

The Effects of the Primarily Oral Function of American Lithuanian on American Lithuanian Writing

Jolanta Aritz
University of Southern California

One of the differences between full and reduced language varieties is the repertoire of their use (Dorian, 1981, 1994). In this paper I argue that the written discourse of American Lithuanian (AL), a language variety spoken in the United States, is different from and to some extent impoverished compared to the written discourse of Full Lithuanian (FL), a language variety used by its native speech community in the Republic of Lithuania. I suggest that this is a result of the primarily oral function of American Lithuanian in its speech community. The data used for the study consist of a 40,000-word corpus of written local news and oral interviews in FL and AL. The paper focuses on the structural composition of written and oral texts in American Lithuanian and Full Lithuanian and analyzes (a) information structure in terms of word order variation as part of cohesion and (b) referent accessibility and the grammatical form of the referent NP as part of coherence.

The present paper examines the effects of the primarily oral function of American Lithuanian on American Lithuanian writing. Any text, whether it is written or oral, has to be cohesive and coherent in order for us to be able to interpret it as a text (Halliday & Hasan, 1976) and therefore to exchange meaningful messages (Grice, 1975). On the basis of American Lithuanian data I argue that the reduction in linguistic activities performed by the immigrant language facilitates changes in the linguistic form. More specifically, certain linguistic options disappear as a result of the primarily oral function served by the language, and linguistic features characteristic of spoken language are found in the written texts. As a result, there is a mismatch between linguistic form and function, which results in written American Lithuanian texts that lack coherence and that differ somewhat from what one would expect in the full language variety.

DATA

For purposes of this study I examined two language varieties: Full Lithuanian (FL), a variety spoken natively by its speech community in Lithuania, and American Lithuanian (AL), a variety used by first- and second-generation Lithuanian immigrants in the United States.

American Lithuanian, as presently used by first-generation Lithuanian speakers (who emigrated to the US in the 1940s) and their children, is used for a restricted number of functions, a subset of the full range of sociolinguistic functions which these speakers of American Lithuanian, as members of American society,

largely accomplish by using their native-like command of English. American Lithuanian is employed primarily in its spoken form in American Lithuanian homes and in American Lithuanian community activities, and involves limited topics related to this community. Full Lithuanian, on the other hand, is used in its written and spoken forms in a broad range of situations ranging from formal speeches to casual face-to-face interactions.

A corpus of 20,000 words of written data has been collected from two major Lithuanian newspapers: *Draugas* ('Friend'), which is published daily in Chicago by first-generation American Lithuanians and reaches approximately 8,000 immigrant Lithuanian homes all over the United States, and *Lietuvos Rytas* ('Lithuanian Morning'), a major Lithuanian daily published in the capital city of Vilnius and currently having the largest circulation of any newspaper in Lithuania. The written corpus was collected from newspapers printed in the late 1990s. For the present study, the register for reporting local news was chosen to control for any possible mismatch in topics or purposes, as would be the case with, for example, editorial pages or personal letters. Also, the editorial page in the American Lithuanian newspaper reprints articles from newspapers published in Lithuania and in that sense the paper has no distinct editorial page of its own. Local news, on the other hand, serves similar functions in both newspapers, that is, to inform readers about events of local significance, and therefore is most comparable. Most of the people writing for *Draugas* are first-generation American Lithuanians who emigrated to the United States in the 1940s, learned Lithuanian as their first language, and still use it as their primary language. They all received schooling in Lithuanian either in Lithuania or in the displaced persons camps in Europe before they came to the US. They therefore are considered fully proficient in Lithuanian by the American Lithuanian community.

The spoken register consists of a corpus of 20,000 words from interviews that I conducted with speakers of Full Lithuanian (FL) and second-generation American Lithuanians on similar topics of local news, events, and activities. The interviews with speakers of FL were recorded in the summer of 1998 in Vilnius. The interviews with speakers of American Lithuanian (AL) were recorded in St. Casimir's Lithuanian Saturday school in Los Angeles in the spring of 1998. Both FL and AL speakers were asked to talk about events and activities of local significance. The AL speakers interviewed were either teaching at the Lithuanian Saturday School, were responsible for American Lithuanian scouts activities or the American Lithuanian Saturday School library, or were part of the Lithuanian Saturday School parents' committee. They all placed a high value on speaking and teaching Lithuanian to their children. In other words, they were all involved in American Lithuanian community activities and used the Lithuanian language on a regular basis. These second-generation speakers were rated highly in their language abilities by other members of the American Lithuanian community and were considered to be proficient speakers of Lithuanian.

