Turkish Students' Comprehension Monitoring and Strategic Behaviors While Reading in French: A think-aloud study

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ABSTRACT

The present study aims to examine how Turkish students of French monitor their understanding and how they behave strategically when reading a French literary text. Differences between more proficient and less proficient readers are also explored in terms of types and frequencies of strategies used during the global monitoring cycle, which encompasses Evaluation, Action, and Checking phases. The data was collected through think-aloud protocols from eight students who studied French in the Department of Foreign Languages at a Turkish university. The findings reveal that the participants used mostly instrumental strategies from the Action phase to deal with problems at word or sentence level. Furthermore, they show that the more proficient participants in the study used a wider range of strategies from different phases of the monitoring cycle more frequently compared to their less proficient counterparts. However, the only significant difference found between the two proficiency groups relate to the *skipping and ignoring a problem* strategy.

Reading research supports the proposition that successful readers are able to monitor and evaluate their understanding of text, plan their approach to reading, and solve comprehension problems encountered during reading. They are able to tap into their cognitive and metacognitive resources and adapt to the exigencies of the task at hand (Koda, 2005). These behaviors are characteristic of strategic reading, an activity particularly important for students in second/foreign language (L2) departments, as they are required to read authentic texts as part of their curricula.

In Turkey, French as an L2 is generally studied in departments of French language and literature, of which French literature has traditionally been an essential component. However, students enrolled in

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these departments are rarely prepared to read authentic French literary texts effectively, as English is the dominant foreign language in all public schools. As a result, French language and literature university departments admit students with little or no background in French. To make up for this, students whose knowledge of French is lacking are required to complete an intensive French program at university before they can commence their Bachelor's degree. This program, called the "French preparatory class", aims to provide students with enough competence in French to allow them to use this language in their bachelor degree. While the purpose of this preparatory program is to equip students with a sound knowledge of French in the four language skills, it is particularly important for the program's instructors to focus on reading skills, in order to enable students to read short literary texts in French at the intermediate level by the time they start their Bachelor's program. Being able to attain such a level of reading proficiency in a relatively short time is often considered challenging by both the students and their instructors. Indeed, once they have completed their French preparatory class, many students still struggle to understand the short literary texts in French they are required to read as part of their Bachelor's programs.

Consequently, in order to improve students' reading skills in French and provide more effective reading instruction in the educational context described above, there is a need to understand how preparatory class students read and to examine empirically how do students behave strategically. More specifically, the chief aims of this study are to understand how these students monitor their understanding and to identify which reading strategies they use. Once identified and understood, a strategy training program, developed by taking into account their characteristics and needs, could be implemented with the aim of developing the reading capacity of pre-Bachelor students.

To the authors' knowledge, to date, there is no study examining the reading strategies of Turkish university students studying French at the intermediate level in the context of reading a literary text. The studies related to L2 strategies carried out in Turkey have mostly focused on English at university level (e.g., Akarsu & Harputlu, 2014; Ghasemi, 2010; Karapınar, 2014; Koban-Koç & Koç, 2016; Mutlu & Eröz-Tuğa, 2013; Özek & Civelek, 2006), and there are only a few investigations related to learners studying French (e.g., Bak, 2011; Özkan-Gürses & Bouvet, 2016). In most of the studies focusing on reading, reading strategies have mainly been investigated through written questionnaires, which could only provide information about students' self-awareness of reading strategies use after the reading task.

Although it is acknowledged that self-awareness of reading strategies is essential in L2, questionnaire-based studies do not necessarily indicate whether these strategies are actually used during reading. Consequently, it is also important to use methodologies that allow researchers to observe readers during a reading task in order to gather detailed information about their use of reading strategies *in situ*. Think-aloud—a type of verbal reporting method also called concurrent verbalizations—are commonly used in reading research to investigate the actual use of reading strategies.[3] Participants are instructed to verbalize their thoughts directly as they come to mind, without attempting to interpret them, as part of performing the task (Ericsson & Simon, 1993). During the procedure, the participants provide information remaining in their short-term memory (Kormos, 1998). As protocol analysis offers detailed understanding of reading and reading-related phenomena (Afflerbach, 2000), numerous think-aloud studies have been carried out, particularly in English-speaking environments. However, there are few studies based on think-aloud procedures that have investigated language learners' reading strategies specifically in the Turkish context (e.g., Akyel & Erçetin, 2009; Bak, 2011; Kayacan, 2005; Yaylı, 2010). Yet, in this context, the

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[3] It is important to note that think-aloud protocols, which are likely to be influenced by the participants' ability to verbalize and other individual differences (e.g., linguistic knowledge, background knowledge relating to the text, etc.), may not reveal all processes related to the actual use of reading strategies (Smith & King, 2013). Consequently, it should be kept in mind that the authors' reliance on terms such as "the actual use of reading strategies" or "strategies used/employed/utilized by readers" actually refers to strategies as reported to be used/employed/utilized by the participants in this study while reading a specific text.

first language (L1) and, in particular, the distance between L1 and L2 could influence the type and frequencies of problems encountered during reading as well as the strategies used to sustain comprehension. Indeed, Ghasemi's (2010) comparative study based on advanced learners of English in four Turkish universities and in two Iranian universities suggests that L1 could influence strategy use. Turkish learners face an important cultural and linguistic gap between their native language and French. This could influence the reading difficulties they encounter and the strategic approaches they put in place to solve problems and monitor their comprehension. There is therefore a need for more think-aloud-based studies to better understand Turkish students' strategic behaviors while reading in French as an L2 and to investigate the differences in strategic approaches between more and less proficient readers. It is hoped that the findings of the present study conducted in an unexplored context will contribute positively to the field of L2 reading strategies research.

2. Purpose of the Study

The chief aim of this study is to examine comprehension monitoring and strategic behaviors of Turkish university students who studied French in a language preparatory class when reading a French literary text. Specifically, the present study addressed the following research questions in the context of studying French in a preparatory class:

1. How do Turkish university students behave strategically when reading a French literary text, especially with reference to the types and frequencies of reading strategies used during the Evaluation, Action and Checking phases of the monitoring cycle?

2. What are the differences between more proficient and less proficient readers when reading a French literary text, especially with reference to the types and frequencies of reading strategies used during the Evaluation, Action and Checking phases of the monitoring cycle?

3. Background to the Study

3.1. L2 Reading as a Problem-solving Process

Reading can be defined as an active, constructive, and responsive process in which the reader aims to comprehend the text by using their background knowledge. It is a multifaceted and complex operation that involves the coordinated execution of a number of processes grounded in attention, memory, perception, comprehension (Daneman & Merikle, 1996; Kern, 1989; Koda, 2005). Furthermore, the reading process has cognitive, metacognitive, social, and affective dimensions; and as Giasson (2004) has argued, the relation between the individual, the text, and the context influences positively the degree of comprehension.

