THESIS

AN ANALYSIS OF DISCOURSE MARKERS AND DISCOURSE LABELS

AS COHESIVE DEVICES IN ESL STUDENT WRITING

Submitted by

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ABSTRACT

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This study analyzes the use of two types of cohesive device, discourse markers (Fraser, 2005) and discourse labels (Francis, 1994), in the academic arguments of native-speaking (L1) Chinese English as a second language (ESL) first-year composition (FYC) students. Discourse markers (DMs) are lexical expressions which signal that a semantic relationship of elaboration, contrast, inference, or temporality holds between adjacent discourse segments. Discourse labels are a type of nominal group lexical cohesion which makes use of unspecific abstract nouns to label and organize stretches of discourse. Using a qualitative text analysis, the use of these cohesive devices is examined in each case in terms of the discourse requirements of the text in question. An analysis of native speaker (NS) writing is used for comparative purposes to determine possible gaps between these two groups of student writers in the ability to use these devices to construct cohesive texts, as well as to determine potential similarities and/or differences in instructional foci for these two groups of student writers. The result of this study suggests that these ESL student writers do not tend to have problems using DMs or retrospective labels, but that they do tend to underuse advance discourse labels in their writing. Underuse of advance labels was not found to be a problem in the NS arguments analyzed. These results indicate that a knowledge gap does in fact exist between these non-native speakers (NNSs) and NSs with regard to the tools available to them in English for constructing cohesive academic texts. Annotated examples from the samples analyzed and specific teaching suggestions are provided to help FYC instructors address this knowledge gap.

ACKNOWLEDGEMENTS

DEDICATION

For Jerome, Shari, and Sheena

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CHAPTER 1: INTRODUCTION

Cohesion is an important aspect of academic writing (Gray & Cortes, 2011, p. 31), and second language (L2) writing researchers continue to investigate ways in which cohesion may be more effectively and efficiently taught to English language learners (see, e.g., Lee, 2002; Mahlberg, 2006; Shea, 2011). Hinkel (2004) devotes a chapter of her book *Teaching Academic ESL Writing* to the rhetorical features of cohesion and coherence; she states,

> In particular various studies have noted that in academic writing cohesion represents an important characteristic of text and discourse flow and that for L2 learners constructing cohesive texts requires focused instruction and additional attention (Byrd & Reid, 1998; Carrell, 1982; Hinkel, 2001a, 2002a; Ostler, 1987; Reid, 1993). (p. 279)

For many degree-seeking English language learners (ELLs), a first-year composition (FYC) course serves as an introduction to academic writing; it may also represent one of the few opportunities these students have for receiving the focused instruction and additional attention in constructing cohesive texts that Hinkel mentions above. For students who wish to continue on to postgraduate study, learning to write cohesive texts takes on an even greater importance (see, e.g., Hyland, 2010, on the use of metadiscourse in masters and doctoral dissertations[1]). And for those who intend careers as teacher-researchers in various disciplines, the importance of constructing cohesive texts cannot be overstated (Ventola & Mauranen, 1991, p. 457).

While I take the position in the present study that the central purpose of college writing instruction should be to prepare students to write academic discourse as it is reflected in expert published writing (e.g., research articles; see Bolton et al., 2002, p. 173), clearly not all FYC students aspire to careers in academia or even to postgraduate study. Yet, all students have a pressing need to learn to construct cohesive texts in English and to read academic discourse,

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[1] While metadiscourse falls outside the focus of the present study, there are several categories of metadiscourse in the taxonomy Hyland (2010) presents which overlap with discourse markers, a type of cohesive device with which the present study is concerned. Discourse markers are discussed below and in detail in Chapter 2 of the present study.

skills expected of them throughout their student careers by faculty in the disciplines (Hinkel, 2002, p. 27).[2]

Among the many English as a second language (ESL) students studying on American campuses that composition instructors may encounter in a FYC course are international students from China, who now represent "the largest international contingent" (Jiang, 2011, para. 1). The large number of Chinese international students studying in American colleges and universities means that FYC instructors, regardless of whether they teach mainstream or L2 sections of FYC, will likely encounter students from this first language (L1) background in their classes. This suggests that understanding the problems these student writers may have in constructing cohesive texts will be of broad benefit to composition faculty. I am not proposing here that the particular needs of ESL student writers of other L1 backgrounds should be considered second-tier priorities in any way. Rather, the rationale for focusing on cohesion in the writing of L1 Chinese ESL students is based on the notion that even composition instructors with no previous experience teaching non-native speakers (NNSs) may encounter these ESL students in their mainstream FYC sections. The purpose of the present study, therefore, is to investigate what particular challenges, if any, this significant population of ESL students faces in learning to construct cohesive texts in English. The ultimate goal of this study, however, is to identify possible instructional foci for the teaching of cohesion to these students.

I note here that proponents of critical discourse analysis (see, e.g., Kubota, 1997) may take issue with the stated purpose and goal of this study, as the obvious aim here is to help these ESL writers "learn the text and discourse conventions of the Anglo-American academy" (Hinkel, 2002, p. 255) according to which they will be evaluated. While Hinkel (2002) states, correctly, I

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[2] Hinkel (2002) also observes that these faculty, in contrast to, e.g., composition or English for academic purposes (EAP) faculty, tend to be "concerned with the product of writing and…not…in the process of its creation" (p. 28).

think, that "[i]t may be unquestionably true that there are issues of power and conflicts of ideology that complicate the teaching and learning of Anglo-American academic discourse frameworks," she also argues with regard to her own study,

> An underlying assumption of this research, however, and one of the demonstrable conclusions is that NNS writers produce text that differs significantly from the text that NS writers produce. A further assumption is that knowing what those differences are is of value to teachers and researchers in applied linguistics. (p. 14)

The present study is also motivated to a large degree by these assumptions, and it's with this in mind that I take a similar position to Hinkel (2002) on the significance of L2 writing instruction, *viz.*, "The purpose of teaching L2 vocabulary, grammar, and text and discourse construction is to allow university students and graduates opportunities and respect commensurate with their academic standing" (p. 256).

Returning to the question of what Jiang (2011) describes as a "rapid increase in the number of Chinese students in America" (para. 2), the influx of L1 Chinese NNSs on American college and university campuses has been tied to China's "desperate need of globally educated" citizens (Jiang, 2011, para. 1). As a result of this need, English language teaching in China has become a national priority. Liu and Braine (2005) state,

> In the past decade or so, China has emerged as a powerhouse in English language teaching because English is now a required subject from Grade 3 onwards and estimates are that more than 225 million students are enrolled in primary, secondary, and university levels in China (Mu, 2004; Zhang and Luan, 2002). (p. 625)

Yet, despite their description of China as a powerhouse in English language teaching, Liu and Braine found that their undergraduate non-English major English as a foreign language (EFL) subjects continue to have difficulty employing cohesive devices in their writing (pp. 631-633). This is somewhat surprising, not only given what they say about English language teaching in China, but also because, as they state, "English, in both written and oral forms, plays

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a crucial role when these students [non-English majors] compete for further education and employment" (p. 625).

Nonetheless, the results of their study and other studies of L1 Chinese ESL/EFL student writing (e.g., Chen, 2006; Flowerdew, 2006, 2010; Hinkel, 2002; Zhang, 2000) suggest that cohesion remains an important aspect of academic writing to address with these NNS writers. It also serves as a reminder that composition instructors are most likely to encounter non-English majors who may have had limited exposure to the tools available in English for constructing cohesive texts (see also Hinkel, 2004, p. x).

Since the publication of Halliday and Hasan's (1976) seminal book *Cohesion in English*, studies of cohesion in L2 writing have focused on the categories Halliday and Hasan refer to as reference, conjunction, and lexical cohesion.[3] Cohesive devices corresponding to the categories of conjunctive cohesion and lexical cohesion have been found to be of particular importance to written academic discourse (Hinkel, 2001, p. 112; see also Hyland, 1998; Flowerdew, 2003). The importance of this finding to L2 writing research is reflected in the number of studies which have focused on these two types of cohesive device [see, e.g., Trebits (2009) on conjunction; Chen (2006), Liu (2008), and Shea (2009) on linking adverbials; Crossley & McNamara (2009), Flowerdew (2010), Gray & Cortes (2011), and McGee (2009) on lexical cohesion; Liu & Braine (2005) and Shea (2011) on both linking adverbials and lexical cohesion]. This research focus in turn points not only to the importance of these types of cohesive device to written academic discourse, but also to the difficulty NNSs have in putting them to effective use in their writing.

The present study is also concerned with the use of a type of cohesive device similar to Halliday and Hasan's conjunctive cohesion, which I refer to as discourse markers (DMs)

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[3] According to several researchers (e.g., Khalil, 1989; Liu & Braine, 2005; Tierney & Mosenthal, 1983; Witte and Faigley, 1981) the other two categories of cohesive device identified by Halliday and Hasan (i.e., substitution and ellipsis) are not commonly found in formal written discourse.

following Bruce Fraser's (2005) terminology, and a subtype of lexical cohesion which I refer to as discourse labels following Gill Francis's (1994) terminology, in NNS student writing. Specifically, the present study is concerned with how these cohesive devices are used in the academic writing of L1 Chinese ESL FYC students. [4] (I discuss cohesion, DMs, and discourse labels in detail in Chapter 2, which sets forth the theoretical framework of the present study.) Fraser's theory of DMs and Francis's notion of discourse labeling provide the basis for the way these devices are examined in the present study. To my knowledge, Fraser's theory of DMs, which takes a broader view of this type of cohesive device than Halliday and Hasan (1976) (e.g., by looking at discourse segments rather than sentences and by including subordinating conjunctions, which are not included in Halliday and Hasan's taxonomy of conjunctives), has not been used in the L2 writing research on cohesion. Nor, to my knowledge, has Francis's notion of discourse labeling been used as the basis for a theoretical framework to analyze lexical cohesion in L2 writing, though similar types of nominal group lexical cohesion have (e.g., Aktas & Cortes, 2008, utilized Schmid's, 2000, notion of shell nouns in their study).[5]

The present study is a qualitative text analysis of L1 Chinese NNS and native speaker (NS) academic arguments from a university FYC course. It examines the use of DMs and discourse labels in terms of the requirements of the text of each of the essays analyzed. The analysis of NS writing is used for comparative purposes in order to determine possible gaps between these two groups of student writers in the ability to use these devices to construct cohesive texts, as well as to determine potential similarities and/or differences in instructional

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[4] An attempt was made to collect information regarding the Chinese language (e.g., Mandarin, Cantonese) spoken by each of the NNS student writers who submitted essays for analysis. However, this information was not provided by most of the writers; therefore, no attempt is made in the present study to further distinguish the L1 of these NNS student writers.

[5] Hinkel's (2002) large-scale study of L2 writing includes frequency counts of nouns which frequently function as heads of discourse labels and related types of nominal groups.

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foci for these two groups of student writers. It is not intended to represent target use of DMs and discourse labels.

A brief review of the prior empirical research mentioned in this chapter reveals that it mostly consists of quantitative analyses, and, therefore, differences in the way DM- or label-like phenomena are used in the writing of NNSs and NSs is commonly conceptualized in terms of how frequently these items occur in NNS student writing when compared with NS (student or expert) writing. Additionally, the research conducted within the past decade or so on phenomena similar to that with which the present study is concerned in the writing of L1 Chinese ELLs suggests that these student writers may tend to overuse DMs (Bolton et al., 2002; Chen, 2006; Hinkel; 2002; Zhang, 2000) and use them incorrectly (Chen, 2006; Hinkel, 2002; Zhang, 2000).[6] It also suggests that they may tend to underuse discourse labels in their writing (Flowerdew, 2010; Hinkel, 2002) and have problems using them correctly (Flowerdew, 2006, 2010).

While acknowledging the contributions of these studies to our understanding of how these student writers use these types of cohesive device in their writing, it is hoped that the present study will provide new insights into the way these writers use these devices by analyzing them in terms of the needs of the text, thereby adding to our understanding of how NNSs of this L1 background use these devices in their writing. Noble (2010) observes that

> close textual analysis allows the teacher/researcher insight into not only the target linguistic items chosen by a student, but also the absence of what might have clarified the writer's meaning and thus potentially the next step the writer could take to improve his or her writing. (p. 149)

Furthermore, one of the benefits of a qualitative analysis such as this is that the use of these items can be readily separated from other potential problems (e.g., register, style, syntax) that are

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[6] Bolton et al.'s (2002) study of connectors also specifically investigated potential underuse of these items, but their results did not suggest that this was a problem for these writers.

often conflated with NNS use of cohesive devices.[7] Annotated examples from the essays

sampled for analysis are intended to be illustrative, and pedagogically relevant to composition

instructors. In addition, teaching suggestions are provided in Chapter 5.[8]

Research Questions

This study addresses the following specific research questions raised by the prior L2

writing research with regard to L1 Chinese NNS student writers:

1. Do these writers use any DMs incorrectly, with "incorrect use" defined in terms of the context

in which they occur?

2. Do these writers overuse any DMs, with "overuse" defined in terms of the context in which

they occur?

3. Do these writers underuse any DMs, with "underuse" defined in terms of the context in which

they occur?

4. Are discourse labels problematic for these writers to use effectively in their writing, with

"effective use" defined as when the semantics of the label (i.e., the nominal group functioning as

such) and its lexicalization are fully compatible?

5. Do these writers overuse discourse labels, with "overuse" defined in terms of the context in

which they occur?

6. Do these writers underuse discourse labels, with "underuse" again defined in terms of the

context in which they occur?

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[7] Cheng and Steffensen's (1996) observation in their mixed-methods study of metadiscourse in NS student writing that "[n]o optimal levels of metadiscourse have been established (and it will be difficult to do this because of differences in writing style)" (p. 164) also contributed to my decision to conduct a qualitative text analysis.

[8] Gilquin et al. (2007) lament the fact that, although "[t]he use of non-native speakers' writing corpora has been advocated by several linguists and a number of descriptive studies exist on important EAP topics….these studies have had little pedagogical impact" (p. 323).

CHAPTER 2: THE THEORETICAL FRAMEWORK

Introduction

In this chapter I present the theoretical framework of the present study. First, I review the

concept of cohesion as it was first defined by M. A. K. Halliday and Ruqaiya Hasan (1976).

Next, I describe DMs (*conjunction* in Halliday & Hasan's terms), primarily focusing on the work

done by Bruce Fraser (2005) in this area, and their cohesive function in written discourse.

Finally, I describe a class of abstract unspecific nouns, primarily focusing on the work done by

Gill Francis (1994) on discourse labeling, and their cohesive function in written discourse.

Similar work done by John Flowerdew (2002), Halliday and Hasan (1976), Hans-Jörg Schmid

(2000), and Angele Tadros (1994) will also be reviewed.

Cohesion

In *Cohesion in English*, Halliday and Hasan (1976; hereafter "H&H") define cohesion:

> The concept of cohesion is a semantic one; it refers to relations of meaning that exist
> within the text, and that define it as a text.
>   Cohesion occurs where the INTERPRETATION of some element in the discourse is
> dependent on that of another. The one PRESUPPOSES the other, in the sense that it cannot
> be effectively decoded except by recourse to it. When this happens, a relation of
> cohesion is set up, and the two elements, the presupposing and the presupposed, are
> thereby at least potentially integrated into a text. (p. 4)

According to H&H, presuppositions (to use their term) serve as "directives indicating that

information is to be retrieved from elsewhere" (p. 31) in the text, and this is achieved "through

relations in MEANING" (p. 10) that have the potential to link sentences and thereby create a text.

They state that this allows us to "interpret cohesion, in practice, as the set of semantic resources

for linking a SENTENCE with what has gone before" (p. 10; see also Hasan, 1984).

While acknowledging that cohesion occurs intrasententially and intersententially (see

H&H, pp. 6-9, for a discussion), H&H argue, "In the description of a text, it is the intersentence

cohesion that is significant, because that represents the variable aspect of cohesion, distinguishing one text from another" (p. 9). The theoretical framework for the present study differs in this respect from H&H and adopts Fraser's (2005) approach to analyzing text at the segment, rather than sentence, level (see also Witte & Faigley, 1981, for early criticism of the sentence-level approach to analyzing cohesion).[9] A discourse segment "encodes a complete message" (Fraser, p. 5). That is, it expresses a complete proposition; it may or may not correspond to a complete sentence. The decision to adopt Fraser's segmental approach to analyzing discourse was primarily based on three reasons. First, although H&H maintain the position throughout *Cohesion in English* that cohesion is, strictly speaking, important mainly at the intersentential level, they are compelled to make some exceptions (see, e.g., pp. 232-233, for a discussion of conjunctive adjuncts occurring "in written English following a colon or semicolon"). The second reason for my decision to adopt Fraser's discourse segment-level approach relates to the fact that developmental L1 and L2 writers often struggle with appropriate punctuation. This often results in problems such as "run-on sentences," which shouldn't be conflated with an analysis of cohesive devices. Finally, as will be shown in the review of Fraser's work on DMs, a DM might signal the same cohesive relationship between two segments of discourse punctuated, for example, by a period, a comma, or a semicolon, with little or no difference in meaning or cohesive force. In all cases the same cohesive relationship would exist between the discourse segments. To say, then, that only segments separated by a period (full stop) are cohesive seems arbitrary. Therefore, both (1:13a) below, which is an example of cohesion created by (in H&H's terms) *non-structural* (i.e. intersentential) means, and (1:13b), which is an example of cohesion created by *structural* (i.e. syntactic) means, will be considered cohesive for the purposes of the present study (examples from H&H, p. 9, their numbering).

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[9] All references below to Fraser are to Fraser (2005).

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[1:13] a. It's raining. – Then let's stay at home.
           b. Since it's raining, let's stay at home.

H&H identified five lexicogrammatical categories of cohesive device: (a) reference, (b) substitution, (c) ellipsis, (d) conjunction, and (e) lexical cohesion. The first three categories are grammatical and the last one is of course lexical. Conjunction, according to H&H, is "on the borderline of the two; mainly grammatical, but with a lexical component in it" (p. 6). The rest of the present study will be concerned with two categories of cohesion: conjunctive cohesion, although I've adopted Fraser's term *discourse marker*; and lexical cohesion, or to be more precise, a subcategory of lexical cohesion consisting of a class of abstract or unspecific noun, for which I've borrowed the term *discourse label* from Francis (1994).[10]

Any discussion of cohesion must be situated within the notion of *text*. H&H view a text as "a semantic unit" (p. 293). "The unity that [a text] has," they state, "is a unity of meaning in context, a texture that expresses the fact that it relates as a whole to the environment in which it is placed" (p. 293). They identify three "components of texture" (p. 324),[11] including cohesion, which they state is "the linguistic means whereby texture is achieved" (p. 293).

Cohesion is thus an important contributor to the overall perceived coherence of a written discourse, yet H&H clearly state that cohesion alone does not create a coherent text (see, e.g., Carrell, 1982, for a strong critique of H&H's discussion of cohesion and coherence). They say,

> Cohesion is a necessary though not sufficient condition for the creation of text. What creates text is the TEXTUAL, or text-forming, component of the linguistic system, of which cohesion is one part. The textual component as a whole is the set of resources in a language whose semantic function is that of expressing relationship to the environment. It is the meaning derived from this component which characterizes a text – which

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[10] Although I've adopted the terms *discourse marker* and *discourse label* for the purposes of the present study, I will make use of other researchers' terms for similar phenomena when the clarity of the discussion benefits from it or when discussing something specific to the work of a particular researcher.

[11] See H&H's discussion of "texture within the sentence" and "the texture of discourse" (pp. 324-327).

characterizes language that is operational in some context, as distinct from language that is not operational but citational, such as an index or other form of verbal inventory.

…The concept of a textual or text-forming function in the semantic system provides the most general answer to the question of what cohesion means….Within the textual component, cohesion plays a special role in the creation of text. Cohesion expresses the continuity that exists between one part of the text and another. It is important to stress that continuity is not the whole of texture. The organization of each segment of a discourse in terms of its information structure, thematic patterns and the like is also part of its texture…, no less important than the continuity from one segment to another. But the continuity adds a further element that must be present in order for the discourse to come to life as text.

The continuity that is provided by cohesion consists, in the most general terms, in expressing at each stage in the discourse the points of contact with what has gone before. The significance of this lies in the simple fact that there are such points of contact: that some entity or some circumstance, some relevant feature or some thread of argument persists from one moment to another in the semantic process, as the meanings unfold. But it has another more fundamental significance, which lies in the interpretation of the discourse. It is the continuity provided by cohesion that enables the reader or listener to supply all the missing pieces, all the components of the picture which are not present in the text but are necessary to its interpretation. (pp. 298-299)

H&H's important observation in the final paragraph above that the relationships between sentences in a text exist independent of surface level cohesion, and that cohesion assists the reader in interpreting these relationships, is a notion central to Fraser's theory of DMs. It has appeared frequently in the empirical research on cohesion in developmental L2 writing as well (see, e.g., Crewe, 1990). I revisit this important notion later in my review of Fraser's work in the area of DMs.

Having briefly reviewed the theory of cohesion as it was originally proposed by H&H in their seminal work in the area, I now turn to a detailed review of DMs and discourse labels and their cohesive functions in written discourse.

Discourse Markers

    Introduction.

    As noted above, for the purposes of the present study, I've chosen to focus primarily on Bruce Fraser's work in the area of DMs. According to Delahunty (2012), "The most developed work in this area is Bruce Fraser's" (p. 57). H&H's work in this area, which includes a detailed taxonomy of these cohesive devices, also contributes to the theoretical framework used in the present study.

    Fraser correctly observes that "there is no general agreement on what to call these items" (p. 3). As noted above, nearly four decades ago, H&H referred to these cohesive items as *conjunctive relations/elements*, or simply *conjunction*. Fraser provides a list of 15 terms frequently found in the literature to refer to the same (or very similar) items, including discourse connectives, discourse signaling devices, and sentence connectives (pp. 3-4).

    For H&H, these items are a "type of cohesive relation…in the grammar" (p. 226). They state that, rather than "simply an anaphoric relation" (p. 226) as most instances of reference, substitution, and ellipsis are,

> [c]onjunctive elements are cohesive not in themselves but indirectly, by virtue of their specific meanings; they are not primarily devices for reaching out into the preceding (or following) text, but they express certain meanings which presuppose the presence of other components in the discourse.
> ….With conjunction…we move into a different type of semantic relation, one which is no longer any kind of a search instruction but a specification of the way in which what is to follow is systematically connected to what has gone before. (pp. 226-227)

Similarly, Fraser broadly defines DMs as a type of pragmatic marker "which [signals] a relation between the discourse segment which hosts them, and the prior discourse segment" (p. 3).[12] He defines pragmatic markers as follows:

> These [lexical] expressions occur as part of a discourse segment but are not part of the propositional content of the message conveyed, and they do not contribute to the meaning of the proposition *per se*. Members of this class typically have the following properties: they are free morphemes, discourse-segment initial, signal a specific message, and are classified not syntactically but in terms of their semantic/pragmatic functions. (p. 1)

What Fraser means by "the proposition" in his definition of pragmatic markers isn't completely clear. Blakemore (1992), for example, observes that

> it is generally recognized that what a speaker means on a particular occasion is not exhausted by the proposition he is taken to have expressed. The hearer is usually expected to derive other propositions which are not related in any systematic way to the meanings of the words uttered. (p. 6)

Fraser doesn't address the "*set* of propositions" (Blakemore, 1992, p. 7, emphasis in original) that an utterance, or "discourse segment" to use his term, may express in his theory of DMs. He focuses instead, like H&H, on the relationship between two semantically related discourse segments that is signaled by the meaning of the DM. Therefore, when Fraser refers to "the proposition" in his definition of pragmatic markers, I take him to mean (in Blakemore's words) "the proposition he [the speaker] is taken to have expressed" (Blakemore, 1992, p. 6), although as Blakemore has observed in the passage quoted above, the hearer is typically expected to also "derive other propositions" from an utterance.

The examples in (8) below illustrate the specific type of pragmatic marker that Fraser refers to as DMs; the DMs are in boldface type (from Fraser, p. 3, his numbering and emphasis):

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[12] Fraser's *conversational management markers*, a subcategory of another type of pragmatic marker he calls *parallel pragmatic markers*, are likely included in Halliday and Hasan's taxonomy of conjunction (*Now* and *Ok* = resumptive temporal relation; *Well* = continuative). However, it's difficult to be certain because Fraser provides so little context in his examples.

(8) a) A: I like him. B: **So**, you think you'll ask him out then?
 b) John can't go. **And** Mary can't go either.
 c) A: Harry is hurrying. B: **But** when do you think he will really get here?
 d) I think it will fly. **Anyway**, let's give it a chance.
 e) Sue isn't here, **although** she said she would be.
 f) Donna left late. **However**, she arrived on time.

Definition.

Fraser provides the following "canonical definition" of DMs:

For a sequence of discourse segments S1 – S2, each of which encodes a complete
message, a lexical expression LE functions as a discourse marker if, when it occurs in S2-
initial position (S1 – LE + S2), LE signals that a semantic relationship holds between S2
and S1 which is one of: a) Elaboration; b) Contrast; c) Inference; or d) Temporality. (p. 5)

Like H&H, Fraser limits DMs to lexical expressions (p. 5). He differs from H&H,

however, in his approach to analyzing segmental relationships, rather than sentential

relationships, as was noted in the section on cohesion above (see also Fraser, p. 15, and the

section on semantic relationships below). Fraser, explicating his definition of DMs, observes

that "the definition specifies that S1 and S2 are single contiguous discourse segments. While

generally true, there are exceptions" (p. 5), as he illustrates in example (10) below (p. 5, Fraser's

numbering), "where the DM *however* relates non-contiguous segments" (p. 6):

 (10) A: I don't want to go very much.
   B: John said he would be there.
   A: **However**, I do have an obligation to be there.

"In addition," says Fraser, "the segments need not consist of a single utterance" (p. 6),

although he states that such instances are "relatively infrequent" (p. 6). In (11a) below, for

example, he explains that "the *however* relates its host segment to the previous three segments"

(p. 6), and in (11b), "*essentially* relates the following three segments to the previous one" (p. 6;

examples also from Fraser, p. 6, his numbering):

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(11) a) He drove the truck through the parking lot and onto the street. Then he almost cut me off. After that, he ran a red light. **However**, these weren't his worst offenses.
b) You want to know the truth? **Essentially**, John stayed away. Jane came but didn't participate. And Harry and Susan fought the entire evening.

