

GENDER IN JEOPARDY!

Intonation Variation on a Television Game Show

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Uptalk is the use of a rising, questioning intonation when making a statement, which has become quite prevalent in contemporary American speech. Women tend to use uptalk more frequently than men do, though the reasons behind this difference are contested. I use the popular game show Jeopardy! to study variation in the use of uptalk among the contestants' responses, and argue that uptalk is a key way in which gender is constructed through interaction. While overall, Jeopardy! contestants use uptalk 37 percent of the time, there is much variation in the use of uptalk. The typical purveyor of uptalk is white, young, and female. Men use uptalk more when surrounded by women contestants, and when correcting a woman contestant after she makes an incorrect response. Success on the show produces different results for men and women. The more successful a man is, the less likely he is to use uptalk; the more successful a woman is, the more likely she is to use uptalk.

Keywords: *gender; speech; popular culture*

This article concerns a sociolinguistic phenomenon? It is a phenomenon that is patterned by both context and demographics? It perhaps seems strange that these statements end with question marks. However, a wide swath of the American public speaks in statements that have the intonation of questions. While linguists refer to this practice as a “high rising terminal”

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(Ladd 1996), a more engaging term is *uptalk* (Cameron 2007; Thomas 2007). The primary sociological controversy surrounding uptalk concerns the fact that women use uptalk more often than men do, and some interpret this as a signal of uncertainty and subordination (Lakoff 1975). Many scholars refute the latter claim, arguing that speakers use uptalk for a variety of reasons. This article uses a unique site—the popular television game show *Jeopardy!*—to study variation in uptalk, and in doing so clarifies the role that gender plays in this intonational variation. Uptalk may indeed indicate uncertainty, but it simultaneously signals much more.

Sociolinguists trace uptalk's origins to 1950s adolescents in Australia and New Zealand (Levis 1999). In the United States, it is reported to have emerged among adolescent women in California in the 1980s, becoming common among many young American women by the 1990s. It has now spread, at least somewhat, to men and older Americans (Algeo and Algeo 1994; Quenqua 2012). Although sociolinguists remain the primary explorers of uptalk, many outside the world of linguistics have noticed its prominence. Spindler (2003, 27) describes, "I have noted that most listeners do not recognize uptalk as such until someone points it out to them and names it. Then, listeners are likely to express their disgust over the statements that sound like questions."

My interest in uptalk took an unexpected turn one day while I watched the game show *Jeopardy!* (the exclamation point is officially part of the title). Even though contestants must phrase their response in the form of a question, I noticed that the contestants primarily used a flat, statement intonation when responding. Yet, some contestants did use an uptalk intonation. Some contestants used uptalk almost exclusively, while other contestants used it hardly at all. After systematically analyzing a significant number of shows, I find that *Jeopardy!* contestants use uptalk in ways patterned by demographics and social context. With regard to demographics, there are differences with regard to gender, race, and age. Gender also interacts with a contestant's level of success during the show. With regard to social context, this study offers considerable insight into the specific environments in which men do and do not use uptalk in order to perform their masculinity in socially acceptable ways. I first offer some background on the show, followed by a review of the literature on gender and speech, concentrating on uptalk as an important example of how gender is constructed through interaction. Next, I argue that *Jeopardy!* offers a unique site through which to study interaction.

THE IMPORTANCE OF *JEOPARDY!* AND THE STRUCTURE OF THE GAME

Since their emergence on radio in the 1930s, American quiz shows have reflected and challenged what is considered important cultural knowledge (Hoerschelmann 2006) and have offered unique insights into human behavior (Johnson and Gleason 2009). *Jeopardy!*, in its current incarnation, has been in syndication since 1984, and maintains an enviable level of importance in popular culture (Berthold 1990). According to its official website, the show averages nine million daily viewers and ranks as the second most popular series in syndication. As another sign of its significance in popular culture, *Jeopardy!* and its host Alex Trebek have won 28 Daytime Emmy Awards, more than any other syndicated game show (Sony Corporation 2012). It even holds a trademark from the U.S. Patent and Trademark Office as “America’s Favorite Quiz Show.” Many Americans are familiar with *Jeopardy!* and respect the way it tests the knowledge of a wide variety of the North American public (while most contestants are from the U.S., Canadians regularly appear on the show).

Each episode features three contestants: one defending champion and two challengers. At the beginning of the show, the announcer Johnny Gilbert introduces contestants by name, occupation, and current or original geographic location. There are three rounds: the *Jeopardy!* round, the Double *Jeopardy!* round, and the Final *Jeopardy!* round. During the *Jeopardy!* round, there are 30 clues, divided into six categories. Within each category, dollar values range from \$200 to \$1000. During the Double *Jeopardy!* round, there are also 30 clues, with dollar values ranging from \$400 to \$2000. If a contestant rings in and answers correctly, the dollar value of that clue is added to the contestant’s score. If a contestant rings in and answers incorrectly, the dollar value of that clue is subtracted from the contestant’s score. At that point, another contestant can ring in to attempt to respond correctly. Of the 60 clues, three are Daily Doubles, one during the *Jeopardy!* round and two during the Double *Jeopardy!* round. If a player lands on a Daily Double, she wagers, before seeing the clue, some or all of her monetary score at that point, and then she is the only one to respond to it. During the Final *Jeopardy!* round, contestants wager from the money they have collected by the end of the Double *Jeopardy!* round. The contestant who amasses the most money after the Final *Jeopardy!* round wins and becomes the returning champion on the next episode.