CONCEPTUAL HYPOTHESES

For purposes of my analysis I looked at spoken and written modes of communication, which ordinarily serve different functions and which are characterized by different linguistic features. The written local news register chosen for this study represents a more formal situation that assumes little or no shared context on the part of the reader and therefore favors greater elaboration and explicitness of form. The spoken register of the interviews presented in this paper, on the other hand, is less formal than the written news register; the interlocutors share a physical environment and a greater degree of shared background. Greater shared context permits interlocutors to rely more heavily on implicit messages and features of economy (cf. Finegan & Biber, 1994; Warren, 1993). With this in mind, I expected to find clear linguistic differences between writing and speaking in Full Lithuanian. Also, I expected to find changes in the written and spoken registers of American Lithuanian as compared to Full Lithuanian because of the differences in the degree of shared context in the two speech communities (with the smaller and more cohesive American Lithuanian community presuming a greater degree of shared knowledge) and in their access to different communicative situations, as outlined above.

ANALYSIS

For purposes of this paper I looked at the following linguistic features, which are important in creating text level structures at a discourse level:

- (1) information structure in terms of word order variation
- (2) referent accessibility
- (3) the grammatical form of the referent NP

In what follows I examine how these features are used in speaking and writing and, more importantly, how they differ across the two language varieties, American Lithuanian (AL) and Full Lithuanian (FL).

Word Order Variation

Since Lithuanian is a pragmatic word order language, it uses word order variation to mark information structure on a sentence level (Thompson, 1978). In what follows I first look at word order variation in speaking and writing in Full Lithuanian and then compare the results with word order variation found in American Lithuanian.

Spoken and Written Full Lithuanian

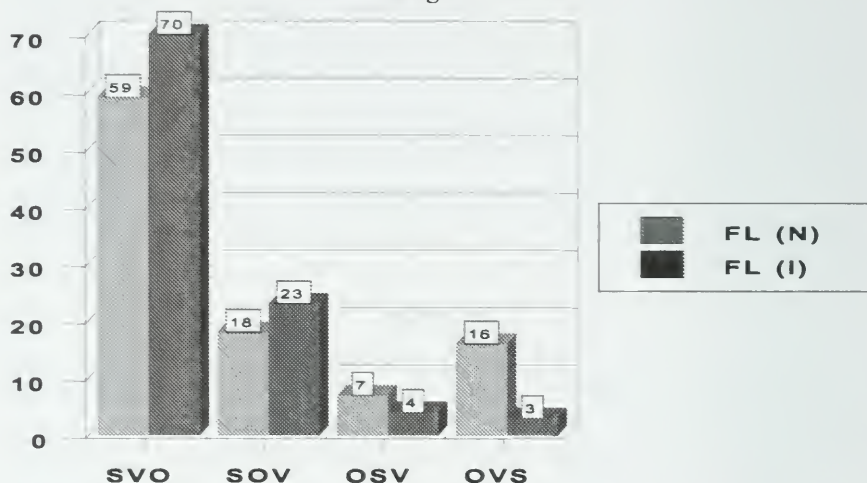
The results of word order distribution in written local news and spoken interviews in FL are given in Table 1 and graphically represented in Figure 1.

Table 1: Distribution of two-argument constructions across two registers in Full Lithuanian

	SVO	SOV	OSV	OVS	Total
FL (N)	172 (59%)	51 (18%)	21 (7%)	46 (16%)	290
FL (I)	124 (70%)	42 (23%)	7 (4%)	5 (3%)	178

Note: FL(N) = Full Lithuanian written local news; FL(I) = Full Lithuanian spoken interviews. Taken from a 20,000-word corpus.

Figure 1



Distribution of two-argument constructions in spoken and written Full Lithuanian. FL(N) = Full Lithuanian written local news; FL(I) = Full Lithuanian spoken interviews.

The results show that in fact there are substantial differences in terms of word order variation across the two registers in Full Lithuanian. In general, the written register of local news, FL(N), shows a greater usage of different options in word order than the spoken register of interviews, FL(I). In FL(I) there is a considerable increase in canonical SVO structures as compared to local news articles, from 59% to 70%, and a general decrease in alternative word order structures, OSV and OVS, except for a 5% increase in object fronting constructions in the form of SOV.

Chafe (1980) suggests that spoken language consists of linguistic expressions that are focuses of consciousness. It differs dramatically from written language, which consists of complete grammatical sentences. Written language exhibits a greater degree of integration of grammatical material in the text as a result of the greater amount of time available in writing, whereas spoken language shows a lesser degree of such integration because of the faster pace of spoken language

(see Chafe, 1982, p. 45).

Word order variation serves the function of integrating grammatical material and facilitating cohesion within the text by connecting a sentence in the text to the previous and the following discourse. It is not surprising then that the written local news register shows a greater degree of word order variation and thus greater integration of grammatical material in the text than the spoken interviews. Different word order options other than canonical SVO structures, such as object fronting in the form of OSV and OVS, undergo a decrease in the spoken interview of FL. The increase of five percentage points in SOV structures in FL(I) is due to a higher degree of pronominalization in the spoken interviews. I will touch upon this issue briefly when discussing the grammatical form of referent NPs.