According to Fraser's definition, S1 and S2 each must encode "a complete message" (p. 5). By "complete message," I take Fraser to mean a complete proposition, and more specifically, "the proposition [the speaker] is taken to have expressed" (Blakemore, 1992, p. 6; see also the discussion related to Fraser's definition of pragmatic markers above). Note that the discourse segments may or may not be separated in written discourse by a period, as the following examples from Fraser illustrate (p. 6, his numbering):

(12) a) Water freezes at 32 degrees **but** boils at 212 degrees.
b) The movie is over, **so** we might as well go directly to the party.
c) A: Fred is a real gentleman. B: **On the contrary**, he's a boor.

Fraser's definition of DMs also permits elision, as example (12a) above and the examples from Fraser which follow show (p. 7, his numbering), where "the S2 has had part of the full discourse segment content elided" (p. 6):

(13) a) A: Jack ate a hamburger. B: I did **too**.
b) Jane wants to leave, **but** not me.
c) A: I'm hungry. **So** (what should I make of that)?
d) She'll go **before** John.

In contrast to the examples in (13) above, the following example (from Fraser, p. 7, his numbering) contains a "lexical expression which has the potential to function as a DM [but] is prevented from doing so because there is not a complete message in S2 which can be related to S1" (Fraser, p. 7):

(14) e) A: How is Sue going to get there. [*sic*] B: She'll go **however [in whatever way]** she can.

Fraser's basic definition of DMs claims that DMs occur in the S2-initial position. Similarly, H&H observe that "[a] conjunctive adjunct normally has first position in the

sentence…and has as its domain the whole of the sentence in which it occurs" (p. 232).

However, Fraser and H&H allow for "an alternative form of the DMs [which] may be placed in the S1-initial position, often with adjustments to the segment" (Fraser, p. 7). For example (Fraser, p. 7, his numbering):

> (15) a) He came back **because** he loved her./He loved her. **Because of that**, he came back.
> b) John didn't take the letter. **Instead**, he left it./**Instead of** taking the letter, John left it.

Fraser glosses the term *signal* in his definition of DMs as follows: "By using the term 'signal' I mean that the DM marks a relationship between S2 and S1 which the speaker of S2 intends the hearer to recognize" (p. 8). Congruent with H&H's theory of cohesion, Fraser argues, "A DM does not 'create' a relationship between two successive segments, since the relationship must already exist for the S1-DM+S2 sequence to be acceptable" (p. 8). Similarly, H&H argue that "the underlying semantic relation" is what "actually has the cohesive power" (p. 229). They say,

> This explains how it is that we are often prepared to recognize the presence of a relation of this kind even when it is not expressed overtly at all. We are prepared to supply it for ourselves, and thus to assume that there is cohesion even though it has not been explicitly demonstrated. (p. 229)

Much of the empirical research lends support to Fraser's and H&H's argument (see, e.g., Crewe, 1990). Fraser's example (12), repeated below, illustrates the point:

> (12) a) Water freezes at 32 degrees **but** boils at 212 degrees.
> b) The movie is over, **so** we might as well go directly to the party.
> c) A: Fred is a real gentleman. B: **On the contrary**, he's a boor.

Fraser states that in example (12a) "the *but*…signals that a contrast exists between S2 and S1 and the hearer is to interpret the sequence while being aware of this" (p. 8). In (12b), he states that "the *so*…signals that the conclusion conveyed in S2 is justified by the message

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conveyed in S1" (p. 8). And "the *on the contrary* in (12c) signals disagreement of the second

speaker with the message of the first" (p. 8). He argues that "[t]hese relationships, and perhaps

others, exist between the sequence of S2 and S1 in (12), whether or not there is a DM present"

(p. 8). This topic is taken up again in the section below, addressed from the perspective of the

syntactic properties of DMs.

Syntactic Properties of Discourse Markers.

Fraser's and H&H's syntactic categorization of DMs overlap a great deal. Fraser places

all DMs into one of the following five syntactic categories: (a) coordinate conjunction, (b)

subordinate conjunction, (c) preposition, (d) prepositional phrase, and (e) adverb (pp. 10-11; cf.

H&H, p. 231). Following is a list of the five categories with examples (from Fraser, p. 11):

a) **COORDINATE CONJUNCTIONS** (*and, but, or, nor, so, yet,…*)
b) **SUBORDINATE CONJUNCTIONS** (*after, although, as, as far as, as if, as long as, assuming that, because, before, but that, directly, except that, given that, granting that, if, in case, in order that, in that, in the event that, inasmuch as, insofar that, like, once, provided that, save that, since, such that, though, unless, until, when(ever), whereas, whereupon, wherever, while,…*)
c) **ADVERBIALS** (*anyway, besides, consequently, furthermore, still, however, then,…*)
d) **PREPOSITIONS** (*despite, in spite of, instead of, rather than,…*)
e) **PREPOSITIONAL PHRASES** (*above all, after all, as a consequence (of that), as a conclusion, as a result (of that), because of that, besides that, by the same token, contrary to that, for example, for that reason, in addition (to that), in any case/event, in comparison (with that), in contrast (to that), in fact, in general, in particular, in that case/instance, instead of that, of course, on that condition, on that basis, on the contrary, on the other hand, on top of it all, in other words, rather than that, regardless of that,…*)

Fraser also identifies three variations of prepositional phrases, outlined below (p. 11), as

well as "synonymous DMs but of different morphological form which fall into two syntactic

categories, depending on whether it is placed with S1 or S2" [p. 12; refer to Fraser's example

(15) above].

a) Fixed Form: *above all, after all, as a conclusion,…*
b) PREP+*that* (where *that* refers to S1): *despite that, in spite of that, in addition to that,…*
c) DM+*of this/that* (where *that* refers to S1): *as a result of that, because of that, instead of doing that, rather (than do/that)*

With respect to the placement of DMs, Fraser observes that it is "the syntactic category of each DM that determines where it may occur in S2" (p. 12). Therefore, according to Fraser, all DMs may occur in S2-initial position "with the possible exception of *though*" (p. 12), and this position is the only one that coordinating and subordinating conjunctions may occupy (p. 12). DMs that are prepositions, prepositional phrases, and adverbials, according to Fraser, "have a much greater latitude syntactically, some occurring in S2-final position, with others occurring in both the final and medial position" (p. 12). The examples below (from Fraser, p. 12, his numbering) illustrate his observations regarding the placement of DMs:

(20) a) A: You must go today. B: **But** I (***but**) don't want to go (***but**).
    b) We started late. **However**, we (**however**) arrived on time (**however**).
    c) The trip was tiring. **Despite that**, he (***despite that**) remained cheerful (**despite that**).
    d) A: The movie is over. B: **Then** we (***then**) should head for home (**then**).

Fraser observes that subordinating conjunctions "must be retained for syntactic reasons" (p. 13). Aside from the syntactic requirement of some DMs, however, Fraser claims that in some cases "the presence of a DM is optional," as in examples (21a-b) below (from Fraser, p. 13, his numbering),

(21) a) A: We started late. B: (**But**) we arrived on time.
    b) He didn't pick up the letter on the table. (**Instead/Rather,**) he left it lying there.

where the intended semantic relationship between the discourse segments in each sequence would be easily recoverable if the DM were omitted, "while in other cases…it must be present for an acceptable sequence to occur" (p. 13). Although it isn't completely clear what Fraser means here by "an acceptable sequence," especially in the light of his argument that "[a] DM

does not 'create' a relationship between two successive segments, since the relationship must already exist for the S1-DM+S2 sequence to be acceptable" (p. 8), I take him to mean either one or both of the following: (a) although a semantic relationship exists between adjacent discourse segments independent of the presence of a DM, omitting the DM would result in a sequence which is difficult to process or which would seem semantically anomalous; (b) the "present and intended" relationship between the discourse segments would not be "recognized, absent the presence of a DM forcing recognition that a specific relationship is present and intended" (Fraser, p. 14); both scenarios are perhaps especially relevant to written discourse.

If Fraser's claim that in some cases a DM "must be present for an acceptable sequence to occur" is interpreted on the basis of (a) above, then Fraser's (21c) below (p. 13, his numbering) provides an example of a sequence which would be difficult to process without the DM present,[13]

(21) c) Fred a gentleman? **On the contrary**, he is a boor.

while H&H's (5:2d) below (p. 229, their numbering but my emphasis) provides an example of a sequence that would at least seem semantically anomalous with the DM omitted:

[5:2] d. He was very uncomfortable. **Nevertheless** he fell asleep.

If Fraser's claim regarding the required presence of a DM is interpreted on the basis of (b), then Fraser's (21d) below (p. 13, his numbering) provides an example in which the "present and intended" relationship between the discourse segments would not be readily available to the reader without the DM present:

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[13] It should be noted here that whether or not my interpretations of Fraser's claim regarding those cases in which a DM is required "for an acceptable sequence to occur" are in fact what he has in mind, he nevertheless intends examples (21c-d) to illustrate such cases.

(21) d) Harry didn't arrive on time. **In any event**, the meeting was late in starting.

In contrast to the sequence in (21c), the sequence in (21d) would not be particularly difficult for the reader to process with the DM omitted; nor would it seem semantically anomalous with the DM omitted, in contrast to the sequence in (5:2d). Rather, in the case of (21d) it is the potential for the reader to miss the "specific relationship [which] is present and intended" (Fraser, p. 14) by the writer without the DM present to signal it. In fact, the semantic relationship that would most likely be inferred by the reader "absent the presence of a DM" would be that the meeting was late in starting as a result of Harry's arriving late.

Whether a DM is optional or required "for an acceptable sequence to occur," however, Fraser claims that

> in no case does the DM create the relationship between S2 and S1. Whatever the relationship, it is present due to the linguistic interpretation of the segments, taken together with the discourse context, and the DM merely makes clear what relationship the speaker intends. (p. 13)

Despite this, he clearly states as well that "this does not mean that DMs are redundant" (p. 13). In the examples in (22) below (p. 13, Fraser's numbering),

> (22) a) This flight takes 5 ½ hours. There's a stop-over in Paris.
> b) This flight takes 5 ½ hours, **and** there's a stop-over in Paris.
> c) This flight takes 5 ½ hours, **because** there's a stop-over in Paris.
> d) This flight takes 5 ½ hours. **So**, there's a stop-over in Paris.
> e) This flight takes 5 ½ hours, **but** there's a stop-over in Paris.
> f) This flight takes 5 ½ hours. **After all**, there's a stop-over in Paris.

Fraser claims, "Whereas the sequence in (22a) enjoys all of the DM relationships indicated in (22b-f),…it is doubtful that all the relationships would be recognized, absent the presence of a DM forcing recognition that a specific relationship is present and intended" (pp. 13-14).

Semantic relationships.

According to Fraser, DMs signal a relationship between two adjacent segments of discourse in one of three ways, shown below with examples (p. 14, Fraser's numbering).

(23) a) **SYNTACTIC REQUIREMENT** (*and, although, but, or, since, so, while, whereas*)
   b) **ANAPHORIC EXPRESSION** (*as a consequence (of that), as a result (of this/that), because (of this/that), besides that, contrary to that, despite that, for that reason, in addition (to that), in comparison (with that), in spite of that, in that case, instead (of this/that), on that basis, on that condition, rather (than this/that), regardless (of that)*)
   c) **IMPLIED BY MEANING OF THE DM** (*above all, accordingly, after all, all things considered, also , alternatively, analogously, as a conclusion, besides, by the same token, consequently, contrariwise, conversely, correspondingly, equally, further(more), hence, however, in particular, likewise, more accurately, more importantly, more to the point, moreover, nevertheless, nonetheless, on the contrary, on the other hand, on top of it all, otherwise, similarly, still, then, therefore, thus, what is more, yet*)

Fraser states, "In (23a), where the DMs are conjunctions, the syntactic properties of the DMs require that there be two discourse segments" (p. 14). Leaving out (23b) for the moment, in (23c) he states that it is the meanings of the DMs which signal a relationship between two discourse segments (p. 14). These two ways in which segmental relationships are signaled by DMs are relatively straightforward when compared with the anaphoric expressions in (23b).

In cases where a relationship is signaled by an anaphoric expression, such as those in (23b), Fraser states that "the anaphoric *that*, which is often elided, indicates that there is a previous segment which serves as the S1 for the relationship" (p. 14). In addition to the demonstratives *this* or *that*, H&H state that "there may by a nominal group with noun Head, the demonstrative or other reference item functioning as Deictic. In order for the total expression to be conjunctive, any form of reference will serve provided it is anaphoric" (p. 231). Example (5:4) below (from H&H, p. 231, their numbering) illustrates the point. Example (5:4d) contains the anaphoric reference item *his* instead of a demonstrative. And examples (5:4c and d) contain

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what I will be referring to as *discourse labels* in the present study (i.e., *move* and *caution*,

respectively); H&H refer to these as *general nouns* below.

[5:4] The captain had steered a course close in to the shore.

a. As a result,
b. As a result of this,   they avoided the worst of the
c. As a result of this move,   storm.
d. As a result of his caution,

H&H claim that

> conjunctions express one or other of a small number of very general relations, and it is
> the conjunctive relation rather than the particular nominal Complement following the
> preposition that provides the relevant link to the preceding sentence. This
> Complement…is frequently a purely anaphoric one, typically a demonstrative, *this* or
> *that*; or, if it is a noun, it is quite likely to be a general noun…which does no more than
> make explicit the anaphoric function of the whole phrase. (p. 232)

Fraser identifies three "possible syntactic arrangements of DMs in sequences, ignoring

the initial/medial/final option" (p. 15) discussed above. These are (p. 15, his numbering):

(24) a) **S1, DM+S2**.
      Coordinate Conjunction: John left late, **but** he arrived on time.
      Subordinate Conjunction: John was sick **because** he had eaten spoiled fish.
   b) **S1. DM+S2**.
      Coordinate Conjunction: John left late. **But** he arrived on time.
      Adverbial: John left late. **However**, he arrived on time.
      Prepositional Phrase: John came late. **After all**, he's the boss.
      Preposition: John left late. **Despite that**, he arrived on time.
   c) **DM+S1, S2**.
      Preposition: **Despite the fact** that John left late, he arrived on time.

According to Fraser, there are more than 100 DMs in English that express one of four

basic semantic relationships, "with sub-classifications within each of these basis [*sic*] relations"

(p. 15). The four basic semantic relationships he identifies are shown below with examples (pp.

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15-16, his numbering). I have retained Fraser's formatting, with the "primary DM" of each class

(as he has defined it) in boldface; the other DMs are "ordinary members" (p. 15).[14]

> (25) a) **CONTRASTIVE MARKERS** (CDMs) ***but***, *alternatively, although, contrariwise,*
> *contrary to expectations, conversely, despite (this/that), even so, however, in spite*
> *of (this/that), in comparison (with this/that), in contrast (to this/that), instead (of*
> *this/that), nevertheless, nonetheless, (this/that point) notwithstanding, on the other*
> *hand, on the contrary, rather (than this/that), regardless (of this/that), still,*
> *though, whereas, yet*
> b) **ELABORATIVE MARKERS** (EDMs) ***and***, *above all, also, alternatively, analogously,*
> *besides, by the same token, correspondingly, equally, for example, for instance,*
> *further(more), in addition, in other words, in particular, likewise, more*
> *accurately, more importantly, more precisely, more to the point, moreover, on*
> *that basis, on top of it all, or, otherwise, rather, similarly, that is (to say)*
> c) **INFERENTIAL MARKERS** (IDMs) ***so***, *after all, all things considered, as a*
> *conclusion, as a consequence (of this/that), as a result (of this/that), because (of*
> *this/that), consequently, for this/that reason, hence, it follows that, accordingly, in*
> *this/that/any case, on this/that condition, on these/those grounds, then, therefore,*
> *thus*
> d) **TEMPORAL MARKERS** (TDMs) ***then***, *after, as soon as, before, eventually, finally,*
> *first, immediately afterwards, meantime, meanwhile, originally, second,*
> *subsequently, when*

Space prohibits a detailed review here of H&H's similar (though not identical)

classification of conjunctive relations (to use their term), in which they categorized nearly all of

these items into the following four basic semantic relationships: (a) additive, (b) adversative, (c)

causal, and (d) temporal.[15] However, from the point of view of the present study, H&H's

taxonomy is valuable primarily because of two important ways in which it differs from Fraser's.

The first is the relatively fine-grained classification of DMs it provides, based on the more

specific semantic meaning(s) of each item and the relationship(s) signaled (see H&H, p. 244 ff.).

Although Fraser doesn't provide a detailed taxonomy like H&H do, he argues for a

"polysemous approach" to the meaning of individual DMs (p. 18). He says,

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[14] Although Fraser sometimes uses the term *paradigm DM* for *primary DM*, and *regular DM* for *ordinary DM*, I've elected to use the terms *primary DM* and *ordinary DM* throughout for the sake of consistency.

[15] H&H also include a small residual fifth category in their taxonomy which they call *Continuatives*, primarily comprised of the six DMs *now, of course, well, anyway, surely,* and *after all*.

Specifically, I take each DM to have a CORE MEANING of a general nature (for example, for *but*, the meaning is "simple contrast"), with various meaning nuances triggered as a function of (i) the core meaning of the specific DM, (ii) the interpretations of S2 and S1, and (iii) the context, linguistic and otherwise. (p. 18)

By taking into account "the core meaning of the specific DM," Fraser's approach to the meaning of DMs is similar to H&H's approach to classifying conjunctive relations. However, by considering the interpretations of the segments in question and the contexts in which they occur, Fraser's polysemous approach to DMs paves the way for an even more nuanced interpretation of individual DMs. In example (28) below (from Fraser, p. 18, his numbering),

(28) a) Water boils at 2112 [*sic*] degrees **but** mercury boils at a much higher temperature.
b) Mary is thin. **But** she still weighs more than me.
c) A: John is right here. B: **But** I just saw him on TV.
d) John died. **But** he was ill.
e) A: The flowers are beautiful. B: **But** they're plastic.
f) A: We had a very nice meal. B: **But** did you ask him about the money he owes us?

Fraser explains that "the interpretation of the sequences in (28)…emanate from the same core meaning of *but*" (p. 18):

For example, the interpretation of (28a) is one of direct contrast of S2 and S1, that of (28b) is one of contrast and rejection of an inference drawn from S1, that of (28c) is of contrast and challenge of an inference drawn from S1, and so forth. (p. 18)

In each of these instances, however, Fraser observes that it is a matter of "the various nuances being derived" by the hearer/reader (p. 19). He further observes in a footnote, "The polysemy of DMs varies greatly, with the primary DMs in each subclass having considerably more than most of the ordinary members of the subclass" (p. 33). (See also, e.g., H&H, p. 257, for their discussion of *so*.). He argues,

The specific meaning of some DMs is relatively opaque, with the primary members of the subclasses (*and*, *but*, *so*, *then*) by far the least transparent. For example, *but* signals only that S2 is in "simple contrast" with some aspect of S1 (e.g., the explicit message conveyed, an implied message, a presupposed proposition, a felicity condition of S1, etc.), with nothing further specified; the work of interpretation of this fine-grained reading must be done primarily by the recipient relying on the interpretation of S2 and S1

and the contextual information. On the other hand, the meaning of *in comparison*, for example, is relatively transparent and the relationship signaled can be read off the meanings of the words. (p. 22)

The second important way in which H&H's taxonomy differs from Fraser's is in the distinction they make between "external" and "internal" conjunctive relations (pp. 239-241), a distinction upon which their taxonomy is largely based. Defining "external" and "internal" relations, they say

> communication is itself a process, albeit a process of a special kind; and…the salient event in this process is the text. It is this that makes it possible for there to be two closely analogous sets of conjunctive relations: those which exist as relations between external phenomena, and those which are as it were internal to the communication situation. (p. 240)

According to H&H, in the following example (p. 239, their numbering)

> [5:14] a. Next he inserted the key into the lock.
>   b. Next, he was incapable of inserting the key into the lock.

> Each of these sentences can be seen, by virtue of the word *next*, to presuppose some preceding sentence, some textual environment. Moreover in each case there is a relation of temporal sequence between the presupposed sentence and this one; both [5:14a and b] express a relation that is in some sense 'next in time'…. But the 'nextness' is really rather different in the two instances. In (a), it is a relation between events: the preceding sentence might be *First he switched on the light*—first one thing happens, then another. The time sequence, in other words, is in the THESIS, in the content of what is being said. In (b), on the other hand, the preceding sentence might be *First he was unable to stand upright*; here there are no events; or rather, there are only LINGUISTIC events, and the time sequence is in the speaker's organization of his discourse. We could say the time sequence is in the ARGUMENT, provided 'argument' is understood in its everyday rhetorical sense and not in its technical sense in logic (contrasting with 'operator'). The two sentences are related as steps in an argument, and the meaning is rather 'first one move in the speech game is enacted, then another'. (pp. 239-240)

Example (5:14a) above, then, illustrates the *external relation*, and (5:14b), the *internal relation*. However, even though H&H, as noted above, base their classification of conjunctive relations largely on the external/internal distinction, they observe, "The line between the two is by no means always clearcut; but it is there, and forms an essential part of the total picture" (p.

241). Ventola and Mauranen (1991), in fact, found that the internal relations expressed by DMs

in scientific research articles "play a particularly important role in marking the various stages of

the global structure when the text is unfolding" (p. 463). Fraser's examples (28a and b) above

also provide a fairly clear contrast between the external/internal distinction in the contrastive

semantic relationship (to use Fraser's terms), respectively, where, according to H&H, "the

underlying meaning is still 'contrary to expectation'; but the source of the expectation is to be

found not in what the presupposed sentence is about but in the current speaker-hearer

configuration, the point reached in the communication process" (pp. 252-253). More

specifically, they describe this as the internal adversative relation with the meaning "'as

against'": "The meaning is something like 'as against what the current state of the

communication process would lead us to expect, the fact of the matter is…'" (p. 253).

Sequencing of Discourse Markers.

In Fraser's words, the sequencing of DMs "occurs quite often" (p. 23). He describes two

ways in which sequences of DMs occur based on his analysis of the British National Corpus. He

says,

> A sequence of DMs typically occurs when two DMs occur as a part of S2…where the
> first DM in the sequence is one of the primary DMs (*and*, *but*, *so*, *then*), and the second
> DM, not necessarily following directly…, is one of the other [ordinary] members of the
> subclass (e.g. for the Contrast Class: *but* vs. *however/nevertheless/on the contrary*,
> *instead*, *rather*, *in comparison*, *despite that*,…). Subordinate conjunctions may not be a
> second DM in a sequence, and two ordinary members of the same subclass (e.g., the
> subclass of Contrastive Discourse Markers) typically do not occur in a sequence... (pp.
> 23-24)

The sentences in example (36) below (from Fraser, pp. 23-24, his numbering) illustrate Fraser's

preceding observations regarding the sequencing of DMs:

(36) a) John went swimming, **but**, **in contrast**, Mary went sailing.
    b) John went swimming **and**, **in addition**, he rode his bicycle.
    c) John went swimming, **so as a result**, he won't be home for dinner.
    d) John went swimming; **then**, **afterwards**, he went sailing.
    e) We started late. **But**, we arrived on time **nevertheless**.

Another possibility, according to Fraser,

is where a primary DM of one subclass occurs as the first in a sequence with an ordinary
member of another subclass (e.g. *but* [CDM]+*as a result* [IDM]). The first DM (always a
coordinate conjunction) signals the major relationship between S2 and S1 (contrast,
elaboration, inference, temporality), while the second DM signals a more specific
relation, not within the first relation's domain. (p. 24)

The sentences in example (38) below (from Fraser, pp. 24-25, his numbering) illustrate the DM

sequencing possibility just described.

(38) a) He walked to town **but**, **as a result**, he caught a cold.
    b) He was sick **and thus** he was unable to work.
    c) He was home, **and yet** he hadn't spoken to his wife.
    d) She criticized him. **Then**, **for that reason**, he left her.

Fraser makes the important point "that when there are different subclasses present in the

DM sequence, each class condition must be satisfied" (p. 25), as the sentences in (39) below (p.

25, his numbering) show:

(39) a) He walked to town. **But**, **as a result**, he caught a cold.
    b) He walked to town. **But**, *__as a result__, he didn't want to visit with Mary.
    c) He walked to town. *__But__, **as a result**, he was the winner.

Table 1 below (adapted from Fraser, p. 25) represents what Fraser refers to as the

"general possibilities of sequences" (p. 25) of primary and ordinary DMs from each subclass.

The asterisk in the table indicates all ordinary contrastive DMs with the exception of *however*.

Table 1
General Possibilities of DM Sequences

Primary DM	Ordinary CDM	Ordinary EDM	Ordinary IDM	Ordinary TDM
CDM (*but*)	All*	All	All	All
EDM (*and*)	Some	All	Nearly All	All
IDM (*so*)	None	Few	All	All
TDM (*then*)	Some	Some	Some	some

Finally, Fraser adds in a footnote to his paper an observation regarding DM sequences that I include here, as the present study deals with developmental L2 writers; he says, "Of the four paradigm [primary] DMs, only *and+so* and *and+then* occur among the combination possibilities" (p. 33; see also H&H, p. 237 ff.).

Discourse Labels

    Introduction.

Flowerdew (2002) has observed that "Halliday and Hasan (1976) were the first to draw attention to the important role played by lexis in textual cohesion" (p. 143). [16] H&H referred to this as lexical cohesion, which they defined as "the cohesive effect achieved by the selection of vocabulary" (p. 274). They further identified a subcategory of lexical cohesion they referred to as *general nouns*. They described these as being "[o]n the borderline between grammatical and lexical cohesion….because a general noun is itself a borderline case between a lexical item (member of an open set) and a grammatical item (member of a closed system)" (p. 274). "The class of general noun," according to H&H, "is a small set of nouns having generalized reference within the major noun classes, those such as 'human noun', 'place noun', 'fact noun' and the like" (p. 274). They identified the following examples of general nouns (p. 274):

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[16] Unless otherwise indicated, all references to Flowerdew below are to Flowerdew (2002).

people, person, man, woman, child, boy, girl [human]
creature [non-human animate]
thing, object [inanimate concrete noun]
stuff [inanimate concrete mass]
business, affair, matter [inanimate abstract]
move [action]
place [place]
question, idea [fact]

"From a lexical point of view," according to H&H, "they are the superordinate members of major lexical sets, and therefore their cohesive use is an instance of the general principle whereby a superordinate item operates anaphorically as a kind of synonym" (p. 275). The sentences in example (6:1) below (from H&H, pp. 274-275, their numbering) illustrate the anaphoric cohesive function of general nouns:

[6:1] a. Didn't everyone make it clear they expected the minister to resign? – They did. But it seems to have made no impression on the man.
b. 'I should like to be a *little* larger, sir, if you wouldn't mind,' said Alice: 'three inches is such a wretched height to be'.
'It's a very good height indeed!' said the Caterpillar angrily, rearing itself upright as it spoke (it was exactly three inches high).
'But I'm not used to it!' pleaded poor Alice in a piteous tone. And she thought to herself, 'I wish the creatures wouldn't be so easily offended!'
c. What shall I do with all this crockery? – Leave the stuff there; someone'll come and put it away.
d. We all kept quiet. That seemed the best move.
e. Can you tell me where to stay in Geneva? I've never been to the place.
f. Henry seems convinced there's money in dairy farming. I don't know what gave him that idea.

