Language learners’ retrieval strategies as shown in topic-controlled deletion in topic chains: A comparison between Chinese and Korean native speakers’ interlanguages

Sunhee Lee
(Catholic University of Korea)


In Chinese, a topic-prominent language, pronouns are often omitted in favor of zero-anaphora. Therefore, Chinese-learners who are speakers of subject-prominent languages, like English, often repeat clause-initial pro-forms when speaking Chinese. However, it is unclear how the speakers of topic-prominent languages, such as Korean and Chinese, acquire zero-anaphora of second language.

We investigated whether Korean- and Chinese-speakers naturally delete pro-forms when learning each other’s language and analyzing their writing and speaking. If positive transfer occurs when they acquire topic-related deletion, then written and spoken deletion should be similar. However, zero-anaphora emerging differently between written and spoken words must be a result of various cognitive strategies not affected by positive transfer.

We observed 20 Korean- and 12 Chinese-learners for six months. All Chinese- and Korean-learners could delete topic-related pronouns in written text. Unlike English-speaking Chinese-learners, deletion occurred by positive transfer among Chinese-speaking Korean-learners and vice versa. Further, although the written task preceded the oral task, the participants deleted more pronouns in the written task. We think that learners switch codes using different strategies while writing and speaking. A psychological mechanism, not grammatical knowledge, plays a role: learners repeat pronouns to buy time to improve their discourse, in a so-called ‘recharging strategy’.

Keywords: Language learners; topic-controlled deletion; Chinese; Korean; comparison; topic chain
1. Introduction

A ‘topic chain’ is a chain of clauses sharing a single topic. The topic is usually mentioned once at the beginning of the chain, in the first clause (called the ‘first link’). Li and Thomson (1976) describe Chinese as ‘topic-prominent’ languages and Korean as Subject and Topic both prominent language. In these languages, subsequent mentions of the same topic are left unspecified, in contrast to ‘subject-prominent’ languages such as English, Indonesian, etc. In the study of Chinese and Korean discourse, noun phrases (NPs) that can be inferred from context are left unspecified (Tsao 1994, Teng 2000, Kim 2004). These unspecified empty positions are analyzed as coreferential with overt NPs, usually present in the preceding text. This ‘zero NP-anaphora’ is not syntactically restricted (Gundel, 1988). Below, (1) and (2) present examples from Tsao (1994), based on research into Chinese and English natives’ oral speech. In (1), which is in Chinese, unspecified, or ‘deleted’, NPs are marked as ‘Ø.’ The subscripts indicate their referential relationships with the overtly mentioned NPs. (2) shows the speech of a native English-speaker. To compare Tsao’s examples with an equivalent Korean situation, we translated (1) into Korean as (3). It can be seen that (3) has the same empty NP positions as (1), but (2) does not.

(1) 这是一个中年的男子, Ø刚从地铁往外走去, Ø手里拿着一卷报纸, Ø低着脑袋, Ø心情非常沉重, Ø往家的路上走去。(Tsao, 1994)
(2) This middle-aged man has just gotten off the metro and he’s carrying a newspaper in his hand. He hangs down his head and he seems heavy-hearted on his way back home.
(3) 한 중년의 남자가 막 지하철에서 나와 Ø 손에 신문을 말아 들고 Ø 고개를 숙인 채 Ø 침울한 표정으로 Ø 집으로 가고 있다.

According to previous studies, native-English-speaking learners of Chinese have trouble deleting NPs in subordinate clauses (Teng, 2000; Xie, 1992, Yom, 1993; Chen, 2008). Assuming that this assumption is right, we will posit that Korean and Chinese learners of each other’s
language will have little difficulty deleting NPs in topic chains even in the other language. This research will test this assumption with writing and speaking tasks. Our goal is twofold: first, to find out if and to what degree Korean learners of Chinese and Chinese learners of Korean can delete the topics of sub-clauses naturally; and second, to analyze whether this topic deletion exists equally in verbal and written output.

2. Previous studies

2.1. Research on Chinese topic chains

Teng (2000) analyzed narration in native-spoken Chinese and in English natives’ Chinese interlanguage. She suggests that when Chinese natives produce a sequential narrative, there is frequent topic-controlled deletion of anaphora, and that pro-forms remain only when a new event occurs or the story moves from describing physical events to psychological responses or some similar change. However, in English natives’ Chinese interlanguage, there was far less zero-anaphora. Teng claimed on this basis that speakers of subject-prominent languages have difficulty with acquisition of topic-controlled deletion in Chinese.

Similarly, Xie (1992) found only one-third as much topic-controlled deletion in English natives’ Chinese interlanguage as in the speech of Chinese natives. In his research, although the learners felt that their Chinese narration was not as natural as that of Chinese natives, they could not tell what the problem was. When they were told that there should not be so many ‘he’ and ‘she’ pronouns in Chinese narration, they intuitively agreed, but were troubled by the reservation that sentences would feel incomplete if the pronouns were dropped.

Tsao (1994) showed a picture to Chinese natives and American learners of Chinese, and had them describe the situation depicted. Examples

---

1) An interlanguage is the term suggested by Tarone (1979) for a dynamic linguistic system that has been developed by a learner of a second language who has not become fully proficient yet but is approximating the target language: preserving some features of their first language.
(1) and (2) above are from his results: (1), a Chinese native’s Chinese narration, and (2), an American’s English narration. The results of an (English-speaking) American learner’s interlanguage (Chinese) narration are as shown in (4) from Tsao (1994).

(4) 那个男人很不高兴 (That man was unhappy), 他 (he), 他现在要回家 (he went back to his home). 他最近 (recently, he), 他今天没有工作 (today, he had no work), 他失业 (he lost his job). 他想一想 (he thought), 我要 (I need to), 我要告诉我的太太 (I have to tell this to my wife), 我要告诉我的妈妈 (I have to tell my mom), Ø 也告诉孩子 (also have to tell my kids). 怎么办 (What can I do)? 我不高兴 (I feel so sad)

As can be seen from (4), this American learner’s Chinese output differed quite a bit from the Chinese native’s. The Chinese-speaker deleted almost all topic-related pro-forms in sub-clauses, but the American learner deleted only one.

These previous studies lead to the same conclusion: because English is a subject-prominent language, American learners of Chinese have difficulty with topic-controlled deletion (zero-anaphora). Based on this conclusion, Chen (2008) asserted that for American learners of Chinese, topic-controlled deletion belongs to ‘Level 5—Split’ under Prator’s hierarchy of difficulty. 2)

In the contrastive analysis, 3) based on this conclusion certain assumptions can be made about the situation for learners of Chinese who are L1 speakers of other languages. That is, for instance, Korean and Chinese often delete topic related pronouns in discourse, so Korean learners of Chinese and Chinese learners of Korean might have no prob-

---

2) Clifford Prator (1967) captured the essence of the grammatical hierarchy in six categories of difficulty – it was applicable to both grammatical and phonological features of language. Level 0 is transfer; level 1 is coalescence; level 2 is under differentiation; level 3 is reinterpretation; level 4 is over differentiation; level 5 is split. Level 5 is that one item in the native language becomes two or more in the target language, the learner need to make a new distinction.

