A case study investigated the writing processes of an adult native speaker of Portuguese in a number of writing tasks in his native language (L1) and in English, his second language (L2). Writing samples over a 14-month period were examined. Most data were collected in thinking aloud protocols for 10 written tasks of varying degrees of familiarity in the two languages. A post-composing interview concentrating on specific aspects of observed subject writing behavior was conducted after each protocol session. To augment protocol data, observations concerning the nature and quantity of language input and of oral and written language output were gathered. The composing processes used in L1 and L2 were compared and found largely similar, with vocabulary searching the most common interruption of the overall process. The subject used the language of the writing prompt most often for verbalization, notetaking, and transcription, but used L1 more often for side comments. Researcher-subject interaction was almost exclusively in L1. Writing tasks were found to affect writing processes in some ways, and familiarity of the task was also very evident in the writing processes. It is suggested that task importance and familiarity are significant pedagogical considerations. (MSE)
First and Second Language Composing Processes Across Tasks

The last two decades have seen extensive investigation in first language (L1) composing processes of writers as they compose various kinds of texts. Much less research has been conducted, however, concerning the processes of composing in a second language (L2). Numerous universities such as mine offer composition courses specifically designed to help these foreign students with their writing assignments. And yet, these courses and many English as a second language (ESL) composition texts have been developed with little consideration given to theoretical issues unique to second language composers.

In order to establish a valid theoretical foundation for teaching ESL composition, much research of varying types is needed. However, to this day, most second language composing research has examined the composing processes of ESL students and compared or contrasted them to the composing processes of native English speakers. An obvious drawback of such research is the assumption that the non-native speakers of English compose in their native language.
in the same way that native English speakers compose in English. More qualitative and quantitative studies conducted with writers in their L1 and L2 would certainly inform conclusions drawn about the role of language proficiency in L2 writing and the transfer of writing skill from L1 to L2. In the last few years, two studies have been published that examine different aspects of writers composing in both their first and second languages (Jones and Tetroe, 1987; Arndt, 1987), but still few generalizations can be drawn from these.

In addition, the social-contextual view of writing and composing processes that has existed for almost 10 years in L1 writing research, is quite limited in L2 writing research. This is somewhat odd considering that ESL specialists have concentrated on situational/contextual aspects of language learning for almost two decades, but as has often been the case, writing is usually the last skill to be studied and taught by ESL practitioners. It is clear that much research is lacking in the study of variables in L2 composing processes.

The case study I will be describing to you is an attempt to add to the literature that examines writers composing in their first and second languages. I have blended theoretical, philosophical and methodological viewpoints into a bilingual, bicultural and naturalistic approach to researching L1 and L2 composing. The rationale for this eclectic method is that the complex act of writing
in two languages necessitates a fused perspective of cognitive, affective, cultural, and contextual frameworks. To adopt a single view would be to deny not only the complexity of composing behavior but of the bilingual mind as well.

My study examined one adult writer composing in his L1 (Portuguese) and L2 (English) in response to a variety of written tasks over a fourteen-month period. The bulk of the data was collected through thinking-aloud protocols of the writer composing ten written tasks of varying degrees of familiarity in the L1 and L2. A post-composing interview was conducted after each protocol session, concentrating on specific aspects of behavior I observed while the writer was composing. To augment the protocol data, observational data were collected throughout the fourteen-month study on the nature and quantity of language input from the environment, and the nature and quantity of oral and written language output by the writer.

The Subject

The subject of the study was a native of Portugal who had been living in the United States for close to four years at the time of the first protocol. Manuel had studied economics at a Portuguese university for three years prior to his arrival in this country and had no formal instruction in writing in Portuguese at the university level. While in Portugal he studied English as a foreign language at an
American language institute for roughly two years, but writing was not stressed there, and he had never written an academic composition in English while living in Portugal.

Manuel transferred to an American college where he studied management for two years. At the college he was required to take an intermediate course in writing ESL, a "freshman" composition course for foreign students, and business writing. He was also required to write several term papers and case studies for other classes.

In Portugal Manuel had been employed for four years as a justice official for the Labor Court. His job required extensive record keeping and writing of a bureaucratic nature, working mainly with legal documents and forms rather than writing letters or reports. All of his work was done in Portuguese.

After graduating in the United States, Manuel was a bank accountant. His job required computer and writing skills, but most of his writing was brief, such as a memorandum or business letter to a customer. He worked entirely in English.