A key aspect of the show is the “answer and question format” (Sony Corporation 2012). The players are given the “answer” and they are

expected to give their response in the form of a “question.” Thus, instead of responding “Thomas Jefferson,” contestants respond “Who is Thomas Jefferson?” Some might rightfully inquire, then, whether *Jeopardy!* is a good research site to study uptalk, since by definition people use uptalk during statements, not questions. This is a valid concern. However, in reality, *Jeopardy!* fans refer to the “answers” as “clues” and the “questions” as “responses” (Fitzgerald 2012). Thus, the contestant’s response is a question in name only. In addition, a strong majority of *Jeopardy!* responses do not employ uptalk, reaffirming that contestants do treat them as statements. However, the variation in uptalk allows for an in-depth sociological analysis of this phenomenon.

DOING DIFFERENCE THROUGH INTERACTION: UPTALK AS PERFORMANCE OF GENDER

West and Zimmerman (1987) revolutionized the way social scientists think about gender by emphasizing its interactional origins. My research illustrates a key claim of their landmark article: “Participants in interaction organize their various and manifold activities to reflect or express gender, and they are disposed to perceive the behavior of others in a similar light” (West and Zimmerman 1987, 127). Gender emerges out of interaction and out of the institutional context within which this interaction is located. While individual actors do gender, they do so in relation to other actors engaged in this same process. We carry out the performance of gender with the knowledge that we hold one another accountable for these performances. If an actor engages in behavior that might provoke gender assessment because of a transgression of gender norms, she or he may adjust other aspects of interaction in order to ensure that the overall gender performance is acceptable.

Speech is a key way people perform gender through interaction (Hollander and Gordon 2006). This importance stems from the continuous and repeated nature of such interaction: “Through their behavior, and especially their discourse, participants in an interaction are continuously engaged in the process of constructing relatively masculine or feminine social identities” (Holmes 2006). Linguists have studied how gender is constructed in male–female interaction, finding, for example, that men are far more likely than women to interrupt (Tannen 1990; West and Zimmerman 1983). However, this relationship becomes less clear when women are in the more powerful position (Epstein 1986; Kollock, Blumstein, and Schwartz 1985; Leffler, Gillespie, and Conaty 1982). Researchers have also

studied same-sex interactions, emphasizing, for example, the competitive nature prominent in all-male conversations (Coates 2003).

Though sociolinguists generally agree that uptalk is a gendered speech practice, the meanings of uptalk remain controversial. Linguist Robin Lakoff (1975) argued that uptalk was a result of female submissiveness. She placed uptalk among a set of speech practices—others include hedge words (“kind of, sort of”) and tag questions (“that is the case, isn’t it?”)—through which women signaled that they were uncertain of what they were saying (Crawford 1996). However, others have claimed that the use of uptalk is not necessarily a signal of subordination (Warren 2005) and that speakers use it for a wide variety of reasons (Ching 1982). Linguists have argued that the interpretation of uptalk depends on the specific context in which the uptalk occurs (Gunlogson 2001; Tomlinson 2009). Britain, for example, argues that uptalk is used for “the establishment of solidary common ground between the speaker and the hearer” (Britain 1998, 215). It is a way of “checking in” with the listener to make sure that she or he is still following what the speaker is saying. For example, researchers have found that speakers are more likely to use uptalk when they are relating a narrative of considerable length in order to ensure that the listener is keeping up (Guy et al. 1986). McLemore (1991) found in her study of a sorority that women leaders used uptalk during meetings as a strategy in order to achieve consensus among the group. The use of uptalk in these situations, and the relative prominence of uptalk in female speech, results not from uncertainty but rather from different gendered norms regarding cooperation and competition. Women are more likely to see interaction as a task that the actors are working on together, whereas men see interaction through a lens of rivalry (Coates 2003).

While the majority of the concern around uptalk involves gender, other background characteristics have been implicated. The findings involving social class have been mixed. If uptalk indeed signals uncertainty and submission, we would expect that those from the lower classes would be more likely to use uptalk as a signal of their lower-class status. In a study of uptalk use in Australia, some researchers have found that uptalk use is related to social class: Middle-class speakers used it the least, while lower-working class speakers used it the most (Guy et al. 1986). A similar study in New Zealand found no such relationship (Britain 1998). The use of uptalk may further be related to context. For example, Conley and O’Barr (2005) found that male witnesses in American courtrooms tended to use uptalk more if they came from lower-class backgrounds. The courtroom setting, especially one involving confrontational lawyers questioning

lower-class witnesses, may exacerbate this connection between uptalk and social class. The evidence regarding race is also indeterminate. While Fought admits that there is some evidence that African Americans differ from white Americans, she also argues that these claims “go far beyond what can be supported by the research that has been done so far on various minority ethnic groups in the United States” (Fought 2002, 457). There is some evidence that Blacks tend to use uptalk less frequently than whites, especially in formal settings (Tarone 1973). In fact, people sometimes use intonational patterns as a way to discern between white and black voices (Rahman 2008). With regard to cohort, given that uptalk is a recent linguistic development, researchers have found that its frequency is higher among younger speakers (Coates 2004; House 2006).

