Marking the Turn:

Obligation, Engagement, and Alienation in Group Discussions

David R. Gibson

University of Pennsylvania
Abstract

In group conversations, not speaking is the state of affairs experienced by most people most of the time; I refer to this as “conversational latency.” I analyze the association between latency (operationalized as the number of turns that elapsed since the current speaker last spoke) and turn-initial words (e.g., but, oh) in twenty-nine experimental task groups, taking turn-initial words as indicators of the type of content a speaker proposes to produce. The findings suggest a model of group conversation in which conversational obligations weigh heaviest on the shoulders of the most recent contributors; those who contributed somewhat less recently remain engaged but have more latitude to take discordant positions; and those who have been quiet for longer periods are susceptible to “alienation from topic,” as a result of which re-entry is often accompanied by an attempt to change the topic.
When we think of conversation, we think of people talking. But in a group setting—such as in a jury or business team meeting or at Thanksgiving dinner—what most people experience most of the time is not speaking. What are the consequences of not speaking? These might include having little influence on the course of the discussion (Gibson 2000) and perhaps leaving with little by way of emotional payoff (Collins 2004), and we know that someone who infrequently speaks will be allotted little status by others (Rashotte and Smith-Lovin 1997). Here I explore another consequence, of conversational inactivity on one’s conversational options when one finally does re-enter conversation. This means linking the structural-organizational side of talk to the content side, or the formal dimension of talk to the semantic dimension.

Conversational inactivity, or “latency,” is easily operationalized as the duration of time that has elapsed since one last spoke. Here I use a variation which I call “turn-latency,” which is the number of speaking turns that have elapsed. More daunting is the question of how to capture content. Social psychology (and adjacent fields) is replete with “speech act” schemes, by which utterances can be classified as, for instance, “offering an opinion” and “releasing tension” (Bales 1950), but such schemes are easily criticized for imposing the theorist’s categories on people with much different concerns (Gibson 2008). With that objection in mind, I instead categorize speaking turns by how they begin, in terms of their opening “discourse markers” (Schiffrin 1987). These are words like oh and but that people use to signal to one another the gist of what they intend to say, and thus why they believe that they deserve to take the floor.

DATA

The data were derived from transcripts of the discussions of 29 experimental task groups. Each group consisted of six previously unacquainted undergraduates, and sex compositions were manipulated to provide for several groups with each possible mix (six males, five males and one
female, etc.). The groups were given a problem that, per the scope conditions of expectation states theory, was well-defined but lacked an obvious solution. Specifically, they were instructed to devise such a problem for some other group to perform, as if they were part of the research planning stage rather than the actual subjects. Group members did not know each other in advance. They were allowed to talk for twenty minutes, and were videotaped. The tapes were subsequently transcribed, and have since deteriorated entirely, so that only the transcripts remain.¹

These data were used for a number of reasons. First, each group consisted of six members, making it likely that people would fall out of active participation frequently enough to ensure substantial variation on that independent variable. Second, the task situation has been hypothesized to activate sex as a “status characteristic” consequential for the exercise of influence and other sorts of conversational behaviors, a hypothesis that has been confirmed using these very data for speaking (Smith-Lovin et al. 1986) and interruptions (Smith-Lovin and Brody 1989). This gives me the opportunity to compare the effects of a salient characteristic on the content of a turn with the effects of latency. And third, the task situation resembles the sort of thing done in many multi-party encounters, such as those of managerial teams (Gibson 2003) and juries (Rose, Diamond, and Murphy 2007).

The transcripts were coded for two types of information: the identity of the speaker in a given speaking turn and the word that he or she began with. Someone was considered to have taken a turn if he or she spoke at least one entire word “in the clear”—that is, without this overlapping with another person’s speech. In contrast to some prior work on these data, working

