Form and Function: Linguistic Studies in Honor of Shuanfan Huang

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Nominal Intonation Unit and Speaker Change in Mandarin Conversation

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1. INTRODUCTION

This is a study of the relationship between discourse and grammar as revealed in language used in real time spoken setting. Nominal phrases that independently constitute the ending intonation unit in conversational turns are examined for their impact on the negotiation of speakership in verbal interaction.

Schegloff, Ochs, & Thompson (1996) point out that there is a radical shift in the kind of questions functional linguists ask about grammar when they are faced with real time spoken data. In traditional linguistic study, a linguistic component is typically treated as a grammatical constituent in the sentence structure. However, as language is primarily put into conversational use for communicative purposes, any linguistic component, regardless of its grammatical category, can also be perceived as a discourse constituent with respect to the conversational turn and sequence structure.

The present study is an investigation of how a particular grammatical category is put into use in real-time discourse and of how it contributes to the shaping and organization of that discourse. Specifically, I would focus on nominals that alone constitute the last intonation unit of a speaker’s turn and examine whether these nominal intonation units are associated with any specific patterns of speakership negotiation, as manifested by the immediately

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1 This is an extensively revised version of a paper of the same title published as in the Proceedings of the First Symposium on Discourse and Syntax in Chinese and Formosan Languages (pp. 15-37), held in June, 1997 at National Taiwan University, Taipei, Taiwan. I was privileged to be able to receive constructive feedback and criticisms from Susanna Cumming, Kawai Chui, Shuanfan Huang, Randy LaPolla, Mei-chun Liu, Sandy Thompson, and an anonymous reviewer for the content of this paper. I may not have followed all of their suggestions, but to them I want to express my deepest appreciation. Needless to say, all the errors and inadequacies remaining in this paper are my own.
following speaker change where the second speaker starts speaking. If any associations are found, we also want to ask what these associations tell us about nominals, about information exchange, about speakership negotiation, and about interaction in general.

I was led to this research topic because of the following observations regarding how speakers interact in conversation. Generally, interlocutors contribute substantial speech after each other's turn to ensure the development of their conversation. However, different from this overall profile, when the prior speaker's turn-ending intonation unit is a nominal phrase, the next speaker tends to opt for non-substantial speech as a response. I want to find out if this tendency can be substantiated by our data and, if there is indeed such a tendency, why? I will approach the issue by considering two sets of clues: (1) the prosodic, structural, informational, and sequential properties of the nominal intonation units, and (2) the discourse functions of the non-substantial speaker change forms from the next speaker. In Section 2, I discuss the key notions and research questions for this study. In Section 3, I analyze the findings. Section 4 is the conclusion.

2. KEY NOTIONS AND RESEARCH QUESTIONS

2.1. Speakership Negotiation, Speaker Change, and Speaker Change Forms

First, let us consider the notions of speakership negotiation and of speaker change. Conversation interaction can be viewed from many perspectives, one of them being the negotiation of speakership. Participants in a conversation can be designated as the primary speaker and the non-primary speaker(s). The former plays the active role in conversation by supplying substantial speech and holding the floor for a considerable stretch of time. The latter plays the passive role in conversation by listening to the primary speaker's speech and
providing various brief comments that are non-floor-taking. In this paper we adopt the term speaker change (Ford & Thompson, 1996) to denote the turn negotiation among interlocutors about speakership. A speaker change is defined as having taken place either with a substantial and floor-taking turn (i.e., a full turn) that involves a shift of primary speakership, or with a non-substantial, non-floor-taking turn from a non-primary speaker that does not involve a shift of primary speakership.

There are a variety of speaker change forms. In addition to full turns, which, as mentioned above, are substantial, floor-taking turns, we will examine three more speaker change forms that all realize non-substantial, non-floor taking speaker changes. These three categories are collectively termed reactive tokens, and the definition of each category is based on the framework proposed in Clancy et al. (1996).\(^3\) First, backchannels are non-lexical vocalic forms that serve as continuers to signal the non-primary speaker’s understanding of or interest in the primary speaker’s speech. Mandarin backchannels include forms like uhm, en, ao, etc. Second, reactive expressions are short lexical words or phrases that a non-primary speaker utters to express her non-floor-taking assessment of the primary speaker’s speech. Mandarin reactive expressions include words like duì 'right, yeah', shì a 'yeah', zhèndè a ‘really’, etc. Third, for our purpose here, repetitions are defined as one speaker’s reiteration of a portion of her interlocutor’s speech. Repetitions are primarily used to acknowledge the receipt of information (and, in some cases, the person’s reaction to that information) just uttered by the other speaker. Through this confirmation process, repetition can establish speaker alignment not only at the ideational level but also at the interpersonal level.

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\(^2\) The relationship between speakership and genre structure does not concern us in this study.