Let us look at two texts, one spoken and one written, in order to examine the above-mentioned differences.

Example 1: FL(N)

1. [...] *G. Verpatinsk-o firm-a gavo [...] akcijų.* SVO
G. Verpetinskas-GEN company-NOM:SG received shares:GEN:PL
'Verpatinskas company received some shares.'
2. *O jas dosnysis pusbrol-is [...] perleido V. Šimulienei.* OSV
and them:ACC:PL generous cousin-NOM:SG gave over to V. Šimuliene-DAT
'And the generous cousin gave them over to Šimuliene.'
3. *Dal-j akcij-ų neva perleid-ęs ir pats G. Krutulis* OVS
part-ACC:SG shares-GEN:PL supposedly gave over-PAST:PART and himself Krutulis
'Krutulis himself gave over part of the shares.'
4. *Tačiau teism-e jis tok-io fakt-o ne-prisimin-ė.* SOV
but court-LOC:SG he such fact-GEN:SG NEG-remember-PAST
'But in court he did not remember such a fact.'

Example 2: FL (I)

1. ... *yra labai daug tokių visokių loterijų,* VS
are very many such various lotteries-GEN.PL
'...there are very many various lotteries like that'
2. *tai ten kokius nors jogurt-ų, tai renka led-ų popierėl-ius* VO
so DM some sort yogurt-GEN.PL or collect ice-cream-GEN.PL labels-ACC.PL
'so [they] collect some yogurt or ice-cream labels'
3. *nu, kai aš tik įsijungiu, tai,* SV
DM when I switch on then
'So/well when I switch [TV] on, then'

4. *jeigu dešimt atsiųs-ite* OV
 if ten mail in-2PL.FUT
 'if [you] mail in ten [labels]'
5. *jeigu ten nupaišys-ite ten pasak-q,* VO
 if DM draw-2PL.FUT DM fairytale-ACC.SG
 'if [you] draw a fairytale'
6. *nu bet kai jis ten pradeda tą program-q,* SVO
 well but when he DM starts that program-ACC.SG
 'well, but when he starts that program'
7. *tai televizij-a savo reklam-q per tą [programą].* SO
 so television-NOM.SG its advertising-ACC.SG on that [program]
 'So television [runs] its advertising on that [program]'
8. *Kad visi ten kažk-q tai turi, man atrodo.* SOV
 But everybody-NOM.PL DM something-ACC has I think
 'But everybody has something, I think.'

There are notable differences between Example 1 and Example 2. Example 2, from the spoken interview, relies more heavily on one-argument rather than two-argument structures. This shows a lesser degree of integration of grammatical material. The written text of FL in Example 1, on the other hand, shows a much greater degree of word order variation, and thus a greater degree of integration of grammatical material and a greater sense of cohesion in the text than in spoken FL. Apart from this, the spoken text is much more pronominal, whereas the written text relies more heavily on full NPs.

Spoken and Written Full Lithuanian and American Lithuanian

Now that the overall differences in word order variation across spoken and written registers have been addressed, let us compare word order variation in Full Lithuanian to spoken and written American Lithuanian.

As seen in Table 2, there are considerable differences between the two language varieties. In what follows I will focus on SVO constructions. The data show that in the written register of local news in FL, SVO word order occurred in 172 instances out of 290 (or 59%) and in the same local news register of AL, SVO was found in 230 instances out of 317 (or 72%). The total percentage of SVO sentences in written American Lithuanian shows an increase of 13 percentage points compared to written Full Lithuanian (from 59% to 72%). This increase is statistically significant ($p < .01$) and important in terms of alternative word order structures, such as SOV, OSV, or OVS¹. As we have seen, the Full Lithuanian written data demonstrates the importance of different word order structures in creating textual level structures in the written register of local news. The written local news

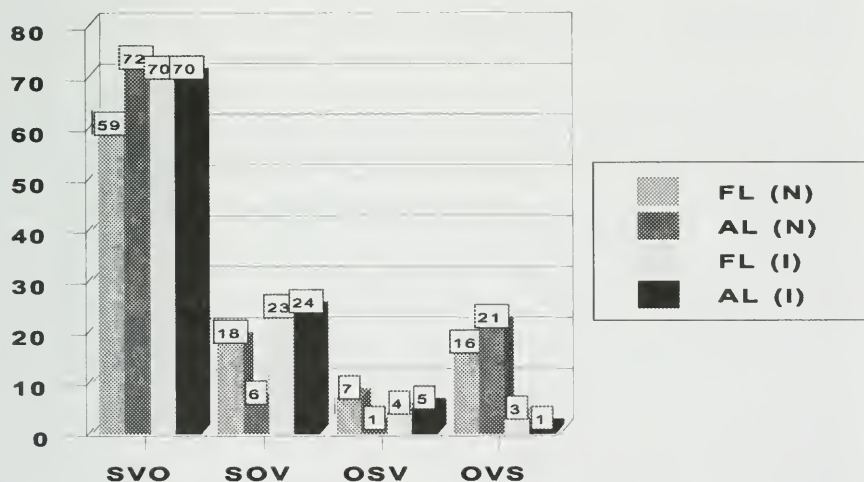
register of American Lithuanian, on the other hand, replaces this variation with a higher number of transparent SVO constructions (see Example 3).

