**STATUS**
In Transit
**SOURCE**
ILLiad
**BORROWER**
GUL
**LENDERS**
GZM, NDD, *CUY, CBG, HLS

**BIOGRAPHIC INFORMATION**

**LOCAL ID**
Local Holdings Available.

**AUTHOR**

**TITLE**
Language and computers.

**IMPRINT**
Amsterdam : Rodopi

**ISSN**
0921-5034

**ARTICLE AUTHOR**

turn initiators in spoken English: A corpus-based approach to interaction and grammar.

**ARTICLE TITLE**

**FORMAT**
Serial

**EDITION**

**VOLUME**
46

**NUMBER**
1

**DATE**
2003

**PAGES**
187-207

**INTERLIBRARY LOAN INFORMATION**

**ALERT**

**VERIFIED**

**MAX COST**
OCLC IFM - 40.00 USD

**LEND CHARGES**
OCLC IFM - 17.00 USD

**AFFILIATION**
We are member of Jesuit Law Library

**COPYRIGHT**
US:CCL

**SHIPPED DATE**
07/28/2016

**FAX NUMBER**
1-(202) 662-9202

**EMAIL**
law-ill@law.georgetown.edu

**ODYSSEY**
gulaw.hosts.atlas-sys.com/ILL

**ARIEL FTP**

**ARIEL EMAIL**

**BILL TO**
Interlibrary Loan
Georgetown U. Law Library ILL
111 G St NW Rm 204
Washington, DC, US 20001-1417

**BILLING NOTES**
US Lib.: Please charge via IFM whenever possible but invoicing is fine. NON-US Lib.: We pay for int'l ILL via IFM or IFLA Vouchers only.

**SHIPPING INFORMATION**

**SHIP VIA**
Ody/Art.Ex./Email/Fax/Mail

**SHIP TO**
Interlibrary Loan
Georgetown U. Law Library ILL
111 G St. NW
Washington, DC, US 20001-1417

**RETURN VIA**

**RETURN TO**
N/A
NOTICE - Warning Concerning Copyright Restrictions.

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material.

Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

This institution reserves the right to refuse to accept a copying order if, in its judgment, fulfillment of the order would involve violation of Copyright Law.
Turn Initiators in Spoken English: A Corpus-Based Approach to Interaction and Grammar

Hongyin Tao

University of California Los Angeles, USA

Abstract

Recent studies in interaction and grammar have demonstrated the importance of examining conversation turn structure for understanding features of grammar. Turn beginnings and endings are seen as particularly important loci for investigation (Schegloff 1996). This study examines two corpora of spoken English to investigate the grammar of turn beginnings in English. A turn initiator is broadly defined as the very first form with which a speaker starts a new turn in conversation. It is found that turn-initial elements in English are overwhelmingly lexical in nature, a result confirming Schegloff’s (1996) hypothesis. Moreover, the data shows that not only are these turn initiators lexical, they also tend to be syntactically independent. It is thus suggested that one of the designing features of the grammar of turns in English involves a short free form of some sort, and English can be considered a turn-initial language in grammaticalizing turn signals. Conversational interactive functions of turn initiators are considered and subcategories suggested. This study also demonstrates some of the advantages of taking a corpus-based approach to language use and looking at turn structure, as exemplified in characterizing the use of some common discourse particles (‘and’, ‘yeah’ and ‘yes’, and ‘this’ and ‘that’).

1. Introduction

The beginnings of linguistic units have long attracted the interest of linguists. Typically, the unit with which linguists are primarily concerned is the sentence. Thus, one of the primary unit-initial phenomena is the position that is associated with the syntactic category ‘subject’ in English and other languages. A great deal of effort has been devoted to characterizing the universal properties of the subject, noting that subject is, in English at least, the starting point of an utterance (Fries 1952, Keenan 1976). In various versions of functional linguistics, on the other hand, researchers concentrate on the functional motivations of linguistic structure, including unit-initial phenomena. For example, in the Functional Sentence Perspective approach put forth by the Prague School (Firbas 1986), sentence structure is explained in terms of Communicative Dynamism (CD), where different portions of the sentence are seen as contributing to varying extent to the development of communication. According to the Prague School, the linear order of words corresponds to a large extent to the degree of communicative dynamism, with initial places (such as the subject) said to carry the least degree of CD as opposed to sentence ends, which carry the most.

Functional linguistic theories dealing with initial place phenomena beyond the sentence include those of Halliday (1985) and Chafe (1979, 1994). Halliday,
building his theory on the Prague School tradition of Functional Sentence Perspective, redefined the distinction between *theme* and *rheme*. Theme, a component that can be realized with conjunctions, adverbials, as well as noun phrases, encompasses most of the initial elements in a clause. Thematic elements constitute the basis on which new information is conveyed in the rhematic component. In contrast with Halliday’s clause-based theory, Chafe (1979, 1994) focuses his analysis of spoken language on a prosodic unit called the intonation unit (IU). An intonation unit refers to a stretch of utterance produced under a single coherent intonation contour (Chafe 1979, 1994, Du Bois et al. 1993). Of particular interest are two IU-based phenomena discussed by Chafe: (1) that there appears to be a Light Subject Constraint, whereby subjects in natural spoken discourse are found to represent given or shared information, serving as starting points for subsequent discourse; and (2) that intonation units are typically linked in American English by conjunctions such as *and* (Chafe 1988).