The interpretation of the general nouns in (6:1) above, like all instances of anaphora, is possible only by reference to the preceding text (H&H, p. 275). These are, therefore, clear examples of anaphoric cohesion created by general nouns. However, it is also clear from example (6:1) that some of the general nouns, at least as they are used here, presuppose (to use H&H's term) longer stretches of discourse than others. Flowerdew, whose work on signaling nouns overlaps considerably with H&H's work on general nouns (as well as Francis's, 1994,

work on discourse labels and others who have researched what Schmid, 2000, refers to as "shell-noun-like phenomena" [p. 75]), argues, "From these examples it is clear that no distinction is made between what [I refer] to as signalling nouns… and what Francis (1988) calls lexical equivalents" (pp. 143-144). Discussing H&H's (6:1c-f) above, Flowerdew contrasts (6:1c and e), where he observes that the meaning of *stuff* and *place* "can be recovered with reference to a single noun phrase in the preceding clause, *crockery* and *Geneva* respectively" (p. 144), with the general nouns in (6:1d and f), which "have a lexical signalling function" (p. 144), where "the meaning of *move* and *idea* can only be recovered by processing the whole of the previous clause" (p. 144). Flowerdew's conclusion is that

> Halliday and Hasan's work is important for drawing attention to the general phenomenon of nouns with a generalized reference, but it fails to make the distinction between…lexical signalling and the less complex (from the point of view of cognitive processing) lexical equivalents. (p. 144)

In addition to the distinction made by Flowerdew above, Schmid (2000) describes what he refers to as "peripheral cases of shell nouns" (p. 275). [17] Schmid, directing his argument for these "peripheral cases" to his category of circumstantial shell nouns (i.e., "nouns referring to situations, times, locations, manners of doing things and conditions for doing things" [p. 275]), also argues for the exclusion of concrete general nouns from the class of shell nouns because they "do not contribute to conceptual partitioning" (p. 276): [18]

> [N]ouns like *place* and *time* or *area* and *stage* have the effect of conceptual encapsulation. As opposed to the world of objects and organisms, which is inherently fragmented and structured into individuals, the temporal dimension and three-dimensional space are both unstructured continua. Locative and temporal expressions help the human conceptualizer to partition these continua by singling out specific

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[17] All references below to Schmid are to Schmid (2000).

[18] A concrete noun has been defined as a "noun that denotes an entity that can be apprehended by any one of the five senses, e.g., *sneeze*, *floor*, *paper*," and an abstract noun as a "noun that denotes entities apprehended by the mind, e.g., *truth*, *belief*" (Delahunty & Garvey, 2010, pp. 185-186).

portions. In this respect, *time* and *place* are more similar to abstract nouns like *fact* or *aim*, which partition portions of the amorphous abstract domain…than to concrete general nouns like *person*, *creature* or *object*. Although they are semantically just as unspecific as *time* and *place*, the latter three nouns do not contribute to conceptual partitioning, since they are used to refer to individuals. Therefore concrete general nouns are excluded from the class of shell nouns, whereas the general locative and temporal nouns are included, even though they are of course situated on the fringe of the class. (p. 276) [19]

These arguments made by Flowerdew and Schmid may perhaps be bridged by the external/internal meaning distinction mentioned earlier in the discussion of DMs. H&H applied this notion to what I've called DMs in this study (conjunctive relations in their terms) but not to lexical cohesion. Specifically regarding the present discussion related to H&H's class of general noun, external meanings which express "a relation between meanings in the sense of representations of 'contents', (our experience of) external reality" (H&H, p. 240) may be said to correspond to unspecific concrete nouns, which in turn are readily expressed as "lexical equivalents." Internal meanings which express "a relation between meanings in the sense of representations of the speaker's own 'stamp' on the situation—his choice of speech role and rhetorical channel, his attitudes, his judgments and the like" (H&H, p. 240) may be said to correspond to abstract nouns, which in turn are better suited for use as "signalling nouns," to use Flowerdew's term. (For a complete discussion of Schmid's detailed approach to unspecificity and abstractness, see Schmid, pp. 63-81.) The external/internal meaning distinction provides another way of understanding why the general nouns *place* and *idea* in (6:1e) and (6:1f), respectively, repeated below, are different.

> [6:1] e. Can you tell me where to stay in Geneva? I've never been to the place.
> f. Henry seems convinced there's money in dairy farming. I don't know what gave him that idea.

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[19] In contrast to the use of *place* as a concrete general noun in H&H's example (6:1e), Schmid's argument here relates to the use of *place* as an abstract noun and to the use of *object* as a concrete general noun, although he notes on p. 75 that *object* may be used as an abstract noun. As will be shown in the next two sections, nouns are identified as discourse labels by their function as such in text.

Definition.

As previously mentioned, for the present study I have chosen to adopt primarily Gill

Francis's (1994) work in this area, and therefore her term *discourse label*. [20] However, work

which overlaps with Francis's research has also been done by (besides the aforementioned

Flowerdew, H&H, and Schmid) Tadros (1994) in her research on *prediction*, particularly with

respect to the predictive categories of *enumeration* and *advance labeling*.[21,22] The work of these

researchers contributes to the framework adopted for the present study as well.

Francis's work on discourse labels has been chosen as the basis for the framework for the

present study for several reasons. To begin, she uses the term *labeling* to refer to "a type of

nominal-group lexical cohesion" that is "used to connect and organize written discourse" (p. 83).

In fact the title of Francis's monograph is *Labelling discourse: An aspect of nominal-group*

lexical cohesion. First and most important to the present framework, then, are the foci of her

research: the cohesive function and discourse organizing role of "an inherently unspecific

nominal element" (Francis, p. 83). Second, according to Francis, this "type of cohesion…is

extremely common in the press and in all discourse of an argumentative nature" (p. 100), the

latter being the focus of the present study. Furthermore, and related to the preceding observation

regarding argumentative discourse, she says, "Labels also have much in common with what

Widdowson (1983: 92) refers to as a general or 'procedural' vocabulary which structures and

supports the more specific, field-related vocabulary of academic texts" (p. 88; see also Gray &

Cortes, 2011, p. 39). Finally, in contrast to Schmid's work on shell nouns, which is primarily but

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[20] All references below to Francis are to Francis (1994).

[21] All references below to Tadros are to Tadros (1994).

[22] See also Nation (2001) for a brief pedagogically-oriented discussion of "discourse-organizing
vocabulary" (pp. 211-214).

not exclusively focused on the intraclausal relationships signaled by these nouns (see

Flowerdew, 2003, p. 315 ff., for a critique of this aspect of Schmid's work), and H&H's

sentence-level analysis of general noun cohesion, Francis's focus on labels "which operate

cohesively across clause boundaries" (p. 83) aligns most closely with Fraser's use of *segments* in

his work on DMs. Table 2 below provides a list of the researchers whose work in this area has

contributed to the theoretical framework for the present study, and their terminology for the

"shell-noun-like phenomena" they have researched.

Table 2
Researchers and Terminology Used for "shell-noun-like phenomena"

Researcher	Terminology
1. Halliday and Hasan (1976)	General nouns
2. Francis (1994)	Discourse labels
3. Tadros (1994)	Enumerables, advance labels
4. Schmid (2000)	Shell nouns
5. Flowerdew (2002)	Signaling nouns

Francis broadly defines discourse labels as follows:

> The main characteristic of what will be termed a label is that it requires lexical
> realization, or lexicalization, in its co-text: it is an inherently unspecific nominal element
> whose specific meaning in the discourse needs to be precisely spelled out (Winter 1982,
> 1992). (p. 83)

She claims that "any noun can be the head noun of a label if it is unspecific and requires

lexical realization in its immediate context, either beforehand or afterwards" (p. 88). According

to Francis's data, the most common head nouns functioning as discourse labels are: *approach*,

area, *aspect*, *case*, *matter*, *move*, *problem*, *stuff*, *thing*, and *way* (p. 89; see also additional

examples listed on p. 89). Francis also observes "that many labels have a complex nominal-

group structure, and can be seen as 'double-headed' (as in the terms set out by Sinclair 1989 for

nominal groups containing *of*)" (p. 89). Examples from her data include: *state of affairs*, *course*

of action, and *level of activity* (p. 89). However, based on the fact that discourse labels are

identified by their function as such in text (described in the following section), Francis states, "It

is impossible to attempt any exhaustive listing of nominal-group heads which can function as

labels" (p. 88).

An observation made by Francis related to the cohesive function and discourse

organizing role of discourse labels which is particularly relevant to L2 (and developmental L1)

writing instruction, is "that there is a tendency for the selection of a label to be associated with

common collocations. Many labels are built into a fixed phrase or 'idiom' (in the widest sense of

the word), representing a single choice" (p. 100). "These clusters," she states, "are readily

available, to be drawn on as the common currency of written and spoken communication" (pp.

100-101). Examples provided by Francis include: 'the move follows…', '…to solve this

problem', and '…to reverse this trend' (p. 100). In example (3) below (from Francis, p. 85, her

numbering), the discourse label *this problem* (italics in original) collocates with the phrasal verb

to get around (bold type added):

> 3 …the patients' immune system recognised the mouse antibodies and rejected them.
> This meant they did not remain in the system long enough to be fully effective.
>   The second generation antibody now under development is an attempt **to get
> around** *this problem* by 'humanising' the mouse antibodies, using a technique
> developed by…

Although Francis's "recognition criteria" (to use her terms) for inclusion of a nominal

group in the category of labels are perhaps not as precise as, for example, Schmid's criterion for

"shell-nounhood" (to use his term; see Schmid, p. 3), when coupled with the provision she has

made that the lexical realization of the label be in the form of a "replacement *clause* [emphasis

added]" (p. 84), her definition is nonetheless particularly suitable to the purposes of the present

study. It does, however, result in a somewhat limited taxonomy of the phenomenon (cf. Schmid,

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pp. 294-297). Nevertheless, it can be noted that Francis and Schmid cover much of the same

ground in their work with regard to classifying this phenomenon. For example, two of Schmid's

shell noun classes, linguistic and mental shell nouns, correspond with three of Francis's

metalinguistic label groups. And Schmid's other classes are largely subsumed by Francis's

broader discussion of advance and retrospective labels, at least when they perform a discourse

labeling function within argumentative discourse. These various types of discourse labels will be

described in the following section.

Functions in written discourse.

Francis identifies two types of label based on how they function cohesively in the text:

retrospective labels, where the label "follows its lexicalization," and *advance labels*, "[w]here

the label precedes its lexicalization" (p. 83). In other words, retrospective labels function

anaphorically, and advance labels function cataphorically. Examples (30) and (31) below (from

Flowerdew, p. 153, his numbering but my italics) illustrate a retrospective label and an advance

label, respectively.

(30) He cannot borrow enough money. *This problem* is really getting him down.
(31) He has *a problem*. He cannot borrow enough money.

Following Francis, I have organized my discussion of the functions of discourse labels

according to their cohesive function in the text, which I describe in more detail in the following

subsections. Before doing so, however, it should be noted that, while both types of discourse

label are perhaps capable of performing "[a] whole array of more or less specific functions"

(Schmid, p. 14), there are three defining functions (in Schmid's terms) which stand out in the

research conducted by Flowerdew, Francis, and Schmid. Schmid, for example, claims that shell

nouns (to use his term) are "a unique linguistic phenomenon" in part because "they combine the

three functions of characterization, concept-formation and linking, which are otherwise

performed separately, each by different types of linguistic elements" (p. 19). Specifically, he

states,

> 1. Shell nouns serve the semantic function of *characterizing* and perspectivizing complex chunks of information which are expressed in clauses or even longer stretches of text.
> 2. Shell nouns serve the cognitive function of *temporary concept-formation*. This means that they allow speakers to encapsulate these complex chunks of information in temporary nominal concepts with apparently rigid and clear-cut conceptual boundaries.
> 3. Shell nouns serve the textual function of *linking* these nominal concepts with clauses or other pieces of text which contain the actual details of information, thereby instructing the hearer to interpret different sections of a text together. (p. 14)

These three functions can be observed in Flowerdew's examples (30) and (31) above.

Advance labels.

I begin with advance labels which, according to Francis and H&H, are not as common as

retrospective labels. Francis describes advance labels as serving the organizing function of

telling the reader what to expect (p. 85). Schmid similarly discusses "cataphoric signposts which

are used by writers to guide readers through their texts" (p. 350). This organizing and guiding

function is shown in example (1) below (from Francis, p. 84, her numbering),[23]

> 1 I understand that approximately 12 per cent of the population is left-handed. Why, then, should there be such a preponderance of right-handed golfers which extends, I am informed, to club level? In reply to that question a golfing colleague of mine offered *two reasons*.
>   The first was that beginners usually start with handed-down clubs, which are usually right-handed. The second was that, for technical reasons, left-handed individuals make good right-handed golfers.

in which Francis says,

> *Two reasons*, here, allows the reader to predict the precise information that will follow, which is an explanation for 'the preponderance of right-handed golfers'. In order to meet these expectations, the nominal group (including, of course, *two*) has to be fully lexicalized in what follows, and these **replacement clauses** (Winter 1982) have to be

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[23] Francis's examples are taken from "the Bank of English collection of corpora held at Cobuild,…and, in particular, the corpus containing a series of complete editions of *The Times*" (Francis, 1994, p. 83). I have retained Francis's italicization of the advance label in the example.

fully compatible with the semantics of *reason*. Thus the label clearly has an organizing role which extends over the whole of the next paragraph.

       If there are additional lexical modifiers or qualifiers within the nominal group, they too have to be lexicalized in the replacement clause or clauses. (p. 84)

Note that Francis states that the advance label *Two reasons* in her example (1) "allows the reader to *predict* [emphasis added] the precise information that will follow." Her observation aligns with Tadros's notion of *Prediction*, which she defines as "a prospective rhetorical device which commits the writer at one point in the text to a future discourse act" (p. 70).

Tadros proposes the notion of prediction as a framework for analyzing the discourse structure of expository text. That is to say, the notion of prediction is not limited to nominal group lexical cohesion; rather, it "refers to an interactional phenomenon—a commitment made by the writer to the reader, the breaking of which will shake the credibility of the text" (pp. 69-70). However, two of her six categories of prediction, enumeration and advance labeling, overlap with Francis's work on advance labels. Tadros states that prediction is realized in the text as

> a *pair*, the first, predictive, member (symbol V), signals the prediction which has to be fulfilled by the second, predicted, member (symbol D). A member may consist of one or more sentences in a member (see Tadros 1981, 1985). (p. 70)

In the following example (from Tadros, p. 70) of the predictive category of

enumeration,[24,25]

> [1] (1) *Two problems* arise in this case. (2) First, there is the universal alibi which exists as long as we have no independent indicator of a change in tastes…
> (3) Second, the possibility is admitted in theory that some demand curves might slope upwards.
>
>   (Lipsey 1963: 154) [26]

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[24] Examples in Tadros (1994) are unnumbered. However, for ease of reference, I have numbered the examples from Tadros that have been included in this paper

[25] Tadros notes that "the sentences have been numbered for convenience and the signals italicized" (p. 70).

it is clear that Tadros is dealing with a phenomenon similar to the one Francis is dealing with in

her example (1) above, but from within a different framework. Tadros states,

> In sentence (1) above there a [*sic*] specific numeral, 'two', followed by a noun of the type
> I have called Enumerables…whose referents in the first instance are signalled as to
> follow in the text. The occurrence of such a signal commits the writer to enumeration,
> which, in this example, comes in sentences (2) and (3). (p. 70)

> Turning to how the predicted (D) member of enumeration is realized in the text so as to

be recognized by the reader, Tadros states,

> Cognitively, of course, the D [predicted] member will have to correspond to the V
> [predictive] member—that is, a reason signalled must be a reason given. But to the
> unwary readers, of whom there are many, this might not be readily available, so, in order
> to help the reader recognize the enumerated text, the writer will use certain devices such
> as: special features of layout, numbering, punctuation, sequencing markers (*first*, *second*,
> etc.), lexical repetition and grammatical parallelism (identical sentence structures). (p.
> 73)

In the light of the present study's focus on the cohesive and discourse organizing functions of

DMs and discourse labels, Tadros's inclusion above of what she has called "sequencing

markers" (i.e. *temporal discourse markers* [TDMs] in this study, following Fraser's terminology)

among the devices used by writers "to help the reader recognize the enumerated text" is of

particular interest. This is, of course, because she draws attention to the fact that both types of

device, sequencing markers and enumeration (to stay with her terms), are often used together to

(in Francis's words) "connect and organize written discourse" (p. 83). Tadros's example (1)

above and Francis's example (1) above provide illustrations of discourse label-DM

combinations.

Retrospective labels.

Francis states that "[a] retrospective label serves to **encapsulate** or package a stretch of

discourse" (p. 85) that precedes it (see also Schmid, pp. 339-348, for a detailed discussion,

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[26] See Tadros, p. 70, for the texts from which she draws her examples and the abbreviations she uses for
them.

situated within several cognitive theories of anaphora, of how shell nouns function

anaphorically.) According to Francis,

> The head nouns of retrospective labels are almost always preceded by a specific deictic like *the*, *this*, *that* or *such*, and may have other modifiers and qualifiers too. The whole nominal group functions very much like a…reference item. In this respect labels are very similar to the **general nouns** identified by Halliday and Hasan (1976: 27).[27] (p. 85)

> For Francis, like Flowerdew, the important thing in determining whether or not a nominal

group is functioning as a retrospective label is that "there is no single nominal group to which it

refers: it is not a repetition or a 'synonym' of any preceding element" (Francis, p. 85). Rather, a

retrospective label

> is *presented as equivalent to* the clause or clauses in replaces, while naming them for the first time. The label indicates to the reader exactly how that stretch of discourse is to be interpreted, and this provides the frame of reference within which the subsequent argument is developed. (Francis, p. 85)

In example (3) below (from Francis, p. 85, her numbering), repeated here from the earlier

discussion of the collocational tendency (to use Francis's term) of many discourse labels,

> 3 …the patients' immune system recognised the mouse antibodies and rejected them. This meant they did not remain in the system long enough to be fully effective.
>   The second generation antibody now under development is an attempt to get around *this problem* by 'humanising' the mouse antibodies, using a technique developed by…

Francis states,

> The retrospective label *this problem* is preceded by its lexicalization, and thus it tells the reader to interpret the rejection of the mouse antibodies as a *problem*. This characterization, which is anticipated by the description of the antibodies as not being 'fully effective', aligns the preceding clauses with what is to follow, and provides a framework for the solution to be described. (p. 85)

> Referencing H&H's seminal work on the cohesive function of general nouns, Francis

describes the text organizing function of retrospective labels in their terms:

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[27] See also H&H, p. 275; see Gray (2010) and Gray and Cortes (2011) for a discussion of demonstratives and lexical cohesion.

> Like general nouns, too (and indeed like *this* and *that* without a following noun), retrospective labels have the ability to refer to 'text as fact': in Halliday and Hasan's terms 'the referent is not being taken up at face-value but is being transmuted into a fact or a report' (p. 52). A label refers to and names a stretch of discourse, aligning it with the ongoing argument, which now continues in terms of what has been presented as 'fact'. (p. 86)

It should be noted here that although Francis claims that "[a] label refers to and names a stretch of discourse…which now continues in terms of what has been presented as 'fact'," it is perhaps more accurate to speak in terms of "'claim,' which does not presuppose the truth of the 'lexicalization'" (G. Delahunty, personal communication, January 2, 2013), than 'fact.' This is of particular importance within the context of teaching discourse labels to developmental writers because, according to Delahunty (personal communication, January 2, 2013), "Many students, and not just ELLs, fail to make a distinction between words that presuppose and words that do not presuppose the truth of their lexicalizations."

Continuing her discussion of the text organizing function of retrospective labels, Francis observes that

> they signal that the writer is moving on to the next stage of his/her argument, having disposed of the preceding stage by encapsulating or packaging it in a single nominalization. This no longer has any prospective potential…
> Thus these labels have a clear topic-shifting and topic-linking function: they introduce changes of topic, or a shift within a topic, while preserving continuity by placing new information within a given framework. This signalling function is reinforced by an orthographic division: clauses containing retrospective labels are usually paragraph-initial. (pp. 86-87)

Like Francis, Schmid notes that "shell nouns can be credited with an organizational function in texts" (p. 350), observing, again like Francis, that "…shell-noun phrases are in fact often used to signal discourse topic changes" (p. 343). According to Schmid, this is "extremely frequent in textbooks and other types of expository writing" (p. 351). He attributes the

frequency of this "signposting strategy" in these types of discourse to the authors' desire "to structure their texts as clearly as possible" (p. 353).

It was noted above that Francis has observed that "clauses containing retrospective labels are usually paragraph-initial." Schmid, addressing this tendency, states, "The crucial relation between the two notions of discourse topic and paragraph is that the beginnings of paragraphs are understood as either representing topic boundaries as such, or as containing linguistic elements that signal topic boundaries, so-called 'topic boundary markers' (Brown and Yule 1983: 94)" (pp. 349-350). He therefore proposes "that not only conjunctions like *but*, *however* and *so* (van Dijk 1977: 139-140) function as topic boundary markers and topic changers or shifters, but also shell nouns" (p. 350). On this basis, Schmid states that "anaphoric signposts," in addition to the three basic shell noun functions of linking, concept-formation, and characterization, "[preserve] (discourse) topic continuity, by relating the new paragraph to the previous ones, and…[mark] the topic change, by serving as a starting-point for new information (cf. Francis 1986: 66)" (p. 351).

As a discourse organizing device, Francis states that "[a] retrospective label may extend its topic-linking capacity over a very small stretch of discourse" (p. 87), where it "has a very local organizing role" (p. 87). However, she notes that "[i]n other cases, the use of a retrospective label may help organize a much longer stretch of discourse, providing the main link that unifies two major structural elements" (p. 87). This is shown in example (6) below (from Francis, p. 87, her numbering),

> 6 Sir, As Lech Walesa visits London this week, I trust someone will raise with him the threat to women's rights in his so-called 'new democracy'.
>   The Polish government is on the verge of outlawing abortion, which has been free on demand since 1956. *This move* in itself is deplorable, but is made far worse by the fact that contraception is virtually unobtainable. As in many eastern European countries, women have become accustomed, rightly or wrongly, to relying on abortion

as a means of choosing their family size. Under the new Polish law doctors will face imprisonment if caught performing illegal terminations and women will only be permitted abortions if life is at risk…

in which she states,

> The stretch of discourse which is labelled by *this move* is short, but the rest of the letter is of some length: it is devoted to an evaluation of the *move* as *deplorable*, and to giving the reasons why. The label, then, comes at the boundary between the Situation and Evaluation sections of a lengthy Situation—Evaluation—Basis for Evaluation discourse pattern (Winter 1982, 1992). It faces both backwards and forwards: backwards to encapsulate and reenter as given the situation described in the preceding paragraph, and forwards to evaluate it. The whole letter, then, is about *this move* and nothing else. (p. 87)

Both Francis and Schmid address the issue of anaphoric noun phrases and "fuzzy reference" (to use Francis's term), in which the "retrospective label does not necessarily refer to a clearly delimited or identifiable stretch of discourse: it is not always possible to decide where the initial boundary of its referent lies" (Francis, p. 88). According to Francis, this in fact "may be explained in terms of the intrinsic cohesive function of retrospective labels: they are used, like the anaphoric *this*, to tell the reader to section off in his or her mind what has gone before" (p. 88). This has a rhetorical effect: "The precise extent of the stretch to be sectioned off may not matter: it is the shift in direction signalled by the label and its immediate environment which is of crucial importance for the development of the discourse" (Francis, p. 88). Schmid, comparing the very similar functions of anaphoric noun phrases with fuzzy reference to anaphoric demonstratives, argues

> It is precisely in order to make sure that readers will be able to identify the antecedents… that speakers use anaphoric shell-noun phrases rather than single demonstrative pronouns. Shell-noun phrases like *this idea*, *this remark*, *this move* or *this issue* are both more informative and more rigid as designators than demonstrative pronouns are. They allow speakers to help readers to interpret their anaphoric references. (p. 343)

Metalinguistic labels.

Francis defines *metalinguistic labels* as

> nominal groups which talk about a stretch of discourse as a linguistic act, labelling it as, say, an *argument*, a *point* or a *statement*. In other words, they are labels for stages of an argument, developed in and through the discourse itself as the writer presents and assesses his/her own propositions and those of other sources. Unlike, say, *problems* and *issues*, which exist in the world outside discourse, they are *ad hoc* characterizations of the language behaviour being carried out in the text. (p. 83)

Thus these labels "are **metalinguistic** in the sense that they label a stretch of discourse as being a particular type of language" (Francis, p. 89). Based on the commonly held assumption "that written text is interactive" (Tadros, p. 69), metalinguistic labels are of particular importance to the writing of argumentative discourse because they "are used by the writer to forge relationships which are located entirely within the discourse itself: they instruct the reader to interpret the linguistic status of a proposition in a particular way" (Francis, p. 89).

Francis places all head nouns of metalinguistic labels into four groups: (a) 'illocutionary' nouns, (b) 'language-activity' nouns, (c) 'mental process' nouns, and (d) 'text' nouns (p. 90). She notes that "there is some blurring and overlap between" (p. 90) several of the metalinguistic categories, *viz.*,

> between the illocutionary and language-activity types of label on the one hand, and the mental-process type on the other. The world of cognition is mirrored in the world of discourse, and the views and opinions we hold are often seen in terms of the way they are expressed. Thus all the nouns in these sets are in fact located on a cline, and their two aspects of meaning shade imperceptibly into each other. (p. 92)

Schmid also notes the similarity between linguistic and mental shell nouns (to use his terms again) in his taxonomy, although he approaches the issue from the reporting function they have in common:

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Linguistic and mental shell-noun uses have a lot in common. The most fundamental parallel lies in their predominant function: linguistic shell-nouns can be used to report UTTERANCES, and mental shell nouns can be used to report IDEAS. However, since speakers only have direct access to their own ideas, their reports on the thoughts of other people also depend on language. (p. 184)

I begin with illocutionary nouns and language-activity nouns. Francis distinguishes illocutionary nouns on the one hand, which she says are "nominalizations of verbal processes, usually acts of communication; they typically have cognate illocutionary verbs" (p. 90), from language-activity nouns on the other, which she states are "nouns which refer to some kind of language activity or the results thereof. They are similar to illocutionary nouns, but they do not have cognate illocutionary verbs (though they may have cognate verbs)" (p. 91).