Table 2: Distribution of two argument constructions across four registers

	SVO	SOV	OSV	OVS	Total
FL (N)	172 (59%)	51 (18%)	21 (7%)	46 (16%)	290
AL (N)	230 (72%)	19 (6%)	3 (1%)	65 (21%)	317
FL (I)	124 (70%)	42 (23%)	7 (4%)	5 (3%)	178
AL (I)	131 (70%)	46 (24%)	9 (5%)	1 (1%)	187

Note: FL(N) = Full Lithuanian written local news; AL(N) = American Lithuanian written local news; FL(I) = Full Lithuanian spoken interviews; AL(I) = American Lithuanian spoken interviews. Taken from a 40,000-word corpus.

Figure 2



Distribution of two-argument constructions in written and spoken American and Full Lithuanian. FL(N) = Full Lithuanian written local news; FL(I) = Full Lithuanian spoken interviews; AL(N) = American Lithuanian written local news; AL(I) = American Lithuanian spoken interviews. Taken from a 40,000-word corpus.

Example 3; AL (N)

1. *Iškviečiami abiturient-ai* VS
 invited-PASS graduates-NOM:PL
 'The graduates are invited.'
2. *kur-iems direktor-ė Doviliene įteikia atestat-us,* SVO
 whom-DAT:PL principal-NOM Doviliene presents diplomas-ACC:PL
 'to whom principal Doviliene presents with diplomas.'
3. *o tėvų komitet-as įteikia baigimo dovan-q.* SVO
 and parents committee-NOM:SG presents graduation gift-ACC:SG
 'and the parents' committee presents a graduation gift.'
4. *Vydūno fondo atstov-ė Eidukiene įteikė* SVO
 Vydūnas foundation representative-NOM:SG Eidukienė presented
kiekvienam abiturient-ui po knyg-q.
 each graduate-DAT:SG a book-ACC:SG
 'The representative of Vydūnas foundation Eidukienė presented each graduate a book.'
5. *Abiturient-ai pasirašo baigim-o knyg-oje* SV
 graduates-NOM:PL sign graduation-GEN book-LOC:SG
 'The graduates sign the graduation book.'

A possible explanation for this difference in word order variation could be the superstratum language influence explanation (Thomason & Kaufman, 1988), which would argue that the higher number of SVO structures in the AL texts could be attributed to the influence of English on the Lithuanian spoken in the United States. English is a predominantly SVO language, and such an explanation seems very attractive and quite plausible. However, other alternative word order structures have been preserved in American Lithuanian (see object fronting in Table 2), and some of them have even undergone an increase in numbers compared to their use in Full Lithuanian (see subject focus constructions in written American Lithuanian in Table 2). For example:

Example 4: AL (N)

Mokykl-os simbolin-į rakt-q Paulius Genčius OSV
 school-GEN:SG symbolic-ACC:SG key-ACC:SG Paulius Genčius

ir Kovas Norvilas įteikia devintok-ams.
 and Kovas Norvilas present ninth graders-DAT:PL
 'Paulius Genčius and Kovas Norvilas present the ninth-graders with the symbolic school key.'

In Example (4) the object NP *the symbolic school key* is fronted and is used as part of the topic preceding the subject NP *Paulius Genčius and Povilas Norvilas*. As a result of the retention of object fronting in AL, the superstratum language influence explanation alone is doubtful. The inadequacy of superstratum interfer-

ence has been noted by other studies on language attrition, which also found the retention of word order variation (Dorian, 1981; Eckert, 1988; Weigel, 1999).

On the basis of my data I propose instead a functional explanation for the above-mentioned changes in word order variation, and argue that the primary vehicle for such structural changes is a narrowing of situations of language use, going from a full range of registers in the case of a full language variety to a very limited range of language activities which serve limited functions in the case of a reduced language variety. As a result, the written American Lithuanian text is much more SVO dominant and in this way resembles spoken registers.