3) Contrastive analysis is the systematic study of a pair of languages with a view to identifying their structural differences and similarities.

However, our research gives results incongruent with those of the previous studies cited above, which contrasts in grammar alone cannot explain. Because Korean and Chinese grammars feature similar zero-anaphora, it would seem that grammatical factors alone cannot explain difficulty in producing it in Korean-Chinese and Chinese-Korean interlanguages. Therefore, we consider other studies related to topic controlled deletion to develop a new perspective on the problem.

2.2. Research on the importance of the topic in discourse (‘topic persistence’) and on phonological markers

Givón (1978) argues that agent omission is simply the result of a low degree of topicality of an agent participant. Topic is ‘a relevant functional notion only at the discourse level, minimally at the chain or paragraph level’ and claims that ‘coherent discourse is characterized by equi-topic clause-chains’ (Givón 1990:902). If a discourse has coherence across a multi-clause chain, there are continuity among sub-elements which is also called ‘referents/topics’. Therefore, Givón claimed that the topic is only ‘discussed’ or is ‘important’ if it remains ‘discussed’ or ‘important’ during a number of successive clauses. Givón suggests two discourse measurements of topicality:

1) **Referential distance:** The number of clauses between the location in question and the last occurrence of the referent in the preceding discourse; and

2) **Potential interference:** The number of semantically compatible referents within the preceding discourse.

---

\(^4\) In here, the ‘Transfer’ means positive transfer. When the relevant unit or structure of both languages is the same, linguistic interference can result in correct language production called positive transfer - ‘correct’ meaning in line with most native speakers' notions of acceptability.
Givón also suggests that persistence of topic can be measured by the number of recurrences of the referent in the subsequent clauses. Using these measurements, Givón analyzes zero-anaphora and unstressed pronouns and asserts that a ‘code-quantity principle’ is at play.

The code-quantity principle: The less predictable/accessible a referent is the more phonological will be the material used to code it (Givón 1988:249).

Cohen and Macaro (2009) claim that cognitive processes operate at the explicit cognitive level (although they may operate so quickly as to appear unconscious) and incorporate different cognitive and meta-cognitive strategies in interaction with one another, bringing about some transformation of language in long-term memory.

For this reason, even if learners seem to have the intention to speak naturally in their target language, their speech cannot be separated from their (first- and interlanguage) awareness, because all the lexical items, grammar and narrative framing and discourse features of the story comes from their long-term memory. Moreover, some phonological indicators are known to expose the learner’s cognitive process. For example, the use of pauses while speaking in a second language can indicate that some specific language-use strategy is being implemented. Raddaoui (2004) stresses that a misplaced pause can be indicative of a speaker searching for a lexical item or a grammatical rule, and the distribution of pauses can be an essential marker of fluency or dysfluency.

Therefore, if we find that the language learners’ output in their second language (and topic-controlled deletion therein) differs between writing and speech, then we can assume that the learner is intentionally using different language-use strategies. This is a very important point, in that it broadens Givón’s previous discussion about topics in the code-quantity principle and establishes fundamentals for foreign language learners’ TL topic and comment research. Givón (1978) asserts that if referential distance in an utterance is small, we will easily see what topic is referred to, in which case that topic will become more elusive phonetically, for
example less stressed or less clearly spoken. This is because the learner can use a cognitive process to retrieve that topic easily—in short, in Givón’s own words, the topic is ‘less important’.

For this reason, if topic-controlled deletion in a language learner’s output seems natural only in written text and occurs less or not at all in verbal output, we can claim that Givón’s preposition in its present form does not apply to learner language. In our research, the learners saw and described the same picture, referring to the same events. Thus, if the presence of discrepancy of topic-controlled deletion in their written and/or oral speech output likely does not indicate difference in the importance of the topic (since the story is based on the same stimulus). If this is what we find, the reason that language learners delete pro-forms differently in written and oral output in a target language, might not be a matter of grammatical but of psychological factors.

In the next section, we will explain our research methodology and describe the subjects. In the following section, results will be presented. Through the discussion that follows, we will come to discern two things: 1) whether Chinese learners of Korean and Korean learners of Chinese can delete pronouns smoothly in the target language, and 2) whether topic-controlled deletion occurs in equal ratios in written and verbal tasks.

3. Research procedures

3.1. Method

This research includes two tasks: a writing test and a speech test. In the writing task, we had the learners read Aesop’s fable ‘The Shepherd Boy and the Wolf’ in their native language and then translate it in writing into their second language (Korean natives translated the story into Chinese and Chinese natives into Korean). In the verbal task, learners view a series of pictures and describe the story the pictures tell.

Before we describe our research, we must emphasize that our methods do not analyze the presumed syntactic zero-anaphora directly but rather
measure the correlation between learners’ intention to use a strategy and topic deletion.\textsuperscript{5)}

A longitudinal approach was adopted for this research, for two reasons: First, this approach is good for gathering data from different points in time and therefore enabling a reliable profile of the second-language acquisition processes of individual learners (Ellis, 1985). Second, the longitudinal approach is able to show how the learner’s speech actually develops over a period of time (Lennon, 1997). In keeping with these advantages, the present study was conducted across sixteen weeks (one academic semester), with the first (writing) test carried out in the fourth week and the second (verbal) test done eleven weeks after the first (in the fifteenth week).\textsuperscript{6)}

3.2. Test subjects

We chose a Business Chinese class as our test class because that is the most advanced level of Chinese offered at Korea University, the university in Seoul where we were carrying out the study, and because it is taken by both Chinese and Korean students. The Chinese students who attended the class had at least level 5 in TOPIK (Test of Proficiency in Korean), and the Korean students all had Hanyu Shuiping Kaoshi (HSK) level 6. There were 20 Korean students and 20 Chinese students in the class. We asked the students if they were willing to participate as experimentees in an academic study, and 32 agreed to participate (12 Chinese students and 20 Korean).\textsuperscript{7)} The patient's information is provided in Tables 1 and 2.

\textsuperscript{5)} This research focuses only on psychological and discourse-related phenomena. In both the Korean and Chinese groups, the learners were all at an advanced level, and their Language certification such as HSK score or Topik score shows their knowledge of grammar was good.

\textsuperscript{6)} The sixteenth week was final exam week.