L2 reading research, which emerged in the late of 1970s, has been much influenced by L1 reading research. However, L2 reading is also influenced by other variables related to L2 (Koda, 2005). One of the aspects specific to L2 is the cultural and linguistic distance that L2 readers experience while reading. L2 readers are more likely to encounter more unfamiliar language and cultural references as well as comprehension problems when reading authentic or unfamiliar texts than L1 readers would, therefore they have to "repair" more gaps in their comprehension (Alsheikh & Mokhtari, 2011; Block, 1992). Consequently, L2 reading can be viewed as a problem-solving process.

3.2. L2 Reading and Comprehension Monitoring

Metacognition, strongly associated with problem-solving, is a fundamental aspect of L2 reading (Block, 1992; Koda, 2005). It refers "to the knowledge and control we have of our own cognitive processes" (Baker, 2002, p. 77). Comprehension monitoring is an important aspect of metacognition. In the main, there have been two different approaches to defining comprehension monitoring in the literature. On the one hand, comprehension monitoring is considered a metacognitive process that includes evaluation (whether or not the reader understands) and regulation of understanding (taking necessary steps to solve comprehension problems to make sure that comprehension takes place) (Baker, 2002; Keener & Hacker, 2012). Similarly, according to Paris and Myers (1981), comprehension monitoring involves evaluation, planning, and regulation. Conversely, as Keener and Hacker (2012) stated comprehension monitoring has often been limited to the evaluation of understanding, and "regulation is considered a separate and unique process" (p. 691). The distinction between evaluation and regulation likely developed, in part, as a result of research in the field of metacognition (Keener & Hacker, 2012). Indeed, metacognition has been conceptualized as having two main components: metacognitive knowledge and metacognitive regulation, which consist in planning and monitoring cognitive activities and checking the outcomes of these activities (Livingston, 1997). It can be argued that even if it is restricted to the evaluation process, comprehension monitoring drives the regulation of understanding. Therefore, comprehension monitoring ought to be considered a major component of reading (Baker, 2002; Oakhill, Hartt, & Samols, 2005**;** Paris & Myers, 1981; Sheorey & Mokhtari, 2001). It is also essential in L2 reading, as L2 reading usually requires more cognitive and metacognitive resources than L1 reading. L2 readers should evaluate whether they understand or not, take immediate actions in the case of comprehensions problems, and check whether their actions are efficient in sustaining, repairing, and enhancing comprehension. Those actions deliberately implemented by L2 readers are defined, in the present study, as problem-solving reading strategies.

3.3. L2 Reading Strategies

Reading strategies can be defined as "deliberate, conscious procedures used by readers" to construct meanings of text and to facilitate comprehension (Sheorey & Mokhtari, 2001, p. 433).

L2 reading strategies have been of interest to researchers since the late 1970s. Hosenfeld (1977), for example, who pioneered L2 reading research, investigated reading strategies used by high school students studying German, Spanish, and French in the United States. She found that successful readers read in large units, kept the meaning of the passage in mind, skipped unimportant elements, and had a positive self-concept as readers. Conversely, less successful readers read in small units, lost the meaning of the sentence, did not skip words, and had a negative self-concept as readers. Block (1986) examined comprehension strategies used by nonproficient readers (native speakers of English and nonnative speakers) and classified strategies as general and local strategies. While general strategies were defined as strategies used to comprehend and monitor comprehension, local strategies were defined as strategies put in place to understand a specific linguistic unit. Block identified four characteristics across two groups labeled "integrators" and "nonintegrators": (a) integration; (b) recognition of aspects of text structure; (c) use of general knowledge, personal experiences, and associations; and (d) response to text in extensive mode rather than in reflexive mode.

Other studies, however, have not supported a systematic relationship between distinct sets of strategies and reading performance (Koda, 2005). For instance, Sarig (1987) suggested that successful reading was the result of "the quality of the reader's unique combination of moves rather than the occurrence of certain moves or lack of others" (p. 118). Similarly, Anderson (1991) found that no single set of strategies contributed significantly to reading performance. He stated that "strategic reading is not simply a matter of knowing what strategy to use, but also the reader must know how to use it successfully

and know how to orchestrate its use with other strategies." (pp. 468-469). This ability to know which strategy to employ in different contexts, to know how to use them and "to orchestrate" them is referred to as *metacognitive awareness* which is the knowledge readers have of reading strategies.

The effect of metacognitive processes on L2 reading has led several studies to focus on comprehension monitoring strategies (Block, 1992; Yang, 2006) and on cognitive and metacognitive reading strategies (Anderson, 1999; Bouvet, 1998; Chamot & El-Dinary, 1999; Sheorey & Mokhtari, 2001). Among think-aloud studies, Bouvet (1998), for example, investigated monitoring and problem-solving strategies used by students of French while reading a literary text. He found that proficient and less proficient readers tended to use similar strategies though differently and with different purposes. His study suggested that proficient readers had a better ability to integrate meaning and construct text in a cohesive and synthetic fashion than less proficient readers.

Chamot and El-Dinary (1999) investigated reading strategies used among learners (high-rated proficiency and low-rated proficiency) in elementary French, Japanese, and Spanish immersion classroom, based on the data gathered through think-aloud protocols. They classified strategies into three categories: cognitive strategies, metacognitive strategies, and metacognitive awareness involving readers' comments[4] rather than the actual use of a particular strategy. The findings showed that high-rated students (i.e., proficient students) used a greater proportion of background-knowledge strategies (inferences, predictions, elaborations). Conversely, low-rated students (i.e., less proficient students) used a greater portion of phonetic decoding than high-rated students.

In the countries such as Turkey, where English is commonly taught as a foreign language, investigations of reading strategies based on think-aloud protocols have mainly been carried out in the context of learning English as Foreign Language (EFL). For example, in Iran, Ghavamnia, Ketabi, and Tavakoli (2013) studied reading strategies used by EFL learners at a university (investigating proficient and less proficient readers). The study findings revealed that although the overall number of strategies used by two groups was similar, there were differences in the types of strategies used. Proficient readers utilized more meaning-oriented strategies, while less proficient readers adopted a word-centered model as they attempted to process word meaning rather than trying to comprehend and retain the meaning of the text.

Recently, Kasemsap and Lee (2015) studied Thai vocational college students' application of reading strategies in reading English texts through data collected via questionnaire surveys, think-aloud experiments and semi-structured interviews. The results indicated that students of higher and lower English proficiency levels used similar typologies of reading strategies. The overall use of reading strategies did not differ significantly between the higher and lower level English proficient students. However, higher level students utilized "retrieval strategies" (e.g., previewing text before reading, using prior knowledge, using context clues to ascertain the meaning) more frequently than lower level proficient students.