SVO in Spoken Full Lithuanian and American Lithuanian

In contrast to the written texts, if we look at the spoken register we can see that there are no major differences in the use of SVO constructions in spoken FL and AL, which comprise 70% of the two-argument constructions in both FL(I) and AL(I) (Table 2). An interesting observation can be made here with respect to register differences in written and spoken registers of Full Lithuanian. The numbers in Table 1 demonstrate that written local news uses a smaller number of SVO constructions as compared to interviews (59% and 70% respectively), and therefore shows a greater overall variation in word order. This fact suggests that greater word order variation is more characteristic of the written register and that word order plays a more important role in information structure in the written register than in the spoken register. This finding is not surprising because spoken registers do not allow for much planning time. As a result, on-line spoken production is more concerned with communicating the message rather than focusing on the overall cohesiveness and connectivity of the text.

However, it is striking that the local news register of American Lithuanian resembles the spoken registers of both AL and FL: 72% SVO constructions in AL(N) compared to 70% in the spoken register in both language varieties (Table 2). These numbers suggest that in the case of AL the features of the written register closely resemble those of the spoken register. The spoken interviews in fact do not rely so much on word order variation as does the written local news because of less planning time involved in on-line production and thus a lesser degree of integration of grammatical material in a spoken text. One could argue then that the similarity between the written and the spoken registers of American Lithuanian is not surprising since American Lithuanian is primarily used as a spoken language. However, use of the spoken style in the written language results in a lack of textual cohesion, which is ordinarily achieved in written FL by means of word order variation.

Referent Accessibility

As a second step in this analysis, I looked at referent accessibility in writing and speaking across both language varieties, AL and FL. I examined object fronting in the form of SOV, OSV, and OVS constructions. Each referent was coded for its

information status using Prince's (1981) taxonomy of Given-New information (the Assumed Familiarity Scale), which assumes that "a text is a set of instructions from a speaker to a hearer on how to construct a particular discourse model," a model which includes "discourse entities" or "discourse referents" (p. 235). Referents were coded as belonging to the following categories:

- 1) Brand New (BN): in which the hearer must create a new entity in their discourse model;
- 2) Textually evoked (TE): in which the entity was evoked based on an earlier mention in the text;
- 3) Situationally evoked (SE): in which the entity is evoked based on situational features such as the identities of the discourse participants;
- 4) Inferrable (I): in which the entity can logically or reasonably be inferred from previously evoked or inferred entities (Prince, pp. 235-236).

For the purposes of my analysis I focus on the information status of the object NP, since for an object NP to appear in a preverbal position as part of the topic in all constructions under analysis (SOV, OSV, and OVS) it must meet these activation conditions: its referent NP has to be Evoked or Inferrable from the previous discourse, but it cannot be Brand New.

The data show that written Full Lithuanian topicalizes only those object NPs which meet the activation conditions stated above. The written news register of Full Lithuanian shows two instances of situationally evoked entities, but they appear only in quotations when the author of the article is quoting someone else. As a rule, these cases contain pronominal NPs which refer to other extratextual discourse participants, such as *we* or *you*. This fact supports the hypothesis that situationally evoked entities are characteristic of the spoken language. Both spoken FL and AL show instances of SE NPs (see Table 3 below):

Table 3: Object NPs in object fronting constructions coded for information status across four registers

Referential status of Object NP	FL (N)	AL (N)	FL (I)	AL (I)
Textually Evoked (TE)	80	39	28	31
Inferrable (I)	46	29	19	22
Situationally Evoked (SE)	2	19	2	2
Total	128	87	49	55

Note: FL(N) = Full Lithuanian written local news; AL(N) = American Lithuanian written news; FL(I) = Full Lithuanian spoken interviews; AL(I) = American Lithuanian spoken interviews. Taken from a 40,000-word corpus.

Interestingly, the written American Lithuanian data show that a high number of fronted object NPs (19 instances) are categorized as Situationally Evoked (SE), which means that the entity refers to the extra-textual context, for example:

Example 5: AL(N)

Skryd-į į Viln-ių (...) laimėjo naujieji Standard Federal bank savinink-ai. OVS
 Flight-ACC:SG to Vilnius won new Standard Federal Bank owners-NOM:PL
 'The new owners of Standard Federal Bank won the flight to Vilnius.'

Example 5 appears in an AL newspaper article describing a banquet in honor of "the Man of the Year," an American Lithuanian doctor, Rimgaudas Nemickas. The banquet was organized by the American Lithuanian community at the Lithuanian Museum of Culture in Chicago. The article reports on the major events within the principal event: the speeches, acknowledgment of the achievements of Nemickas, and introduction of the guests. However, prior to the sentence in Example 5 no lottery or drawing of tickets is mentioned in the article. Thus, there is no frame from which the object NP *Skryd-į į Viln-ių* 'a flight to Vilnius' could be inferrable. As a result, unless the reader was present or had other background information, the NP is Brand New on the familiarity scale.

