inspiring and enlightening to their final selection, some of them even become the turning point of their topic selection. Also, interview may miss some important information and details of the process because of the depletion of simultaneity between mental activity happened in reading and interview. With think-aloud protocol and longitudinal research, the detailed picture of the process can be depicted. Thirdly, due to the time limitation, research paper informants conducted were mere term paper. Compared to B.A. thesis, these papers might not be representative enough to study.

Further study can take B.A. thesis as a research object which calls for higher academic expectation. Within the realm of topic selection and formulation, more variables can be included, such as interaction of supervisor, researcher and peers, previous learning experience, and language aptitude etc. In terms of methodology, longitudinal research and think-aloud protocol would be recommended, in case missing some sudden inspiration when informants were reading. Researcher also can study the influencing factor of alteration of reading materials, or the effect of reading on proposal writing

### APPENDIX

Interview questions:

1. What is your research topic now?

2. WHAT DID YOU READ MOST? EMPIRICAL STUDIES, WEBSites, books?

3. Describe some of the crucial events which you think have impacted the direction or selection of reading done in the past months of study. How is it related to your research topic?

4. Has your selection of literature gone through any major changes throughout these months of your study? What were the changes and what caused the changes?

5. Did reading literature help you narrow down the research topic? If so, how?

6. In terms of manageability and availability of the topic, did you benefit from reading literature? If so, how?

7. In terms of significance of the topic, did you benefit from reading literature? If so, how?

8. Did reading literature cause some difficulties on your topic selection? If so, what are the difficulties? How did you solve them?

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