\textsuperscript{7)} There are many Chinese students in Korea. They often take Chinese class to get better grades. That is why we were able to find Chinese and Korean subjects in the same class.
### Table 1. Subject Information of Chinese Natives Studying Abroad in Korea

<table>
<thead>
<tr>
<th>Learner</th>
<th>Jiaxiang</th>
<th>POL (Period of living)</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH1</td>
<td>Henan</td>
<td>1</td>
<td>F</td>
</tr>
<tr>
<td>CH2</td>
<td>Hubei</td>
<td>1</td>
<td>F</td>
</tr>
<tr>
<td>CH3</td>
<td>Hebei</td>
<td>1</td>
<td>F</td>
</tr>
<tr>
<td>CH4</td>
<td>Jilin</td>
<td>2</td>
<td>M</td>
</tr>
<tr>
<td>CH5</td>
<td>Beijing</td>
<td>1</td>
<td>F</td>
</tr>
<tr>
<td>CH6</td>
<td>Beijing</td>
<td>3</td>
<td>F</td>
</tr>
<tr>
<td>CH7</td>
<td>Ha’erbin</td>
<td>3</td>
<td>F</td>
</tr>
<tr>
<td>CH8</td>
<td>Beijing</td>
<td>3</td>
<td>F</td>
</tr>
<tr>
<td>CH9</td>
<td>Shanxi</td>
<td>1</td>
<td>F</td>
</tr>
<tr>
<td>CH10</td>
<td>Beijing</td>
<td>1.5</td>
<td>F</td>
</tr>
<tr>
<td>CH11</td>
<td>Zhejiang</td>
<td>3</td>
<td>F</td>
</tr>
<tr>
<td>CH12</td>
<td>Shanghai</td>
<td>1.2</td>
<td>F</td>
</tr>
</tbody>
</table>

### Table 2. Subject Information of Korean Natives

<table>
<thead>
<tr>
<th>Learner</th>
<th>PIC</th>
<th>POL</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1</td>
<td>10</td>
<td>10</td>
<td>M</td>
</tr>
<tr>
<td>K2</td>
<td>8</td>
<td>8</td>
<td>M</td>
</tr>
<tr>
<td>K3</td>
<td>13</td>
<td>13</td>
<td>M</td>
</tr>
<tr>
<td>K4</td>
<td>10</td>
<td>10</td>
<td>F</td>
</tr>
<tr>
<td>K5</td>
<td>13</td>
<td>13</td>
<td>M</td>
</tr>
<tr>
<td>K6</td>
<td>13</td>
<td>13</td>
<td>F</td>
</tr>
<tr>
<td>K7</td>
<td>6</td>
<td>6</td>
<td>M</td>
</tr>
<tr>
<td>K8</td>
<td>6</td>
<td>6</td>
<td>F</td>
</tr>
<tr>
<td>K9</td>
<td>4</td>
<td>4</td>
<td>F</td>
</tr>
<tr>
<td>K10</td>
<td>4</td>
<td>4</td>
<td>F</td>
</tr>
<tr>
<td>K11</td>
<td>3</td>
<td>3</td>
<td>F</td>
</tr>
<tr>
<td>K12</td>
<td>0</td>
<td>3</td>
<td>M</td>
</tr>
<tr>
<td>K13</td>
<td>0</td>
<td>3</td>
<td>M</td>
</tr>
<tr>
<td>K14</td>
<td>0</td>
<td>4</td>
<td>M</td>
</tr>
<tr>
<td>K15</td>
<td>0</td>
<td>3</td>
<td>F</td>
</tr>
<tr>
<td>K16</td>
<td>0</td>
<td>5</td>
<td>F</td>
</tr>
<tr>
<td>K17</td>
<td>0</td>
<td>6</td>
<td>F</td>
</tr>
<tr>
<td>K18</td>
<td>0</td>
<td>5</td>
<td>F</td>
</tr>
<tr>
<td>K19</td>
<td>0</td>
<td>5</td>
<td>F</td>
</tr>
<tr>
<td>K20</td>
<td>0</td>
<td>5</td>
<td>F</td>
</tr>
</tbody>
</table>

PIC: Period in China; POL: Period in China; M: Male; F: Female
The eight Chinese students are from Han ethnic group, the main ethnic group of China and one Chinese male student (CH4 in table 1) is from Chaoxian ethnic group. They all use Mandarin Chinese as their First language. The Korean students were divided into two groups, one composed of students who had learned Chinese only in Korea and the other who had studied abroad in China. The second group was divided again by the length they had lived in China: less than five years and more than seven, respectively. However, there did not prove to be any significant differences between these groups, and so we will not provide a statistical comparison between them.

3.3. Collection of writing sample

The writing sample was collected through a small test (quiz) administered in three classes. After four weeks of the semester, we gave the students a paper test that assessed knowledge of word meanings, sentence writing, and translation. The translation results were the ones used for our research. The subjects were four Korean learners of Chinese who had never been to China, six Korean learners of Chinese who had lived in China for between four and 13 years and four Chinese learners of Korean who had come to Korea within the past two years. Not all 32 volunteers were retained because the translation task was assigned at the end of the quiz and more than half of the subjects did not finish the task. The task results were analyzed to determine scores on the topic deletion index (TDI), as used in Xie (1992).

Writing sample. The following is an Aesop fable of Korean and Chinese text that we used for this test:

---
8) The class have 40 students and composed with reading and conversation practice section. All 40 students study in the same classroom in reading sections, but in the conversation practice section they are divided into 3 small groups. The reading section was on 16:00~17:30 of Tuesday and Thursday. The conversation practice section was on 15:00~16:00, 16:00~17:00 and 17:00~18:00 of Friday. One teacher managed the entire section. We proceeded with the writing test in three divided classes of conversation section.

9) TDI is a ratio of the number of topic deletions over the total number of clauses, multiplied by 100.
Korean
① 어느 마을에 양치기 소년이 있었습니다. ② 어느 날 소년은 심심해서 놀 재미있는 일 없을까 생각을 하다가 “늑대가 나타났다!”라고 거짓말을 하였습니다. ③ 놀란 마을 사람들이 협력해 뚱뚱해 왔지만 늑대가 없자 곧 돌아갔습니다. ④ 다음 날 또 늑대가 나타났다고 거짓말을 했고, ⑤ 사람들은 또 달려갔지만, 늑대를 찾지 못해 화를 내고 돌아갔습니다. ⑥ 그러다가 어느 날 늑대가 정말로 나타났지만 ⑦ 아무도 도와주지 않아 ⑧ 소년의 양은 모두 늑대에게 먹혀버렸습니다.

