

Learners' awareness of the role of input and task repetition on L2 speech production

Sachiyo Nishikawa
Nara National College of Technology, Japan

Abstract

This study explored whether learners' awareness of the role of input differs when performing narrative retelling tasks, and to what extent learners' awareness of the task performance varies as a result of redoing those tasks. Twenty-four Japanese students were placed into two groups (one oral input, one written input) using a vocabulary test. In Week 1, each group received its respective input and performed the same narrative retelling tasks. In Week 2, the tasks were repeated, and retrospective interviews were conducted with 12 students in the L1. The analysis of the interview data showed differences in perceptions of the input modes between the two groups. Both groups tended to be aware that gains in comprehension that resulted from repeating tasks helped learners produce more speech.

Keywords

Speaking, modality, task repetition, learners' awareness of task performance, L2 processing.

El rol de la información y la tarea de repetición consciente en la expresión oral de estudiantes que aprenden una segunda lengua

Resumen

El presente estudio explora si la toma de conciencia del rol de la información proporcionada a los estudiantes difiere cuando se llevan a cabo tareas de recuento narrativo, y hasta qué grado la toma de conciencia del desempeño de la tarea de la persona que aprende un nuevo idioma varía como resultado de hacer dicha tarea repetidamente. Veinticuatro estudiantes japoneses fueron colocados en dos grupos (uno con información proporcionada de manera oral y el otro de manera escrita) y se empleó una prueba de vocabulario. En la semana 1, cada grupo recibió su respectiva información y desempeñó las mismas tareas de recuento narrativo. En la semana 2, las tareas se repitieron y se realizaron entrevistas retrospectivas con 12 estudiantes en su lengua materna. El análisis de los datos de la entrevista mostró diferencias en la percepción de los modos de recibir la información (oral/escrita) entre los dos grupos. Los estudiantes de ambos grupos estuvieron conscientes de que una mejor comprensión (derivada de repetir la misma tarea) los ayudaba producir un discurso más abundante.

Palabras clave

Habla, modalidad, repetición, concientización del desempeño entre personas que aprenden un idioma, procesamiento de segunda lengua.

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Introduction

The development of second language (L2) learners' communicative skills can be facilitated by learning opportunities where learners engage in the processes of input and output in the target language. Input information can be provided via spoken and written language. A significant feature is that a spoken word is transitory, whereas the written word is accessible as long as readers need. It is of value to study the role of modality because it can help us understand what input learners need in a classroom and how they work with that input (Leow, 1995). According to the model of single word processing (Martin & Wu, 2005), fundamental differences in the processing of the two modes of input, oral and written, into speech output are that a heard word perceived via phonemes in the input phase is processed into speech output, whereas a written word recognized via graphemes in the input phase requires "orthography-phonology conversion" to produce speech output (see Figure 17.1 in Martin & Wu, 2005, p. 384). The two modes of input may be processed distinctively and influence output production. When L2 learners are required to read a text and produce speech, the act of reading a text enables them to recognize words as orthographic lexicons. Learners have to search for corresponding phonemes in order to articulate words in the output phase. In contrast, when learners are asked to listen to a story and to produce speech, they may recall and generate the phonological representations of the oral input in subsequent speech somewhat more smoothly due to the preceding encounter of words with their sounds. Conceivably, prior exposure to oral input may facilitate learners' subsequent speech production. This facilitation can be a benefit of priming. Since the two modes of input are processed through different linguistic pathways, it is reasonable to suppose that the two modes of input may have distinct roles in language processing. While a number of empirical studies have investigated the impact of modality on L2 learning in terms of comprehension (Lesser, 2004; Lund, 1991), learners' attention (Wong, 2001), and vocabulary learning (Nassaji, 2004; Vidal, 2011), there do not appear to be any studies on learners' awareness of the role of input on L2 speech production.

From a pedagogical perspective, it is vital to gain a better understanding of how learners can improve their communicative language skills. Generally, repetition facilitates a quicker retrieval of information. Repetition of a task is potentially important because it may help them change the internal factors in L2 learning. Potential benefits as a result of task repetition are that learners may have more linguistic capacity, more speed of access, and more learners' attention to their performance from the general to the specific (Bygate, 2007). The extent to which learners show

awareness of changes in their performance provides important additional information concerning the benefit of repetition.

Processing of oral input

Listening is the act of comprehending the stream of spoken language by being attentive to phonological information. The listener is involved in processing auditory input for comprehending messages at four phases: decoding, segmenting, recognizing, and integrating (see Fig. 5.1 in Cutler & Clifton, 1999, p. 124). In the decoding phase, the listener must isolate speech from other auditory input (noise) to transform it into an abstract representation. In the segmentation phase, the phoneme as the smallest unit in speech is processed in an encoded form by exploiting explicit cues in utterances. Since the phoneme is not a candidate “unit of perception” in listening, two levels of recognition take place: “word recognition” and “utterance interpretation”. In the word recognition process, candidate words are activated by the incoming speech signal, and competition among candidates occurs. Once a word form is selected in competition, the meaning of the word and the morphological structure are retrieved. The utterance is interpreted through “syntactic analysis” and “thematic processing”. In the final phase, “integration into discourse model”, prosody plays an important role in interpreting sentences semantically and in integrating the sentences into the proceeding discourse.