\(^3\) In Clancy et al. (1996) there are two more kinds of reactive tokens, i.e., collaborative finish and resumptive opener. These two categories are not discussed in this study. See Section 2.3 for reasons.
2.2. NP IU

In this paper, we want to examine how speaker change forms are used after a particular type of conversational unit, i.e., an intonation unit that consists of a nominal phrase. We follow Chafe (1987) to call the basic unit of conversation the intonation unit (IU hereafter), which is, roughly speaking, "a stretch of speech uttered under a single coherent intonation contour" (Du Bois et al., 1993: 47). An IU can correspond to a variety of grammatical units. When it consists solely of a (portion of a) nominal phrase, we call it a nominal intonation unit (NP IU hereafter). When an NP (and only an NP) constitutes an IU, the assumption is that the information conveyed therein is likely to be dense, such that the speaker uses a single IU to deliver it. Given the 'one new idea at a time' constraint (Chafe, 1987), an NP IU is also likely to introduce new information to the discourse that may be cognitively demanding to process for both the speaker and the recipient. However, the likelihood that NP IUs may carry new information does not exclude the possibility that NP IUs may designate given information that has already been activated in the mind of the addressee.

2.3. Research Questions

Now we discuss why we are interested in the relationship between NP IUs and the speaker change forms used after their utterance.

In our database, which consists of a roughly 80-minute long, mostly dyadic conversation, we found a total of 150 NP IUs that are followed by a speaker change. Table 1 compares the distributions of six speaker change forms as they occur after the 150 NP IUs and as they are used after the total 1231 IUs (including the 150 NP IUs) found in our database that are

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4 We follow Tao (1996) in defining the NP IU as an IU that consists of (1) bare nouns (including some demonstratives and question words), (2) nouns with modifiers (including relative clauses), or (3) nouns mixed with other non-verbal elements.
followed by a speaker change.5 It appears that, compared to the general picture (the ALL IU column), the current speaker’s NP IU tends to attract repetition, reactive expression, and backchannel rather than full turn (and other reactive tokens) from the interlocutor.

<table>
<thead>
<tr>
<th></th>
<th>NP IU %</th>
<th>ALL IU %</th>
<th>NP IU %</th>
<th>IN ALL IU</th>
</tr>
</thead>
<tbody>
<tr>
<td>full turn</td>
<td>45 30%</td>
<td>690 56%</td>
<td>7%</td>
<td>1231 100%</td>
</tr>
<tr>
<td>resumptive opener</td>
<td>8 5%</td>
<td>146 12%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>repetition</td>
<td>30 20%</td>
<td>76 6%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>collaborative finish</td>
<td>3 2%</td>
<td>20 2%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>reactive expression</td>
<td>25 17%</td>
<td>109 9%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>backchannel</td>
<td>39 26%</td>
<td>190 15%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>150 100%</td>
<td>1231 100%</td>
<td>12%</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Speaker change forms as used after NP IUs and after all IUs

The same tendency can also be detected from the ratio, as shown in the rightmost column in Table 1, of the frequency of a speaker change form appearing after an NP IU against after all 1231 IUs. The four non-floor-taking forms (repetition, collaborative finish, reactive expression, and backchannel) all display a ratio much higher than the two floor-taking forms (full turn and resumptive opener). Thus, the association between the current speaker’s NP IU and her interlocutor’s tendency to utter a non-floor-taking reactive token upon hearing this NP IU is quite distinct.

For this study, we will not examine collaborative finish and resumptive opener because, as shown in Table 1, the frequency for each of them after an NP IU is no more than 5%. In the remainder of the paper, we will focus on full turn, repetition, reactive expression, and backchannel.

Given the distributional skewing of the speaker change forms between the overall profile (i.e., the ‘All IU’ group) and the NP IU group, we want to ask: What are the properties of the

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5 The conversation was transcribed according to the system proposed in Du Bois et al. (1993) with minor modifications. See the Appendix for transcription conventions. The 1231 tokens consist of 1110 clear speaker changes and 121 (near-)IU-initial overlaps. Speaker changes taking place at IU-initial overlaps are disregarded for this study.
NP IU that attract the interlocutor’s non-floor-taking reactive tokens, rather than his full turn for obtaining primary speakership?

Furthermore, as briefly introduced in 2.1, while the three reactive tokens under study all signal their user’s wish to remain a listener, distinctions can still be made with respect to the degree of their user’s active participation in the conversation. Backchannel, as a continuer uttered to encourage the other party to go on, signals the most passive listenership. Reactive expression, as a device for the interlocutor to express her assessment, signals a more participatory listener role than backchannel. In like fashion, repetition, as a device for the interlocutor to maintain alignment with the speaker, also indicates a listener role but with more substantial contribution to the interaction than backchannel. Given that the three forms signal listenership of different degrees of participation, the second question we want to ask is: If the NP IU’s properties that attract the interlocutor’s non-floor-taking reactive tokens can be identified, do repetition, reactive expression, and backchannel manifest differentiated associations with any of them?

The following steps are taken to seek answers to the two questions. First, NP IUs are categorized in terms of their structural integratability and discourse functions. Next, the distribution of the four speaker change forms with respect to each of the NP IU types was tabulated. The associations between the speaker change forms and the NP IU types were then analyzed. Finally, the behavior of the four speaker change forms across NP IU types was examined.