Among the studies based on the think-aloud method carried out in Turkey, Kayacan (2005) examined high school students' reading strategies while reading in English. She found a very small difference between successful and less successful readers in terms of strategy type. However, she argued that successful readers used more frequently the *questioning and guessing the meaning of unknown words* strategy than less successful readers. In another study of English learners in Turkey, Yaylı (2010) investigated cognitive and metacognitive strategies employed by students in an English Language Teaching department. She found that the proficient readers employed more frequently cognitive and metacognitive reading strategies than the less proficient readers. In relation to learners of French, Bak (2011) compared reading strategies of university students who studied French and English at advanced

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[4] Such as comments about why or when a strategy was useful, about the students' learning preferences, and evaluative comments about oneself as a learner.

levels across Turkish (L1), English, and French (FL) while reading a literary text. She found that there were similarities among the participants in terms of strategy use across the three languages. The results showed that the most used strategy was *identifying keywords and phrases,* whereas the least used strategies were *intertextuality* and *using prior knowledge.*

The review of the studies deemed relevant to the present investigation indicates that there may be differences between more successful and less successful readers in terms of their use of particular strategies and in terms of the categories from which these strategies are drawn. The findings of these studies suggest that proficient readers generally rely on meaning-oriented, cohesive and background knowledge strategies and that, unlike less proficient readers, they are able to understand texts in a synthetic fashion.

Let's now turn our attention to methodological considerations pertaining to the present study.

4. Method

4.1. Context

The present study involved students of four French preparatory classes taught by six French instructors in the Department of Foreign Languages at Eskişehir Osmangazi University, Turkey. These French classes are open to the students of the Department of Comparative Literature who choose French as a second foreign language. These students need to meet the requirement of a sound knowledge of a second foreign language (French or German) at Intermediate level of proficiency before their university studies. Approximately 150 students of the Department of Comparative Literature enroll in the preparatory class each year; approximately half of them choose French. The objective of this one-year program is to achieve the B1 level of the Common European Framework of Reference for Languages through approximately 900 hours of instruction. The students' academic evaluation is based on four midterms examinations, quizzes, projects, online activities, and the final examination. The students who cannot pass the final examination are eligible to re-sit the examination.

4.2. Participants

At the beginning of the academic year, when the study was carried out,[5] 101 students were enrolled in the French preparatory program. Sixty-three students (47 females and 16 males) attended classes regularly and sat all the exams. Their age ranged from 18 to 25 years (M = 20.0).

In order to investigate the second research question, more proficient and less proficient categories of participants were determined according to 63 students' scores of a reading comprehension test in French.[6] The mean of the reading comprehension test was 9.93 out of 20 (n = 63, SD = 2.53, min = 5, max = 17). The T scores (M = 50, SD = 10) of the reading comprehension test (min = 30.6, max = 77.8) were also calculated. The students with the reading test T score above 60/100 (above 1 SD) were categorized as More Proficient (MP) readers; those below 50/100 were categorized as Less Proficient (LP) readers.[7] Incidentally, there was a margin of 16 percentage points between the lower MP participant and the higher LP participant (refer to Table 1 below).

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[5] For the academic year 2012-2013.

[6] The *KR20* coefficient of the reading comprehension test, which had four texts and 20 questions, was determined to be .65 (Özkan-Gürses & Bouvet, 2016).

[7] Among the 63 students, there was only one student above 2 SD (above 70), who volunteered to take part in the study. Furthermore, there were 11 students below 2 SD (below 40). However, most of them did not volunteer to take part in the study. As a result, three of the LP participants had a reading score between 40 and 50.

The difference between the MP participants and the LP participants in terms of the participants' average of their midterm exams' scores was also checked. The midterm exams evaluate students' language proficiency (four language competences and knowledge of grammar and vocabulary), and they are administered four times throughout the preparatory class. The mean of midterm exams' scores of the 63 students was 66.8 out of 100 (n = 63, SD = 11.4, min = 40.5, max = 91.8). T scores of average scores for 63 students were also calculated (min = 26.9/100, max = 71.9/100). As presented in Table 1, T scores of all MP participants were above 60, and all LP participants' scores were below 50 (except Alper's). Although Alper is an average student in terms of his midterms score average, he was classified as LP reader according to his reading test score and to his think-aloud protocol.

Among these 63 students, 11 students (five MP and six LP students) volunteered to participate in the present study. However, as three students' protocols (one MP and two LP) were too short and deemed not to be exploitable, only eight participants, three males and five females aged between 18-24 years old (M = 20.8), were eventually included in this study.

Table 1 presents the participants' characteristics according to their proficiency level.

Table 1.
Participants' characteristics according to their proficiency level

Participants	Gender	Age	Length of study (NS)	Reading Time (min)	Reading test T score	Midterm average T score	Proficiency level
Meryem	F	20	2	9.24	77.8	67.3	MP
Faruk	M	23	2	45.5	62.1	71.9	MP
Pakize	F	24	2	23.0	62.1	61.3	MP
İhsan	M	21	4	20.4	62.1	61.3	MP
Tülin	F	19	2	12.0	46.3	44.0	LP
Alper	M	18	2	13.1	42.4	55.2	LP
Dilara	F	21	4	25.1	42.4	39.0	LP
Meltem	F	20	4	11.5	38.4	43.1	LP

Note. Pseudonyms were used to identify each of the participants. NS = the number of semester studied.

4.3. Data Collection Procedures

The data presented in this study was collected[8] using the think-aloud technique applied during the reading of a text in French. Before the start of the experiment, the participants were briefed about the think-aloud technique and about what was expected from them. They also practiced verbalization on a short textual extract of 83 words (*An Iceland Fisherman* by Pierre Loti) to familiarize themselves with the procedures. During the think-aloud training exercise, the participants were prompted to express out-loud what they thought while reading. On occasions, when they became silent for too long, they were

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[8] Data was collected at the end of the second semester of the academic year 2012-2013.

reminded to verbalize their thoughts. Once the participants understood the task, they were asked to read a 449 word-extract of *The Great Life* by J. M. G. Le Clézio (Appendix A). The researchers found this text suitable for the intermediate level of proficiency, as it is neither too easy nor too difficult, and includes vocabulary and sentence patterns normally familiar to Intermediate-level students. To evaluate its suitability, an average student (who was not a participant in the study) read the text using the think-aloud technique. The student was able to finish reading and understand the main points of the text. The data collected during this evaluation indicated that although the text was a little challenging, it was not overly difficult to read.

The participants' verbal reports were recorded using an audio recording device. The average duration of reading was 15.0 min (ranging from 45.5 to 09.24 min).

4.4. Data Analysis Process

Prior to analyzing the data, the audio recordings of protocols were transcribed; the transcripts, originally in Turkish, were subsequently translated into English as one of the authors does not speak Turkish. During the analysis process, the researchers elaborated a classification model that accommodated the range of strategy data collected (see Appendix B) based on studies carried out by Block (1992), Bouvet (1998), and Chamot and El-Dinary (1999). Each researcher coded the verbal reports of each student independently. When a participant had used a strategy that did not appear in the strategic framework designed for this study, that strategy was added to the inventory. Inter-rater reliability was calculated 71.2% by using a formula (i.e., the sum of agreements divided by the sum of agreements plus disagreements multiplied by 100). The inter-rater reliability of between initial coding of the researchers was not very high. However, the researchers compared their coding, discussed and resolved any disagreement. After coding, frequencies and percentages relative to the strategies employed were calculated. The Mann-Whitney U test was applied to investigate whether there was a significant difference between more proficient and less proficient participants in terms of strategy use.