During listening comprehension, the listener accesses four knowledge sources: linguistic knowledge, pragmatic knowledge, prior knowledge, and discourse knowledge (Vandergrift & Goh, 2012). These four knowledge sources are interrelated with the cognitive processes of listening: perception, parsing, and utilization. In the perception and parsing phases, the listener draws on linguistic knowledge in order to decode speech stream and parse the incoming speech into meaningful linguistic units. In the utilization phase, prior knowledge, pragmatic knowledge and discourse knowledge are employed for interpreting messages in a listening text (see Figure 2.2 in Vandergrift & Goh, 2012, p. 27). Comprehension is likely to take place when messages in the auditory input are fully interpreted with learners' linguistic and background knowledge.

Processing of written input

Reading is an act of obtaining information from a written or printed text (Eskey, 2002). Working from the premise that reading is a continuum of input from written language to the reader, Sadoski and Paivio (2007) identified three basic processes in

reading: decoding (i.e. transforming written language to inner language), comprehension (i.e. forming a mental model of the text), and responses (i.e. conducting mental critique, appreciation or application). Extensive studies on reading have suggested that reading processes comprise two levels: lower-level processes and higher-level processes (see Grabe, 2009, 2010; Grabe & Stoller, 2011). Lower-level processes for reading, which may be executed by using phonological short-term memory resources (Gupta & Tisdale, 2009), include “word recognition”, “syntactic parsing” and “semantic-proposition encoding” (Grabe, 2009). Word recognition involves an interactive operation of the orthographic, phonological and semantic properties of words (Seidenberg & McClelland, 1989). Syntactic parsing is a process of analysing a group of words with grammatical information. Semantic-proposition encoding involves “building clause-level meaning from word meanings and grammatical information” (Grabe, 2009, p.22). By contrast, higher-level processes, which generally involve “the cognitive processing resources”, include a text model of comprehension, a situation model of reader interpretation, background knowledge use and inferencing, and executive control processes (Grabe & Stoller, 2011, p. 23). The Construction-Integration (CI) Model proposed by Kintsch (1988, 1998, 2004) assumes that comprehension entails two levels of cognitive processes: a text model at the construction phase and a situation model at the integration phase. The reader engages in constructing information provided by a text in order to understand what the text is trying to convey, and in integrating text information with relevant prior knowledge for the interpretation of a text. When the reader forms a mental representation of a text through lexical, syntactic, and inferential processes, comprehension usually occurs (Perfetti, 1999).

We could reasonably argue that a significant difference between the two modes of input is, thus, in respective linguistic components: oral input via phonemes and written input via graphemes. In L2 learning settings, input materials via listening and reading are provided to learners not only as useful exemplars in the target language but also as a resource they can access in performing subsequent tasks. In this respect, “information transfer” (see Nation, 1988; Nation & Newton, 2009) is a practical classroom activity where learners cope with two phases of tasks: receiving available input and producing oral speech recalling prior input information. In this task condition, the language processing that involves comprehension of the available input and speech production based on recalling the comprehended input provides learners with a form of “priming” where prior language exposure can influence subsequent language processing (see McDonough & Trofimovich, 2009; Trofimovich & McDonough, 2011, for priming research). Working on the assumption that different modes of input are processed differently into output productions,

it seemed useful to explore whether learners' reflections show awareness of distinctive features in the processing of the input when performing a series of speaking activities.

Repetition and L2 learning

Repetition provides L2 learners with opportunities for coping with an essential aspect of the language learning process and may enable them to increase their awareness of target-like structures and appropriate use of vocabulary (Cook, 1994). When learners repeat a speaking activity, "their attention would be expected to shift from the content, to the form, with the result that grammatical details are gradually integrated into the whole" (Bygate, 2006, p. 170). Conceivably, repetition of the task may enable learners to refine their language production because they have reflected on their previous experience of the task. Several studies have investigated the effect of task repetition under different task conditions: narrating a video (Bygate, 1996), online rendition of a video (Gass, Mackey, Álvarez-Torres, & Fernández-García, 1999), interviews and narratives (Bygate, 2001), the development of pragmatic aspects of task-performance (Németh & Kormos, 2001), narrating a video under four task conditions (Ahmadian & Tavakoli, 2010), and fluency development using the 4/3/2 technique (De Jong & Perfetti, 2011). With regard to learners' motivation, Plough and Gass (1993) reported that learners who engaged in an unfamiliar task showed more interest in their task and greater negotiation with a partner than those who reworked a familiar task. "Novelty" in a task appeared to be a solution for preventing the possible tedium of task repetition (Calvin, 1989, as cited in Plough & Gass, 1993, p. 51). Focusing on learners' awareness of immediate task repetition, Lynch and Maclean (2000) reported that vocabulary was the most common response given to the question of which the language area the participants intended to change. Lynch and Maclean (2001) found that weak learners might not be aware of changes in their oral production. A question that remains unanswered is whether learners show awareness of changes in their performance when redoing the task after an interval of one week.