While linguists are primarily concerned with initial place phenomena that are based on structural units (sentence, clause, IU, etc.), Conversation Analysts call linguists’ attention to conversation interactional units such as turns and their relevance for understanding the nature of grammar. For Conversational Analysts, interaction is highly relevant to lexico-grammar. The basic premise of CA’s view is that the makeup and evolution of language, as with any other biological entities, must be sensitive to its natural habitat; in the case of grammar, that natural habitat has to be ordinary conversation (Schegloff 1989). In other words, if language is primarily used in conversational interaction, there is strong reason to believe that at least some aspects of grammar are designed for, or arise out of, conversational interaction. Schegloff (1996) is one of the more systematic studies in this area and deals with fundamental issues in turns and grammar, specifically the linkage between turn positions and lexico-grammar:

There may be structural affinities between “position in a turn” and particular TCU [Turn Construction Unit –HT] types, employing various “typologies” of TCUs ... By reference to these types of units, lexical TCUs occur overwhelmingly (I think) as first – or only – TCU in their turns. Their occurrences elsewhere is, I suspect, limited and marked, i.e., doing something special when they occur. Such a differential distribution can offer one kind of evidence for positionally sensitive grammars. (p. 63)

Even though Schegloff’s observation is based on a small sample of data, the issues he raises are fundamental. The idea that there is some connection between conversation structure and grammatical design deserves systematic empirical investigation. In this paper, I take up this issue and explore two relatively large language corpora of conversational language to verify his proposal. In the end I will suggest that the relevance of turn position to grammatical shape is indeed a rich area that is yet to be explored fully.
2. Methodology

2.1 Defining turn initiators

For the present purpose, a turn initiator is defined as the very first form with which a speaker starts a new turn in conversation (Sacks et al. 1974). In the literature, the notion of a turn has not been understood uniformly, with the differences mainly concerning whether both regular turns and reactive forms are taken as turns or only full turns are taken as turns. Reactive forms (Clancy et al. 1996) include such phenomena as laughter, continuers (uh huh) (Schegloff 1981), change of knowledge state forms (oh) (Heritage 1984) and similar items. In this paper ‘turn’ is understood in the broadest sense, and any speaker change will be treated as a new turn. Thus I will define turn initiators as any form that starts a new turn. To illustrate, let’s look at example 1:

Ex. 1.

A.11: If I came in just in jeans or,  
B.12: [Laughter].¹  
A.13: or tattered clothes, that I didn’t have as good control over the class.  
B.14: Right.  
A.15: And if I tried to wear things that were a little bit more businesslike,  
B.16: Exactly. Well I, I work, uh, I’m a financial analyst. (SW)

In this extract, all of the underlined items are turn initiators, namely, if, laughter, or, right, and, and exactly.

2.2 Databases and coding

For this study, I used two corpora of spoken English. The first one is the Switchboard (SW) corpus (Godfrey, Holliman and McDaniel 1992), which is a collection of telephone conversations among strangers from all regions of the United States. Over 1000 turns were randomly sampled and coded.

The other corpus I used is the Cambridge University Press/Cornell University Corpus (CUP-CU). This is a spoken North American English corpus jointly built by Cambridge University Press and Cornell University (Tao and Waugh 1998). This database consists of mostly informal face-to-face conversations among family members and/or friends. For this project, over 2000 turns from the collection were randomly selected.

The selection of these two corpora was designed to control for such factors as different regions and speaker styles, as well as differences in media (telephone versus face-to-face) and degrees of familiarity between participants. With respect

¹Only tokens of clear laughter are treated as turns; overlapped laughter is excluded.
Hongyin Tao

to all these factors, these two corpora, I believe, represent a relatively balanced collection.

This study employed a rather simplistic method in identifying turn-initial forms. A computer search program was instructed to search the corpora for the very first form following the speaker label. Admittedly, this is not methodologically the best way to handle interactively sensitive phenomena such as turn initiators, since many useful subtleties may have been overlooked. For example, an initial form of oh may be identified as a turn initiator, but it says nothing about the phonological and pragmatic differences existing between a true change of knowledge state form oh and oh in a semi-lexicalized expression like oh well. Nor did I make a distinction between beginnings and pre-beginnings -- elements leading to a beginning -- of turns, as Schegloff (1996) did. Also out of consideration are important phenomena such as ‘recycled turn beginnings’ (e.g., ‘oh d- by the way did you get the tapes?’) as a repair mechanism in conversation (Schegloff 1987).