2.4. Structural and Functional Subtypes of NP IU

NP IUs can be further examined for their structural (i.e., syntactic) and functional properties (Tao 1996). Structurally, NP IUs are either attached or detached in terms of their integratability into a neighboring clause. When the intonation boundary is disregarded, an
NP is attached if it can be grammatically integrated into a clause preceding or following it. Otherwise, it is detached. For the discourse functions of Mandarin NP IUs, I propose to revise Tao’s classification and distinguish three subtypes: referential, predicating, and interactional. First, NPs can be referential, i.e., they are used to establish or track the reference of a discourse participant. Secondly, many uses of NPs do not refer but predicate in discourse. The predicating function provides some characterization about the “state of affairs” of a discourse participant (an entity or a situation) that is already established and being tracked in the discourse. A good example is the predicate NP in copula/equational clauses. The predicating function of an NP is subgrouped under the referential type in Tao’s taxonomy but we feel it is distinct enough to be a type on its own. Finally a repeat NP is an interactional NP, used by a recipient to establish the alignment at the ideational and possibly interpersonal levels between herself and the prior speaker with regard to (the referent of) a nominal just uttered by that speaker. The interactional NP IU is, therefore, always a reiteration of an NP and is structurally detached to its neighboring clause.

3. DISCUSSION OF FINDINGS

3.1. General Overview

<table>
<thead>
<tr>
<th>NP IU TYPE</th>
<th>TOKEN</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>indeterminable referential</td>
<td>5</td>
<td>3%</td>
</tr>
<tr>
<td>attached referential</td>
<td>28</td>
<td>19%</td>
</tr>
<tr>
<td>attached predicating</td>
<td>66</td>
<td>44%</td>
</tr>
<tr>
<td>detached referential</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>detached predicating</td>
<td>12</td>
<td>8%</td>
</tr>
<tr>
<td>detached interactional</td>
<td>37</td>
<td>25%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>150</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2. NP IU types  

The 150 NP IUs are grouped into six categories, as shown in Table 2.6 Two groups have

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6 As there are two structural categories (attached and detached) and three functional categories (referential, predicating, and interactional) for NP IUs, there should be altogether six combination types (attached referential, attached predicating, etc.) when everything is put together. However, due to the nature of the interactional NP
relatively few tokens: the indeterminable referential and the detached referential. In the remainder of this paper, we will disregard these two categories and focus on the other four major NP IU categories. Table 3 gives the distribution of speaker change forms in these four types.

<table>
<thead>
<tr>
<th></th>
<th>attached predicating</th>
<th>detached predicating</th>
<th>attached referential</th>
<th>detached interactional</th>
</tr>
</thead>
<tbody>
<tr>
<td>full turn</td>
<td>16 24%</td>
<td>4 33%</td>
<td>5 18%</td>
<td>15 43%</td>
</tr>
<tr>
<td>resumptive opener</td>
<td>5 8%</td>
<td>1 8%</td>
<td>0 0%</td>
<td>2 5%</td>
</tr>
<tr>
<td>repetition</td>
<td>16 24%</td>
<td>2 17%</td>
<td>2 7%</td>
<td>11 27%</td>
</tr>
<tr>
<td>collaborative finish</td>
<td>0 0%</td>
<td>0 0%</td>
<td>3 11%</td>
<td>0 0%</td>
</tr>
<tr>
<td>reactive expression</td>
<td>12 18%</td>
<td>3 25%</td>
<td>4 14%</td>
<td>5 14%</td>
</tr>
<tr>
<td>backchannel</td>
<td>17 26%</td>
<td>2 17%</td>
<td>14 50%</td>
<td>4 11%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>66 100%</td>
<td>12 100%</td>
<td>28 100%</td>
<td>37 100%</td>
</tr>
</tbody>
</table>

Table 3. Speaker change forms and the four major NP IU types

3.2. Attached Predicating NP IUs

The attached predicating NP IU is the most commonly seen type among all categories. It constitutes mostly clause-final NPs, taking on grammatical roles such as the O, or serving as the predicate NP in copula/equational constructions. As these NPs constitute an entire IU by themselves, the information they carry is likely to be substantial and cognitively demanding to process. Also, it should be more likely than not that these NPs do not designate semantically predictable items, such as the “redundant” object in Chinese V-O compounds (e.g., the hua ‘speech’ in shuo-hua ‘speak speech – to speak’). Indeed, none of the 66 attached predicating NP IU tokens designates the O in a V-O compound. On the other hand, most of these tokens (n = 63, 95%) carry new information that is introduced to the discourse for the first time. Thus, the status of the attached predicating NP IU as an informationally substantial and cognitively demanding item is strongly supported by our data.
As the figures in Table 3 show, each of the four major speaker change forms (full turn, repetition, reactive expression, and backchannel) occur frequently after an attached predicated NP IU. Consider the following examples, in which full turn, repetition, reactive expression, and backchannel are used respectively.

1. attached predicated NP IU followed by full turn
   C: .. Na wo yao jiao ni zeme xie,
   then I want teach you how write
   Well I’ve got to teach you how to write,
   --> C: .. dizhi.
   Address
   the address.
   --> A: .. [Wo dizhi meiyou xie cuo a.
   I address NEG write wrong PRT
   [I didn’t write the address wrong.
   C: .. [Na ge xin shi shou bu dao.
   that CL letter BE receive NEG reach
   [(Or) the letter won’t reach its destination.