4.5. Classification Model Used in the Present Study

As seen in the literature review, various taxonomies of reading strategies have been used in L2 reading research. However, there appears to be a considerable overlap, and even inconsistencies, among these classifications, as argued by Alkhaleefah (2016) in a recent review of major think-aloud-based studies on L1 and L2 reading strategies. Even overarching categories of strategies such as global (top-down) and local (bottom-up) strategies as well as cognitive/metacognitive strategies tend to overlap depending on the purpose of the strategy used. One of the reasons for this overlap may be the nature of metacognitive processes which affect all reading operations and guide the strategic approaches, including the choices of strategies. In the present study, as L2 is considered a problem-solving process controlled by comprehension monitoring, a classification model compatible with this view was elaborated by the authors. Thus, the strategies that appear in this framework have been reviewed according to a global cycle of control (overall monitoring cycle), as supported by Lee-Thomson (2008), which includes the three phases suggested by Block (1992) and Bouvet (1998): (a) evaluation, (b) action, and (c) checking. The classification of the strategies defined under these categories was based on the studies by Bouvet (1998) and Chamot and El-Dinary (1999).

The Evaluation phase involves the reader's impression as to whether the text makes sense or not and the identification of problems that obstruct comprehension. During this phase, the reader may recognize comprehension problems, identify their nature, and assess their importance.

The Evaluation phase drives the Action phase which involves planning and implementing problem solving strategies. In other words, the reader plans and implements problem-solving strategies according to their evaluation of what the problems are and how important they are. Three types of problem-solving strategies were differentiated in this study: instrumental strategies (requiring a direct action to resolve a problem), deductive strategies (requiring an action of deduction), and cohesive strategies (requiring the establishment of a relationship or a link between different parts of the text).

The last phase, the Checking phase, mostly involves assessing the reader's performance during or post reading, checking of the effectiveness of strategies used, and revising their strategies if necessary. When in *checking* mode, the reader can also display their metacognitive awareness by making comments about the task, their strategic approach, and their personal aptitude in relation to reading. Metacognitive awareness also influences the reader's strategy use in a particular task. For instance, the reader can assess their performance and adapt their strategy use according to their evaluation of text difficulty or according to their emotional reaction *vis à vis* the task. Consequently, comments related to the participants' metacognitive awareness about reading were included to this category.

5. Results and Discussion

5.1. Turkish University Students' Strategic Behaviors When Reading a French Literary Text

In relation to the first research question: *How do Turkish university students behave strategically when reading a French literary text, especially with reference to the types and frequencies of reading strategies used during the Evaluation, Action and Checking phases of the monitoring cycle?* data analysis revealed that the participants to this study used a total 38 strategies,[9] implemented 865 times. In Figure 1, frequencies of all strategies employed by all participants are presented according to each strategy category.

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[9] Although all behaviors expressed in the protocols were referred to as strategies in the present article, it can be argued that particular behaviors categorized in the Evaluation and Checking phases might not be considered as strategies as such, but rather as essential behaviors actioned to monitor the overall reading process and to implement problem-solving strategies.
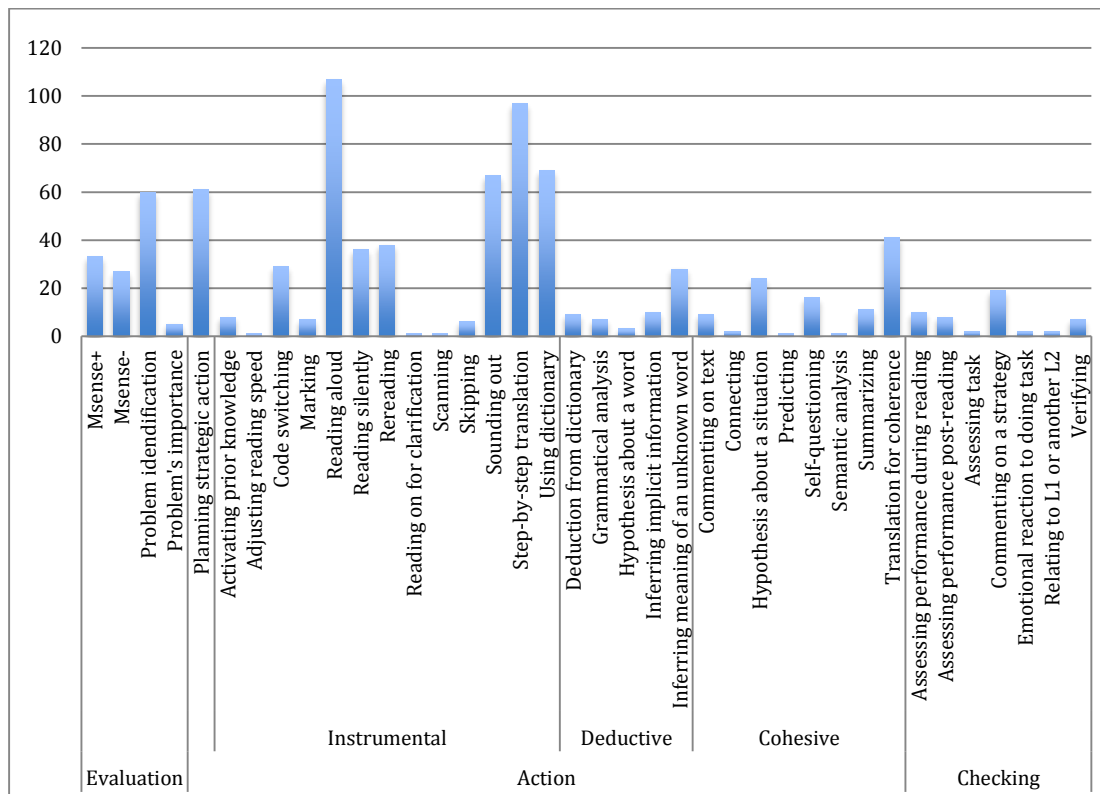
Figure 1. Frequencies of strategies used by all participants according to strategy category

As presented in Figure 1, the bulk of the strategies reported by the participants were concentrated around the Action phase (690 occurrences or 79.8% of the total number of occurrences), which was followed by the Evaluation phase (125 occurrences or 14.5%) and the Checking phase (50 occurrences or 5.8%). This distribution of strategies is supported by Bouvet's (1998) study, in which the same categories were used to identify reading strategies used by Australian learners of French. It is also supported by several other think-aloud studies (e.g., Lin & Yu, 2015; Thampradit, 2006), in which L2 language learners used cognitive and support/compensatory strategies more often than metacognitive strategies. The dominance of the Action phase—which features two steps: Planning strategic action and Implementing problem-solving strategies—could be explained by the fact that the participants encountered problems continuously during their reading and that, generally, they used one or more problem-solving strategies to address each problem they identified. The more frequent use of problem-solving strategies could be also due to the tendency the participants had to externalize their strategic behavior while they dealt directly with the problems encountered during reading. In other words, the implementation of problem-solving strategies could have masked evaluation and checking strategies, which may not have been expressed as clearly and openly as those listed in the Action phase requiring a more active strategic engagement.