¹ More information about data collection can be found in Smith-Lovin, Skvoretz, and Hudson (1986).
out of the expectation states tradition (e.g., Smith-Lovin et al. 1986), a person’s turn was considered to have stretched from its beginning until the start of the next speaker’s turn, so that, by definition, a person could not take two consecutive turns. An attempt at interrupting was only counted as a turn if the first speaker stopped talking while the interrupter continued. More generally, a later-starting utterance that, for a time, overlapped with the previous (earlier-starting) turn was considered a turn unto itself when it continued beyond the previous turn, as judged by whether the number of syllables in the later-starting utterance exceeded the number of syllables remaining in the previous turn, counting from the onset of overlap. (The transcripts indicate where overlap begins, but do not locate its end.) Excerpts 1 and 2 provide examples. In each, the slash indicates the point in the first speaker’s turn that the second speaker began speaking. In Excerpt 1, for instance, subject 3 began saying “I’ve heard of it” immediately after 5 asked the question, and in overlap with 5’s “We used to do that in high school.” In accordance with the rule just given, subject 3 in Excerpt 1 is not credited with a successful turn, while in Excerpt 2, 6 is so credited, because though both 3 and 6 begin speaking in overlap, only 6’s utterance clearly extends beyond the previous speaker’s turn.

**Excerpt 1** (group 1)

5. That's good. You've never had to do that before? / We used to do that in high school.

/3. I've heard of it.

**Excerpt 2** (group 1)

2. You know, actually there could be a solution / if the problem was what you---

/6. If the problem has to be of interest to most college students, then, you know, that college problem would do that.
A speaker’s first word is simply the word he or she began a successful turn with, even if its first portion was produced in overlap. Thus, in Excerpt 2, the first word of subject 6’s turn is “If.” An exception is when the word or words produced in overlap do not immediately continue into the successful turn. An example is in Excerpt 6, where subject 1’s turn is considered to have started with “Well,” and not the “Yeah” produced without any immediate attempt at continuation in the midst of subject 4’s turn.

**TURN-INITIAL WORDS**

Table 1 lists the 21 most common turn-initial words in the 29 task groups. (All right was considered a single word because in meaning and usage it is akin to okay, and because almost all instances of turn-initial all were followed by right.) Together, these account for 64 percent of first words—a fairly amazing thing given the tens of thousands of words in an educated speaker’s vocabulary (Aitchison 1997:62). Some of these words—such as that, it, and there—are fairly unrevealing about the content to follow. Other words, however, are more telling. Several are discussed in detail by Schiffrin (1987) under the heading of “discourse markers.” Here I draw heavily upon her account (and related work), at least as a starting point to this description of how such words were typically used in these groups.

Five discourse markers discussed by Schiffrin (1987), and not only in opening position, are well, and, but, so, and oh. The first four, in particular, serve the function just described, of signaling to listeners how subsequent talk is to be interpreted with respect to previous talk—which means talk by the previous speaker(s), inasmuch as these words are turn-initial. And and so mean about the same thing at the start of a turn as they do in its middle: and that a previously started action (like the telling of a story) is about to be continued or extended (Schiffrin 1987:141-50; see also Turk 2004), and so that the talk that follows identifies the result or
consequence of whatever came before (Schiffrin 1987:191-227; see also Raymond 2004).

Examples from the task group transcripts are in Excerpts 3 and 4.

**Excerpt 3** (Group 5)

2. If all of the sudden CBS came out and promoted one presidential candidate, it would be unfair. It would make a big difference, if the other stations didn’t.

4. That would make it one-sided.

5. And that's why they had the law about equal time.

**Excerpt 4** (Group 20)

5. So the problem, we could say, would be, um, the need for different ways of assessing student's performances, is that the problem?

In Excerpt 3, subject 5 provides the implied conclusion to 2’s and 4’s observations about media partisanship. In Excerpt 4, subject 5 attempts to formulate the consequence of recent talk—spread over the course of many turns—for the group’s task.

*Well* and *but*, in contrast, have distinct turn-initial import. While in the middle of a turn (or in written text) *but* marks a contrast between contiguous ideas, in turn-initial position it often heralds a flat-out objection (Schiffrin 1987:175), as in Excerpt 5.

**Excerpt 5** (Group 30)

5. Make it [cafeteria food] more nutritious.

3. But you know they're [university dining services] not going to do that, they're going to say their spending budget, they only have so much money to spend

*Well*, in the meantime, is probably far more common in turn-initial position than elsewhere.

According to Schiffrin (1987:102-27) and Pomerantz (1984), its function is to signal that the
incipient utterance is in some way at odds with what was evidently expected or hoped for (by way of response) by the previous speaker. This is illustrated in Excerpt 6.

**Excerpt 6 (Group 2)**

4. What about the judicial system, / like criminals, yeah. You know, how, how victims are just overlooked and everything.

