Planning Time: A Mediating Technique between Fluency and Accuracy in Task-Based Teaching

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Task-based instruction is arguably associated with fostering fluent L2 speech distant from native-like accuracy. Of several methodological options recommended for accounting for accuracy problems of meaning-first approaches to language teaching, planning time has been explored in this study. Three groups of English majors watched a cartoon and narrated their accounts of watching under no-planning, undetailed pre-task planning and detailed pre-task planning conditions. To measure the accuracy and dysfluency of their L2 production, the collected data were coded for the number of error-free clauses, the number of total clauses and also for repetitions, false starts, reformulations and replacements. One-way ANOVAs run on the data revealed that detailed pre-task planning might result in more accurate and less dysfluent language than undetailed pre-task planning which in turn might lead to more accurate and less dysfluent language than no-planning condition.

Keywords: No-planning, Undetailed Pre-Task Planning, Detailed Pre-Task Planning, Accuracy, Dysfluency

Increasingly, both second language acquisition researchers and language practitioners embrace meaning-first approaches to
language teaching. It is now strongly believed that such approaches to language teaching elicit language samples which well represent what language learners are expected to perform under real-life circumstances removed from EFL classroom settings. The post-method era dismisses any linguistic system as the unit of teaching and learning on the grounds that they can never realize and meet the characteristics of the units which might be easily accommodated to the internal syllabus which the learner is believed to be endowed with (Ellis, 2003; Skehan, 1998).

CLT in general and task-based language instruction in particular aim at fostering communicative ability on the part of the learner. These approaches to language teaching unlike the earlier methods, which took language as a set of linguistic units, place premium on communicative activities and tasks. Learning is believed to be intimately associated with using language for communicative purposes where getting meaning across takes priority over linguistic concerns.

While there is little doubt – if any at all – as to the effectiveness of CLT and task-based instruction in fostering L2 fluency compared with traditional methods practiced over decades, accuracy concerns remain as a haunting problem to the proponents of these well-established approaches to language teaching, so to speak. Relying on purely task-based language teaching as a version of CLT, has failed to elicit structurally accurate language from language learners. Under real time pressure learners can hardly attend to both fluency and linguistic accuracy simultaneously. Such a striking drawback associated with task-based language teaching calls for some methodological interference which can result in L2 production with higher degrees of accuracy without that much damage to fluency (Swain, 1985; Swain & Lapkin, 1982).

Theoretically viewed, in message- or meaning-first approaches to language teaching the learner has to prepare specific messages and formulate them linguistically prior to articulation. Such a concern with the content and the form of the message does not seem to be an easy task to carry out for L2 learners, who undoubtedly possess a limited command of the target language.
When a new message emerges, the speaker has to "track down appropriate morpholexical items from memory" (Bygate, 2001, p. 26), which will pose problems for the learner. Since language learners do not have ready-made language plans for new situations of language use, which involve establishing constant form-meaning relations (Lightbown, 1998; Widdowson, 1978), the real time pressure created will give rise to accuracy and fluency challenges on the part of the learner. It has to be reiterated that such a condition for task performance threatens the accuracy of language output more than fluency since the priority is expected to be given to meaning negotiation.

Briefly stated, while L2 learners are required to produce L2 under real time pressure, they will, there is no doubt, experience a great deal of challenge and difficulty in establishing form-meaning relations consistent with the target language norms. In spite of the fact that such relations are quite difficult to establish, they are highly desired and are of great concern for language teachers and language learners as well. Giving planning time, however, is predicted to provide some opportunity for language learners to put their efforts into establishing an effective relationship between form and meaning.

**Task-Based Instruction and L2 Acquisition**

Tasks admittedly are not the same as activities which people interact through and negotiate meaning by. Tasks create interaction opportunities which are similar to real-life activities. Authenticity associated with tasks is not *situational authenticity* rather *interactional authenticity* (Bachman, 1991) which emerges as interlocutors get involved in task accomplishment. Thus, interactions entailed from task performance can create meaningful situations which possess a good deal of correspondence to situationally authentic interactions.

Through task performance the learner is involved in what Brown, Collins, and Duguid (1989a) call *authentic activity* and *situated cognition and invention*. Authentic activity concerns the learner’s “direct experience with the modes of thought and action
in a field of practice” (Berwick, 1993, p. 100). Task-based teaching has the potential to engage the learner with authentic language communication which is of essence for language learning. The importance attached to authentic activity can be easily supported by situated cognition and invention which rightly claim that “[implicit] knowledge is situated in activity and that it is used and made sense of within specific contexts and cultures” (Brown, Collins, & Duguid, 1989b, p. 11). Task-based teaching has the potential to engage the learner indirectly with implicit knowledge that is situated in activities which come into existence as a result of task accomplishment.

If language practice is limited to what learners are already in possession of or to imitating the interlocutor’s speech, learners will have no chance of developing their interlanguage system. The only benefit which might result from such a practice is automatization of structures available to learners. However, according to the Output Hypothesis (Swain, 1985), production is not limited to imitation and control of language; rather, it engages language learners in syntactic processing and contributes to L2 development. Research conducted in immersion classes demonstrated quite explicitly that comprehensible input, which exists in immersion classes, did not ensure native-like grammatical and sociolinguistic competence, despite the fact that learners had high levels of ability in meaning negotiation and comprehension (Swain & Lapkin, 1982). According to the Output Hypothesis, syntactic processing is at the core of L2 production and as learners attempt to produce meaningful language, they need to attend to form which can induce acquisition. Long and Crookes (1992) and Skehan (1998) emphasize the point that through task-based teaching, learners can maintain focus on form, which is judged to be useful for L2 development.