The interaction of these various characteristics must be considered as well. Recent feminist scholarship calls for an intersectional lens, criticizing previous research on gender, class, and racial inequalities as “rarely attempting to study them as complex, mutually reinforcing or contradicting processes” (Acker 2006, 442). While work on gender differences in interactional strategies abounds, this focus on gender has been at the expense of research on differences relating to other characteristics of the speakers, such as social class and race (Epstein 1986). With regard to assertive speech in general, Woods (1989) found that gender trumps social class. In her research on workplace conversations, she found that lower-class men still interrupted upper-class women (Woods 1989). Experimental research by Leffler found that both men and women, when placed in a position of power, engaged in interruption more frequently (Leffler, Gillespie, and Conaty 1982). With regard to race and gender, Bucholtz (1996) found that Black women, more so than Black men, use speech strategies in professional settings (such as questioning an authority figure) that challenge hegemonic discourse.

Returning to West’s reconceptualization of these processes, it is important to study uptalk and other speech practices as situated interactional phenomena: “We cannot determine their relevance to social action apart from the context in which they are accomplished” (West and Fenstermaker 1995, 30). The interactional nature of uptalk must be placed in its institutional context for its implications to be fully understood. As Wiley and Woolley argue, the interpretation of speech patterns must take into account situational factors and the statuses of the speakers within these situations (Wiley and Woolley 1988).

JEOPARDY! AS A SITE OF GENDER PERFORMANCE

What, then, can we learn about uptalk's relationship to gender and other statuses through study of a corporate-owned media product? At first, contestant performance on *Jeopardy!* may seem far afield from real interaction. Sociolinguists elicit their data through varied means, including researcher-guided interviews (Eckert 2000; Tagliamonte 2006) or conversation in more natural contexts (Coates 2003; Sunderland and Litosseliti 2008; Woods 1989). Research involving speech practices within media is scarce, primarily because such interaction lacks the authenticity of speech in the real world (Richardson 2010).

I argue that *Jeopardy!* provides a unique and productive site for studying speech in interaction. Contestants face varied contexts within the course of a show and from episode to episode. There is much variation in the gender of contestants from show to show. One episode may feature two women and one man, while another might have two men and one woman, and yet another three men. Such combinations could affect the interactions among the contestants as they perform gender in differently gendered contexts. The hierarchy of success on the show is constantly shifting: Not only are there champions and contenders, but at any given moment, contestants may be significantly ahead of or behind one another. Combining these status shifts with the gender of the contestants allows for a unique opportunity to study the interaction of status and gender. Another example of interaction involves contestants "correcting" one another: After one contestant is incorrect, another contestant may step in and offer a correction. If uptalk varies among these contexts in patterned ways, such findings could offer unique advances to our understanding of how gender, race, and class are constructed through speech.

The potential power of these patterns lies specifically within the mediated context within which the interactions take place. As mentioned above, millions watch *Jeopardy!* on a daily basis. The show's fast-paced nature leads to many responses in a short span of time. If uptalk appears repeatedly within these interactions in patterned ways, the reinforcement of existing hierarchies could be accomplished. Indeed, Butler argues that hierarchies operate through a process of repetition that "conceals itself and enforces its rules precisely through the production of substantializing effects" (Butler 1990, 185). If members of certain social groups in particular situations use uptalk in quickly repeating patterns, such iterations could have significant implications. I show that uptalk on *Jeopardy!* varies along

axes of identity and interaction. Some of these patterns mirror what previous studies have found, although they are located in a unique, mediated setting. Other findings reveal heretofore unacknowledged ways in which gender is constructed through speech practices.

METHODS

I used the method of quantitative content analysis to analyze the episodes. Content analysis reveals deep social and cultural patterns in cultural texts that may not be easily revealed elsewhere (Neuendorf 2001; Riffe 2005), nor would these be discerned through casual, day-to-day observation of a media product. I developed a coding mechanism that allowed me to analyze the demographic and context effects related to the use of uptalk. I coded 100 regular episodes from the 2009-2010 season, and these data inform the majority of my findings. I also coded 49 special episodes. These included a two-week tournament of champions; a two-week teenager tournament, a two-week tournament of college students; episodes with children; episodes with celebrities; and the re-airing of the first episode of the current incarnation of the show from 1984. I occasionally will make reference to findings from some of these special episodes, but the majority of the analysis concerns the 100 regular episodes.

The unit of analysis was a contestant's response, while the dependent variable was the intonation of the response: upward intonation versus flat/downward intonation. While this was a subjective measure, there was little question as to which intonation the contestant was using. A reliability check provided strong support for this claim.¹ The other subjective measures were the age, race, and occupational prestige of the contestant making the response. For age, I coded the contestants into decade categories: 20s, 30s, 40s, or 50s (with the very few much older contestants coded as being in their 50s). I placed contestants from the child, teen, and college shows in categories separate from the other age groups. For race, I coded the contestant into three categories: white, Black, and other (limited racial diversity on *Jeopardy!* prevented further classification). I coded as Black the few contestants I perceived as Black/white biracial. I attempted to garner this information from the Sony Corporation (which owns *Jeopardy!*), but the representative to whom I spoke said this information was confidential. Because I was troubled by the subjective nature of these variables, I had nine additional coders of a variety of ages and races code contestants' ages and races based on photographs provided at the J-Archive website