Chinese
① 有一天，一名牧童没有事情做，忽然想到了一个好主意——骗他们羊被狼袭击，于是他就大声喊：“狼来了！”。② 村民就武装上山拯救羊，结果发现他们被少年骗了。③ 牧童认为挺有趣的，所以又说谎了。④ 村民们又被骗。⑤ 直到有一天，狼真的来了，⑥ 牧童大叫：狼真的来了，快点去救羊吧！⑦ 可是大家都以为牧童在说谎，没有去救羊。

English version of Aesop's fable
① There was once a young Shepherd Boy who tended his sheep at the foot of a mountain near a dark forest. ② It was rather lonely for him all day, so he thought of a plan by which he could get a little company and some excitement. He rushed down towards the village calling out ‘Wolf, Wolf!’ ③ The villagers came out to help him and some of them stayed with him for a considerable time. ④ This pleased the boy so much that a few days afterwards he tried the same trick. ⑤ Again, the villagers came to his help. ⑥ The Wolf, however, did truly come at last. ⑦ The Shepherd Boy, now really alarmed, said ‘Pray, do come and help me; the Wolf is killing the sheep’. ⑧ But no one paid any heed to his cries, nor rendered any assistance. ⑨ The Wolf, having no cause for fear, at his leisure wounded, or destroyed the whole flock.10)

10) The English example is from the website: http://www.learnamericanenglishonline.com/Reading/Purple_Level_Reading/9_The_Shepards_Boy.html. The Chinese version is from Wikipedia: http://zh.wikipedia.org/zh-sg/%E6%BE%BE%E7%BE%8A%E7%9A%84%E5%AD%A9%E5%AD%90. The Korean version is from the book *Easop's Fable* (Oh, Hyungsuk 2012).
This story was given to the subjects, written in Chinese or Korean as appropriate. We gave the Chinese version of the story to the Chinese students and the Korean version to the Korean students and let them translate that story into their second language.

The parts of the English story with ⑦ do not exist in the Korean version, which is why it has only eight sentences. In addition, the Chinese version does not include the parts of the English version with ① and ⑨. This is why the Chinese version only has seven sentences. However, the second sentence, which is marked ②, and the third, which is marked ③, are substantially the same as in the English version; these were adopted as the task sentences, since they saw the most topic-controlled deletion. Unlike the other sentences in the story, these two describe one agent doing several actions sequentially. However, we also included any pronoun deletions in other sentences when calculating TDI.

3.4. Verbal test

Before carrying out the verbal test, we did a pilot test to see what kind of narration naturally involves more topic-controlled deletion. We showed two different sets of pictures to three Korean natives majoring in Korean and let them describe the events in those pictures. One set of pictures presented the daily life of a student going to school abroad, in Beijing. The other set was the fable of the Shepherd Boy and the Wolf, above. In the verbal descriptions, we found more topic-controlled deletion in the latter, so we adopted that set.

Figure. 1. Picture for verbal take.
The Figure 1 is one of the pictures that we used for the verbal task. A sequence of six pictures is used, of which figure 1 shows the first two. According to the code-quantity principle, the more predictable the topic, the less the need to emphasize it phonologically. This means that learners are more likely to delete the topic if they know the story well.

3.5. Speech sample collection

The speech sample was collected from recordings of the subjects’ verbal tests. One week before the final exam, two of the three classes took the verbal test. At the end of the test, I explained that there would be a simple task added for my own research, unrelated to their academic grade, and that only students who were willing needed to participate. After the recordings, the results were transcribed and TDI was calculated and analyzed.

4. Results

Our research focuses mainly on the interlanguage TDI results of Korean learners and Chinese learners. We first calculated the TDI of the task article. TDI of the given texts for written task came out 66.7, both in the Chinese and Korean texts. We then calculated TDI means for Korean- and Chinese-learners and compared them using a $t$-test. The results are as below.

<table>
<thead>
<tr>
<th>NATIONALITY</th>
<th>$N$</th>
<th>$F$</th>
<th>$t$</th>
<th>Mean</th>
<th>SD</th>
<th>SE mean</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHINESE</td>
<td>4</td>
<td>3.2</td>
<td>.00</td>
<td>45.100</td>
<td>6.07234</td>
<td>3.03617</td>
<td>.999</td>
</tr>
<tr>
<td>KOREAN</td>
<td>10</td>
<td>41</td>
<td>1</td>
<td>45.0900</td>
<td>21.53279</td>
<td>6.80927</td>
<td></td>
</tr>
</tbody>
</table>

Table 3. TDIs of written text interlanguages of Korean Chinese-learners and Chinese Korean-learners

We hypothesized that a difference exists between Korean- and Chinese-learners’ interlanguage TDI. Result were considered significant if $p$
was less than 0.05. As shown in Table 3 above, p-value was in fact 0.999, so that the null hypothesis was affirmed. Thus, no significant differences exist between Korean-/Chinese- and Chinese-/Korean-interlanguage TDIs.

If we simply compare the means, we can also see that there seems to be no difference between learner groups. After Korean learners of Chinese translated the Korean text (whose TDI was 66.7) into Chinese, its TDI was 45.1, and when Chinese learners of Korean translated the Chinese text (which also had 66.7 TDI) into Korean, TDI was 45.09. Thus, not only was TDI almost the same between these groups, it was also smaller than native-text TDI.

### Chinese TDIs: Korean natives’ Chinese-interlanguage TDI and Chinese natives’ Chinese TDI

We assumed that Korean natives’ Chinese interlanguage TDI would differ from that of Chinese natives and analyzed both these TDIs to test this assumption. The results are given below.

<table>
<thead>
<tr>
<th>NATIONALITY</th>
<th>N</th>
<th>F</th>
<th>t</th>
<th>Mean</th>
<th>SD</th>
<th>SE mean</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDI CHINESE</td>
<td>12</td>
<td>.85</td>
<td>9.3</td>
<td>66.5833</td>
<td>15.49392</td>
<td>4.47271</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>TDI KOREAN</td>
<td>20</td>
<td>1</td>
<td>0</td>
<td>12.2200</td>
<td>16.82075</td>
<td>3.76123</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in Table 4, since the p-value is 0.000, the t-test result is statistically significant and we can affirm our hypothesis: the Chinese TDI of Chinese natives differs from that of Korean learners of the Chinese language. That is, while native Chinese-speakers seem to delete a certain quantity of NPs, Korean learners seem not to engage in topic-controlled deletion in Chinese as much as Chinese natives do. Chinese natives’ TDI here is almost the same as that for the Chinese text, which was used for the written test, 66.7.

Next, we will provide breakdowns for t-test results by learner groups.

We divided Korean participants into two groups depending on their experience studying abroad in China. The first group was made of nine
Language learners’ retrieval strategies as shown in topic-controlled deletion in topic chains

...learners who had learned Chinese in Korea only. The other eleven learners, in contrast, had once lived in China. The t-test results for these two groups are shown in Table 5.

Table 5. Korean participants’ experience living in China and their TDI.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>F</th>
<th>t</th>
<th>Mean</th>
<th>SD</th>
<th>SE mean</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>In CHINA</td>
<td>11</td>
<td>.45</td>
<td>1.0</td>
<td>15.85</td>
<td>16.42360</td>
<td>4.95</td>
<td>0.511</td>
</tr>
<tr>
<td>In KOREA</td>
<td>9</td>
<td>0</td>
<td>6</td>
<td>7.78</td>
<td>17.15938</td>
<td>5.72</td>
<td></td>
</tr>
</tbody>
</table>

Though the means differ quite a bit between these two groups, the discrepancy is statistically insignificant. However, the possibility exists that the different sizes of the groups affected the result because according to the descriptive statistics, Korean learners who had lived in China deleted NPs twice as often as the others did.