Skehan (1998) argues that there is a relationship between the difficulty of the task and information processing load which the task exercises on the L2 learner. According to this view, the more demanding a task is, the more attentional resources are needed for task transaction. Form is admittedly ignored under such a circumstance. Thus, in task-based language instruction, there is a
chance to increase or reduce the difficulty of tasks with different pedagogical goals. As Skehan rightly mentions, by choosing easier tasks, learners can be freed up from processing load and can focus on accuracy to strike a balance between different aspects of language. Increasing the difficulty of tasks might push learners towards producing syntactically complex structures, provided that their proficiency of the language is high enough and they have enough time to direct their attentional resources to that aspect of the language.

Planning Time

An Overview

Skehan (1996) claims that under certain circumstances learners prefer to pay attention to their lexicalized knowledge of language, which is likely to lead to fluency improvement, while under other circumstances they have to refer to their rule-based system which results in greater complexity and accuracy. To overcome this polarity and strike a healthy balance among these aspects of language, he put forward opportunities for planning.

Learners make use of planning time to be ready cognitively and linguistically prior to task performance. In other words they make a decision on what meaning they want to convey and search for the linguistic elements appropriate for expressing their intended meanings. From a focus on form perspective, planning time not only decreases the cognitive load and releases attentional resources but also it brings about a conscious shift of attention to formal aspects of the language which are necessary to task accomplishment. In this respect, choosing the aspects of language that should be attended to is the learner's job. S/he is free to evaluate task demands and to weigh available linguistic resources in a self-regulated way. This kind of learner-initiated and teacher-regulated focus on form may result in opportunities to make form-content relations, to notice the gap (Schmidt & Frota, 1986), to notice holes in one's competence (Swain, 1998) and to restructure and develop interlanguage in general (Ortega, 1999).
Allowing learners to reflect on their production results in searching for linguistic resources during the formulation stage and facilitating the process of pre-production and post-production monitoring. Yuan and Ellis (2003) propose that when learners have time to plan what they are going to say, they use the provided time to formulate their message more carefully and monitor the output of the formulation and articulation stages of production. In so doing learners are supposed to make use of linguistically complex and grammatically accurate utterances.

Based on psycholinguistic perspectives (e.g., Clark & Clark, 1977, as cited in Hulstijn & Hulstijn, 1984), the speech production process is composed of the conceptualization of a message, the planning of an outcome and the production of the planned utterance. These three processes occur interactively. Planning includes the activation and retrieval of knowledge of language forms and meanings which are stored in the learner's memory. There are several stages in the planning phase of speech production. Learners revise their utterance, plan and decide on changing it or keeping it. These revising processes are called monitoring (Hulstijn & Hulstijn, 1984). Monitoring can lead to a number of covert and overt editing or self-correction. Skilled language learners have plenty of ready-made subroutines for the construction of these structures and for monitoring and correcting errors. Non-skilled second language learners, however, have not still routinized most of these structural rules in their mind. For such learners, the use of these structural rules can be taken as a controlled process. Controlled processes are constantly monitored, attended to and governed by the subject. Furthermore, they require more time than automatic processes (Skehan, 1998).

It is safe to argue that all learners know more lexis and syntax than they can use fluently and accurately in their utterances. Time pressure forces learners to make use of memorized language rather than triggering their creativity. Without planning time learners have to make references to the immediate context along with appropriate gestures. This communicative strategy is quite common among language learners. In this regard, there would be a risk of less desirable interlanguage development and as a result
more fossilized forms might be used. In that case accuracy would not be enhanced and learners would not be encouraged to extend their existing interlanguage (Skehan, 1998; Swain, 1985). Planning time, however, is likely to let learners devote attention to form and content rather than forcing them to select one choice at the expense of the other. Put differently, it releases learners from thinking of too many things at the same time while collecting thought and producing speech.

It is possible that planning time would enable learners to involve in the content of the task, in the interpretation of what it implies and in the schematic knowledge which is related to its completion. This may result in the transition of material and ideas in preparing for task completion. It may not influence accuracy strongly but it is likely to be effective regarding fluency and complexity in two ways. Firstly, the organizational changes may make the learners use more complex language to reflect different ideas as well as more complex internal organization. Secondly, with prepared ideas and schematic knowledge more attention might be available during task performance. As a result, fluency and accuracy are likely to take an advantage indirectly.

Skehan & Foster (2001) assert that accuracy and complexity may compete with each other for attentional resources. Following VanPatten (1990) and adopting limited-capacity model of attention, Skehan & Foster (2001) argue that more complex tasks require more attention to content and this in turn leads to withdrawing attention from form. However, limited capacity and single-resource model has been questioned by recent research investigating the role of attention in task performance (e.g., Neumann, 1987, as cited in Robinson, 2001).

Studies Conducted

A number of studies have explored the effects of planning time on language production (e.g., Crookes, 1989; Ellis, 1987; Foster & Skehan, 1996; Mehnert, 1998; Ortega, 1999). Underlying these studies is information processing theory that claims human beings have a limited processing capacity and cannot attend fully
to all aspects of a task simultaneously. It is difficult for second language learners, especially beginners to attend to form and meaning on the spot (Skehan, 1996; VanPatten, 1990). However, when learners have the opportunity to plan the linguistic and propositional content of a task, these processing limitations can be compensated for, as a consequence the quality of their linguistic output might improve.

