

FRENCH LIAISON IN NATURAL DISCOURSE

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1. INTRODUCTION

French liaison is one of the more well discussed phenomena in linguistics. It is the peculiar distribution and behavior of liaison which have led to numerous attempts to characterize and account for it in discourse. Traditionally, liaison was accounted for category by category, and even word by word in some cases. Various factors such as historical influence, phonetics, pragmatics, and syntax played a role in predicting the distribution of liaison in this approach (see DeLattre 1947, 1955, 1956, 1966). This typological approach has been abandoned in the past few decades in exchange for proposals consistent with current thought on the prosodic hierarchy and a shift towards more generalized theories. These types of proposals account for liaison in a less holistic way than proposals along the lines of DeLattre, appealing primarily, though not exclusively, to syntax based arguments. Selkirk (1972, 1974) presents a comprehensive proposal of the distribution of liaison based on X-Bar theory, thus rejecting for the most part the notion of the categorically (with respect to grammar) and lexically governed distribution of liaison. However, while the syntactic based account of liaison presented by Selkirk is an attractive proposal in that it is seemingly simple, it fails to accurately account for the distribution of liaison in spoken colloquial French. The traditional approach has a lot more to offer with respect to accounting for the distribution of liaison, in that the traditional approach looks to more than syntax for an explanation, but it too falls short of accurately accounting for the phonological distribution in natural discourse. A major reason why both of these approaches fall short has to do with the very basic assumptions these proposals make with respect to the distribution of liaison.

Essentially, all accounts of liaison begin by making the following two assumptions. First, there are three distinct styles of speech in French — casual, careful, and poetic — and these three styles are marked by their liaison distribution.¹ Liaison distribution falls out from the second assumption, namely that there are three distinct liaison categories — obligatory, prohibited, and optional. Casual speech is marked by a restricted liaison inventory, while careful speech may optionally include more liaison environments, and finally, formal or poetic speech has virtually no restrictions on where a liaison *may* occur. Herein lies the problem.

Since casual and formal speech are marked by *optional* increase in liaison use, it is, in fact, conceivable that what appears to be a restricted casual use of liaison, may in fact, be a case of careful speech where option to liaise is not taken. If this is true, then we must necessarily question the validity of style defined by the distribution of liaison. In turn we must question the status of the various liaison categories, since they rely crucially on style. Furthermore, since these models do rely crucially on the notion of style, we are forced to question the adequacy of these models at the very base level. Without the notion of style playing a key role in characterizing liaison, the optional liaison category becomes more of an escape-hatch for instances of liaison or lack of liaison which the current theory or model is unable to explain. Furthermore, even if we did accept the theoretically weak assumptions that these proposals base themselves on, they still fail to make accurate predictions concerning the distribution of liaison in the corpus of data under investigation in this study.

Our task must be to find a way to flush out the category of *optional* liaison as best we can by finding alternative explanations for the seemingly unpredictable behavior of liaison. In doing so we must look beyond the grammatical component. The immediate goal in this study is to arrive at an observationally adequate account of liaison. This we achieve by an inductive analysis of the distribution of liaison in a corpus of natural discourse. Crucial to this study and others like this is the corpus of natural discourse. It is only by looking at natural discourse that we can begin to see where current proposals fall short and new approaches are in order. An inductive approach here will allow us to capture generalizations in the data that simpler more popular models may miss. It is only by inductively approaching a corpus of natural data that we may begin to understand what role such phonological phenomenon, such as French liaison, play in prosodic phrasing.

¹Some approaches may assume as many as four distinct styles — casual, careful or elevated, formal, and poetic.

Phonologists are often interested in the segmental process that has something to do with prosody. In fact, often times certain phonological processes are viewed as autonomous structures of prosody. That is to say, it is often assumed that segmental processes, such as French liaison, follow from a general structure, rather than act alone as separate pieces to the whole. While it is true that different phonological features will have something to say about phrasing, our approach shows that phonological features are not tools which simply organize content. This study does not assume there to be an underlying shape of discourse which relies exclusively on the grammatical component. The fact that there is sometimes an isomorphism between content and shape, does not lead us to the conclusion that content is the shape. My work indicates that there is sensitivity to linguistic structure, but that the linguistic structure and the phonological features are not in lockstep. Other factors which we will be discussing in this paper must be taken into account in order to explain the behavior of these features. By using natural discourse as a model and by approaching the data inductively, we begin to understand what devices are used in organizing discourse.