Korean TDIs: Chinese natives’ Korean interlanguage TDI and Korean natives’ Korean TDI

Although Korean natives’ Korean TDI on the translation was lower than that on the given Korean text used in written task (66.7), it is still higher than Chinese learners’ interlanguage value. According Table 6, the Korean output TDI difference between Korean and Chinese students is significant. (t = -3.71, p < 0.001)

Table 6. Korean natives’ TDI and Chinese learners’ interlanguage TDI

<table>
<thead>
<tr>
<th>NATIONALITY</th>
<th>N</th>
<th>F</th>
<th>t</th>
<th>Mean</th>
<th>SD</th>
<th>SE mean</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDI CHINESE</td>
<td>12</td>
<td>2.352</td>
<td>-3.71</td>
<td>37.42</td>
<td>18.22</td>
<td>5.26</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>KOREAN</td>
<td>20</td>
<td>59.45</td>
<td>12.26</td>
<td>2.74</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Learners’ native-language TDI as compared to interlanguage TDI (across both groups)
Last, we compare learners’ TDI in their own native language with that in their interlanguage. Tables 7 and 8 show t-test results for Korean and Chinese natives’ TDIs, respectively. Both results are statistically significant.

### Table 7. Koreans’ TDI in Korean (native language) and Chinese (interlanguage)

<table>
<thead>
<tr>
<th>LANGUAGE</th>
<th>N</th>
<th>F</th>
<th>t</th>
<th>Mean</th>
<th>SD</th>
<th>SE mean</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDI NATIVE LANGUAGE</td>
<td>20</td>
<td>4.348</td>
<td>10.14</td>
<td>59.455</td>
<td>12.26</td>
<td>2.74</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>INTERLANGUAGE</td>
<td>20</td>
<td></td>
<td></td>
<td>12.220</td>
<td>16.82</td>
<td>3.76</td>
<td></td>
</tr>
</tbody>
</table>

Table 8. Chinese natives’ TDI in Chinese (native language) and Korean (interlanguage)

<table>
<thead>
<tr>
<th>LANGUAGE</th>
<th>N</th>
<th>F</th>
<th>t</th>
<th>Mean</th>
<th>SD</th>
<th>SE mean</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDI NATIVE LANGUAGE</td>
<td>12</td>
<td>0.435</td>
<td>4.223</td>
<td>66.58</td>
<td>15.49</td>
<td>4.47</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>INTERLANGUAGE</td>
<td>12</td>
<td></td>
<td></td>
<td>37.42</td>
<td>18.22</td>
<td>5.26</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in Table 7, it seems very clear that Koreans use topic-controlled deletion more often in their own native language than in their interlanguage.

As can be seen in Table 6, Chinese natives’ TDI tendency is parallel to that of Korean natives: Chinese participants have higher TDI in their mother tongue than in their Korean interlanguage.

### 5. Discussion and conclusion

#### 5.1. Discussion

We analyzed Korean and Chinese natives’ TDIs in the Korean language, the Chinese language and Korean–Chinese and Chinese–Korean interlanguages, and were able to make some interesting observations. The general trend of TDIs is shown in Figure 2.
The TDIs on the given text used in written task came out the same—66.7—as seen in Figure 2. In the written task, Korean and Chinese natives’ output showed almost equal levels of topic-controlled deletion: 45.09 and 45.1 respectively. When the learners translated the native-language articles into second-language articles, in both cases TDI levels dropped.

Second-language use in the written task showed higher TDI than in the verbal task. In addition, as shown in Graph 1, when the learners spoke their own native language, they showed higher TDI than in their second language. The lowest TDI overall was shown in the spoken interlanguages. We will understand the reason for this better if we remember that the spoken task took place almost two months after the written task. Just to consider these test result, it may seem like the learners had learned more Korean or Chinese, and deletion of pro-forms in the second language was less.\textsuperscript{11) However, the language teachers of those students all agreed they-the advanced learners- delete pro-forms far better comparing with the intermediate or beginning level students. That is, the TDI difference between oral and verbal test does not result from the grammatical knowledge.

Based on the fact that interlanguage outputs come out differently in different communication modalities (written or spoken), we can understand that different cognitive processes and language-use strategies are employed depending on the communication modality. This is why we need to consider not only grammar feature but also the psychological language use

\textsuperscript{11) Though we did not teach Korean grammar in our class, all the Chinese students who attended our class also attended same level of Korean language class, which is mandatory subject for international students.
strategy(ies) at play, which can affect acquisition of topic-controlled deletion.

As discussed before, some phonological forms might show a learner-specific cognitive reaction in terms of the time taken to retrieve the form from memory. In our research, learners deleted second-language articles accurately, but not to the extent of native speakers. Our research seems to show very distinctly that our learners, when speaking their second language, use certain language-retrieval strategies, such as saying the topic noun repeatedly, to 'buy time'. There exists no specific term to describe this phenomenon; the term 'retrieval strategy' has been used in a similar way, but refers to a strategy for retrieving certain grammar forms (Cohen, 1994). However, even our Korean subjects who had grown up in China and had almost native-like Chinese ability also had different test results in the written and spoken tasks. This means that not merely a grammatical phenomenon but a truly psychological phenomenon is at play here. Therefore, the term 'retrieval strategy' cannot properly be used to explain the TDI difference between written and spoken interlanguages. Therefore, we define this kind of learner strategy as a **recharging strategy**, which learners use to earn more time so that their cognitive system can arrange lexical items and grammar more properly.

The use of this strategy was most distinct in Korean natives’ Chinese interlanguage. No matter whether they had lived in China, they all repeated more pronouns in speech than in writing. Moreover, though the Chinese natives’ interlingual verbal output had a higher TDI than that of Korean natives, they nevertheless still used many pragmatically atypical pauses when they speak Korean. As described by Raddaoui (2004), a misplaced pause can be indicative that the speaker is searching for a lexical item or a grammatical rule. Because there were so many ‘uh ⋯ hum ⋯ ’-type pauses found in our Chinese-speakers’ interlingual recordings, it seems that they are using this pause time to retrieve the proper lexical items; therefore, we can assert they are using a recharging strategy to reconstruct corresponding forms in their own language.
5.2. Conclusion

Previous studies have concluded that for American learners of the Chinese language, topic-controlled deletion should be placed at the ‘level 5-split’ in the hierarchy of difficulty. Based on this result, we researched whether Korean- and Chinese-speakers can delete pro-forms naturally when using each other’s language. In the context of this previous work, our research had two aims: first, to find out if Korean learners of Chinese and Chinese learners of Korean can delete the topics of sub-clauses naturally in their L2; and second, to analyze whether this topic deletion exists equally in verbal and in written output. We first compared written output in target languages (Chinese and Korean) and then compared oral output. The results show that both Chinese- and Korean-speakers had higher TDI in L2 written text (45.09 for both) than in oral output (37.42 for Chinese and 12.2 for Koreans).

