

Presidential Use of Negation*

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1. Introduction

This paper will analyze variation in negation and disagreement strategies and how that variation reflects speakers' footing *vis à vis* their coparticipants in a given interaction. Given that speakers' strategies for negative placement and prosody are determined by their dialect and other factors, as well as by the social situation, the ideal corpus for analysis of disagreement/negation strategies should permit analysis of the same speaker(s) in different unscripted interactive social situations, at least one of which would be adversarial. Given that most adults would not be happy to have their adversarial interactions [family fights, academic brawls?] transcribed, much less taped for posterity, there is a limited availability of appropriate data. Fortunately, the digital divide has now been breached, and presidential libraries are coming 'online' with transcription and sound files which permit a comparative analysis of any given [recent] president as he interacts with friends and family members as well as with political adversaries and in news broadcasts. The present study will make use of a small segment of such a corpus, to analyze the negation strategies of recent presidents. In particular, it will compare how

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the presidents produce negatives in news conferences [an informative setting¹] with how they present them in political debate [an adversarial setting].

2. Cognitive and Conversational Principles

Cognitive researchers have maintained that other things being equal, critical information should be perceptually prominent to an interlocutor even if there are strong syntactic or other reasons for the information to be prosodically reduced (Cutler, Dahan and Donselaar, 1997). If that is the case, negatives should be consistently prominent, as they appear to be in read news (Hirschberg, 1990, 1993). The principle behind that claim will be referred to here as the 'Cognitive Prominence Principle'.

However, there are two strong counterindicators that this principle is universally valid for the analysis of negatives: Firstly, if it were, and negatives carrying new information were always prominent, there would be no reduction of negatives; however, 'Jespersen's Cycle' (Jespersen, 1917; Horn, 2001) provides ample evidence that there is a cross-linguistic tendency to reduce negatives. Secondly, both Gricean and Sacksian analyses propose that there is [to use Sacks' term] a 'preference for agreement' (Schegloff, Jefferson and Sacks, 1977) which influences speakers to defer and reduce expressions of negation, or even omit them, rather than emphasize them, unless the negative is used to support the statement of a previous speaker.² We will refer to this as the 'Social Agreement Principle'.

The conflicting claims of these two principles are testable. To the extent that the informative content of the interaction is primary, and social interaction is secondary [like in the news, a news conference, or Air Traffic Control interaction, say], the negatives are more likely to be prominent even if they can be seen as redundant. To the extent that the information conveyed by the negative is seen as 'dispreferred', the *not*-negative [henceforth, *NEG*] is more likely to be reduced. This study compares the Cognitive Prominence Principle with that of the Social Agreement Principle. *NEG* prominence in Question answering during newsconferences [henceforth QA] is indicative of the strength of the CPP, while prominence in political debate [henceforth PD] is indicative of the strength of the SAP.

3. Contraction

One type of negative-reduction to be analyzed is the reduction from a full form of the negative to a contracted form. Earlier research has shown that for most contexts, the reduction from full to contracted form is more a question of planning than a question of interactive intent (Yaeger-Dror, 1997). Table 1 compares full and contracted forms in declaratives¹, for QA and PD, for all verbs except *is* and *are*; despite the fact that QA are less scripted, for most presidents they are significantly more likely to be full form than the *NEG* in PD. This suggests that the CPP is primary.

¹ Note, however, that recent articles have presented considerable evidence that during the years under analysis, the appropriate footing for a news conference has shifted toward the adversarial end of the continuum (cf., Clayman, 2001, Clayman and Heritage, in press, and articles cited there.)

² Following Pomerantz's work (1984), I include under 'supportive' cases in which a disagreement is ultimately supportive of the interlocutor, and therefore is 'preferred'.

In theory, the choice between *not*-contracted and Aux-contracted forms of *{is not, are not}* is also at least partly related to the speaker's need to avoid focus on negation (Yaeger-Dror, Hall-Lew and Deckert, 2001). Consequently, the choice of *not*-contraction over Aux-contraction in the two corpora cited will be analyzed here.