(Fitzgerald 2012). I then calculated, for each contestant, the mean of all 10 coders' estimates for age (coding an estimate of "20s" as 25 years old, and so on), and the mode for race. Their estimates were generally quite similar.² Using the occupations provided at the beginning of each episode, I matched each occupation with a listing from the occupational prestige codes used by the National Opinion Research Center (National Opinion Research Center Website 2010). Though some of the occupations matched up exactly (e.g., lawyer, bartender), others did not. When this occurred, I assigned the prestige code for the closest occupation. A couple of common occupations, such as student or homemaker, did not have any corollary on the list, and I used a missing data code for these contestants. The remaining variables for the responses were less subjective. They were as follows: the gender of the contestant; the gender of the contestant's opponents (two men, two women, or a man and a woman); whether a contestant was a returning champion or a contender; the gender of the champion (if the contestant was not the champion); the dollar amount by which the contestant was leading or losing at the moment of response; if leading—the amount between the leader and the next closest contestant; if losing—the amount between the losing contestant and the leading contestant; whether the response was correct or incorrect; whether the response was the first response to a clue, or a response after an incorrect response; the gender of the incorrect responder, if the response followed an incorrect responder. I did not include a variable for geographic location—even though some identify the West Coast as the origin of American uptalk (Locke 1998)—because the announcer names either the current residence or original hometown of the contestant. I considered coding for the gendered nature of the categories on the *Jeopardy!* board, but decided against this since previous research on *Jeopardy!* found that around two-thirds of the category titles are gender neutral (Brownlow, Whitener, and Rupert 1998). While I coded the Daily Double responses, I kept these separate from the regular responses and did not include them in the following analyses because their nature varies significantly from a regular response.

I recorded the episodes onto a digital video recorder by setting it to record all first-run episodes of the show at the same time each evening. After listening carefully to the intonation of a response, I would pause the DVR and record the values for the 12 variables associated with the response. Once I received the age and race estimates from the nine additional coders, I replaced my original coding of these variables with the average estimates. I used SPSS to perform all of the statistical analyses. Since the dependent variable is a dichotomy (uptalk or not), I used logistic regression for the analyses.

TABLE 1: Descriptive Statistics for Contestants and for Responses

	<i>300 Contestants</i>		<i>5,473 Responses</i>	
	<i>Mean</i>	<i>Standard Deviation</i>	<i>Mean</i>	<i>Standard Deviation</i>
Woman	0.44	0.50	0.39	0.49
Black	0.07	0.26	0.07	0.26
Other race	0.13	0.34	0.13	0.34
Age	35.77	8.87	37.89	7.03
Occupational prestige	56.19	12.99	56.27	12.80
Returning champion	0.33	0.47	0.37	0.48
Lead/loss at moment of response			-\$1,240	\$5,090
Uptalk intonation			0.37	0.48
Incorrect response			0.12	0.33

Note: statistics for the Prestige variable are based on 258 contestants and 4,736 responses.

RESULTS

For the majority of the results, I use data from the 100 regular episodes I have coded. These episodes involved 300 contestants and 5,473 regular responses. Though I concentrate primarily on the regular responses within the regular shows, I occasionally make reference to sets of special shows in order to provide points of contrast.

Demographics of the Contestants

In the 100 shows, there were 300 contestants. If a contestant appeared on more than one episode, she was coded as a separate person, given that the context varies from show to show (e.g., during one show, a contestant could be a challenger with two male opponents, and during the next show, she could be a returning champion with one male and one female opponent). Table 1 presents descriptive statistics, by contestant and by response. Of these 300 contestants, 56 percent were men and 44 percent were women. The most common contestant configuration on the show was two men and one woman, followed by two women and one man, and finally three men (there were no episodes with three women). More than three-quarters of the contestants appeared white, slightly more than one-fifth Black, and the remaining contestants of other races. Combining gender and race characteristics, there were 123 white

men, 115 white women, 16 Black men, 6 Black women, 28 men of other races, and 12 women of other races. Obviously this reflects limited variation, so I am cautious in interpreting some of the findings. With regard to age, using the average ages compiled from the 10 coders, the majority were in their 30s, followed by those in their 40s, and then equally split between those in their 20s and 50s. The mean age was 38. *Jeopardy!* contestants vary significantly with regard to occupational prestige. After removing the 42 contestants for whom there was no listed occupational prestige score (32 students, 9 homemakers, and one self-proclaimed "gadabout"), prestige scores ranged from 22 (a custodian) to 86 (four physicians).

Uptalk and Uncertainty

Table 2 presents coefficients and odds ratios from logistic regression models predicting use of uptalk. Because logistic coefficients and odds ratios are not necessarily intuitive, Figure 1 presents illustrative examples of probabilities of uptalk based on the regression results (DeMaris 1995). In the 5,473 responses in the 100 regular shows, contestants used uptalk 37 percent of the time. Even though the contestants are asked to phrase their response in the form of a question, a strong majority of the time they deliver their responses as statements. I show that the use of uptalk varies by demographics and context.