Thus, on the basis of our analysis, we reach the following conclusions:

1) Written text in both interlanguages showed a TDI of 45.09. Though native-language TDI was higher than that for interlanguage text, 45.09 is distinctly higher than the TDI of the Chinese-interlanguage TDI of the American participants in Xie (1992). This means that the grammatical features of a learner’s native language have an effect on the acquisition of topic-controlled deletion in interlanguage discourse.

2) Our analysis also gave higher results for interlanguage speech output than in previous studies. Compared with the results of Xie (1992), we see here Chinese and Korean learners of each other’s language deleting 2-3 times as much as American learners of Chinese. These findings can sit comfortably together if we understand that for speakers of subject-prominent languages, it is hard to acquire topic-controlled deletion, which is a topic-prominent language’s most striking feature and easier for speakers of other topic-prominent languages.

3) Further, however, there are also notable differences in TDI between spoken and written output within the topic-prominent languages we consider here: learners repeat more often when engaging in oral speech in their L2.
If we recall that the written task took place in September 2012, one month earlier than the oral task, which was assigned in December 2012, we see that this is not a matter of learner’s linguistic knowledge of topic-controlled deletion. Instead, this paper argues, it is a matter of psychological pressure stemming from the implicit requirement for immediate output in oral conversation. Learners need time to retrieve grammar and lexical items when constructing an utterance, so they ‘repeat’ the topic to buy time. We define this new strategy, only shown in learner language, as the ‘recharging strategy’.

Humans use certain identified strategies in second-language communication: social strategies, intimacy strategies, etc. (Alonso, 2006). ‘Second-language learner strategies’ encompass both learning strategies and use strategies. On the basis of previous studies, we expect Korean learners of Chinese and Chinese learners of Korean to have little difficulty deleting pro-forms in their second language, because their native language is also a topic-prominent language.

However, there are more topics provided in a spoken than in a written task. When language learners speak in their second language, they repeat NPs in order to retrieve relevant lexical items or grammatical structures from memory and reconstruct them in their own language. Through the inspection of learners’ TDI in this paper, we found that they use different strategies when they write and when they speak in their second language, and we suggest on this basis that they are employing a ‘recharging strategy’ to help them retrieve and reconstruct meanings in ‘their own’ words. Topic-controlled deletion is thus not merely a matter of grammar acquisition, but in spoken language is more an expression of a psychological communication strategy.

References


Cho S-Y (1991) *Focusing in English and Korean*. Frankfurt am Main, etc.


Sunhee Lee
ELP College
Catholic University of Korea
Virtus 301, 43 Jibongro, Wonmi-gu, Bucheon-si, Gyeonggi-do, 420-743, Korea
Email: lishanxi@naver.com

Received: February 28, 2014
Revised version received: April 4, 2014
Accepted: April 7, 2014
Appendix 1. Transcription of the learners’ outputs

We provide learners’ task results here. Because these are strict transcriptions, there are many grammatical and lexical mistakes. We didn’t retouch it and provide exactly the same output of learner’s recording.

1) Writing results

Korean natives’ Chinese
1. 有一天，男孩很无聊，Ø 想什么事有意思的说：狼来了！的谎话。惊讶的村民很快来了，但是狼没有，他们就回来了。
2. 有个天少年感了闲，所以他叫“狼来，狼来！”于是村庄的人都赶来了，可是在这没有狼，村庄的人回去了。
3. 有天，他真无聊，Ø 想了棒的事儿，Ø 说“老狼来了！”，这谎话。吃惊的人们跑着找少年，Ø 看到没有狼后，Ø 回去了。
4. 有一天，少年很无聊，Ø 想有没有很有意思的事情，他说“狼出现了！”的谎话。受惊的村民气喘吁吁跑来了，没有狼 Ø 就回来了。
5. 一天，少年因为无聊，Ø 想着有没有喊完的事，Ø 说了野狼出现了！的谎话。虽然，惊慌的村里的人赶紧抱来了，但是因为没有野狼，他们马上回去了。
6. 少年有一天觉得很无聊，Ø 想了想有没有什么新鲜事，于是 Ø 就撒谎狼来了！惊讶的村民都跑过来了，但是 Ø 发现没有狼之后，Ø 就回去了。
7. 一天他太无聊，而 Ø 大声喊“狼来了”。乡下人民吓得都跑了出来，但 Ø 发现没有狼，Ø 就回过了头。
8. 这个少年有一天觉得很无聊，所以 Ø 大声叫“大野狼出现了！”。Ø 听到少年的叫声，村里的人都很惊讶地跑来，可是 Ø 发现被骗了之后，Ø 就回去。
9. 那少年感到很无聊，Ø 就想了是否有一些有趣的事情。他就说谎了说：狼来了！吃大惊了的村庄人们喘吁吁地跑过来了，可是 Ø 没看到狼子，Ø 就回去了。
10. 有一天，少年的无聊。Ø 突然大喊“狼来了！”来说谎。惊慌的村民们都气喘吁吁地跑过来，但 Ø 发觉没有狼之后，Ø 就回去了。

Chinese natives’ Korean
1. 某天那个无聊的男人什么东西都不做，Ø 想了一个无聊的事情想说“狼来了！”的谎言。吃惊的村民们很惊讶地跑来了，但是没有狼，他们就回来了。

Appendix
간다. 결국 그들은 소년한테 속인 것을 발견했다.
2. 어느 날에, 한 목동이 할 일이 없어서, O 갑자기 좋은 생각을 들었다. 촌민의 양떼가 늑대를 습격한다고, O 거짓말했다. 그래서 개가 큰 소리로 늑대가 왔다! 늑대가 왔다고 지르며, 촌민들 무장하고, O 양떼를 구조하려 O 산에 올라갔다. 결국 소년한테 속았다.
3. 어느 날, 한 목동은 심심해서, O 갑자기 좋은 생각이 났다. 늑대가 이웃주민의 양이 잡아 먹다는 거짓말이었다. 그래서 목동은 큰소리로 늑대가 왔다고 말했다. 주민들이 바로 무기를 갖고, O 산에 올라갔다. 결국 그들이 속았다는 것을 알았다.