/1. Yeah.

1. Well, somebody would know about it, though. Somebody would have a special interest in it.

Here, subject 4 proposes a general topic from which a problem might be crafted. Subject 1 initially encourages the thought (“Yeah,” interjected so as to overlap with 4’s “like,” as indicated by the slashes), but subsequently expresses a reservation, namely that it might tap strong pre-existing opinions.

*Oh* is a bit different in that, to a much greater extent than the first four discourse markers, it may serve as a complete turn. According to Heritage (1984) and Schiffrin (1987:74), what *oh* signals is that new information has been received or familiar information recalled. Receipt of new information is illustrated in Excerpt 7 (in which the remainder of the turn conveniently explains what sort of *oh* it is).

**Excerpt 7 (Group 13)**

1. This is, this is just a sample question, "Should any of the Ten Commandments be dropped?" Period. Five were dropped and thrown away. If they all were thrown away would it . . . ?

2. What was the fifth one?

1. Fifth one? Well, there was once fifteen of ’em.

2. Oh, I didn't know that.
Also included in Table 1 (and also potentially stand-alone utterances) are okay, all right, yeah, and right. Okay and all right can express simple understanding or assent (Beach 1995), but in these groups, at least, also heralded attempts to take stock of the implications of recent talk for the task at hand. This is illustrated in Excerpt 8 for the case of okay.

**Excerpt 8** (Group 13)

6. Okay, we've got "Should the drinking age be raised to 21 for both beer and liquor?" Now, how does this problem meet the requirements?

Meanwhile, yeah and right are markers of agreement and affirmation. (Yeah may also serve as an affirmative response to a question.) Excerpt 9 illustrates for the case of yeah.

**Excerpt 9** (Group 2)

6. Sororities and fraternities, they people already had values and opinions about 'em.

1. Yeah, that's true.

One other word in Table 1 carries consistent enough meaning that it, too, reveals something about the turns it introduces. What is a standard question-initial word, leading off a request for the naming of a thing to which the rest of the sentence (with a bit of rearranging) declaratively applies.

These, then, are the turn-initial words included in the statistical analysis: and, so, but, well, oh, okay, all right, yeah, and right.² In addition, the six wh-question words—what, when, where, how, why, and which—are also included. Discourse markers (such as because) not in listed in Table 1 occurred too infrequently to support statistical analysis. No, which is in Table 1, was considered, as the possible obverse of yeah, but was not included because it was most often used in ways that had nothing to do with

²
why, who, where and how—were combined into a single category, at least for the initial analysis, both because they appear to herald a single sort of interrogative speech act, and because distributionally they manifest very similar patterns vis-à-vis latency. Together, these account for 34 percent of turn-initial words. Again, a speaking turn was associated with whatever word it began with, even if the turn-initial word was produced in overlap with the previous speaker’s talk.

Two objections to using turn-initial words as indicators of content should be anticipated. First, while one’s opening word may reveal something about the first thing one intends to say in one’s turn, it may have little predictive value vis-à-vis what one says later in that turn. Indeed, I assume that inasmuch as latency affects discursive options, those will be, first and foremost, turn-initial discursive options, because it is by means of the first thing that one says that one moves back into conversation; subsequent acts are performed not by somebody who had just been latent, but by somebody who already has the floor. But this is not as limiting as it appears, for the rules of turn-taking make it difficult to squeeze more than one act into a given turn when there are several other people interested in speaking (Sacks et al. 1974), and accordingly most turns in these groups were very short (5-15 words), probably not extending far beyond what the initial word portended (insofar as it portended anything).

A second and more serious problem is that many turns do not begin with one of the words just reviewed. This is obviously a limitation of the method, one discussed in more detail in the full version of the article.

expressing disagreement, including as the first part of no one and as the first word of some of the oft-quoted lines in the groups’ written instructions.
RESULTS

The statistical analysis centers on the association between three variables: turn-initial word (including “other” as a category, so that all turns are included), sex, and the just-completed period of turn latency. I take the first of these as the dependent variable, so that the goal of the statistical analysis is to pinpoint the respective effects of sex and latency on turn-initial word, controlling for the association, if any, between the two independent variables.

