Register and prosodic variation, a cross language comparison

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Abstract

It is widely recognized that prosody serves as a cue for information content and for mutual agreement (or lack thereof) among dialogue participants. It is also true that different social situations require dissimilar prosodic strategies. The present paper will address the problem of prosodic prominence and contours on negatives in various interactive and noninteractive registers of Continental French, and will compare the results with those from American English negatives in similar situational contexts. Negatives were studied because they provide vital information—which should be emphasized prosodically to maximize comprehension—yet their presentation can be critical to amicable interaction, and under certain social conditions should be de-emphasized to minimize possible sources of discord. Consequently, analysis of prosody on negatives permits us to juxtapose theories of how language is produced and how it is interpreted. The study will provide evidence of three different loci of prosodic variation: language, culture, and social situation, concluding that each of the three variables influences prosodic realization. © 2002 Elsevier Science B.V. All rights reserved.

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1. Introduction

"Prosody offers important linguistic and paralinguistic resources for highlighting different aspects of dialogue structure. Speakers use prosody to signal a gamut of communicatively relevant information in order to secure successful interaction with their conversational partners" (Swerts and Hirschberg, 1997). Among other things,

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it is widely recognized that prosodic variation serves as a cue for information status and for mutual agreement (or lack thereof) among dialogue participants. It is less generally recognized, but of central concern here, that different social situations permit (or even require) dissimilar prosodic strategies.

The study to be presented here provides evidence for three loci of prosodic variation.

- Language: within a given language, syntactic position influences the likelihood of prosodic prominence (Ladd, 1996). Such rhythmic prominence will not be of great concern here. The importance of a given word to the significance of the turn at talk—or 'focus'—is also known to influence prosodic prominence and will be discussed in greater detail.
- Social situation: within a given linguistic community, prosody varies radically with the social situation (or 'register', as defined in Biber, 1988). This paper will isolate specific sources of variation in the situation which influence prosodic prominence.
- Culture: in different linguistic communities, prosodic prominence is manipulated differently even in apparently similar social situations. Some of these differences are purely linguistic, while others appear to be culturally variable. This study will present evidence that the latter source of variation should not be ignored.

This study was initiated to determine the degree to which negatives are emphasized prosodically in different registers of Continental French and demonstrate if the results are influenced by each of the above factors. Comparison with similar English results (Yaeger-Dror, 1985, 1996a,b) permits a cross-cultural contrast, which will clarify that the evidence documented for English reflects a cross-linguistic pattern with culture-specific components. The study's analysis of negatives in English and French provides quantitative evidence that linguistic, situational, and cultural factors must all be incorporated as variables for any analysis of negation strategies.

2. Review of the relevant literature

2.1. Language and prosodic salience

Syntactic position within a sentence influences rhythmic prosodic options. Syntax is also used to foreground important information (Cutler et al., 1997, and relevant articles cited there; Fowler, 1988; Fowler and Housum, 1987; Kadmon, 2001; Koopmans-Van Beinum, 1992; Ladd, 1996). Foregrounded semantic information is often referred to as 'focal prominence'. Bolinger (1978) proposed that prosodically emphasizing such information is a cross-linguistic universal. The assumed motivation for such prosodic salience will be referred to here as the 'Cognitive Prominence Principle'. Focal prominence maximizes the ability of conversational partners to focus attention on information which is critical to mutual understanding.

2.1.1. Cutler's Cognitive Prominence Corollary

Considering both production and perception studies, Cutler et al. (1997) conclude that "speakers seldom de-accent (critical) information, and if they do, this hinders listeners". Thus, they show that while a prominent syntactic position can be neutralized by the overriding significance of other words in the environment, focally informative words are unlikely to be reduced because of their syntactic position. That is, words that carry critical information will be prosodically prominent even if syntactic position would tend to reduce them.

Cutler et al.'s conclusion will be referred to as the 'Cognitive Prominence Corollary'. This corollary entails that a prosodically nonprominent token of a highly significant word is quite unlikely. It is an exceptional—one might even say 'marked'—lack of prosodic prominence on a critically significant word which would have to be accounted for. Note that studies which support the corollary claim have been carried out on both English (cf., Cutler et al., 1997 and references therein) and French corpora (Benguerel, 1970; Dahan and Bernard, 1997). A large segment of this paper is devoted to analysis of ways in which negatives are either prosodically prominent (supporting the claim) or not (possibly refuting the claim).

2.1.2. Three prosodic parameters of prominence

There are three primary parameters for prosodic prominence: fundamental frequency (F_0), amplitude (loudness), and duration. In the analysis of both American English and French vernaculars, one parameter will vary more systematically than the others. In the Standard English data analyzed to date, F_0 prominence, amplitude prominence, and vowel-durational increments all appear to be used in tandem, and variation in one parameter has been taken to symbolize variation in prosodic prominence (Syrdal et al., 2001). However, in both English and Continental French, variation in fundamental frequency appears to be the primary realization of focal prominence, while amplitude and durational prominence are used primarily for other purposes (Cutler et al., 1997; Dahan and Bernard, 1997; Klatt, 1976). For speakers of Standard American English, amplitude generally appears to co-vary with fundamental frequency, while duration appears to be correlated with both sentential position and focal prominence.

Both amplitude and duration are also influenced by intrinsic characteristics of the phonetic realization of the words under analysis. Although some interesting studies have shown amplitude increments to be correlated with emphasis (Goldberg, 1978; Kreiman, 1982), all researchers agree that amplitude is not the primary correlate of focus in any language studied to date.

Many studies have analyzed variation in vowel duration, and have found that so many factors influence duration that its inclusion in a study of conversational speech is foredoomed,[1] so while duration was coded, it has not been a useful measure.

In both American English and Continental French it is also possible to manipulate focus by altering syntactic position. Fortunately for this particular study, in both English and French, the most common form of the negative—*not* for English, and *pas* for French—generally occurs in immediate proximity to the verb and is not readily manipulable in this way. This study is limited to the analysis of prosodic

realization on the most common negative in declarative sentences; tokens which were not in the canonical position, were not tabulated.[2] The evidence will show that the primary correlate for prosodic focal prominence on negation in both English and French will be fundamental frequency; the evidence for prominence is coded from pitchtracks with other possible variables and analyzed for this study.

2.2. Social situation and prosodic salience

Even within one dialect, vowel positions, consonant realizations, and even intonational contours vary with speech situation, and the variation is considered one of **style** (Eckert and Rickford, 2001). Within sociolinguistics, given that style as a term has been used in a narrower sense, as noted above, speech variation related to social situation can be referred to as variation in **register** (Biber, 1988; Eckert and Rickford, 2001), and that term will be used here.

Biber (1988) utilized multivariate statistical analysis routines to isolate five register continua, which he refers to as "register dimensions". The dimension with the greatest influence on variation in the English data he studied—Dimension 1—varies from a pole which Biber terms language-regulated (or informational) to one he terms interaction-regulated (or involved), In this paper, these poles will be termed 'informative' and 'interactive', respectively.

Table 1 presents the list of linguistic features from which this informative-interactive dimension 1 is postulated. Note that *not*-contraction is favored very strongly at the interactive end of the continuum. The importance of this register dimension for prosodic variation in negatives will also be documented, and the reasons for its importance will be discussed below.

Many studies have now shown the importance of register variables on morphological choices (Biber, 1988; Jefferson, this issue; Mori, 1999; Takano, 1997; Tanaka, 2000) and on phonology (Bell, 1984, 2001; Yaeger-Dror, 1993, 2001). On the other hand, register has previously been shown to influence intonation contours only for

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[1] Those universal factors include: the intrinsic duration of the vowel (with /a/ being long, Lehiste, 1970), the number of syllables in the word (with a single-syllable word like /pa/ permitting the longest vowels, Lehiste, 1970), the word's position in the sentence (Grosjean and Hirt, 1996; Kloker, 1976; Schafer et al., 1996) and in the turn-at-talk (Bard et al., 1989), the disfluencies which become more frequent as the register becomes more interactive (Bard et al., 1991; Blaauw, 1995; Shriberg and Stolcke, 1996), the relative speed of delivery of the segment, which is influenced by several factors, including, among others, the speaker's own general speech rate, the speaker's feelings about what s/he is saying, or the speaker's sense of needing to speed up in order to finish, or slow down in order to prevent the other speaker from taking over the floor (Schegloff, 1982). Cross-linguistically, duration is found to be central to the production of syntactic/rhythmic patterns according to Selkirk (1984); Yaeger (1979) found that in Canadian French durational variation is highly correlated with sentential position as well as with vowel phonology (Cedergren and Perreault, 1992; Yaeger, 1979). All these factors may reduce the availability of duration as a simple tool for decoding focus in actual interactive speech. Thus it is not surprising that Mertens (1987) and Dahan and Bernard (1997) found pitch to be the primary correlate of focal stress in Continental French as it is in English.

[2] While this did not limit the French corpus significantly, it did eliminate much of the speech for certain idiosyncratic speakers of English (like the Bushes).

quite stylized registers of English such as story-telling, sports reporting, and political or religious speeches, or direction-giving in a narrowly defined 'game' setting (see, for example, Blaauw, 1995; Hirschberg, 2000; Hirschberg and Nakatani, 1996; Grosz and Sidner, 1986; Levin et al., 1982; Liberman, 1992; Nevalainen, 1992). However, recent studies have begun to look at less stylized interactive situations (Bunnel and Idsardi, 1996; Chu-Carroll and Green, 1998; COLING-ACL, 1998; IEEE, 1997; Sagisaka et al., 1997). The present study will focus on variation in prosodic strategies in specific registers of French and English for which we have (relatively) parallel corpora.

2.3. Focal prominence and negation

When looking specifically at negatives as carriers of critical information, both theoretical (Horn, 2001; Kadmon, 2001) and experimental researchers (Hirschberg, 1990, 1993) have shown that negatives carry just the sorts of information which 'focal prominence' is intended to highlight, and studies of both English *not* tokens (Hirschberg, 1990) and French *pas* tokens (Morel, 1995) have found negatives to be consistently pitch-prominent in read speech, as would be projected from the Cognitive Prominence Principle.

On the other hand, conversation analysts have shown that 'preference for agreement' characterizes the conversations they analyzed (Sacks, 1992; Schegloff et al., 1977). These researchers have shown that, in polite interactions, agreement among conversational co-participants (Jefferson, 1975; Holtgraves, 1997; Tottie, 1991) is generally related to social support of conversational co-participants' 'face' (Brown and Levinson, 1978; Goffman, 1971; Hayashi, 1996; Pomerantz, 1984; Yaeger-Dror, 1985). Consequently, agreement often takes precedence over informative clarity. The principle underlying these claims will be referred to as the Social Agreement

Table 1
Linguistic features which enter Dimension 1 (adapted from Biber, 1988)

Features favored	In interactive registers	In informative registers
	Private verbs	Type/token ratio
	That omission	*That* retention
	Contraction	noncontraction
	not-negation	Other forms of negation
	Present tense	Nonpresent tense
	1st; 2nd person pronouns; *it*	Nouns
	demonstrative pronouns	
	do, be as a main verb	Causative subordination
	discourse particles	
	hedges	
	amplifiers	
	sentence relatives	
	wh- questions or clauses	
	final prepositions	Prepositional clauses

Principle.[3] The Social Agreement Principle projects that in interactive social situations, negatives may well be prosodically neutral—or non-prominent—despite their semantic significance.