Even in English translation the problem is apparent. Given the context it would be impossible in a similar news article in English to express Example (5) using a definite NP, *the flight*, as in "*the flight* to Vilnius was won by the new owners of Standard Federal Bank," since neither the flight nor the lottery from which the inference could be made has been mentioned previously in the text and therefore the NP cannot be topicalized. Thus, in such a context the only appropriate English expression would be "The new owners won *a flight* to Vilnius," where *a flight* is part of the focus construction.

As noted before and as shown in Table 3, such situationally evoked entities that occur in the written local news register of American Lithuanian are characteristic of the spoken language. Therefore, the oddities of the written AL text may also be explained as a mismatch between registers, in which the written news register of AL uses features characteristic of a spoken register, such as situational accessibility, which require a great deal of shared context to be interpreted. As a result of the use of such SE NPs in the written text, it is difficult for anyone who is not part of the "group" and does not have the necessary extra-textual information to trace the referent of such SE NPs. Such text becomes incoherent and confusing for an outside reader.

Grammatical Form of Expression

As the last part of the analysis I examined the grammatical form of the second mention of an NP, namely whether the referent is used in pronominal form or a full NP. Previous studies (Biber, Conrad, & Reppen, 1998; Chafe, 1992; Kroch & Hindle, 1982) have noted that registers differ with respect to the use of pronominal versus full NPs. These studies demonstrate that spoken registers rely more heavily on pronominal reference. By contrast, in the written registers, because of the lack of shared knowledge, writers tend to make references as explicit as possible by using full noun phrases as opposed to pronominal NPs.

In this part of the analysis I explore the grammatical form of Textually Evoked

NPs (i.e., the second mention of a referent in the text). The goal of this section is (a) to see whether there are any differences in the grammatical form (full versus pronominal noun phrase) of the second mention NPs across the spoken and written registers in Full Lithuanian, and (b) to examine how these two registers in Full Lithuanian compare to the same registers in American Lithuanian with respect to their use of pronominal versus full noun phrases.

Textually Evoked NPs in Object Fronting Constructions

In object fronting constructions (in the form of SOV and OSV) Textually Evoked (TE) NPs in the position of grammatical subject and object were coded as either full NPs or pronominal NPs. The numerical results for Textually Evoked subject NPs in object fronting constructions are given in Table 4. These results in percentages are represented graphically in Figure 3.

The results show that there are in fact significant differences with respect to the distribution of full versus pronominal NPs in the subject position in written local news and in spoken interviews in Full Lithuanian (75% full NPs in the written news register of FL versus 4% full NPs in the spoken interview register of FL). Clearly, spoken Full Lithuanian relies on pronominalization of second mention referring expressions (96% pronominal NPs), whereas written Full Lithuanian uses more full noun phrases (75% full NPs). Overall, the results are consistent with the observations made in other studies on register variation (cf. Biber, Conrad, & Reppen, 1998).

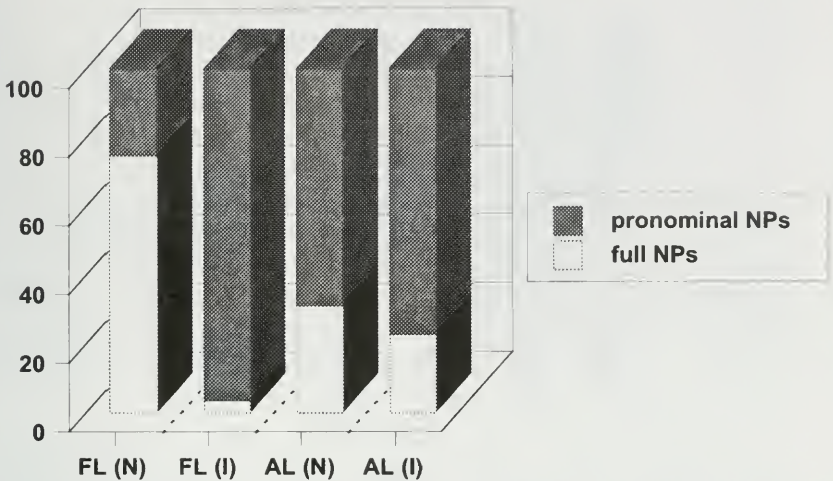
Interestingly, the two registers in the American Lithuanian data do not exhibit the same statistically significant differences in the distributional patterns found in the corpus of Full Lithuanian. In fact, the two registers in AL, spoken interviews and written news, are not significantly different in their use of pronominal versus full NP references. In this regard the two registers seem to be merging into one, more closely resembling the spoken register of Full Lithuanian. Both registers of AL use more pronominal NPs than full NPs (69% in AL[N] and 77% in AL[I]), which resemble the characteristics of the spoken register of Full Lithuanian.