2. attached predicated NP IU followed by repetition
   B: ... (1.2) Women xianzai zhi xiang gao yige --,
      we now only want make one=M
      We’d like to start up a --,
   --> B: .. chuban gongsi.
      publish company
      publishing company.
   --> A: ... (1.4) Chuban gongsi.
      publish company
      A publishing company.

3. attached predicated NP IU followed by reactive expression
   A: .. @ Wo xianzai zai zuo,
      I now in do
      #What I am now is,
   --> A: .. um= chengshi shejishi.
      program designer
      uh a (computer) programmer.
   --> B: .. Shi ma?
      be PRT
      Is that right?

4. attached predicated NP (final) IU followed by backchannel
   B: ... (1.1) Zai yangguang xiamian ta hui
      under sunlight beneath it will
      Under the sunlight it
      bianwei yizhong hen xian de yizhong,
      become one=kind interactional fresh DE one=kind
      takes on a kind of bright a kind of,
   --> B: .. juhongse.
      orange=color
      orange-red cast.
   --> A: .. Uhm.
      Uhm
      Uhm.

While full turn does take up almost a quarter (24%) of all speaker change forms after an
attached predicking NP IU, the three non-floor-taking forms, as a whole, are clearly preferred.

Table 4 shows a comparison between the attached predicking NP IU tokens and tokens where the speaker change takes place after a "prototypical" clause, i.e., a clause completed with a clause-final NP without the NP constituting an IU by itself. In Table 4, the IU of the latter category is called “predicking NP-plus IU”. We notice that full turn as the speaker change form is used more frequently in the “predicking NP-plus IU” category than in the NP IU category. In other words, the tendency is still maintained that an attached predicking NP attracts non-floor-taking reactive tokens when it alone constitutes an IU more than when not. We further notice that among the non-floor-taking reactive tokens, the most outstanding distributional difference falls on repetition. Repetition is clearly an indispensable speaker change form after attached predicking NP IU (24%), but its use after a prototypical clause ending with a predicking NP-plus IU is infrequent (2%).

<table>
<thead>
<tr>
<th></th>
<th>attached predicking NP IU</th>
<th>predicking NP-plus IU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>full turn</strong></td>
<td>16</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>24%</td>
<td>38%</td>
</tr>
<tr>
<td>Resumptive opener</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Repetition</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>24%</td>
<td>2%</td>
</tr>
<tr>
<td>Collaborative finish</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>reactive expression</td>
<td>12</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>18%</td>
<td>17%</td>
</tr>
<tr>
<td>Backchannel</td>
<td>17</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>26%</td>
<td>35%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>66</td>
<td>190</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4. Attached predicking NP IUs compared with predicking NP-plus IUs, in terms of speaker change forms

A cognitive and interactional approach based on the fact that these NPs are informationally substantial can account for the tendency that reactive tokens are favored in the attached predicking NP IU category. Just as it takes time for the speaker to produce these NPs, it takes time for the recipient to process them. However, the recipient is at the same time pressured to respond, given the conversational turn-taking systematics. Under these circumstances, the recipient would be more likely to use a non-floor-taking form, which signals her attentiveness to the prior speaker's completed clause and commits herself only to a
non-primary speaker role so that she can take time to process the new information just received. Immediate substantial reactions from the recipient (as realized by full turn or opener) are still possible, but the likelihood is reduced.

As Table 3 shows, repetition, reactive expression, and backchannel are quite evenly distributed in the attached predating category. There does not seem to be any semantic, syntactic, or functional properties of the NP in correlation with the occurrence of any of the three reactive tokens. There is, however, a correlation detectable in terms of the IU's prosodic feature: As attached predating NPs generally complete a clause, most of them are IUs with a final intonation. The NP IU given in example (4) is such a final IU. However, there is a strong association between (attached predating) NP IUs with a continuing intonation and backchannel as the subsequent speaker change form. In our database, 6 of the 9 continuing NP IU tokens are followed by a backchannel. Consider the following example:

5. attached predating continuing NP IU followed by backchannel

B: .. Daizu ne shenghuo zai,
   Dai=people PRT live at
   The Dai People live in,
---> B: .. Diannan,
     Yunnan=south
     Southern Yunnan,
---> A: .. Uhm.
     Uhm
     Uhm.
B: .. Xishuangbanna,
    Xishuangbanna
    Xishuangbanna,
B: .. Dehong.
   Dehong
   (and) Dehong.

Although continuing IUs are not always followed by a backchannel, and backchannels do not just occur after a continuing IU, the association between the two appears to be significant.

We will return to this point in Section 3.4.