Research questions

The study reported in this paper aimed to answer the following questions.

1. To what extent do learners' reflections show awareness of the role of input (oral and written) in their task performance?

2. To what extent do learners' reflections show awareness of the role of task repetition in their task performance?

Method

Participants

Twenty-four second-year Japanese Sociology undergraduates completed the two required sessions of narrative retelling tasks. This paper focuses on 12 students (2 females and 10 males) who participated in the retrospective interviews. The students (aged between 19 and 21 years) were enrolled in the compulsory English class at a university in central Japan (approximately a B1 on the CEFR). A book token was given to each participant as recompense.

Task materials

Three types of task materials were prepared for the study: strip cartoons, narrative texts, and audio tapes. Two sets of strip cartoons were selected for visual aids: Dog story (Brockbank, 1970) and Businessman story (Sempé, 2002). Two corresponding narrative texts were created for input materials. The level of vocabulary items was examined using Vocab Profile (Cobb, 2006). Approximately 95% of the tokens in the two texts were at the levels of the most frequent 2,000 words (i.e. 1k and 2k). Listening audio tapes were made for oral input by using the speech read at natural speed.

Design

The cohort (N = 24) was given a vocabulary test at the 3,000 word level (Nation, 2001) one week in advance of the study so that participants could be divided into two comparable groups in terms of vocabulary ability. The vocabulary test was used for the preliminary study because learners' vocabulary knowledge could be critical in both comprehension and production levels. In one session, two picture stories were used. Each story consisted of two parts in order to break down the workload of the tasks, and to explore the effect of immediate task repetition. The first half of the story was provided for Part 1, and the entire story was used for Part 2. Thus, four sub tasks were provided in one session: i) Dog story Part 1, ii) Dog story Part 2, iii) Businessman story Part 1, and iv) Businessman story Part 2.

In Week 1, each group received its respective input. The Oral Input (OI) group listened to a tape once; the Written Input (WI) group read a text aloud once. The WI group only read it once to

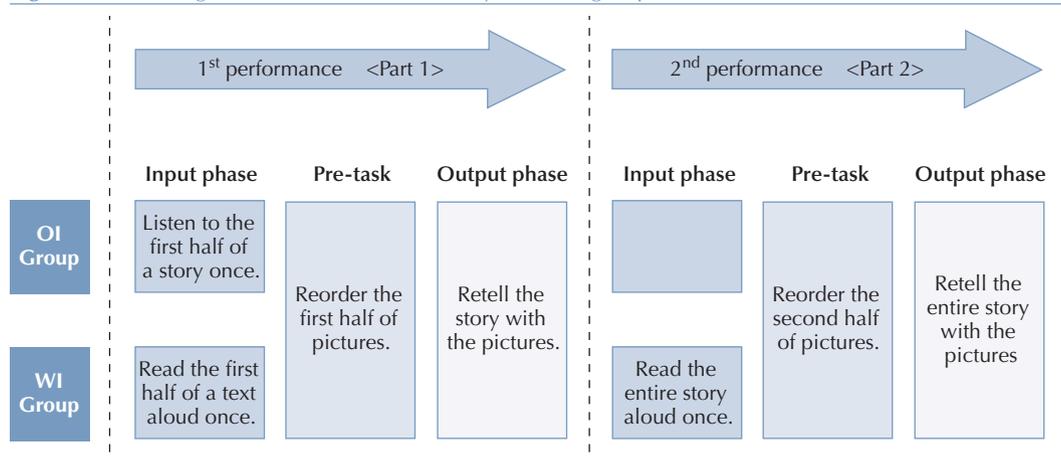
ensure that the two groups were given equivalent task conditions in terms of the exposure to the text. Both groups received a set of corresponding pictures in a random order, then reordered them. While looking at the pictures, students retold the story in as much detail as they could. Both groups performed the four sub-tasks using the same procedures (i.e. receiving input, reordering pictures, retelling a story). Reordering pictures was included in the task design for two reasons. Firstly, it was posited that the dual task demands (i.e. reordering pictures and retelling a story) being provided as learners' "foreknowledge of a task" (Yoshimura, 2006) might lead them to pay greater attention to information of the input for their need to perform subsequent tasks. Secondly, the time for reordering pictures might be used for pre-task planning. The pre-task phase might function as "strategic planning" that allows learners an opportunity to work on the preparation for the task thinking of the content they will have to express (Ellis, 2005). Figure 1 shows the design of the session of one story for the two groups.

In Week 2, each group repeated the narrative retelling tasks. Retrospective interviews were conducted in the L1 of the students.