2. A BRIEF OVERVIEW OF COMPETING PROPOSALS: SELKIRK VS. DELATTRE

2.1 SELKIRK'S PROPOSAL FOR LIAISON ²

Selkirk's account for the occurrence and distribution of liaison relies crucially on syntax. Her central claim is that a liaison will occur within phonological words and not between them. The domains of these phonological words are determined according to the basic principles of SPE (Chomsky & Halle, 1968). A word is defined by a boundary symbol # which is inserted by rule at the beginning and end of certain syntactic domains. In essence, main lexical categories get boundaries at both the beginning and end, and non-lexical categories only get boundary symbols at the beginning.

"the boundary # is automatically inserted at the beginning and end of every string dominated by a major category, ie, by one of the lexical categories "noun", "verb", "adjective" or by a category such as "sentence" and "noun phrase", "verb phrase" which dominates a lexical category." (taken from SPE (p.366))

According to this account, liaison will occur between two words when there is only one boundary symbol separating them, and a liaison will not occur when there are two boundary symbols separating them. In the example below, liaison occurs between *des* and *enfants*, but not between *enfants* and *anglais*.

(1) ex. ##des#enfants##anglais##

In the case where liaison occurs, *des* is a determiner, and thus a non-lexical category. It only gets a boundary marker at the beginning of it. *Enfants*, on the other hand, is a lexical category, so it is flanked by boundary symbols. Therefore, there is one boundary symbol, namely that of *enfants*, which separates *des* and *enfants*. Hence, liaison is licensed between the two words. Between *enfants* and *anglais*, there are two boundary symbols because both words are lexical. Therefore, a liaison is blocked in this case. It is not to say, however, that a liaison between *enfants* and *anglais* can never occur. This is not the only boundary configuration that this string of words can assume. That is to say, while a liaison does not occur between *enfants* and *anglais* in style I (casual speech), it may occur in style II (formal speech) and style III (poetic speech) by applying a "readjustment rule".

The notion of readjustment rules allows Selkirk to account for liaisons which occur across two word boundaries. The purpose of a readjustment rule is to manipulate the word boundaries, reducing ## to # in certain contexts (contexts being defined as Style I, II or III), thus licensing liaison. Readjustment rules, as shown in example 2, allow her to explain deviant liaison behavior by putting the weight of the explanation on style.

(2) Style I: ##des#enfants##anglais## --->des enfants ll anglais
 Style II: ##des#enfants##anglais## ---> (readjustment rule applies)
 ##des#enfants#anglais##-->des enfants^anglais

Crucial to the notion of the readjustment rule in light of the behavior of liaison is the optional status liaison hold in the readjusted environments. That is to say, a readjustment rule does not *necessitate* a liaison in the readjusted

²For a more detailed account of Selkirk's proposal see Selkirk (1972, 1974), Morin & Kaye (1982), Carleton (1992b)

contexts, it *permits* a liaison. As we have pointed out, it is precisely this dependence on style and optionality for prosodic explanation that this study questions.

2.2 DELATTRE'S TYPOLOGY

Delattre (1947) presented the general tendencies and classification of the french liaison. Like the other proposals, he assumes the distribution of liaison to be predictable based on speaker style. His account differs slightly from other accounts in that he proposes *four* distinct styles. 1) familiar conversation, 2) elevated conversation, 3) formal, and 4) verse or poetic. Based on these assumptions he makes predictions with respect to the distribution of liaison in the following sentence: *Des hommes illustres ont attendu*, 'the illustrious men have waited'. Conversational french would only have a liaison between the article and the noun³ — Des^hommes || illustres || ont || attendu. Elevated conversation could additionally have a liaison between the auxiliary and the participle — Des^hommes || illustres || ont^attendu. Formal speech could add a liaison between the noun and the adjective — Des^hommes^illustres || ont^attendu. Finally, poetic speech could liaise at every possible chance — Des^hommes^illustres^ont^attendu.

Like Selkirk's proposal, all but the first liaison in the example is optional in all styles except conversational style. Unlike Selkirk's proposal, however, DeLattre takes many factors other than syntactic relationships into account in describing liaison tendencies. As he explains, "la fréquence avec laquelle se fait telle liaison facultative semble dépendre de nombre facteurs." (p.44, 1955). 'The frequency of the optional liaison seems to depend on a number of factors.' He states five factors which influence the occurrence of liaison.