The Tasks

In selecting appropriate prompts for my study, I was particularly concerned with topic control and the validity of cross-analysis of data. In the case of the first data collection sessions, I wanted comparable topics that would still differ so that despite a six-month interim between
protocols, the first task would not influence the second task. For this reason, I chose two prompts that had been shown statistically to elicit comparable holistically-graded compositions (Witte, Cherry, Meyer, & Trachsel, 1987). The writers in the Witte et al. study were freshman university students and native speakers of English. It is possible that the results would not have been the same had they studied non-native speakers of English. These two prompts called for expository essays, one dealing with the role of money in society and the other dealing with the role of education in American society.

In devising subsequent prompts for writing, I was interested in observing how familiarity of a writing task affected the composing process. I was also interested in looking at writing in a variety of contexts, not solely academic, and to create credible, natural writing tasks. In this multimodal research design, I also hoped to view writing in its full complexity, examining not only cognitive processes, but also societal, cultural, and affective influences on my participant’s writing. To that end, I examined Manuel’s non-academic life in the United States and his native country, and devised four writing tasks in his L1 and four counterparts in his L2 which were similar to the types of writing he had done in each country.

Two of these new tasks came from Manuel’s personal life—personal letters and poems—and two came from his professional life—letters of application and business
memos. These specific tasks were decided upon also because in all but the poem, they were writing tasks that he had done frequently, but not necessarily recently, in both languages. In devising the prompts for the third tasks, the letters of application, I culled the classified sections of American and Portuguese newspapers for jobs that I thought would appeal to Manuel in terms of type and location of employment, and for which he would be qualified. The classified advertisements were given exactly as presented in the newspapers. As in the case of the personal letters, these prompts clearly produced authentic writing situations because Manuel decided on his own to send all four letters after completing the writing tasks.

To assure authenticity of the fourth tasks, the business memos, I consulted with Manuel's boss at the bank where he was employed at the time of the data collection and with his past boss at the Labor Court in Portugal. I then devised prompts to elicit business or legal memos similar to ones he had written in the past. Finally, in devising the fifth tasks used as prompts for writing poems in each language, topic and content were left entirely up to Manuel to supply. The only constraint given was that the poems should contain at least two stanzas, in an attempt to keep the L1 and L2 poems comparable.

Familiarity of Writing Experiences
As noted earlier, one variable of writing that I wished to examine was the effect of familiarity of the writing task on the composing process. More precisely, I wanted to examine particular writing experiences in a specific language. In this study, a writing experience includes content, such as topic, ideas and knowledge; form, such as the specific structure of the discourse; and situation, which encompasses not only the audience and purpose of the writing task, but also the cultural expectations of the appropriate discourse community of the writing task. In addition, all of these aspects make up a particular writing experience when in a specific language.

For the purposes of this research, a familiar writing task was defined as one that had been practiced in a particular language at least every other month for the past two years; the task was considered unfamiliar if it had not been done in that language more than four times in the last four years. For example, the letter of application was unfamiliar in Manuel's L1 because he had not written one in Portuguese in over five years, but it was considered familiar in his L2 as he had frequently written letters of application in English in the recent past. As the table on your handout shows, tasks 2, 3, 4 and 5 were familiar writing experiences in one language and unfamiliar writing experiences in the other language. In all prompts, content was kept familiar as a control; it was either supplied in
the prompt or left open for Manuel to supply from his own knowledge.

Familiarity of Writing Tasks*

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Analysis of Data and Coding of Composing Processes

As Swarts, Flower and Hayes emphasize, "there is no single, correct way to analyze protocols: one's method is ultimately determined by the task, the subjects, and the research questions to be answered!" (1984, p. 56). My own method was directed by the variables I wished to examine in devising the specific writing tasks, and by the following research questions:

1. In what ways are the composing processes in the L1 and L2 similar, and in what ways are they different?
2. What is the interaction of the L1 and L2 in composing?
3. How do writing tasks affect the writing process?
4. How does the familiarity of the writing experience affect the writing process?

All of the protocol transcripts were coded and analyzed according to the Model of L1/L2 Composing Processes, the second page of your handout. (See Figure 1)

The model is based on the work of Flowt'r and Hayes (1981) and their Cognitive Process Model of Writing but contains elaborations and alterations to accommodate a bilingual approach to composing. ((I won't explain the model in detail right now, but I'd be happy to discuss it after the talk with anyone who may be interested.))

I have reams of data and their analysis that there won't be time to present today. Instead, I'd like to discuss the data by answering the research questions outlined in your handout.

In What Ways are the Composing Processes in the L1 and L2 Similar, and in What Ways are they Different?