For the analysis, Concorde (www.crm.umontreal.ca/~sankoff) runs of all *{'s not, 're not}* tokens and all *{isn't, aren't}* tokens in declarative sentences are tabulated for each news conference and political debate in the transcripts which provided the raw data.³ The results below are based on the percent of the contracted tokens which were *not*-contracted for each of these presidents. In theory, the news broadcasts should have a low percentage of *not*-contracted (so as to avoid reduced *not* in the informative setting), while the political debate would either have more *{isn't, aren't}*, to portray the speaker as nonadversarial, or would have lower *not*-contraction in contravention of the Social Agreement Principle, to display the adversarial nature of the interaction. Note that cross-speaker comparisons are ruled out because each of the speakers is from a different dialect area, and Northern US speakers are more likely to use *not*-contraction than Southern speakers (Yaeger-Dror *et al.*, 2001.) The results can be found on Table 1.

Dialect area is the most salient factor influencing contraction strategy for most individuals (Yaeger-Dror *et al.*, 2001.) In general, the Southern candidates favor Aux-contraction while candidates from the North and the West Coast favor *not*-contraction. Statistically, Northerners are 88 times as likely to use *not*-contraction as the Southerners ($p < .0001$.) These results are consistent with those found in studies of other registers (Yaeger-Dror, *et al.*, in press.)

News Conference (Q/A) vs. Debate (PD) Intraspeaker variation favors the full *NEG* in PD, but the tendency is not significant at the .05 level, and there are too few tokens for any one speaker to permit any conclusions to be drawn.

(1) Table 1. Comparison of *not*-contraction percentages for news conferences and debates.

President	% full PD	% full Q/A	% n't PD	% n't Q/A
Kennedy	50 <ns	60	35 <ns	46
Nixon	57 <*	78	88 <ns	100
Ford	50 >*	39	67 <ns	70
Carter	35 <*	48	* <ns	3
Reagan	41 >*	24	80 >ns	43
Bush1	14 <*	22	23 <*	42
Clinton	17 <*	28	0 <ns	22
Gore	25	*	13	*
Bush2	15	*	23	*

³ Clarification for reasons why the analysis must be limited to declarative tokens can be found in Yaeger-Dror, Hall-Lew and Deckert, in press). Note that *is* and *are* are considered separately because they permit Aux-contraction as well as *not*-contraction.

4. Prosodic prominence.

For this part of the study, all declarative *not*-negations from these two registers are analyzed: full form, Aux-contracted and *not*-contracted forms for all tokens in the News Conference (Q/A) and Debate (PD) declarative sentences were compared for each president.⁴ Both sets of digitized sound files were acoustically analyzed online using the Pitchworks program (www.sciconrd.com). Sample pitchworks tokens can be found in the appendix. Note that the coding 'tier' on top can be detached and used for statistical analysis. The following factor groups have been analyzed for this discussion, with the help of Goldvarb (www.crm.umontreal.ca/~sankoff).

Pitch 'accent' (*cf.* Horne, 2000, and Syrdal, Hirschberg, McGory and Beckman, 2001, for a discussion of ToBI and its categorization of pitch accents) was coded and was classified as the dependent variable.⁵ Table 2 shows the choices of pitch contour which were coded for the present study; sample pitch tracks for these contours can be found in the appendix. Given that the ToBI categorization of intonational phonology was determined on the basis of a careful analysis of news broadcasts, which are quite different from either Q/A or PD, it is understandable that the intonational choices which occur in the present study are likely to differ from those necessary for the analysis of these previous corpora.

- (2) Table 2. Dependent Variable: prosodic contours on *NEG* coded in this study; numbers mark sample pitch tracks in the Appendix. Sound files are attached in the online version.

Code	significance	ToBI correlate(s)	App	(#)
• N	Neutral	-	-	(1)
• A	Amplitude	-	-	
• H	High	H*	+	(2)
• R	Rising	H+H*; L+H*; %H-H* or %L-H*	+	(3)
• ^	Rise+fall	H*+L; H*-L%	+	(4)
• F	Falling	H*+L; H*-L%	+	(5)
• L	Low	L*	-	
• v	Fall-rise	L*+H	-	

One focus of this analysis is to determine how often pitch 'accent' prominence occurs on negatives, and how that prominence is realized; therefore, a prominent raised pitch -- *H** and its permutations -- will be considered 'applications' of the hypothetical rule that negatives will be prominent. Thus, {H,R,^,F} belong to the set of rule 'applications'. On the other hand, Bolinger (1978) claimed that cross-linguistically speakers will use negative prominence [which we equate with *L**, or *L*+H*] on negatives, the coding scheme chosen will also permit an analysis with these two *L** options as the application value in an

⁴ Tokens of '*I dunno*.' were not tabulated. See detailed discussion in Yaeger-Dror *et al*, 2001.