Among these 5,473 responses, 659 of them were incorrect. Contestants used uptalk twice as often among these responses. Using the final logistic model to predict a probability, a male contestant making a correct response had only a 27 percent chance of using uptalk. When men answered incorrectly, this predicted probability rose to 57 percent (see Figure 1, examples 1 and 3). A similar effect is found among women (see Figure 1, examples 2 and 4). As described above, some literature on uptalk has argued that it can be used as a way to signal uncertainty. This first result illustrates that in the context of *Jeopardy!* this is indeed the case. Often, contestants knew they were guessing as they were responding, and their quizzical looks and longer response time indicated this. Such guesses were more likely to lead to incorrect responses. The contestants vocally signified this uncertainty by engaging in uptalk a majority of the time. Thus, a link between uptalk and uncertainty occurred repeatedly on the show. The existence of this link, as I will discuss later, has potential ramifications for the interpretation of uptalk as used by various demographic groups.

TABLE 2: Coefficients and Odds Ratios for Logistic Regression Predicting Use of Uptalk

Independent Variable	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7		Model 8	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio	Coefficient	Odds Ratio	Coefficient	Odds Ratio	Coefficient	Odds Ratio	Coefficient	Odds Ratio	Coefficient	Odds Ratio	Coefficient	Odds Ratio
Incorrect response	1.20***	3.32	1.23***	3.43	1.26***	3.51	1.25***	3.50	1.26***	3.51	1.26***	3.51	1.26***	3.51	1.26***	3.51
Female	0.83***	2.29	0.85***	2.35	0.81***	2.25	0.91***	2.47	0.91***	2.48	0.97***	2.63	0.97***	2.64	0.88***	2.41
Age	-	-	-0.04***	0.97	-0.04***	0.96	-0.04***	0.96	-0.04***	0.96	-0.04***	0.96	-0.04***	0.96	-0.04***	0.96
Black	-	-	-	-	-0.45***	0.64	0.03	1.03	0.03	1.03	0.03	1.03	0.03	1.03	0.03	1.03
Other race	-	-	-	-	-0.38***	0.69	-0.36**	0.70	-0.36**	0.70	-0.37**	0.69	-0.37**	0.69	-0.37**	0.69
Black × female	-	-	-	-	-	-	-1.85***	0.16	-1.85***	0.16	-1.86***	0.16	-1.86***	0.16	-1.84***	0.16
Other × female	-	-	-	-	-	-	0.00	1.00	0.00	1.00	0.01	1.02	0.01	1.01	0.01	1.00
Lead/loss in 1000s	-	-	-	-	-	-	-	-	0.00	1.00	-0.01	0.99	-0.01	0.99	-0.01	0.99
Lead/loss × female	-	-	-	-	-	-	-	-	-	-	0.04**	1.04	0.04**	1.04	0.03**	1.03
Returning champion	-	-	-	-	-	-	-	-	-	-	-	-	0.02	1.02	-0.07	0.93
Champion × female	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26*	1.29
Constant	-1.01***	-	0.29	-	0.47**	-	0.42*	-	0.42*	-	0.42*	-	0.42*	-	0.47**	-
Nagelkerke R ²	0.094	-	0.110	-	0.116	-	0.126	-	0.126	-	0.128	-	0.128	-	0.129	-
-2 log likelihood	6,840.19	-	6,770.92	-	6,742.26	-	6,699.38	-	6,699.18	-	6,690.61	-	6,690.47	-	6,686.52	-
n	5,473	-	5,473	-	5,473	-	5,473	-	5,473	-	5,473	-	5,473	-	5,473	-

Note: Reference group for race variables is “white.”
* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed test).

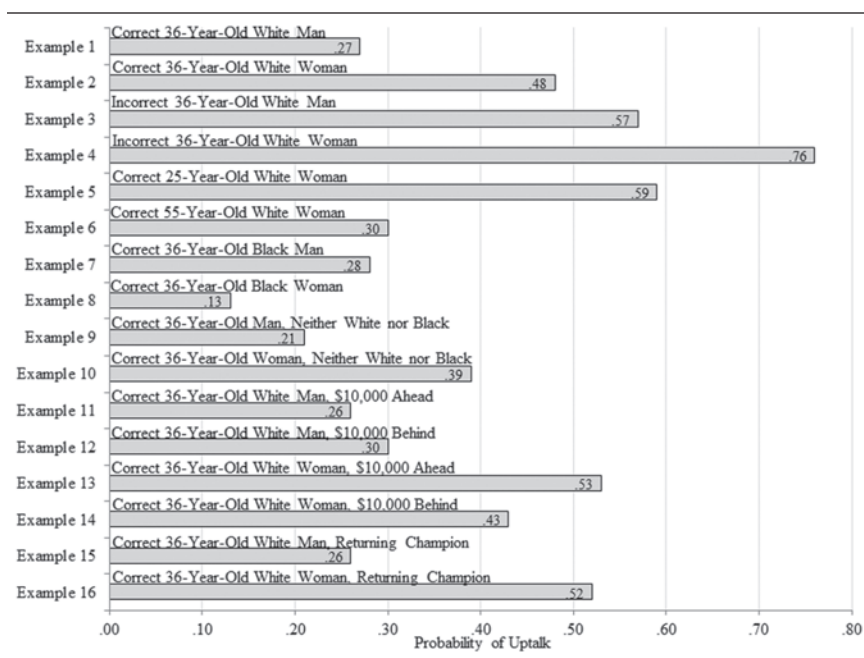


FIGURE 1: Illustrative predicted probabilities of uptalk

Note: Predictions calculated using logistic coefficients from Table 2, Model 8 and the following formula: $p = e^2 / (1 + e^2)$. All examples, unless otherwise noted, are challengers (i.e., not returning champions) who are neither ahead nor behind.