Ellis (1987) explored the difference between adult ESL learners' use of past tense in planned and unplanned speech. To this purpose, he asked participants to perform three tasks. First, they wrote a composition based on the illustrated pictures of a story using the past tense (Task 1). Then they recorded two oral versions of the story but only the second one was analyzed (Task 2) and finally, a second set of pictures were presented for 2 minutes. Participants were supposed to record an oral version of the story (Task 3). He concluded that the accuracy of past tense verb decreased from Task 1 to Task 3. Accuracy of irregular past tense remained more or less constant, accuracy of copula on Task 1 and 2 was approximately similar but concerning Task 3, it was significantly lower.

Ellis (1987) asserts that those forms which learners have not already mastered to use automatically are more likely to be used under conditions in which planning time has been provided. He claims that opportunities for planned performance should increase the likelihood of these new, more difficult forms being finally internalized and integrated into the vernacular style involved in the immediate performance. He concluded that planning time had a positive effect on the accuracy of regular, rule governed past tense forms like played, but not on the accuracy of irregular past tense forms like went.

Crookes (1989) calls Ellis's (1987) study into question claiming that his study confounds modality with planning time, that is, Task 1 and Task 2 were in the written mode while Task 3 was oral. Thus one cannot claim that results are due to planning time itself or due to the shift from speaking to writing. To lend support to his criticism, Crookes took into account only planning time in his study.
Crookes (1989), like Ellis, conducted a research on planning time but from a different perspective. Using information-gap tasks, he gave learners 10-minute planning time and compared its effect on learners who were given zero planning time. He compared the performance of the control and the experimental groups and concluded that there was no distinct difference between the two groups concerning accuracy measures. On the other hand, there was a significant difference between them concerning complexity, that is, more complex sentences and wider lexical items were used by the planners. It seemed that in Crookes' (1989) study, planning time did not lead to greater accuracy rather it made learners make use of more complex language by taking more risks.

Foster and Skehan (1996) scrutinized the effects of planning time by using three tasks, i.e., a personal information exchange task, a narration task and a decision-making task. All tasks were performed by the three groups of participants: group 1 had no planning time, group 2 was given 10-minute undetailed planning time and group 3 was given 10-minute detailed planning time.

Findings show an effect for accuracy which is in agreement with Ellis (1987) and in conflict with Crookes (1989). But the prominent finding is that the highest accuracy level is due to undetailed planning condition. To put it differently, more accurate performance was achieved when learners were given planning time but no guidance as to how to use that time. When learners are exposed to planning time, they are likely to plan the language they are going to use, as a result their accuracy might improve. When learners are instructed to allocate their planning time to content organization of the speech, accuracy is likely to suffer. In other words, strong effects of planning time are directed towards complexity of syntax, variety of syntax, breadth of vocabulary items, fluency and naturalness of task performance.

In their subsequent study, Skehan and Foster (1999) showed that even teacher-led planning could be efficacious although in their later study a distinction between language and content-oriented planning did not result in significant differences.

Results compatible to that of Foster and Skehan (1996) were reported by Mehnert (1998). She investigated the effects of three
different amounts of planning time (one-minute, five-minute and 10-minute) as well as no planning condition. The accuracy results indicated that no-planning condition was the least accurate while accuracy improved strikingly with one-minute planning time but with longer amounts of time no further benefit for accuracy was proved.

In another study, Hulstijn and Hulstijn (1984) asked L2 learners of Dutch to perform short oral narrative tasks under four conditions involving combination of two variables: time (participants were supposed to speak as fast as possible or to take as much time as they wanted) and focal attention (learners were to focus on either form or meaning). They concluded that time pressure could not affect the accuracy of word order by itself rather it could be effective in combination with some focus on form.

Wigglesworth (1997) demonstrated that the interaction between planning time and other variables should be taken into account. She used FACETS to establish task difficulty based on performance ratings by skillful judges. She claimed that there was a greater planning effect on complexity measures concerning high proficient learners when performing the most difficult task. She reported a similar result regarding accuracy where an aggregated morphology measure was concerned. However, when accuracy was evaluated in terms of target language use of articles, low proficient learners performed better.

Research to date lends support to the claim that planning time affects language production positively, especially where fluency and complexity are involved (Ortega, 1999). Studies by Crookes (1989), Foster and Skehan (1996) and Wendel (1997, as cited in Ellis, 2003) show that planning time leads to increased fluency. In Foster and Skehan's (1996) study both detailed and undetailed planning had a positive effect. Mehnert (1998) explored different lengths of planning time and found that fluency improved with increased planning time.

In contrary, mixed results have been reported for accuracy. Ellis (1987) concluded that planning time had a positive effect on the accuracy of regular, rule-governed past tense forms but not on
the accuracy of irregular ones. However, Crookes (1989) found no significant effect on the use of articles. Wendel (1997, as cited in Ellis, 2003) could not find a difference in the measure of linguistic accuracy between 10-minute planning and no-planning groups. Foster and Skehan (1996) found that planning time influenced linguistic accuracy when the planning was undetailed but not when it was detailed.