Data

The interview data were collected from 12 students (6 students from each group) for approximately 20-30 minutes (Mean = 26 minutes). Due to the time constraints, half of the students were interviewed immediately after the tasks in the second session, while the other half were interviewed within three days of the second session.

Figure 1. The design of the session of one story for both groups.



Data analysis

All the interview data were transcribed. Eight transcripts (4 transcripts from each group) were selected as an informative sample and translated into English. Firstly, preliminary main categories and subcategories were created after studying two informative transcripts from each group. The rest of the selected transcripts were coded using the main categories and the subcategories that emerged in the first phase. A reliability test was conducted by asking one rater to check the analysis of two transcripts. The second agreement reached 95.2%. The remaining six transcripts were analysed using the definitive categories.

Results

The students showed their awareness of the roles of input they received and various aspects of changes in their task performance. Table 1 shows the tallies of the number of mentions of subcategories in the interviews for the overview of frequencies of students' responses.

Although five main categories emerged from the interview data analysis (input, Week 2 task repetition, picture, story, and

Table 1.

Tallies of the number of mentions of subcategories in the interviews.

Category	Subcategory	Definition of subcategory	OI Group (N = 4)	WI Group (N = 4)	Overall total (N = 8)
1. Input	1.1 Perceptions	Quality of perception in input	22	18	40
	1.2 Exemplars	Exploiting input as a useful language	8	13	21
	1.3 Orientation	Students' attitude to input	7	4	11
	1.4 Attention capacity	Ease of the processing of input	5	14	19
	1.5 Memory recall	Input influence on memory recall	48	34	82
2. Week 2 task repetition	2.1 Comprehension	Repetition influence on comprehension capacity	14	7	21
	2.2 Focus of attention	Repetition influence on focus on the details	11	17	28
	2.3 Noticing changes in performance	Repetition influence on noticing changes in performance	41	34	75
	2.4 Memory recall	Repetition influence on memory recall	24	34	58

immediate task repetition), as space is limited, we will focus on the first two categories. Under the first main category – input – five subcategories of focus emerged: perceptions, exemplars, orientation, attention capacity, and memory recall. Under the second category – Week 2 task repetition – four subcategories of focus emerged: comprehension, focus of attention, noticing changes in performance, and memory recall. Regarding the responses on the subcategories, both groups commented the most on item 1.5 (memory recall). This finding may imply that reflecting on output performance the students had experienced, they mostly acknowledged that some aspects of the mode of input were associated with the subsequent speech production. The second most frequent responses were on item 2.3 (noticing changes in performance). The students seemed to concede that task repetition served them as an opportunity for noticing specific changes in their task performance. Focusing on detailed similarities and differences between the two groups, the findings of learners' awareness on respective subcategories will be reported.

Input

Perceptions

Perceptions represent learners' reflections on what elements of representations in the input they recognized. The similarities across both groups were that, irrespective of input type, students generally mentioned “vocabulary”, which was probably equivalent to a “word” as a grammatical unit (Biber, et al 2007, p. 50), as a particular kind of linguistic element that they noticed while reading or listening the input. However, there were differences in what members of the two groups reported. The OI group acknowledged “rhythm”, “stress”, “intonation”, “chunks”, “pauses”, “pronunciation”, and communication of “feelings” in narrative speech during listening; the W1 group reported perceiving “prepositions”, “adverbs”, “phrasal verbs” and “grammar”. In general, the differences in perception between the two groups tended to centre on phonological information in listening and visual word and syntactic identification in reading.

Exemplars

One of the roles of input is to provide students with exemplars. This happened in two ways: providing a model story corresponding to the pictures, and providing exemplars of useful expressions. In terms of the input as a model story, both groups reported that they could not have spoken so well if they had not received any input. In terms of the input as useful expressions, both groups acknowledged that “vocabulary” (i.e. word) as a type of linguistic unit was helpfully exemplified by the input,

but each group reported different types of linguistic features and linguistic units. The OI group tended to comment on “pronunciation”; the WI group reported that the input provided them with “phrases”, “sentences”, and “grammar”. Two points to note about the differences in exemplars are that the WI group reported recognition of grammar in a text and perception of large units. R6¹ commented, “I extracted some substantial “grammar” (from the text in speaking)².” Regarding the size of units, readers seemed to perceive larger units (sentences) as exemplars than listeners did. R12 reported:

If I had to speak (without any input), I had to make sentences from scratch. However, because I read (the texts), some of the “sentences” remained in my mind.

Overall, students seemed to be aware that the roles of input as exemplars were as a model story for pictures and as a source of useful expressions, in particular, grammar and sentences for readers.

Orientation

When reflecting on their experience, students also noted that receiving the different types of input helped them perform the tasks. That is, orientation represents learners' attitude to input. A striking similarity across the two groups was that both tended to say they would prefer the mode of input that they had experienced in the study. However, the two groups also commented on different beneficial aspects associated with the input they had received. R23 commented:

If I had listened to the stories, I think there would have been a lot of areas I could not have comprehended. In reading, I could comprehend some.