The Demographics of Uptalk

The use of uptalk is patterned along several demographic characteristics, most pertinently gender. Women used uptalk significantly more than men did. The final model shows that, when giving a correct response, a man's probability of using uptalk was 27 percent while a woman's probability was 48 percent (see Figure 1, examples 1 and 2). For an incorrect response, these probabilities were 57 percent and 76 percent, respectively (see Figure 1, examples 3 and 4). Another way to look at this gender difference is at the contestant level. For each contestant, I calculated the percentage of correct responses delivered with uptalk. Nine percent of female contestants used uptalk nearly exclusively (91 percent of the time or more during an episode), while there were no male contestants who did so. Thirty percent of men used uptalk 10 percent of the time or less, whereas only 12 percent of women used uptalk this infrequently.

The linguistic phenomenon of uptalk is a relatively recent development, and the literature suggests that it is younger people who use this

intonation pattern more frequently. This is reflected on *Jeopardy!* as well. I added the age variable in Table 2, Model 2, and the effect was quite significant and large. As illustrated in Figure 1, examples 5 and 6, the final model predicts that a 25-year-old white woman answering correctly used uptalk 59 percent of the time, whereas a 55-year-old white woman used uptalk 30 percent of the time. A brief look at results from the limited number of special episodes involving children, teenagers, and college students helps to form a richer picture of uptalk throughout the life course. Among children, female uptalk far outpaced male uptalk (77 percent vs. 32 percent). Among teenagers, there was near parity (58 and 54 percent). Among the college students (all of whom seemed of traditional college age), the gender difference reappears: While female uptalk remains high (56 percent), male uptalk decreases (31 percent). The size of this difference between men and women then remains steady throughout the life course: Older women do use uptalk less than younger women, but it is also the case that older men use uptalk less than older women.

Table 2, Models 3 and 4 include variables for the contestant's race and corresponding interaction effects. The standout group in these models is Black women. According to examples derived from the final model, where a correct white woman has a 48 percent chance of using uptalk, a correct Black woman's chance is a mere 13 percent (lower even than men; see Figure 1, examples 2 and 8). Yet, it is necessary to keep in mind that these results are based on only six Black women (and only five individuals, since one contestant was a returning champion). However, the size and significance of this finding corroborates earlier findings that Black women employ speech strategies that differ from those of white women and Black men.

I expected that the higher the occupational prestige of the contestant, the lower the use of uptalk: Those from occupations with high prestige and much training might be more certain in their responses. There was some evidence that as women's occupational prestige rose, their use of uptalk slightly decreased, but this effect is small relative to the other effects and merely approached statistical significance ($p < .10$, model not shown). Because this effect was small, and because the prestige variable was the only variable for which there was a significant amount of missing data, I ultimately excluded it from the regression models.

Uptalk and Success

Because uptalk is so clearly linked to uncertainty, I expected that success might influence the use of uptalk. If one becomes successful, either

during the course of a game or over the course of more than one game, one's status rises. With this rise in status, one's uncertainty might decrease, and with it the use of uptalk. I measured success in two ways: success during a show (by examining the extent to which contestants were leading or losing at any point during a game) and success from show to show (by contrasting returning champions with challengers). Table 2, Models 5 and 6, measure the effect of the former type of success: being ahead by a wide margin. Such success marginally affects male contestants, but in the expected direction. Figure 1, examples 11 and 12, illustrate that a correct man who is \$10,000 ahead of his nearest competitor has a 26 percent chance of using uptalk, while a similar contestant who is \$10,000 behind the leader has a 30 percent chance. The interaction effect shows that this difference among women is larger. However, the effect is in the *opposite* direction from the expected relationship. As illustrated in Figure 1, examples 13 and 14, a correct woman who is \$10,000 ahead has a 53 percent chance of using uptalk, while a similar contestant who is \$10,000 behind has a 43 percent chance.

The final model in Table 2 includes the other type of success: being a returning champion. An interaction effect captures whether men and women are differentially affected by being a champion, and indeed they are. A male champion uses uptalk slightly less than a male contender: a 26 percent chance versus a 27 percent chance (see Figure 1, examples 1 and 15). For women, the opposite is true. A female champion uses uptalk more than a female contender: a 52 percent chance versus a 48 percent chance (see Figure 1, examples 2 and 16).

Both measures of success, then, produce the same result: The more successful a woman is, the higher her propensity to use uptalk, exactly the opposite of what one would expect the relationship to be between success and certainty. Women who enjoy higher status, either by winning or by being a returning champion, use uptalk more than women of lower status. One possible explanation for this is that successful women are engaging in a compensatory strategy in order to perform their gender "correctly." A woman brashly flaunting her knowledge is perceived by some as engaging in an inappropriate gender performance, or she is, at least, held more accountable for this performance (West and Zimmerman 1987). Research in other contexts has shown that women who show dominance are considered unlikable and unfeminine (Carli 1990; Costrich, Feinstein, and Kidder 1975). Perhaps successful women on *Jeopardy!* engage in uptalk more often in order to temper this negative effect.