The first factor is stylistic, which was described above. The second factor he considers is syntax. He considers syntactic sequences and rates them from 1 to 10, where 10 is the most frequent and 1 is the least. These sequences include determiner^noun, adjective^noun, personal pronoun^verb, etc. This sequential approach is the basic approach that my study has taken in initially classifying liaison distribution. Third, he defines the prosodic factor. Under this, he includes the length of the elements to be liaised, the intonation of the phrase, and focus.⁴ The fourth factor influencing the distribution and frequency of liaison is the phonetic factor. For example, he states that liaisons are most likely to occur after a vowel than after a consonant, and furthermore, liaison is easier to make after one consonant than after two. The fifth and final factor effecting the frequency of liaison is a historic factor. For example, an historic influence might be the aspirated 'h'. An 'h' which was aspirated historically will not liaise.

While DeLattre's analysis of the distribution of liaison is not entirely consistent with what the corpus under investigation reveals, the spirit behind his analysis is consistent with the spirit behind this one. That is to say, he clearly understood the complexity of the distribution of liaison, and clearly saw that several forces combined to account for the behavior of liaison. Morin and Kaye (1982), in response to Selkirk, call for a more traditional approach to accounting for liaison, and by that they meant something more along the lines of DeLattre's proposal.

3. THE STUDY

3.1 METHODOLOGY

This study is based on a tape recorded conversation between three French women and one American woman who speaks fluent french (the American woman's data were disregarded in this study.). The data were collected in 1983 at the University of Minnesota by Betsy Barnes, and came to me through Knut Lambrecht at the University of Texas, Austin. I received the orthographic transcripts of the conversation along with the tapes. The conversation I analyzed is part of a bigger corpus collected over several casual meetings between the four women and Betsy Barnes in her living room while enjoying lunch. Time and space prohibit me from discussing the entire corpus under investigation here. What I present in this working paper, is a slice of the corpus I have already analyzed (see Carleton, 1992b for more in depth discussion of the corpus).

³ " || " indicates that no liaison occurs between two constituents (ex. hommes || illustres), and

" ^ " indicates there is a liaison relationship between two given constituents (ex. des^hommes).

⁴ It is not within the scope of this study to show exactly where DeLattre's account does not fit my corpus; however, it is the fact that what he proposes here is inconsistent with what my data show. This thread can be picked up and illustrated in the next step of this study. The purpose would be to show with evidence the shortcomings of his analysis. Like Selkirk, my aim is not to completely discredit his word, but rather to use it as a spring board for further research into the nature of liaison.

I recorded each and every occurrence and non-occurrence of liaison in the corpus. A non-occurrence is defined as every phonological environment in which liaison could have taken place and didn't. Initial categorization of these tokens concentrated on syntactic sequences rather than syntactic domains.⁵ Any cases in which it was difficult to ascertain whether or not a liaison occurred was thrown out, regardless of how "predictable" liaison was in the particular context. Most of the tokens I threw out were discarded because either the speaker was laughing, eating, or talking at the same time as someone else, and I couldn't hear it. Liaison omission as a result of fast speech was not discarded.

All of the occurrences and non-occurrences of liaison are divided into three major categories— 1) Always, 2) Never, and 3) Contingent. The contingent category basically replaces the optional category put forth in previous accounts. The label *Contingent* was selected for mnemonic purposes reminding us that the cases that fall into this category can be explained *contingent* on factors beyond syntax. The factors under consideration include simple grammatical/lexical factors, phonetic factors, phonological factors, historical factors, prosodic factors, pragmatic factors, and individual speaker variation. The fact that liaison occurrences can be explained by looking at these additional factors allows us to divide the Contingent category into three sub-categories ALWAYS, NEVER, UNCLASSIFIED. The primary basis for categorization into the three major categories is syntactic sequencing, while the basis of categorization for the contingent sub-categories may be any one of the additional factors mentioned above. Sub-categories ALWAYS and NEVER refer to the cases where a liaison will always or never occur contingent on some factor/s beyond syntactic sequencing. At this stage of the study, UNCLASSIFIED remains an escape-hatch of sorts for tokens I am still unable to explain, due mostly to lack of data. With respect to this study, nothing was considered a performance error.