Again, latency was calculated as the number of turns the current (focal) speaker “sat out” since last speaking. For instance, if John takes a speaking turn now after not talking for ten turns, then the turn latency associated with his current turn, and whatever word it starts with, is ten. This variable was collapsed into three categories containing roughly comparable numbers of observations: in the first, the focal speaker last spoke two turns ago, and so was latent for one (low latency); in the second, the focal speaker was latent for two to four turns (intermediate latency); and in the third, the focal speaker was latent for more than four turns (high latency). Obviously, what counts as “high latency” need not actually correspond to a truly long period of inactivity—either in terms of elapsed turns or elapsed seconds—but this collapsing was necessary to ensure enough data given the infrequency with which anyone spoke after being latent for more than four turns.

The analysis was performed using hierarchical log linear models. (An explanation of log linear models and model fit statistics are in the full version of the paper.) The preferred model was one in which sex and turn latency affect turn-initial word separately, with latency having a larger impact on first word than sex. The main sex effects were that women were significantly more likely than men to begin a speaking turn with okay, while men were more likely to use all
right and well—where the well effect might be seen as consistent with research showing that men are more argumentative (Johnson, Clay-Warner, and Funk 1996).

Here I focus on the effects of latency on turn-initial word. Because sex and turn-latency were not themselves associated, and because their effects on turn-initial word were independent (i.e., there was no “three-way interaction effect”), we can aggregate across sex, which basically means ignoring it (with statistical warrant) from this point forward.

Rather than analyze log linear parameter estimates, I opt to interpret adjusted residuals from a model that assumes no association between latency and first word. Such residuals highlight combinations that occur with significantly greater and less than expected frequency given the assumption of independence. A residual greater or equal to 2.0 (rounding up slightly from 1.96) indicates a significant positive association at the .05 level, while a residual equal to or less than -2.0 indicates a significant negative association (Haberman 1973). These residuals are in Table 2.

[Table 2]

Of the turn-initial words, six out of ten are what we might call “positionally sensitive,” in the sense that they were significantly more or less likely to occur in some latency positions than in others. These include but, well, oh, okay, right, and the composite wh-question category. Below, I discuss those typical of each latency position in turn, drawing upon representative excerpts from the transcripts to aid interpretation, and in two cases extending the analysis to include turns’ second words.

Understanding and Agreement in Low Latency Position
Interlocutors speaking in low latency position, after sitting quietly for the minimum of one turn, were especially likely to begin with *okay*, as well as with *right* (though the positive residual for *right* falls short of statistical significance). In low latency position, *okay* most often expressed understanding regarding whatever was said in the previous turn, and particularly understanding of it as a response to whatever the focal speaker said two turns ago. This is illustrated in Excerpt 10.

**Excerpt 10** (Group 18)

1. Let's list some things that would be of interest, that would interest us.

6. How 'bout sports, 'cause I like sports.

1. Okay. [pause] Does it have to be a **problem** or just a **topic**?

*Right*, in the meantime, is a more explicit show of agreement, as in Excerpt 11.

**Excerpt 11** (Group 11)

4. All right, let's put it this way, it hasn't been debated yet anywhere.

6. It's a practical problem that's not very commonly thought of.

4. Right, that's a good way to put it.

The association of *okay* and *right* with low latency position is interesting because it suggests that obligations known to be associated with parties to dyadic encounters—in particular, to express understanding and agreement (e.g., Schegloff 1982; Sacks 1987)—weigh most heavily

---

3 Again, by definition, one cannot speak in two consecutive turns.

4 Bold print indicates emphasis.
on the shoulders of people who, though in a group setting, behave (at least for short stretches) as if they were talking to just one other person. I will return to this idea later.

**Discord Markers in Intermediate Latency Position**

More surprising is the concentration of *but*- and *well*-initial turns in intermediate latency position. Both are markers of discord and reservation, as illustrated by Excerpts 5 and 6. At least in this setting, these markers seem to have been most readily wielded not by those most recently involved in the conversation, nor by those reasserting themselves after a long period of inactivity, but rather by those who had a part in shaping recent talk, but only in collaboration with others.\(^5\) This is illustrated in Excerpts 12 and 13.

**Excerpt 12** (Group 3)

4. What happens if you park in a tow-away zone? I know where to go if your car gets towed away.

6. Yeah, but what about, #3 again, [quotes some of the instructions]. We're students, we get mad as hell when we can't find a place to park.