TABLE 3: Coefficients and Odds Ratios for Logistic Regression Predicting Male Contestants' Use of Uptalk

<i>Independent Variable</i>	<i>Model 1: Competitor Model</i>		<i>Model 2: First Responder Model</i>	
	<i>Coefficient</i>	<i>Odds Ratio</i>	<i>Coefficient</i>	<i>Odds Ratio</i>
Incorrect response	1.29***	3.64	0.67	1.95
Competitors: 1 male, 1 female	-0.16	0.85	—	
Competitors: 2 males	-0.92***	0.40	—	
First responder female	—		1.41**	4.11
Black	—		0.81	2.25
Other race	—		0.59	1.81
Black × first responder female	—		-0.79	0.46
Other race × first responder female	—		-1.29	0.28
Constant	-0.88***		-1.28***	
Nagelkerke R^2	0.064		0.133	
-2 log likelihood	3,917.15		257.06	
<i>n</i>	3,335		204	

Note: Only male responses are included in these models. Reference group for competitors variables is "2 Females." Reference group for race variables is "white."

** $p < .01$, *** $p < .001$.

Uptalk, Social Context, and the Performance of Masculinity

The attention placed on women's uptalk often overshadows interesting variation in men's uptalk. Women use uptalk more often, but men sometimes do use uptalk, such as when they are uncertain of a response. However, how men use or avoid uptalk can be examined as part of their gender performance. This final set of findings concerns patterns in male contestants' uptalk usage. Here, the contexts in which contestants respond become particularly important. Because I am referring to some fairly specific contexts, the sample sizes are smaller, but the relationships remain striking. The first context involves the gender of a man's opponents. Table 3, Model 1, shows that men's use of uptalk is affected by the gender of their fellow contestants. When a man has two women for opponents, his probability of using uptalk for correct responses is 29 percent. When his opponents are one man and one woman, this probability drops to 26 percent (although this change is only marginally significant at the $p < .10$ level). When his opponents are two men, his probability of uptalk for correct responses

drops significantly, to 14 percent. In addition, the returning male champions on these all-male shows used uptalk less frequently than their average use of uptalk on the other shows on which they appeared and on which female contestants were present. Unfortunately, this contestant configuration is rare on *Jeopardy!* Among the 100 regular shows I coded, only two shows featured three men. Yet more qualitatively, as I was coding these two shows, I actually perceived a difference in the atmosphere that I can describe only as a heightened level of competitiveness. These episodes appeared to be, to use a masculine phrase, "pissing matches." In such an environment, use of uptalk among men became virtually verboten, as the norm of masculine certainty was fully in play. Other research has shown that a man's gendered context affects his behavior (Kreager 2007), and these results provide another example of this phenomenon.

The second context concerns the interactional process of correcting others. Of the 5,473 responses, 339 involved a contestant "correcting" another contestant: A contestant answers incorrectly, and another contestant then rings in and answers correctly. Two hundred four of these 339 involved a man correcting another contestant. Though such correcting moments are relatively rare, examining how men behave during these moments gives us insight into how men use variation in uptalk to perform their masculinity. According to Table 3, Model 2, when correcting a fellow man who had just responded incorrectly, men's probability of using uptalk is 22 percent, even lower than the 26 percent found earlier in the general model (see Figure 1, example 1). However, if a man is correcting a woman who had answered incorrectly, his probability of using uptalk more than doubles, to 53 percent. The race interaction effects in the model, though not statistically significant because of the small sample size, suggest that this effect may be particular to white men. I suggest that these men are performing their masculinity through this differential use of uptalk. Men are not merely correcting other men, they are "schooling" them, trying to one-up the other man and secure a higher place in the hierarchy (Kiesling 2001). To similarly put a woman in her place might be considered an inappropriate display of masculinity, particularly in such a public setting. Therefore, some white men, in the process of correcting women, engage in uptalk to soften the blow: "It's too bad that you were incorrect, but I'm going to venture a guess that the correct answer is" Uptalk among white men can be viewed as a speech strategy that helps them engage in context-appropriate forms of white masculinity. Already atop the gendered (and raced) hierarchy (Chen 1999), perhaps white men temper their corrections of women with uptalk so as not to appear overly aggressive. This finding complicates the relationship identified between gender and the propensity

to interrupt (Anderson and Leaper 1998). White men may correct women, but the way in which they do so is of paramount importance.

DISCUSSION

Though sociolinguists have studied the phenomenon of uptalk, its prominence in contemporary American speech and the controversies surrounding its meaning demand further inspection within as many contexts as possible. Such studies are important because the leading users of uptalk are young adult women, for whom a semblance of certainty is of utmost importance. Though we can learn how speakers construct gender through speech using conventional sociolinguistic methods, I have shown that it is possible to gain additional insight by performing a quantitative content analysis of a popular media product. *Jeopardy!* is one of the longest-standing and most respected programs on television, and this makes the presence of uptalk particularly notable. *Jeopardy!* contestants have worked very hard to appear on the show, enduring multiple tests of knowledge, interviews, and auditions. Therefore, it is likely that the contestants on the show hold their intellectual prowess in relatively high regard. Their confidence must be high.

Despite this, women who appear on the show engage in uptalk nearly twice as often as men do. Some argue that uptalk should not be taken as a signifier of uncertainty, but the stark differences in uptalk use between correct and incorrect responses confirm that uncertainty does play a role. However, the findings also show that uncertainty is not the whole story. Indeed, even after taking the correctness of the response into account, the gender difference remains. The combination of these two findings has intriguing implications. Contestants imply uncertainty through uptalk. Do people infer from women's greater use of uptalk, then, that women are more uncertain than men are? Given that the uptalk is often repeated in quick succession, such iterations could indeed reinforce this connection. Women's speech practices contribute to the reinscription of gender hierarchies.