In this paper, except for some fused forms such as I’ve, it’s, most of the items identified as turn initiators are independent word (or word-like) forms. The total number of turns (and turn beginnings) examined was 3229.

In the sections that follow, I first discuss the overall structural patterns in the data and then move on to discussing the functions of turn initiators. Finally, I will discuss some pairs of synonymous forms and show how a consideration of turn position can shed light on their differences. Conclusions are given at the end of the paper.

3. Corpus-based findings

3.1 Lexical forms and vocalizations dominate

One of the prominent features of turn-initial grammar as reflected in these two corpora is that lexical forms are dominant in turn beginnings, which confirms Schegloff’s (1996) observation of the dominance of lexical forms as turn beginnings.

The top twenty types (N=1919) account for 60% of the total number (N=3229) of turn beginnings, as indicated in Table 1. We can see that most of these top twenty forms are lexical in nature, e.g., right, but, okay, and, no, and so forth. While these forms are not difficult to identify as lexical forms, the status of some of the other top forms may be unclear, e.g., mhm, oh, uh. Even though conventional dictionaries would not usually treat them as lexical entries, most of these forms are frequent and typical conversation particles that function much like an independent lexeme.

An important feature of turn initiators is that fourteen out of the top twenty items (70%) are ‘syntactically’ independent lexical forms or vocalizations which can be used without the co-occurrence of any other forms. For example, the most frequent form, yeah, may be used without any other syntactic elements following it. The only items that need a follow-up element, marked with an asterisk in Table
1. are the pronominal forms such as interrogative pronouns (what), personal pronouns (I/you/he/she/we), demonstrative pronouns (that), and the third person inanimate pronoun *it*.

Table 1: Top 20 high frequency forms and their occurrences

<table>
<thead>
<tr>
<th>No</th>
<th>Form</th>
<th>Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>YEAH</td>
<td>374</td>
</tr>
<tr>
<td>2</td>
<td>*I'/M'/L'/V'E</td>
<td>217</td>
</tr>
<tr>
<td>3</td>
<td>OH</td>
<td>149</td>
</tr>
<tr>
<td>4</td>
<td>AND</td>
<td>137</td>
</tr>
<tr>
<td>5</td>
<td>UH-HUH</td>
<td>133</td>
</tr>
<tr>
<td>6</td>
<td>WELL</td>
<td>88</td>
</tr>
<tr>
<td>7</td>
<td>*YOU</td>
<td>86</td>
</tr>
<tr>
<td>8</td>
<td>SO</td>
<td>78</td>
</tr>
<tr>
<td>9</td>
<td>UM</td>
<td>78</td>
</tr>
<tr>
<td>10</td>
<td>OKAY</td>
<td>70</td>
</tr>
<tr>
<td>11</td>
<td>RIGHT</td>
<td>63</td>
</tr>
<tr>
<td>12</td>
<td>*THAT/'S</td>
<td>63</td>
</tr>
<tr>
<td>13</td>
<td>BUT</td>
<td>58</td>
</tr>
<tr>
<td>14</td>
<td>NO</td>
<td>58</td>
</tr>
<tr>
<td>15</td>
<td>MHM</td>
<td>57</td>
</tr>
<tr>
<td>16</td>
<td>*IT/'S</td>
<td>51</td>
</tr>
<tr>
<td>17</td>
<td>*WHAT/'S</td>
<td>48</td>
</tr>
<tr>
<td>18</td>
<td>*WE</td>
<td>39</td>
</tr>
<tr>
<td>19</td>
<td>LAUGHTER</td>
<td>39</td>
</tr>
<tr>
<td>20</td>
<td>UH</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1919</strong></td>
</tr>
</tbody>
</table>

Also, many of the non-independent lexical forms, the pronominals, as discussed above, actually appear in lexicalized or semi-lexicalized forms in the turn-initial context, even though this is by no means categorical. For example, the first person pronoun *I* may be used in a variety of ways, but as a turn initiator it is very often used in the context of *I mean, I think, I know*, etc., functioning as discourse markers (Schiffrin 1987) or epistemic phrases (Thompson and Mulac 1991). Similarly, the demonstrative pronoun *that* may also be used in any number of ways, but typically in turn-initial positions. We find examples of the following type, where the formal configuration is THAT+COPULA+ADJECTIVE, whose function is to make an assessment (Pomeranz 1984, Goodwin and Goodwin 1992):
Ex. 2.

B.42: they, they do, they do copy versions, they do cover versions of, of, you know, like standards, I guess you could call it.
A.43: That’s right. (SW)

More discussion of that will be given in Section 4.

Below is a list of some of the common patterns associated with pronominal turn initiators:

I: I think, I mean, I thought, I bet, I know, I wish, I wonder
You: you know, you know what, you mean, you are right, you are?
That: That’s + ADJ (that’s true, that’s fine, that’s interesting, that’s right)
It’s: It’s like, it’s kind of, it seems, it’s your baby.