Skehan and Foster (1997) concluded that the type of task influences the effect of planning on accuracy. Planning results in greater accuracy concerning personal and narrative tasks but not in decision-making tasks. Mehnert (1998) reported that greater accuracy was achieved by learners who were provided with one-minute planning time but giving learners more time (five-minute or ten-minute) did not lead to additional improvement in accuracy.

In her study of the effects of planning time in language testing situation, Wigglesworth (1997) found no statistically significant difference on plurals or verb morphology between planning and no planning groups of learners. Ortega (1999) in her study of Spanish learners found positive accuracy effects for planning time on noun-modifiers but not on articles.

Skehan (1996, 1998) argues that the opportunity to plan before L2 task performance decreases communicative stress and enables learners to direct their attentional resources towards some forms. In so doing, planning would act as an external trigger of focus on form that would prevent learners from processing language for meaning only. Thus, the goals of fluency, accuracy and complexity would be balanced in planned performance.

Strategic and On-Line Planning

Wendel (1997, as cited in Ellis, 2003) drew a distinction between strategic (pre-task) planning and on-line (moment-by-moment) planning. Strategic planning takes place in the pre-task phase of task cycle and includes processes like rehearsal and engagement of strategic competence. On-line planning, on the other hand, takes place in the during-task phase and includes a particular type of speech production which integrates careful
production and monitoring, both of which can be comprehended based on Levelt's (1989, as cited in Ellis, 2003) model of speech processing.

Robinson (personal communication, as cited in Skehan & Foster, 2001) mentions that learners may resort to planning time in order to avoid structures which they have not mastered yet and as a result achieve high levels of accuracy. Therefore, learners may make use of strategic planning to prepare the ground for greater accuracy they wish to achieve. Schachter (1974, as cited in Skehan & Foster, 2001) argues that error analysis is difficult to be determined precisely because learners avoid producing structures with which they have problems. Planning makes learners use this strategy effectively. When learners plan the context of a task effectively, they direct their attention towards producing more accurate utterances perhaps by resorting to on-line planning time.

Findings indicate that fluency and complexity improve as a result of strategic planning. Roughly speaking, every study lends support to this claim but as for accuracy, some studies (e.g., Foster & Skehan, 1996; Mehnert, 1998; Wigglesworth, 1997) represent a positive effect while others (e.g., Crookes, 1989; Ortega, 1999) do not. Ortega (1999) argues that strategic planning is unlikely to have any influence on accuracy during task performance.

Yuan and Ellis (2003) concluded that strategic planning resulted in more speech and greater complexity in comparison to no planning condition. It had no statistically significant influence on fluency or accuracy. Therefore, strategic planning increases the quantity of output and some aspects of linguistic complexity but not accuracy in both oral and written modes of L2 production. In fact the main difference refers to fluency.

Some other studies (e.g., Crookes, 1989; Foster & Skehan, 1996) represented a positive effect for strategic planning concerning fluency in oral performance. Yuan and Ellis (2003) failed to show an effect in their study because planners were given limited time for on-line planning whereas in other studies on-line production was not pressured. The lack of time for on-line planning may lead to anxiety which in turn might have a negative effect on fluency.
In strategic planning the provided time can be allocated to the prediction of what is to be completed. Such strategic planning results in greater fluency and complexity but not in accuracy. Crookes (1989) and Ortega (1999) did not find an effect for accuracy while Foster and Skehan (1996), Wigglesworth (1997) and Mehnert (1998) reported positive evidence for accuracy development.

Strategic planning concerns the first stage of Levelt's (1989, as cited in Ellis, 2003) model, i.e., conceptualization while on-line planning concerns formulation and articulation and manifests itself through monitoring. Strategic planning let learners plan propositional content and isolated chunks of language in order to encode them. Even if learners try to formulate their production with more detail, it would be unlikely for them to remember the pre-planned forms while performing the task, in fact they have to formulate their production on-line. As readers remember the propositional content of what they have read rather than the linguistic encodings, strategic planners would remember what they want to say, the schema they have triggered, so to speak, rather than how to say it. It implies that strategic planning does not facilitate formulation especially concerning grammatical morphology. Therefore, complexity and fluency but not accuracy will improve as a result of strategic planning. In contrast, on-line planning makes learners search their long-term memory for grammatical encodings. On-line planners might also get involved in conceptual planning, i.e., the first phase in Levelt's planning processes. To wrap it up, strategic planners are expected to do better than no-planners as far as fluency is concerned while on-line planners are likely to perform well regarding accuracy.

**Detailed and Undetailed Planning**

Foster and Skehan (1996) explored the effects of more guided planning. They compared the results of undetailed and detailed planning in which learners were provided with metacognitive advice about how to pay attention to syntax, lexis, content and organization of their L2 production. The results
showed that regarding narrative task, the guided planners were more fluent than the unguided ones but there was no significant difference for the personal and decision-making tasks. They concluded that asking learners to focus on form or meaning had no marked effect on fluency. In the same study, Skehan and Foster addressed the source of planning and compared the effects of teacher-led planning, individual learner planning and group-based planning on task performance. As far as fluency was concerned, individual learner planning was the most effective and accuracy was the greatest when the planning was teacher-led.

Foster and Skehan (1996) found that both the undetailed and the detailed planners produced fewer errors than the no-planners on the decision-making task, and that only the undetailed planners performed more accurate language than the no-planners on the personal task, while there was no effect for planning on accuracy for narrative task. They concluded that undetailed planning resulted in greater accuracy concerning personal and narrative tasks but not on the decision-making one. They claimed that the detailed planners use more subordination than the undetailed planners who in turn produce more subordination than the no-planners.