5. So does faculty, then.

6. Faculty, too, yeah.

4. But still, that's still saying we have a predetermined value [i.e., prior opinion].

**Excerpt 13** (Group 16)

2. On the first floor. I mean, you can't get out of the building [in the event of a fire] unless you're on the second floor and climb up and jump over.

\(^5\) It is possible that speakers in low latency position use these markers just as much, but have to postpone them until after they do the business of signaling understanding. *Okay, well*, however, only occurs in turn-initial position six times in the transcripts, and *okay, but* only once.
1. Jump over.

3. Then you kill yourself from the fall.

2. Really.

5. Why in the world would anyone come up with a design of a building like that?

1. Well, the reason they did that was because the Law Center across the street and the majority of the first students that lived there were Law students, and they were committing suicide and everything.

Excerpt 13 is typical of a more subtle use of well than seen in Excerpt 6, specifically to signal some resistance to the direction of recent talk—here, to announce that 1 is going to resist echoing recent observations about the absurdity of how some building was designed (having already contributed in that direction) and instead attempt a reasonable explanation. But in both Excerpts 12 and 13, the marker is produced by someone who just seconds earlier had a hand in shaping the topic under discussion, and who is now responding to a succession of responses that his or her earlier turn had partially set into motion.

Further evidence that discord markers are at home in intermediate latency position can be found in the distribution of the compound marker yeah, but, seen (but not previously analyzed) in Except 12. This occurred 50 times in the data. Table 3 cross-tabulates latency with yeah, but, and other sorts of yeah-initial turns separately (with “other” now encompassing all other turn beginnings). There are no significant residuals, but inasmuch as there is a pattern, yeah, but mirrors the distributional pattern of but and well, being especially likely in intermediate latency position.

[Table 3]

---

6 Yeah, well only occurred twice.
New Proposals (Topics) in High Latency Position

Finally, in high latency position we find turn-initial *wh*-question words: *what*, *when*, *why*, *who*, *where*, and *how* (which, recall, I combined into a single category). At first, it seems that those who had been out of conversation for a longer period were especially likely to ask questions upon speaking again. On closer examination, however, many *what*- and *how*-initial turns had as their second word *about*: *what about*, *how about*. These are compound markers of new proposals, of which there were many in these groups, especially during the opening minutes when the subjects brainstormed about possible solutions to the problem. Two examples are in Excerpts 14 and 15.

**Excerpt 14** (Group 2)

4. What about the judicial system, / like criminals, yeah. You know, how, how victims are just overlooked and everything.

**Excerpt 15** (Group 13)

2. How about stealing in dorms? That's a hard one to work out.

If we separate these compound markers from the rest of the question turns, it turns out that the association with high latency position was *exclusive* to the former (see Table 4). I interpret this to mean that long-latent participants become alienated from the content of talk, putting them in the position of having to redirect that content as a condition (or at least a facilitating condition) of their re-entry.

[Table 4]

**DISCUSSION**
The results suggest that both sex—the pertinent “status characteristic” (Berger, Cohen, and Zelditch 1972) in a setting of otherwise similar undergraduates—and turn latency matter for one’s choice of turn-initial word, but that the effect of latency does not depend on sex. This implies that discursive options and responsibilities both adhere to people by virtue of the characteristics they bring to an encounter (and whatever stereotypes get activated as a consequence) and, independently, to conversational positions induced by turn-taking processes.

[Figure 1]

My main concern has been with the effects of latency. I interpret the association of turn-initial word with turn latency, summarized in Figure 1, to mean that discursive obligations and opportunities are conditioned by latency, or the length of time (measured in speaking turns) since a person last spoke. The obligations are most evident in the discourse markers associated with low latency position: *okay*, and to a lesser extent (because the positive residual is not significant though the negative residual for high latency position is) *right*. *Okay* signals understanding and, perhaps, a sort of tepid agreement, and *right* a stronger form of agreement. And understanding and agreement are things known to be characteristic of the sort of *dyadic* talk that conversation analysts overwhelmingly study (e.g., Beach 1995; Pomerantz 1984; Sacks 1987; Schegloff 1982, 1996a). This suggests that obligations incumbent upon parties to dyadic encounters get imported into group contexts, but that they weigh most heavily on the shoulders of those who behave as if they are speaking dyadically—speaking a mere two turns after having spoken last.