Since negatives not only provide crucial cognitive information but also provide the key to the expression of social agreement, or support, and disagreement, or repair, analysis of the prosodic realization of negatives provides interesting data for the comparison of the relative importance of the Cognitive Prominence and Social Agreement Principles. We will hypothesize that in informative registers (like reading the news), speakers prosodically emphasize negatives without compromising 'good vibes'. In interactive registers (like conversations), however, where people are actually talking or writing to each other, interlocutors can end up in a double bind on the two poles of this register dimension: They want to convey information clearly, but they also want to interact acceptably. To the degree that cognitive imperatives regulate production, negatives should be prominent, while to the degree that interactive concerns regulate speech, prominent negatives may be dispreferred. It is no surprise then that the choice of negation strategies appears to be correlated with Dimension 1.

2.4. *Not-negation, contraction and Dimension 1*

Speech register has been found to be a major influence on the form of negation in English (Bell, 1984; Biber and Finegan, 1994; Mulkay, 1986; Yaeger-Dror, 1997). As discussed in Section 2.1, reduction can take the form of shortening; consequently, one common form of reduction in English is contraction. Consistent with the preceding discussion of Dimension 1, in informative registers of standard British, New Zealand, and American English (like reading the news) *not* is less likely to be reduced to *n't* than in other situations (Bell, 1984; Biber, 1988).

Comparing news in these three communities, Bell found that British news is least likely to permit *not*-contraction, and American news is most likely to do so, with New Zealand news moving away from the more 'informative' British extreme toward a US 'interactive' presentation model. Thus, we see that, not only is there variation along the informative–interactive (Dimension 1) register continuum, but even at a given point along that continuum, within a given language, there can be regional as well as situational variation.

Evidence for regional variation is even stronger for imperatives and interrogatives than for declaratives: Both permit full *not* tokens in British and Commonwealth English, but in standard American English negatives are typically reduced to *n't* almost categorically in imperatives and interrogatives—perhaps because they have the greatest potential for face-threat (Westergren-Axelsson, 1998: 177f; Yaeger-Dror, 1997; Yaeger-Dror et al., in press a). Note also that uncontracted *not* tokens in interactive questions are now so disfavored that questions with first person sub-

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[3] Initially this principle was termed the 'Preference for Agreement' Principle. However, linguists generally infer that 'agreement' signifies grammatical rather than social agreement, so the phrase has been altered.

jects commandeer an *are* form to sidestep the apparent unacceptability of using an uncontracted form in this sentence type (*am I not? = > aren't I?*).

Given that there are some verbs which permit both auxiliary contraction (e.g., *'s not*) and *not*-contraction (e.g., *isn't*), recent analyses have explored the degree to which one form of contraction is favored over the other in informative print media (Westergren-Axelsson, 1998), in literary texts, in debates, and in conversations (Yaeger-Dror, 1997; Yaeger-Dror et al., in press a). In her analysis of *not*-negation in two corpora of newspaper prose, Westergren-Axelsson provides new evidence for variation in negative syntactic strategies which appears to coincide with the informative-interactive Dimension 1. If our theory is correct, aux-contraction should dominate in informative registers, and *not*-contraction should dominate in interactive registers.

Westergren-Axelsson isolated three subgenres: reporting, editorials, and reviews.[4] She also makes a distinction (already isolated in Yaeger-Dror, 1996b) between material inside and outside quotes—with more *not*-contraction in dialogue and actual conversations than in informative/narrative segments of text. Both Yaeger-Dror (1997; Yaeger-Dror et al., in press a) and Westergren-Axelsson have found that there is a large gap between informative prose and written dialogue (which is presumably more interactive). Both contraction and prosodic strategies in dialogue differed significantly from read descriptive prose and were more similar to actual interaction. Thus, when interactive rules are more relevant—whether signaled by quotation marks in print or triggered by the interactiveness of the social situation— the likelihood of *not*-contraction increases, and, conversely, when conveying information is primary, *not*-contraction is curtailed.

Westergren-Axelsson's study also concluded that, although both forms of contraction are permissible in informative print media, there may be diachronic (p. 161f) and lexical variation (p. 155) as well as regional dialect differences (p. 156) in preferences for *not*-contraction vs auxiliary contraction. She found that, in British newspapers, *not*-contraction of {*is/are*} is only half as likely to occur as auxiliary contraction (p. 158). These results provide evidence for the claim that the greater the importance of information content, the greater the likelihood that the auxiliary (rather than the negative) will be contracted, resulting in a negative that is presented more saliently. Similarly, Yaeger-Dror et al. (in press a) found that, in US informative registers such as Air Traffic Control transcripts and classroom lectures, aux-contraction of {*is/are*} was preferred over *not*-contraction, while *not*-contraction was preferred in more interactive registers.

2.5. *Not*-negatives, prosody and Dimension 1

In news reading, where the informative requirements of the situation dominate, negatives are almost always prosodically (Hirschberg, 1990, 1993) as well as morphologically prominent in English; but in both American (Yaeger-Dror, 1985) and

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[4] Unfortunately, certain distinctions are conflated by the decision to merge editorials with letters to the editor, and sports, and social reporting with international news.

British (Kaufmann, this issue; Tottie, 1991) interactive registers, where social agreement is relevant and preferred, and the supportive interactive requirements of the situation dominate, negatives are less likely to be prosodically prominent; Yaeger-Dror (1997, 2001) also found syntactic and prosodic reduction to be highly correlated. Thus, in interactive registers of English, the Social Agreement Principle appears to dominate over the Cognitive Prominence Principle, and negatives are both structurally and prosodically reduced in interactive registers.

2.6. Negatives and other situational expectations

Discourse in which the preference for agreement may be temporarily abrogated, like in classroom situations (e.g., Kakavá, this issue, or Blum-Kulka et al., this issue) or game playing (e.g., Goodwin et al., this issue, and citations therein) can also be distinguished from registers in which disagreement is actually preferred, such as talk shows with an adversarial stance (Blum-Kulka et al., this issue; Hutchby, 1996; Scott, 1998), certain types of political interviews (Heritage, this issue), US courtroom interaction (but see Kurzon, 2001), or televised political debates (Yaeger Dror, 1996b; Yaeger-Dror et al., in press a,b).[5]

2.7. Negatives and stance within a situation

Labov and Fanshell (1977), Goffman (1981), Jacobs (this issue) and Clayman (this issue), have shown that, within a given register, turn stance may vary—with one participant required to be guardedly neutral (the interviewer, the therapist, the mediator, or the moderator), while other participants are not so constrained. Goffman (1981) and Schilling-Estes (1998) also isolated specific register and interactional factors that influence turn stance.

Clayman and Heritage (2001) have also ascertained that what is considered an appropriate turn stance may vary over a number of years within a single society. They demonstrated that, whereas in the 1950s news, reporters were deferential and supportive of presidents during a news conference, register expectations have altered so radically since the Nixon years that the appropriate turn stance for a US reporter in this register is now adversarial. A hypothetical continuum from supportive to remedial turn stance is found in Fig. 1. This continuum will tentatively be referred to here as Dimension S (for 'stance').

2.8. Negatives and cultures of power and solidarity

Brown and Levinson (1978) chose to emphasize the importance of face concerns, whether the cultural motivation for variation was solidarity or power-based. Brown and Gilman (1960) showed that *Tu/Vous* choice (T/V) varies with both relative solidarity and relative power of speaker and recipient, that the dominance of power

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[5] Bilmes (1997) presents evidence that interruptions and repair of interruptions are also more overt in debates; see also Hayashi (1996).

or solidarity vector is a societal rather than linguistic choice, and that the vector preferred in a given culture may change over time.[6] Just as Brown and Gilman found that T/V usage can be correlated primarily with either a solidarity vector or a power vector, depending on whether choice of T or V is reciprocal or not, it is reasonable to hypothesize that prominent face-threatening negatives are used reciprocally in a solidarity-oriented society and nonreciprocally in a power-oriented society.

By inference, *not* tokens are most likely to be reduced in 'face-threatening' (Brown and Levinson, 1978) or 'remedial' (Goffman, 1971) turns even when important information is conveyed by the negative; they are most likely to be prosodically prominent in supportive turns, even when no new information is conveyed. Yaeger-Dror (1996a,b) found that, in social conversations, and even in read literary dialogue (where the need for the Cognitive Prominence Principle should be maximized and concern for the Social Agreement Principle is fictive), only the Social Agreement Principle can account for the low percentage of prominent negatives in remedial turns.

Just as the Cognitive Prominence Principle is assumed to be a cognitive universal, conversation theorists initially assumed that rules such as the 'preference for agreement' (Sacks, 1992; Schegloff et al., 1977), referred to here as the Social Agreement Principle, are cultural quasi-universals. However, there is also evidence that not all cultures have the same expectations for the appropriate stance relative to this principle (Blum-Kulka, 1997; Goodwin et al., this issue; Gumperz, 1982; Kakavá, this issue; Pontecorvo and Fasulo, 1997; Sterponi and Pontecorvo, 1996; Sterponi and Santagata, 2000; Tannen, 1984).

Brown and Levinson demonstrated that there is a wide variation in face concerns in different cultures. Not only the importance of power and solidarity, but the situations considered face-threatening vary radically as well. Interlocutors from different cultures don't request or apologize in the same way, and they definitely don't disagree in the same way. Tannen (1984), Schiffrin (1984), Maynard (1989), Modan (1994), Goodwin and Goodwin (1995), Goodwin et al. (this issue), Jefferson (this issue) and Lee and Peck (1995) have all shown the degree to which subculture is a relevant variable for disagreement strategies or use of negatives even within the English-speaking world. Gumperz
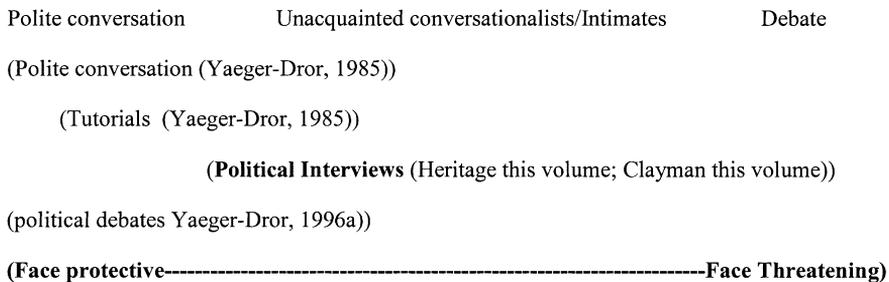
Polite conversation   Unacquainted conversationalists/Intimates   Debate

(Polite conversation (Yaeger-Dror, 1985))

    (Tutorials (Yaeger-Dror, 1985))

           (**Political Interviews** (Heritage this volume; Clayman this volume))

(political debates Yaeger-Dror, 1996a))

(**Face protective**---**Face Threatening**)

Fig. 1. Registers may have a habitual turn stance '**Dimension S**', as hypothesized for American English interactions (cf. Goffman, 1971; Wolfson, 1988; Hayashi, 1996).

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[6] Biber has also presented evidence that register parameters change through time (Biber et al., 1998), and can vary radically from one society to the next (Biber and Conrad, 2001).

(1982), Licari and Stame (1990), Couper-Kuhlen (1992), Okamoto (1994), Song (1994), Ting-Toomey et al. (1994), Ambady et al. (1996), Pike and McKinney (1996), Holt-graves (1997), and Mendoza-Denton (1998) all demonstrate that variation in dis-agreement strategies is even greater in cross-language, cross-cultural comparisons. However, while these studies present evidence for a sliding scale of face concerns impacting turn stance, they all assume a cross-cultural consensus on a continuum from supportive to remedial turn stance, similar to the one presented in Fig. 1.