In the next section of this paper, I will discuss in detail the distribution of liaison in the context of the impersonal *c'est*. Liaison between *c'est* and a following constituent is *contingent* in French. I discuss these contingent cases and show how these cases can be generalized and accounted for by considering the effects of factors beyond word boundaries and syntactic domains. Previous accounts have placed *c'est* in the optional category because it has not been possible to predict its distribution within the parameters of the models proposed. Because of the approach taken in this paper, "prediction" of liaison behavior is not a goal; rather, the concern in this paper focuses on "explanation". We are specifically interested in explaining this corpus of data. I will show that for the most part, what has been considered by many to be a problematic glitch in liaison literature is not so difficult to explain, if we are willing to complicate our account a bit by considering factors beyond the grammatical component which are relevant and important in characterizing the behavior of this phonological phenomenon.

3.2 THE ANALYSIS OF IMPERSONAL C'EST

The impersonal *c'est* corresponds very roughly to "that's..." or "that is..." , where the impersonal *ce* contracts with the copula *être* and is followed by prepositional phrases, adjective phrases, or noun phrases. On a strictly sequential level, *c'est* participates in the following configurations:

- 1) C'est + preposition
- 2) C'est + interrogative
- 3) C'est + det + X
- 4) C'est + noun
- 5) C'est + adjective
- 6) C'est + adverb
- 7) C'est + conjunction

In the corpus under investigation, there are 32 cases in which a liaison occurs between *c'est* and the following constituent, and there are 25 cases in which liaison does not occur. While Selkirk's proposal would licence liaison between *c'est* and a following constituent, her proposal falls short of being able to predict which of the 57 cases would liaise and which would not. She acknowledges its unpredictable behavior by delegating *c'est* to the optional category. In this way, she escapes having to offer an explanation for something her model clearly cannot explain.

⁵Initial organization based on syntactic sequencing was done for simplicity's sake. With the amount of data under investigation, it was simply easier to break it up into syntactic sequences. I make no claim at this point in the study regarding the specific role syntax plays in prosodic structuring. As the study matures, we will be better able to ascertain where syntax fits in, if at all.

These cases *can* be explained, however, by looking beyond the model. The table below categorizes the fifty-seven tokens of *c'est* in liaison environments. Consider the table below.

Table 1. NON-LIAISON AND LIAISON ENVIRONMENTS WITH IMPERSONAL *C'EST* :
ORGANIZED SEQUENTIALLY CATEGORY BY CATEGORY

<u>C'EST + PP</u> C'est // a toi C'est // en rafia C'est // en fin de compte C'est // apres justement C'est // en Farenheit	<u>C'EST + PP</u>
<u>C'EST + INTERROGATIVE</u> C'est // ou?	<u>C'EST + INTERROGATIVE</u>
<u>C'EST + NP</u> C'est // un^apartement C'est // un ^autre boulet C'est // un, un tres beau, ..parterre C'est // un TOAST	<u>C'EST + NP</u> C'est^un beau cadeau "that's a beautiful present" C'est^un gaspillage C'est^un chose C'est^un fruit C'est^une piece C'est^un musicien C'est^un sorte de soupe
<u>C'EST+ NOUN W/O ARTICLE</u> C'est // Uptown C'est // "ee" C'est // "e" C'est // autre chose	<u>C'EST + NOUN W/O ARTICLE</u> C'est^elle "that's her"
<u>C'EST + ADJECTIVE</u> C'est // incroyable "That's unbelievable" C'est // horrible C'est // horrible C'est // horrible C'est // agreable C'est // extrodinaire	<u>C'EST + ADJECTIVE</u> C'est^affreux C'est^enorme C'est^incroyable C'est^imbecil Il est^enorme Il est^evident C'est^interessant C'est^excellent C'est^international

<u>C'EST + ADVERB</u> C'est encore autre chose C'est enfin tu.. C'est assez cher "that's expensive enough" C'est un peu comme lutherens C'est un petite peu different C'est un peu comme Jean Marc "that's a little like Jean Marc"	<u>C'EST + ADVERB</u> C'est^effectivement bon a jeter C'est^effectivement un'autre "that's effectively another" C'est^assez connue "that's well known enough"
<u>C'EST + CONJUNCTION</u> C'est aussi un peu Francais "that's also sort of French"	<u>C'EST + CONJUNCTION</u> C'est^aussi la vie "that's also life"

What is most noticeable about the above set of data is that there are no cases in which a liaison *always* occurs in a given sequence. There are, however, certain sequences in which a liaison will *never* occur — namely, when *c'est* is conjoined with a preposition, or an interrogative. Therefore, we can predictably account for six of the fifty-seven tokens by referring to the syntactic sequencing at the grammatical category level.