Research Questions and Hypotheses

This study seeks to answer the following research questions:

1. What effects does planning time exert on the accuracy of learners' oral production?
2. What effects does planning time exert on the fluency of learners' oral production?
3. Do detailed and undetailed planning bring about differential effects on the accuracy of L2 performance?
4. Do detailed and undetailed planning bring about differential effects on the dysfluency of L2 performance?

Underlying the present study is the information processing theory which claims that learners possess a limited capacity which
makes attending to all aspects of language at the same time almost impossible. Skehan (1998) and VanPatten (2002) suggest that L2 learners, especially those with limited proficiency, cannot deal with accuracy and fluency simultaneously under the real time pressure. Planning time is predicted to prepare learners to focus on form and meaning in their interactions.

The following hypotheses are formulated for the above-stated research questions:

1. Providing planning time will enhance the accuracy of L2 production.
2. Providing planning time will enhance the fluency of L2 production.
3. The speech produced under the undetailed planning condition will be more accurate than that produced under the no planning condition but less accurate than the detailed one.
4. The speech produced under the detailed planning condition will be less dysfluent than that produced under the no planning and the undetailed planning conditions.

Method

Participants

The participants of this study were 61 students of Payame Noor University (Ardebil Branch) majoring in translation studies in EFL situation. The proficiency test, CELT (a Standardized Comprehensive English Language Test for Learners of English) was administered to 94 students who sat for the test voluntarily. From this pool 61 students whose scores ranged from 27 to 55 participated in the study. Every effort was exercised to make sure as to the homogeneity of the groups in terms of their level of proficiency.

They were divided into three groups randomly. These three groups of participants were labeled as the no-planners, the undetailed planners and the detailed planners based on the conditions which were supposed to be provided for them.
In order to make sure that there was no statistically significant difference among the three groups of participants, their scores on the proficiency test were put into a one-way ANOVA. The results of the ANOVA test showed that there was no significant difference across the three groups of participants ($F = .37, p = .691$). Based on the results obtained, the three groups of the study were taken to be almost equivalent in terms of their English proficiency. Means and standard deviations for all the three groups have been presented in Table 1 below.

Table 1
*Means and standard deviations of proficiency scores for the three groups*

<table>
<thead>
<tr>
<th></th>
<th>No-planners</th>
<th>Undetailed planners</th>
<th>Detailed planners</th>
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</thead>
<tbody>
<tr>
<td>G1 (n = 17)</td>
<td>M = 40.35</td>
<td>M = 42.73</td>
<td>M = 40.67</td>
</tr>
<tr>
<td>Sd = 7.93</td>
<td>Sd = 7.36</td>
<td>Sd = 9.60</td>
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</table>

Group 1 (including 17 participants as the no-planning group) watched a five-minute episode of a silent cartoon, *Pat and Mat*, after which they were asked to narrate their accounts of watching immediately without any pre-task planning. Then Group 2 (including 15 participants as the undetailed planning group) watched the same episode. This time, however, the participants in group 2 were given a five-minute planning time to give some organization to their narration. Before their production the group was not given any cues as to how they could use the planning time. The 3rd Group (including 15 participants as the detailed planning time group) watched the same episode of the cartoon. A five-minute pre-task planning was provided along with some guidance on L2 accuracy. After watching the cartoon played, all 61 participants narrated the episode on the tapes provided at the laboratory of the university but unfortunately due to some technological failure, only 47 (21 males and 26 females) recordings were qualified enough to be transcribed.
Materials

Proficiency test is taken to be one of the important instruments which are used in almost all investigations which relate to L2 acquisition in one way or another. By administering the proficiency test (CELT in this study), it was assured that the groups involved were homogeneous in terms of their L2 proficiency.

In addition to the proficiency test, which was administered to assure the homogeneity of the groups, cassettes and tape recorders were other key instruments for recording the oral production of all participants of the study. A video-player was also used to play the cartoon which was supposed to be watched and narrated by the participants.

Procedure

All the three groups were supposed to watch a five-minute episode of *Pat and Mat* in the laboratory respectively. In order to prevent any confusion, they were instructed in Persian what they were going to do. At the beginning of data collection Group 1 narrated whatever they had watched as soon as the episode came to its end. They had to record their narration on the tape recorder under the real time pressure. They were told that they had better use as many sentences as they could. After five minutes they stopped their narration and left the laboratory.

The 2nd Group did the same but when the cartoon episode was over, they were told that they had a five-minute planning time to think about whatever they were going to narrate and to organize the form and meaning of their production. They could take notes during their planning time but while narrating their account of watching they had to put them aside.

Finally for the third Group the episode was played as it was the case with Group 1 and 2. As soon as the episode came to its end, the researchers informed participants that they had a five-minute planning time to think about the content and forms that they were to use in narrating their account of watching the cartoon.
Like Group 2 they could take notes and had to put them away when narrating. Since the simple present tense and past tense are of paramount importance in narrations, they were instructed to pay attention to them as well as the singular third-person -s, regular and irregular verbs in past tense, plural -s, the agreement of verb and subject and the definite article the. When their five-minute pre-task planning time was over, they were required to narrate the cartoon bearing the instructed forms in their mind.

Measures

All recordings were transcribed in detail inserting pauses and hesitations. As mentioned in the preceding sections, in this study two aspects of L2 performance namely, accuracy and fluency were taken to be focused on as two important facets of language proficiency.