Examples of illocutionary nouns include: *argument*, *claim*, *conclusion*, *explanation*, *observation*, *rejection*, *statement* (Francis, p. 90; see p. 90 for additional examples). Example (7) below includes two examples of illocutionary head nouns in labels (from Francis, p. 90, her numbering):

> 7 As we left this meeting, my wife said: 'Potter has gone barmy, and they don't know what to do.' I could not bring myself to believe she was right. I only accepted *this explanation* when my wife confided her suspicions to a friend, a psychiatrist, who exclaimed: 'That's a terrible thing to say about your child's therapist.' *This level of denial* convinced me that it was true.

Examples of language-activity nouns include: *account*, *comparison*, *description*, *example*, *reasoning*, *summary*, and *way (of putting it)* [Francis, p. 91; see p. 91 for more examples]. Francis also includes here "nouns referring to the results of discourse-patterning and stylistic operations carried out on language data" (p. 91), such as: *conundrum*, *corollary*, *image*, *imagery*, *irony*, *metaphor*, and *paradox*, as well as *gossip* and *heresy* "which are used primarily to evaluate verbal activity" (p. 91). In example (9) below (from Francis, p. 91, her numbering),

9 Rather as the great king of Babylon, Nebuchadnezzar, was obliged to listen to Daniel, the prophet of the oppressed people of Israel, so Saddam the tyrant of Baghdad has been forced to listen to the spokesmen of the Kurds, a people he despises. The Western powers should not spoil *this irony*.

irony functions as the language-activity head noun in the retrospective label *this irony*. As a metalinguistic label it functions to "instruct the reader to interpret the linguistic status of [the] proposition" (Francis, p. 89) expressed in the stretch of discourse which precedes it (i.e., it *labels* it) as an *irony* which, in this context, I take to have "the shell-noun specific meaning…described by the entry 'a situation that seems strange and unexpected or amusing, or the reason it is like this' in LDOCE3 [*Longman Dictionary of Contemporary English*, 3rd ed.]" (Schmid, pp. 74-75).

Before moving on to mental-process nouns, it should be noted that Schmid similarly divides the class of linguistic shell nouns in his taxonomy, which he says "allow speakers to portray linguistic activities and their contents and products" (p. 131), into illocutionary and propositional uses; these correspond to Francis's illocutionary nouns and language-activity nouns, respectively. According to Schmid, the former are much more common than the latter (p. 135). Taking a slightly different approach than Francis to differentiating these two uses, Schmid says the illocutionary use "allows the SPEAKER to direct the focus of attention on the communicative intentions which he or she imputes to the ORIGINAL SPEAKER'S ORIGINAL UTTERANCE" (p. 135), while the propositional use "[focuses] on the information given in, or the propositional content expressed by, the ORIGINAL UTTERANCE" (p. 135). Schmid, again in a way similar to Francis, observes that illocutionary uses are often distinguishable from propositional uses in that the nouns used to express the former are typically "morphologically derived from…speech-act verb[s]" (p. 135).

Mental-process head nouns are defined by Francis as those which "refer to cognitive states and processes and the results thereof. They include nominalizations of mental-process

verbs of the type that are used to project ideas, like *think* and *believe*, but not all of them have

cognate verbs" (p. 92). As previously noted, Schmid's class of mental shell nouns overlaps with

Francis's mental-process nouns. Although space prohibits further discussion here, see Schmid,

pp. 184 ff., for a detailed discussion of these nouns as well as "[t]he correspondence between the

linguistic and the mental domain" in his taxonomy. Examples from Francis's data include:

analysis, *finding*, *hypothesis*, *idea*, *interpretation*, *notion*, *theory*, *(point of) view* (p. 92; see p. 92

for additional examples). For example (Francis, p. 92, her numbering):

> 10 At a press briefing in London during the inaugural meeting of the bank's board of
> governors, Henning Christophersen, vice-president of the European Commission,
> said: 'The EBRD must not be a political institution, but plainly and simply a bank.'
>   *This view* contrasted with that of Jacques Attali, the president of the European
> Bank, who regards the bank's role as political and economic.

Francis defines text nouns, the final type of metalinguistic label identified in her research,

as "nouns which refer to the formal textual structure of discourse" (p. 93). According to Francis,

"There is no interpretation involved: they simply label stretches of preceding discourse whose

precise boundaries they define" (p. 93). More recent work in the area of metadiscourse (e.g.,

Hyland, 2010), while overlapping to some degree with Francis's work on metalinguistic labels,

corresponds most closely to her work on text nouns. Examples of text nouns include: *excerpt*,

page, *paragraph*, *passage*, *quotation*, *section*, *term*, and *terminology* (Francis, p. 93; see p. 93 for

additional examples). For example (Francis, p. 93, her numbering):

> 11 'Projects are also introducing changes in teaching styles. Increasingly these are
> geared towards providing students with the opportunity to develop initiative,
> motivation, problem-solving skills and other personal qualities. Central to this
> approach is the transfer to students themselves of the responsibility for managing
> their own learning and applying their own knowledge.'
>   *That quotation* comes not from the Plowden report, but from the Technical
> and Vocational Education Initiative review of 1985. Is it very different from what we
> found in the best primary schools?

Evaluative function of discourse labels.

Schmid states that "shell nouns provide speakers with powerful tools for the characterization, perspectivization, and indeed even manipulation, of their own and other speakers' ideas" (p. 8; see also Schmid, p. 7, for further discussion). He observes, for example, how "speakers who report utterances by means of linguistic shell-content complexes leave their mark both on the characterization of the utterance entailed in the shell noun and on the representation of the report given as shell content" (pp. 132-133). Flowerdew states that "[s]ignalling nouns may be introduced with an evaluative function" (p. 153) by one or both of the following means: "through the choice of noun (e.g. *insight* vs. *distortion*, *truth* vs. *fabrication*)" and "through the introduction of pre- or post-modifiers: (e.g. *down-to-earth approach*, *unnecessarily modest contention*)" (p. 153).

Choice of noun as head of label.

It was mentioned earlier that Francis's "major criterion for identifying an anaphorically cohesive nominal group as a retrospective label is that…it is *presented as equivalent to* the clause or clauses it replaces, while naming them for the first time" (p. 85). That is, it is presented as *given* information, or "what the speaker is treating as information that is recoverable to the hearer" (H&H, p. 27).[28] But it is only *presented* as such, observes Francis, "since the label does not have a 'synonym' in the preceding discourse, and its head is actually a new lexical item" (p. 86). At the same time, she observes that labels "have interpersonal meaning, and may, in fact, add something new to the argument by signalling the writer's evaluation of the propositions which they encapsulate" (p. 93). She states,

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[28] Information structure is comprised of given and new information. H&H define the latter as "what he [the speaker] is treating as non-recoverable" (p. 27).

47

Some head nouns of labels, for example *statement*, *belief* and *view* can be termed 'attitudinally neutral', though they may well take on 'positive' or 'negative' meanings in discourse, according to the lexical environment in which they are used. Others necessarily indicate either a negative or a positive attitude towards the preceding propositions. (p. 93)

In example (12) below (from Francis, p. 94, her numbering), Francis argues that "the label *this claim* is clearly a distancing device, enabling the writer to convey skepticism as to its validity" (p. 94):

12 …led me to wonder whether politicians are becoming more cavalier in their use of data. John Major, speaking of the government's new council tax in the Commons 10 days ago, said: 'Over 70 per cent of people will be gainers under the scheme.'
    As it happened, at the exact time he was making *this claim*, I and other correspondents were being briefed on the tax by senior Treasury officials.

According to Francis, "There are few head nouns which, if unmodified, classify their referents in positive terms: those that can be termed positive usually indicate the writer's identification with the status and validity of the referent, such as *fact* and *finding*" (p. 94). They also presuppose the truth of their lexicalizations, whereas those which may be termed negative do not (G. Delahunty, personal communication, January 2, 2013). In example (15) below (from Francis, pp. 94-95, her numbering), Francis states that "the results obtained by the Accident Research Unit are endorsed as *information*" (p. 94):

15 The Accident Research Unit at Birmingham University has been investigating the outcome of real-life car accidents for the past 25 years. Each year, the Cooperative Crash Injury Study (of which we are part) investigates 850 car accidents in which people are injured or killed.
    We thoroughly examine the vehicle with particular reference to the occupant protection systems, of which the seatbelt forms a fundamental part. We combine *this information* with detailed medical and police records as well as information provided on questionnaires supplied voluntarily by the accident victims themselves.

Modification of head nouns of labels.

Francis distinguishes three types of meaning expressed by modifiers of head nouns of labels, based on "the three Hallidayan metafunctions" (p. 84; see also H&H, pp. 26-28, for a

brief overview): (a) ideational, (b) interpersonal, and (c) textual, to which she appends

comparative epithets which "are similar to textual modifiers in that they may have both

retrospective and prospective functions" (p. 99; see also H&H, pp. 275-277, for a discussion of

the use of attitudinal modifiers with general nouns).

According to Francis, modifiers that have a primarily ideational function "add to the

meaning of the head noun by classifying it or defining it, making its participant role more

explicit" (p. 95). The ideational meaning of the modifier, like the head noun, must be

"compatible with," perhaps even "recoverable from," the label's co-text (Francis, p. 95).

> 17 This week dentists up and down the country are being asked to hand out sweets as part of
> a 'tooth-friendly' promotion to boost sales of sweets being sold as 'kind to teeth'.
> Manufacturers of *this new confectionary concept* are providing dentists participating in
> this week's National Smile Week with free samples to give away on open days aimed at
> encouraging more people to visit their dentists.

In example (17) above (from Francis, p. 95, her numbering), Francis argues, "Both *new* and

confectionary are ideational modifiers in the sense that they are far more informative than

concept would have been on its own in encapsulating the whole idea of the sweets being sold as

'kind to teeth'" (p. 95). Moreover, she states that "[t]he economy of the device, in allowing a lot

of information to be presented as a single given package, is particularly apparent" (p. 96) in this

example.

Interpersonal modifiers "evaluate the propositions they encapsulate" (Francis, p. 96).

The "economy of the device," to use Francis's terms, is evident here too. She states, "Where the

nominal group acts as a single cohesive unit, this evaluation is slipped in as part of the given

information" (p. 96). Such an evaluation may be "a new indication of the writer's attitude" or it

may "spell it out more fully" (Francis, p. 97). The latter is the case in (21) below (from Francis,

p. 97, her numbering), where the attitude communicated by the interpersonal modification

thoughtless and stupid "is predictable from the compatible lexis of the previous sentences"

(Francis, p. 97):

> 21 London's cab drivers take an aristocratic thrashing in the current edition of their
> magazine *Taxi*. The Earl of Winchilsea and Nottingham, the Liberal Democrat peer
> and staunch defender of cabbies, writes in warm terms about the trade in general but
> blasts those drivers who refuse to pick up fares in Parliament Square because they do
> not like the destinations.
> 　　　'Because of *this thoughtless and stupid attitude*, it is becoming more difficult
> to continue the fight against minicabs', thunders the earl.

Example (21) illustrates an additional reason why a writer might elect to use a label with

a neutral head noun like *attitude*. Francis states,

> Writers seem to choose the labelling device because of the modification options it offers:
> by choosing a nominalization like *attitude* they can get in their evaluation without having
> to make a special point of it. *Attitude*, then…is primarily a carrier for its modifiers. In
> other words, it is easy to see here what the motivation is for choosing a lexically cohesive
> device rather than a grammatical one like 'Because of *this*, it is becoming more
> difficult…' (p. 97)

To summarize, then, when head and modifier(s) of a label "function as a single cohesive

unit" (Francis, p. 97), Francis states, "In some cases the modifiers seem to be simply an

extension of the meaning of the head, and in others they seem to be more important in encoding

the writer's message than the heads which carry them" (p. 97). In all cases, however, the head

nouns of these labels "cannot be omitted…as the result would be ungrammatical" (Francis, p.

97).

However, Francis observes that not all labels function "as a single cohesive unit," noting

that "very often the label is the Complement of the deictic. In such cases…only the head is

presented as given, while the modifiers are presented as new, and have prospective meaning" (p.

97). This is illustrated in the following example (from Francis, p. 97, her numbering):

22 'I feel mentally like a pink worm fed on pink nougat', he observed.

      Readers of his later books might suppose *this* to be *an accurate description* of his mental state from cradle to grave, but in fact, as an Oxford undergraduate just after the first world war (in which, extraordinarily, he had been a military instructor), Nichols was a brilliant success.

Francis states, "Here the modifier *accurate* is prospective in a way that it would not be in a label like *this accurate description*: it is precisely the word *accurate* which carries the discourse forward….*Description*, here, just seems to be a convenient carrier for this modifier" (pp. 97-98).

Although Francis states, "The most common modifiers found in labels…are those which encode interpersonal meaning quite unequivocally" (p. 96), she notes that in some cases modifiers have an interpersonal meaning and, at the same time, an ideational meaning, as example (19) below (from Francis, p. 96, her numbering) shows. Here she observes that in addition to the "classificatory role" of the modifier *hotly-debated*, "there is something hyperbolic about this particular choice of epithet which conveys the writer's attitude towards the issue" (p. 96).

19 How free range is a free-range chicken? After months of deliberation, the European Commission has come up with an official answer, or rather three answers, to *this hotly-debated question*: there is free range, traditional free range and total free range. The Brussels mandarins have devised the three-part definition to satisfy a commendable desire for a common standard throughout the European Community while at the same time, and more questionably, enabling all the main types of free-range chicken on the market to qualify.

Textual modifiers are defined by Francis as "those which contribute directly to the organizational role of labels: they help to order messages with respect to each other and signal the relationships between them" (p. 98). She continues,

Textual modifiers differ from ideational and interpersonal modifiers in important respects. First, they are always presented as new information, even when the rest of the nominal group is presented as given, and even when they occur clause-initially in unmarked Themes. Second, and obviously related, the labels in which they occur are not co-referential with the preceding text. In Hasan's (1984) terms, they participate in similarity chains, but not identity chains. (p. 98)

Regarding Francis's second point, that "the labels in which they occur are not co-referential with the preceding text," Schmid similarly observes about what he refers to simply as "cohesive adjectives,"

> On the basis of Halliday and Hasan's notion of "comparative reference" (1976: 76), these items can be understood as suggesting that the anaphoric noun phrases and their antecedents are similar in certain respects and therefore belong to one class of things. (p. 347)

Textual modifiers of head noun labels "include post-deictics like *same*, *similar*, *different*, *next*, *further*, *other* and *another*, and numeratives like *second* and *third* (Francis, p. 98). According to Francis, "Of these, *another* is by far the most common" (p. 98). Congruent with Francis's observations, Schmid says, "The most important and frequent items are *next*, *(an)other*, *different*, *same* and the ordinal numbers *first*, *second*, etc." (p. 347). Textual modifiers such as these, with their message-ordering and relationship-signaling functions, play a discourse organizing role similar to some types of DMs, as defined by Fraser.

> 24 In his inauguration speech, for example, Mr Walesa stressed the need for good relations with neighbors, but forgot to mention Czechoslovakia. This reminded Prague of the sourness that has crept into relations between their president, Vaclav Havel, and Mr Walesa since the revolution of 1989. *Another blunder*: the outgoing president, General Jaruzelski, was not invited to the inauguration ceremony.

These issues of given/new, co-reference vs. "comparative reference," and the message-ordering and relationship-signaling role of textual modifiers are summed up in Francis's discussion of the combined anaphoric and cataphoric function of *Another blunder* in example (24) above (from Francis, p. 98, her numbering):

> Here, *blunder* encapsulates Mr Walesa's failure to mention Czechoslovakia. While *blunder* is presented as given, however, *another* is new and refers forwards to another omission of the same sort. In other words, the head noun is retrospective, but the nominal group as a whole is predictive. In this example, the nominal group is structurally cataphoric, that is, cohesive within the clause (Halliday and Hasan 1976: 78). (Francis, 1994, p. 98)

Schmid states that, "[s]uch backward characterizations by means of comparative cohesive adjectives do not come out of the blue, but are carefully prepared by speakers (or more typically writers)" (p. 348).

In addition to discourse labels which are "structurally cataphoric," such as the one in example (24) above, Francis states, "Where the prospective reference extends beyond the clause, however, such nominal groups may be both retrospective labels (excluding the textual modifier) and advance labels" (p. 98). These are more to the point of the present study. In example (25) below (from Francis, p. 99, her numbering), *A similar argument* functions as both a retrospective and an advance label:

> 25 Mr Budd has had no direct connection with politics or the Tory party but, like Sir Terry, he was closely identified with the monetarism of the early Thatcher years.
>   *A similar argument* may work against Gavyn Davies, chief UK economist at Goldman Sachs, the US investment bank. Mr Davies has been widely identified with Labour although his only links were a stint 15 years ago in Jim Callaghan's office, and marriage to Neil Kinnock's private secretary.

Francis observes that textual modifiers such as the ones in examples (24) and (25) "are extremely useful as discourse-organizers" (p. 99), noting:

> First, they establish a wide range of degrees of contrast, from 'sameness' to 'difference' between the co-classified items. At the same time they can be used to sequence the stages of an argument: the numeratives like *first* and *second*, in particular, sequence quite explicitly. Hence these modifiers have a metalinguistic function: they may sequence the points in an argument or events in the world, but even in the latter case, the progression is determined by textual considerations. What the writer is asking and answering is not 'How many things happened, and in what order?', but rather 'How many events do I need to cite, and in what order shall I present them?' (p. 99)

Example (16.15) below (from Schmid, p. 348, his numbering) is of particular interest for several reasons.[29] First, it contains an advance label, *two reasons*; Tadros refers to this as *type (c) enumeration*, that is, "the occurrence of a numeral, exact or inexact, in association with [an] Enumerable" (p. 72). Next, it contains the paragraph-initial label *The second danger* which

[29] Schmid notes the source as "*The Economist*, 17 January 1998, p. 34-35."

functions in both an anaphoric and a cataphoric manner: the head noun *danger* is retrospective,

but the label as a whole functions as a structurally cataphoric advance label (see Francis's

discussion following her [24] above). Finally, the temporal DM (to use Fraser's terminology)

First is used "in order to help the reader recognize the enumerated text" (Tadros, p. 73).

> (16.15) …the book is still dangerous to the government for two reasons. First, it may
> encourage people to believe that an embittered Mr Brown is bidding [*sic*] his
> time until he can exact revenge by ousting Mr Blair. In fact, while Mr Brown
> still harbours ambitions to become prime minister […], his relationship with the
> prime minister is nevertheless a lot closer than many other chancellors have
> enjoyed. "You cannot be with Gordon for an hour without him phoning Tony or
> Tony phoning him," says a cabinet colleague.
> **The second danger** is <u>that the book brings into open all the bitchy Westminster
> gossip about…</u>

In Schmid's terms,

> The first sentence sets up the text structure of the following two paragraphs by
> introducing *two reasons* why a certain book is *dangerous*. The first reason is then
> introduced by the numerative text signal *first*, and the second reason by the shell-noun
> phrase *the second danger*. This noun phrase has the welcome double effect that it
> reminds readers that the previous paragraph was about a danger and informs them that the
> complementing clause is about a second danger. (p. 348)

According to Schmid, this approach to organizing discourse is a common one; he states,

"Especially when the first realisation follows directly after the signpost, shell-noun phrases are

not often used to signal the realisation" (p. 358).

Comparative epithets modify head nouns of labels in a way similar to textual modifiers.

As mentioned above, Francis states that "[c]omparative epithets, and to a lesser extent equatives

and superlatives as well, are similar to textual modifiers in that they may have both retrospective

and prospective functions" (p. 99). This dual retrospective-prospective function occurs in the

label *a more bombastic explanation* in (26) below (from Francis, p. 99, her numbering),

26 He always pronounced the word 'heard', as if spelt with a double e, 'heerd', instead
   of sounding it 'herd', as Boswell recorded was most usually done. Perhaps this was
   partly a hangover from Sam's early Staffordshire pronunciation, but,
   characteristically, he had *a more bombastic explanation* when challenged: 'He said
   his reason was that if it were pronounced "herd", there would be a single exception
   from the English pronunciation of the syllable "ear", and he thought it better not to
   have that exception.'

in which Francis says,

> Here, *explanation* encapsulates the sentence beginning 'perhaps', which counts as a
> partial explanation of Johnson's pronunciation, to be contrasted with the *more bombastic*
> one then attributed to Johnson himself. Therefore the nominal group, while its head is a
> retrospective label, has a prospective function as an advance label. (p. 99)

Alternatively, Francis notes that "the use of *even* before *more*…signals a relation of

comparative affirmation" (p. 100). In the label *even more drastic projections* in example (27)

below (from Francis, p. 100, her numbering), she observes that "both *projections* are presented

as being on a scale, from *drastic* to *more drastic*" (p. 100). Compare the meaning of the

modification *even more drastic* in the label in (27) below with *a more bombastic* in the label in

(26) above:

27 According to a report submitted to an east-west migration conference in Vienna
   earlier this year, some 1.4 million people left the post-communist countries last year.
   Figures submitted to the European Commission in Brussels suggest that 800,000 a
   year could be entering western Europe from the east. There are *even more drastic
   projections* emerging from the Soviet Union: between 1.5 million and eight million
   Soviet citizens are said to be ready to move westwards.

Discourse label patterns in text.

In describing the patterns in which advance labels are realized in text I draw primarily on

Tadros's research on enumeration and advance labeling; I draw on both Francis and Schmid in

describing the patterns in which retrospective labels are realized in text. Although the discussion

included here is not intended to be comprehensive (for a comprehensive overview of the

lexicogrammatical patterns of shell nouns, see Schmid, pp. 294-297), it should nonetheless be

useful to composition and L2 writing instructors as they approach the teaching of discourse labeling to NNSs. This is of course because instructors of NNSs can utilize the often strong working knowledge of English grammar that these developing writers have frequently acquired from previous ESL/EFL instruction.

Advance labels.

Although Schmid provides an extensive description of the lexicogrammatical patterns in which shell nouns occur, his focus regarding the cataphoric patterns he identifies is primarily intraclausal. While this largely intraclausal focus doesn't exclude the use of shell nouns in an advance discourse labeling function, this function doesn't take center stage in his work. It does, however, take center stage in Tadros's research on prediction, and therefore her extensive treatment of the patterns in which the predictive categories of enumeration and advance labeling are realized in text is more suitable to the purposes of the present discussion. Schmid's research will contribute briefly to the discussion as well.

Before turning to a detailed description of enumeration and advance labeling, however, it should be noted again that the notion of prediction is not originally intended as a description of nominal group lexical cohesion. Rather, it is "a prospective rhetorical device which commits the writer at one point in the text to a future discourse act" (Tadros, p. 70). As will become evident in a moment, this "prospective rhetorical device" comprises elements in addition to what I refer to as advance discourse labels in this study. What these other elements are depends on the specific criteria for predictive membership in the categories of enumeration and advance labeling that Tadros has identified; I, in turn, interpret these criteria as patterns in which advance discourse labels may be realized in the text.

I approach the discussion of enumeration and advance labeling by revisiting Tadros's

general description of how prediction is realized in the text:

> Each of these categories consists of a *pair*, the first, predictive, member (symbol V),
> signals the prediction which has to be fulfilled by the second, predicted, member (symbol
> D). A member may consist of one or more sentences in a member (see Tadros 1981,
> 1985).[30] (p. 70)

Tadros describes the predictive category of enumeration as consisting of a predictive V

member that "carries a signal that commits the writer to enumerate. There is of necessity more

than one D [predicted] member" (p. 71). She identifies three types of enumeration, each defined

by a single criterion for predictive membership, which she states "is both a sufficient and a

necessary condition" (p. 71). These criteria are listed below (p. 71). Examples, also from

Tadros, follow the criterion that defines each type.

Criterion 1:

> Where a structure has either (a) a plural subject followed by a verb which demands a
> complement followed by a colon, or (b) a free clause followed by a clause binder (a word
> which joins a bound clause to a free clause (Sinclair 1972: 25).

Although Tadros identifies two distinct ways in which criterion 1 may be realized in the text, the

pattern which emerges in either case is "a syntactically incomplete sentence terminating with a

colon [which] requires syntactic completion which is provided discoursally by the D [predicted]

member of Enumeration" (p. 72). Examples (2) and (3) below (p. 71), show *type (a)*

enumeration, defined by criterion 1(a) and 1(b), respectively:

> (2) The *major* points [*sic*] are:
>
> (S&C, p. 61)
>
> (3) This is possible under *conditions when*:
>
> (H, p. 157)

---

[30] Tadros, like H&H, has chosen the sentence as the unit of analysis. However, Tadros finds it "necessary
to extend the notion of sentence to include not only what is traditionally conceived of as a sentence boundary, but
also other stops not traditionally regarded as terminal signals—the dash and the colon" (p. 70). Tadros states this is
because the dash and the colon "can be taken as sentential terminal signals when they separate a V from a D
member" and they "are capable of marking major discourse patterns" (p. 70).

Criterion 2:

> Where a sentence includes a cataphoric textual place reference item such as *the following* or *as follows* in association with a plural noun.

Example (4) below (p. 72) illustrates *type (b) enumeration*, defined by criterion 2:

> (4) *The following*, for example, are all short story openings:
>
> <div align="right">(W, p. 64)</div>

Criterion 3:

> Where a sentence includes an Enumerable…in association with a numeral, provided the information is presented as new to the context.

Tadros glosses criterion 3 as follows:

> 'Enumerable' comprises both what we might call 'sub-technical' nouns (e.g. *advantages*, *reasons*, *aspects*, etc. as distinct from *men*, *women*, and *children*) as well as discourse reference nouns (e.g. *examples*, *definitions*, *classifications*)….The important thing to bear in mind is that the referents of such nouns are, in the first instance, textual, that is, other stretches of language.
> 'Numeral' can be exact, such as *two*, *three*, *four*, or inexact, such as *a few*, *several*, *a number of*.
> 'New' is glossed as that which is assumed not to be recoverable from the context. For instance, 'There are three reasons for…' is presented as new to the context, whereas 'The three reasons mentioned above…' is presented as recoverable, and hence the structure does not predict Enumeration although this may still occur. (p. 71)

Additional examples of what Tadros refers to as enumerables include: *advantages*, *aspects*, *categories*, *effects*, *examples*, *factors*, *problems*, *qualities*, *senses*, *terms*, *things*, *ways* (p. 72).