Sequencing at this level will not, however, explain the behavior of liaison in the remaining fifty-one tokens. These are the cases where *c'est* is conjoined with determiners, nouns, adjectives, adverbs, and conjunctions. We begin our account by addressing *c'est* + determiner. Consider the table below.

TABLE 2. C'EST + DETERMINER + X

C'est un^apartement C'est un ^autre boulet C'est un, un tres beau, ..parterre C'est un TOAST	C'est^un beau cadeau C'est^un gaspillage C'est^un chose C'est^un fruit C'est^une piece C'est^un musicien C'est^un sorte de soupe
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There are two things which determine whether or not liaison will surface in the above environment. The first is the initial segment of the noun, and the second is the status of the noun in the French language. Notice in Table 2 that liaison does not occur when the noun is vowel initial. All of the cases in which liaison occurs in this environment are cases in which the noun is consonant initial. One speculative explanation may be that sequences of liaisons are avoided in casual speech ⁶. This is a simple explanation based on a pattern which could be generalized from looking at the data inductively. ⁷ This explanation is not a valid one in the simpler more elegant models where such patterns and generalizations are not recognized. In those models impersonal *c'est* must necessarily be placed in the optional category along with the other cases in which no "predictability" is possible. We can begin to see how such models do not stand a great of a chance of shedding much light on the real nature of these phonological phenomenon.

The other case in which liaison does not occur in the *c'est* + determiner environment is where the noun is a loan word. Loan words appear to have a different status in French. It is consistent with the rest of the data (ie., the larger corpus) that liaison behavior with loan words is distinct from liaison behavior of French words. In fact, there is no case in which a loan word liaises with anything. While it is the determiner which is in liaison relationship with the *c'est* constituent, it is possible, again speculative, that the loan word is indirectly effecting liaison relationship. We

⁶This is one of the things that we want to test with native speakers. How are multiple liaison sequences perceived? Are they natural or marked in casual conversation? If they are marked, what do they mark, and when would they be likely to occur?

⁷ By "generalize", I mean to simply make a statement about the data under investigation. Due to the size of the corpus, qualitative generalizations are not specific goals of this study.

have only one token of this type, so more than a speculative account is irresponsible. What is important here is not that we arrive at the exact reason for the lack of liaison, but rather that we arrive at a reason. That is to say, we can clearly show that the distribution of liaison in the *c'est* + noun phrase context *can*, in fact, be explained contingent on factors beyond syntactic domains. In this case, the factors include phonological conditions influenced possibly by stylistic considerations and lexical status. Table 3 shows liaison behavior with *c'est* + noun without an article. Here we use different criteria in explaining the distribution.

TABLE 3. C'EST + NOUN (W/O ARTICLE)

C'est Uptown C'est "ee" (fem. past participle morpheme) C'est "e" (masc. past participle morpheme) C'est autre chose	C'est^elle
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In case there is no article associated with the noun following *c'est*, liaison may or may not occur between *c'est* and the noun in question. As we discussed above, loan words don't liaise. So, in the case of the loan word "Uptown", no liaison takes place between *c'est* and Uptown. Secondly, a liaison will not occur between *c'est* and a so called open class of nouns which surface without an article. This is shown by the examples with "ee" and "e".⁸ The generalization that can be made here is that if the lack of article is optional, as it is in the cases of "ee", "e" and "autre chose", then liaison does not occur⁹. It must be emphasized that the generalizations that are made here are in no way definitive. The opposite is true. With more data, it may very well be that these generalizations won't hold at all. Crucial here is that a generalization, however spurious, is observed.

The final generalization that can be made with respect to this set of data is that a liaison will occur in cases where the noun is a pronoun which cannot take an article. Now let us consider what happens when *c'est* comes together with a preposition. See table 4 below.