L4, on the other hand, commented that if she needed to speak, she thought that listening would be useful prior to speaking. By and large, the WI group seemed to appreciate comprehending the content of the story by means of word recognition, while the OI group felt that linguistic information in the oral input seemed to be usable for speaking.

Attention capacity

Managing the speed of input seemed to be a significantly different condition between the two groups. Several of those in the WI

1 Students' IDs are labelled with a letter and a number. Two letters are used: L for Listening (i.e. the OI group) and R for Reading (i.e. the WI group).

2 Hereafter, when original quotations include ellipsis in L1, the interpretation for the ellipsis is added in parentheses.

group commented on the potential flexibility of reading speed. R10 reported, "I read the texts at my own pace, so I think I had less pressure to pay attention to several areas, compared to listening." The OI group, on the other hand, had to perceive oral input in real time. L4 reported that she sometimes found herself listening to the next sentence at the same time as she was still comprehending the previous one. Consequently, she noticed that one sentence had gone past before she had understood it. Overall, readers seemed to have more flexibility to use their attention capacity to perceive the input than listeners did.

Memory recall

Input influence on memory recall was reported the most in the categories of input (47.4% of the responses on input). When asked, all students seemed to remember linguistic features of the input that they had been able to recall and produce in retelling. Both groups reported two similar points. The first point was that even though they had something to convey in their L1, it was often hard to express it in the L2. The second point was that both groups reported recall of "vocabulary", "phrases", "sentences", and "grammar". There were, however, differences in the linguistic features of the input that the two groups recalled. The OI group reported recall of "pronunciation" and "intonation", whereas the WI group identified "phrasal verbs".

Even though some linguistic features of the input were commonly recalled by both groups, each group seemed to recall them somewhat differently. In terms of recall of vocabulary, L4 reported that she was overwhelmingly occupied by recalling the phonological shape of the input, so it was hard to replace the vocabulary she had heard with different vocabulary. Interestingly, only the OI group (L8) commented on recalling "direct speech" for a grammatical aspect. There was one comment on the potential influence of processing phonological representations in speech output. L4 reported:

(The speed in) listening was faster than reading at my own pace, so perhaps I attempted to retell faster than (the speed in) reading. If I had had to read (the texts), I would have had the pace of reading and would have retold at the speed (of reading).

In contrast, the WI group tended to report "sentences" and "grammar" more explicitly than the OI group. R12 reported, "I could retell fluently when I remembered 'sentences' I had read." In terms of recalling grammar, R6 stated that he intended to use grammatical structures that had appeared in the text. Seemingly, what each group recalled in the output was to some extent related to the linguistic features they had perceived in the input phase.

Week 2 task repetition

Comprehension

One of the interesting findings of the Week 2 task repetition was that all of the students acknowledged an improvement in their comprehension at Week 2. Both groups reported that comprehending “content” and “details” of the stories improved when repeated. L19 reported:

My comprehension in particular changed significantly. I think the ability to absorb (= comprehend) vocabulary improved.

L8 commented that he could anticipate the subsequent occurrences because he already knew the plot of the story. It is worth noting that the OI group reported an improvement in comprehending “vocabulary” for a linguistic unit. By and large, comprehension of general content of the stories seemed to be improved by receiving the same input again.

Focus of attention

Students seemed to change their focus in response to what they thought they would need for the subsequent speaking tasks. Both groups reported focusing on three aspects: vocabulary; details of the stories; and areas that they had not been able to understand or retell during the previous performance. For instance, L8 explained why he focused on a specific adjective, “huge”:

The second time, I (already) knew a “traffic jam”, so I do not think I would have listened to it very carefully. It would have been easy to listen to the areas before and after the “traffic jam”.

It seems that familiarity with the information enabled him to shift attention to the preceding material (i.e. the adjective “huge”). In terms of focus of attention towards more detailed aspects of the information, R6 reported that he tried to read the “detail” carefully because he thought he could retell more details at Week 2. Both groups also reported focusing on materials that they had not previously understood or produced. L24 said, “I paid attention to the vocabulary that I had not understood but wanted to use (in speech).” There were, however, some comments that suggested that readers may have had somewhat greater capacity to focus closely on sentence constituents than listeners. Only the WI group reported a change in the focus on past perfect form. R6 reported that he reproduced an accurate past perfect form (“had gone”) because he found the exact verb form in the text when reading at Week 2. Overall, both groups seemed to shift their focus towards specific areas of the input that they felt they needed

to comprehend for the subsequent retelling task, and towards details they could use to expand sentences in retelling.