Type (c) enumeration, defined by criterion 3, is illustrated in examples (5) and (6) below (p. 72):

> (5) The term 'question of law' is used in *three distinct* though related *senses*.
>
> <div align="right">(F, p. 66)</div>
> (6) In addition to insurance, there are *a number of ways* by which risks can be reduced.
>
> <div align="right">(H, p. 17)</div>

This is the type of enumeration which corresponds most closely to Francis's *advance label*; this also represents the aspect of Tadros's work on prediction which has received the most attention in the applied linguistics research (see, e.g., Hinkel, 2001).

Advance labeling is defined by Tadros as "a category of Prediction in which the writer both labels and commits him/herself to perform a discourse act" (p. 73). She identifies three types of advance labeling; these are enumerated under criterion 4 in her study (p. 73). Note that here, however, criterion 4 has been adapted to include only *type (a) advance labeling*, the type that is of interest to the present study (see pp. 73-74, for a full discussion of advance labeling). She states that all four criteria for predictive membership of advance labeling presented below "must be satisfied to qualify for inclusion" (p. 73).

> 1. The sentence must contain a labelling of an act of discourse.
> 2. The labelling of the act must be prospective.
> 3. The role of the actor is not assigned elsewhere, and, therefore, remains as the writer's.
> 4. The sentence labelling the act must not include its performance. Advance Labelling is realized by (a) linear text.

In example (7) below (pp. 73-74),

> (7) V This analysis leads us *to make the important distinction* between real income and money income.
> D Money income measures a person's income in terms of some monetary unit, …; real income measures a person's income in terms of the command over commodities which the money income confers.
>
> (L, p. 140)

Tadros states that "the act labelled in advance [by the predictive V member] is 'to make the important distinction' and this sets up the prediction that the two terms 'real income' and 'money income' will be distinguished. The prediction is fulfilled in the D [predicted] member" (p. 74). It should be noted here, however, that while "the act labelled in advance" in example (7) includes the advance discourse label *the important distinction*, in contrast to the criteria for predictive membership of enumeration, which includes—with the possible exception of criterion 1(b)—a nominal group functioning as an advance discourse label, Tadros's criteria for predictive membership of advance labeling does not include the use of a discourse label *per se* (cf. example [7] above with another example Tadros provides, "'Let us distinguish between x and y'" [p. 73]).

I restrict the conversation here, however, to the variant of advance labeling (if it may be called such for my purposes here) which includes a nominal group functioning as a discourse label.

Similar to Tadros's *type (a) advance labeling* is a type of signpost (to use Schmid's term) that Schmid describes as "exclusively cataphoric" (p. 355). In the example below (adapted from Schmid, p. 353, his numbering),

> (16.19) What we're confronted with here is **a pragmatic principle**: <u>speakers try to be understood correctly and avoid giving false impressions</u>. If what I say is logically correct, and true according to some abstract semantic 'rule', but still confuses or misleads my hearer, then my utterance will not have its proper effect: I will be misunderstood.[31]

Schmid states that the function of the shell-noun phrase (to use his terms) *a pragmatic principle*, "[a]s signalled by the colon after this noun phrase…is to tell the reader that specific information is to follow" (p. 355).

Retrospective labels.

Francis's description of the patterns in which retrospective labels are realized in text, although brief in comparison with Schmid's treatment, nonetheless addresses the same two basic patterns. I have already mentioned her observation that "[t]he head nouns of retrospective labels are almost always preceded by a specific deictic like *the*, *this*, *that* or *such*, and may have other modifiers and qualifiers too" (p. 85). Describing the two patterns in which retrospective labels occur, she states, "The head noun of a retrospective label may combine with a definite reference item in one of two ways: first, it may be modified by it…; second, it may be the complement of the reference item" (p. 86). Example (3) illustrates the former (and is repeated below for ease of comparison), and example (4) illustrates the latter (from Francis, pp. 85-86):

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[31] Schmid cites this source as "Mey (1993)" (p. 349).

3 …the patients' immune system recognised the mouse antibodies and rejected them. This meant they did not remain in the system long enough to be fully effective.

   The second generation antibody now under development is an attempt to get around *this problem* by 'humanising' the mouse antibodies, using a technique developed by…

4 Anthony Burgess thinks hero worship is peculiar to the British. He explains it by our obsession with the past and our preference for believing in the supremacy of people over ideas. 'In contrast to Plutarch's Lives, which contain no real people, it is healthy on the part of the British to think that history is made by people going to the toilet or having indigestion.'

   While this is *an old-fashioned diagnosis*, in line with Carlyle's maxim that history is the essence of innumerable biographies, there is cogency in the notion that we, unlike Europeans, and especially the French, do not approve of seeing abstruse values exalted over individual achievement.

Table 3 below (adapted from Figure 3.1 in Schmid, p. 22) summarizes the two patterns illustrated in Francis's examples (3) and (4) above, though in slightly different terms, *viz.*, it shows the two lexicogrammatical patterns of anaphoric shell nouns Schmid identifies in his research. Note that in the second pattern, like Francis's example (4) above illustrating the pattern head noun of a retrospective label as complement of the definite reference item, he observes that the "shell nouns do not accompany the anaphoric demonstratives as immediate neighbors but are only equated with them by means of the copula" (p. 345; cf. Francis, pp. 97-98, discussed above).

Table 3
Lexicogrammatical Patterns of Anaphoric Shell Nouns

Pattern	Abbreviation	Example of the general pattern[32]
Referring item + (premod) + shell noun	*th*-N	(Mr Ash was in the clearest possible terms labelling my clients as anti-semitic.) I hope it is unnecessary to say that **this accusation** is also completely unjustified. (PAPERS)
Referring item as subject + *be* + shell noun (phrase)	*th-be*-N	(I won the freshmen's cross-country. – Mm.) That was **a great achievement** wasn't it? (SPOKEN)

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[32] Examples are taken from the Cobuild corpus (Schmid, p. 21).

In this chapter I have presented the theoretical framework for the present study. The framework, which comprises the theory of cohesion and two types of cohesive device (i.e., DMs and discourse labels), may be summarized as follows: (a) H&H's theory of cohesion provides the foundation, with one significant commutation, *viz.*, cohesive relations in the text are analyzed in terms of segmental relationships following Fraser's research in the area of DMs, rather than H&H's intersentential relationships; (b) Fraser's research provides the basis for the present framework as it relates to DMs, largely because his segment-level approach to describing relationships in the discourse signaled by DMs provides a means to keep the variable of DM use separate from other variables, such as punctuation errors in the writing of developmental L2 writers; (c) Francis's research provides the basis for the present framework as it relates to discourse labels, largely due to the foci of her research, *viz.*, the cohesive function and discourse organizing role of discourse labels, as well as her interclausal approach to the cohesive function of discourse labels, which aligns well with the rest of the framework. In the next chapter, I present the research methodology to which this theoretical framework is applied.

CHAPTER 3: THE STUDY: CORPORA AND ANALYSIS

Corpora

Two comparable learner corpora of argumentative writing were created for this study.[33]

Specifically, these were a NNS corpus and a NS corpus, both composed of final revisions of

academic arguments written for a university FYC course. Essays were added to the appropriate

corpus as they were received from instructors (i.e. randomly). As previously stated in Chapter 1,

the NNS corpus consists entirely of essays written by student writers whose first language (L1) is

Chinese. No attempt was made to collect any ethnographic information beyond the student

writers' L1 (see Footnote 4 in Chapter 1).[34] The NNS corpus consists of 29 essays totaling

50,259 words, and the NS corpus consists of 30 essays totaling 48,259 words.

The arguments in the corpora were written in the two semesters prior to the semester in

which they were collected for analysis. Some of the NNS and NS essays came from L2 and

mainstream sections which I taught during the semesters in question. However, most of the

essays in the NNS corpus were written by students in NNS sections taught by one other

instructor in the department, and most of the essays in the NS corpus were written by students in

mainstream sections taught by several other composition instructors in the department. As the

essays were written prior to the conception of the research approach and design of the present

study, it is assumed that none of these students received instruction on the cohesive devices with

which this study is concerned other than perhaps those which are commonly referred to as

"transition words/phrases" in FYC courses (i.e., they did not received any focused instruction on

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[33] Granger and Tyson (1996) state that four variables must be controlled in order for corpora to be comparable: (a) type of learner, (b) stage of learner, (c) text type, and (d) a native speaker corpus of writing similar to the ELL corpus (pp. 18-19).

[34] See also Noble (2010), in which the researcher makes a case for "data collection [which] replicates university tutorial conditions where a teacher or lecturer has very limited information about the students' background, let alone writing experience" (p. 146).

DMs or labels). Also, because I had no intention of attempting to relate cohesion to writing

quality, I requested that essays be submitted to me electronically without grades or marks of any

kind in them.

An important consideration in the decision to analyze final revisions of student writing

was the intention of avoiding a potential issue noted by Field and Yip (1992) in their study of

internal conjunctive cohesion in the timed essay writing of NSs and L1 Cantonese NNSs, in

which they observed,

> The high frequency of devices in L2 and even in L1 scripts may be due to the
> limited time provided for completion of the task. Content had to be devised quickly and
> writers may have relied on organizational devices to shape the essay rather than a strong
> development of their thought. [35,36] (p. 24)

Here, I think it's important to address the question of to what degree the final revisions

used in the present study reflect each individual NNS writer's understanding of how to construct

cohesive texts utilizing DMs and discourse labels. The process approach to composition

instruction is highly valued by the university's Composition Program, and it may be assumed—

correctly, I think—that all of the instructors in the Program use this approach in teaching FYC.

Therefore, my expectation of the essays comprising the NNS corpus, just as with the essays in

the NS corpus, is that they have undergone a process of revision which, in addition to revisions

initiated by the writers themselves, probably included revisions based on feedback following

peer-review sessions, writing conferences with students' composition instructors, and perhaps

Writing Center tutorials. Nor is it uncommon for students to have additional discussions with

their composition instructors about their writing or to request feedback from friends, for

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[35] For a related discussion, see Crewe (1990) on "surface logicality" and "deep logicality."

[36] Reynolds (2001) makes a similar observation regarding the potential for a timed essay to promote the use of simpler forms of lexical cohesion, such as lexical repetition (p. 472).

example. The revision process for the NNSs therefore potentially included a great deal of feedback from NS instructors and tutors as well as NNS peers.

An additional expectation, however, is that the cohesive devices which are the concern of the present study generally fall outside the focus of the university's FYC course, which primarily focuses on the macro-elements of coherent writing, such as the rhetorical situation and macrostructure of a given text, rather than micro-elements, such as cohesion (see Lee, 2002, pp. 139-140).[37,38] Furthermore, in order for NNS students to internalize the use of cohesive devices such as those with which the present study is concerned, they typically require focused instruction (Hinkel, 2004; see also Lee, 2002, and Shea, 2011). This, in turn, suggests that because this has probably not been the case in their FYC course, their final revisions should accurately reflect their level of understanding of how to use these devices in constructing cohesive texts. In fact, in the light of Field and Yip's (1992) and Reynolds's (2001) observations above related to student writers' use of conjunctive cohesion and lexical cohesion, respectively, in timed essay writing, students' understanding of DM and label use may actually be more accurately reflected in final revisions than in timed writing (this question, however, is outside the scope of the present study's investigation).

It's interesting to note that the relatively small number of studies of DM- and label-like phenomena in the prior L2 writing research that have included a qualitative dimension have used timed essays for analysis. The importance of placement and diagnostic tests, including standardized tests, to the student careers of NNSs (Hinkel, 2001, 2002) may be one factor in the decision of many researchers to use timed writing samples. It may also be based on matters of

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[37] Reid (2011) states that in argumentative writing, "The rhetorical situation (purpose, audience, genre, occasion, and cultural context) plays a crucial role" (p. 501).

[38] Lee (2002) defines the macro-structure of a text as "a characteristic pattern or shape appropriate to its communicative purpose and context of situation (Hoey, 1983, 1991)" (p. 139).

convenience, as timed essays are quite short in comparison to the essays analyzed in the present study, where the average length of the essays in the NNS and NS samples are 1,782 and 1,714 words, respectively (I say more about the samples in the following subsection; see also Dörnyei, 2007, on the "labour-intensive" nature of qualitative research [p. 38], and Connor, 1994, on the "time consuming, intricate, and specialized work" of text analysis [p. 684]). For example, Flowerdew's (2006) mixed methods analysis of signaling nouns in the writing of L1 Cantonese ELLs used a corpus comprised of timed argumentative essays of 450-500 words each, and Zhang (2000) analyzed timed expository essays of about 250 words each in a mixed methods study investigating reference, conjunction, and lexical cohesion in the writing of Chinese undergraduate English majors.[39] To my knowledge, the only qualitative article to provide annotated examples of problems of use with DM- or label-like devices in L2 writing published within the past 10 years is McGee's (2009) paper on lexical cohesion. However, he provides very little information about the student writing on which he bases his discussion. As I observe in the next chapter, at least one unexpected finding of the present study may be due in some measure to the decision to analyze longer essays which have undergone a revision process (see the discussion under research question 4 regarding the effective use of discourse labels in the NNS sample).

As a final point, the decision to use this particular genre, the academic argument, for analysis was made for several reasons. First, the source-based academic argument assigned in the university's FYC course is designed to replicate the type of academic writing students will be required to perform throughout their student careers. Second, as I noted in Chapter 1, cohesive devices corresponding to the categories of conjunctive cohesion (*DMs* in the present study) and

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[39] An exception is Noble's (2010) mixed methods study of the related concept of metadiscourse (see Footnote 1 in Chapter 1), in which she analyzed argumentative essays of approximately 1,500 words each. It does not appear that the essays were written under timed conditions.

lexical cohesion have been found to be of particular importance to written academic discourse. Several researchers have noted this or, similarly, the important role of these cohesive devices in constructing persuasive and expository text [see, e.g., Crismore et al. (1993), Dafouz-Milne (2008), and Granger & Tyson (1996) on the importance of DM-type devices (including metadiscourse) in writing with a persuasive aim; Hinkel (2002) on the importance of conjunctions in academic prose; Aktas & Cortes (2008) and Flowerdew (2003) on the importance of discourse label-type devices in academic written discourse; Zhang (2000) on the importance of lexical cohesion in expository writing]. Third, it was hoped that the importance of DMs and discourse labels to constructing cohesive academic texts would compensate to a large degree for the fact that the variable of topic was not controlled in the present study.[40]

Analysis

It was determined that a sample of five essays drawn randomly from each corpus for analysis would be appropriate based on the stated purpose and goal of the present study, as well as the potential of a qualitative analysis of this kind to generate a very large amount of material (G. Delahunty, personal communication, March 3, 2013).[41] Once samples were created for analysis, I began annotating all instances of use (i.e., correct uses, incorrect uses, overuses) and underuse of DMs and discourse labels in the NNS sample (the essays in this sample have been included in the Appendix). As I stated in Chapter 1, issues of correct use, incorrect use, overuse, and underuse were defined according to the needs of the text of each essay analyzed. After annotating all uses and underuses of DMs and discourse labels in the first two essays in the NNS

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[40] For a discussion on the importance of topic to the relationship of coherence and cohesion, see Tierney and Mosenthal (1983) who, citing Morgan and Sellner (1980), argue "for the subordinate relationship of cohesive patterning to topic and to coherence" (p. 219). See also Carrell (1982) for a related discussion.

[41] Dörnyei (2007) provides some guidelines addressing saturation and sample size in qualitative research (pp. 126-127) which I attempted to adapt to the needs of the present study as well.

sample, a determination was made as to which DMs and label uses were problematic across these essays. The focus of the analysis was thereby narrowed down to only those issues which were common to the first two essays, and these, in turn, became the focus of the analysis of the third essay. This process of narrowing and refocusing my analysis was continued in the analysis of the fourth and fifth essays in the NNS sample. Once I had completed my analysis of the NNS sample, the results of this analysis were used to focus my analysis of the NS sample for the purpose of determining if the results of the analysis of the NNS sample also held for the NS sample. I discuss the results of my analysis in Chapter 4.

CHAPTER 4: RESULTS AND DISCUSSION

The results of the analysis of the NNS sample are presented according to the five research questions presented at the end of Chapter 1.

Research Question 1

Research question 1 concerns the incorrect use of DMs in the writing of these NNSs, with "incorrect use" defined in terms of the context in which they occur. Simply put, no DM was found to be incorrectly used in all essays in the NNS sample. This finding is somewhat unexpected in the light of the findings of the past decade or so, which would suggest that these L2 writers may tend to use DMs incorrectly in their writing (see, e.g., Chen, 2006; Hinkel, 2002; Zhang, 2000). This discrepancy may be due to methodological differences between this study and prior studies. For example, Hinkel's (2002) large-scale quantitative analysis of L2 writing relied on frequency rates of types of devices similar to DMs in NNS and NS student writing, with significant differences in the use of these devices between NNSs and NSs suggesting to her that these devices are often used by NNSs at the expense of other types of cohesive device (e.g., discourse labels). Clearly, Hinkel's (2002) research design led her to define incorrect use in different terms than the present study. Chen's (2006) qualitative analysis of incorrect use of conjunctive adverbials, which primarily focuses on the EDM *besides* and the IDM *therefore* in final drafts of L1 Chinese EFL student writing, appears to be based on errors made in some (but not all) of the essays analyzed, which suggests that these findings may not be generalizable. Likewise, it's unclear whether Zhang's (2000) findings, based on a qualitative analysis of timed L1 Chinese EFL student writing which found that these writers misused a variety of EDMs, TDMs, and CDMs, were based on errors made in all of the essays in the corpus, again raising the question of whether these findings are generalizable.

There is an additional possibility which may shed light on the discrepant findings as well.

Zhang (2000) states that, "[partly] because of" the fact that in EFL instruction in China "the

primary focus of study" is at the sentence-level, "Chinese students of English find it very

difficult to construct an organised and coherent written text in English (Yang, 1994)" (p. 61).

(Zhang [2000] also observes that "the usual length of essays written by students at this level

[second-year English majors] when they are doing classwork or taking an examination" is 250

words [p. 63].) This may well no longer be an accurate description of EFL instruction in China a

little over a decade after Zhang made this observation. Liu and Braine (2005), for example,

state,

> Although neglected for a long time in Mainland China (Yang, 1994; Liu, 2000), writing
> in English as a foreign language is becoming more and more important owing to the fact
> that even EFL learners have to write papers and theses in English at secondary and
> tertiary levels, and send job application letters and applications to foreign universities,
> among other functions. As a result, in China, effective writing appears to be particularly
> important in teaching and learning of English as a foreign language. [42] (p. 624)

This suggests that EFL writing instruction in China has begun to address writing on a discourse

level more effectively.

Research question 2

Research question 2 concerns the overuse of DMs in the writing of these NNSs, with

"overuse" defined in terms of the context in which they occur. In answer to this question, no

DM was found to be overused in all essays in the NNS sample. This finding is somewhat

unexpected in the light of the findings of the previous research, which would suggest that these

L2 writers may tend to overuse DMs in their writing (see, e.g., Bolton et al., 2002; Chen, 2006;

Hinkel, 2002; Zhang, 2000) [though as Shea, 2011, observes, the results of the prior research

"are far from conclusive" (p. 23)]. This may again be due to methodological differences

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[42] See also Jiang (2011) for an informative account of changes to secondary EFL reading and writing
instruction in China as schools attempt to better prepare students to study in American colleges and universities.

between the present study and previous studies. For example, Bolton et al.'s (2002) study of connectors in L1 Chinese NNS and NS student writing vs. NS published academic writing, like Hinkel's (2002) study, relied on frequency rates in defining overuse. Chen's (2006) quantitative analysis, which found that L1 Chinese ELLs (slightly) overused conjunctive adverbials when compared with the writing found in NS research articles, similarly relied on frequency rates. And, just as with Zhang's (2002) findings regarding incorrectly used DMs, it's unclear whether the finding (also based on a qualitative analysis) that these NNSs overuse of a variety of EDMs and TDMs was based on errors made in all of the essays in the corpus. This again calls into question the generalizability of this finding. Furthermore, the possibility mentioned above with regard to Research question 1, that EFL writing instruction in China has begun to address writing on a discourse level more effectively, must be considered in light of the present study's finding related to DM overuse.

Research question 3

Research question 3 concerns the underuse of DMs in the writing of these NNSs, with "underuse" defined in terms of the context in which they occur. In answer to this question, no DM was found to be underused in the NNS sample. This is expected based on the prior research, which, as noted earlier, suggests that these NNSs tend to overuse rather than underuse these devices in their writing. Despite this, I decided that a qualitative analysis which considered underuse of DMs as a potential writing problem for these NNSs was warranted, based on the same potential I observed with regard to research questions 1 and 2 for methodological differences to shape results, *viz.*, that quantitative analyses such as Bolton et al. (2002), Hinkel (2002), and Chen (2006) defined overuse in terms of frequency rates rather than the discourse requirements of the text. And, as I also observed with regard to the first two research questions,

it isn't clear if the results of Zhang's (2000) qualitative analysis are in fact generalizable.

Furthermore, studies which include a discussion of underuse of this type of device are rare;

Granger and Tyson (1996) observed nearly two decades ago that "very little has been written

about connector underuse, undoubtedly because it is much more difficult to spot" (p. 20).

Nonetheless, a close analysis of the NNS sample revealed that no DM was underused in

all essays in the sample. This, again, may be due to the possibility suggested above with regard

to research questions 1 and 2, that EFL writing instruction in China has begun to address writing

on a discourse level more effectively, and this may include more effective instruction on the use

of DM-type devices to signal semantic relationships which hold between discourse segments.

Research question 4

Research question 4 concerns the effective use of discourse labels in the writing of these

NNSs, with "effective use" defined as when the semantics of the label (i.e., the nominal group

functioning as such) is fully compatible with its lexicalization.[43] In answer to this question,

ineffective use of discourse labels was not found to be a problem in all essays in the NNS

sample. This finding is somewhat unexpected based on the prior research, which would suggest

that these L2 writers may tend to have problems using discourse labels effectively in their

writing (see, e.g., Flowerdew, 2006, 2010). For instance, Flowerdew (2006) states in his study

of signaling noun errors that the use of this type of nominal group lexical cohesion is challenging

for NNSs (p. 345). He identifies five categories of error based on an analysis of a corpus of

argumentative essays written by L1 Cantonese EFL students. However, the essays in question

were timed, and the writers did not have access to dictionaries (p. 349). As a result, some of the

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[43] Flowerdew (2006) presents a taxonomy of NNS signaling noun errors based on an analysis of a corpus comprised of L1 Cantonese EFL student essays. However, it was determined early on that, for the purposes of the present study, many of these categories of error (e.g., collocation errors made with these nominal groups) conflate discourse labeling errors with other developmental NNS writing errors.

types of error Flowerdew (2006) identifies, such as inappropriate head nouns, may have been the result of the test conditions under which the NNS essays were written.

In a later study, Flowerdew (2010) observes that the use of signaling nouns by NNSs (again, L1 Cantonese) and NSs differ in ways that impact the NNSs' ability to construct coherent argumentative essays (p. 38). For example, the NNSs were found to use a narrower range of types of head noun (p. 46). However, this and other findings in this study may be due in part to differences in the learner corpora used for analysis. For instance, in contrast to the NS corpus, the NNS corpus in this study comprised timed essays that were on average about half the number of words of the NS essays. Furthermore, according to the way effective use has been defined in the present study, an analysis that includes, for example, the range of head nouns found in NNS vs. NS writing conflates errors of style and register with the appropriateness of the head noun to its lexicalization.

The finding of the present study may also be surprising given the common concern among many NNSs that a limited vocabulary poses the greatest challenge to writing academic discourse in English (see, e.g., Xing et al., 2008, pp. 71-72). Hinkel (2002) states that her results point to "a severely restricted lexical repertoire" for NNS writers, including L1 Chinese NNSs (p. 74; see also Flowerdew, 2010, p. 40). Yet, the nouns which commonly function as discourse labels might be a different matter. These nouns "are semantically and lexically relatively simple" (Hinkel, 2002, p. 80), at least with respect to the majority of the most common head nouns (see Aktas & Cortes, 2008; Flowerdew, 2006; Francis, 1994; Tadros, 1994). This suggests that these nouns are in fact part of the lexical repertoire of most NNS FYC students, including those with whom the present study is concerned.

Research question 5

Research question 5 concerns the overuse of discourse labels, with "overuse" defined in terms of the context in which they occur. While the previous research (e.g., Flowerdew, 2010; Hinkel, 2002) suggests a tendency for L1 Chinese NNSs to underuse this type of cohesive device, it was decided, based on methodological differences between these studies and the present study, that an analysis which included overuse of discourse labels as a potential writing problem for these NNSs was warranted. For example, Hinkel's (2002) finding of underuse was based on frequency counts of nouns which often (but not always) function as labels. And while Flowerdew's (2010) analysis of EFL student writing was conducted by hand in order to ensure that nouns which commonly function as signaling nouns were in fact functioning as such in the student texts, as noted in the discussion of research question 4 above, the learner corpora used in his study were different in several important respects.[44]

Nonetheless, the overuse of discourse labels in the writing of these NNSs was not found to be a problem in all essays in the sample. I note here that a related problem that composition instructors are more likely to encounter in the writing of these NNSs is the use of unspecific nouns which are not employed as labels (Hinkel, 2002, pp. 80-81). For example, Hinkel (2002) notes a tendency for these NNS student writers to use unspecific abstract nouns in a manner in which they are not used "to classify and present new information but to carry the ideational content of the text without informational specifics" (Hinkel, 2002, p. 81). In other words, they are not lexicalized.

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[44] Flowerdew (2010) points out that conducting the analysis of label-like phenomena by hand "is time-consuming, but nevertheless the most effective approach available" (p. 38), especially as concerns the identification of discourse labels which have an interclausal function (i.e., the type with which the present study is concerned).

Research question 6

     Research question 6 concerns the underuse of discourse labels by these NNS student writers, with "underuse" again defined in terms of the context in which they occur. The analysis revealed that underuse of discourse labels, and in particular, advance labels, is in fact a problem for these NNS student writers. This is congruent with the previous L2 writing research on labeling in general (e.g., Flowerdew, 2010; Hinkel, 2002). Hinkel (2002), for example, proposed based on her finding that "NNSs seem to rely more on phrase-level coordinators, sentence transitions, and demonstrative pronouns to provide cohesion" in their writing, rather than employing advance and retrospective labels (p. 249). This tendency contrasts with that of NSs, who tend to use advance and retrospective labels more to "[establish] cohesion between text ideas and flow" (Hinkel, 2002, p. 249). Flowerdew (2010) also observes that L1 Cantonese NNSs used significantly fewer signaling nouns in their writing when compared to NSs (although Flowerdew, 2006, found underuse of signaling nouns to be the least frequent error made [p. 357]). The underuse of advance labels was not found to be a problem in the NS student texts.