TABLE 4. C'EST + PREPOSITION

C'est a toi C'est en rafia C'est en fin de compte C'est apres justement C'est en Farenheit	
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Like loan words, prepositions behave consistently throughout the corpus. That is to say, prepositions do not liaise with anything directly to their left, which in this case includes the impersonal *c'est*¹⁰. In fact, if we look back at table (1) we will find that the other examples of cases in which *c'est* never liaises with either a certain category or word are all cases which behave consistently throughout the corpus. That is to say, interrogatives never liaise, and *un peu*, funnily enough, never liaises. These factors appear to be more language specific rather than case specific. Hence, these factors which explain the distribution of liaison in the context of *c'est*+ preposition are more generalized than the factors involved with the other syntactic sequences in the context of *c'est*. This is primarily because the syntactic sequence itself explains the occurrence of liaison in cases like *c'est* + preposition, or interrogative, where as factors *beyond* the syntactic sequence explain the occurrence of liaison in the cases involving noun phrases, nouns, etc..

Now let us consider a new set of data, namely tokens of *c'est* + adjective. Study Table 5 below.

⁸"ee" and "e" are orthographic representations of the past participle morphemes. Both are pronounced /e/. The speaker is a French teacher who was describing the difficulty her students had with these morphemes. "That's "ee" and that's "e" ? "

⁹Actually, in the case of 'autre chose', I am not sure whether or not that is idiomatic. This needs to be checked out with a native speaker. If it is the case, then a different generalization needs to be made. Really, the crucial point is that we can make generalizations on some level, and thus account for in some crude fashion the distribution of these cases of liaison.

¹⁰The exception to this is 'a', which is discussed in the longer version of this paper (Carleton, 1992).

Table 5. C'EST + ADJECTIVE

C'est incroyable	C'est^affreux
C'est horrible	C'est^enorme
C'est horrible	C'est^incroyable
C'est horrible	C'est^imbecil
C'est agreable	Il est^enorme
C'est extrodinaire	Il est^evident
	C'est^interessant
	C'est^excellent
	C'est^international

C'est + Adjective poses an interesting twist to our story so far. There is no clear cut distinction between those cases in which we get liaison and those cases in which we do not. One generalization that can be made is that no liaisons occur with "h" initial adjectives. They may be due to hypercorrection of the aspirated "h" liaison prohibition, an historical influence on French phonology. This, however, does not explain why the other three cases show up without a liaison — namely, *c'est* + *extrodinaire*, *incroyable* and *agreable*.

One generalization that can be made about the above cases is that all of the tokens in which no liaison occurs between the *c'est* and the adjective are spoken by the same speaker. It is also the case that all but one of the cases in which there *is* a liaison between *c'est* and the adjective are spoken by the other two speakers. In fact the generalization can be supported further by the fact that the exception to liaison occurrence in other contexts can consistently be traced to this same speaker. In general, her speech is very fast and not well articulated. She tends to reduce her words and mutter. It seems to be true that faster speech is more likely to drop a liaison than slower speech. In this case, we must attribute the lack of liaison to individual speaker style. Therefore, we will assume that the *unmarked* case liaises *c'est* with an adjective. Individual speaker style can then override the positive liaison status that this context projects.

Now let us turn to the context of *c'est* + adverbials. Consider table 6.

TABLE 6. C'EST + ADVERB

C'est encore autre chose	C'est^effectivement bon a jeter
C'est enfin tu..	C'est^effectivement un'autre
C'est assez cher	C'est^assez connue
C'est un peu comme lutherens	
C'est un peu comme Jean Marc	
C'est un petite peu different	

The first generalization that can be made with respect to liaison status between *c'est* and adverbs is that lexical adverbs always liaise in this context. With respect to non-lexical adverbs, or closed class adverbs, it is the case that with the exception of *assez* closed class adverbs never liaise with *c'est*. In fact, a further generalization can be made about closed class adverbs, namely that there is a set of closed class adverbs which never liaise in any context. Like prepositions, they are language specific, not context specific factors. These adverbs include all temporal adverbs, like *ici*, *aujourd'hui*, *hier*, etc.. In addition, this set includes *encore*, and as mentioned previously, *un peu*.

Assez poses an interesting case because we must consider influencing factors which are much more deeply embedded. Consistent with liaison exception between *c'est* and adjectives, the same speaker who didn't liaise with adjectives, does not liaise here with *assez*. *Assez* has rather complicated behavior, and time did not permit a full investigation into its distribution. However, for the purpose of the analysis of the distribution of liaison in the *c'est* environment, we can speculatively attribute the liaised and non-liaised *assez* to both individual speaker variation, and pragmatics.