2.9. *Pas-Negation studies in French*

Most French studies of negation follow the theory of Ducrot (1984), for whom negatives are analyzed as 'descriptive', 'polemic', or 'metalinguistic'. Only the first two concern us. Ducrot's 'descriptive' coincides with the register pole referred to here as informative. His 'polemic' infers that negatives used in an interactive register are used adversarially, although polemic-supportive tokens are not so much ruled out as not discussed. Thus, Ducrot's taxonomy corresponds roughly to the 3-way distinction proposed by Yaeger-Dror (1985)—with informative (or 'descriptive') negatives being distinguished from both supportive and remedial use of interactive ('polemic') negation. However, there is no implication that polemic negatives are more reduced than descriptive tokens, as the present theory proposes.

2.9.1. *Syntactic variation of pas*
Most of the literature specifically addressing the use of negatives in French ana-lyzes syntactic variation (Achard et al., 1995; Allouche, 1992; Callebaut, 1991, 1992; Meunier and Morel, 1994; Muller, 1995; Nølke, 1990). The negative *ne* precedes the verb, while *pas* follows the verb (Horn, 2001; Morel, 1994; Nølke, 1990, 1991, 1992). Ashby (1976, 1981, 2001), Vincent and Sankoff (1977), Coveney (1996), and Mougeon and Martineau (2001) have found that loss of *ne* is very common and is conditioned by syntactic, phonological, and dialect factors, as well as by prosody, register and time.[7]

While all these researchers focus primarily on regional and social dialect as factors in *ne* loss, it is clear from the Mougeon and Martineau's (2001) historical analysis that *ne* was reduced earliest in interrogatives and imperatives—just the situations in which *not* is most often reduced in English. I propose that if face threatening con-structions (like imperatives and interrogatives) are more likely to require negative reduction in both English and French, independently, this is more likely to stem

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[7] Mougeon and Martineau (2001) compare results for 'popular' literary data, to conclude that while *ne* loss does not gain momentum as a change until the 19th century, in the twentieth century it is a change rapidly coming to completion. Researchers have found that today *ne* is almost categorically avoided in Canada, and retention even in middle class, continental French conversations is at most 20%, and is most likely to be retained in careful registers which are only included in this database as readings. Mougeon (p.c.) goes so far as to propose that we should consider *ne* to be an insertion in specific careful registers rather than an elision in the vast majority of cases. Even in readings, where *ne* does occur, it is never found to be prosodically salient, and is not relevant to the analysis. Therefore, factors which favor *ne* insertion do not appear relevant to this study, and *ne* will not be discussed for the present analysis.

from an avoidance of face threat rather than from some syntactic/prosodic conjunction shared by the two languages.

2.9.2. *Prosodic variation on pas*

While prosodic analyses of French have been published by Benguerel (1970), Vaissière (1974, 1991), Gerard and Dahan (1995), Guaitella et al. (1995), Grosjean and Hirt (1996), Dahan and Bernard (1997), Astesano et al. (1997), and Di Cristo (1998) for Continental French, and Boudreault (1968, 1970), Yaeger (1979), and Thibault (1996) for Canadian French, only Morel has specifically analyzed the prosodic realization of *pas*. In an early study, she claimed that (*ne*) . . . *pas* is often negatively prominent. That is, the fundamental frequency on *pas* is often lower than the rest of the sentence. Such negative prominence would be consistent with Bolinger's claim that negatives are universally pitch-lowered (1978); however, Morel provides no pitch tracks or other support for this claim. In later work, she maintains that negatives are generally pitch-raised, and her published pitch tracks support the hypothesis that *pas* are F_0-raised (Morel, 1995). Unfortunately, Morel's publications neither explain what social situations her data were drawn from, nor present quantitative results, so her studies are of anecdotal rather than scientific assistance.

2.9.3. *Cross-cultural comparisons*

Impressionistic reactions to apparently amicable conversations overheard on the metro or in departmental committee meetings support Morel's theory that French negatives are more consistently pitch prominent than the English negatives; literature by American popular sociologists, journalists, and travel writers warn the American reader that the French revel in confrontation (Applefield, 1995, 1997; Carroll, 1987; Platt, 1998). So both Morel's acoustic studies and popular sociologists and journalists would have us hypothesize either that the informative-interactive continuum is irrelevant to the use of *pas*-negation in French (since all *pas* are prominent), or that, in French culture, *pas* prosody would be skewed relative to that used by English speakers, with prominent *pas* more common than prominent *not/n't*.

Fig. 2 presents a hypothetical pattern consistent with this speculation. Just as Hymes (1964) presented British culture as relatively more sensitive to the Social Agreement Principle than a speculative 'general' American culture. Wierzbicka (1994) presented Japanese culture as far more sensitive to the Social Agreement

(---------**British**------------(Hymes, 1964; Tannen, 1984))

(--'General'-**American**------(Schegloff et al., 1977))

               (--**Jewish/ New Yorker**------(Tannen, 1984; Schiffrin, 1984))

                          (--**French**---------------(Platt, 1998))

(**Neutral** ---F_0 **prominent**)
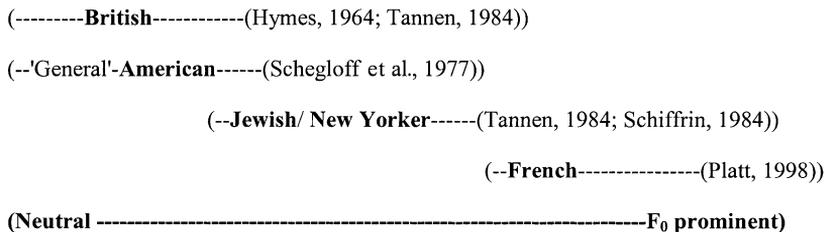
Fig. 2. Hypothetical range of prominence for negation in face threatening situations in four cultures.

Principle, and Polish culture as far less sensitive to it. Tannen (1984) and Schiffrin (1984) presented New Yorkers and Jews as relatively less sensitive to the Social Agreement Principle than other Americans. And Kakavá (this issue) presents Greeks and even Greek Americans as less sensitive to the Social Agreement Principle. Similarly, Platt and Applefield (New Yorkers), and Carroll (a French anthropologist teaching at Oberlin) present Francophones from the old world as less sensitive to the Social Agreement Principle than Americans (including New Yorkers).

This study will address the assumption that French speakers prosodically emphasize negatives more than US speakers of English by comparing their usage with that of US speakers. The initial hypothesis is that disagreement strategies in French may permit, or even require, more prosodic prominence on interactive negatives than is permissible in US English, but that, in all likelihood, the relative importance of agreement in specific registers (like those shown on Fig. 1) will be similar. In order to address this hypothesis, the present analysis will look at data from a variety of different social situations along the informative-interactive continuum comparing US and French corpora.

3. Research methodology

3.1. Speech materials to be analyzed from parallel corpora

Various corpora were chosen which could compare interactive with non-interactive—but discourse relevant—material. Table 2 presents the French corpora that were analyzed for the present study, on the left, with the most similar English data (analyzed in earlier publications) on the right. It is obvious that the original corpora for English were chosen to maximize the distance between situations: informative, pseudo-interactive, interactive-supportive, and interactive-adversarial. The French corpora were chosen both to fit into these carefully circumscribed situations, and to match the American corpora as closely as possible. If the writers cited are correct, prominence percentages for a given situation and stance combination will be higher for French than for English speakers in each situation studied.

The following situations were analyzed:

- *Informative*: any speech that is used primarily to convey important information is referred to as informative. Theoretically, informative negatives have the greatest likelihood to be prosodically prominent. Included under this rubric are informative monologues, including memoirs, and descriptive sequences (or 'prose') that convey new information. Information should be more important in a read corpus than in an interactive corpus. Memoirs are arguably more informative than prose passages in fiction. Radio-broadcast interviews are arguably more informative than other conversations.
- *Memoirs*: it was assumed that descriptive passages in memoirs would be relatively informative. The English memoir was written and read by Garrison

Keillor (1985; 1985/1986), of 'Prairie Home Companion' fame. The French equivalent chosen was a reading from her memoirs by famous French journalist and political activist, Françoise Giroud (1990). Giroud's memoirs did not include dialogue, whereas Keillor's did.[8]

- *Literary readings*: earlier analysis of American fiction has found descriptive prose passages (henceforth, 'prose') to be relatively informative. Consequently, prose passages in English were compared with prose passages in French. *Ethan Frome* by Edith Wharton (1911/1969) was chosen to provide a direct comparison between an American work and its French translation since Yaeger-Dror (1996a,b) had found that Wharton's writing permits a neat dichotomy between the informative descriptive passages (with almost no contraction) and the politely interactive dialogue (with almost categorical contraction).

  In addition, Duras' (1980) reading of her own prose (*La jeune fille et l'enfant*)[9] was compared with actress Jill Eikenberry's reading of *Breathing lessons*, written by Anne Tyler (1988; 1988/1990). The hypothesis is that while modern literary readings would perhaps differentiate less carefully between descriptive/informative passages and dialogue/interactive segments than Edith Wharton did, they would also differ from the recent memoirs.

- *Interactive*: when two or more parties are interacting, even if as dialogue in a read text, the social situation is defined as interactive (Yaeger-Dror, 1996a,b).
- *Interviews*: the French corpus includes a register that has not yet been tapped in English: Radio-broadcast interviews. Interviews are regarded as interactive (between interviewer and interviewee, as well as between radio-listener and

Table 2
Matching corpora for French and American interactions in this study

Register	French Corpus	Year	Code	US Corpus	Year	Code
Literary	Marguerite Duras	1980	dl	Anne Tyler	1988/90	tl
Reading	Ethan Frome	1969	wl	Ethan Frome	1969	ef
memoir	Giroud	1990	gl	Garrison Keillor	1985/6	kl
kidlit	'*Nicolas*'	1961/87	rl	'*Ramona*'	1968/81/90	cl
Conversation	Nassera/Isabelle	1997	2f	Two Girls	1970	tg
Interviews	Chabrol/Chancel	1992	civ	–		–
	Duras/Pivot	1980	div	–		–
	Barthes/Chancel	1979	biv	–		–
	Cousteau/Chancel	nd	coiv	–		–
	Giroud/Chancel	1979	giv	–		–
Debates	Chirac/Jospin	1997	c/j	Mecham/Babbitt	1988	m/b

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[8] In fact, we will be forced to conclude that the Keillor reading is a poor match, because while Giroud's text fits a stereotype of the didactic autobiography of poor {girl/guy} makes good, Keillor's text is a satirical take on that genre.

[9] Thanks to Mary-Annick Morel and Annie Rialland for the use of the Duras reading.

speaker. See discussion in Bell, 2001; Heritage, 1985; Hutchby, 1996) All interviews used here were broadcast on the cultural *Radioscopie* program, which is comparable to National Public Radio's (NPR's) *Fresh air*, or the BBC's *Start the week*. It was projected that the interview register would provide a hybrid database, simultaneously informative and supportively interactive, with deferential host meeting expansive interviewee. In actuality, the interview situation varied a great deal. Comparing across interviews, those with Marguerite Duras (Pivot, 1980, 1980a), Roland Barthes (1975), and Claude Chabrol (1992) ('literary' interviewees) were found to be quite different from interviews with Françoise Giroud (Chancel, 1979) and Jacques Cousteau (nd), ('activist' interviewees); the two interview types were quite different, with the literary interviews including fewer (and more reduced) negatives (see also Clayman, 2001, who considers the permissibility of remedial presentation in different interview situations in American English.)