3.3. Detached Predicating NP IUs

Detached predicating NP IUs in Chinese discourse have been identified and discussed
(Chui, 1994; Tao, 1996). While only 12 tokens (followed by a speaker change) are found in our database, the detached predicating NP IU is functionally quite interesting. An NP standing alone, it provides further predicating information on some entity or situation that has already been predicated on in the prior discourse. The detached predicating NP IU can be used by the same speaker to recapitulate what she just said, or by the interlocutor to offer an alternative characterization. When uttered by the same speaker, it is termed “unattached NP increment” in recent literature, and its function as an assessment of what is just said is highlighted (Schegloff 1996; Ford, Fox, & Thompson 2002). In fact, the use of the detached predicating NP IU often takes place in a meaning negotiation sequence (Huang, 1995; Biq, 1999): A best description or characterization about what is being talked about is negotiated through the sequence of (1) the “original” predication, (2) the detached predicating NP IU offered as an alternative, and (3) the speaker change form, if any, that follows the NP IU and reveals the interlocutor’s reaction to that alternative. It is only natural that detached predicating NP IUs are all lexical (rather than pronominal) NPs and with the final (rather than continuing) intonation, and they mostly carry new information (for 11 of our 12 tokens).

As Table 3 shows, all of the four speaker change forms under study occur frequently after a detached predicating NP IU, just as in the case of the attached predicating NP IU. Consider these two detached predicating examples respectively followed by full turn and reactive expression as the speaker change form:

6. detached predicating NP IU followed by full turn
   C: .. Ni shuo,
       you say
   C: .. Ni mingtian,
       you tomorrow
       tomorrow you,
   A: .. jiu che,
       just retreat
       will “retreat”,
   A: .. che jun la.
       retreat army PRT
       (like) retreating an army.
B: ... Chetui.
   Retreat
   Retreat.

C: ... Che?
   Retreat
   Retreat?

A: ... Chetui.
   Retreat
   Retreat.

A: ... jiu [zou.
       just leave
        It's just [leaving.

B:       [Oh= yinwei wo dang guo bing.
         oh because I be EXP soldier
[Oh= I use the term because I was in the army.

---> B: ... Suyu.
       Slang
       (It's) slang.

---> A: ... Ta yong,
       3s use
       He used,

A: ... jundui de <L2 terminology L2>.
       army DE terminology
       army terminology.

7. detached predicating NP IU followed by reactive expression

B: ... Wanshang ne=,
      evening PRT
      In the evening,

B: ... Wo gei tamen,
      I for them
      I'll,

B: ... bao jiaozi.
      wrap dumpling
      make dumplings for them.

B: ... gei tamen zuo ji ge cai.
      for them make several CL dish
      (I'll) make a few dishes for them.

B: ... (0.8) Bu shi sheme da cai,
      NEG be what big dish
      Nothing special,

B: ... jiu shi zuo dian xiao liang cai.
      just be make some small cold dish
      just a few cold dishes.

---> A: ... (1.2) Jiachang cai.
       home-style dish
       Down home food.

---> B: ... Dui.
       Yes
       Yeah.

A full turn follows a detached predicating NP IU either to capitalize on the subject or to move on to a new topic. Example (6) illustrates how it is used in the former way. Speaker C, the American friend, was struggling with the slang use of the Chinese word che for the meaning of 'retreat'. At the first arrow, speaker B finally realizes this and points out, with the detached predicating NP IU, suyu 'slang', that his use of the term is a slang use. At the
second arrow with a full turn, speaker A makes a further "annotating statement" about this NP to ensure that C fully understands it.

Non-floor-taking forms occur more frequently (about two thirds of all tokens) than full turn after a detached predating NP IU. Just like the attached predating NP IU, the detached predating NP IU is informationally dense and thus cognitively demanding for the interlocutor. Immediately after hearing the detached predating NP IU, the interlocutor is more likely to take time to process the information and make a minimal response than to come up with a substantial contribution to the conversation. In (7), speaker A offers *jiachang cai* 'down home food' to recapitulate what speaker B has been talking about. At the second arrow, B expresses his agreement with A's choice of words with a reactive expression, *dui*.

3.4. Attached Referential NP IUs

The 28 tokens of the attached referential NP IU category are all clause-initial NPs taking the grammatical roles A or S that serve to establish or track the reference of a discourse participant, or are themselves framing elements such as time or place that help set up the discourse topic. The occurrence of these NP IUs does not yet complete a clause. However, these tokens are identified as attached because, after the speaker change, the NP IU speaker eventually manages to complete her clause.

The attached referential NP IU group is quite different from the last two groups in terms of prosody, grammatical form, and information status: Most (24 of the 28 tokens) of them are, as expected, IUs with continuing intonation. Some (6 tokens) of them are in pronominal forms, which is not a surprise since clause-initial NPs are often in pronominal forms. Finally, new and given information are almost equally represented (15 tokens for new; 13 tokens for given). We have established that the first two NP IU categories discussed above are informationally
substantial and as a result a floor-taking move from the interlocutor is less likely to occur. For attached referential NP IUs, the distinction between given and new information does not appear to be significant. It is rather that the current speaker has signaled, prosodically and structurally, that she is not finished with her turn.

Backchannel is the dominant speaker change form for this type, used in half of the cases (n = 14, 50%). By contrast, repetition and reactive expression are considerably less popular.