Noticing changes in performance

The influence of repetition on changes in learners' performance was reported the most when discussing changes at Week 2 (41.2% of the responses on repetition). This subcategory reflects learners' responses showing awareness of specific changes in their performance at Week 2. Three similar points were reported from the two groups: receiving input without pressure; retelling more details because of comprehending content better at Week 2; and a gap between comprehension and production. With regard to the first point, R10 reported that the most significant changes in her performance were "comprehension" and "feeling pressure-free", which indicates that she noticed an improvement in her reading comprehension and at the same time felt less pressure during task performance at Week 2. With regard to retelling more details of the story, R10 commented, "Even though I did not attempt to memorize sentence by sentence, to my surprise, I noticed that I could produce vocabulary and phrases that remained unforgettable." Despite noticing gains in comprehension, some students reported feeling that their speech performance did not change as much as they had expected. R6 noted that even though he comprehended the content better at Week 2, he noticed that he could not retell it better. Some students, therefore, noticed a gap between gains in comprehension and an improvement in retelling (Swain, 1995).

In terms of the differences in awareness of changes in their performance, the two groups seemed to appreciate different aspects of linguistic features in their speech production. The WI group felt they could produce grammatically complete "sentences", while the OI group seemed more focused on "communicating" rather than on grammar. R12, for instance, reported:

I noticed that there were some areas I thought I could retell well, and those areas actually gained. I might have been able to produce slightly more "sentences".

In contrast, L8 reported that his speech could have sounded like a monotone at Week 1, whereas at Week 2 he wanted to retell the story as if he were actually communicating with someone. The OI group seemed to be sensitive to one of the fundamental aspects of communication, namely, "feelings" (Clark & Clark, 1977, p. 3).

With regard to maintaining motivation when redoing the task (a potential problem noted by Plough & Gass, 1993), R10 reported:

If it was in Japanese, I might have thought so (maintaining motivation would be a problem), but I could not fully comprehend

(the texts). For that reason, I was uneasy about the areas I had not yet understood. . . . I do not think I applied myself less in my second performance.

Presumably, even at Week 2, she had to rise to the challenges in L2 at the input phase (i.e. comprehension) and the output phase (i.e. speech production), and might therefore have kept motivated.

Memory recall

The memory of the story retained from doing the tasks previously seemed to be related to on-task recall. The similarities acknowledged by both groups were twofold: recalling memories of the stories while redoing the task, and gains in reproducing the stories. With regard to recalling memories of the stories while redoing the task, L24 reported that the fact that he already knew the situation of the stories helped him bring the whole scenario to mind quickly. With regard to gains in reproducing the stories, some students recognized that even though they had difficulty recalling certain specific areas of the stories at Week 1, they could reproduce some of those areas at Week 2. R10 reported that she identified how to say “a hat came off” in the target language while repeating the task, so she was able to say it eventually. Table 2 shows R10’s utterances in the Dog story across the four occasions. As she reported, she actually reproduced exactly the same sentence used in the model text, “his hat came off”, on the fourth occasion.

Table 2.
R10’s utterances in the Dog story across the four occasions.

Occasions	R10’s utterances
Week 1 Part 1	ee the dog and that man’s hat fly jump
Week 1 Part 2	and umm and his hat came ee take took off
Week 2 Part 1	and the man um jumped and came off his hat
Week 2 Part 2	a man tripped xx off xxx and his hat came off
xx = inaudible	

To sum up, regarding Week 2 task repetition, prior memory of the stories in the task was described by students in a way that suggested that building on prior memories of the material helped them to comprehend the stories, to identify vocabulary items and phrases for retelling, and to process these in the speech output phase.

Discussion

The analysis of interview data seemed to show learners' awareness of being affected by the input medium. The distinctive linguistic features at the input phase – phonological information and visual word information – seemed to be associated with generating communicative and grammatical elements at the output phase. The OI group experienced the two roles of “listener” and “speaker” which are central roles in oral “communication” (Clark & Clark, 1977, p. 25) that are built into the current task design. Presumably, as well as storing the phonological representations of the input in their memory, listeners also stored particular feelings which some of them associated with the intonation patterns. As speakers, they then recalled the story, activating the memory of linguistic information of the input, particularly the phonological representations of the input and feelings that they had appreciated from the narrators' storytelling. This series of processes may have enabled the OI group to appreciate communicative elements in the input and reproduce them in their output. In other words, it is possible that such prosodic cues in the oral input might have primed their subsequent oral production. In the interview data, the fact that the OI group consistently reported “vocabulary” as something they noticed at the input and the output phases could be a reflection of the fact that they were processing oral input. Generally, small units can be recalled faster than large units, and empirical studies suggest that there is a relationship between word length and memory span (Baddeley, Thomson & Buchanan, 1975, cited in Baddeley, 2004). Thus, communicative elements in small units (i.e. pronunciations of vocabulary heard in the oral input phase) could have been reproduced at a speed moderately similar to that of the oral input. However, there seemed to be a potential limitation to the extent to which oral input could be processed into speech output. There was some evidence that listeners had less attention capacity than readers, presumably due to the time pressure likely to be associated with speech processing (Rost, 2011). This may explain why the OI group particularly reported recalling language at the lexical level. That is, speed limitations might have inhibited them from retaining larger units, such as phrases and sentences.