Uptalk on *Jeopardy!* is patterned along multiple demographic characteristics in ways that mirror findings from the literature. While the gender effect is arguably the largest, it is also clear that younger contestants use uptalk more frequently than older contestants; Black women use uptalk far less frequently than white women; and occupational prestige has relatively little effect on uptalk use. Given that these displays of uptalk happen in a very public, mediated arena, they perhaps have power to reaffirm these relationships in the public consciousness.

I also offer several examples of how social context affects gender performance. One's accountability for her or his performance can result in changes in frequency of uptalk use. For example, the literature shows that there is an unfortunate tendency for people to penalize female success. Successful women on *Jeopardy!* accountable for this breach, may attempt to correct their gender performance through additional use of uptalk. Men, understanding that they are accountable for their gender performance, adjust their use of uptalk upward when correcting a female contestant. However, when they correct fellow men, or are in the presence of only men, they realize that their gender expectations demand competitiveness and certainty, and their uptalk use declines.

Clearly, this research is subject to critiques. With regard to external validity, some may argue that this research is too far removed from actual interaction. However, many of the variables used here—success, order of response, and contestant context—capture elements of interaction. The key step now is to continue to study the use of uptalk in additional contexts outside of the *Jeopardy!* arena. Do men use uptalk when correcting women in the course of normal conversations? Do successful women in a variety of environments use uptalk more in order to compensate for their success? How do older women feel about the use of uptalk among their younger female peers? Attempts are also needed to assess the validity of the causal relationships I have identified. For example, I suggested above that successful women might use uptalk as a compensatory strategy, but the data cannot confirm this claim. Using a method similar to Ching's, in which he asked research subjects to react to recordings of their own uptalk use, might help to address these questions (Ching 1982).

Since I collected all of the data from episodes in the 2009–2010 season, another obvious validity concern regards the time-specific nature of the results. Has uptalk on *Jeopardy!* increased over time? Studying linguistic change is a difficult endeavor (Britain 1998; Warren 2005), and data from other seasons is not available (Sony Corporation representative, personal communication). However, in the rebroadcast of the first episode from 1984, the lone woman used uptalk only once in her 10 correct responses. Expanding the scope of the project over a longer span of time would also allow one to build a better sample of racial minorities, as well as more episodes with only men (and some episodes with only women). A much larger sample would also allow for more specific analyses, such as how race, gender, social class, and age intersect in interaction. For example: What is the propensity for uptalk when white men correct Black women who are younger than themselves? How does success affect uptalk use among professional Black women? Another round of coding could also

add a set of variables regarding the interactions of the host, Alex Trebek, a male authority figure on the show who might affect the gender performance of the contestants.

Regarding reliability, I was the only coder of these episodes. However, the majority of the variables involved little subjectivity, and I did have additional coders gauge the contestants' ages and races. The dependent variable—intonation—could also be considered subjective, but my reliability check of this variable yielded a perfect reliability coefficient. I did not use linguistic devices such as a pitch meter, which might give some pure linguists pause.

However, given the strength of the relationships I have identified, using a context and method that vary considerably from typical approaches, we can learn a great deal about the subtle nature of gender relations. This research demonstrates not only that uptalk constructs gender through interaction, but also that it reproduces the gender order. Women contestants' greater use of uptalk causes them to appear uncertain of their knowledge and apologetic for their success. Men contestants lower their use of uptalk to appear competitive toward other men, and raise their use of it in what is perhaps a chivalrous effort to "protect" women contestants. It is a compelling coincidence that uptalk, which reaffirms the existing gender hierarchy, has arisen precisely during an era of supposedly greater gender equality. This makes it all the more critical to study uptalk in as many contexts and through as many methods as possible.

NOTES

1. A second coder and I coded the intonation of responses in two episodes (in which 28 percent of the 108 responses used uptalk). Using the percentage-agreement measure of reliability, the reliability coefficient for the intonation variable was 1.00 (no disagreements occurred). In the 100 regular episodes I coded, there were 25 responses for which the presence or absence of uptalk was unclear. The majority of these were responses where the contestant began a response, but then froze into silence.

2. Using the percentage-agreement measure of reliability, the reliability coefficient for the race variable was .95. Six contestants' races proved particularly problematic, primarily because of their Hispanic or Hawaiian backgrounds, and I coded them as "other" (meaning not white and not Black). For the age variable, defining an agreement as two coders coding a contestant's age in the same decade, the reliability coefficient was a low .52. However, defining an agreement as two coders coding a contestant's age in the same decade or an adjoining decade (i.e., 20s or 30s, but not 20s or 40s), the reliability coefficient was .97, meaning there were very few cases where coders were more than a decade apart. In addition, taking the mean of the 10 estimates elicits what is likely a good estimate of the contestant's age. If a contestant really was in her early 20s, most coders likely

chose "20s," giving her a mean age of 25. If a contestant really was in her mid-30s, most coders likely chose "30s," giving her a mean age of 35. If a contestant really was around 30 years old, it is likely that some coders chose "20s" while others chose "30s," giving her a mean age of 30.

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