The interviews were also chosen to provide direct comparison with other corpora under analysis: the Duras interview was directly comparable to her reading of both prose and dialogue from her novella, while the Giroud interview was directly comparable to her reading from her memoir. To the extent that interviews are informative, negatives should theoretically be prominent. To the extent that they are interactive, those held with political activists (Giroud, Cousteau) might be more likely to be *pas*-prominent than those held with purely literary focus.

- *Junior fiction*: Yaeger-Dror (1996a,b, 1997) found (not surprisingly) that speech read for adults differed systematically from speech read for children. In the US database, the latter readings are more pseudo-interactive, even in descriptive passages, and the remedial passages are more likely to be read as if the speakers' stance is adversarial. Consequently, the English reading of *Ramona Quimby, age 8*, by Beverly Cleary (1968, 1981/1990) was compared with an equivalent classic of French children's literature, *Les récrés du petit Nicolas* (Sempé & Goscinny 1961/1987) — 'Little Nicolas's recess' (henceforth: *Ramona* vs. *Récrés*.) Both junior fiction tapes include prose informative passages and acted dialogue segments (both supportive and confrontational) read by several actors. The analysis of dialogue is not assumed to reflect actual interactive rules but to reflect the rules for performing reading for a child audience.[10] In fact, the two readings are amazingly similar in their comedic incorporation of childhood foibles, in their radical syntactic and prosodic split between descriptive prose and dialogue, and in the radical (apparently adversarial) techniques used in the dialogue.

- *Solidary/face protective interactions*: while both literary (face protective) and activist (adversarial) interviews were distinguishable, neither was equivalent to polite interactions of the kind included in the US corpus. Consequently,

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[10] An attempt was also made to collect play-time activity between siblings, but the sound quality did not permit acoustic analysis. (See however, Goodwin et al.'s paper in this issue.)

comparable conversations between two good friends, who were students at the university, were compared: 'Two Girls' (TG), and '2 Femmes' (2F).[11] The girls/*femmes* seem equivalent in background and apparent degree of solidarity, so differences will be, at least partly, attributable to differences between the cultures. Note that although many friendly/supportive conversations have been analyzed for American English (Yaeger-Dror, 1985), and British English (Kaufmann, this issue), TG was chosen as the one corpus which most closely matched 2F.

- *Adversarial interactions*: both English and French corpora include radio-broadcast political debates, which permit—or even require—prominent disagreement. The French debate is between two national party leaders in France: Chirac and Jospin. The English corpus includes a debate between Mecham and Babbitt, who were, at the time, top Arizona politicians (MacNeil and Lehrer, 1988); again, as with the TG/2F comparison, while many US debates have been analyzed, Mecham/Babbitt was chosen as the one most nearly comparable to the Chirac/Jospin debate (Radio France, 1997). Presidential debates could have been used, but while Chirac/Jospin is fairly *ex tempore*, even the more recent American presidential debates are more ritualized and scripted. As a result, the Mecham/Babbitt debate was chosen as most comparable to the French corpus available. The two debates have about equivalent amounts of political animosity, so differences between them should be attributable to the differences between cultural expectations.[12] We hypothesize that the French and American corpora will differ, but that there should be an implicational scale of percentages for prominent *pas* which is roughly equivalent to the scale for *not* or *n't*.

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[11] TG was transcribed by Gail Jefferson for Emanuel Schegloff and Harvey Sacks; 2F was transcribed by a student for Marie-Annick Morel and Annie Rialland (1997) and adapted to the Sacks conventions by myself. '2 Femmes' is a good parallel for the 'Two Girls' corpus. (And thanks are due to all of these people for access to their data and transcripts.) The transcripts show these girls doing story rounds, complimenting each other on hair dressers, empathizing over wayward boyfriends, and discussing vacation plans. In short, these are very similar supportive conversations. Note that segments of transcripts used in examples follow Jefferson's transcription conventions, with the following additions:

LOUDER segments are in boldface

Pitch raised segments are in italic

°{}°Asides are surrounded by curlicue brackets {}, and if noticeably reduced in amplitude, also by °{}°
-H- - Hitches are shown by a dash, and, if accompanied by a pause, by capital H.

Glosses of the French data are my own. Equivalent examples for the English data can be found in Yaeger-Dror (1985, 1996a,b, or, 1997).

[12] It was initially intended that political monologal propaganda be compared with actual political debate; however, preliminary research for the present study found that French broadcast pre-election monologue propaganda had few or no negations, while face-to-face debates permitted frequent use of negatives. This conclusion was supported by evidence found in earlier studies of French political discourse (Achard et al., 1995). A more expanded study will nonetheless compare propagandistic pre-election monologues as well as debates, but for the present analysis only the two televised face-to-face debates were compared.

3.2. Negatives to be analyzed

For the present study, data were carefully chosen from a broad range of situational contexts to permit the isolation of specifically established variables and the quantitative analysis of these variables. Only (*ne*) . . .*pas* will be analyzed for French, since this is the most common, and most neutral, realization of the French negative; all tokens from full declarative sentences which are found in a given corpus are analyzed, coded, and compared with the coding for all tokens of *not*-negation in English declaratives in the parallel corpus.

As in the studies cited, except in readings, *ne* generally was so reduced that it was omitted almost categorically. Consequently, only the prosodic realization of *pas* and *not* (and its permutations) will be studied here. A later study will examine the extent to which register is relevant for other negative locutions (*e.g., rien, plus, jamais, point* for French, *never, nothing,* etc, for English).

3.3. Examples of supportive and remedial use of negatives within a turn at talk

Yaeger-Dror (1985) showed that negatives can be used within an interaction either informatively or to support or correct a co-participant. The interactive impact of a negative is a theoretical variable in the present study as well. The cited studies in English considered whether the negative was actually disagreeing with someone, as opposed to informative, and whether the disagreement is remedial, as opposed to supportive. French examples from the present corpora follow; English parallels for these statements have appeared in previous publications (Yaeger-Dror, 1985, 1996a,b, 1997, Yaeger-Dror et al., in press a,b). (Sample pitch tracks for the French examples can be found in the Appendix, while specific English examples and their pitch tracks can be found in the earlier publications cited.) In (1) negatives are used informatively, in (2) remedially and in (3) supportively. Following Goffman (1978) this will be referred to as the turn 'footing'.

• **Informative** (Ducrot's 'descriptive') use of negatives in French: The narrator, Nicolas, conveys the information that Alceste does not like to run.

(1) '*Alceste est gardien de but parce qu'il n'aime pas courir.*'
'Alceste is goalee because he doesn't like to run.' (*Récrés* 75.4[13])

• **Interactively remedial** (Ducrot's 'polemic') use of negatives in French: One child tells the recreation guard that he should not have walked on his snack, another tells a classmate that if he doesn't hand over a cardboard nose, it will be punched.

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[13] Note that, the information is in a dependent clause, so although the *pas* is prominent (300 Hz) it is not as prominent as the most prominent word in the main clause. On the other hand, while below (2b)'s *pas* is also in a dependent clause, fronted clauses have a greater F_0 range potential. Since tokens are coded only for relative prominence within their own clauses, this factor has no bearing on the present analysis. Numbers after a citation represent (for read prose) the page number, followed by the pitch track number. Thus, in (1), the example is from p. 75, pitch track 4.

(2) a *'J'ai dit que nom d'un chien, zut, vous n'avez pas le droit .h de marcher sur mes tartines.'*
'I said, "name of a dog, jeez, you don't have the right -.h- to walk on my snack!"'(kid to playground instructor (*Récrés* 11.4)

   b *'Si tu ne me le prêtes pas, je lui donne un coup de poing....'*
'If you don't lend me it, I'm gonna give it a punch...' (kid to classmate, *Récrés* 18.4).

● **Interactively supportive** (Ducrot's 'polemic') use of negatives in French: in (3), a father uses negatives supportively to convince his son that his new watch will be even better now that it doesn't work, and a teacher tells a student she doesn't want him to feel bad. Both of these examples are intended to be perceived by the child as supportive.

(3) a *'Mais ça ne t'empêchera pas de t'amuser avec elle...'*
'But that won't stop you from having fun with it...' (father to son: *Récrés* 32.2)

   b *'Je ne veux pas te faire de peine...'*[14]
'I don't want to make you feel bad. . .' (teacher to student: *Récrés* 69.1)

Thus, as in English, aside from the register parameter, a turn-stance relevant code is incorporated into the analysis; these three interactively relevant options will be taken into consideration when categorizing negative tokens in the data: Informative and interactively neutral, interactively remedial (Goffman, 1971) or face-threatening (Brown and Levinson, 1978), and interactively supportive (Yaeger-Dror, 1985).

3.4. Acoustic variables

Initially, three primary parameters for prosodic prominence were coded based on the acoustic analysis. As noted in the review of the literature, these factors are used similarly in both Continental French and US English. This study analyzes how frequently there is prosodic prominence on a negative in this declarative context, since comparison of the specific contours chosen in each language is not relevant to the main thrust of this paper.

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[14] Since negatives occur least frequently in supportive turns, a few examples from English corpora may be helpful:
   (3)c 'No, you don't look old!' (Tyler reading)
   (3)d Ehrlichman: *I wouldn't haul the president into it if you can help it!*
   Kalmbach: *Oh, no no I will no:t!* (from the Nixon White House calls 4/19/73; thanks to Gail Jefferson for this example.)
   More detailed discussion of this rare use of negatives is found in Yaeger-Dror (1985) and Yaeger-Dror et al. (in press b).

- F_0—*pas* could be pitch raised or neutral. Similarly, *not* can be raised or neutral: As in other work on prosody cited for English (Hirschberg, 1990, 1993; Kaufmann, this issue; O'Shaughnessey and Allen, 1983; as well by Yaeger-Dror's earlier studies), the English tokens are categorized as prominent even if they are cliticized, but the Aux is prominent, although this characterization of prominence side-steps the fact that radical reduction of the vowel has taken place. While the actual disposition of a contour may differ in the two languages, this is also true for the prosodic patterning in two dialects of the same language (Grabe et al., 2000).

In contrast to Bolinger's (1978) and Morel's (1994) claims, only one *pas* token (1/680) was negatively prominent (with F_0 lower than the line of the sentence contour). While the ratios vary widely in English (occurring in 1% of all negative tokens in the Kennedy/Nixon debates, less frequently even in other debates, but closer to 0.01% in supportive conversations), the vast majority of prominent tokens have raised fundamental frequency, therefore, only tokens in which the fundamental frequency (of *not/n't* or *pas*) was higher than that of other words in its clause were coded as prominent. Tokens were considered prosodically neutral when the fundamental frequency followed the sentence contour, and the rare pitch lowered token was coded as nonprominent for the present analysis. (See the discussion of variation in choice of prosodic prominence contour in Syrdal et al., (2001); Wightman and Ostendorf (1991, 1992); Yaeger-Dror et al. (in press b), for English, and Hirst and Di Cristo (1998a); or Thibault (1996) for French.)