There are many indications that for Manuel, his composing process is similar in his L1 and L2. In the first writing tasks of expository essays, Manuel's overall composing in both languages followed a goals-to-text model, a term used by Stephen Witte (1985) to describe a writer who first generates ideas, then establishes goals, next
generates more material and finally transcribes the text. Not surprisingly, this goals-to-text approach was also seen in the second, third, and fourth writing tasks; these were what Maxine Hairston (1986) calls Class II writing that typically require the writer to organize and present known content and, most likely, are less conducive to a discovery or text-to-goals model of writing.

Manuel approached most writing tasks, whether in his L1 or L2, in much the same way. He read the prompt, asked me a clarifying question if necessary, and reread the prompt to focus on the essential elements for his writing. At this point he established high level content and organizational goals, and in many of the tasks he wrote a few notes or the beginnings of an outline that contained these high level goals. He then began generating, in some cases for quite an extensive time period. In the familiar tasks, however, he often transcribed immediately without separately generating material. In other tasks, after his initial generation concerning the topic, he moved back to his high level goals to review, evaluate, and revise them if appropriate. He rarely verbalized any generating concerning the rhetorical problem, although it is clear from many of his side comments on culture and language that he considered the rhetorical situation when evaluating his own vocabulary and expression, depending on the specific writing task.

Once Manuel began transcribing text, he usually continued transcribing for an extended length of time,
pausing only to review the last few words of a phrase to get a 'running start' for the next sentence. At times he would revise a few of these last words, but on the whole, Manuel performed very little revision on any task in either language.

In either language, after transcribing almost half of the text, Manuel usually reviewed the prompt, his goals, and his text to see if they concurred, and then he continued transcribing to the end.

The most frequent times when this process described above was interrupted was when he had difficulties in finding vocabulary in the correct language. Whether working in his L1 or L2, Manuel often had an expression in the "wrong" language that he wanted to include in his writing, and he had problems in finding the word in the "right" language without losing his train of thought and bringing his composing to a stop.

From the data collected in this study, it appears that the composing process in the L1 and L2 are very similar, if not the same, for the subject of the study.

What is the Interaction of the L1 and L2 in Composing?

In most cases, Manuel verbalized his thoughts in the protocols, made notes or outlines, and transcribed, in the language of the writing prompt. However, it was much more common for him to give side comments or metacommments in his L1 across all tasks. He spoke to me almost exclusively in
his L1, and there were many instances when he was working in
his L2 and switched to his L1 for a brief comment or
reflection on what he had just verbalized. The poem in
English provided a good example of this when he recognized
that what he was writing was a bit too mundane, even for his
feeble attempt at poetry in English.

"... if you walk outdoors, you get wet, isto nao ha
duvidas nenhuma*. *[there's no doubt about that]

In the earlier tasks of the expository essays, there
was much more interaction between the L1 and L2 than in
later tasks. This could be due to a number of reasons.
First, in both the L1-1 and L2-1 tasks, Manuel approached
the topic from a decidedly Portuguese viewpoint, generating
material in a historical, chronological sequence. His
knowledge base was also in Portuguese, and he had
difficulties with translating concepts and lexical items
when he needed to write in English. The later tasks
exhibited less of this dependency on L1 knowledge, but this
could have been a developmental effect because his L2
writing--although not tested empirically--visibly improved
during the fourteen months of the study. This could also
have been due to a practice effect from participating in the
numerous thinking-aloud protocols. More likely, though,
less interaction between the L1 and L2 in later tasks was an
effect of the tasks themselves because the last four pairs
of tasks were created to control for content that would be
supplied by the writer or the prompt. Especially in the familiar tasks in his L2, Manuel did not usually have any trouble in providing content and suitable terminology in the L2.

How Do Writing Tasks Affect the Writing Process?

In some ways the writing tasks in this study did affect the writing process. Tasks 2, 3 and 4, the personal letters, letters of application and business memos, were Class II writing, described by Hairston (1986) as extended, relatively complex writing that requires the writer's attention but is self-limiting . . . she already knows most of what she is going to write or she can retrieve the content from memory or known sources. (Her) main task is to decide how to organize and present (her) ideas effectively for a particular audience. (p.444)

Tasks 1 and 5, the expository essays and poems, were Class III writing, described by Hairston as "extended reflective writing in which the writer discovers much of his or her thought during the writing process." (p.445) Even though form and content emerged in the process of the Class III writing, Manuel's overall composing process still followed a goals-to-text model.