3.2 Evidence that some elements of the lexicon/grammar are closely associated with turn beginnings

In Table 2.1, I have presented data showing the top twenty forms which are lexical and frequently used in turn-initial positions. However, one shortcoming with that presentation is that it does not show to what extent these forms are used as turn initiators. That is, even if an item can be demonstrated to be frequently used at the turn-beginning position, it does not mean that turn-initial positions are the sole location where this form is put to use; there may well be other positions where this item can be found. In order to identify features of the grammar of turn-initial places, it is necessary to identify those elements, if any, that show some degree of exclusivity as turn initiators.

One simple measurement for this purpose is the ratio of the frequency of turn-beginning uses of a form to its overall frequency of occurrence, which can be expressed as follows: Frequency of Initial Place Use/Overall Frequency. Obviously, the higher the ratio is, the more exclusively the form is used as a turn initiator. With this measurement, the top twenty forms were re-examined, and the result is represented in Table 2.2.

Table 2.1: Ratio of forms used as turn initiators to overall frequency (INI indicates initiator frequency, TOTAL indicates overall frequency. Percentage indicates percentage of initiator out of all uses of the same form.)

<table>
<thead>
<tr>
<th>Form</th>
<th>INI/TOTAL Freq.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEAH</td>
<td>374/504</td>
<td>74%</td>
</tr>
<tr>
<td>*I/I’M/I’LL/I’VE</td>
<td>217/1628</td>
<td>13%</td>
</tr>
<tr>
<td>OH</td>
<td>174/232</td>
<td>75%</td>
</tr>
<tr>
<td>AND</td>
<td>150/1050</td>
<td>14%</td>
</tr>
<tr>
<td>UH-HUH</td>
<td>133/152</td>
<td>88%</td>
</tr>
<tr>
<td>WELL</td>
<td>92/204</td>
<td>45%</td>
</tr>
</tbody>
</table>
Before we start discussing the results, a couple of notes are in order. First, there are a few forms, marked with a question mark (?) in Table 2.2, which have multiple functions associated with them. For example, *well* may be a discourse particle at the beginning of a turn, but it may be something quite different elsewhere, e.g., *sleep well*. The same applies to *right*. Secondly, I have deleted *uh*
from Table 1, and added the, a high frequency word in English but whose frequency as a turn initiator is just a few numbers short for inclusion in the top twenty list in Table 1. I list it here just for comparison purposes.

A number of observations can be made from this exercise. First of all, it appears once again that there is a strong correlation between syntactically independent lexical forms and turn initiators. This is most clearly demonstrated by the fact that seven out of the eight forms at the very bottom of this list (Table 2-2) are syntactically dependent forms, and most of them are pronominal forms.

Second, it is noted that some low frequency items may be used more or less exclusively for turn-initial positions. Some such examples are:

- Excuse (me): 1/1
- Pardon (me): 4/4
- Yep: 4/4
- Wow: 5/7

On the other hand, there are lexical expressions that are highly frequent overall but are less likely to occupy the turn-initial position, for example:

<table>
<thead>
<tr>
<th>Rank in Frequency</th>
<th>Form</th>
<th>Usage as Turn Initiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>like</td>
<td>14/516 (3%)</td>
</tr>
<tr>
<td>13</td>
<td>know</td>
<td>0/512 (0%)</td>
</tr>
<tr>
<td>31</td>
<td>think</td>
<td>3/231 (1%)</td>
</tr>
</tbody>
</table>

One of the most intriguing facts has to do with the definite article the. The is arguably one of the most frequently used words in English. In the two corpora used for this study, the ranked number 4, just after I, and, and uh, in terms of overall frequency. In linguistic examples, the is almost invariably given as the starting element of an English sentence, as made clear in such famous sentences as ‘the farmer kills the duckling’ (Sapir 1921, Lambrecht 1987). However, in the conversation data, the is seldom used as a turn initiator. In fact only 3% of the the forms are used at turn-initial places. I take this to suggest (1) that turns and sentences are two very different levels of linguistic organizations -- if sentences can be shown to exist at all in spoken data; and (2) that there is a striking discrepancy between constructed samples and how turns actually occur.

Overall, the data discussed in this section suggests an interesting structural pattern of the grammar of turn-initial elements. That is, rather than being just lexical forms, which confirms Schegloff’s earlier hypothesis, turn initiators tend to be syntactically independent lexical(ized) forms. Of course syntactic independence often implies structural simplicity and fewer forms used (optimally one). From these facts we can infer that one of the ‘designing’ features of turn initiators in English involves a short, syntactically free form. Thus, even in cases of syntactically dependent forms, as with the various pronominal forms (e.g., I in I think), we can also find that there is some degree of lexicalization associated with them, a process that takes place especially in the turn-initial position (or as the ‘main clause’ (Thompson and Mulac 1991). Overall it can be suggested that
there is a correspondence between short, free forms and beginnings of turns. This reminds us of the mirror image of many East-Asian languages, where the end of a turn is often the site of a discourse particle (Chinese a, ba, ma, ne, etc.). English of course lacks this kind of particle at the end of turns, but there are a great number of short forms (including vocalizations) and discourse markers (Schiffrin 1987) at the beginning of a new speaker turn. Taken together, we might propose that there are three possibilities for natural languages in terms of grammaticizing turn-signalling elements: turn-final strategy, turn-beginning strategy, and both turn-initial and turn-final strategy. English seems to fall into the second type.²