- Amplitude—*not/n't* or *pas* could be louder than, as loud as, or less loud than other words in the immediate environment. 'Loudness' would be measured in acoustic amplitude. While recognizing that the vowel of *pas* and *not* has high intrinsic amplitude (Lehiste, 1970),[15] in actual interactions, these vowels generally have lower amplitude than adjacent vowels, obviating the need for a separate perceptual measurement. The amplitude measurements provided no significant results, and will not be discussed in detail.

- Duration—earlier studies have shown that in English duration is correlated with syntactic position, but not with focus. However, the picture for French is not as clear. Even at its most straightforward, as discussed earlier, vowel duration varies relative to so many factors that it is not surprising that neither absolute nor relative (a) durations provided significant results (cf. the classic discussion in Lehiste, 1970 or Campbell, 2000, for English; for French, see discussions in Cedergren and Perreault, 1992; Yaeger, 1979).
  Obviously the same cannot be true for English *not*, where the vowel is commonly lost. Analysis of contraction and how it interacts with the parameters

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[15] That is, (a) is a maximally open vowel (and therefore carries maximal intrinsic amplitude) in both of the dialects under analysis here: The same would not be true for data from Kennedy or a French Canadian speaker, but that is immaterial to the present analysis.

studied here has been presented elsewhere (Yaeger-Dror, 1997; Yaeger-Dror et al., in press a, and literature cited there).

On the other hand, lengthening of (p) tokens was measured for the French corpus. Klatt (1976) showed that English stop consonants are not really 'compressable', so most durational variation is found on the vowels. French (p) are generally shorter than English (p) and are not aspirated, leaving even less room for variation. However, (p) at the beginning of *pas* could be found with over 100 ms of voicing lag followed by a strong burst. Such tokens of *pas* were perceived by native listeners as emphatically remedial. Conse-quently, (p) were coded for this variation whenever possible.[16] Long ('emphatic') (p) were found in *Récrés* readings, political debate material, and interviews with the 'activist' interviewee J. Cousteau, but only in those cor-pora. Since p-lengthening occurs only in conjunction with emphatically remedial pitch, and only in those corpora which appear to have a preference for disagreement, the analysis of this variable is left for a later study which will focus only on expression of disagreement in adversarial corpora.

- Vowel color/peripherality. Yaeger-Dror (1997) discusses radical reduction of *not* (i.e., contraction). No such phenomenon occurs with *pas*-negation. Ear-lier study of Quebecois (Yaeger, 1979) and Parisian (Lennig, 1978, pc) *pas* showed that (a) were centralized in casual sociolinguistic interviews. However, there is no evidence of (a)-centralization in any corpus analyzed for this study.

3.5. Syntactic position

Even when utterance-final *pas* or *not/n't* is F_0 prominent—as in the second *pas* in example (4)—it is usually lower than earlier prominences in the sentence (Bou-dreault, 1968). One can also hypothesize that despite the claims made in Cutler et al. (1997), sentence final *pas* may be prosodically prominent less frequently than sen-tence internal tokens. However, there were few sentence final tokens. While sentence final *not/n't* occurs even less frequently in the English data, this syntactic environ-ment is coded for in both English and French corpora.

(4) '*Elle n'aime pas quand on l'écoute pas*.'
    'She doesn't like it when you don't listen to her.' (*Récrés*, 22.3)

3.6. Adjacent prosodic prominence

This study also coded for a pitch prominence in the immediate environment of a *not* or *pas* token, since a competing prominence might neutralize the prominence on *pas* or *not*. In fact, the most significant positional variable appears to be the presence of an immediately preceding contrastive/emphatic accent, as in (5); in most registers this reduces the likelihood that *pas* or *not/n't* will be prominent.

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[16] That is, when they were not preceded by an unreleased voiceless stop or a pause.

(5) *Vous savez, je voudrais <u>vraiment pas</u> faire les prognostiques là-dessus.*
    You know, I *<u>really</u> <u>wouldn't</u>* like to prognosticate about that. (Giroud 46)

Note, however, that most words found in this environment are adverbials, which are actually there to modify and intensify the negative (as in 5), and although they may technically reduce the likelihood of pitch prominence on the specific *pas* or *not* token, they actually emphasize the force of negation.

On the other hand, Cousteau has a high frequency of emphatic pre-*pas* verbs (as in 6). Although in (6), both the verb and the *pas* are prominent, as a rule, these reduce the likelihood of *pas* prominence without emphasizing the disagreement.

(6) *Rien à faire pour- l'empêcher. (pause) Aujourdhui on ne <u>sait pas</u>-H atténuer °{ou éliminer}° les gènes (pause) qui commandent la violence.(pause) Et- tant mieux!*
    There's no way to- prevent it. (Pause) Today we <u>don't</u> *<u>know</u>* --H- how to minimize °{or eliminate}° the genes (pause) for violence. (Pause) And- so much the better! (Cousteau, c33)

Similarly, in English, there can be a preceding noun or pronoun emphasized (*<u>She</u>*'s <u>not</u> going.), providing a different context from that in which a preceding adverb occurs (She's *<u>really</u>* <u>not</u> going.). Consequently, data are coded for whether there is prominence immediately preceding or following *not/n't* or *pas*, and a preceding emphatic adverb (as in 5) is distinguished from a preceding prominent verb or pronoun (as in 6).[17]

3.7. Pragmatic significance of an adjacent prominence

To further complicate matters, in both English and French data, a modifier may further emphasize the force of the repair in one position, but minimize it in another position. One (hypothetical) example of this pattern in English follows:

(7)s 'You know, I <u>really wouldn't</u> like to say...'
(7)w 'You know, I <u>wouldn't really</u> like to say...'[18]

The former strengthens the force of the negation, while the latter weakens it. This factor has also been coded, but the results of that analysis (which requires Boolean manipulation of the coded files) will be left for a later presentation.

In addition, both languages permit multiple adjacent prominences, as in (8). In both languages, not only the multiple adjacent negations occur primarily in political debates, but when they occur in a debate, prominence on the *pas* (as in 8) or *not* is actually statistically favored.

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[17] The discussion of the coding of adjacent stress in English is addressed in greater detail in Yaeger-Dror et al. (in press b).

[18] In these hypothetical English examples, 's' stands for strengthening, and 'w' stands for weakening. Since (7) is hypothetical, (7) in the Appendix actually corresponds to (8) in the text.

(8) *Ils ne comprennent pas pourquoi on les ignore.*
   They don't understand why people don't know about them. (Chirac 33.3)

3.8. Analytical protocol

Each corpus was analyzed separately. Only analog recordings were available, but corpora were chosen for their superior sound quality. Each token of (*ne*) . . .*pas* negation found on approximately one-half hour of tape (when possible) was isolated, recorded, and measured using the UNICE program available at the Institute of Phonetics in Paris or using the SoundEdit and Signalyze programs available in the Cognitive Science Speech Perception Laboratory at the University of Arizona.

Similarly, for the English corpora used here, each corpus was analyzed separately. The analogue data were converted and measured using either a Rabiner black box hardware pitch tracker at UCB (Yaeger-Dror, 1985), or the Signalyze program used for the French corpora. As with the French data, all *not*-negatives, or at least those in the first half hour of tape, were measured and coded.

3.9. List of variables

The following quantitative measurements were recorded onto the analog printout of the pitchtrack for the declarative sentence including the negative:

- the fundamental frequency (F_0) of negative tokens
- the fundamental frequency of relevant words in the immediate syntactic environment
- the duration of both (p) and (a) in ms (for the French data)

The data were then coded for

- F_0 prominence ($\pm$) relative to other words in the phrase
- relative durational prominence of both (p) ($\pm$) and (a) ($\pm$) (for French).
- the $\pm$contracted status of the token (for the English data)
- sentence position ($\pm$final)
- turn position ($\pm$final)
- proximity to a pause or 'hitch'
- lexical environment of the negative
- immediately preceding or following prominence
- situation and stance or footing as described in Sections 3.1 and 3.3 above.

As already stated, in French, F_0 prominence and *p*-durational prominence co-varied significantly in those registers which permit *p*-lengthening. In addition, adjacent prominence, register, and turn footing were significant factors in the analysis for most of the corpora analyzed. There were too few tokens of negatives used supportively for conclusions to be drawn about whether supportive tokens are more likely to be prominent in French as they are in English.

3.10. Analytical hypotheses

The following hypotheses can be evaluated with these measurements.

- **Dimension 1**: informative vs. interactive situations. Negative tokens used informatively in informative situations are more likely to be prominent than those used remedially. For example, tokens from news reading like 'There were *not* any survivors of the blast' are relatively likely to be prosodically prominent, with the prominence percentages directly correlating with the importance of the information relayed.
- **Dimension S** (for Turn Stance): Solidary vs. adversarial turn stance or footing. Prosodic prominence will be most consistent in the political debates and in prose for children, where face threat is permissible, or perhaps even preferred (see the discussion in the Introduction to this special issue). It will occur least consistently in solidary conversations like 'Two Girls' or '2 Femmes', or when used by program interviewers (Clayman, this issue; Yaeger-Dror, 1996a,b), where the speakers' stance is generally solidary or neutral.

Solidary stance will permit least prominence, and interactions in which face threats are relatively admissible (like political debates) will permit greater latitude. If stance, register and significance reinforce each other, the prominence percentages should reflect this—say when a remedial negative occurs in an adversarial situation, or an informative negative occurs in a news broadcast, prominence should occur most frequently.

Another key question is how the data pattern, when the turn stance and register are not consistent: will informative tokens in a supportive stance and register be prominent? (and if not, why not?) Will informative tokens in adversarial stance be prominent? The theory does not suggest a clear answer to these questions, except where the register and stance conflict, there should be nonprominent tokens: a remedial token in a supportive register like 'Two Girls' or '2 Femmes' is much less likely to be prominent.

The theory projects that prosodic prominence should be most likely in purely informative prose and prose for children, perhaps somewhat less so in political debates and extended informative prose, and least often in remedial turns in polite interactions.

- **Culture**: To the extent that popular sociologists are correct, even in polite disagreements prosodic prominence will be more common in French remedial turns than in English, but the continuum from situations which are most to least likely to permit prominence may be maintained.