Consider the following backchannel example:

8. attached referential NP IU followed by backchannel
   B: .. Yao zhe me kan, 
      need this look  
      Look, 
     --> B: .. yiban Zhongguo ren lijie de 
           generally Chinese people understand DE 
           zhe ge Zhongguo huihua, 
           this-M Chinese painting 
           what most Chinese think of as Chinese painting,
     --> A: .. Uhm. 
          Uhm. 
          B: .. dou shi shuimo, 
              all be ink=painting 
              is ink paintings, 
          B: .. wenrenhua. 
             literati-painting 
             literati paintings.

Backchannel being the dominant choice is understandable. Upon hearing an NP that establishes, tracks, or frames a discourse participant, the recipient is led to expect the coming of the predicated part of the clause. The most reasonable move she can take, if she wants to say anything at all at this point, is to provide a non-floor-taking continuier backchannel to encourage the primary speaker to complete the clause.

Goodwin (1986) points out that the differentiated use of a continuier and an assessment suggests the interlocutor's different interpretation of the speaker's current unit of talk in its sequential context. A continuier is used since the listener treats the current unit as part of an extended stretch of talk. An assessment, on the other hand, is used to "deal with the
specifics of the talk in progress as phenomena in their own right rather than as a prelude to further talk" (Goodwin, 1986: 214). In the case of the attached referential NP IU, as the unit is concerned with setting up the reference of a discourse participant (whose predication is yet to occur), it is less likely to be interpreted as something worthy of an comment in its own right than as a prelude to further talk, which would provide the predication. No wonder that the attached referential NP IU is closely associated with backchannel, but not with reactive expression nor repetition.

3.5. Detached Interactional NP IUs

The interactional NP IU is, as defined, always a reiteration of an NP uttered in the prior talk. As a result, it is always informationally given and structurally detached. Our data also show that interactional NP IUs are all, as expected, in lexical (rather than in pronominal) form. Prosodically, they are IUs with final intonation, although whether the final intonation is posed as an echo to express confirmation (i.e., akin to a statement) or as a confirmation-seeking element to request more details (i.e., akin to a next-turn repair initiator) is hard to distinguish. The speaker change that follows immediately does not offer any clues to this particular distinction, either. Sometimes contextual information can help to identify whether an interactional NP IU is a confirmation echo or a confirmation-seeking device. Consider the following example, where Speaker A’s interactional NP IU is preceded by an interjection oh with a falling intonation, which clearly signals that she just understood what Speaker B was trying to tell her.

9. detached interactional NP IU with full turn (Speaker B is trying to identify the name of the minority people he is talking about:)

B: .. baisi de bai.
white-color POSS white
[It’s] the bai as in ‘white color’.
--> A: .. oh baisi de bai.
oh white-color POSS white
Oh (you mean) the bai in ‘white color’.


--> B: .. Baizu.
    white-people
    The White (minority) People.

However, most of the tokens in our database can be interpreted in either way. Consider the following example:

10. detached interactional NP IU with repetition (Speaker B is a painter and he mentions a particular type of painting technique:)
    B: .. Ye ye you nei ge-,
    also also have that CL
    There's also this --,
    B: .. un-,
    Un,
    uh,
    1 B: .. siwangyin.
    silk=screen=print
    silk-screen prints.
    --> 2 C: .. siwangyin.
    silk=screen=print
    silk-screen prints.
    --> 3 B: .. siwangyin.
    silk=screen=print
    silk-screen prints.
    A: .. shenme dongxi?
    What thing
    What is it?

At the first arrow, C repeats what B just said, siwangyin 'silk-screen prints'. No intonational or collocational information can help us to identify this repeat as either a confirmation echo or a confirmation-seeking request. However, given that B is a painter and both speakers A and C are not, it is highly likely that C has never heard of this term before and it is new to him.

By repeating the NP, C attempts to confirm the new term with B and establishes an alignment with B: He is trying to learn what formerly B knew but he didn't know and, so to speak, to take on B's perspective, in which there is a concept of, and a term for, silk-screen prints.

We argue for a unified treatment, i.e., regardless whether the speaker intends it as a confirmation echo or as a confirmation-seeking device, the repeat NP IU always functions interactionally in the sense that the speaker utters it in an attempt to establish an alignment with her interlocutor with regard to (the referent of) the NP at the ideational level (i.e., confirming the referent) and perhaps also at the interpersonal level (i.e., showing her
agreement/approval/surprise, etc. regarding the interlocutor’s use of this NP).

In our database we find that after the NP is repeated by the recipient, the speaker who first utters the NP often repeats it yet again. Example 10 illustrates this point. Speaker B first utters *siwangyin* ‘silk-screen prints’. Speaker C repeats it (at the first arrow). Speaker B then repeats it again (at the second arrow). This sequence manifests a typical conversational exchange structure consisting of initiation, response, and follow-up as the three basic units (Coulthard & Brazil, 1981; Huang, 1994). The “original” speaker’s follow-up also functions interactionally because it is an effort on her part to (re)confirm the previously provided nominal so that the two parties can reach the same alignment ideationally (and interpersonally). This type of exchange between the participants for ideational and interpersonal alignment on a particular NP (and its referent) can be viewed as constituting a side sequence within the on-going conversation (Jefferson, 1972). Side sequences are typically kept as short as possible. The original speaker’s follow-up in the side-sequence is often bypassed; instead, the speaker can simply go back to the on-going conversation.