     What's unclear, however, is why the underuse of advance, but not retrospective, labels was a problem for these writers. While the results of the present study cannot speak directly to this question, I'd like to speculate briefly on two possible reasons for this. Since the publication of Halliday and Hasan's (1976) *Cohesion in English*, the focus has been on the anaphoric cohesive potential of these (or similar) devices. Halliday and Hasan (1976), in fact, stress this cohesive aspect of general nouns in their relatively brief discussion of lexical cohesion, and it has clearly received more attention in the empirical research (e.g., Aktas & Cortes, 2008; Gray, 2010; Gray & Cortes, 2011; McGee, 2009; Shea, 2011) and in writing guides for NNSs (e.g., Swales & Feak, 1994). Francis also focuses on retrospective labels in her monograph on

discourse labeling, stating that, based on her data, "retrospective labels are far commoner than advance labels" (p. 89; see also Hinkel, 2001). These observations suggest two things related to the problem of underuse of advance, but not retrospective, labels in these NNSs' writing. The first, based on the emphasis on the anaphoric aspect of labels in the theoretical and empirical research, as well as in writing guides for NNSs, is the strong possibility that any instruction these NNSs may have previously received on discourse labeling had as its focus the anaphoric aspect. The second, based on Francis's observation that retrospective labels are more common, as well as her observation that labeling "is extremely common in the press and in all discourse of an argumentative nature" (p. 100), is that these students have had more opportunities to notice the phenomenon of retrospective labeling in authentic English texts.[45] As a result, they may have learned to use this text-rhetorical feature in their own writing.

Interestingly, all instances of advance label underuse in the NNS essays appear to fall within the category of prediction Tadros refers to as *type (c) enumeration* (see Chapter 2 of the present study for a detailed description of Tadros's notion of prediction as it applies to this study). The errors of omission of advance labels in the NNS student writing analyzed in the present study are presented as being of two kinds, with the intention that this may be useful to composition instructors: (a) instances in which the coherence of a relatively short stretch of discourse (e.g. a paragraph) would be substantially improved by the cohesive and discourse organizing functions of an advance label; (b) instances in which the coherence of a relatively long stretch of discourse (e.g. multiple paragraphs or pages of text) would be similarly improved.

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[45] Ortega (2009) states that according to the Noticing Hypothesis (Schmidt, 1995), "in order to learn any aspect of the L2 (from sounds, to words, to grammar, to pragmatics), learners need to notice the relevant material in the linguistic data afforded by the environment. Noticing refers to the brain registering the new material, with some fleeting awareness at the point of encounter that there is something new, even if there is no understanding of how the new element works, and possibly even if there is no reportable memory of the encounter at a later time" (p. 63).

While the focus here remains on the NNS student writing, examples of advance label use in NS student writing are included for comparative purposes, while examples from expert published writing are included as examples of target use of advance labels.[46] In most cases, fairly long stretches of discourse have been included in the examples. I begin by addressing the first kind of omission (a), instances in which the coherence of a relatively short stretch of discourse would be substantially improved by the cohesive and discourse organizing functions of an advance label.

Before presenting examples from the NNS and NS samples, however, I provide an example of target use below.[47] Note that, like the errors of omission in the NNS student writing, the following example of target use is an example of Tadros's *type (c) enumeration*. (This pattern wasn't identified in the NS sample.)[48] Note the writer's use the TDMs *first* and *second* (italicized below) to signal the predicted members (i.e., the *two comments*). I've bolded the label in the text below.

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[46] Gilquin et al. (2007) note, "Using expert writing as a norm against which to compare learner writing is controversial," but that "[t]he question of the norm can be settled by taking into account the aim of the comparison" (pp. 326-327). They argue that expert writing may be most desirable "in the context of pedagogical applications" (p. 326). See also Aktas and Cortes (2008) for another example of a study which uses published expert writing as target use.

[47] Examples of target use in this chapter are from Bruce Fraser's (2005) monograph, *Towards a Theory of Discourse Markers*.

[48] While the analysis isn't concerned with the patterns *per se* in which discourse labeling is realized in NNS student writing, this is an interesting finding. Speculating on possible reasons for this, it may be that the different labeling patterns used are the result of different macrostructures (e.g., enumerated vs. elaborated essay types; see Shea, 2011, p. 41) or, as Noble (2010) observes in her qualitative analysis of the metadiscoursal subcategory of connectors in NNS student writing, it may signal "that another method of linking ideas has been employed" (p. 157).

Target Example 1

> Her [Diane Blakemore's] conclusion: DMs are not a coherent class worthy of study. I take issue with this position in Fraser (forthcoming b). For the moment, I will make only **two comments**. *First*, given the way relevance theory views language, this may be a valid conclusion within that theory. However, since most of the world does not embrace the relevance theory view, it is premature to write off DMs as unworthy of study. *Second*, while it is plausible (though not by any means provable) that *but* or *so* do not have a core meaning which might be thought of as "conceptual meaning," it is strange that *however* and *contrary to expectations*, for example, both DMs according to the definition given here in (9), function exactly alike and occur in the same linguistic environments, and indeed, have the same meaning: "contrary to expectations." Yet according to relevance theorists, only the former can be a DM, for, to include the other, would destroy the mutual exclusivity of their two types of meaning, a hallmark within the theory.

The writer utilizes the advance label, *two comments*, to construct a cohesive and clearly organized stretch of discourse which contributes to the overall perceived coherence of the text. Specifically, the writer uses what Francis refers to as an illocutionary noun, *comments*, to label the two predicted members. The advance label "commits the writer…to a future discourse act" (Tadros, p. 70), and the inclusion of the TDMs *first* and *second* "help the reader recognize the enumerated text" (Tadros, p. 73). The advance label and the TDMs function together to make the text easier to process for the reader.

In each of the following examples from the NNS sample, the coherence of a relatively short stretch of discourse would be substantially improved by the inclusion of an advance label. A discussion follows each example. (No changes have been made to the original NNS or NS texts other than those indicated.)

NNS example 1

Not only consumers, but also farmers can get same amount of benefit from GMOs. GMOs' pest-resistant ability benefits farmers the most **[for *two reasons*]**. Because first, GM crops can resist pest by themselves, farmers don't have to spend extra money for chemical pesticide and spray it on plants. Therefore, pest-resistant GMOs can save farmers' money, energy and time. Second, insect attack is a serious agricultural problem and also the main reason leading to yield losses and reduced product. Insects can cause damage both in the field and after harvest during storage. According to GMO Compass, which is a website was financially supported by the European Union, that insects destroy about 25 percent of food crops worldwide each. One specific example is that the larvae of Ostrinia nubilalis, the European corn borer, can destroy up to 20 percent of a traditional maize crop ("Pest Resistant Crops"). If insect attack problem can be solved by an easy and economic way, then farmers will never lose most of their production when they are going to harvest and just at this time, a serious insect attack dramatically occur. Fortunately, pest-resistant GM crops are this kind of thing that can avoid this tragedy. Therefore, pest-resistant GMOs are really good things to farmers.

Although not set off orthographically as a new paragraph, the beginning of the text included above begins the writer's discussion of the essay's second premise (subclaim). In this paragraph the writer discusses two reasons why "GMOs' pest-resistant ability benefits farmers the most." The writer has included the TDMs *first* and *second* to signal where the discussion of each of these reasons begins. The inclusion of an advance label such as that proposed above would improve the organization of the text; it would also improve the cohesion of the text by providing a cataphoric link to each of the TDMs present in the original text. As a result, the text becomes more coherent and easier to process.

NNS example 2

        Up till now, nuclear technology has been used for several decades and scientists are able to control the nuclear power reaction. Tragedies like Chernobyl, the Three Mile Island and Fukushima are the only few accidents that rooted in people's minds. These are precious experience to prevent accidents happening again. However, throughout the half century, nuclear power has always been clean, safe, and efficient to human beings. Based on the current technology, the wastes from nuclear power plants can be dealt with safely [**in one of** *two ways* **according to how radioactive the waste is**]. "According to an article on *thinkquest.com*, they could be manipulated either by temporary storage or Permanent storage. Fuel rods, which are the most radioactive substance but small in volume, can be placed in a cool pool. After five years of cooling they can be kept in a dry storage in case the pool might be filled." (thinkquest). Even though it seems the danger is still there, we can prevent the radiation after putting nuclear waste safely by using the method above. Meanwhile nuclear wastes that are not extremely radioactive could be buried under the surface of the ground. Yucca Mountain, Nevada has been chosen as the permanent place for storing nuclear wastes. Since it is a dry place with less geologic activity and ground water, radiation will have less chance to spread. Apart from that, people are digging the hole into the mountain, trying to put the waste in a deeper and safer place.

Although the focus of this paragraph appears to shift after the third sentence, most of it is about the two ways in which "the wastes from nuclear power plants can be dealt with safely." The addition of an advance label such as the one I've proposed above would help organize and build cohesion in the text, especially since the writer hasn't clearly signaled the predicted members in the original text (the second way of dealing with nuclear waste is introduced with the TDM *meanwhile*).

NNS example 3

        Although standardized testing has some disadvantages, it is still the most advanced tool to measure students' performance in today's education. Standardized testing helps to improve the education for most students in schools [**in** *several important ways*]. This specific kind of testing can provide great data to improve decision making, help teachers learn more about students' abilities and identify students' academic performance, and it lays a firm creative foundation and cultivates students' time management skills.

This paragraph introduces the essay's claim and premises in the second and third sentences, respectively. An advance label such as the one I've proposed above could be used to

clarify the claim-premise relationship of these sentences for the reader, thereby making the text easier to process. I've included an example of Tadros's *type (c) enumeration* pattern in the text above, but her *type (b) enumeration* pattern is also possible here (e.g., "Standardized testing helps to improve the education for most students in schools in the following *ways*:"). In both cases, the inclusion of a label improves upon the organization and cohesion of the text.

As I previously stated, the underuse of advance labels was not found to be a problem in all essays in the NS sample. An example of NS use of an advance label is provided below for comparative purposes. I've bolded the advance label but have made no other changes to the original text.

NS example 1

> It goes without saying that Gosztola and Roberts have **antagonistic views** on the subject of information freedom in general and on WikiLeaks in particular. While Roberts argues that WikiLeaks should be shut down because it is a thorn in the side of the righteous power structure, Gozstola counters that the US government is less than righteous and that the thorn has value because it lets all the people see and judge the power structure more critically.

The NS student writer of this text has used an advance label early on in this fairly short stretch of discourse to label Gosztola and Roberts' respective arguments as *antagonistic views*. In addition to the cohesion the label creates in this paragraph, it also serves to frame the propositions which follow, thereby contributing to the overall perceived coherence of the text and making it easier to process for the reader.

I now turn to the second kind of omission (b) of advance labels in the NNS sample, instances in which the coherence of a relatively long stretch of discourse would be substantially improved by the cohesive and discourse organizing functions of an advance label. First, however, I provide an example of target use. Note, again, that like the errors of omission in the NNS student writing, the example of target use below is an example of Tadros's *type (c)*

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enumeration; also note the author's use of the retrospective labels *the first*, *the second*, *the third type*, and *the fourth type* to signal the predicted members (I've italicized these below). The advance label is bolded.

Target example 2

> There are **four types** of Pragmatic Markers. *The first*, BASIC PRAGMATIC MARKERS, illustrated by the bolded items in (1), signal the type of message (the illocutionary force) the speaker intends to convey in the utterance of the segment.
>
> (1) a**) I promise** that I will be on time.
>   b) **Please**, sit down. [a request but not a suggestion or an order]
>   c) **My complaint** is that you are always rude.
>
> *The second*, COMMENTARY PRAGMATIC MARKERS, signal a message separate from but in the nature of a comment on the basis message. The different types are illustrated in (2-5).
>
> (2) Assessment Markers
>   a) We got lost almost immediately. **Fortunately**, a police officer happened by.
>   b) Mary hurried as fast as she could, but **sadly**, she arrived too late for the movie.
> (3) Manner-of-speaking Markers
>   a) A: Mark, you've got to do something. B: **Frankly** Harry, I don't know what to do.
>   b) You got yourself into this mess. **Bluntly speaking**, how are you going to get out?
> (4) Evidential Markers
>   a) A: Will he go? B: **Certainly**, he will go.
>   b) I have great concerns over this. **Conceivably**, Tim is right.
> (5) Hearsay Markers
>   a) A: Is the game still on? B: **Reportedly**, the game was postponed because of rain.
>   b) I won't live in Boston. **Allegedly**, all the politicians are corrupt.
>
> *The third type*, PARALLEL PRAGMATIC MARKERS, signal a message separate from the basis message. They are illustrated in (6).
>
> (6) Deference Markers
>   a) **Sir**, you must listen to me.
>   b) **Your honor,** can I help you?
> (7) Conversational Management Markers
>   a) **Now**, where were we when we were interrupted?
>   b) **Well**, we could do it either of two ways.
>   c) **Ok**, what do we do now?
>
> *The fourth type* of Pragmatic Markers are those I am calling DISCOURSE MARKERS (DMs), which signal a relation between the discourse segment which hosts them, and the prior discourse segment. These are illustrated in (8):

(8) a) A: I like him. B: **So**, you think you'll ask him out then?
  b) John can't go. **And** Mary can't go either.
  c) A: Harry is hurrying. B: **But** when do you think he will really get here?
  d) I think it will fly. **Anyway**, let's give it a chance.
  e) Sue isn't here, **although** she said she would be.
  f) Donna left late. **However**, she arrived on time.

The writer's use of an advance label to create cohesive links in the text and organize this fairly long stretch of discourse contributes to the overall perceived coherence of the text. The head noun of the advance label, *types*, is an example of what Tadros refers to as an *enumerable* and, in this case, a "sub-technical" noun (pp. 71-72). The advance label, which "commits the writer…to a future discourse act" (Tadros, p. 70), and the predicted members (i.e., the *four types* of Pragmatic Markers) signaled by the nominal groups *the first*, *the second*, *the third type*, *the fourth type*, function together to make this relatively long, complex stretch of discourse easier to process.

In each of the following examples from the NNS sample, the coherence of a relatively long stretch of discourse would be substantially improved by the inclusion of an advance label. A discussion follows each example.

NNS example 4

> Have you noticed those large words of "The Kindle Family" in the front page of the Amazon? Have you noticed many customers passing by reading something on their ipads? Society has already seen a fast moving information age with various new-born things and EBooks are only one invention among the numerous quantities. Like Loebbecke said, EBooks have been in the world for more than 20 years since their first appearance and have been a hot topic all the time (1), being a group directly related to EBooks, traditional publishers, would definitely know the booming of EBooks has already led to some influence on their business sales and people's lives in society as well. Under this situation, what I believe is that traditional publishers should attach importance to Ebooks rather than being distant to them in order to get more benefit for themselves, people and society as well.
> Kristina Bjoran, editor of BuySellAds and UXBooth (*"Kristina Bjoran"*), once said, "It seems that even though e-readers are everywhere, the publishing industry, editors, and writers seem to have forgotten that they're working with an entirely new, quite powerful medium"(Bjoran). **[There are *several reasons* why publishers are**

reluctant to embrace EBooks.] [First,] We can see that many current publishers are still doing little or even nothing to adapt themselves to this trend due to reasons mentioned in "EBooks, Libraries and Peer-to-Peer File-Sharing", concerns for copyright, piracy control or large possibility of inserting malicious code while uploading EBooks which will do harm to various aspects (Hoorebeek 163). However, we know that many countries are already establishing laws to offer protections for online works. Security administrators are maintaining the Internet via different ways and in fact this kind of malicious activity rarely happens (Hoorebeek 166), so it should not be a reason for publishers to be resistant to EBooks especially in the future for these mature protective measures being taken. [Second,] Another thing is that some publishers hold the view that there is no need for them to adapt to EBooks since they are already able to produce paper books at a rather high speed with highly-developed technology. However, it is not true. Based on Federick's words, without adapting to EBooks, libraries have to make a lot of copies to satisfy customers' needs (23). It can be pointed out that keeping away from EBooks will lead book publishers to a heavier publishing burden and may not well meet the social needs since EBooks can help them out of this predicament via a much higher speed for publishing and spreading books. [Third,] What's more, people may think EBooks will make readers less concentrated while reading, according to the fact pointed out in "The Ebook Reader Is Not The Future Of Ebooks", multimedia often combine computers with the entertainment side to make more profit(Herther). However, taking the example of one of the EBooks called The Fantastic Flying Books of Mr. Morris Lessmore, it turns out to be a fantastic one that combine itself with excellent soundtrack, narrative style and visuals as well, giving readers great interations(Bjoran). So we can see people will pay more attention to those vivid dynamic styles offered by EBooks instead of being less concentrated to read. All above can further my aim of persuading these publishers to pay attention to EBooks.

The second paragraph in the text above provides three counterarguments to the essay's claim, which is to be found at the end of the first paragraph; each of these is followed by a refutation. The writer begins the second paragraph with a quotation which reflects the writer's view that the publishing industry is reluctant to "adapt to EBooks." After this, however, the writer immediately begins discussing the first counterargument to the main claim. While the organization of the text here would be improved by separating this long paragraph into three paragraphs, each of which addresses a counterargument and the writer's refutation of it in turn, an advance label such as the one I've suggested in the text above would improve the organization of the text and make it easier to process. TDMs, such as those I've proposed in the text above,

could be used to introduce each of the predicted members, thereby using the cohesive potential

of the proposed label to greatest effect.

NNS example 5

> Easy borrowing policy increases the instability of the economic system **[in *two ways*]**. [First,] Easy borrowing policy destroys the balanced percentage of deposits and loans among banks. When the loan proportion in banks' assets becomes larger and larger, the banks' credit risk will be higher and higher. That is to say, the banks who owe too many loans are unsafe and cannot work well. Once the banks fail to get the repayment from the loans, the assets they actually have may not be able to support its capital overturn. The bank will be faced with the threat of bankruptcy. As well known to us, the collapsed US investment bank Lehman Brothers is a specific example. Bank is the most important member in the financial system and can make a difference to the whole economic system. If banks cannot solve the problems about their own credit, the economic system will face severe challenges. [Second,] Besides, easy borrowing policy keeps the fed-funds rate low and indirectly leads to the inflation. The low interest rate attracts the public to make more loans so more funds are injected into the market. It causes the inflation which means limited goods with increasing money and can be witnessed by the high product price before the subprime crisis. Alan Greenspan who served as Chairman of the Federal Reserve of the United States from 1987 to 2006 is concerned about the low rate and points out that the inflationary tinder was added to the economy via the low rate after the Federal Reserve began to carry out the easy monetary policy from 2004. It's problematic that the policy doesn't reach the original purpose of improving the economic situation but leads to the inflation and influences the economic cycle.

This paragraph is a discussion of the essay's third premise. This paragraph in fact

comprises two distinct ways in which "Easy borrowing policy increases the instability of the

economic system," and should therefore be divided into two paragraphs. Signaling this with an

advance label such as the one I've proposed above would more effectively organize the text.

TDMs (or labels), such as those I've proposed in the text above, could be used to introduce each

of the predicted members, thereby using the cohesive potential of the proposed label to greatest

effect.

NNS example 6

    In addition, GMOs can benefit farmers in a long term period because GMOs are friendly to the environment [**in *two respects***]. First, GMOs are friendly to croplands. Chemical pesticides and herbicides are harmful to the environment because they will break croplands' balance, increase soil's acid level, and alkaline level. The over-acid or over-alkaline soil will lead to yield reduction and therefore decrease farmers' income. In a report, published on *Science*, Qaim and Zilberman claimed that 99 percent of the global GM crops have insect-resistant and herbicide-tolerant traits. By growing these insect-resistant and herbicide-tolerant GM crops, farmers can stop using chemicals to damage soil. Only in a friendly context, can farmers have a sustainable agricultural production. Second, GMOs are friendly to environment because of making safer and healthier fruit, vegetable, and wheat products. The lack of chemical components in agricultural productions, like herbicide-free GM wheat, pesticide-free GM fruits and vegetables, is healthier and is more popular for consumers, and therefore farmers can build up a long-term business pathway to consumers (Qaim). All in all, GMOs can help farmers to increase income in a long-term period because these chemical free pesticide GM crops can avoid chemical components' damage to local environment, including soil, land, animals and wild plants. Only a friendly environment can guarantee crops' consistently stable yield as well as farmers' benefits.

This paragraph is a discussion of the essay's fourth premise. It addresses two specific

ways that "GMOs can benefit farmers in a long term period because GMOs are friendly to the

environment," each of which should be described in a separate paragraph. Similar to the

instance of underuse in (NNS example 1) above, the writer has included the TDMs *first* and

second to signal the beginning of the discussion of each of the two ways in which GMOs are

environmentally friendly, but has not preceded them with an advance label. The inclusion of an

advance label such as the one I've proposed above would improve the organization of the text,

making it easier to process. It would also improve the cohesion of the text by providing a

cataphoric link to each of the TDMs present in the original text.

Admittedly, **[there are *several criticisms* of standardized testing.]** [S]ome may argue that the standardized testing is not helpful to cultivate students' critical thinking and ultimately wastes time needed to prepare for the tests (Kohn 60). According to Kohn, a famous writer who has published 11 books in the education field, standardized testing just "measures superficial thinking". He indicates that people may guess the answers and avoid the hard parts, which leads to not really understanding what they have learned. It is not doubtful that some students just "learn for the test", however, according to Buck, whether applying standardized testing or not, this "must known" knowledge has to be taught without any doubt (52). In this situation, people are the most crucial factor—deciding if they accept the knowledge or not. Standardized testing, just a form to deliver knowledge, should not be blamed for all the faults. In addition, the knowledge tested by standardized testing is the basis of any creative work. People without any elementary knowledge have little possibility in activating the development of his or her huge potential of critical thinking. All in all, standardized testing will not hurt the development of critical thinking; on the contrary, it may even help to cultivate this way of thinking.

Furthermore, Kohn also states that the time spent on the preparation must "come from somewhere else", which does not aid a help in the development of creativity. As Kohn argues, the testing occupies a lot of time and chances to improve students' creativity. The time taken by the tests could be used to teach something really creative and beneficial to cultivate students' creativity such as "programs in the arts", "class meetings" and "discussions about current events". Preparing for a test indeed takes a lot of time; however, this preparation gives students a general idea about what they have learned. According to Buck and other authors, "Test-prep does not necessarily sap creativity, for teachers or students" (52). The reason is just as the other teacher who was in this research said, "True creative people will find a way to be creative regardless of what the framework is" (Buck 52). Applying standardized testing doesn't mean denying any other forms of evaluating. People just take advantage of the benefits of the testing and make up the shortcomings by other ways such as an interview or recommendation letters. In fact, people usually have multiply ways to evaluate a person's ability. In conclusion, standardized testing is still a helpful tool in cultivating creativity, even though a few restrictions to the students could be a result.

Others may question that standardized testing is "teaching to the test" (Longo 55). To combat this, "Inquiry-based learning" is put forth to help avoid this down side which is the biggest problem of the testing (Longo 55). As Longo states, "Inquiry-based learning defines the teachers' role as helping students through the process of discovering knowledge for themselves and not providing the knowledge for them, thereby promoting creativity" (55). This new method may remedy part of the imperfection of standardized testing, but it cannot substitute it to any extent. The reason is that "Inquiry-based learning" is too random and lacks the accountability and the valid measurement of basic knowledge which is required by a qualified education.

The text above comprises the counterarguments to the claim and the writer's refutation of

them. The first paragraph is difficult to process because the original first sentence (i.e.,

"Admittedly, some may argue that the standardized testing is not helpful to cultivate students'

critical thinking and ultimately wastes time needed to prepare for the tests") sets up the

expectation that a discussion of the criticisms related to critical thinking and time allocated to

test preparation will be discussed in this paragraph. However, the first criticism is the focus of

this paragraph; the second criticism is discussed in the following paragraph; and in fact there is a

third criticism (i.e., "Others may question that standardized testing is 'teaching to the test'

(Longo 55)"), that is not mentioned until it is discussed in the third paragraph included above.

Including an advance label, such as the one I've proposed above, at the beginning of the first

paragraph would make the text easier to process. The second discourse segment in the original

first sentence should also be omitted.

Finally, I include below an example of advance label use from the NS sample in which

the writer utilizes the cohesive and discourse organizing functions of the label to contribute to

the overall perceived coherence of the text. I've bolded the advance label and italicized the

retrospective label which introduces the second of two predicted members, but I've made no

other changes to the original text.

NS example 2

> Although society in general has accepted technology as a normal functional aspect in
> society, teenagers should limit and change their constant use of socially interactive
> technology to better balance their tenuous social life on a stable foundation of face-to-
> face interaction.
>   In general, teenagers are some of the main advocates for using technology to
> interact with people before meeting them. Laura, a teenage participant in Julie Cupples
> and Lee Thompson's study says, "I love texting, it's like the best thing. It's such a good
> way to meet people" (6). Although texting can certainly augment certain facets of social
> life, **the dangers** of meeting people through technology have been made clear by
> concerned adults. In her article "Cyber Socializing", Clemmitt explains, "[b]ut as Internet
> socializing grows, so do fears that the practice exposes the vulnerable — especially
> young people — to sexual predators." Talking and socializing with people before
> meeting face-to-face has become a dangerous practice that teenagers in particular
> definitely need to watch out for. Encounters with sexual predators, a group of criminals

who often target their victims through the anonymous web, can leave an emotional burden on young adults for the rest of their lives. *Another problem* with meeting people online is the different, and not always positive, form of connection that people experience. According to Nancy Baym, a professor of communication studies at the University of Kansas, "When people meet one another online…they often seem to like one another more than they would if they had met in person" (126). This difference shows how personas online are different than in real life and create illusions. Teenagers seem especially apt to encounter false personas even when there are only subtle differences because of their vast use of technology. These false personas can create fake perceptions and damage relationships.

The NS writer of this essay has used the head noun *dangers* to introduce his or her first premise as well as signal his or her "negative attitude towards the propositions it encapsulates" (Francis, p. 94). The first predicted member immediately follows the discourse segment containing the label; the second member is signaled by the segment-initial label *another problem*, which is both retrospective and structurally cataphoric. While the discourse organizing function of the retrospective label hasn't been fully utilized—here, it "[signals] that the writer is moving on to the next stage of his/her argument, having disposed of the preceding stage by encapsulating or packaging it in a single nominalization" (Francis, p. 86), and therefore it should begin a new orthographic paragraph—the advance label does effectively signal to the reader that the stretch of discourse above should be understood as a discussion of the first premise.