Table 4: Textually evoked subject NPs in object fronting constructions across four registers: Full versus Pronominal NPs

	FL (N)	FL (I)	AL (N)	AL (I)
Full NPs	30 (75%)	1 (4%)	5 (31%)	9 (23%)
Pronominal NPs	10 (25%)	25 (96%)	11 (69%)	30 (77%)
Total	40 (100%)	26 (100%)	16 (100%)	39 (100%)

Note: FL(N) = Full Lithuanian written local news; AL(N) = American Lithuanian written news; FL(I) = Full Lithuanian spoken interviews; AL(I) = American Lithuanian spoken interviews. Taken from a 40,000-word corpus.

Figure 3



Textually Evoked subject NPs in object fronting constructions. FL(N) = Full Lithuanian written local news; FL(I) = Full Lithuanian spoken interviews; AL(N) = American Lithuanian written local news; AL(I) = American Lithuanian spoken interviews. Taken from a 40,000-word corpus.

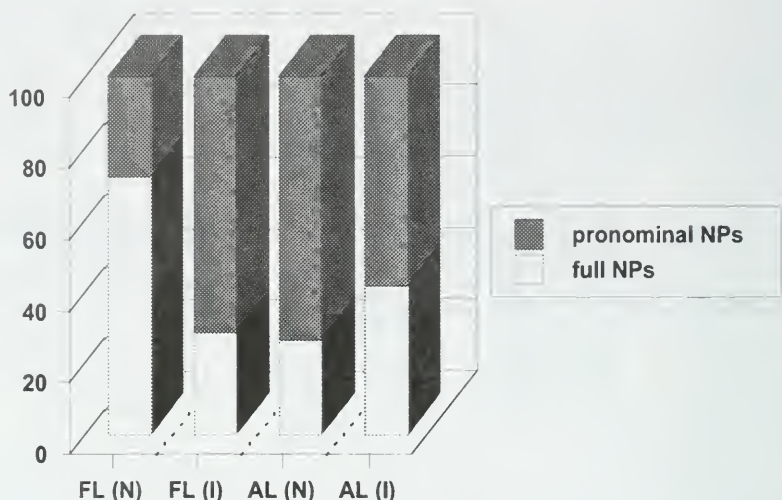
The distribution of the grammatical form (full or pronominal NP) chosen for subject NPs in object fronting constructions is similar to the patterns observed when object NPs were coded for their grammatical form in the same object fronting constructions. The results of the distribution of the grammatical form of object NPs in object fronting constructions are given in Table 5 and percentages are graphically represented in Figure 4:

Table 5: Textually evoked object NPs in object fronting constructions across four registers: Full versus Pronominal NPs

	FL (N)	FL (I)	AL (N)	AL (I)
Full NPs	30 (75%)	1 (4%)	5 (31%)	9 (23%)
Pronominal NPs	10 (25%)	25 (96%)	11 (69%)	30 (77%)
Total	40 (100%)	26 (100%)	16 (100%)	39 (100%)

Note: FL(N) = Full Lithuanian written local news; AL(N) = American Lithuanian written news; FL(I) = Full Lithuanian spoken interviews; AL(I) = American Lithuanian spoken interviews. Taken from a 40,000-word corpus.

Figure 4



Textually Evoked object NPs in object fronting constructions. FL(N) = Full Lithuanian written local news; FL(I) = Full Lithuanian spoken interviews; AL(N) = American Lithuanian written local news; AL(I) = American Lithuanian spoken interviews. Taken from a 40,000-word corpus.

Again, FL shows significant differences between the two registers, spoken and written, whereas spoken and written AL are not significantly different and more closely resemble spoken FL.

CONCLUSION

In conclusion, the data presented here demonstrate that American Lithuanian shows loss of the distributional differences of linguistic features that distinguish different registers. First, written AL does not show the same variation in word order which is characteristic of written Full Lithuanian. In fact, written AL is much more SVO dominant, which is characteristic of the spoken language. Second, written AL uses situationally evoked entities and positions them in the topic position. Such SE entities are characteristic of the spoken language, as demonstrated by data from FL. And finally, there is no significant difference in AL in the use of pronominal and full NPs across speaking and writing. In fact, both written and spoken AL rely more heavily on pronominalization, which is characteristic of spoken registers only. As a result, AL written texts are somewhat lacking in coherence from the perspective of a FL speaker since they do not exhibit the same linguistic features found in FL written texts. Since AL performs a primarily oral function, the features characteristic of spoken registers are transferred into the written language. The analysis presented here suggests that these changes are possibly due to the

shrinkage of situations that the language is used for. The results of the study are consistent with observations made by Dorian (1981), Eckert (1988), Hill (1981), and Maceviciute (2000) which stress the importance of social factors in explaining language attrition.