3.3 Precedence patterns in combinations of turn initiators

One can notice that among the high frequency turn initiators, many of them occur together (e.g., ‘oh okay’). This raises the issue of which precedence patterns or combinations are common. The following are some of the recurrent patterns in the data:

- The OH series: oh yeah, oh okay, oh well, oh so, oh no, oh God
- The SO series: so um, so and, so uh
- The AND series: and then, and uh, and um, and so
- The YEAH series: yeah but, yeah well, yeah and, yeah so

Given the above, a precedence pattern can be delineated as follows:

**OH > YEAH > AND/SO**

What this hierarchy implies is that if there are combinations involving these high frequency forms, the ones on the left side of the bracket take precedence over the ones on the right side.

To summarize the discussion concerning structural properties of turn initiators, I have shown that in the corpus data syntactically independent lexical (and semi-lexical) forms are predominant as turn initiators. I have also shown that there is evidence that some elements of the lexicon/grammar are closely associated with turn beginnings. It is suggested that English may belong to the kind of language that chooses turn beginnings as the site for grammaticizing turn transition signals. Finally, it is noted that when common turn initiators (oh, so, and, yeah) are combined, there are precedence patterns for such combinations.

---

² There appears to be a tendency for discourse-pragmatic meta elements to take a short grammatical form. For some discussion of this, see Schegloff (1981) and Tao (2001).
3.4 Functions of turn beginnings

Because of the significant impact of turn beginnings on interactional behavior, it has been of great interest for Conversation Analysts to explore the function of turn beginnings since the inception of this tradition. Even as early as 1974, for example, Sack, Schegloff and Jefferson (1974) note in their seminal paper on conversation turn taking that:

> Generally the starts of turns are designed to connect to their prior turns, and their ends are designed to provide projections and connections for their following turns. (pp.722-3)

In a more recent study, Schegloff (1996) further proposes that:

> There is often a semantic, lexical and/or phonological connection between the terminal elements of one turn and the initial elements of the next (i.e., there is a direct, achieved linkage between beginnings and preceding endings). (p. 95)

> Evidence from the two corpora examined suggests that these observations are to a large extent valid. Many turn beginnings can be seen as linking back to their prior turns. In the following excerpt, for example, each of the underlined items can be seen as the speaker responding to a prior turn in some way:

Ex. 3.

A.93: You can only laugh [laughter].
B.94: **Yeah**, you just sort of, you know, well I guess I can just humor them, you know [laughter]. At this point.
A.95: **Right**, [laughter] well, they, I guess our age is showing when, we, we think that.
B.96: **Yeah**, but well, you know, I, I, I’ve liked a lot of the new music. (SW)

However, I also found that turn beginnings may be doing more than just connecting to the prior turn, and some subcategories may be established. Specifically, a four-way distinction may be proposed based on the kinds of activities the speaker is doing with the turn-initial form. These functions and the corresponding major forms are listed in Table 3.

Table 3: Functional categories of some common turn initiators

<table>
<thead>
<tr>
<th>Tying</th>
<th>OH WELL BUT AND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessing</td>
<td>YEAH NO RIGHT</td>
</tr>
<tr>
<td>Explaining</td>
<td>SO</td>
</tr>
<tr>
<td>Acknowledging</td>
<td>MHM UH-HUH OKAY</td>
</tr>
</tbody>
</table>
I will detail each of these functions with illustrations next.

### 3.4.1 The tying function: linking the current turn with the previous one(s)

This functional category corresponds closely to what has been proposed in the CA literature (Sacks 1992:150-6, 349ff., M. Goodwin 1990:177ff.). Discourse forms typically associated with this category are *oh, well, and,* and *but.* Most of these forms have received extensive treatment (see especially Heritage 1984, Schiffrin 1987, Holtgraves 2000, and Schourup 2001) and have other functions as well. Here I would like to focus the discussion just on *and.*

*And* has been treated as the dominant conjunction form in English. Recent discourse studies of natural language have treated it as a marker that functions to coordinate idea units and continue a speaker’s action; it functions to link idea units (Schiffrin 1987). Similarly, Chafe (1988) finds *and* to be the most prolific form for linking intonation units.

It is interesting to note that among the major conjunction forms, the overall frequency and their use in initial positions vary considerably, as shown in Table 4.