Within the problem-solving category of strategies, instrumental strategies were the most frequently used (467 occurrences, or 54.0%). The second most frequently used strategies were cohesive strategies (105 occurrences, or 12.1%), followed by deductive strategies (57 times, or 6.59%). Of all the problem-solving strategies, the four most frequently used strategies were instrumental strategies: *Reading aloud*, *step-by-step translation*, *using dictionary*, and *sounding out* (see Figure 1). However, it should be noted that the nature of think-aloud protocols could cause the overuse (or at least the over-verbalization) of some instrumental strategies, such as *reading aloud*, *sounding out*, *using dictionary* as these may be placed on

a more conscious plan than other strategies. As for cohesive strategies, *translation for coherence* was the most frequently used strategy. Within the category of deductive strategies, *inferring meaning of an unknown word* was the most frequently used.

These findings indicate that one of the most frequently utilized strategies was translation (*step-by-step translation*: 97 occurrences, or 11.2% and *translation for coherence*: 41 occurrences, or 4.74%). Translation is one of the most used strategies as reported in several studies (Ghavamnia et al., 2013; Lee-Thompson, 2008; Lin & Yu, 2015; Stevenson, Schoonen, & Glooper, 2007; Thampradit, 2006). Different types of translation approaches have been differentiated in the literature, such as literal *versus* conceptual translation and step-by-step/word-for-word translation *versus* translation for coherence. In the present study, two translation strategies were also differentiated: *step-by-step translation of a section* and *translation for coherence*. *Step-by-step translation of a section* was situated at word- or sentence-level and classified as an instrumental strategy. *Translation for coherence* was used to link the different parts of the text, thus it was classified as a cohesive strategy. In this study, the participants used both translation strategies; however, they mostly relied on *step-by-step translation of a section*.

Our findings related to dictionary use, one of the most frequently reported strategies, indicate that the participants often dealt with vocabulary problems while reading. The most frequently used deductive strategies were also related to unknown words and expressions. However, the frequency of *inferring meaning of an unknown word* (28 occurrences, or 3.24%) was much lower than that of *using the dictionary* (69 occurrences, or 7.98%). The following examples illustrate vocabulary difficulties and participants' preference for instrumentals strategies over deductive strategies.

Let's look *pneus* up [He is looking it up]. *Pneus*. It is not here. [He is looking it up in another dictionary]. *Pneus*. It's not in the dictionary.	STRATPLAN, DICT, DICT
So I will try to guess this from the context. *Pneus de bicyclettes.* It might be something like 'chain' or 'pedal' (Ihsan, MP, 273-275).	STRATPLAN, INFER

Ou dégonflaient les pneus de... dégonflaient bicyclette or bicyclette its prononciation... [She doesn't know how to pronounce to word of *bicylette* and she tries to pronounce in two different ways].	READAL, SOUNDOUT
I will look up its meaning [She is looking it up]. Ah, it means bicycles! (Dilara, LP, 631-634):	STRATPLAN, DICT

In the first example, one of the MP readers tried to infer the meaning of a word only after he could not find the word in the dictionary. In the second example, one of the LP readers consulted the dictionary to find out the meaning of the word "bicycles" which, incidentally, is used in Turkish and is pronounced in a similar way as in French.

Figure 1 also shows the least frequently used strategies (used only once or twice). These strategies were *adjusting reading speed, reading on for clarification, scanning, connecting, predicting, semantic analysis, assessing task, emotional reaction to doing task,*[10] and *relating to L1 or another L2*. In particular, the low occurrence of cohesive strategies such as *connecting and predicting* indicates that the participants mostly focused on what they have just read and that they were not able to predict what would come next or to connect different parts of the text.

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[10] This is not a strategy as such; rather it is a reaction to the task.

In sum, according to the data reported in this study, it appears that generally the participants could not often understand the text in a cohesive and integrative manner. Rather they focused their strategic action at word- and sentence-levels while reading. As reported in the literature, dealing with unknown vocabulary is also one of the strategic actions mostly implemented by Turkish learners of English (Yaylı, 2010) and Turkish learners of French when reading a French literary text, this even at advanced level (Bak, 2011). Research has argued that due to their limited language knowledge, L2 readers often process texts in a "bottom-up" manner, focusing on linguistic and local elements in the text rather than on shifting focus to text's content and meaning (Kern, 1989; Lin & Yu, 2015; Stevenson et al., 2007). Similarly, Kantarcı (2006) found that Turkish university students studying English at intermediate level tended to mostly use bottom-up strategies. The participants in the present study were also Intermediate-level students. Although it appears that the participants' limited language knowledge may have prevented them from using strategies for understanding the text in a cohesive and integrative way, it should also be noted that all cohesive or integrative processes may not have been expressed through think-aloud protocols. Indeed, Ericsson and Simon (1999) warn that it is possible that verbalizations may not reflect thought processes exactly and that "processes underlining behavior may be unconscious" (p. 109). However, it can also be argued that, as many researchers defined strategies as conscious behaviors or processes, these processes might not be considered as strategies, but rather as skills.

5.2. The Differences between More Proficient and Less Proficient Readers in terms of Comprehension Monitoring and Strategy use