By applying the idea of language variation and by looking at linguistic form in relation to language use situations, the present paper systematically analyzes what has previously been loosely referred to as *functional deficiency* (Dorian, 1981; Sasse, 1992). Using a discourse model of analysis, this study has gone beyond the sentential level of analysis prevalent in studies of language attrition and has investigated functional deficiency in terms of concrete grammatical features contributing to discourse organization. If used in other studies, the qualitative method of text analysis developed in this study may provide additional insights into the differences in discourse organization of full and attrited languages.

APPENDIX

List of Abbreviations

- NOM = nominative
- GEN = genitive
- ACC = accusative
- DAT = dative
- LOC = locative
- PAST = past tense
- DM = discourse marker
- NEG = negation
- SG = singular
- PL = plural

NOTE

¹I would like to thank Barbara Lohse for her help with the statistical modeling presented in this paper. Significance levels were computed with an S-PLUS function provided by Rand Wilcox which tests the hypothesis that two independent binominals have equal probability of success.

REFERENCES

- Biber, D., Conrad, S., & Reppen, R. (1998). *Corpus linguistics: Investigating language structure and use*. Cambridge: Cambridge University Press.
- Chafe, W. (1980). The deployment of consciousness in the production of a narrative. In W. Chafe (Ed.), *The pear stories: Cognitive, cultural, and linguistic aspects of narrative production* (pp. 9-51). Norwood: Ablex.
- Chafe, W. (1982). Integration and involvement in speaking, writing, and oral literature. In D. Tannen (Ed.), *Spoken and written language: Exploring orality and literacy* (pp. 35-55). Norwood: Ablex.
- Chafe, W. (1992). Information flow in speaking and writing. In P. Downing, S. Lima, & M. Noonan (Eds.), *The linguistics of literacy* (pp. 16-29). Amsterdam: John Benjamins Publishing Company.

- Dorian, N. (1981). *Language death: The life cycle of a Scottish Gaelic dialect*. Philadelphia: University of Pennsylvania Press.
- Dorian, N. (1994). Stylistic variation in a language restricted to private-sphere use. In D. Biber & E. Finegan (Eds.), *Sociolinguistic perspectives on register variation* (pp. 217-232). New York and Oxford: Oxford University Press.
- Eckert, E. (1988). First generation American Czech: A sociolinguistic survey. *Language Problems and Language Planning*, 12(2), 97-109.
- Finegan, E., & Biber, D. (1994). Register and social dialect variation: An integrated approach. In D. Biber & E. Finegan, (Eds.), *Sociolinguistic perspectives on register* (pp. 315-347). New York and Oxford: Oxford University Press.
- Grice, H. P. (1975). Logic and conversation. In P. Cole & J. Morgan (Eds.), *Syntax and Semantics 3: Speech Acts* (pp. 41-58). New York: Academic Press.
- Halliday, M. A. K., & Hasan, R. (1976). *Cohesion in English*. London: Longman.
- Hill, J. (1981). The social functions of relativization in obsolescent and non-obsolescent languages. In N. Dorian (Ed.), *Investigating obsolescence: Studies in language contact and death* (pp. 149-164). Cambridge: Cambridge University Press.
- Kroch, A., & Hindle, D. (1982). *A quantitative study of the syntax of speech and writing*. Final report to the National Institute of Education on Grant No. G78-0169.
- Maceviciute, J. (2000). *The beginnings of language loss: A discourse study of American Lithuanian*. Unpublished doctoral dissertation, University of Southern California, Los Angeles.
- Prince, E. (1981). Toward a taxonomy of given-new information. In P. Cole (Ed.), *Radical pragmatics* (pp. 223-255). New York: Academic Press.
- Sasse, H.J. (1992). Language decay and contact-induced change: Similarities and differences. In M. Brenzinger (Ed.), *Language death: Factual and theoretical explorations with reference to East Africa* (pp.59-80). Berlin-New York: Mouton de Gruyter.
- Thomason, S. G., & Kaufman, T. (1988). *Language contact, creolization, and genetic linguistics*. Berkeley: University of California Press.
- Thompson, S. (1978). Modern English from a typological point of view: Some implications of the function of word order. In *Linguistische Berichte* 54, 19-35.
- Warren, M. (1993). Inexplicitness: A feature of naturalness in conversation. In M. Baker, G. Francis, & E. Tognini-Bonelli (Eds.), *Text and technology: In honor of John Sinclair* (pp. 37-53). Philadelphia, PA: Benjamin Publishing Company.
- Weigel, W. (1999, January). *Breakdown of topicalization in language obsolescence*. Paper presented at the meeting of the Linguistic Society of America, Los Angeles, CA.

Jolanta Aritz holds a Ph.D. in Linguistics from the University of Southern California. Her interests are in the area of language change, language loss, and discourse analysis. She is currently teaching in the Department of Business Communication at the Marshall School of Business at USC.