Readers, however, appeared to have more attention capacity than listeners did and tended to show their awareness of grammatically complete speech production. With regard to processing linguistic information in the two phases (i.e. input and output), the WI group commented on “grammar” and “sentences” more explicitly than the OI group did. This may be because readers are able to control their reading speed to some extent, potentially giving them more time to parse sentence structures and to interpret the text during the input. Moreover, readers are involved in identifying

words while having access to the relevant sounds (Eysenck & Keane, 2010). This phonological processing in reading is likely to be slow for word identification (Coltheart, Rastle, Perry, Langdon, & Ziegler, 2001; Frost, 1998). Thus, the WI group might have more exposure time to the model text than the OI group because of the two factors: the control of reading speed for their need and the nature of reading for word identification. The reporting noted earlier of the reproduction of “past perfect” forms by R6 and of model sentences by R10, indicates that it is possible that the WI group paid closer attention to the accuracy of sentence constituents than the OI group did. It seems reasonable to suppose then that the WI group accurately recognized somewhat more sentence constituents and sentence structures than the OI group did.

There is another reason for differences in the two groups' ability to recognize sentences. Readers would have been able to recognize the ends of sentences by seeing a full stop whereas listeners would be more likely to recognize the ends of sentences by using prosodic cues and pausing (Eysenck & Keane, 2010). Those recognitions are arguably based on the nature of the segmentation of written and spoken languages, that is, “punctuation units” and “intonation units” (Chafe, 1988, p. 23). For this reason, the WI group may have been more likely to recognize sentences as groups of words with a structure, while the OI group might have been more likely to recognize sentences as large chunks. These factors might explain why only the WI group explicitly reported recognition of sentences.

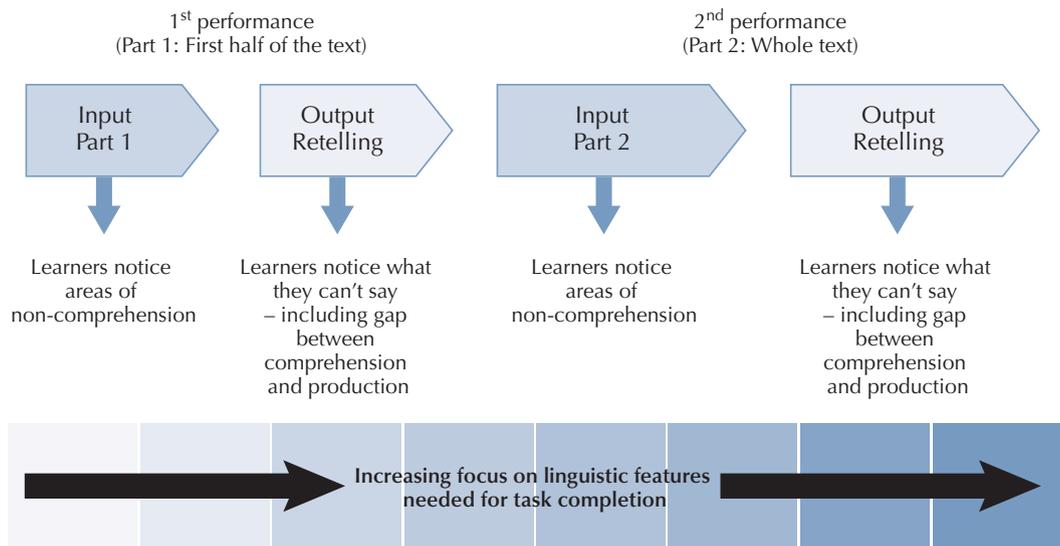
Concerning the second category, Week 2 task repetition, one striking result was that all students reported an improvement in comprehension as a result of task repetition. Presumably, a memory of the story from the first encounter could have functioned as background knowledge when the time came to retell it. The existence of prior knowledge on the second iteration meant that students did not need to pay attention to all aspects of the story equally in the way they would have done on the first occasion. This might have helped them reduce the cognitive load involved in comprehending the story on the second occasion. As a result, they may have comprehended “more details” the second time around. This gain in comprehension of the text seemed to have something to do with the second finding: evidence of changes in their focus.

One of the main changes in learners' focus during task performance concerned the way they directed their attention towards what they “needed” for the subsequent speaking activity (Laufer & Hulstijn, 2001). During the series of iterations of task performances involved in Part 1 (first half of the text) and Part 2 (whole text), students had three different occasions to notice incomplete areas of their performance. In the input phase, they had the opportunity to notice the areas of the story they could

not comprehend, and then to spot which areas they were not able to retell in the output phase. Some students might have noticed that they had not succeeded in recalling certain areas that they had comprehended (see Figure 2). If they had adopted a somewhat spontaneous selective focus, this could have led them to increase the number of comprehended areas cumulatively over the two time periods. Thus, learners' awareness of gains in comprehension might be attributable partly to the accumulation of comprehended material that resulted from a gradual shift in focus towards areas that were needed during later iterations of the task. Repetition provided students with an opportunity to focus on selected areas according to their needs. In the light of task repetition theory, the progressive changes in focus on the needed areas of the input seemingly helped students convert the use of their language system (Bygate, 1996), by optimizing their resources (Bygate & Samuda, 2005).