To measure the accuracy of L2 production, Foster and Skehan (1996) used error-free clauses as a percentage of the total number of clauses. Following them first the number of clauses in every single transcription was counted to measure this aspect of L2 production. Then the number of error-free clauses, i.e., clauses which were syntactically and semantically accurate, was counted. Learners' narration was measured by calculating the number of error-free clauses as a percentage of the total number of clauses.

Following Skehan and Foster (1999) the dysfluency of L2 production was measured by counting the number of false starts (abandoning a word or phrase before completing), repetitions (repeating the same word or phrase), reformulations (reformulating the erroneous utterance) and replacements (replacing one word or phrase with another one) in each transcription.

Data Analysis and Results

To compare the accuracy of the three groups of participants in narrating their accounts of watching the episode played for them, the accuracy indices obtained for the three groups were put
into a one-way ANOVA. Table 2 shows the descriptive statistics for the influence of planning condition, as the independent variable on L2 accuracy, as the dependent variable.

Table 2
Descriptive statistics for accuracy

<table>
<thead>
<tr>
<th>Planning condition</th>
<th>Mean</th>
<th>SD</th>
</tr>
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<tbody>
<tr>
<td>No-planning</td>
<td>62.51</td>
<td>17.20</td>
</tr>
<tr>
<td>Undetailed</td>
<td>72.16</td>
<td>12.62</td>
</tr>
<tr>
<td>Detailed</td>
<td>75.71</td>
<td>37.42</td>
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</table>

As it is obvious in Table 2 the detailed planners have the highest mean (M = 75.71) in comparison to the undetailed planners (M = 72.16) and the no-planners (M = 62.51). The undetailed group has produced more accurate speech than the no-planning group while the detailed group has outperformed both the no-planners and the undetailed planners. Simply put, the detailed planners > the undetailed planners > the no-planners.

A one-way ANOVA was conducted to see if the differences observed as a result of planning condition (no-planning, undetailed planning and detailed planning) on L2 accuracy were statistically significant. Table 3 represents the results.

Table 3
One-way ANOVA results for the effects of planning condition on accuracy

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>1510.28</td>
<td>2</td>
<td>755.14</td>
<td>1.25</td>
<td>.148</td>
</tr>
<tr>
<td>Within groups</td>
<td>26568.16</td>
<td>44</td>
<td>603.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>28078.44</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The one-way ANOVA run demonstrates that the difference among the three groups concerning L2 accuracy is not that much meaningful. Technically speaking, the $F$-value ($F = 1.25, p = .148$) did not turn out to be statistically significant to claim that planning condition exerted an influence on L2 accuracy. Although there were differences among the means of the three groups of participants, their L2 accuracy was not affected significantly by exposing them to three different conditions of planning time.

To examine the second aspect of L2 performance, i.e., fluency, the number of repetitions, false starts, reformulations and replacements were counted separately. In fact they are taken as the components of dysfluency. The more the number of these components, the more dysfluent the production would be judged to be. A negative correlation exists between fluency and the number of components of dysfluency.

For each component a separate analysis was carried out in the SPSS. In addition, a single analysis was conducted for dysfluency which included the total number of all components of dysfluency. Table 4 shows the descriptive statistics obtained for dysfluency in general and for its composing components.

Table 4
Descriptive statistics for dysfluency of the three groups

<table>
<thead>
<tr>
<th>Component</th>
<th>No-planners Mean (SD)</th>
<th>Undetailed planners Mean (SD)</th>
<th>Detailed planners Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dysfluency</td>
<td>14.00 (13.43)</td>
<td>7.67 (4.51)</td>
<td>7.33 (4.03)</td>
</tr>
<tr>
<td>Repetitions</td>
<td>10.29 (12.90)</td>
<td>5.40 (3.72)</td>
<td>4.73 (2.87)</td>
</tr>
<tr>
<td>False starts</td>
<td>1.35 (.93)</td>
<td>.60 (.99)</td>
<td>.73 (.96)</td>
</tr>
<tr>
<td>Reformulations</td>
<td>1.35 (1.37)</td>
<td>1.40 (1.24)</td>
<td>.87 (.83)</td>
</tr>
<tr>
<td>Replacements</td>
<td>1.00 (1.06)</td>
<td>.27 (.46)</td>
<td>1.00 (1.25)</td>
</tr>
</tbody>
</table>

By a brief look at the findings presented in Table 4 for the first component of dysfluency, i.e., repetitions, it becomes clear that there is a significant difference among the three groups of participants. The no-planning group shows the highest mean (M =
The no-planning group produced the least fluent narration ($M = 14.00$). The undetailed planners, however, did better than the no-planning group ($M = 7.67$). The third group, the detailed planners, outperformed both the no-planners and the undetailed planners but the difference between the mean of the undetailed planners ($M = 5.40$) and that of the detailed planners ($M = 4.73$) was not that much significant while the difference between the no-planners ($M = 10.29$) and the undetailed ones ($M = 5.40$) is quite obvious.

The second component, i.e., false starts, which was calculated by the number of abandoned words or phrases, shows that the no-planning group has produced the least fluent narration due to its high mean of dysfluency ($M = 1.35$). The undetailed planners, on the other hand, performed very well in comparison to the other groups. The calculated mean for this group is .60. The detailed planners produced less fluent narration ($M = .73$) than the undetailed group ($M = .60$).