In relation to the second research question: *What are the differences between more proficient and less proficient readers when reading a French literary text, especially with reference to the types and frequencies of reading strategies used during the Evaluation, Action and Checking phases of the monitoring cycle?* data analysis shows that the MP readers used 37 strategies and the LP readers used 29 strategies from a total of 38 strategies identified in the strategy classification used in the present study. While none of the MP participants used *predicting* (classified as a cohesive strategy), none of the LP participants employed some of the instrumental strategies (i.e., *activating prior knowledge, adjusting reading speed, reading on for clarification, scanning*). Similarly, two cohesive strategies (*connecting* and *semantic analysis*) and three strategies from the Checking phase (i.e., *assessing task, relating to L1 or another L2, emotional reaction to doing task*) were not reported at all by the LP participants. However, it should be noted that that the frequencies of these strategies used were not high. The frequencies of the strategies used by the MP and LP readers are presented in Figure 2 and are listed by strategy category.
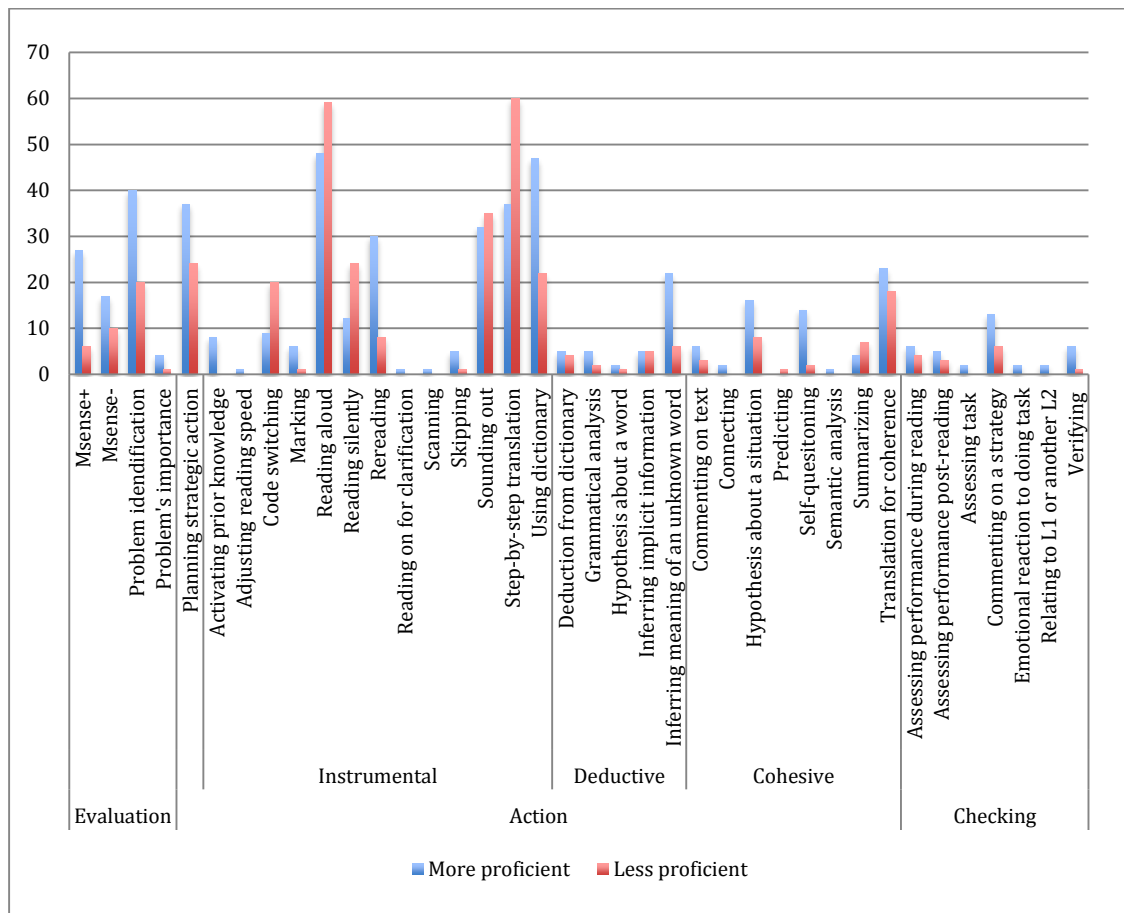
Figure 2. Frequencies of strategies used by both groups of participants by strategy category

As presented in Figure 2, our data analysis revealed that the MP group used a wider range of strategies and more frequently than the LP group. While the LP readers only used a number of instrumental strategies (i.e., *reading aloud*, *step-by-step translation*, *code switching*, and *sounding out)* and one cohesive strategy (i.e., *summarizing*) more frequently, the MP readers used all strategies from the Evaluation and Checking phases and most of the strategies from the Action phase more frequently (i.e., *planning strategic action*, *using dictionary*, *rereading*, *inferring meaning*, *self-questioning*). In particular, the MP readers' frequent use of strategies from Evaluation and Checking phases suggests that they monitored their understanding and their strategy use more frequently than the LP readers. By contrast, the LP readers' frequent use of some instrumental strategies, such as *step-by-step translation* would suggest that they relied more frequently on these strategies to understand the text at word- and sentence-levels. However, it should be noted that there is a slight difference between the two groups in terms of the use of two cohesive strategies: *summarizing* and *translation for coherence*. While the LP participants used *summarizing* more frequently, the MP participants used *translation for coherence* more than their MP counterparts. Thus, it can be argued that LP readers also attempted to read the text in a cohesive and synthetic fashion by using the *summarizing* strategy. However, it is likely that LP readers' the limited proficiency caused the overuse of *step-by-step translation* which conflicted with their attempts to read cohesively. Furthermore, it should be noted that the MP group also mostly dealt with word-level problems and they used both the strategies of *using dictionary* and *inferring meaning of an unknown word* more frequently than the LP participants. The reason for more the frequent use of the dictionary and

meaning inferring strategies by the MP readers could be that they were able to identify and attend to problems more frequently than LP readers. It could also be that two MP participants (Faruk and Pakize) in particular frequently checked their inferences by using the dictionary. Consequently, the *verifying* strategy was utilized more frequently by the MP group as well. The following example illustrates how one of the MP participants identified a vocabulary problem and how they used different strategies to solve the difficulty.

…But I have a problem because I don't know the words *farce* and *bêtise* in the last part of the sentence.	PROBID
C'était la plupart du temps pour faire quelque bêtise. Bêtise makes me think of something like 'stupidity', 'rubbish', 'stupidity', 'naughtiness'.	READAL, INFER
Quelque farce. I have to look these words up. [He is looking it up]. *Farce, farce* 'stuffing', 'prank'.	STRATPLAN, DICT
I think *bêtise* is also something like 'foolishness'. But I still want to make sure. [He is looking it up]. It means *foolishness*. Yes, my guesses are correct (Faruk, MP, 89-94).	INFER, DICT, VERIF

This participant's statement shows an overt problem-solving cycle that included strategies from all three phases: *Problem identification* in the Evaluation phase, instrumental strategies (i.e., *reading aloud, using dictionary*) and a deductive strategy (i.e., *inferring meaning of an unknown word*) in the Action phase, and finally a strategy in the Checking phase (i.e., *verifying*).

The following example illustrates a LP participant's use of several instrumental strategies to deal with a similar vocabulary problem.

Quelque farce. Elles sonnaient à toutes les portes. [She is reading silently]. *Sonnaient* I will look up the meaning of *sonnaient* [She is looking it up].	READAL, READSIL, SOUNDOUT [PROBID], STRATPLAN, DICT
Elles sonnaient à toutes les portes. They *toutes les portes* they rang all the doors. They rang the bell of the doors (Dilara, LP, 586-588).	REREAD, CODESWITCH, SBSTRANS

In this example, the reader used several instrumental strategies (i.e., *code switching, reading aloud, reading silently, rereading, using dictionary, step-by-step translation, and sounding out*) in order to understand a sentence. Let's note that she did not use any deductive strategy such as *inferring meaning of an unknown word*—which was the case in the MP example above—and that her strategic approach did not include any strategy from the Checking phase. Therefore, the low use of checking strategies by the LP group could be explained by the frequent use of instrumental strategies from the Action phase. Indeed, Figure 2 shows

that deductive strategies were not often used and *verifying an inference/a prediction*, one of the strategies completing the problem-solving cycle, was used only once by the LP group.

The findings presented so far indicate that the frequencies of a number of strategies used by the MP group were higher than those recorded for the LP group. However, it should be noted that the results of the Mann-Whitney U test only revealed a significant difference between the two groups in relation to the *skipping and ignoring a problem* strategy[11] (the *skipping* strategy referred to below), Mann-Whitney $U = 1.5$, $n1 = n2 = 4$, $p = .040$ two-tailed).

The data analysis showed that the *skipping* strategy was used by all MP participants (once by three participants and twice by one participant). However, it was only used by one LP participant (and once). Below is a transcribed verbalization showing how this strategy was used differently by this LP participant and one MP participant for comparison.