4. Analysis

4.1. Number of negatives in declaratives

The raw number of negations varies fairly radically in different situations: Table 3 presents a comparison of the number (*N*) of (*ne*) . . . *pas* tokens in a given number of

minutes (/mins) of tape analyzed. Only 38 negatives occurred in 30 min of the French translation of *Ethan Frome*, but 70 occurred in the same amount of reading from *Récrés*. Giroud used 91 negatives during an interview in which the interviewer used only seven. Nor is a given speaker, say Giroud, necessarily going to use negatives as frequently in 45 min of reading as she does in 25 min of interaction on the same subject. Literary interviewees used 41 negatives in 30 min (or approximately 1 per min), while activist interviewees used 203 in 65 min (approximately 3 per min). So, a first conclusion is that, as Mulkay (1986) and Tottie (1991) found for British English, and Yaeger-Dror et al. (in press, b) found for American data, the number of negatives varies radically across situations in French. The evidence in Table 3 merely adds that this effect is as clear in French contexts as in British contexts, that it is as clear when comparing the same speaker in different situations as when com-

Table 3
Comparison N of (ne)...*pas* tokens

Register	Corpus	Code	Tokens (No.)	Tokens/min	Remed tokens	Rem. tokens/min
Readings						
Informative	Duras	dl	61	2.0	10	0.33
prose	Wharton	wl	38	1.3	11	0.37
Memoir	Giroud	gl	43	0.96	5	0.11
Children's classic	*Nicolas*	rl	104	4.6		
dialog	Adult > kid	rl	12		10	2.0[a]
	A > A	rl	10		10	2.0
	Kid > Kid	rl	8		8	1.6
	K > A	rl	6		6	1.2
Conversation	Nassera	2f	24	1.6	4	0.27
	Isabelle	2f	60	4.0	3	0.2
Interviewers	Chancel	giv	9	0.9	2	0.2
	Chancel	civ	13	0.9	–	–
	Chancel	coiv	30	2.0	12	0.8
	Pivot	div	7	1.0	–	–
Literary	Barthes	biv	9	1.0	9	1.0
Interviewees	Chabrol	civ	0	0.0	0	0.0
	Duras	div	33	4.125	1	0.125
Activist	Giroud	giv1	63	4.2	44	2.93
Interviewees		giv2	28	5.6	9	1.8
	Cousteau	coiv	112	5.6	69	3.45
Debate	Chirac	c/j	39	1.95	39	3.9
	Jospin	c/j	29	1.45	28	2.8

[a] Note that where there are multiple speakers I did not calculate the number of minutes that an individual speaker actually spoke, so the number of negatives (and remedial-negatives) per minute are not accurate. For instance, if, say, Chirac and Jospin each spoke for 10 min, a fairly accurate metric would be 39/10 and 29/10 min, respectively. However, while in theory the two debate candidates were given equal time, it is not clear that Nassera and Isabelle each talked for 15 min, and it is even less likely that the interviewers and interviewees of *Radioscopie* spoke for exactly half the recorded time. Therefore, the number of tokens per minute is only a very rough and inaccurate measure.

paring different situations spoken by different people, and that when stance is added as a variable, more negatives occur in relatively adversarial situations than in neutral or supportive interactions.

The effect is much stronger when one considers only remedial tokens. Table 3 shows that the number of remedial- *pas* per minute is highest in debate (2.9–3.8), somewhat lower in 'activist' interviews (2.65–3.4), lower in children's literature (2.0), and lowest in polite interaction (0.2–0.27) or informative prose (0.11–0.37). As discussed earlier, the number of negatives per minute in French pre-election oratory is even lower. Our results for English corpora are similar. Keillor uses more negatives than Giroud in her memoir: She may be a politician, but he is a satirist (see Yaeger-Dror et al., in press b, for the detailed breakdown of the English data.)

4.2. Nonsignificant factors

The quantitative results to date do not support the theory that amplitude and duration are directly correlated with pitch prominence. Nor do they support the theory that syntactic position influences the prosodic realization in either language (i.e., sentence final position by itself does not appear to significantly influence the likelihood of prosodic prominence).

In the position right before a 'hitch', whether that is a pause or a filled pause (Shriberg and Stolcke, 1996), *pas* or *not/n't* should be more likely to be rhythmically prominent (Astesano et al., 1997; Geluykens, 1994; Geluykens and Swerts, 1992). This expectation has not been confirmed by the data either.

4.3. Prominence in the French corpora

Table 4 presents the raw totals for prosodically prominent *pas*-negatives over total *pas* tokens for the French language corpora: Informative and interactive tokens are distinguished from each other, as are supportive and remedial tokens.

Note that in most corpora negatives are more likely to be prominent in informative turns than in remedial turns. Despite the fact that earlier researchers have claimed negatives to be almost categorically prominent even in solidary supportive situations of Standard Continental French, there is no one situation studied so far in which prosodic prominence on negatives is categorical in either language studied. In French, prominence percentages only surpass 50% in informative turns used by the child narrator of *Récrés*, but informative turns in other registers are not far behind.

In most of the interactive registers of French chosen for analysis, informative negatives are more likely to be prominent than interactive (and potentially face-threatening) tokens. The only French exception to this implicational comparison occurs in the Cousteau interview. Social situation has an impact even on purely informative *pas* negation: *Pas* were most likely to be prominent when used informatively in readings for children (76%), and least likely to be prominent when used by radio interviewers of prestigious literary interviewees (17%).

In fact, at first glance, comparing across registers, looking at the informative percentages, there is less of a contrast than initially projected. Although we have

already seen that the supportive situations permit fewer negatives, informative tokens are actually more likely to be prominent in the polite conversation (48%) than in the readings (30–39%) or interviews (29–39%) where there is more redundancy! We can conclude that, in French interactions, informative *pas* will be prominent between 30 and 50% of the time, rather than the 80 or 90% as we might have projected based on Morel's claims.

Table 4 also shows that there is a fairly hard line between informative and remedial interchanges (Goffman, 1971): The '2femmes' conversation and the literary interviews have few remedial negatives, and those are generally nonprominent. The political debate and the interviews with Françoise Giroud and Jacques Cousteau have many more remedial negatives than the polite interactions, and those used are more likely to be prominent.[19] However, in each comparison remedial *pas* are less likely to be prominent than informative tokens in the same interaction.

Comparing informative and interactive tokens, it is even more obvious to which degree the cultural rules of social agreement influence prosody. Even in an artificial

Table 4
Number of prominent *pas* tokens over N

Register	Code:speaker	N	Informative	Interactive: informative	Supportive	Remedia 1
Prose						
Literary	dl:Duras	61	14/47	0/2	1/2	1/10
	wl: actor	38	8/18	1/6	0/3	3/11
Memoir	gl:Giroud	43	14/35	0/1	1/2	3/5
KidClassic	*rl*: '*Nicolas*'	68				52/68
	rl: adults to kids	12			2/2	7/10
	rl: adult to adult	10				4/10
	rl: kid to kid	8				3/8
	rl: kid to adult	6				2/6
Converse	2f:Nassera	24		7/18	0/2	0/4
	2f:Isabelle	60		25/49	3/8	1/3
Interview						
IVer	giv: Chancel	9		–	2/7	0/2
	coiv: Chancel	30		1/5	6/13	2/12
	div:Pivot	7		0/1	2/6	–
Lit.IVee						
	civ:Chabrol	0				
	div:Duras	33		18/28	1/4	1/1
Act.IVee	biv:Barthes	9				0/9
	coiv:Cousteau	112		11/38	3/5	24/69
	giv1:Giroud	63		6/15	0/4	12/44
	giv2:Giroud	28		10/17	1/2	4/9
Debate	c/j:Chirac	39				11/39
	c/j:Jospin	29		0/1		10/28

[19] There were too few negatives used supportively for us to plot them or draw conclusions, but certainly they are much less likely to be prominent than they are in English.

literary style, 70% of adult to child face-threatening negatives in the junior classic are prominent, but only 33% of the child to adult disagreements are prominent. In political debates, 28–36% of negatives are prominent, but friends (or broadcast interviewers) use only 14–17% prominence on face-threatening *pas*, and Duras only used prominence 10% of the time, whether the repair was fictive or addressed to her interviewer. Obviously, the Social Agreement Principle reduces the likelihood that a speaker will use prominent *pas* in remedial turns.

Note that remedial tokens are not significantly more likely to be salient in the debate (28–36%) than in the conversational broadcast interviews with activists (30–35%). However, tokens are more likely to be prominent in these two contexts than in the literary interviews (~10%) or polite interactions (14%). Even political debaters modulate their confrontational remarks by producing nonprominent *pas* most of the time.

Thus, in informative turns, negatives are more likely to be prominent than in remedial turns, whatever the situation or stance of the speaker. Remedial negatives are more likely to be prominent in adversarial or informative situations than in supportive conversations.

Prominence is significantly less likely to occur if the immediately preceding word is prominent. However, in most instances of preceding remedial emphasis in adversarial stance, the immediately preceding emphasized word actually adverbially highlights and strengthens the force of the negative (*vraiment pas/ really isn't/ it's really not*), and supports the claim that semantics and informativeness are far more important than syntactic/rhythmic prominence in determining actual pitch prominence.

4.4. Comparison of French and English results

Table 5 permits comparison of remedial and informative turns in different registers of English and French, based on the data which have been analyzed with the identical protocol.[20] Table 5 contrasts the percentage prominence for different registers in English and French.

Table 5
Percent prominent *pas* or *not* in each register

Register	F Inform>	US inform	F repair	US repair	Corpora
Polite.conversation	0.4776*	0.14	0.1429	0.01	2F/TG
Literary.Read	0.3151	0.25	0.1905	0.17	Duras/*Frome*
Memoir	0.3889	0.49	0.28	0.33	Giroud/Keillor
Child.classic	0.7647	0.468	0.375*	0.6	*Récrés/Ramona*
Debate	–	–	0.313*	0.74	c/j/ m/b

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[20] Given the rarity of negatives used supportively, only informative and remedial tokens are compared here, so as to facilitate 'eyeballing' and discussion of the data.

In both languages, the informative negatives are more likely to be prominent than the interactive/remedial negatives. However, the differences between the two corpora are surprising.

The Cognitive Prominence Principle is more dominant in French informative turns than in equivalent US turns, since the percentage of prominent *pas* in such environments is higher than the percentage of prominent *not* in equivalent English data. Moreover, the prominence percentage of informative turns in English, while higher than the prominence percentage for remedial turns, is apparently correlated with the percentage which occurs in the remedial turns. It is as if the Social Agreement Principle is 'bleeding' its influence into the realization of even informative tokens. Note the contrast with the French data, where this effect is not noticeable.

It is true that the English memoirs do permit more prominent remedial negatives than the French memoir. However, as already noted, this may be an artifact of Keillor's style rather than a cross-linguistic pattern.

Note that the evidence does not support the popular claim that French friendly conversationalists 'revel in argument'. On the contrary, the table reveals across the board a lower percentage of prosodic prominence in French remedial turns than in English remedial turns.

On the other hand, the Social Agreement Principle is neutralized by a situation's adversarial situation in English more consistently than it is in French. In fact, comparing English and French remedial percentages in the two debates studied, in French prominent *pas* are clearly dispreferred in remedial turns, whereas the US politicians prefer prominent *not* in this situation.

The evidence does not demonstrate that French speakers are more confrontational, but that while the Cognitive Prominence Principle is somewhat more systematically relevant in informative usage, the Social Agreement Principle is more consistently relevant when negatives are used remedially. Interactive *pas* appear more consistently sensitive to the Social Agreement Principle in French. In the US data, the likelihood that a token will be prominent is correlated with the register and stance more than with whether the token is informative or remedial.

Consider, for example, the debate register: Chirac (28%) and Jospin (36%) clearly use less prosodic prominence on remedial negatives than do Mecham (64%) or Babbitt (85%). In fact, they use prominence less extensively than any American debater whose speech has been analyzed.

One can also draw the conclusion that register patterns found in our English corpus do not appear to be parallel with those found in our French corpus. Not only is the French pattern skewed relative to the American pattern, but the Guttman scalar representation of French is quite different: The Cognitive Prominence Principle has a stronger impact on informative negatives, but even in informative turns, the probability of prominence is still far from the near-categorical prominence that Morel (1996) claimed to find in her data (a surprising finding, given that her students collected the data for '2 Femmes', the Duras reading, and some of the interviews analyzed here).