2) Verbal results
Korean natives’ result: Korean and Chinese
1. 그 뭐지 O 너무 심심해서, O 양만 부치기가 너무 심심해서. 그리고 늑대가 나타났다고, O 촌민 사람들한테 거짓말을 했는데, 주민사람들이 그게 진한 줄 알고, O 뭐나와서, O 그 늑대를 잡으려고 왔는데, 나중에 양치기 소년이 거짓말이라고 하자, 그날 어른들은 아무 말 없이 돌아갔는데,
   有一天，…在牧羊的小孩子特别无聊，O 很疲倦，所以他想骗那个… …狼出现了，O 跟… 他们说，然后他们觉得，他们要抓那个狼去了，但是那个小孩子是骗人的。然后，那个人，大家就是特别不满，然后 O 很生气的回家了。
2. 양치기라는 양을 키우는 소년이 O 항상 마을사람들에게 늑대가 왔다고 거짓말을 치다가, O 두 세 번이 되자, 이제 어 나중에 사람들이 믿지 않아서
   一个少年，就是牧羊的少年，啊，他喜欢对别人开玩笑，然后那种开玩笑的程度比较有点过分了，然后他每天跟大家说：“狼过来了，狼过来了”。因为他们是牧羊的人，所以第一次还是第二次，他们都相信牧羊少年的话，然后他把羊都，啊，放到别的地方这样子。
3. 자기가 양치기 소년이 늑대가 나타났다고, O 계속적으로 주민 사람들에게 겁을 주고, 그것을 또 O 까미로 삼아서, O 상습적으로 거짓말을 하다가
   就是说，从前有一个少年他善长于骗人。他是看样的一个牧童。然后，他擅长
于骗人，每一次都向他们村的人喊：狼来了，狼来了，但是他们村的人去看了之后，结果 Ø 发现，狼是根本不存在的。

4. 이 양치기 소년이 양을 관리 하는데는, Ø 어……심심해서, Ø 큰소리로 늑대가 왔다고 소리를 치니, 주민들이 놀라서 소년을 살리려고, Ø 모여서, Ø 쫓아내려고 올라왔는데, 이게 Ø 거짓말이라는 것을 알고서 Ø 혼계만 하고 내려갔는데，
他是山上一个人管理这个羊。他就很烦，他就大声叫说，狼来了，然后在山下住的人，Ø 都家家户户都出来，Ø 救这个男孩儿，然后他们就发现这个男孩儿就说了谎。

5. 양치기 소년이 양을 치고 있었는데요, Ø 너무 심심해서, Ø 늑대가 왔다 하고 소리를 질렀어요. 그러나 마을 사람들들이 달려왔는데, 늑대가 없자 Ø 다시 돌아간 거에요.
他放羊的时候感觉到很无聊，所以他喊了那村庄里的人说“狼来啊！”。很多人过来看，但是没有狼。

6. Ø 항상 산에 올라가서, Ø 양을 치고 있었어요. 그 소년은 되게 심심한 거에요, Ø 마을을 향해서 되게 큰소리로 늑대가 나타났다 소리를 막 질렀어요. 마을 사람이 도와주기 위해서 올라갔는데，늑대가 없는 거에요. Ø 알고 보니 Ø 심심하니까 거짓말을 한 거에요.
他经常去山上打羊。不过，有一天他觉得很无聊，所以有一次他就喊了：狼来了！狼来了！然后，那些住民就来帮助他，问他狼到底在哪里，他说其实是骗你们的。因为我很无聊。

7. Ø 매일마다 장난으로 늑대가 나타났다고 거짓말을 마을 사람들에게 해가지고，Ø 매번 늑대가 나타났다고 거짓말을 했는데，마을 주민들이 그때마다 진짜 줄 알고, Ø 도우러 왔는데，
他每天都会，就是说，狼现在吃他的羊。然后，那些人民都被他骗了，Ø 一次会去想帮他，然后 Ø 就出去，可是结果 Ø 知道他们被骗了。

8. Ø 양치는 일이 너무 심심해서 Ø 하루는 사람들한테 늑대가 나타났다고 거짓말을 했는데 사람들이 늑대를 잡으려 온걸 보고, Ø 되게 재밌어서他又很无聊，所以 Ø 跟很多人说假话。他说：狼来了！所以他们都来帮助他。
但是他，很多人来的时候，他跟他们说 Ø 是假话。

9. Ø 마을에서 양을 키우고 있는데，늑대가 나타나지도 않았는데，매번 늑대가 나타났다고 Ø 거짓말을 마을 사람들에게 해가지고，
他养一些羊，但是他就感觉对生活很无聊，他就是想搞一个新的生活。他就骗那个他们这个县里的人：狼来了！狼要吃那个好多只羊了。但是，一开始他们县的人都相信他的话。
10. 양치기 소년이 심심해서, 누打通통 사람들이 누 Olympus 나중에는 믿지 않고

他是管理羊的时候, 0 无聊的时候, 他与村人说狼来了。但是实际上狼没有来。

11. 양치기 소년이 심심해서, 누打通通 마을 사람들은 누打通통 늑대가 나타났다고 거짓말을 했는데, 마을 사람들이 처음에는 믿고 와서, 누打通통 구해주려고 했는데,

他养了很多羊。有一天他非常无聊, 所以他骗其他人们说“野狼出现了！”一开始他们都相信他的话，所以他们都跑来救了那个少年和羊，但是他们发现那个都是少年说的谎，所以他们开始不相信那个少年了。

12. 그래서 누打通통 wavelength 큰일을 찾다가, 누打通통 한가지 생각을 했는데, 누打通통 생각은 누打通통 거짓말을 해서 마을 사람들에게 늑대가 나타났다고 하는 것이었습니다. 소년은 말했습니다.

有一次，少年没有什么是，所以少年想没有意思。所以他喊，现在有狼！听说这么喊，村里的人都来。可是少年说这是谎话。所以村里的人都话（说）你不要说这么。

13. 누打通통 양을 치고 있었어요. 누打通통 큰대 누打通통 너무 심심해서, 사람들을 향해 누打通통 늑대가 왔다고 누打通통 거짓말을 했어요. 사람들이 늑대를 찾으려고 했는데, 늑대가 없어서, 누打通통 속았다고 돌아갔어요.

他很……他没有……他谎话了，啊，狼出现了，所以很多人去杀狼。但是少年说谎，所以狼没有。所以很多人回家了。

14. 양치기가 심심해서, 누打通통 거짓말을 몇 번 했는데, 마을 사람들이 안 믿어주는 거예요.

这一内容，就是有一个小伙子撒谎几次以后，在人们他们三大撒谎，他们不相信。

15. 한 양치기 소년이, 옛. 늑대가 나타났다고 거짓말을 했는데, 그 때 처음에는 사람들이 믿었지만, 나중에 누打通통 계속 말하다 보니가, 누打通통 믿지 않았는데.

男孩子，一个男孩子说狼，狼来，狼来。嗯，人们，嗯，人们都相信男孩子的说。

16. 어느 날 아이가 심심해서, 누打通통 거짓말을 하고 싶어졌습니다. 그래서 누打通통 마을 사람들에게 늑대가 왔다고 거짓말을 했습니다. 마을 사람들은 놀라서, 누打通통 늑대를 찾으려 갔지만 누打通통 없었습니다. 그래서 누打通통 거짓말인 줄 알고 돌아갔습니다.