⁵ Mere word-by-word transcription of the data, which requires no acoustic expertise, takes approximately 15 minutes for every minute of text (p.c., Brian MacWhinney). The most experienced analysts of prosodic data find that prosodic analysis "commonly takes from 100-200 times real time. That is, a 10 second utterance would require from 17 to 33 minutes to label." (Syrdal *et al*, 2001). Thus, while large amounts of data are now available for analysis, the present corpus has been carefully limited to relatively small samples from two radically different situations.

analysis; however, no speaker to date has had even 1% L^* tokens, and an analysis using those tokens as 'applications' of the prominence rule has not been considered necessary. Similarly, Takano (ms.) finds that in Japanese a large percentage of the 'prominent' negative tokens are not pitch prominent, but only amplitude prominent. This pattern has not been found in any English language corpus studied. Consequently, for this analysis all 'applications' of the rule of prominence have a raised pitch; we can assume that amplitude and duration are also prominent in these cases. Nonprominent tokens [and the less-than-1% of tokens which are either L^* or amplitude prominent without any pitch prominence] are classified as nonapplications.

In addition, the data were coded for 'footing'. Table 3 presents the most common footings found in these corpora. This extra coding is needed because even in a political debate, a speaker can present his comment as informative, rather than as adversarial: Witness Ross Perot's display of charts as evidence of his informative rather than adversarial footing in the debate with Clinton and Bush. Quite often the footing can be dual: witness the Perot/Bush/Clinton debates, again, where the two primary candidates used claimed support of Perot's position in order to display their adversarial stance relative to each other. While in friendly conversations hedges may be used either as signs of predisagreements, or as lack of information, in the debates and news broadcasts, hedges are used much more consistently to acknowledge a lack of information. 'Self protect' was included to accommodate future comparisons with Japanese corpora; in doing so, we discovered that some US politicians frequently used negatives self-protectively.

(3) Table 3. Specific turn-footing codes in this study

Code	footing	Sample sentence	source
• I	Informative	<i>It's <u>not</u> going to be all done by legislation</i>	Cl/Bu/Per
• S	Supportive	<i>Kennedy and I <u>are not</u> in disagreement.</i>	K/N
• R	Remedial	<i>He simply <u>doesn't</u> know what he's talking about.</i>	K/N
• C	Self-correct	<i>They really <u>don't</u>—they're <u>not</u> able to control their markets very well.</i>	K/N
• P	Self-protect	<i>I <u>don't</u> wanna get this man mad at me,</i>	Cl/Bu/Per
• H	Hedge	<i>I'm <u>not</u>—I'm <u>not</u> sure that</i>	Cl/Bu/Per

The evidence will be judged relative to the two principles cited earlier:

- Cognitive Prominence Principle: the speaker will emphasize new-information negatives.
- Social Agreement Principle: the speaker with a nonadversarial footing will emphasize negatives which express support of the coparticipant; the speaker using adversarial footing will emphasize those negatives which are face threatening to the coparticipant.

We may well find that there will be more negative tokens when there is an adversarial footing than when there is a neutrally informative or supportive footing. We may also find that in a given situation, there will be more negative tokens with footing consistent with the stance of the situation.

- (4) Table 4. Comparison of tokens in different turn footings, for Adversarial (PD) and Supportive (SWB) corpora. [adapted from Yaeger-Dror et al, in press.]

Corpus	N	Footing			self-	self-	Remedial
		Support	Hedge	Inform.	Correct	Protect	
SWB	493	.255	.172	.296	.105	.079	.091
PD:K/N	419	.048	.007	.400	.010	.002	.536
PD:B/G	267	.011	.019	.382	.004	.116	.457

In previous work, we have shown that American English friendly conversationalists use prominence on negation even in informative turns more sparingly than political debaters do (Yaeger-Dror *et al*, in press). Table 4 shows the comparison: Polite conversationalists use negatives supportively 25% of the time. Debaters almost never use negatives supportively, and use them remedially more than half the time. Similarly, as we see on Table 5, more than half of the Q/A negatives are used informatively, and half of the PD tokens are used remedially.