<table>
<thead>
<tr>
<th>Form</th>
<th>Frequency</th>
<th>As Turn Initiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO</td>
<td>80/373</td>
<td>21%</td>
</tr>
<tr>
<td>BUT</td>
<td>61/320</td>
<td>19%</td>
</tr>
<tr>
<td>AND</td>
<td>150/1050</td>
<td>14%</td>
</tr>
<tr>
<td>OR</td>
<td>10/203</td>
<td>5%</td>
</tr>
</tbody>
</table>

What is striking is that *and,* which is by far the most frequent conjunction, is actually far less likely (14%) to be used as a turn initiator than some of the other conjunctions such as *so.* It is speculated that the reason for this might have to do with the rather special function associated with *and* in interactive discourse. That is, turn-initial *and* usually continues the same speaker’s previous turn rather than tying directly to the other speaker’s immediately preceding turn(s). Here are some examples:

Ex. 4.

B.82: They bring in half a trillion dollars and they spend one point four and then the rest goes to, to the national debt.
A.83: This just keeps accumulating. [breathing] I don’t know. What else do you think about them, let’s see, state?
B.84: That’s about it, I guess.
A.85: And the city tax, the sale tax. They used to, you really didn’t even think anything about it when you bought something.
B.86: Yeah. (SW)
Ex. 5.

A.42: The little camping area was pretty near the shore,
B.43: Uh-huh, oh yeah.
A.44: and there were some pretty big dunes before the, the camping area, and the sand was all blowing up, and you couldn’t even go out of the camper. (SW)

Ex. 6.

B.5: So I usually wear skirts and sweaters in the winter time, slacks, I guess.
A.6: Uh-huh.
B.7: And in the summer, just dresses. We can’t even, well, we’re not even really supposed to wear jeans very often, so, (SW)

In all of the above examples, we can see that the turn-initial and is used by the same speaker to tie the current utterance to his/her own utterances expressed earlier, and after certain intervening utterances from the co-participants. It is rare, but certainly not impossible, that a second speaker uses and to tie to the other speaker’s previous turn. In a random sample of three transcripts (SW: 2028, 2036, CUP-CU: 21111001) from the database, 27 out of 28 (or 96%) turn-initial and forms are for same-speaker tying, and only one instance of and is for inter-speaker tying. Given the fact that turn-initial and tends to be associated with the same speaker after intervening utterances from the co-participant, it is understandable that and in this position is less prolific than in other genres such as narratives (Chafe 1988).

3.4.2 Assessing: to evaluate yeah, no, right

A number of forms, especially yeah, no, and right, are used at turn beginnings and function to make an assessment or mark an agreement/affirmation or disagreement with regard to the prior talk. Example 7 gives an illustration of this use:

Ex. 7.

<1> Like on the... Like right in your row. But on the other side.
<2> Right in my row?
<1> Right... You know like in the middle section. You’re towards the left. He’s towards the right.
<2> He have like black hair?
<1> Yeah. And he has like a little goatee.
<2> I can’t... (CUP-CU)
Right and yeah in this case may be said to be tying to the prior talk, but they also make an explicit assessment with regard to the validity of the proposition made in the prior turns.

Of course all of these assessment/(dis)agreement forms may be produced with different types of prosody resulting in different interpretations. For example, no may be produced with a short duration and non-stress prosody to indicate a simple negation, but it may also be used as an emotional cry when produced with lengthened and prolonged duration. In the latter case it may be used, for example, as negative assessment showing empathy with the addressee upon hearing a dispreferred event from the addressee.

3.4.3 Explanatory: giving explanations

Many turn beginners can be regarded as explanatory forms, where they preface an explanation for some state of affairs expressed in the context. A typical discourse particle used in this context is so. Some researchers have discussed so and because/’cause together. Schiffrin (1987), for example, states that:

I consider so and because together because they are complements both structurally and semantically..because conveys a meaning of ‘cause’ and so conveys a meaning of ‘result’. (pp. 201-202)

However, in the corpus data, these two forms behave quite differently with respect to the turn-initial position. In addition to other interactional differences, so is much more likely to be used as a turn initiator than because, as is demonstrated in Table 5.

Table 5: So and because (’cause) as turn initiators

<table>
<thead>
<tr>
<th>Form</th>
<th>Frequency</th>
<th>Appearance as Turn Initiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO</td>
<td>80/373</td>
<td>21%</td>
</tr>
<tr>
<td>BECAUSE</td>
<td>14/159</td>
<td>9%</td>
</tr>
</tbody>
</table>

One potential reason for this asymmetry is that so conveys more than just the ‘result’ meaning, especially at the turn-initial position, whereas because/’cause is more restricted in use. In the corpora, for example, so can mark what Schiffrin (1987) calls ‘invited transitions in participation’ -- signalling a speaker’s readiness to relinquish the floor. Example 8 gives an illustration of this use:

Ex. 8.