有一个孩子放羊，他真无聊，所以他想谎话，他给别人，他想给别人说谎，所以他跟别人说：狼来了！所以，嗯……，别人，嗯，都来了。可是，他发现狼没有，所以他们发脾气回家了。

17. 한 소년이 있었는데, 아, 누打通통 늑대가 나타났다고 해서, 마을사람들이 믿었는데,
Language learners’ retrieval strategies as shown in topic-controlled deletion in topic chains

Ø 늘 거짓말을 빠 먹듯이 하다 보니,
有一个孩子，孩子每天骗人，嗯，狼来了！嗯。。。所以嗯，大家不相信他。

18. 옛날에 양치기 소년이 한 명 살았는데，Ø 거짓말 하는 게 습관이 되서，Ø 매 일 늑대가 나타났다고 말했습니다. 매번 사람들이 그 말을 듣고 왔고, Ø 늑
대가 나타나지 않은 것을 알고，Ø 화나 돌아갔습니다.
以前有一个少年，他很喜欢说谎，所以每天他说一条狼来了。所以周围的人一
听到他的话，Ø 就来看。可是每次他们发现了连一条狼都没来。

19. Ø 양을 치다가 심심해서，Ø 거짓말로 늑대가 왔다고 소리를 질렀지요.
그러더니 마을사람들이 찾아와서，Ø도와주려 했는데，Ø 거짓말이었던 것을 알
았죠. 그래서 Ø 화를 내고 갔는데，Ø
有一天他觉得很无聊，所以他就喊着说：有一个狼，狼来了！然后周围的人都
赶来要帮他，但是他们发现原来他是说谎的。

20. 어느 날 Ø 너무 심심해서，Ø 마을 사람들들을 놀려주기로 생각을 하고，Ø 마
을 사람들에게 갑자기 외쳤습니다. 늑대가 나타났습니다. 그러자 마을 사람들이
놀라서，Ø몰려들었습니다.
他在村里养羊。有一天他觉得很无聊，所以他打算骗村里的人。所以他跟村里
的大喊叫说：狼来了！Ø 听到小孩儿的，村里的人走过来，Ø 看看那个羊和
小孩儿发生了什么事。

Chinese natives’ result: Chinese and Korean

1. 有一个小孩儿想搞了做剧，Ø 就在人们放羊的时候，Ø 就是说“狼来了，狼来了。”，
 어느 날 한 남자아이가 늑대 왔어요 거짓말 했는데，사람이 다 믿고，Ø 양을
떼리고 집에 갔어요.

2. Ø 每天在山上放羊，但是 Ø 觉得很无聊，Ø 每天重复做同样的事情，Ø 就觉
得特别无聊，有一天 Ø 在山上喊说：“狼来了。”，然后人们就相信了，Ø 就上
去帮他打狼，但是 Ø 发现被骗了。

그 아이는 매일 산에서 양을 키워서 있어요. 그래서 Ø 너무 심심했어요. 그
래서 그 아이는 늑대 왔는데 소리를 치서 있었습니다. 사람 그 소리를 듣고 다
왔어요. 그런데 늑대 없어요. 그래서 사람 다 내렸어요.

3. 然后 Ø 看见农民在工作的时候，Ø 就可能是很无聊吧，所以 Ø 就向那个农民
们喊：狼来了。第一次农民就信了嘛，然后 Ø 就全都拿着各种工具啊 Ø 去帮
他。

옛날에 어느 아이가 양을 길렀는데，이 Ø 심심해서，아이는 농민들에게 늑대
왔어요. 농민들 듣고 외서，Ø 도왔어요.
4. 可是他觉得很无聊，所以就往山下喊：狼来了！于是听到那个声音后，村民们
就赶过来看，结果他说是开玩笑。

한 소년이 산에서 양을 기르던 중 오무라 심심하여 아이는 산 아래에 대해
승냥이가 왔다고 소리쳤어요. 그래서 산 아래 농민들이 올라와서 오무라나
승냥이가 없고 아이의 거짓말이었어요. 그래서 농민들은 다시 내려갔어요.

5. 每天放羊，就很喜欢跟大人们开玩笑，于是就和大人们说野狼来了，
野狼来了。刚开始的时候，大人们都听到野狼来了这句话之后，都匆忙地
赶到，但是赶到之后发现并没有野狼，然后只看见放羊的那个小男孩在哈哈大笑。

어린 아이가 양을 키었는데, 어느 날에 그 아이가 주민들에게 양을 쳐npos;
다. 늑대가 왔어. 오무라 이렇게 장난을 찍으셨다. 아르무트 그때 더 급하게
도착했습니다. 근데 오무라 도착했지만 늑대가 한 개도 없었습니다. 그날 아이가
하하하 웃었습니다.

6. 这是一个，在我们国家来说是叫“狼来了的故事”。刚开始是一个在山上放羊的孩子，
觉得无聊的时候，想开个玩笑。然后发现狼来了，然后听到就赶来救羊。

아는 오후에 음… 양 소년이 (?) 아이? 아이가 너무 심심할 때, 오무라 한 번 장난하고
실했어요. 아이 오무라 큰소리로 외쳤다. 늑대가 왔다. 늑대가 왔다. 음. 그때, 마늘(을) 사람
 다 들어서, 오무라 빨리 거기 가서, 야. 오무라 늑대가 안 보이겠다. 그래서 마늘 사람
 다 들어있어, 왔었다.

7. 他躺在草地上，感觉到非常无聊，想弄我干点儿什么好呢？看其他在忙
的人，然后突然想到，那我就骗他们吧。他就突然喊起来狼来了。然后大家都
非常，都四处再找，然后就问“狼在哪儿呢？”

오무라는 아이가 양치기를 하는 소년이 양을 계누고 있는데, 오무라 그 심심
해서 뭐 할까 생각났는데 오무라 마을 사람한테 늑대 온다고 거짓말을 했어요. 근
데 마을 사람이 거짓말을 들으면 오무라 늑대 거짓말을 줄 알았어요. 그래서 오무라
여기저기 서로 묻고, 근데 소년이 마을 사람이 모양을 봐서 크게 웃었어요.

8. 他放羊的时候，觉得特别没有意思，所以他就想编一些谎话，引起人们
的注意，因此就大喊狼来了。然后，人们就跑过来看，发现一只狼也没有，
然後 늑대 양치기 소년이 한 명이 있다. 아… 그 아이가 일할 때, 오무라 너무 심심
해서, 오무라 늑대 거짓말을 맛게 만들었다. 늑대를 줄 알았다는 맛에 하디도 없었다.

9. 但是每天觉得很无聊，然后，嗯，天，就想去搞一些玩笑出来。
狼来了！狼来了！然后，村里面的人都过来抓狼，但是 Ø 发现狼不在。한 아이 양을 먹일 때, Ø 장난 치고 싶었어. 그 아이 늑대가 나타났다 소리쳤고, 그 마을 사람들 거기 와서, Ø 늑대를 잡으려고 하는데 늑대가 없었어 요. 그래서 사람들이 화가 나서 Ø 다시 돌아갔어요.