In short, the results of the analysis of DMs and discourse labels in the writing of these NNSs suggest that these student writers do not tend to have problems using DMs or retrospective labels appropriately to construct cohesive academic texts, but that they do tend to underuse advance discourse labels in their writing. This problem of underuse results in stretches of discourse which lack to varying degrees cohesion and organization, thereby negatively affecting the overall perceived coherence of the text and making the text more difficult to process for the reader.

The results of the analysis further suggest that the best approach to addressing problems

with DMs and most problems with discourse labels (i.e., ineffective use or overuse of either type

of label, or underuse of the retrospective type in particular) may be on an individual basis with

students for whom these are problems. This could be done during writing conferences or in

feedback in student writing, for example. It does not appear based on these findings that

dedicating class time to these issues is warranted. The problem of underuse of advance labels

does, however, appear to warrant (in Hinkel's words) focused instruction and additional attention

during class time. The chapter which follows provides some suggestions for addressing the

problem of advance label underuse for these NNSs which may be used in L2 sections of FYC.

CHAPTER 5: TEACHING SUGGESTIONS AND CONCLUSION

Teaching Suggestions

The purpose of this section is to provide some suggestions for addressing the problem of underuse of advance labels in the writing of L1 Chinese NNSs which can be used in L2 sections of FYC. Most of the teaching activities have been adapted from the L2 writing research, and they have been selected in consideration of the fact that a FYC curriculum typically leaves little time for covering additional material.

Flowerdew (2003) suggests the following strategies for teaching the closely related type of nominal group lexical cohesion he refers to as signaling nouns:

> Given the important discourse role that lexical signalling items fulfill, an appropriate pedagogy should involve the study of signals in context. Rules and examples might provide a useful initial heuristic. But this would need to be supplemented with the study and production of signals in context. Alternatively, an inductive strategy might be preferred, with learners identifying signals and how they function in context and then being presented with the rules for reinforcement and systematisation.[49] (p. 343)

The three rather broad teaching suggestions offered below are based on best practices and may be approached with either (or both) of the two strategies described above in mind. The instructional activities require students to work with advance labels in context. Ultimately, however, whether using the teaching suggestions and activities provided here or others, it's important to keep in mind when teaching cohesion "that the goal is not increased cohesion *per se*, but rather the potential increase in writing quality that may result from an increase in effective use of cohesive devices" (Shea, 2011, p. 17), in this case advance labels.

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[49] Aktas and Cortes (2008) also stress the importance of studying this type of nominal group lexical cohesion in context; they state, "The contextualized presentation of shell nouns in their frequently occurring patterns of use together with their frequent functions…could become the main target in the teaching of shell nouns to mark and maintain cohesion in academic prose" (p. 11).

Teaching suggestion 1.

Present the text-rhetorical feature of advance labeling while keeping in mind what these developmental NNS writers probably already know. Aktas and Cortes (2008) make the following observation in their study investigating international graduate students' use of shell nouns:

> These students do not need to be taught these nouns as vocabulary items. They need to be exposed, though, to examples that illustrate the cohesive functions of shell nouns when used in the appropriate lexico-grammatical patterns to help them more efficiently organize the communicative purposes of their texts. (p. 13)

Similarly, the NNS FYC students with whom the present study is concerned probably know most of the nouns which commonly function as advance labels. That the problem of advance label underuse is not a vocabulary problem *per se* is further suggested by this study's finding that ineffective use of discourse labels is not a problem for these writers. Addressing the problem of advance label underuse therefore requires calling their attention to the notion of advance labeling, to the use of various unspecific abstract nouns in this function, and to the patterns in which advance labels are realized in academic writing.

Despite the fact that these students do not need to be taught the nouns in question, providing them with a list of nouns that commonly function as heads of advance labels can be useful for drawing their attention to this function. It's also helpful because not all nouns which function as heads of retrospective labels also function as heads of advance labels (Francis, p. 89). Although Francis observes that "[i]t is impossible to attempt any exhaustive listing of nominal-group heads which can function as labels" (p. 88), Tadros provides a list (included below) of what she refers to as *enumerables* that were found in her corpus to function as head nouns of advance labels (p. 72). Hinkel (2004) states that "learning them is well worth the time and effort because of the breadth of their meanings and their flexible contextual uses" (p. 285).

adjuncts	*classes*	*effects*	*motives*	*sources*
advantages	*concepts*	*elements*	*objections*	*stages*
angles	*conditions*	*examples*	*periods*	*suggestions*
aspects	*consequences*	*factors*	*points*	*terms*
attempts	*courses*	*features*	*policies*	*things*
branches	*criticisms*	*forms*	*problems*	*trends*
categories	*difficulties*	*influences*	*propositions*	*types*
causes	*disadvantages*	*kinds*	*qualities*	*varieties*
circumstances	*drawbacks*	*meanings*	*reasons*	*views*
			senses	*ways*

From a writing as well as a reading comprehension perspective, it's important to emphasize to students that discourse labels are functionally defined. That is, these nouns are defined as head nouns of labels, and in particular advance labels, based on their function as such in text. Flowerdew (2003) recommends using a concordancer to provide students with examples of these nouns in authentic text "to illustrate how there is not a one to one relation between a lexical item and its signalling function" (p. 344). *Compleat Lexical Tutor*, created by Tom Cobb of the University of Quebec at Montreal, provides (among other useful resources for teaching and learning vocabulary and grammar) a high quality free concordancer (http://www.lextutor.ca/concordancers/) capable of providing an adequate amount of context to determine whether a given unspecific abstract noun is in fact functioning as head of an advance label. (This website has the additional benefit that it focuses on academic discourse.) But illustrative examples can also be drawn from other sources, including textbooks, high quality student writing, and research articles. And in fact it will be necessary to draw examples from

sources such as these in order to provide examples of the cohesive and discourse-organizing functions of advance labels in relatively long stretches of discourse.

For a description of the patterns in which advance labels may be realized in writing, see the subsection in Chapter 2 of the present study, *Discourse label patterns in text*. Finally, it's worth noting here that simply drawing students' attention to the notion of advance labeling may have a positive impact on their ability to notice instances of underuse in their own writing (Johns, 1984).

Teaching suggestion 2.

Provide ample opportunities for students to see the ways in which this important text-rhetorical feature of academic writing is realized in text. To this purpose, three activities are provided below, adapted from Francis (1988) (as cited in Flowerdew, 2003, pp. 343-344). The focus of the first activity is on providing comprehensible input and receptive practice. The focus of the other two activities is on output/production. Instructors are invited to adapt these activities to their specific purposes, and to remember that these are intended only as examples. Student texts written by NSs or NNSs or expert published texts, again written by NSs or NNSs, may be used in these activities.[50] In all cases, however, it's important that examples presented to students exemplify target use of the device in authentic academic writing.

Activity 1.

For this activity it is best to begin with a relatively short stretch of discourse. Students are provided with a text which includes an advance label(s) and are asked to identify the cataphoric referent(s) of the label(s) (i.e., its lexicalization).

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[50] Hinkel (2004) notes, importantly, that if student-written texts are used, "The texts should be written by students who are not in the class, and the author's permission must be secured to use the text for teaching purposes" (p. 305).

The next two activities can be used to emphasize that when the semantics of an advance label is not fully compatible with its lexicalization, the result is text which lacks cohesion and, as a result, overall perceived coherence (though, again, it should be stressed that advance labeling is only one of the tools available in English for constructing cohesive academic texts).

Activity 2.

A relatively long stretch of discourse may work best for the following activity, which can be variously modified based on the amount of scaffolding desired. Students are provided with a cloze text which has had the advance label(s) removed and a list of advance labels from which to choose in order to complete the text. The list should include near synonyms which are not appropriate based on the context (see Hinkel, 2004, pp. 306-307, for a similar activity), and students should be encouraged to use dictionaries to determine the differences in the semantics of near synonyms. Alternatively, a word list may not be provided. A variation of this activity is to substitute an inappropriate head noun (and/or modifier[s]) for the original correct label, and to ask students to analyze the stretch of discourse in question to determine the source of incoherence in the text.

Activity 3.

For this activity, it's perhaps best to consider advance labeling in terms of Tadros's notion of prediction. Students are provided with the first part of a text (i.e., the text should include only the predictive member) and are asked to complete the text by providing the predicted member(s), keeping in mind the semantics of the head noun and any modifier(s).

The different emphases on the advance label and the lexicalization in activities 2 and 3 above, respectively, may also be combined by having students provide both the advance label and its lexicalization in a short writing assignment. For example, students might be asked to

utilize advance labeling in writing a summary of a source text (provided by the instructor) which lends itself to the use of this cohesive device.

Suggestion 3.

Provide students with opportunities to practice advance labeling in their own and/or their peers' writing. The following activity could be effectively incorporated into a peer-review session or, alternatively, with students reviewing drafts of their own essays. Again, it might work best if advance labeling is considered in terms of the notion of prediction.

Activity 1.

In this activity, students are asked to examine their peers' drafts for instances of advance label underuse, which may be identified, for example, by the presence of predicted members without the presence of a predictive member, noting any instances in their peers' drafts where the coherence of the text would be improved by the presence of an advance label.

Students may also be asked to look for instances of predictive members which haven't been lexicalized.[51] This problem may occur after advance labeling has been the focus of instruction, and, as I noted in the previous chapter, Hinkel (2002) has observed a tendency for these NNSs to use unspecific abstract nouns in a manner in which they are not used "to classify and present new information but to carry the ideational content of the text without informational specifics" (p. 81). Hinkel (2001) observes that because "nouns such as *advantage*, *factor*, *problem*, *reason*, *stage*, *term*, *type* are expected to have specific identifiable referents in text, to which these nouns are 'connected'" (pp. 129-130), an effective way of reinforcing the connection between the advance label and its lexicalization is to have students draw "tying strings" between them. If students are unable to do this in their peers' writing, the unspecific abstract noun has not been lexicalized. However, because this does not necessarily indicate an

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[51] This segment of the activity has been adapted from Hinkel (2001).

error, students should be invited to comment on whether or not its presence is appropriate based on the context.

Conclusion

This study examined the use of two cohesive devices, discourse markers and discourse labels, in the writing of L1 Chinese ESL first-year composition students. It was found that, as defined in terms of the requirements of the text of each of the essays analyzed, advance labels were underused by these NNS student writers, while DMs and other aspects of discourse labeling were not found to be problematic for these writers. The finding of advance label underuse may be interpreted as a knowledge gap which exists between these NNSs and NSs with regard to the tools available to them in English for constructing cohesive academic texts. Prior research suggests, however, that pedagogical intervention is effective in addressing cohesion problems in ESL writing (see, e.g., Shea, 2011). As I noted in the first section of this chapter, these NNSs have probably learned from previous EFL (and/or ESL) instruction the nouns which commonly function as heads of advance labels, making the task of addressing advance label underuse largely one of drawing their attention to this text-rhetorical feature, the use of various unspecific abstract nouns in this function, and the ways in which advance labeling is realized in academic writing.

Limitations of the study.

Conducting an analysis of a large amount of writing by hand is subject to human error, including errors of omission, even when work is carefully reviewed as it was in this study. However, as Flowerdew (2010) observes, this method of text analysis is "nevertheless the most effective approach available" (p. 38), and it is perhaps the only effective approach available for

identifying the interclausal function of discourse labeling with which the present study was concerned.

Another limitation of the present study is the inability of text analysis alone to answer certain questions, such as why, according to the findings of this study, certain cohesive devices, such as DMs, which were previously found to be problematic for these NNSs are no longer so, while advance labeling is. Future research which includes an ethnographic component(s), such as interview or questionnaire data, may provide additional insights of pedagogical relevance, for example by shedding additional light on current EFL instruction in mainland China.

Here, I think it's also important to acknowledge that in using final revisions for my analysis, I haven't accounted for all the potential feedback these NNSs might have received regarding their use of these cohesive devices. That is, certain uses of DMs and/or labels which were not found to be problematic for these NNSs in the present study might have been addressed, for example, by the students' composition instructors or during peer review sessions.

Finally, while the findings of this study generalize to the L1 Chinese ESL students attending the FYC program in question, they should be interpreted with caution beyond this population. That is, the findings of this study may have strong "internal generalizability" but not "external generalizability" (Maxwell, 1992, as cited in Dörnyei, 2007). China is a large and diverse country, and no data were collected from these students other than their essays and L1 (see Footnote 4 in Chapter 1). In short, when considering the findings of this study, it's important to keep in mind a pitfall often encountered by researchers in comparative rhetoric research that Liu (1996) describes as "a mismatch between the textual/experiential data base and the scope of their generalizations" (p. 323).

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APPENDIX

THE ESSAYS IN THE NON-NATIVE SPEAKER SAMPLE[52]

NNS Essay 1

Attach importance to EBooks

Have you noticed those large words of "The Kindle Family" in the front page of the Amazon? Have you noticed many customers passing by reading something on their ipads? Society has already seen a fast moving information age with various new-born things and EBooks are only one invention among the numerous quantities. Like Loebbecke said, EBooks have been in the world for more than 20 years since their first appearance and have been a hot topic all the time (1), being a group directly related to EBooks, traditional publishers, would definitely know the booming of EBooks has already led to some influence on their business sales and people's lives in society as well. Under this situation, what I believe is that traditional publishers should attach importance to Ebooks rather than being distant to them in order to get more benefit for themselves, people and society as well.

Kristina Bjoran, editor of BuySellAds and UXBooth (*"Kristina Bjoran"*), once said, "It seems that even though e-readers are everywhere, the publishing industry, editors, and writers seem to have forgotten that they're working with an entirely new, quite powerful medium"(Bjoran). We can see that many current publishers are still doing little or even nothing to adapt themselves to this trend due to reasons mentioned in "EBooks, Libraries and Peer-to-Peer File-Sharing", concerns for copyright, piracy control or large possibility of inserting malicious code while uploading EBooks which will do harm to various aspects (Hoorebeek 163). However, we know that many countries are already establishing laws to offer protections for online works. Security administrators are maintaining the Internet via different ways and in fact

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[52] No changes have been made to the student-written essays included here.

this kind of malicious activity rarely happens (Hoorebeek 166), so it should not be a reason for publishers to be resistant to EBooks especially in the future for these mature protective measures being taken. Another thing is that some publishers hold the view that there is no need for them to adapt to EBooks since they are already able to produce paper books at a rather high speed with highly-developed technology. However, it is not true. Based on Federick's words, without adapting to EBooks, libraries have to make a lot of copies to satisfy customers' needs (23). It can be pointed out that keeping away from EBooks will lead book publishers to a heavier publishing burden and may not well meet the social needs since EBooks can help them out of this predicament via a much higher speed for publishing and spreading books. What's more, people may think EBooks will make readers less concentrated while reading, according to the fact pointed out in "The Ebook Reader Is Not The Future Of Ebooks", multimedia often combine computers with the entertainment side to make more profit(Herther). However, taking the example of one of the EBooks called The Fantastic Flying Books of Mr. Morris Lessmore, it turns out to be a fantastic one that combine itself with excellent soundtrack, narrative style and visuals as well, giving readers great interations(Bjoran). So we can see people will pay more attention to those vivid dynamic styles offered by EBooks instead of being less concentrated to read. All above can further my aim of persuading these publishers to pay attention to EBooks.

First of all, producing paper books together with EBooks can help traditional publishers hold their business positions and stabilize society's employment level. More deeply, it is a way that can not only benefit publishers themselves, but also other people around. Proved in USATODAY, according to Amazon's statistics, their EBook sales has been higher than that of paper ones for the first time in history (McGraw), we can see that the sale of EBooks has already begun to affect that of published ones. If traditional publishers ignore EBooks' importance or

keep being resistant to them, it is very likely that their business achievement will experience a downgrade in the near future or even these days. To avoid this dilemma, publishers should take new steps towards this issue, as mentioned by Herther, librarian for sociology, anthropology, American Studies and Asian American studies(*"Nancy K. Herther"*), who once said that companies that succeed in this developing trend have all considered EBooks when handling their business development(50). Combining sales of these two types of books is a better choice for publishers to hold their business position when going through such a challenging time, which can also be seen from an article in Information Today, "Both Springer, with its SpringerLink platform, and O'Reilly Media, with Safari Books Online, have enjoyed success with their ebook offerings in recent years"(McClure 18). What is more, if some publishing companies crash one day, then there will be more jobless crowds wandering around and struggling for their lives, which to some extent will be an unstable factor of society and thus affect people's lives. Evidence shows that "in the early 21st century when the publishing industry is in distress, publishing houses like Simon & Schuster, Macmillan, HarperCollins, Doubleday and Houghton Mifflin Harcourt are laying off staffs left and right."(Grossman 1), thus it is urgent for publishers to realize it and adapt to the new situation instead of opposing EBooks which will benefit themselves and people via maintaining the employment level and making the whole society in harmony.

Secondly, traditional publishers will be able to have a bigger and wider group of readers if they can consider EBooks as another target, which will eventually raise people's cultural level. As known to all, we have already fallen into an information age with rapid developing technology that makes it possible for people to search for whatever they want through the Internet no matter where they are. Here are some comments made by an end-user of EBooks in

the 2008 Springer whitepaper "I can carry and read [an eBook] everywhere! I can put it on my small laptop or PDA and finish my literature research while traveling on the train" (Velda 5.1) and statistics found as "between 58 percent and 80 percent of respondents at each institution had used eBooks at least once"(*"eBooks –The End User Perspective"*). We can see that many people prefer searching the Internet to find their books and enjoy reading at home instead of going out and trying to get one in bookstores through dazzling shelves for convenience. So if publishers do not take EBooks into consideration, more and more original readers will turn to EBooks, leaving fewer readers along with published books in the future. However, if these publishing companies can accept EBooks as part of their business such as providing paper books together with online electronic versions, there should be more people satisfied with the diverse choices of the word media and eager to get one regular book for collection or other particular reasons, then we can surely expect an increase in the sales in bookstores in every corner. According to the Russian and Soviet author, Gorky's words, "Books are the ladder of human progress", the overall cultural level of people should be improved and more people will be able to enhance themselves as long as they increase the amount of daily reading.

Thirdly, the spread of knowledge can be significantly sped up with the supplement of EBooks. To quote from an article in TIME, it is really hard for Lisa, a 38-year old health-care-industry consultant who wants to be a novelist, to find a publisher to print out her works in this 21st century (Grossman 1). Thus we can come to a guess that sometimes it is hard for a writer to find some publishers to have his own works printed out especially when he is in his initial stage or not so famous. Publishers will usually prefer works written by famous figures for they believe those can give them more profits and thus would charge more for small writers while these ordinary authors may not be able to afford such high cost of printing. However, if publishers can

take EBooks as one of their publishing styles, it should be easier for writers to publish their creations for it is comparatively faster, cheaper and more profitable to publish online. We can see from the evidence shown in "The global Impact of EBooks on EPublishing" that the fixed cost for an author will be limited when publishing books in a way that combines paper books with EBooks and online authors can form their own communities to interact with each other to obtain a win-win situation (Henke 177). Also since the Internet is a global platform, more people will be able to read EBooks as soon as they come out, accelerating the spread of knowledge contained compared with what was done before. What's more, based on the research done by two scientists, Goodman Jordan and Kara M. McClurken, we can see that the interaction of knowledge around is going on at a very fast pace similar with that of the development of science (66). So this kind of knowledge updating will be expedited and finally benefit people around.

Last but not least, regarding EBooks as one of their business targets, publishers can launch a revolution in public institutions like schools and libraries which will also improve people's lives via increasing the government's finance. Based on the report of "Ebooks in UK Libraries:Where Are We Now?", public libraries in UK are paying more attention to providing EBook services via network or other methods offered by EBook managers, thus making EBooks available in these libraries and becoming one of the major ways for readers to read(Garrod), we can see that these steps made by public libraries mean that using EBooks as one of their main resources can make it much easier and more convenient for readers to search and choose whatever they like from a large selection, leading to their higher enthusiasm to go to the library to find something useful which can make libraries more prosperous. Similar changes will also occur in schools if publishers consider EBooks as one of their choices. If teachers use online resources in formats like EBooks to teach students, students will be able to learn more through these online materials.

According to Anthony Antolino who is the senior vice president of Copia ("*Anthony Antolino*"),"How powerful is it if you're reading whatever textbook you're reading and you're on chapter 12, and it's late at night and we're all studying from our own locations, to know where each other is at exactly, what page we're at "(Baumann 5), we can see that a more flexible and selective study type is offered that will be able to satisfy more students in learning. The more satisfied the students are, the happier they will be in study, the more achievements they will get and the better reputation the school will gain. Then these schools can strengthen themselves and involve more students and win more investment from all around. In other words, this kind of variation brought by adapting EBooks can make public places more flourishing and can raise the government's revenue. Since taxes of public mechanisms is the major official income, the government can help build a better society via more input in basic demands like construction of infrastructure and medical welfare, which can add more quality to people's everyday life and meet the overall developing needs for society.

In conclusion, in such a case that EBooks are experiencing a rapid development due to the fast expanding of science and technology around, even if it hasn't reached the state that everyone everywhere is able and eager to use EBooks, it should be a future trend, as Loebbecke once said,"people have become more accustomed to reading texts on screen; they are more experienced with e-Commerce, and new devices that offer an enhanced reading experience" (1). Though some issues like copyright and piracy can't be completely ignored, they should not be the major block in the future and instead of keeping themselves far away from EBooks, these traditional publishers should know the truth clearly and attach as much importance as they can to this innovation.

NNS Essay 2

Easy Borrowing Policy Leads to the Subprime Crisis

When the subprime mortgage crisis hit the United States in 2007, a large number of

companies and banks went bankrupt due to the defaults. The financial system collapsed and the

prices of stock markets subsided to the bottom. The consequence of the subprime mortgage crisis

affected the whole world and people lost the confidence to the economy. Have you ever thought

of the reason for the occurrence of subprime crisis? What caused the great financial crisis and

what role it played during the development of economy? After conducting some researches, I

find out that easy borrowing policy is the primary cause of the subprime crisis. Easy borrowing

policy means lowering the borrowing standard and extending the loan range in order to increase

the lending. It includes the low interest rate policy, lending money to some corporations with

credit problems, offering preferential policies to borrowers, and so on. In some special periods of

economic cycle, the easy borrowing policy is carried out to stimulate the economy but leaves a

lot of problems to the financial system. Easy borrowing policy results in more risky financings,

causes the bubbles in the market, increases the instability of the economic system and finally

leads to the subprime mortgage crisis.

Easy borrowing policy results in more risky financings. Under the easy borrowing policy,

some corporations which are defined by rating organization as subprime borrowers because of

some problems in credit history can also get loans and make investments. The subprime loan

cannot be guaranteed to pay back on time and is more likely to turn bad. The default of the

subprime lending blocks the normal operation of the financial system and becomes the direct

cause of the subprime mortgage crisis. The investigation statistics provided by Harvard

University shows that the subprime mortgage loan accounted for 18 to 21 percent of the whole

originations during the three years from 2004 to 2006, while the proportion between 2001 and

2003 is less than 10 percent. The easy borrowing policy injects a lot of subprime loans into the

market and poses a threat to the future repayment. According to the speech of Ben S. Bernanke,

the current Chairman of the Federal Reserve, the central bank of the United States, there is

approximately 16 percent of subprime adjustable rate mortgages unable to repay the loans by

2007 and the percentage is three times the 2005 rate. The risky financings cause a larger scale of

defaults and spread the delinquent behavior from one company to another and influence the

bank's capital flow. Consequently, it makes the whole financial system break down and brings

about the subprime crisis.

Easy borrowing policy creates the bubbles in the market, especially the real estate market.

The moment the bubbles burst, the market will collapse and the crisis will happen. Easy

borrowing policy encourages more firms and individuals to make loans. As a result, they have

more available funds and will choose appropriate opportunities to join in the investment

activities. So a large sum of additional money floods the market and creates a lot of bubbles. Ben

S. Bernanke also states that the subprime lending increased from an estimated $35 billion, 4.5

percent of household mortgage to $600 billion, 20 percent of it among 1994 and 2006. The

statistical data illustrates the subprime lending which is the product of easy borrowing policy

rose dramatically. Meanwhile, the S&P/Case-Shiller national home-price index shows the

housing prices in the United States increased by 124% from 1997 to 2006 ("CSI"). The

association between the amount of subprime lending and the housing prices can be analyzed by

the data above. The easy borrowing policy pours much money which is mostly from the

subprime lending to the real estate market and leads to high prices far beyond houses' reasonable

values. The difference between the extravagant price and real market value is something that the

bubbles stand for. The existence of the bubbles is one of the root causes for subprime crisis and is detrimental to the market and economy.

Easy borrowing policy increases the instability of the economic system. Easy borrowing policy destroys the balanced percentage of deposits and loans among banks. When the loan proportion in banks' assets becomes larger and larger, the banks' credit risk will be higher and higher. That is to say, the banks who owe too many loans are unsafe and cannot work well. Once the banks fail to get the repayment from the loans, the assets they actually have may not be able to support its capital overturn. The bank will be faced with the threat of bankruptcy. As well known to us, the collapsed US investment bank Lehman Brothers is a specific example. Bank is the most important member in the financial system and can make a difference to the whole economic system. If banks cannot solve the problems about their own credit, the economic system will face severe challenges. Besides, easy borrowing policy keeps the fed-funds rate low and indirectly leads to the inflation. The low interest rate attracts the public to make more loans so more funds are injected into the market. It causes the inflation which means limited goods with increasing money and can be witnessed by the high product price before the subprime crisis. Alan Greenspan who served as Chairman of the Federal Reserve of the United States from 1987 to 2006 is concerned about the low rate and points out that the inflationary tinder was added to the economy via the low rate after the Federal Reserve began to carry out the easy monetary policy from 2004. It's problematic that the policy doesn't reach the original purpose of improving the economic situation but leads to the inflation and influences the economic cycle.

However, some people hold the point of view that easy borrowing policy, by means of increasing investment among business and household, boosts the economic development and avoids the financial crisis. In fact, the market prosperity created by the increasing investment is

the reflection of "bubble" rather than the healthy economic development. On the other hand, the additional investments contain a lot of risky financings. It seems that easy borrowing policy builds up a brisker market with larger amount of capital, but the new capital added to the market is mostly loan in face of default. So it worsens the economic situation and leads to the financial crisis rather than avoid it. It's a long-term hazard behind the financial system and weakens the security of market.

It can be figured out that easy borrowing policy leads to the subprime crisis. Easy borrowing policy brings about more risky financings, creates the "bubbles" in the market and makes the financial system more instable and vulnerable. The problems which are not exposed also have significant effects on our economic environment. The subprime crisis reminds people to pay attention to the volumes of loans and keep the balance in debits and credits.