<1> How do they know?
<2> Just you know you figure that was a long time ago. We didn’t have you know phonographs or et cetera.
<1> Yeah.
So I mean how do they know what it sounded like? ...
Don’t they guess by sounds in poetry? Like what rhymes and... (CUP-CU)

Another reason is that so can present a vague inference, which provides the current speaker with a chance to continue by way of elaborating that reasoning. Example 9 gives an illustration of this use:

Ex. 9.

What is this for? Explain.
It’s a project. I personally am going to rewrite it. No. Every couple of years you have to update a dictionary.
Right.
So Oxford’s updating their dictionary. And Oxford has a very very extensive dictionary words. But we won’t get into that. (CUP-CU)

In this example, Speaker 2 vaguely infers that Oxford is updating a dictionary, and then continues talking along these lines.

In contrast with so, the context for because’cause to appear is generally more restricted. Ford (1993) and Ford and Mori (1994) have found that because often occurs in the context of speaker-recipient negotiation. This restriction may contribute to the low frequency of because as a turn initiator.

3.4.4 Acknowledging with backchannel forms: mhm, uh-huh, okay, etc.

Finally, there is another class of common-turn initiators whose function can be said to regulate interaction by acknowledging the co-participant. These forms, such as um and mhm, are commonly called continuers (Schegloff 1981) or reactive forms (Clancy et al. 1996). They are almost by definition turn initiators, if one counts, as is done here, such expressions as turns.

3.4.5 Overlaps in function and functional precedence

I have just discussed a few subcategories of turn initiators based on their functions in conversation: tying, assessing, explaining, and acknowledging. I am ready to acknowledge that there are overlapping cases in functional types among the forms, especially those that are used frequently. For example, yeah can be argued to be both an assessment form and a form for acknowledgment (Drummond and Hopper 1993). Oh can function at the same time as a form to display recipiency and to tie to the prior turn (Heritage 1984). There is no doubt that multiple functions exist in most, if not all, of the high frequency forms.

Given the combinatory preferences we saw earlier, it is interesting to see what kind of functional categories take precedence when combinations occur. As
we have shown earlier, forms that can cluster together have the following precedence patterns:

\[
\text{OH} > \text{YEAH} > \text{AND/SO}
\]

Given what we know about their (main) functions, it seems possible to postulate the following functional precedence pattern:

Marking of change of knowledge state > Acknowledging > Tying

If my characterisation of functions is correct, we may say that what this hierarchy displays is a continuum from the more marked form to the less marked form. For example, marking the change of knowledge state implies an act of acknowledgement, and an act of acknowledgement implies tying to the prior turn. From this point of view, this hierarchy can be seen as suggesting that the less marked ones or the neutral functions (simple tying functions) are less likely to be put first when multiple common turn initiators are used. Perhaps this suggests that when doing signalling of a new turn, where necessary, the preference for the speaker is to highlight the more salient content over the straightforward tying function.

In this section, then, I have looked at the various functional categories associated with turn initiators, especially those high frequency forms. The categories identified in the data are similar to the general tying function of turn initiators that has been noted by CA researchers, but it is suggested that a finer distinction among sub-types would be useful to make. I have also noted the precedence patterns concerning combinations of functional types.

4. Usage patterns of some synonymous forms in light of turn beginnings

Before closing, let us take a quick look at some of the common words that are similar in meaning but differ with regard to turn-initial use.

The first group to be discussed is the affirmative forms *Yeah, Yes, and Yep*. These three forms may appear to be similar in meaning, and many English Conversation Analysts indeed treat them as variants of the same type. However, a closer inspection reveals that they are substantially different from each other in terms of phonology, frequency, and function. Phonological differences are interesting to look at, but for now we will just rely on the orthographical distinctions. They also appear with very different frequencies.

<table>
<thead>
<tr>
<th>Form</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEAH</td>
<td>374</td>
</tr>
<tr>
<td>YES</td>
<td>19</td>
</tr>
<tr>
<td>YEP</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 6: *Yeah, Yes, and Yep*
Yeah is by far the most frequent. This corresponds to their functional differences. While yes may perform the canonical function of an affirmative form, yeah is basically an acknowledgement marker taking the form of a positive assessment marker (Drummond and Hopper 1993). This function helps to make it one of the top forms of turn initiators, as we have seen earlier. Yep, which is rare in the data, seems to function to provide a short answer without taking up the floor.

Another area where these “synonymous” forms can be shown to differ is the ability to combine with other forms at turn-initial places. Specifically, some of the yeah-related combinations do not allow for yes, for example, in combinations such as yeah but, yeah well, yeah and, yeah so, while the combination of yes or no doesn’t allow for yeah. Yes, as well as yep, are typically not combined with other elements at the beginning of a turn.

Another interesting pair is that and this. Although both are demonstrative pronouns, their likelihood of functioning as a turn initiator differs greatly. First of all, in terms of raw frequency, there are 49 cases of that as a turn initiator in the data, versus 9 instances of this. That is five times as frequent as this in turn-beginning position. In terms of exclusivity in being used to start a new turn, that has a 5% rate, while this has 3.4%.