- (5) Table 5. Comparison of tokens in different footings, for Adversarial (PD) and Informative (Q/A) Stance corpora.

Speaker	Stance	N	Footing	
			Inform.	Remedial
JFK	Q/A	58	.51	.23
GB1	Q/A	171	.56	.21
JFK	PD	199	.41	.53
GB1	PD	199	.29	.49

- (6) Table 6. Percent *NEG* with each prominence (**P**) type, for remedial tokens. [adapted from Yaeger-Dror, et al, in press]

Corpus	Footing	N	-P			+P				
			Neu	A	L*	L*+H	H*	L+H*	H*+L	^
SWB	Informative	146	.81	.00	.01	.00	.04	.05	.03	.07
SWB	Remedial	45	.87	.00	.00	.00	.04	.00	.02	.07
JFK:Q/A	Informative	30	.30	.00	.00	.00	.23	.27	.17	.03
JFK:Q/A	Remedial	12	.33	.00	.00	.00	.41	.00	.17	.03
GB1:Q/A	Informative	96	.50	.02	.00	.01	.15	.20	.10	.02
GB1:Q/A	Remedial	36	.36	.03	.00	.00	.11	.28	.17	.06
JFK:PD	Informative	82	.54	.01	.00	.00	.26	.10	.09	.01
JFK:PD	Remedial	105	.37	.04	.00	.00	.35	.06	.17	.01
GB1:PD	Informative	58	.40	.00	.00	.00	.16	.22	.19	.03
GB1:PD	Remedial	98	.50	.00	.00	.00	.15	.17	.16	.01

When we look at the number of negatives (Table 5), and the percentage of prominent negatives (Table 6) which occur in friendly conversations [SWB], Informative sessions [Q/A] and debates [PD], we find that while there are not more negatives, there are far more prominent negatives in an adversarial corpus or an informative corpus than in a friendly corpus, and that the difference is most salient in remedial turns.

(7) Table 7. Contour preferences by each of four debaters.

Debater	N	A	H*	L+H*	^	H+L*	L*	L*+H	%Prom
JFK	.36	0	.29	.16	.04	.12	.01	.01	.52
Nixon	.45	.03	.29	.08	.02	.14	0	0	.62
Gore	.52	0	.10	.21	.05	.11	0	.01	.48
Bush2	.67	0	.16	.05	.03	.09	0	0	.33

Change in time may be the primary significant factor for **pitch prominence**. Table 7 shows **prosodic contours** for different debaters. The 1960s debaters (K/N) preferred a simple H^* contour, whereas 2000 debaters preferred the permutations $L+H^*$ (rise) and H^*+L (fall). However, there is insufficient data here to draw any conclusion as to whether more complex contours have become more 'popular' across the board, or in this particular register of speech...or whether one speaker has merely accommodated to the other speaker's prosodic patterns.

5. Discussion.

For a discourse variable, even more than for a phonological variable, it would be impossible to evaluate the importance of the social situation without the analysis of parallel corpora for the same speaker. Of all the corpora currently available for dialect, time, and register analysis, only the contrast between presidential registers permits the systematic comparison possible here. With the evidence from these parallel corpora, we find that there are many factors which influence contraction strategy, and one of these factors is the social situation, as was shown on Table 1.

The evidence from the presidential archives demonstrates that both the Cognitive Prominence Principle and the Social Agreement Principle influence the realization of negatives used by presidential aspirants and presidents. To an American English-speaking audience, the confirmation of the Social Agreement Principle's primacy over the Cognitive Prominence Principle, and the fact that it is 'inverted' in adversarial situations may appear to be so intuitively self-evident as to be uninteresting. However, this is not a cross-cultural universal. Recent work by Yaeger-Dror (in press) has demonstrated that French debaters use informative footing, and eschew adversarial footing, so prominent negatives are no more likely to occur in a debate than in a friendly conversation.

Although this study has primarily been limited to a comparison of two situations in which prominence is expected to occur -- informative (Q/A) and adversarial (PD) situations, the results support the argument that all variation in negation strategies cannot be traced to the Cognitive Prominence Principle. The results also demonstrate that even small samples of truly 'parallel' corpora provide certain advantages for the analysis of discourse related corpora.

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