I am using the dictionary. [He is looking it up]. It is used in the meaning of joke, play. By joking, playing… I couldn't get the meaning from here.	DICT
I will pass to the next sentence. I am underlining it... (Alper, LP, 528-529).	STRATPLAN, SKIP, MARK
Everything is clear until now.	MSENSE+
[Reading silently]. I don't know the word *Grelot*. But I think it is related to class. Anyway. I'll skip it (Meryem, MP, 18-19).	[READSIL], PROBID, INFER, SKIP

As shown in the example above, the LP participant used the *skipping* strategy after not being able to understand the meaning a word, even after consulting the dictionary. However, the MP participant monitored her reading by stating that the text was clear. She then identified a vocabulary problem and tried to infer the unknown word's meaning. She did not spend much time on it, did not find it necessary to consult the dictionary and decided to skip the problem as it was perceived as unimportant.

Although no significant difference was found between two groups in terms of any other strategies, the data analysis suggests that the MP group was better at *inferring meaning of an unknown word.*[12] This strategy was used 22 times by all the MP participants (min = 2 and max = 12) and six times by three LP participants (min = 1, max = 4). The following examples illustrate one MP participant's use of *inferring meaning of an unknown word* and one LP participant's *use of the dictionary* for the same vocabulary problem.

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[11] The values for two strategies (*Msense+* and *inferring meaning of an unknown word*) were close to significant level, Mann-Whitney $U = 2$, $n1 = n2 = 4$, $p = .076$ two-tailed, Mann-Whitney $U= 2$, $n1 = n2 = 4$, $p = .081$ two-tailed, respectively.

Uh… the word *atelier* did not evoke anything at first but now I have realized in another sentence that it is workshop. (Pakize, MP, 362-364).	PROBID, INFER
afterwards, regularly… *les ateliers*, *ateliers* … There is a word I don't know. Again I want to look it up [in the dictionary]... [She is looking it up]. (Tulin, LP, 483-484)	CODESWITCH, SOUNDOUT, PROBID, STRATPLAN, DICT

In the first example, the MP participant skipped the word *atelier* which she did not know, although she did not overtly express that she was using the *skipping* strategy. However, she kept the meaning in the mind and could infer the meaning of the following sentence. The second example illustrates using dictionary of a less proficient participant to find the meaning of the same word that was also used in Turkish language.

In sum, the results pertaining to the second research question showed that the MP readers employed a range of strategies—including different types of strategies such as instrumental and cohesive strategies or the strategies featured in the Checking phase—that LP readers did not utilize. However, only one or two MP readers implemented some strategies not used by the LP group. For example, *activating prior knowledge*, which differentiated high-rated and low-rated students in Chamot and El-Dinary's (1999) study, was used only by two MP readers (eight occurrences). Furthermore, in our study, none of the participants commented on the text's author, nor did they report activating their prior knowledge about the literary text they read. In Bak's (2011) study, advanced-level Turkish students used *activating background knowledge* less frequently when they read a literary text in French. The reason for the limited use of this strategy among Turkish students might be the cultural distance experienced when learning French.

The results also showed that the MP readers used all Evaluation and Checking strategies more frequently than LP readers. Furthermore, they used most of problem-solving strategies in the Action phase. This finding suggests that the MP readers were more comfortable with their control of the monitoring process and with the use of a variety of problem-solving strategies. Similarly, Wang (2016) also found that throughout reading, successful readers monitored their understanding, identified reading problems, and took remedial actions to solve their comprehension problems. From a qualitative perspective, Chamot and El-Dinary's (1999) study also argued that more successful students were more effective at monitoring and adapting strategies, although they did not found a significant difference in terms of overall strategies use between high-rated and low-rated students. Furthermore, as it is also the case in the present study, no significant dissimilarities were found in the study by Ghavamnia et al (2013) between proficient and less proficient readers in terms of overall strategies use and in terms of which categories these strategies were drawn from. Other studies, however, found a significant difference between groups of differing reading or language proficiency in terms of the type of strategies used. For example, it was found that advanced EFL learners used metacognitive strategies more frequently than intermediate EFL learners (Bakhshalinezhad, Nikou, & Bonyadi, 2015), that higher level students utilized "retrieval strategies" (e.g., using prior knowledge) more frequently than lower level students (Kasemsap & Lee, 2015), and that proficient readers implemented more meaning-oriented strategies than less proficient readers (Ghavamnia et al, 2013). The contrasting results reported in the above-mentioned studies could be due to differences in sample size and strategy classification, but also to the participants'

language and reading proficiency levels in L2 that varied notably among these studies. In the present study, the findings suggest that the MP participants were better at inferring meaning of an unknown word than the LP participants. Furthermore, the LP readers' reliance on *step-by-step translation* suggests that they lacked the capacity to integrate and construct meaning in a cohesive fashion compared to the MP group, which is also supported by Bouvet's (1998) study based on Australian participants. Despite these dissimilarities, the absence of any major differences between the two groups in terms of strategy frequencies (except one strategy: *skipping*) could be explained by the fact that there was not an important gap between the two groups in terms of language and reading proficiency, as none of the participants were at advanced level. The only significant difference observed between two groups was found in relation to the *skipping* strategy, which was used more frequently by the MP readers than by the LP ones. Thus, it can be stated that, as it was the case in other studies (e.g., Bouvet, 1998; Chamot & El-Dinary, 1999; Hosenfeld, 1977), the MP readers were more comfortable in skipping unimportant elements while reading. It is probably because these students' L2 reading proficiency was high enough to allow them to differentiate more easily between important and unimportant elements to get through the text. This result also hints at the operating of covert processes supporting cohesiveness in the way MP participants read.

6. Conclusion

This study has sought to investigate the comprehension monitoring and strategic behavior of Turkish university students of French when reading a French literary text. Firstly, the findings show that, overall, the Turkish participants tended to use predominantly instrumental strategies drawn from the Action phase. Furthermore, the participants appeared to focus their strategic action at word- and sentence-levels and mostly in relation to vocabulary problems. The participants' lack of reliance on higher level strategies such as *predicting* and *activating prior knowledge* could be due to their limited knowledge in French literature and to the distance separating them from French linguistically and culturally, as well as to their limited exposure to the French language more generally.

Secondly, in terms of difference between the MP and LP readers, the results of the study indicate that the LP readers were too dependent on instrumental strategies such as *step-by-step translation* and *code switching* and they only made infrequent use of deductive and evaluative strategies. Furthermore, they could not skip unimportant elements and *infer meaning of unknown words,* while all the MP readers could use these strategies occasionally. The MP readers also varied their strategic approaches by implementing a range of strategies drawn from all three phases of the strategic cycle. They used different types of problem-solving reading strategies frequently, which helped them understand the text at local and global levels. Therefore, globally, it appears that the MP readers demonstrated more agility in their strategy use. These results confirm the assumption underlying the present study that both the effective use of a range of problem-solving strategies and the active control of the monitoring process would lead to successful comprehension.