Table 7: That and this as turn initiators

<table>
<thead>
<tr>
<th>Form</th>
<th>Frequency</th>
<th>Appearance as Turn Initiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>THAT</td>
<td>49/971</td>
<td>5%</td>
</tr>
<tr>
<td>THIS</td>
<td>9/258</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

Thus, we can say that that is much more likely to be used as a turn initiator than this. This can be explained by the fact that many turn beginnings are designed to connect back to the prior turn(s), i.e., to be anaphoric, and the anaphoric function of that serves this purpose better than this, which is often forward linking (McCarthy 1994, Lawson 2000). The following example has two instances of that, which are both used in a linking-back fashion. Example 10 gives an illustration of this use:

Ex. 10.

<1> <E> sings </E>
<1> It’s just a little crush.
<2> He kept talking about it.
<1> That’s what I said too. I was like... I spent two million dollars on crush invitations.
<2> That will come definitely. (CUP-CU)

As the discussion of these two groups of forms shows, at least some of the differences between otherwise similar lexical items can be better understood by way of analysing their position in conversation structure.
5. Conclusions

Corpus evidence suggests that turn-initial elements are overwhelmingly lexical in nature, a result that confirms Schegloff’s (1996) hypothesis. Noteworthy is the fact that just the top 20 forms of turn initiators make up 60% of all turn beginnings in the database. Moreover, a closer examination of the lexical item reveals that not only are these turn initiators lexical, they also tend to be syntactically independent, with many being either interjections, vocalizations, acknowledgement forms, or conjunctions and part of some fixed discourse markers. Taking into consideration the well-known facts from other languages (such as Chinese) where turn endings are marked with special discourse particles, it is suggested that English can be considered a turn-initial language, where grammatical elements for signalling turn boundaries reside mainly in turn beginnings rather than endings. It is further suggested that one of the designing features of the grammar of turn-initial places may require a short, free form of some sort, in order to signal turn transition, perhaps in an efficient manner.

My analysis of turn-initiator functions suggests that the function of turn beginnings may be characterized as mainly to link to prior turns, but a variety of other functions are found to exist in the data, chief among them are assessing, explaining, and acknowledging.

This study also demonstrates some of the advantages of taking a corpus-based approach to language use. For example, in the course of discussion, various conjunctions and discourse markers are re-examined in the light of turn-initial positions (e.g., and), and interesting differences between otherwise similar forms were revealed (e.g., the differences between so and because). Also in light of the turn-initial position, the differences among groups of synonymous lexical items (yes ~ yeah ~ yep, this ~ that) were compared.

Overall this study demonstrates that at least some aspects of lexico-grammar can be identified as designed for, or arise out of, discourse structure. It is to be viewed as a preliminary inquiry into the nature of grammar in terms of discourse location and structures of social interaction (Atkinson and Heritage 1984), and should be taken as contributing to a young but growing body of literature that points to the interconnection among discourse, interaction, and grammar. Recently, numerous studies have demonstrated how the choice of anaphoric forms depends on discourse structure (Fox 1987), how discourse context is a useful predictor of grammatical choice (Hughes, Carter and McCarthy 1995), and how (adverbial) clauses emerge from participants’ agreement negotiations (Ford 1993, 1994, Ford and Mori 1994). Now an increasing focus on turns and sequences and their grammatical ramifications has just begun to shed new light on language structure (Selting and Couper-Kuhlen 2001, and the papers in Ford, Fox and Thompson forthcoming).

Finally, two brief methodological notes concerning genre and the role of corpus linguistics in researching interaction and grammar may be offered. In this paper, I have looked at interactive discourse such as face-to-face interaction. In a study of academic English, Swales and Malczewski (2001) have identified a number of what they call ‘new episode flags’, which are somewhat similar but not
identical to turn initiators discussed here, and their results are also partially different from what is reported here. This raises the important question of what are the important structural elements to identify in different genres and how similar forms function differently in different genres. I leave this question to future research.

On the second theme, it has been amply demonstrated that in investigating matters of interaction and grammar, detailed analyses of single episodes of interaction as exemplified by many classic studies in the CA tradition have distinctive advantages (Schegloff 1987a). However, I believe that computer-assisted analysis of large amounts of data can complement CA to some extent. The key to the usefulness of quantitative analysis of social interaction lies in a well-defined set of comparable variables, as has been convincingly argued by Schegloff (1993). To come up with such a set of variables as objects of analysis is, admittedly, no easy matter, but in my opinion this should not prevent us from trying, especially given the current situation where computer-assisted analyses of conversational phenomena are relatively rare (McCarthy forthcoming). I hope that this study, by limiting the variables to an identifiable turn position, has made a positive contribution to this end.

Acknowledgments

I wish to thank Michael McCarthy, Charles Meyer, and Sandra A. Thompson for valuable written comments on some earlier versions of this paper. Any shortfalls are entirely my own responsibility.

References