As explained earlier, this goals-to-text model was similar across tasks, but differences among the tasks did exist. One reason was the use of Class II writing. In these Manuel did not need to generate much in the familiar
writing experiences. He established goals immediately, generated a bit of introductory material, and then began transcribing. Next he reviewed the prompt and checked it against his high level content goals, and then he generated or directly transcribed again. There were no long generating episodes, a strong characteristic of the expository essays in the first tasks in both the L1 and L2. Also, few structural goals were created except in the most unfamiliar writing experiences.

**How Does the Familiarity of the Writing Experience Affect the Writing Process?**

Familiarity of the writing experience definitely affected Manuel's writing process, especially in the speed and confidence with which he could complete successfully a writing task. The writing experience is made up of the content, form, context or situation, and the language of that writing experience. Each of these elements affected Manuel's composing process at one time or another.

The effect of the familiarity of the writing experience was particularly evident in cases where some language loss--and possibly culture loss--had occurred, as in the L1 letter of application. It was also apparent in the L2 familiar tasks when Manuel felt confident in producing adequate written products in the linguistically weaker language.
In addition, protocols of the unfamiliar writing experiences showed frequent interruptions in the composing process. Manuel commonly stopped for low-level concerns due to problems in remembering where parts of a letter should go, or what the correct expression was. He tried to monitor for this, saying he would forget about it and go back to it later, but it clearly preoccupied his mind.

Metacommments and side comments indicated that Manuel recognized how familiar or unfamiliar each task was, and at times he reflected on how that affected the success or speed with which he was able to complete (and in some cases not complete, in the case of the L1 poem) each writing task. His letter of application in the L2 was obviously familiar as indicated by his comments: "Dear Sir, the first paragraph is always the same" and later: "I'm saying the same thing I said a few days ago". But he commented in his L1 letter of application: "I haven't done a letter like this in a million days, O.K.?" and later: "How long has it been since I've done one of these letters?"; he then went off task for a short time trying to figure out the year and place when he had last written one.

In all of these instances, Manuel's composing was affected by the lack of familiarity of the experience. His composing process was interrupted, and he usually had to review previous goals, the prompt, and his text-so-far to try to get back "in gear". He often became upset with himself when he was not able to remember previously well-
practiced forms of writing and expressions in his L1. In the case of the L1 letter of application, he lost confidence in the appropriateness of almost all aspects of his letter. Although Manuel had been in the U.S. for fewer than five years at the time of his L1 application letter task, he worried if perhaps his native country, culture, and language had changed to such a degree that his letter would look odd compared to those written by other Portuguese.

**Pedagogical Applications of the Findings**

The findings from this study suggest a few pedagogical applications. First, major applications of this research exist in L2 writing assessment. The importance of the task and the familiarity of the writing experience should be considered strongly when assessing L2 writing. As noted before, much research is lacking in this area; because of this, educators should be especially wary of current ESL writing assessment. Second, these same factors should be considered when developing writing assignments and course curricula. Instructors should also be aware of the complex nature of the writing experience and recognize the various elements that can make up a writing assignment. Any of these elements can present difficulties for students and may need to be taught separately (e.g. content, form, and situational context). Instructors should also familiarize their students with strong examples of the writing, and they should provide numerous opportunities for creating and
practicing specific writing tasks within particular discourse communities.

Finally, this study's findings show that instructors should be aware that as much as ESL students desire fluency in English and the ability to write successfully in a variety of situations or academic fields, many of these students will face eventually native language and perhaps culture loss. As seen with culture shock, this could be more traumatic for some than for others. Rather than ignore this possible outcome, perhaps instructors can help prepare their advanced ESL students who will live, study and work for long time periods away from their native countries, by discussing this as a natural consequence of learning and adapting successfully to a new language and culture.
First and Second Language Composing Processes Across Tasks

This study examined one adult writer composing in Portuguese, his first language (L1), and English, his second language (L2), in response to a variety of academic and non-academic writing tasks over a fourteen-month time period. The research combined thinking-aloud protocol analysis, post-composing interviews, and observational descriptive research of the nature and quantity of language input from the environment and the nature and quantity of oral and written language output by the writer.

The data were analyzed for evidence of cognitive processes in writing as well as cultural and social influences on the writing process, and the following research questions were answered:

1. In what ways are the composing processes in the L1 and L2 similar, and in what ways are they different?
2. What is the interaction of the L1 and L2 in composing?
3. How do writing tasks affect the writing process?
4. How does the familiarity of the writing experience affect the writing process?

### Familiarity of Writing Tasks*

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FIGURE 1
Model of L1/L2 Composing Processes