Consider now children's literature: in reading an American children's classic, remedial dialogue was prominent in about 60% of the tokens, while only 38–44% of the French classic's remedial tokens were prominent. From this, it is clear that

remedial *not*-prominence exceeds remedial *pas*-prominence by a wide margin in apparently adversarial situations.[21]

While the evidence from this paper is not conclusive, it does support another popular theory voiced by Carroll (1987), who claimed that French children are expected to 'respect' their elders in ways that American children do not. If we base our judgement on the limited sample of pseudo-remedial tokens in the *Ramona* and *Récrés* readings, we find that while adult to child remedial negatives are much higher in *Récrés* than child to adult negatives, the opposite is true of the *Ramona* readings. Of course, such a comparison will be purely hypothetical until there is access to, and analysis of, comparable family-argument data which include children.

The 'TG' and '2F' data provide almost identical female college student friendly conversations: Just as the American 'Two Girls' are the least likely to produce *not*-negatives prominently when they are disagreeing, the '2femmes' are also least likely to do negatives prominently. However, while the two girls (and other conversationalists we have analyzed before, but have not used here) use almost NO prosodic prominence on remedial negatives (moving up to a height of 4%), the super supportive '2femmes' use prominence on about 15% of their remedial *pas*.[22] The difference in remedial prominence between the corpora is nonsignificant, but the difference in informative prominence is highly significant.

The short literary interviews had few prominent negatives in disagreements; these interviews are more 'polite' than even the '2 Femmes'. However, the 'activist' interviews are quite different. Giroud—who is a journalist and author, but who was interviewed right after having left the Cabinet—uses more prominence (rather than less) on remedial disagreements. In fact, the Giroud interview not only uses prosodically prominent disagreements more than 30% of the time—like the political debates!—but was perceived (by both American and French listeners) as much more confrontational than was consistent with the fact that she was being interviewed as a respected author rather than as a political personality. And in most cases these disagreements were unmitigated in any way.[23] Similarly, Cousteau's interview is quite political, and as argumentative as the political debates. For these speakers, the dif-

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[21] So, perhaps French remedial *pas* are actually less likely to be prominent? French colleagues proposed theories why a politician should NEVER emphasize disagreement, because this would (to the French) look as if s/he did not have an agenda of his/her own (Rialland p.c.) Of course, that does not talk to the discrepancy between results for children's readings in the two languages.

[22] Note that this is caused by the fact that there are so few remedial tokens which actually occur in friendly conversations: one prominent token can skew the percentages, so the percentages in French are higher, but the difference between the French and English corpus is insignificant.

[23] This paper primarily deals with mitigation of a disagreement by prosodic means. However, as Schegloff et al. (1977) showed, there are a series of ways in which a speaker can mitigate a disagreement. Here, for example, is one mitigated disagreement from the Giroud interview: (Giroud 53)R 'Bien sû::r,-mais::. En même temps, euh::, je pourrais vous dire quelque chose qui- qui v' vous montre que ça'avait pas tellement changé?, c'est que-' (Gloss: Cer:tainly, bu::t. At the same time, uh:::, I could tell you something that- that w- would show you that things didn't change so much? It's that-) Here, as in other cases of mitigated disagreement, an apparent agreement (*bien sûr*) is followed by a predisagreement (*mais*) and hedge (*en même temps*), a hesitation (*euh*), a minimizer (*je pourrais vous dire*) and further hesitations which have all been shown to be used as mitigators of disagreement.

ference between remedial and informative tokens is not significant, just as for many Americans the difference between remedial and informative tokens is not significant. However, the differences between the groups is—with the French favoring prominent tokens more in informative situations, and the Americans favoring a preference for disagreement (that is—favoring prominent remedial negatives) in specific situations.

4.5. Influence from the linguistic environment

In both languages, prominence is less likely to occur if the preceding word is prominent, but if the following word is prominent this has no significant effect. In both English and French adversarial situations, the negative is actually more likely to be prominent if both preceding and following words are prominent (as in example 8 above). These environmental factors appear to be related directly to the expectations for public oratory (in contrast to private interaction).

5. Discussion

To fully measure the extent of potential linguistic variation in French, material was collected from very different social situations or registers to determine both the syntactic and pragmatic rules behind prosodic variation on *pas* in different social settings. The evidence has demonstrated the importance of register, and the importance of not assuming that register divisions will be the same in different cultures.

5.1. Registers

The present paper supports a number of claims made by Biber in earlier studies:

- Register variation is multidimensional, influenced by many factors other than conscious manipulation.
- One bipolar register dimension—the one responsible for the greatest percentage of register variation in English—has been found particularly appropriate to the analysis of negations, in both English and French.
- Specific register parameters (dimensions) are not equally relevant in different societies.

5.2. Prominence

Although the tools for prosodic analysis are still being refined, the present study shows that they are already adequate for an elaborate analysis of variation in prosodic strategies. The analysis of prosodic variation appears to be a productive technique for determining distinctions among different registers, both within and across cultures. The differences between cultures (even cultures that we would initially expect to be quite similar) are at least as great as the distinctions between different registers within a single culture. We had initially expected that confrontational

situations—like political debates and readings of junior literary dialogue—would be quite different from polite social occasions– like the conversations-for-class-consumption between two friends. In fact, the polite situations used less pitch prominence than the confrontational situations in both cultures. However, the differences between the American and Parisian versions of a given situation were as salient as the differences between the situations within each culture.

The comparison of French and English percentages of prosodic prominence permits the analyst to discard first impressions not borne out by careful analysis. French informative negatives are likely to be more prominent than US informative tokens, perhaps leading to the US 'sociologists' perception of French culture as confrontational. However, French remedial tokens are less likely to be prominent, except in the most intimate friendly interactions; even political and children's (literary) confrontations are likely to be more prominent than negatives in less confrontational situations, but much less likely to be prominent than their US counterparts, and in most situations French remedial negatives are less prominent than the English equivalents.

5.3. Theoretical ramifications

Further analysis is needed, both to determine the degree to which syntax controls the prosody, and to determine the extent of possible within-register and cross-register variation. The theoretical implications of the analysis should also be studied:

Coupland (2001) isolates two types of situational variation: One he refers to as 'dialect style', and the other as 'ways of speaking'. He hypothesized that there is a clear distinction between those variables which are linguistic ('dialect style') and those which are influenced by cultural rules for interaction ('ways of speaking'). The use of negation is relevant to both,[24] and both must be taken into consideration to permit an adequate analysis of negation strategies, although the present study has only considered the importance of 'ways of speaking' to this variation.

Coupland also suggests that both 'dialect style' and 'ways of speaking' may vary relative to three goals: Instrumental, identity, and relational. Further study will be needed to fully substantiate Coupland's claim that variation in negation strategies occurs relative to each of these three 'goals'.

5.4. Practical applications

While the differences between registers within a culture are useful for distinguishing situations from each other and for analyzing the etiology of situation variation, the consistent differences between French and American expectations are of practical as well as theoretical importance: The French visitor to the United States may be perceived as 'in your face' and 'dissing' friends, when s/he only intends to convey

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[24] Studies which have analyzed dialect-style variation in prosodic patterns include Boudreault (1968), Guy et al. (1986), Bladon et al. (1987), Wells (1989), Couper-Kuhlen and Selting (1996), Wells and Peppé (1996), and Kroch (1996). Those that have analyzed dialect-style variation in negative usage include Hazen (1996), Westergren-Axelsson (1998).
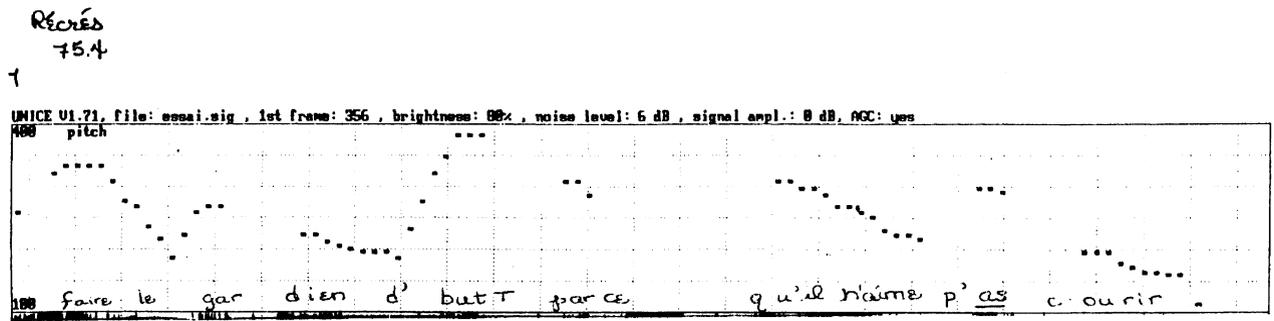
information clearly. On the other hand, the US politicians would appear boorishly un-diplomatic to their French counterparts, and the French politicians surprisingly diplomatic. The US visitor to France must alter prosodic strategies, emphasizing informative negatives more consistently, and reducing negatives when disagreeing, while the French visitor to the US must learn to deemphasize informative negatives in 'polite' interactive situations. We conclude that input from this theoretical study could be used to train students of cross-cultural pragmatics to avoid expressing themselves inappropriately.

Acknowledgements

Appendix

1. '*Alceste aime faire le gardien de but parce qu'il n'aime pas courir.*' [*Récrés* 75.4]
'Alceste likes to play goalee because he doesn't like to run.' **Informative**
The information is conveyed that Alceste does not like to run.

RÉCRÉS
75.4

UNICE V1.71, file: essai.sig , 1st frame: 356 , brightness: 80% , noise level: 6 dB , signal ampl.: 0 dB, AGC: yes

pitch

faire le gar dien d' butT parce qu'il n'aime p'as c ourir .

2a. '*J'ai dit que nom d'un chien, zut, vous n'avez pas le droit.h de marcher sur mes tartines.*'
[kid to playground instructor, *Récrés* 11.4]
'I said, "%ˆ&, you don't have the right -.h- to walk on my snack!" **Adversarial**

RÉCRÉS
11.4
2a

NICE V1.71, file: essai.sig , brightness: 80% , noise level: 6 dB , signal ampl.: 0 dB, AGC: yes