NNS Essay 3

Genetically Modified Organisms Can Benefit Both Farmers and Consumers

The influence of genetically modified organisms (GMOs) is one of the hottest topics in public debate. There are two opposite standpoints on GMOs all the time. One thinks that GMOs benefit people more so that we should support GMOs, another thinks that GMOs have too many negative effects on people as well as the environment, and we definitely should ban them. It is an interesting phenomenon that at the initial time when GMOs just came into the public field of vision, they were so popular that once they were seen as powerful and omnipotent tools to solve various problems, such as starvation, pest diseases, low yield, and etc. People were so passionate about GMOs in the beginning, hoping scientists could create any possible species that humans can imagine. People were wrong. They didn't wait until a miraculous GMOs era came out, however, as scientists researched GMOs, some potential dangers that could be produced by

GMOs were gradually discovered and attracted public attention from their goodness. Right now, we are in this kind of against GMOs era. Although not everyone is against GMOs, most media prefer reporting negative news about GMOs, which produce wave after wave of fear. GMOs are an easily misunderstood theme because they involve some professional knowledge, which is hard to find, so it is harder for the public to judge GMOs especially when the public can only find media news as their reference. However, academic journals, government reports, non-profit organization websites, etc. prove that GMOs are good for both consumers and producers (i.e. farmers) because GMOs have higher amount of nutrition, higher production yield, good pest-resistant ability, and friendliness to the environment.

First, GMOs is a good thing for anybody who consumes them because they contain higher nutrition than traditional crops therefore they contribute to consumers' health. A good example is "Golden Rice", which get a transferred vitamin A gene from carrots. Golden Rice contains rich vitamin A, which can help curing eye diseases or preventing blindness in children who suffer from vitamin A deficiency (VAD) (Qaim). It is reported that widespread consumption of Golden Rice could reduce the probability of VAD by 59 percent, which means this genetically modified rice saves nearly 40,000 lives each year (Tang). Not only Golden Rice, but also other GM crops, which contain extra significant nutrition, can improve human health a lot. GMOs are good for general consumers, but they especially benefit the poor because these people don't have money to buy various types of foods and therefore it is impossible to absorb complete nutrition from simple daily diet, like if they only eat rice and corn most of day. If their main food, for instance, rice, contains rich nutrient, in this case, they could get relative complete nutrition from rice even if they cannot afford other types of foods. Also, this kind of rich nutritious GM foods

will benefit rich people because more nutrition always is a good thing for health. Therefore, GMOs are pretty good things for all people, poor and rich, as a good resource of nutrition.

Not only consumers, but also farmers can get same amount of benefit from GMOs. GMOs' pest-resistant ability benefits farmers the most. Because first, GM crops can resist pest by themselves, farmers don't have to spend extra money for chemical pesticide and spray it on plants. Therefore, pest-resistant GMOs can save farmers' money, energy and time. Second, insect attack is a serious agricultural problem and also the main reason leading to yield losses and reduced product. Insects can cause damage both in the field and after harvest during storage. According to GMO Compass, which is a website was financially supported by the European Union, that insects destroy about 25 percent of food crops worldwide each. One specific example is that the larvae of Ostrinia nubilalis, the European corn borer, can destroy up to 20 percent of a traditional maize crop ("Pest Resistant Crops"). If insect attack problem can be solved by an easy and economic way, then farmers will never lose most of their production when they are going to harvest and just at this time, a serious insect attack dramatically occur. Fortunately, pest-resistant GM crops are this kind of thing that can avoid this tragedy. Therefore, pest-resistant GMOs are really good things to farmers.

Another benefit of GMOs to farmers is that GMOs genetically increase yield production with shorter growth time, which provides a higher quantity of food to people (Azadi and Ho). Most articles involving GMOs discuss GMOs' high production yield. Qaim and Zilberman published a report, "Yield Effects of Genetically Modified Crops in Developing Countries", on *Science*, showing that GM cottons gain more than 1.5 times average yield than traditional cottons. The reason why GM crops always have higher yield is because their modified genes can persist pest, disease, extreme environment, and sometimes they get genes that only focus on

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increase yield, which helps farmers a lot on high production yield (Qaim and Zilberman). High

production yield can increase farmers' income directly by harvesting more crops in a short time.

In addition, high yield of GM crops can also help farmers by efficiently using croplands because

farmers can produce more crops within one generation ("Sierra Club Speaks Out"). Therefore,

with the continued increasing demand of foods because of increasing populations, farmers don't

have to worry about occupying more wild land to make them into croplands and put them in

trouble of debate between natural conservation and agricultural development. Therefore, GM

crop high yield can help farmers to increase their income in a proper and non-controversial way.

In addition, GMOs can benefit farmers in a long term period because GMOs are friendly

to the environment. First, GMOs are friendly to croplands. Chemical pesticides and herbicides

are harmful to the environment because they will break croplands' balance, increase soil's acid

level, and alkaline level. The over-acid or over-alkaline soil will lead to yield reduction and

therefore decrease farmers' income. In a report, published on *Science*, Qaim and Zilberman

claimed that 99 percent of the global GM crops have insect-resistant and herbicide-tolerant traits.

By growing these insect-resistant and herbicide-tolerant GM crops, farmers can stop using

chemicals to damage soil. Only in a friendly context, can farmers have a sustainable agricultural

production. Second, GMOs are friendly to environment because of making safer and healthier

fruit, vegetable, and wheat products. The lack of chemical components in agricultural

productions, like herbicide-free GM wheat, pesticide-free GM fruits and vegetables, is healthier

and is more popular for consumers, and therefore farmers can build up a long-term business

pathway to consumers (Qaim). All in all, GMOs can help farmers to increase income in a long-

term period because these chemical free pesticide GM crops can avoid chemical components'

damage to local environment, including soil, land, animals and wild plants. Only a friendly

environment can guarantee crops' consistently stable yield as well as farmers' benefits.

Because GMOs have higher nutrition, pest-resistant ability, higher production, and they

are friendly to the environment, GMOs benefit both consumers and farmers. However, people

who disagree with GMOs claim that GMOs are not good because they won't benefit people's

health and they may decrease species variation. Of course, every single thing, especially a new

invention like GMOs, has its negative aspect. However, if GMOs' positive side benefit people

more than their negative side, it is reasonable to look at GMOs as good things. In addition,

people should believe that every new invention keeps changing, and it's the same with GMOs.

Therefore, why can't we believe that GMOs could become safer, healthier and friendlier to the

environment than what they are now by improving most of their shortcomings?

One of the opposite voices against GMOs is that GMOs have potential adverse health

effects to people because of possible allergenic substances and potential toxic substances due to

introduction of new genes into GM crops (Bakshi). Many consumers refuse to buy GM foods

because they have these concerns. However, all these concerns about GMOs are uncertain. Even

though Bakshi also says in her article that most literatures indicate that GM crops available in the

market are generally safe and these GM crops don't cause serious health problems. The reason

why Bakshi and other people worry about GMOs is because of their potential dangers to human

health. What's more, feeding tests have been done by authorized institutes in Europe and the

United States, showing that no negative effects been observed ("Evaluating Safety"). GMO

Compass, a website set up by the European Union, also shows that some GMO critics say that

feeding tests have presented negative health effects. But later on, GMO Compass defends that

those claims have not been based on scientific, peer-reviewed evaluations. In addition, if GMOs are really a threat to human health, then we would not see so many GMOs in markets.

Another opposite voice against GMOs says that GMOs may decrease genetic diversity by cross-pollination between GM plants and native species. If the exotic genes are very advantageous, GM plants carrying these genes may dominate the native species' gene by occasional pollen pollution. This situation may happen, but not as frequently as it could affect genetic diversity. Still, the doubt about GMOs may decrease genetic diversity by cross-pollination is also uncertain. The Mexican government thought some of the country's native corn varieties have been polluted by genetically engineered DNA, but Mexico bans all importation of GM corn. Where are those foreign genes coming from? It is uncertain whether they are really coming from neighbor GM corns (Yoon)? In addition, cross-pollination may be avoided with careful management. For instance, corn is one of the most popular GM crops and corn has the most serious problem in cross-pollination because corn is only fertilized by a different strain of corn. Fortunately, there is a type of corn that will not breed with other types of corn, and therefore people could expect to prevent cross-pollination in this way (Boyce). Also, GMO Compass gives people some good tips about how to avoid cross-pollination. For examples, allowing for sufficient space between fields, plants buffer strips of traditional crops surrounding GM plantings, careful cleaning of harvesting equipment, and arranging plantings and selecting cultivars so that natural corns can be harvested first. These advices are proposed relying on plant tests conducted in Germany in 2004 ("Minimizing Pollen Traffic"). As a result, people can see that scientists are endeavoring on how to solve the genetic diversity threat that GMOs may cause, although it is not so certain. Also, if this kind of concern does exist, there are several ways and guidelines to avoid these problems.

GMOs are good things not only because their advantages are more than disadvantages as time goes by, but also the original intent to invent GMOs is good. People invent GMOs hoping they can solve several serious issues in the agricultural field, one is pest disease, and another is starvation. Although people cannot say GMOs are totally perfect creations, they can look at GMOs as good things instead of considering it harmful to people and the environment. At least, GMOs have several advantages that are good for both consumers and farmers that were presented above. GMOs have higher amounts of nutrition, have higher production yield, pest-resistant ability, and friendliness to the environment. In addition, people should believe the potential human health concern and genetic diversity concerns can be solved in the future because scientists are focusing on these issues. If people once believed GMOs will rescue human beings, they can believe GMOs once again.

NNS Essay 4

Keep using nuclear power plants and stop expanding them.

The use of nuclear power plants to generate energy can be considered as one of the greatest breakthroughs in the 20th century. Nuclear power is able to produce substantial amounts of energy by splitting atoms. However, a series of accidents such as the Three Miles Island draw people's attention and the reactor melting after a tsunami hit in Japan triggered even more heated debate on nuclear power: Should we still use and expand the number of nuclear power plants? On May 28th, 2011, Angela Merkel, the Prime Minister of Germany announced the plan to close all 17 nuclear energy plants in Germany by the year 2022. This topic has just recently been put on the discussion table and passed by the German government. Why did Germans decide to give up using nuclear power plants two months after the calamity in Fukushima? Is this a wise decision? After extensive researching into the details about the nuclear power plants, in my

opinion it might be too soon to abandon nuclear power since it brings us huge advantages in life. I believe we should use the nuclear power plants that are currently operating and stop further expansion.

There are some reasons accounted for that. Building a new nuclear power plant could be over-budget and over-time, but maintaining one is reasonable when the nuclear reactions and the nuclear wastes are deal with correctly. If governments decide to abandon nuclear power right now or in the near future, would that be wise since we do not have an adequate replaceable resource? Besides, it occupies a large portion of the energy consuming in some countries, thereby decreasing the greenhouse gases. Nuclear power technology has been used for several decades, which is reliable despite the fact that there have been only few accidents. In addition to this, scientists could research into the ways to improve safety and dealing with waste. At the same time, we need to figure out sustainable energy before abandoning nuclear power plants. So we should continue using nuclear power plants until their lifespans are over.

It is expensive to build a new nuclear power plant. According to Jason Morgan, a business profession who approve of using nuclear power plant using financial and economic data analysis, "the construction fee of a new nuclear power plant is the largest part of the overall nuclear energy to the end while on-going operating cost is comparatively low."(Morgan) There are real estate, material, engineering and design, license that will cost a lot of money. There are concerns about the safety, a large amount of the nuclear power plants is located in remote places and they might occupy large acres of land. Here is an example of the budget of the new nuclear power plants. In Feb, 2010, the Obama government decided to finance two new nuclear power plants, including an 8.33$ billion dollars loan to Georgia Power, part of which is from the taxpayers. If the taxpayers are not willing to pay, there is going to be a default risk. According to

the Congressional Budget Office, it is estimated that 50% private loan for nuclear power plant will default. Georgia Power customers will be paying $1.6 billion over the next six years to help finance the reactor construction. Furthermore, Georgia Power customers need to pay an additional $10 per month to support the project. Meanwhile, even if we have the technology to build a nuclear power plant, there are still not enough qualified and experienced workers, engineers. So it will take decades and money train or hire people to build one, too. So we should use the nuclear power plants built years ago and stop expanding new nuclear power plants.

When constructing a new nuclear power plant, there will be related industries around it, which adds initial investments. A uranium mine will be built; a generator is needed to convert the kinetic energy into electricity, a cooling system used to transform the heat is necessary, etc. So it is not simply a nuclear reactor could represent the nuclear power plant, but an association of other industries. Since we have already put tons of money into building nuclear power plants, we should not abandon them immediately.

Operating a nuclear power plant, however, is much less expensive than building a new one. According to the *nuclearinfo.net*, "Companies that operate the USA's nuclear power reactors have made excellent profits over the last five years."(nuclearinfo) It is indicated that the nuclear power plants do make the energy cheaper and repay the initial investment used to build the nuclear power plant previously. From the year 1987 to 2004, cost of producing electricity has shrink from 3.63 cents per KWHr to 1.68 cents per KWHr and plant availability has increased from 67% to over 90% (Nuclearinfo). Fuel consuming, which is the main part of the operating cost, and nuclear power plants have the least proportion of fuel when comparing with coal and

gas, only 26% (Morgan). So nuclear power is better than coal and gas for using a comparatively smaller proportion of fuel.

However, people are terrified of the horrible effects brought by the accidents like the Three Mile Island, Chernobyl, and Fukushima, saying that radioactive materials from nuclear power plants are fatal to our health; people were dying from the accidents. But every source of energy has its pros and cons; the point is to choose the one that has advantages outweighing the disadvantages. Even if there is still a mere likelihood for nuclear accident to happen again and cause damage, nuclear power plants are environmental friendly in the following perspectives: Nuclear reaction and waste can be safely dealt with. They can reduce greenhouse gases. Coal Ash from burning can be more radioactive than nuclear waste.

Up till now, nuclear technology has been used for several decades and scientists are able to control the nuclear power reaction. Tragedies like Chernobyl, the Three Mile Island and Fukushima are the only few accidents that rooted in people's minds. These are precious experience to prevent accidents happening again. However, throughout the half century, nuclear power has always been clean, safe, and efficient to human beings. Based on the current technology, the wastes from nuclear power plants can be dealt with safely. "According to an article on *thinkquest.com*, they could be manipulated either by temporary storage or Permanent storage. Fuel rods, which are the most radioactive substance but small in volume, can be placed in a cool pool. After five years of cooling they can be kept in a dry storage in case the pool might be filled." (thinkquest). Even though it seems the danger is still there, we can prevent the radiation after putting nuclear waste safely by using the method above. Meanwhile nuclear wastes that are not extremely radioactive could be buried under the surface of the ground. Yucca Mountain, Nevada has been chosen as the permanent place for storing nuclear wastes. Since it is

a dry place with less geologic activity and ground water, radiation will have less chance

to spread. Apart from that, people are digging the hole into the mountain, trying to put the

waste in a deeper and safer place.

When talking about the releasing of the greenhouse gas, there is one thing that

makes the nuclear power plant stand out: Decreasing the greenhouse gases emissions.

Richard Meserve, "President of the Carnegie Institution and former chairman of NRC

claims that the nuclear power today provides about 70% of US electrical generation that

does not emit greenhouse gases during operation" (alternativeenergy). It is obvious that

greenhouse gas emitted by coal burning has been one of the greatest environmental

problems in the world. When scientists are worrying about the effects from emitting CO2,

there come the nuclear power plants. Furthermore, the traditional coal industry is not the

solution to the energy crisis in the future, the greenhouse gases it emits not only make our

earth warm, triggering the glacier melt, but also notorious for a inefficient fame.

Coal ash is more radioactive than nuclear power wastes. It seems to shock a lot of people,

but this is true. Since people are using coal mining a lot, it can be really harmful. According to

Coal Facts and Folklore, coal mining provide 50% of the electricity in U.S. Normally, people

tend to associate the coal industry with acid rain, less freshness of the air and typically the

greenhouse gas emission. However, a research on the *Scientific American* reveals that "the

uranium and thorium are concentrated at up to 10 times their original levels when coal is burnt

into fly ash", this is a terrifying result." We are always relating radiation to the nuclear power,

and lots of people just assume that even burning coal is harmful to the atmosphere and there is no

radiation." (Hvistendahl) This research from *Scientific American* claims that "estimated

radiation doses ingested by people living near the coal plants were equal to or higher than doses

for people living around the nuclear facilities." (Hvistendahl)   So that the nuclear power plant is much safer to the environment as well as the general population as long as we control the nuclear reaction carefully and deal with the waste correctly. However, burning the coal and letting the radioactive substances emit into the atmosphere is definitely not the solution to provide electricity.

Recent years have witnessed a dramatic increase in other source of energies like solar power, wind power, biochemical energy, etc. Scientists are preaching the cleanness and availability of those energies in the future, broadcasting that the nuclear power plants should be closed and give space for them. However, every different kinds of energy has its pros and cons, all we need to do is just to make a balance and try to figure out the comparatively better energy that can cater needs from human beings. Simply to acquiesce, new energies are uprising and attractive, but they cannot suffice people's requirement for more energy right now. According to *world-nuclear.org*, the energy consumption in 2020 will be doubled from 2004. In order to boom the economic growth, huge amount of energies should be provided. Still, nuclear power is the right answer before new energies are ready and it does occupy certain percentage of the electricity producing in some countries.

We can never deny the bright future of the clean energies, however, they are not efficient enough or still in the progress of being researched. Here is an example; some people are advocating the advantages of biomass energy. However, in order to grow crops, other forms of energies are needed, such as the photosynthesis from the sun. So the transforming of energy is not efficient. And we have to burn the crops again to get the energy. But this can also create large amount of greenhouse gases, needless to say the difficulty to collect those energies. "According to a study by Massachusetts Department of Energy Resources, Generating the same

amount of electricity from biomass emits 45 percent more carbon dioxide than coal and almost 300 percent more than an efficient natural-gas power." (Song). So when compare the energy in the future with the current nuclear power plants, it is obvious that there is still a long way to clear the obstacles before massively using new source of power. In the way, nuclear power could be the perfect choice to generate energy and give scientists more time to solve the problem with new sources of energy. So before the new form of energy is popularized around the world, nuclear power will save time and money for scientific research. And then we gradually shrink the proportion of nuclear power energy, and use new methods of producing energy and let them take the place of nuclear power.

By looking at the structure of energy consuming in some countries, nuclear power does occupy a certain proportion. So the new source of energy is not ready for providing adequate electricity. Nearly 20% of the electricity is coming from nuclear power plant in USA, 29% in Germany (NEI). 78.8%, a shock but real statistic that represents the energy provided by nuclear power plant in France (IEER). China is expecting to keep the average 9% of GDP growth since 1980, and nuclear power plant construction is going on in China to provide more energy with efficiency. All of these are statistics displaying the important role that the nuclear power plants play. If we abandon using the nuclear power plant right now or soon in the future, what are we going to find good source of energy to replace them. Certainly not to use the new source of energy that we are not able to control skillfully. They are clean and useful, but cannot be used massively at this moment.

In conclusion, even if there were accidents happening before, new sources of energy coming, nuclear power plants still need to operate to provide us energy. We can enjoy high

efficiency and less emission, stop worrying wastes radiation, since the nuclear technology is successful. But building and expanding new nuclear power plants should be stopped.

NNS Essay 5

<p style="text-align:center">Should standardized testing persist in education?</p>

Walking out of the classroom, Casey sighs deeply and then laughs out, "That sucks." This is a common scene after a student finished taking a test. Standardized testing as we know it may sound more like a product of modern civilization, but in fact it has a long history. "China has a long history of standardized tests, beginning with the ancient imperial exams initiated during the Sui Dynasty" (Greenspan). In the United States, it developed during World War II and the Cold War, since "identifying student talent in academics, leadership, and managerial skills" was needed at that time (Longo 55). Thanks to the development of technology, standardized testing has developed rapidly in the past half century (Longo 55). However, the controversy surrounding this kind of testing has been raised in the past twenty years despite its good reputation of high accountability. Arguments are made for the pros and cons of standardized tests and substitutions for the tests are constantly being explored.

Although standardized testing has some disadvantages, it is still the most advanced tool to measure students' performance in today's education. Standardized testing helps to improve the education for most students in schools. This specific kind of testing can provide great data to improve decision making, help teachers learn more about students' abilities and identify students' academic performance, and it lays a firm creative foundation and cultivates students' time management skills.

Standardized testing can provide great data to make better decisions. The admission to college is a huge assignment for colleges every year. The work load is so heavy that colleges

have to put into a large number of labor and capital to guarantee the efficiency of the admission process. However, as an assistant method (such as the SAT), due to its easy form and clear results, standardized testing provides a platform for the admission process. It is easy to be graded and evaluated, helping improve the accuracy and efficiency of the admission process. In addition, since the fluctuation of the GPA and different evaluation systems exist in different schools, the score from standardized testing (the SAT) is more reliable and trustworthy (Caperton 24). Therefore, colleges are able to make better decisions for admission.

On the other side, teachers are more likely to understand their students' abilities due to the good accountability of the testing. In Buck's research which interviewed 42 teachers in five Arkansas schools, thanks to the useful organized data (such as the average score on a test) from tests, teachers are able to better understand the students' performance (51). The reason is that teachers can find out specific problems in students' comprehension based on the test results and solve the problems in a timely way. Consequently, students can catch up with the pace of the class and are on the same page with teachers in the future studies. Thus, standardized testing achieves its goals in improving educational efficiency.

As a result of accurate assessment, standardized testing can also help people recognize their potential and abilities which will direct their career, make the right decision and do what they love or are good at in their lives. Not only for students but also for schools, this type of testing can identify students' level in academic performance.

For most students, writing skills are hard to improve without teachers' instruction and the application of standardized testing in this area makes a big difference. According to Foltz, the Intelligent Essay Assessor (IEA), "a set of tools to evaluate short essays", helps teachers grade a great number of writing assignments and allows students to improve their writing skills

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independently. This technology has been tested and can be trusted (Foltz). For instance, it has been repeatedly used in the TOEFL and the GMAT (Foltz). These tools free instructors' time for more meaningful things like improving their teaching quality. Also, another benefit is that it allows students to do writing practice by themselves. Here is how Foltz explains the tool works: students submit their writing to the computer and then get responses from the system. After receiving the responses, they can keep working on their writing until they are satisfied with their grades (Foltz). This "submit-response-revise-submit" process helps students identify their problems and make gradual progress.

For schools, the SAT has been used for the admission to college for a long time and will continue to be popular in the future (Fletcher). Colleges with the data from standardized testing, alone with the other materials such as personal statement, GPA and recommendation letters can tell a person's ability and potential easier. Moreover, with the help of this information, colleges are able to make intelligent decisions to guarantee the "right" students get what they deserve. Therefore, this assistant evaluation guarantees the quality of the students enrolled.

Since it provides a good way to understand students' academic performance, standardized testing also lays the foundation of creative ability. As showed in Buck's research, it guarantees the students to have the basic "must known" knowledge and allow them to improve their creativity based on the basic knowledge (52). This "must known" knowledge is the foundation for any creative work. Students who are without basic knowledge are less likely to create anything, let alone practice their critical thinking. Besides, standardized testing makes the teaching plans easier, leaving more room for teachers to focus on teaching creatively (Buck 52). As a result of the easy normative format provided by standardized testing, teachers are able to focus on building the student's creativity and improving educational efficiency.

Furthermore, students can exercise time management skills since they are able to "predict" when the exams and quizzes will be held in the future semester. Time management is a very essential skill in one's life. This kind of skill is one piece of the knowledge that schools want to teach but never can teach on class. However, students can practice their time management skill by scheduling a whole semester ranging from the details on weekdays to the arrangement on weekends before an exam. They could split the assignment into smaller parts and estimate the time spent on it (Time Management). Therefore, knowing the teaching plan is the prerequisite for successful time management, helping students adjust their own paces. In conclusion, not only the teaching plan for teachers, but also the whole semester schedule for students can get benefits from standardized testing.

Admittedly, some may argue that the standardized testing is not helpful to cultivate students' critical thinking and ultimately wastes time needed to prepare for the tests (Kohn 60). According to Kohn, a famous writer who has published 11 books in the education field, standardized testing just "measures superficial thinking". He indicates that people may guess the answers and avoid the hard parts, which leads to not really understanding what they have learned. It is not doubtful that some students just "learn for the test", however, according to Buck, whether applying standardized testing or not, this "must known" knowledge has to be taught without any doubt (52). In this situation, people are the most crucial factor—deciding if they accept the knowledge or not. Standardized testing, just a form to deliver knowledge, should not be blamed for all the faults. In addition, the knowledge tested by standardized testing is the basis of any creative work. People without any elementary knowledge have little possibility in activating the development of his or her huge potential of critical thinking. All in all,

standardized testing will not hurt the development of critical thinking; on the contrary, it may even help to cultivate this way of thinking.

Furthermore, Kohn also states that the time spent on the preparation must "come from somewhere else", which does not aid a help in the development of creativity. As Kohn argues, the testing occupies a lot of time and chances to improve students' creativity. The time taken by the tests could be used to teach something really creative and beneficial to cultivate students' creativity such as "programs in the arts", "class meetings" and "discussions about current events". Preparing for a test indeed takes a lot of time; however, this preparation gives students a general idea about what they have learned. According to Buck and other authors, "Test-prep does not necessarily sap creativity, for teachers or students" (52). The reason is just as the other teacher who was in this research said, "True creative people will find a way to be creative regardless of what the framework is" (Buck 52). Applying standardized testing doesn't mean denying any other forms of evaluating. People just take advantage of the benefits of the testing and make up the shortcomings by other ways such as an interview or recommendation letters. In fact, people usually have multiply ways to evaluate a person's ability. In conclusion, standardized testing is still a helpful tool in cultivating creativity, even though a few restrictions to the students could be a result.

Others may question that standardized testing is "teaching to the test" (Longo 55). To combat this, "Inquiry-based learning" is put forth to help avoid this down side which is the biggest problem of the testing (Longo 55). As Longo states, "Inquiry-based learning defines the teachers' role as helping students through the process of discovering knowledge for themselves and not providing the knowledge for them, thereby promoting creativity" (55). This new method may remedy part of the imperfection of standardized testing, but it cannot substitute it to any

extent. The reason is that "Inquiry-based learning" is too random and lacks the accountability and the valid measurement of basic knowledge which is required by a qualified education.

Standardized testing can provide great data to make better decisions. As a result of good measurement, it can help teachers learn students deeply and identify students' levels of academic performance. It also lays a firm foundation of creativity due to the "must known" knowledge gained from tests. In addition, this type of tests also practices students' time management abilities. Although some argue that standardized testing hinders the cultivation of critical thinking and creativity, it is still the most powerful tool to improve the education for most students in schools.