In our database, there are 37 interactional NP IUs that are followed by a speaker change. Among them, 4 tokens are of the third, follow-up move, while the other 33 tokens are of the second, responding move. Since the sample is too small, we disregard the follow-up NP IUs and focus on the 33 responding NP IUs. Table 5 shows the speaker change forms that follow these interactional NP IUs.

<table>
<thead>
<tr>
<th></th>
<th>2nd move (responding)</th>
<th>interactional NP IU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>full turn</strong></td>
<td>14</td>
<td>42%</td>
</tr>
<tr>
<td><strong>resumptive opener</strong></td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Repetition</strong></td>
<td>11</td>
<td>33%</td>
</tr>
<tr>
<td><strong>collaborative finish</strong></td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>reactive expression</strong></td>
<td>4</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Backchannel</strong></td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>33</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5  Speaker change forms after the 2nd responding interactional NP IUs
interactional follows either 14 tokens the follow-up
speaker brings following example B moves on

As shown in Table 5, the favorite speaker change forms used after the recipient's interactional NP IU are full turn (n = 14, 42%) and repetition (n = 11, 33%). A full turn follows either as the follow-up move by the original speaker to elaborate on the NP (6 of the 14 tokens in our data). Speaker B's last turn in Example 9 illustrates this type of use. Or, the follow-up move is deemed unnecessary and bypassed, and a full turn by the original speaker brings back the on-going conversation (8 of the 14 tokens in our data). Consider the following example. The follow-up is bypassed after Speaker C's repeat. Instead, Speaker B moves on to provide some more new information on the character.

11. detached interactional NP IU with full turn
   C:  ... zhe ge,
       this CL
       This
   C:  ... de,
       Virtue
       de,
   C:  ... zi,
       Character
       its character,
   C:  ... zeme xie?
       how write
       How do you write it?
   B:  ... Daode de de.
       virtue POSS virtue
       (It's written with) the de as in 'virtue'.
   --> C:  ... Daode de de a.
       virtue POSS virtue PRT
       De as in 'virtue'.
   B:  ... Shuangren pang.
       double-person radical
       (It's the one with) the double-person radical.

Repetition is the other favorite speaker change form. As in Example 10, the original speaker simply repeats the NP IU again as a follow-up. The other reactive tokens are apparently not as ideal as repetition. Backchannel as a continuer is apparently not a good choice here because the original speaker does not intend to solicit further talk from the recipient. On the other hand, between repetition and reactive expression, repetition is still preferred: when the NP is uttered in its full form again, (re)confirmation on the NP and thus alignment between the parties are optimally warranted. Linguistic iconicity favors repetition
here, too (Haiman, 1994): the recipient’s interactional NP IU is itself a repetition already. When the original speaker repeats the NP yet again, the identical form in the three-part exchange sequence isomorphically suggests the impeccable alignment between the two persons.

3.6. A Preference for Non-floor-taking Listener Role

In 3.2 to 3.5 we have identified the prosodic, structural, informational, and sequential properties of NP IUs to account for the fact that, in contrast to the general speaker change profile, in which full turn is the favorite speaker change form, non-floor-taking reactive tokens such as repetition, reactive expression, and backchannel are preferred speaker change forms if the prior speaker’s last IU in her turn consists of only an NP.

Full turn does not have a low frequency rate across all categories. As we have seen, full turn is the most favorite speaker change form after the interactional NP IU. Its preference, as accounted for in Section 3.5, is because this speaker change form can deliver either a follow-up elaboration or a return to the on-going conversation. However, the non-floor-taking repetition, reactive expression, and backchannel, as a whole, do dominate over full turn across categories. Why, after the prior speaker’s NP IU, does the interlocutor tend to remain a listener rather than negotiate to become the primary speaker? Our analysis suggests that this is related to the NP IU’s prosodic, structural, informational, and sequential properties.

First, a listener tends to remain a listener before the current speaker prosodically, structurally, or informationally reaches a transition-relevance-place (Sacks et al., 1974; Ford & Thompson, 1996), but a listener may signal her attentiveness in the midst of the speaker’s talk to encourage the latter to go on. The speaker change that takes place after the attached referential NP IU exemplifies this type of listener action.
Next, during an information-checking side sequence, non-floor-taking reactive tokens are sequentially preferred so that the side sequence can be quickly accomplished and kept as little disruptive to the on-going conversation as possible. The speaker change that takes place after the interactional NP IU exemplifies this type of listener action.

Finally, when the function of an NP is to predicate (on an established topic), and the utterance of this NP reaches a possible transition-relevance-place prosodically, structurally, or informationally, the chances that the listener reacts by uttering a full turn should be high. However, when the predicking NP solely constitutes the IU, it is usually an informationally substantial unit for the listener. The attached and the detached predicking NP IUs both exemplify this subtype. The listener tends to take time to process this informationally substantial unit and thus make only a non-floor-taking move rather than to produce her own substantial speech at this point.