pitch

vous n'avez pas! le droit 'h de mar cl er sur mes tar tines!
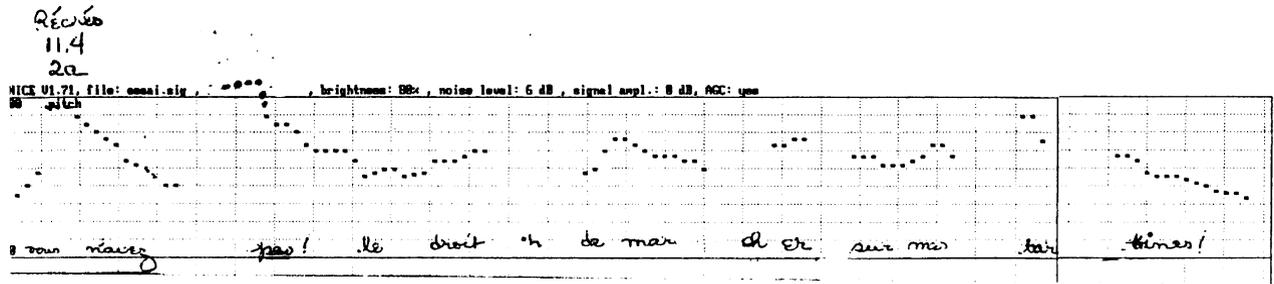
2b. '*Si tu ne me le prêtes pas, je lui donne un coup de poing à ton nez!*'
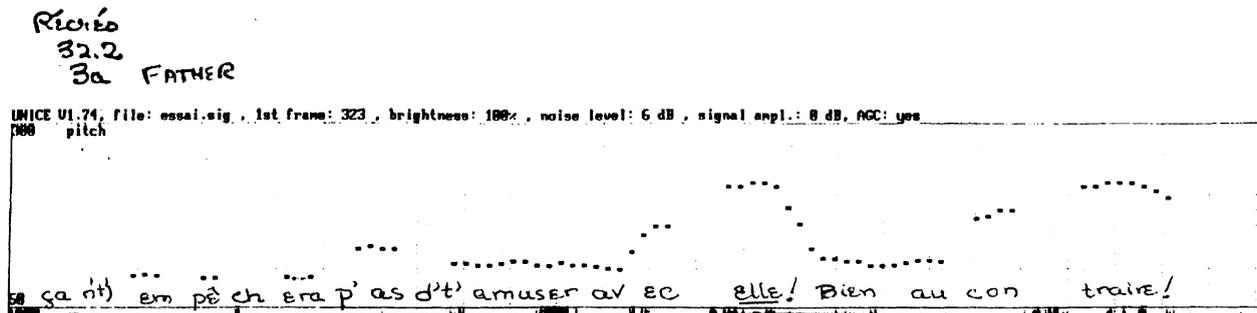[kid to classmate, demanding nose mask, *Récrés* 18.4]
'If you don't lend me it, I'm gonna give your nose a punch!..' **Adversarial**
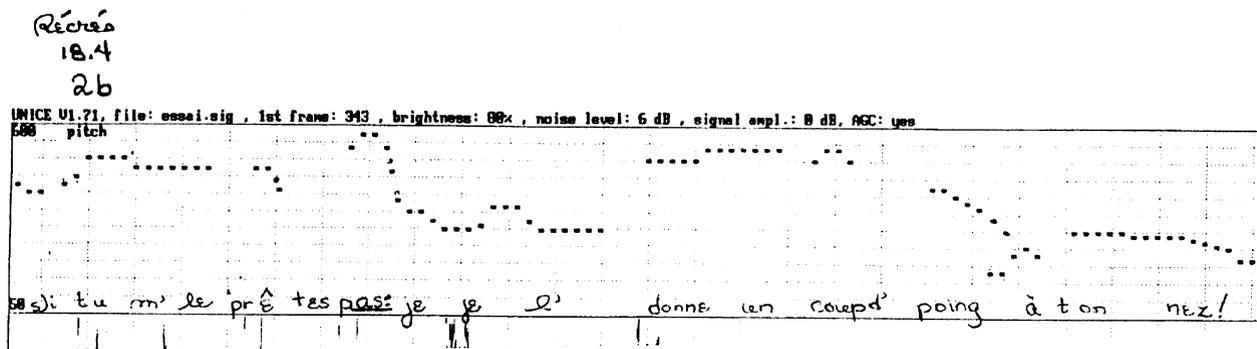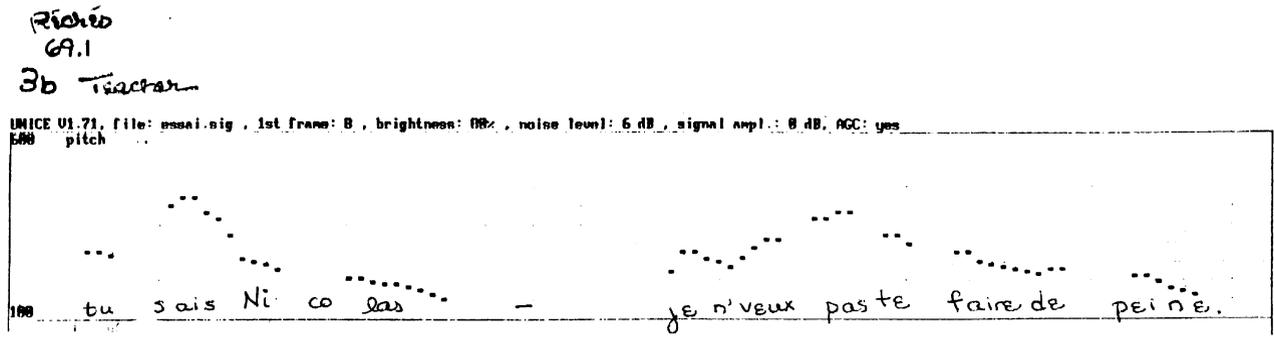

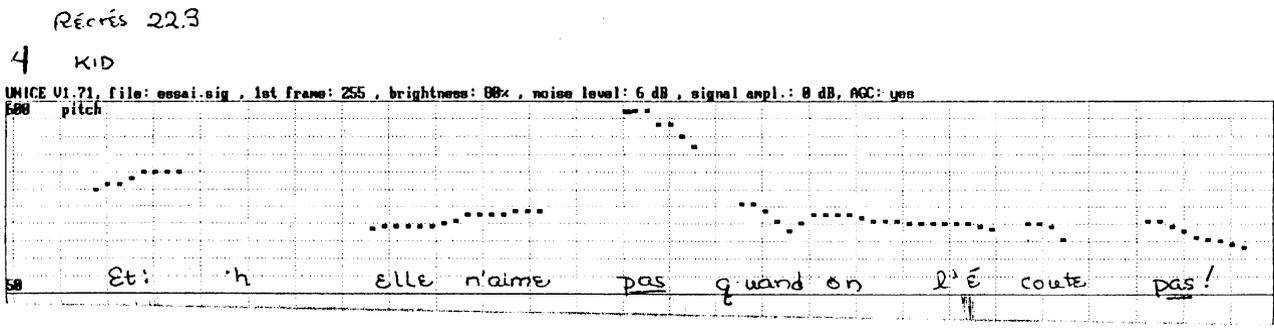**3a.** '*Mais ça ne t'empêchera pas de t'amuser avec elle...*' [father to son: *Récrés* 32.2]
'But that won't stop you from having fun with it.' **Supportive**

3b. '*Je ne veux pas te faire de peine...*' [teacher to student: *Récrés* 69.1]
'I don't want to make you feel bad.' **Supportive**

Récrés
69.1

3b Teacher

UNICE V1.71, file: essai.sig , 1st frame: 0 , brightness: 80% , noise level: 6 dB , signal ampl.: 0 dB, AGC: yes
500   pitch

100   tu   sais   Ni   co   las   —   je n'veux pas te   faire de   peine.

4. '*Elle n'aime pas quand on l'ecoute pas.*' [*Récrés* , 22.3]
'She doesn't like it when you don't listen to her.' **Informative/dependent clause**

RÉCRÉS 22.3

4   KID

UNICE V1.71, file: essai.sig , 1st frame: 255 , brightness: 80% , noise level: 6 dB , signal ampl.: 0 dB, AGC: yes
500   pitch

50   Et: 'h   Elle   n'aime   pas   quand on   l'é   coute   pas!

5. '*Vous savez, je voudrais <u>vraiment pas</u> faire les prognostiques là-dessus.*' [Giroud 46]

'You know, I <u>*really*</u> wouldn't like to prognosticate about that.' **Adjacent emphasis**
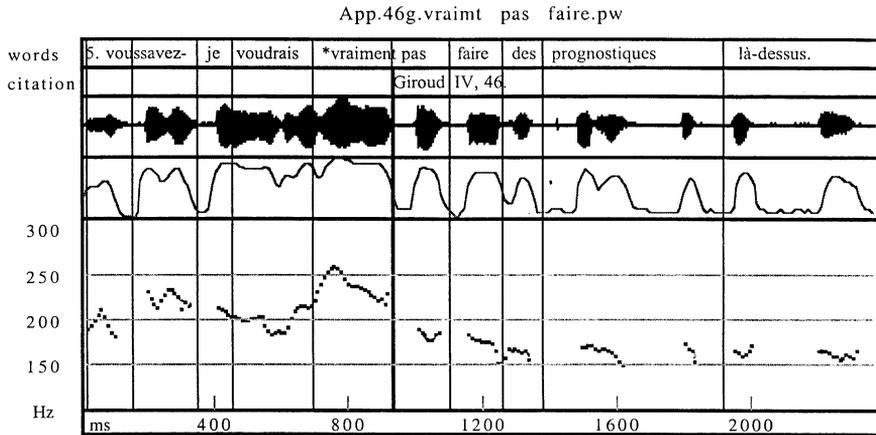
App.46g.vraimt pas faire.pw

6. '*Rien à faire pour-l'empêcher. (pause) Aujourdhui on ne <u>sait pas</u>-H atténuer °{ou éliminer}° les gênes (pause) °{qui commandent la violence}°. (pause) et-tant mieux!*' [Cousteau c33]

'There's no way to prevent it. (pause) Today we <u>don't *know*</u> - -H- how to minimize °{or eliminate}° the genes (pause) °{for violence,}° (pause) and so much the better!' **Adjacent emphasis**

app.33c.sait*pas*pw
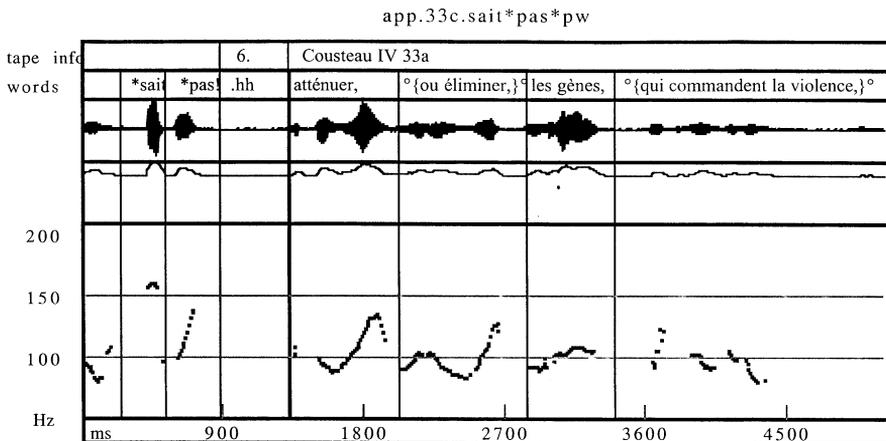
7. '*Ils ne <u>comprennent</u> pas <u>pourquoi</u> on les ignore*.' [Chirac 33.3]
'They <u>don't</u> <u>understand</u> <u>why</u> people don't know about them.' - -**left & right focus**

c33.3.comprennent   pas   p/q.pw
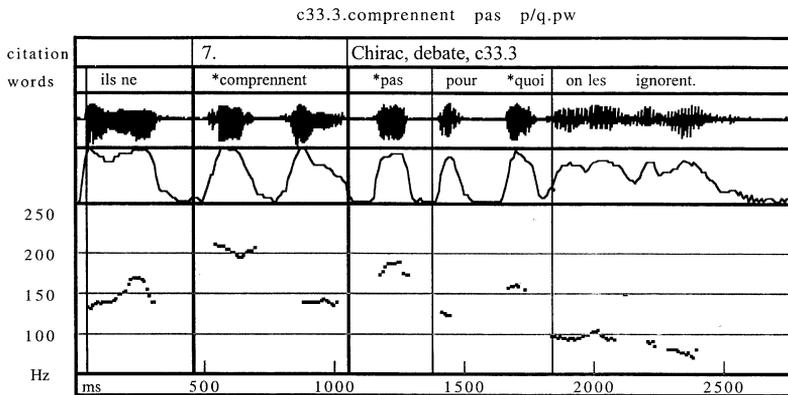
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