The third component, i.e., reformulations, which was measured by counting the number of erroneous words or phrases corrected by the participants, represents unclear results. The undetailed planners have produced the least fluent speech based on their mean ($M = 1.40$). Surprisingly enough, the no-planners ($M = 1.35$) outperformed the undetailed group. However, the detailed planners ($M = .87$) outperformed the other groups.

The last component, i.e., replacements, which was measured by the number of words or phrases that have been replaced by some others shows strange results. Comparing the means of the three groups shows that the undetailed planners ($M= .27$) outperformed the no-planners ($M = 1.00$) and the detailed planners ($M =1.00$).

In order to measure dysfluency as a single unit, the sum of components calculated is presented in Table 4. It is clear that the detailed planners have produced more fluent narration ($M = 7.33$) than the undetailed planners ($M = 7.67$) while the undetailed planners ($M = 7.67$) have outperformed the no-planning group ($M = 14.00$). Interestingly enough, the difference between the no-planners and the planners, i.e., both the undetailed and the detailed
planners is significant enough to see the positive effects of planning time on decreasing the rate of dysfluency.

To have a better view of the performance of the three groups of participants, their scores of dysfluency as a single unit and its different composing components were put into a series of one-way ANOVAs. Table 5 represents the ANOVA results for each component separately and for dysfluency as a single unit with all the above-mentioned components included.

Table 5
One-way ANOVA results for the effects of planning on repetitions

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>M</th>
<th>F-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>299.852</td>
<td>2</td>
<td>149.92</td>
<td>2.22</td>
<td>.06</td>
</tr>
<tr>
<td>Within groups</td>
<td>2972.06</td>
<td>44</td>
<td>67.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3271.91</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 indicates that the F-value ($F = 2.22, p = 0.6$) is not significant enough to claim that planning condition has exercised remarkable influence on repetition as a component of dysfluency.

Table 6
One-way ANOVA results for the effects of planning on false starts

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-value</th>
<th>p</th>
<th>Location of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>5.244</td>
<td>2</td>
<td>2.62</td>
<td>.03</td>
<td>.016*</td>
<td>NP-UP</td>
</tr>
<tr>
<td>Within groups</td>
<td>40.41</td>
<td>44</td>
<td>.91</td>
<td></td>
<td>.350</td>
<td>NP = No-planners, UP = Undetailed planners, DP = Detailed planners</td>
</tr>
<tr>
<td>Total</td>
<td>45.66</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On the other hand, Table 6 shows a significant $F$-value ($F = 2.85, p = .03$) which lends support to the claim that planning
condition affects L2 fluency. The post-hoc LSD test revealed that the difference between the no-planners and the undetailed planners as well as the no-planners and the detailed planners are statistically significant. While the difference between the undetailed planners and the detailed planners is not significant, the difference between the no-planners and the undetailed planners turns out to be more significant than that of the no-planners and the detailed planners.

Table 7
ANOVA results for the effects of planning on reformulations

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2.65</td>
<td>2</td>
<td>1.328</td>
<td>.96</td>
<td>.197</td>
</tr>
<tr>
<td>Within groups</td>
<td>61.21</td>
<td>44</td>
<td>1.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63.87</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7 represents an F-value ($F = .96, \ p = .197$) which is far from being significant.

Table 8
One-way ANOVA results for the effects of planning on replacements

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-value</th>
<th>NP-UP</th>
<th>NP-DP</th>
<th>UP-DP</th>
<th>Location of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>5.49</td>
<td>2</td>
<td>2.74</td>
<td>.035*</td>
<td>.021*</td>
<td>.500</td>
<td>.024</td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>42.93</td>
<td>44</td>
<td>.97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48.42</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8 shows that there is a positive relationship between replacement and planning time. The $F$-value observed is 2.81 at $p$
= .035 which shows that there is some significant differences among the groups. To find out the exact location of differences among the three groups, a post-hoc LSD test was run. It shows that only the difference between the no-planners and the undetailed planners is significant. The difference between the no-planners and the detailed planners as well as the difference between the undetailed and the detailed planners are not significant. Under the undetailed planning condition participants replaced their erroneous utterances more than the two other conditions.

Table 9 shows the measure of dysfluency as a whole. As it is clear in the table, the F-value observed for dysfluency ($F = 2.97, p = .03$) is statistically significant. To show the precise location of differences among the three groups an LSD test was run.

The results of the LSD test show that the difference between the no-planning group and the undetailed group is statistically significant as it is the case with the difference between the no-planning group and the detailed planners. The difference between the undetailed and the detailed group is not significant. The difference between the no-planners and the detailed planners is more significant than the difference between the no-planners and the undetailed planners. It implies that the detailed planners have produced more fluent L2 production than the undetailed ones.

Table 9  
*One-way ANOVA results for the effects of planning on dysfluency*  

<table>
<thead>
<tr>
<th>Location of significance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-value</th>
<th>p</th>
<th>NP-UP</th>
<th>NP-DP</th>
<th>UP-DP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>459.29</td>
<td>2</td>
<td>229.64</td>
<td>.03*</td>
<td>.024*</td>
<td>.019*</td>
<td>.459</td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>3396.66</td>
<td>44</td>
<td>77.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3855.95</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The first research question addressed the effects of planning time on L2 speech accuracy. The findings in this study did not indicate a statistically significant effect on L2 accuracy as a result of providing planning time, which is contrary to the findings of Foster and Skehan (1996), Mehnert (1998) and Wigglesworth (1997). Robinson (personal communication, as cited in Skehan & Foster, 2001) as well as Schachter (1974, as cited in Skehan & Foster, 2001) claim that planning time makes learners avoid making use of structures that they have not mastered yet. As a result they are likely to produce more accurate utterances. The findings of this study call their argumentations into question. Although they have the required time to avoid uttering inaccurate structures or structures they are not that much familiar with, when they come to produce L2 under the real time pressure, they fall short of using this strategy.