In summary, the prosodic, structural, informational, and sequential properties of the various types of NP IUs tend to encourage the recipient to remain a listener and refrain from turning herself into the primary speaker.

3.7. **Continuer, Assessment, and Interactional Alignment**

In our analysis, we found that while reactive tokens are in general preferred after an NP IU, there are distributional disparities among repetition, reactive expression, and backchannel in some NP IU categories. The attached referential NP IU is most frequently followed by a backchannel, because as a continuer, backchannel appropriately displays the interlocutor's understanding that more speech relevant to the current unit of talk is coming. On the other hand, the interactional NP IU is most frequently followed by a repetition, because repetition is the formal choice that best warrants the optimal alignment effect between interlocutors with
regard to an informationally substantial item.

All of the three reactive tokens are more or less conspicuously distributed in the attached predicking and the detached predicking categories. This is quite reasonable, given our understanding of how they are used elsewhere. Reactive expression, among the three, is the most reasonable choice after a predicking NP IU, attached or detached, as long as the recipient does not intend to become a primary speaker with a full turn. By uttering a reactive expression, she displays her understanding of the speaker's talk so far as a complete unit and worthy of an evaluative response from her. Repetition is opted for because the NP IU may be an informationally substantial and even cognitively demanding item for the recipient, and she may find it necessary to (re)confirm the information through reiteration. Finally, backchannel is also a popular choice. When the listener uses a backchannel, which implies a "forward-looking" expectation of more talk from the current speaker, she displays her interpretation of the speaker's current unit of talk as non-terminal but rather preliminary to further talk, in spite of the fact that, in the case of the attached predicking NP IU, the utterance of the NP IU structurally completes a clause.

4. CONCLUDING REMARKS

In this paper, we questioned why a current speaker's NP IU tends to be responded to with a reactive token -- repetition, reactive expression, or backchannel -- rather than with a full turn, a phenomenon different from the general speaker change profile, in which full turn is the most frequently used form. We identified the prosodic, structural, informational, and sequential properties of these NP IUs for clues to the answer. First, prosodically constituting an IU, the NP in an NP IU is usually an informationally substantial item for both the speaker and the listener. The processing of such an item is cognitively demanding for the listener.
As a result, what the listener manages to say, upon hearing an NP IU, tends to be a reactive token rather than anything substantial. Second, structurally and functionally, NP IUs that do not complete a clause but instead suggest more speech to come further discourage the interlocutor to contribute any substantial talk at that juncture. Finally, a confirming or confirmation-seeking NP IU sequentially initiates a side sequence, whose completion is best accomplished with a non-floor-taking reactive token so that disruption brought to the on-going conversation is reduced to the minimum.

We also questioned whether the various reactive tokens show any particular association with any properties of the NP IU. We found that backchannel as a continuer is highly favored when a referential NP IU identifies or tracks (the referent of) the topic but no prediction has yet been provided for that topic, or when the listener judges that the speaker has more to say even when the speaker has syntactically reached a transition-relevance-place. By contrast, reactive expression is used when the listener determines that the speaker's speech so far is complete and deserves an evaluative response from her. Finally, repetition is associated with informationally substantial NP IUs that require reiteration by both the listener and the original speaker to assure that they are cognitively well aligned about the information designed by that NP.

Needless to say, many issues about NP IUs and about speaker change forms that call for careful examination are not covered in this study. For instance, the pause between the NP IU and the subsequent speaker change form is a prosodic feature that may tell us more about how a listener interprets and reacts to the speaker's talk (Huang, 1993). Also, some NP IUs are related to other aspects of spontaneous interaction, such as repair and restart (Chui, 1996). The impact of these speech mechanisms with respect to the relationship between an NP IU and the subsequent speaker change form requires further research. We understand that these
issues (and others) are not touched upon in this paper, but we hope that this paper is a modest beginning of our quest for an understanding of how grammar and intonation work together in daily verbal interaction.
References


Appendix

Transcription Conventions for the Conversational Data  (In order to reduce reading interferences, transcription notations with no direct bearing on the issues studied here are not provided.)

<table>
<thead>
<tr>
<th>Speaker identity and intonation unit</th>
<th>long pause</th>
<th>...(N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>word</td>
<td>medium pause</td>
<td>...</td>
</tr>
<tr>
<td>truncated intonation unit</td>
<td>short pause</td>
<td>@</td>
</tr>
<tr>
<td>truncated word</td>
<td>latching</td>
<td>(0)</td>
</tr>
<tr>
<td>beginning of speech overlap</td>
<td>lengthening</td>
<td>=</td>
</tr>
<tr>
<td>final intonation</td>
<td>laughter</td>
<td></td>
</tr>
<tr>
<td>continuing intonation</td>
<td>code switching</td>
<td>&lt;L2 L2&gt;</td>
</tr>
<tr>
<td>appeal intonation</td>
<td>key intonation unit</td>
<td>--&gt;</td>
</tr>
<tr>
<td>researcher's English paraphrase( )</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>