In the case where we have no liaison between *c'est* and *assez*, the speaker is reporting something about the price of apartments in Minneapolis. Everyone is comparing rents and she is contributing to the general conversation. She has the floor, but she does not appear really invested in the subject. The topic is impersonal. In the case where liaison does occur between *c'est* and *assez*, the speaker is drawing focus upon the fact that a cooking school that she went to was well known, and that, therefore, qualifies her as a good cooking teacher. In this case, she most definitely holds the floor, and plans to hold the floor for a lot longer, since the information about her cooking school is simply lead-in information to what she wants to talk about, which is her cooking.

The case of *assez* is a nice one because it really points out the complexity of the variables involved in whether or not a liaison occurs. The example I have in my data is not enough to draw any conclusions with respect to *assez*, however, it is enough to show that any theory which ignores pragmatic interpretation and speaker variation will fail to capture many generalizations or patterns in the distribution of these liaisons. These theories, will, in fact, have no alternative but to classify these cases as optional and unpredictable. As it is, there are so many variables involved that it will take careful investigation of a much larger corpus to tease out exactly which variables are the crucial ones, and where they stand in relation to one another with respect to this context.

Let us now finally turn to the last two sequences under investigation here, namely *c'est* + conjunction, and *c'est* + interrogative. Consider Table 7.

Table 7. C'EST + CONJUNCTION

C'est il aussi un peu Français	C'est^aussi la vie
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This case is a bit similar to the *assez* case. Again, it is the same speaker who never liaises who doesn't liaise here. In addition, it is the same speaker who liaises most frequently who liaises in this case. It is clear from the rest of the corpus however, that it is the marked case to liaise in this context. It is hard to say in this case whether or not the lack of liaison here is due to speaker variation. There is just too little data. Speaker variation is, after all, the last resort taken for explaining liaison distribution. The best we can do in this case is choose one of the variables and categorize it.

Table 8. C'EST + INTERROGATIVE

C'est il ou?	
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Interrogatives behave the same way as prepositions. The only thing to note in this case is that the prohibition against liaising with an interrogative has always been considered from the right end only. That is to say, descriptions have traditionally noted that interrogative + X does not liaise, not that X + interrogative does not liaise. Given the data above, which gives us a case of X + interrogative, it is clear that liaison does not occur on either side of the interrogative.

This concludes our discussion of the impersonal *c'est*. What I hoped to show by discussing this was that the "optional" category is not "optional" at all, but is better described by the term "contingent". In being contingent, those contexts which fall into this category are influenced by factors beyond syntax and word boundaries. They are no less explainable than other liaison contexts; they simply depend upon more factors. As we saw, some of the contexts were easily explained based on categorical or lexical sequencing. Others were dependent on more context specific factors like phonological conditioning, as we saw with vowel initial and consonant initial nouns, or on lexical status of the word in French, as we saw with loan words. Still other factors which influence the distribution of liaison include individual speaker variation, and pragmatics. Certain factors like speaker variation, pragmatics, and phonetic effects like speech rate and reduction can override liaison status in the contingent category (ex. speaker variation overrides positive liaison status of *c'est* + adjective). These factors are much less generalized than factors like lexical status, phonological factors, and historical factors, which are in turn less generalized than syntactic sequencing. What is important here is 1) there seem to be distinct levels of prominence concerning factors which influence liaison activity, some being much easier to define than others, 2) the factors involved cover a wide range of linguistic considerations and, 3) it is the presence or absence of these factors which help us arrive at a plausible explanation with respect to the distribution of liaison.

5. CONCLUSION

Having looked at the impersonal *c'est* in detail, and having done the preliminary work of developing an accurate typology and description of the distribution of liaison in natural discourse, I think we can clearly see that models which attempt to account for the distribution of liaison in a simple and more elegant manner will most definitely miss crucial generalizations, and thus, be unable to account for what is really happening. I have shown that we can account for liaison much more adequately by taking an inductive approach. As this study continues, one very important step will be to look more systematically at how all of the various factors apply to each and every token. In addition, a larger corpus will help us to see a great deal more about the nature of liaison.

Natural discourse is messy. It is only by looking at natural discourse that we can clearly see where the flaws of the simpler theoretical models are. A clear and accurate description of the facts at hand gives us the real and complete picture of what we have to account for. This study simply shows where some of the flaws in previous studies surface when put to the test of having to account for natural discourse. In order to continue to make progress in this area, it is clear that we must challenge all current theories to stand up to the rigor of language in use. This study and studies like this are a challenge to both current prosodic theories, and formal linguistic theories in general.

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