Intermediate latency position may be associated with greater discursive latitude, particularly to express discord with remarks beginning with *well* and *but*. Arguably, this is because someone speaking after being latent for only two to four turns continues to be engaged in a topic that he or she recently helped shape, while perhaps being less obligated to privilege
displays of understanding and agreement regarding whatever was said in the previous turn. This is noteworthy in light of the idea that group decision-making is plagued by “groupthink,” or rapid and objectively unwarranted consensus (Janis 1989). In the very least, it points to the need to carefully study the turn-taking patterns that are associated with groupthink versus those that are not (e.g., Gibson 2010).

Finally, the strong positive association between topic-introducing *what/how about* and high latency position (and the negative association between high latency and *well, oh, okay, and right*) is consistent with the idea that those who have fallen out of conversation for longer periods are susceptible to “alienation from topic.” By this I mean the state of having little to contribute to the topic under discussion which results from not having recently contributed to its development, as a consequence of which the introduction of a new topic (in this setting, a new proposal) is an important avenue of conversational reintegration. This is surprising in light of the idea that topic change is the prerogative of high-status individuals (Okamoto and Smith Lovin 2001), for it suggests that introduction of a new topic may be less a manifestation of one’s status than a symptom of, and response to, protracted conversational latency.

**CONCLUSION**

The results support the initial conjecture that discursive options and/or obligations are influenced, at least to some degree, by the amount of time that has passed since one last spoke. As a finding, this was unanticipated by expectation states researchers, who in sociology have a corner on behavior in task groups. It thus offers a bridge between that perspective and qualitative conversation-analytic research on, among other things, turn-taking (see also Gibson 2003, 2008). Among the priorities for future research in this direction are alternative operationalization of latency, alternative approaches to the coding of content, and the collection and analysis of larger
data sets as needed to rule out alternative explanations (some of them discussed in the full version of the paper).
References


_____. 2010. "Avoiding Catastrophe: The Interactional Production of Possibility During the Cuban Missile Crisis." Unpublished.


David Gibson is Assistant Professor of Sociology at the University of Pennsylvania, where he runs the Culture & Interaction Workshop. His interests include face-to-face interaction, social networks, and theory. Current projects include a mixed-methods analysis of the deliberations of the Executive Committee of the National Security Council during the Cuban Missile Crisis, and a study of deliberative democracy groups meeting about zoning issues in Philadelphia. Recent work has appeared, or is forthcoming, in *Sociological Forum, The Annual Review of Sociology*, and *Sociological Theory*.
<table>
<thead>
<tr>
<th>Word</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>yeah</td>
<td>554</td>
</tr>
<tr>
<td>I</td>
<td>354</td>
</tr>
<tr>
<td>that</td>
<td>260</td>
</tr>
<tr>
<td>okay</td>
<td>238</td>
</tr>
<tr>
<td>well</td>
<td>219</td>
</tr>
<tr>
<td>how*</td>
<td>183</td>
</tr>
<tr>
<td>it</td>
<td>175</td>
</tr>
<tr>
<td>what*</td>
<td>159</td>
</tr>
<tr>
<td>you</td>
<td>152</td>
</tr>
<tr>
<td>we</td>
<td>125</td>
</tr>
<tr>
<td>no</td>
<td>113</td>
</tr>
<tr>
<td>and</td>
<td>94</td>
</tr>
<tr>
<td>the</td>
<td>92</td>
</tr>
<tr>
<td>but</td>
<td>85</td>
</tr>
<tr>
<td>so</td>
<td>55</td>
</tr>
<tr>
<td>there</td>
<td>55</td>
</tr>
<tr>
<td>they</td>
<td>55</td>
</tr>
<tr>
<td>just</td>
<td>54</td>
</tr>
<tr>
<td>right</td>
<td>54</td>
</tr>
<tr>
<td>oh</td>
<td>49</td>
</tr>
<tr>
<td>all right</td>
<td>48</td>
</tr>
</tbody>
</table>

*Note: Includes the first word of contractions (e.g., it for it’s).
*Note: Words included in statistical analysis are in bold.
*Combined with other *wh*-question words in the statistical analysis.
Table 2. Observed cell values, expected cell values (in parentheses) assuming independence, and adjusted residuals (in italics)