The third factor related to task repetition that was mentioned by the students interviewed was that they noticed changes in their task performance over the two time periods. Two significant aspects were associated with these changes: the reduction of pressure, and relationships between comprehension and production. There was evidence that students may have felt more "pressure-free" at Week 2. This feeling might have been a product of gains in task familiarity (Bygate, 1996, 2001; Németh & Kormos, 2001) and reduction in cognitive load (Bygate, 2001; Németh & Kormos, 2001). The increased predictability of the task and of the areas of non-comprehension afforded by reflecting on their prior

Figure 2. Potential occasions for focus and noticing incomplete areas of the performance.



memory of the story in the input could have led students to identify a precise “need” for their task performance. In consequence, it can be argued that they needed to make less effort simultaneously towards all aspects of their performance, and could instead focus on a “bit at a time”, thus feeling less pressure.

Learners' awareness of changes in their performance fell into two distinct types: awareness of gains in both comprehension and production, and awareness of gains in comprehension only, and not in production. Conceivably, when comprehended material consisted of familiar vocabulary items, these tended to be reproduced. However, when comprehended material contained unfamiliar vocabulary items, these tended not to be reproduced as readily as familiar ones. Accordingly, when students attempted to recall “unfamiliar” areas that they had comprehended but were not able to retell, they might have felt no gain in production. Even though all students acknowledged gains in comprehension, this could imply that gains in comprehension might not always lead to gains in production.

Concerning motivation in relation to task repetition, R10 reported that repeating a task did not make her less motivated. One reason she gave concerned the use of language. She noticed that some areas remained unclear on the first occasion and as a result she felt uneasy. The unclear areas may have created a “need” for all-round comprehension and a “need” to produce speech based on the input, giving her the sense that missing areas remained a “challenge”. Repetition gave her another chance to deal with unsolved problems. The adjustment of vocabulary level in the input materials might also have encouraged her to think “the more the reading, the greater the comprehending”. The input materials were designed to ensure that at least 95% of the vocabulary items were familiar. It is possible that the student recognized that unclear material involved either unfamiliar vocabulary items or familiar vocabulary items that she simply needed to read again. Assuming that 5% of unfamiliar vocabulary is the level at which comprehension is manageable, and new language can be inferred, repetition may have further facilitated the task of resolving comprehension problems. Thus, learners may not see task repetition as a source of boredom provided that it has a purpose, such as to improve their performance, and provided that the challenge it poses is manageable.

Regarding the fourth factor of Week 2 task repetition, students identified two changes in their memory recall during the tasks: changes in their recall of the story and gains in reproduction of the story. It seems that previous experience of performing the task could have enabled students to recall the story during the input on the second occasion and may have helped them anticipate the content of the story. Their reports offer some evidence that recalling prior memory of the story in the input and antici-

pating the story may have helped them comprehend more details and increase linguistic information of the input. It is possible that those gains in comprehended areas and of linguistic information of the input would become a source of speech. In the output phase on the second occasion, they might have had a greater source of mental representation for speech derived from linguistic information of the input than on the first occasion. Using the source, they could have reproduced some vocabulary items that they noticed they had not been able to reproduce on the first occasion. When this happened, they might have felt gains in their production of the story.

Conclusion

The findings of the interview data analysis revealed some valuable aspects of learners' reflections on their awareness of the role of input and task repetition in their performance. Evidence that the OI group reported awareness of communicative elements of the input (suprasegmentals) and awareness of small units (words) can be attributed to the limited attention capacity they had available. The fact that the WI group seemed to recognize syntactic structures (grammar) and larger units (sentences) and could generate larger units can be explained by that group having more cognitive capacity available. The findings in the current study support the prevailing theories of the beneficial aspects of repetition: the Week 2 task repetition effect was attributable to promoting task familiarity (Bygate, 1996, 2001; Németh & Kormos, 2001), reduction of cognitive load (Bygate, 2001; Németh & Kormos, 2001) and shifting learners' attention (Bygate, 1996, 2001, 2006).

Although the findings concerning the learners' perceptions provided intriguing insights into the role of input and task repetition, generalizability of the findings of the interviews is inevitably limited, given the limitation in the data collection conditions and the small amount of data gathered. For all that generalizability is limited, students' comments on useful points of the tasks can be regarded as practical suggestions for designing tasks.

Implications for teaching are twofold. Firstly, the synergetic input task (e.g. listening and then reading, or reading and then listening) may facilitate performing the subsequent oral task because learners are given opportunities for perceiving the linguistic components in terms of forms and phonological information. The study provisionally proposes that the synergy of oral and written input may help to improve L2 oral production. Secondly, task repetition can be used as a practical method to support learners making small changes in their performance as a result of their perceptions of internal changes (e.g. comprehension, rule system) and external changes (e.g. oral output). The key to

encouraging learners to redo a task is to make task repetition moderately “challenging”.

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