It is safe to argue that pre-task planning time gives learners the opportunity to predict what should be included in the completion of the task. In so doing, fluency is likely to improve to a great extent but accuracy might remain as a challenge. The results of the study reveal that participants were not able to use the pre-planned forms when they were to narrate the story under the real time pressure. Despite the fact that no significant differences were found among the three groups, their means show a trend towards producing more accurate utterances on the part of the detailed planners.

On the other hand, this study lends support to the findings of Ortega (1999) and Yuan and Ellis (2003) who concluded that the pre-task planning time cannot lead to the development of accuracy.

Although the F-value was not significant, there were differences among the means of the three groups. The undetailed planners outperformed the no-planners while the detailed planners did better than the undetailed group. In the pre-task planning learners were given five minutes to trigger their lexical and grammatical repertoire. After five minutes they were given another
five minutes to narrate their utterances. Again in this case they are under the real time pressure and they tend to prioritize fluency over accuracy. The pre-task planning let learners plan the propositional meaning and isolated forms to express the intended meaning. As readers remember the content of what they have read rather than the exact linguistic elements, the pre-task planners only remember the content they have already planned to narrate. Therefore they forget what structures they are going to resort to. But if they are provided with on-line planning time, they will not be under pressure to narrate the episode during a limited time span. Since they have moment-by-moment decisions by paying on-line attention to both form and meaning, they might produce accurate and less dysfluent utterances.

It seems that when learners are given pre-task planning time, even though they have enough time to prepare what they are going to utter, they are likely to forget the planned structures while performing the task under the real time pressure. When learners are provided with pre-task planning, they remember the content better than linguistic structures. But if they are given on-line planning time, they will have enough time to organize the syntax and semantics of their utterances and to overcome their stress. As a result, they would produce more accurate and less dysfluent utterances.

The second research question addressed the effect of planning time on L2 fluency. The results indicate that fluency is affected by the planning time significantly, which gives more support to the findings of Wendel (1989, as cited in Ellis, 2003), Yuan and Ellis (2003), Crookes (1989) and Foster and Skehan (1996).

When learners are given time prior to their narration, they think more about the content itself rather than the form. They may draw a mind map so that they can narrate the story in tandem. They get involved in narrating the story and put emphasis on fluency at the cost of accuracy due to attention's limited capacity.

The third research question was formulated to explore the differential effects of the undetailed and the detailed planning time on L2 accuracy. Findings show that the detailed planners produced
more accurate utterances than the undetailed planners, which is contrary to the findings of Foster and Skehan (1996) who concluded that the undetailed planners outperformed the detailed ones. Since the detailed planners are instructed to pay extra attention to the essential forms of L2 production, it is likely that they would try to avoid unacceptable forms in their narration as far as they can. Needless to say, their accuracy would be affected to some extent.

The last research question had to do with the effects of the undetailed and the detailed planners on L2 dysfluency. Results show that the detailed planners produced less dysfluent utterances vis-à-vis the undetailed planners. Since the content becomes ready-made as a result of the planning time on the part of the detailed planners, they might produce L2 speech with fewer number of dysfluency indices. Seen from a different perspective, it can be claimed that since learners are provided with the task-essential forms in advance by the instructor, they do not need to spend that much attention for finding the appropriate forms at the moment of production and are set free from too much cognitive load for processing.

Pedagogical Implications

Prior to task performance, language teachers are recommended to allow language learners to organize their output in terms of content and form. During pre-task planning, teachers can direct the attention of language learners towards focusing on some particular target features which might be obligated by the task design and which the learners are ready to pick up. Too complex structures which are likely to exercise too much processing challenge on the part of language learners are not suitable candidates for such a purpose. Guided planning is believed to be of greater use regarding language development.

It has to be emphasized that the implications hold true with regard to private language institutes and university classes rather than high schools where teachers are under time pressure to meet the state-approved syllabi which have nothing to do with oral
language production. As Maftoon (2002) rightly asserts “the EFL milieu of Iran presents challenges to those who wish to implement CLT… ” (p. 50). Centrality of the Iranian educational system, lack of exposure to authentic language, large classes, among some other factors are the reasons based on which Maftoon argues that implementing CLT in Iranian high schools is doomed to failure.

Suggestions for Further Research

The present study did not take into account different levels of proficiency. Only intermediate learners participated in the study. To examine the effects of planning time on L2 accuracy and fluency, different levels of proficiency should be included in the study. Different results might be observed as a result of interaction among different conditions of planning time and different levels of proficiency.

Along with pre-task planning time, on-line planning can be given to learners to see whether different conditions of planning time have differing effects on L2 accuracy and fluency of participants with different levels of proficiency. It is predicted that on-line planning time would lead learners to produce more accurate utterances since they would have enough time to think moment-by-moment on the structures of their speech. Meanwhile fluency would be decreased since learners would make use of more pauses and hesitations to think about the appropriate and accurate forms along with the content they will try to produce.

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