<table>
<thead>
<tr>
<th>Turn-initial word (other)</th>
<th>I</th>
<th>2-4</th>
<th>&gt;4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>And</td>
<td>41 (37)</td>
<td>24 (33)</td>
<td>29 (25)</td>
<td>94</td>
</tr>
<tr>
<td>So</td>
<td>23 (21)</td>
<td>21 (19)</td>
<td>11 (15)</td>
<td>55</td>
</tr>
<tr>
<td>But</td>
<td>25 (33)</td>
<td>38 (29)</td>
<td>22 (23)</td>
<td>85</td>
</tr>
<tr>
<td>Well</td>
<td>86 (85)</td>
<td>91 (76)</td>
<td>42 (58)</td>
<td>219</td>
</tr>
<tr>
<td>Oh</td>
<td>22 (19)</td>
<td>21 (17)</td>
<td>6 (13)</td>
<td>49</td>
</tr>
<tr>
<td>Okay</td>
<td>128 (92)</td>
<td>83 (82)</td>
<td>27 (63)</td>
<td>238</td>
</tr>
<tr>
<td>All right</td>
<td>18 (19)</td>
<td>22 (17)</td>
<td>8 (13)</td>
<td>48</td>
</tr>
<tr>
<td>Yeah</td>
<td>215 (215)</td>
<td>205 (191)</td>
<td>134 (148)</td>
<td>554</td>
</tr>
<tr>
<td>Right</td>
<td>27 (21)</td>
<td>19 (19)</td>
<td>8 (14)</td>
<td>54</td>
</tr>
<tr>
<td>Wh- question</td>
<td>130 (150)</td>
<td>124 (133)</td>
<td>132 (103)</td>
<td>386</td>
</tr>
<tr>
<td>Total</td>
<td>1926</td>
<td>1712</td>
<td>1321</td>
<td>4959</td>
</tr>
</tbody>
</table>

Chi-square: 83.76 (20 d.f.) $p = .00$

* $p < .05$

Note: Expected values may not sum to row or column totals due to rounding.
Table 3. Observed cell values, expected cell values (in parentheses) assuming independence, and adjusted residuals (in italics), distinguishing between yeah and yeah, but

<table>
<thead>
<tr>
<th>Turn-initial word</th>
<th>1</th>
<th>2-4</th>
<th>&gt;4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(other)</td>
<td>1711 (1710)</td>
<td>1507 (1520)</td>
<td>1187 (1173)</td>
<td>4405</td>
</tr>
<tr>
<td></td>
<td>.6</td>
<td>-1.3</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>Yeah, but</td>
<td>16 (19)</td>
<td>23 (17)</td>
<td>11 (13)</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>-1.0</td>
<td>1.7</td>
<td>-.7</td>
<td></td>
</tr>
<tr>
<td>Yeah (not but)</td>
<td>199 (196)</td>
<td>182 (174)</td>
<td>123 (134)</td>
<td>504</td>
</tr>
<tr>
<td></td>
<td>.3</td>
<td>.8</td>
<td>-1.2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1926</td>
<td>1712</td>
<td>1321</td>
<td>4959</td>
</tr>
</tbody>
</table>

Chi-square: 4.56 (4 d.f.) \( p = .335 \)

* \( p < .05 \)

Note: Expected values may not sum to row or column totals due to rounding.
Table 4. Observed cell values, expected cell values (in parentheses) assuming independence, and adjusted residuals (in italics), distinguishing between what/how/about and other wh-question words

<table>
<thead>
<tr>
<th>Turn-initial word</th>
<th>Turn latency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>(other)</td>
<td>1796 (1776)</td>
</tr>
<tr>
<td></td>
<td>2.2*</td>
</tr>
<tr>
<td>What/how about</td>
<td>20 (32)</td>
</tr>
<tr>
<td></td>
<td>-2.6</td>
</tr>
<tr>
<td>Other wh-question words</td>
<td>110 (119)</td>
</tr>
<tr>
<td></td>
<td>-1.0</td>
</tr>
<tr>
<td>Total</td>
<td>1926</td>
</tr>
</tbody>
</table>

Chi-square: 21.31 (4 d.f.)  p = .000
* p < .05
Note: Expected values may not sum to row or column totals due to rounding.
Figure 1. Summary of positionally sensitive turn-initial words

Note: Arrow indicates when speaker at $t_0$ next speaks.