It is important to note that the results of the present study should be interpreted in light of its methodological limitations. Firstly, the small sample of participants does not permit us to draw strong generalizations. Secondly, due to the nature of the think-aloud method (and this despite their thorough training), the participants were not able verbalize their thoughts exactly in the same manner and to the same degree. Thirdly, the participants could only articulate the most salient aspects of their strategic approaches, as some strategies were placed on a less conscious plan, beyond the participants' attention. Furthermore, other individual differences (e.g., background knowledge relative to the text, learning style, etc.) are also very likely to have influenced the participants' strategic behavior.

The study was also limited to the reading of one literary text only. The readers' prior knowledge about the text content, or lack thereof, could have influenced the results obtained in this study. Another

limitation is the absence of triangulation, a technique used to increase the validation of verbal reports-based studies. As the classification model used in this study was elaborated as a result of the analysis of think-aloud protocols, it was not possible to give the participants a questionnaire compatible with this classification model before the think-aloud procedure took place.

Given the limitations of the present investigation, in order to improve the validity of the data, we suggest that studies based on a larger sample be carried out, taking into account individual differences between participants that may influence how readers approach the task. For example, the strategic approaches of learners who have similar learning styles could be compared. A questionnaire focusing on the monitoring process and problem-solving strategies could be developed based on the classification model presented here to allow a two-pronged approach to data collection. Furthermore, introspection and retrospection techniques could be combined in order to obtain more detailed information about the monitoring process and problem-solving strategies.

From a pedagogical perspective, this study suggests that Turkish students attending preparatory classes would greatly benefit from reading strategy training in order to tackle French literary texts more efficiently. Indeed, teaching intermediate-level students to better monitor their reading comprehension and to use of a wide range of problem-solving strategies more effectively, at local and global levels, would be beneficial, particularly in relation to less proficient readers. The use of the think-aloud technique in the class as a pedagogical tool to demonstrate how to control the monitoring process would be particularly useful to increase the students' awareness about reading process. Furthermore, during their first year of language study in the preparatory class, a curriculum giving more prominence to Francophone literatures and cultures would be beneficial to Turkish university students in order to reduce the cultural gap that may compound comprehension difficulty. However, in doing so, it is important to select suitable materials by taking into account learners' language levels, interests, and cultural background.

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Appendix A

La Grande Vie [extrait]

J.M.G. LE CLEZIO

A l'époque, Pouce et Poussy habitaient un petit deux pièces avec celle qu'elles appelaient maman Janine, mais qui était en réalité leur mère adoptive. A mort de sa mère, Janine avait recueilli Pouce chez elle, et peu de temps après, elle avait pris aussi Poussy, qui était à l'Assistance. Elle s'était occupée des deux fillettes parce qu'elle n'avaient personne d'autre au monde, et qu'elle-même n'était pas mariée et n'avait pas d'enfants. Elle travaillait comme caissière dans une Superette Cali et n'était pas mécontente de son sort. Son seul problème, c'étaient ces filles qui étaient unies comme deux sœurs, celles que dans tout l'immeuble, et même dans le quartier, on appelait les deux "terribles". Pendant les cinq ou six années qu'avait duré leur enfance, il ne s'était pas passé de jour qu'elles ne soient ensemble, et c'était la plupart du temps pour faire quelque bêtise, quelque farce. Elles sonnaient à toutes les portes, changeaient de place les noms sur les boîtes aux lettres, dessinaient à la craie sur les murs fabriquaient de faux cafards en papier qu'elles glissaient sous les portes, ou dégonflaient les pneus de bicyclettes. Quand elles avaient eu seize ans, elles avaient été renvoyées de l'école, ensemble, parce qu'elles avaient jeté un œuf du haut de la galerie sur la tête du proviseur, et qu'elles avaient été prises, en plein conseil de classe, de leur fameux fou rire en forme de grelots, ce jour-là particulièrement inextinguible. Alors, maman Janine les avait placées dans une école de couture, où elles avaient, on se demandait comment, obtenu ensemble leur C.A.P. de mécaniciennes. Depuis, elles entraient régulièrement dans les ateliers, pour en sortir un mois ou deux plus tard, après semé la pagaille et manqué faite brûler la baraque.

Elles travaillaient toutes les deux dans un atelier de confection, où elles cousaient des poches et des boutonnières pour des pantalons qui portaient la marque Ohio, U.S.A. sur la poche arrière droite. Elles faisaient cela huit heures par jour et cinq jours par semaine, de neuf a cinq avec interruption de vingt minutes pour manger debout devant leur machine.

Celles qui parlaient, qui arrivaient en retard, ou qui se déplaçaient sans autorisation devaient payer une amende au patron, vingt francs, quelquefois trente, ou même cinquante. Il ne fallait pas qu'il y ait de temps mort. Les ouvrières arrêtaient à cinq heures de l'après-midi exactement, mais alors il fallait qu'elles rangent les outils, qu'elles nettoient les machines, et qu'elles apportent au fond de l'atelier toutes les chutes de toile ou les bouts de fil usés, pour les jeter à la poubelle. Alors, en fait, le travail ne finissait pas avant cinq heures et demie.

Appendix B

Classification model

Strategy categories	Strategy names	Codes
	Msense+ [Makes sense, I understand]	MSENSE+
	Msense- [Doesn't make sense, I don't understand]	MSENSE-
Evaluation Phase	Problem identification [Noting the nature of the problem]	PROBID
	Problem's importance [Deciding on importance of the problem]	PROBIMP
	Planning strategic action [Deciding type of action to be undertaken]	STRATPLAN
	Activating prior knowledge	ACTIVATE
	Adjusting reading speed [Slowing down/increasing]	ADJSPEED
	Code switching	CODESWITCH
	Marking text	MARK
	Reading aloud	READAL
	Reading silently	READSIL
	Rereading	REREAD
	Reading on for clarification	READON
	Scanning	SCAN
	Skipping or ignoring a problem	SKIP
	Sounding out a word/expression	SOUNDOUT
	Step-by-step translating of a section	SBSTRANS
	Using dictionary	DICT
	Deducting the meaning of a word from a dictionary entry	DEDUCTDICT

Left margin spanning labels: Action Phase · Implementing problem-solving strategies · Instrumental strategies

Bottom row left margin labels: Actio... · Impl emen... · Dedu...

	Performing a grammatical analysis to deduce the meaning of a word or expression	GRAMANALYSIS
	Making a hypothesis about the meaning of a word/expression	HYP
	Inferring implicit information	INFERINFO
	Inferring meaning of an unknown word/expression	INFER
Cohesive strategies	Commenting on text characteristics	COMMENT
	Connecting problematic part with another section of text	CONNECT
	Making a hypothesis about a situation	HYPOSIT
	Predicting what will come next	PREDICT
	Self-questioning	SELFQUEST
	Semantic analysis	SEMANALYSIS
	Summarizing	SUM
	Translating for coherence	TRANSCO
Checking Phase	Assessing one's performance/skills/knowledge during reading	ASSESSPERF1
	Assessing one's performance/skills/knowledge post-reading	ASSESSPERF2
	Assessing task difficulty	ASSESSTASK
	Commenting on the usefulness of a strategy	STRATBEHAVIOUR
	Emotional reaction to doing task	AFFECT
	Relating to L1 or another L2	L1L2
	Verifying (confirm/change) an inference, prediction	VERIF