UNCOVERING THE USE AND TRANSFER OF COGNITIVE AND METACOGNITIVE READING STRATEGIES ACROSS TEXT TYPES (NARRATIVE & EXPOSITORY READING TEXTS) IN ENGLISH (L3) AMONG MOROCCAN EFL UNIVERSITY LEARNERS

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Abstract:
Based on one of the major sections of my unpublished doctoral thesis defended in 2015, the current study investigates the extent to which Moroccan EFL first-semester university students utilize and transfer (meta) cognitive reading strategies in processing differing English (L3) written texts (i.e., narrative, expository). By addressing 113 university learners (Experimental Group: n=63; Control Group: n=50), the study seeks to find out whether EFL university learners transfer reading strategies (i.e., cognitive, metacognitive) from the narrative written text to the expository one with similar or different frequencies along the continuum of the pre- and post- intervention. To gather the relevant data, such instruments as the reading comprehension texts (i.e., narrative, expository), narrative and expository reading tests, explicit strategy intervention, and a retrospective questionnaire (RQ) were utilized. The findings show that the targeted learners did transfer a host of cognitive and metacognitive reading strategies (CMRSs) across text types with varying frequencies of use at both pre- and post-testing levels. Thus, it is deducible that text genre is an influencing variable on the learners' frequent usage and flexible transfer of CMRSs in the achievement of L3 reading comprehension. Further, some implications and limitations related to this undertaken study are stated.

Keywords: (meta)cognitive reading strategies, metacognition, strategy transfer, reading strategy use, text genre

1. Introduction

The high premium placed on the learnability of cognitive and metacognitive reading strategies (CMRSs) in processing and synthesizing English as a foreign language (EFL)

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written discourse exhibits the vital importance of metacognitive knowledge in the meaning-making procedure (Msaddek, 2015). In effect, the proactive dependence on declarative, procedural, and conditional knowledge pertaining to a vast host of reading heuristics is part of the key to facilitating the developmental act of grasping the writer's/ author's conceptual views and core insights. This reveals that university learners, in attempting to deconstruct any assigned English (L3) textual content and disentangle its perspectival themes and assertions, are meant to develop critical alertness to the essentiality of metacognitive thinking, cognitive flexibility, and strategic monitoring. Clearly, with a view to achieving an optimal, sophisticated form of L3 comprehension that is robustly founded upon reasoned thinking and rational meta-understanding, learners are required to be astutely cognizant of how and when to apply the most efficient strategies (i.e., cognitive, metacognitive) necessitating the execution of meta-thinking processes and the exhibition of metacognitive behaviors.

Actually, the retrospective act of using and transferring reading strategies (RSs), namely cognitive and metacognitive ones, across differing text genres (i.e., narrative, expository) entails metacognitive control and reasonable thinking. These two essential variables assist the learners to deduce and comprehend the textual input with a great measure of facility. What should be underscored is that the meaning-building heuristics as well as the higher-level thinking modes depended upon in the critical textual synthesis cannot be put into effect unless meta-awareness of strategic moves is exhibited by learners. This shows that the disentanglement of the text content, be it narrative or expository in type, fundamentally rests upon the proper functioning of working memory and the flexible usage of a potentially rich repertoire of text-processing strategies (i.e., predicting, goal-setting, background knowledge use, inferring, main idea selection, visualizing, underlining, note taking, self-monitoring, self-questioning, rereading, paraphrasing, recalling, summarizing) (Msaddek, 2015).

In recognition of the tacit perspectives put forth above, and taking account of the fact that learners frequently deploy and transfer some RSs when exposed to the narrative and expository written discourse, it is of critical importance to bring to the fore and investigate this topical issue. In essence, the intricate interrelation between metacognition and text processing (e.g., Brown, 1981; Garner, 1987) undergirds the core viability of orchestrating the controlled, intentional deployment of RSs. Thus, considering the marked paucity of scholarly research on the use and transfer of CMRSs across text types in the context of Moroccan higher education, the present study is aimed at unveiling the extent to which text type (i.e., narrative, expository) dictates the invocation and transference of CMRSs as well as their frequent application to advanced-level English (L3) written input among the first-semester English Department learners at the pre- and post-intervention levels.

2. Review of Literature

2.1. The Metalinguistic Nature of Reading

Given the metalinguistic essence of the reading process undertaken by EFL learners, it is evident that it requires an acute awareness of the structural features of the target language (e.g., Guo *et al.*, 2011; Nagy & Anderson, 1998; Schiff & Calif, 2007). In fact, learners process, analyze, and synthesize the textual content in light of three linguistic systems that are embodied in the graphophonic, syntactic, and semantic levels (Goodman, 1973). These three levels represent the metalinguistic awareness that should be exhibited by university learners whilst immersing themselves in processing the L3 written input. To illustrate, the graphophonic level refers to the readers' overall knowledge of the phonetic features typifying the target language to fully comprehend the included words/ concepts (Grabe, 2009; Schiff & Calif, 2007). The syntactic level is mainly concerned with the syntactic and grammatical awareness possessed by the readers with a view to assimilating the textual content. This helps them identify the types and structures of the sentences as well as the phrases incorporated in the written discourse in an endeavour to disentangle the input put forward by the writer/ author. As to the semantic level, it showcases that readers have to be cognizant of the meaning of concepts and the semantic correlation existing among the words. These three levels, as stated by Goodman (1973), are to be taken into account by the readers to derive the meaning from the written texts.

Thus, the process of making meaningful sense of any assigned high-level, advanced written discourse (i.e., narrative, expository) entails that the learners possess thorough linguistic competence (e.g., Carrell, 1988; Grabe, 2009; Koda, 2005). The latter is plainly manifested in lexical, phonological, morphological, syntactic, and semantic competence which facilitate one's cognitive control over reading strategy application. However, the development of linguistic awareness of the major constituents of the written input can only be fortified if learners reflect sufficient knowledge of cognitive (i.e., predicting, inferring, main idea selection, visualizing, underlining, note-taking, paraphrasing) as well as metacognitive reading strategies (i.e., goal-setting, background knowledge use, self-monitoring, self-questioning, rereading, recalling, summarizing) which occupy an instrumental part in text processing and meaning analysis (Msaddek, 2015). Actually, the systemic disentangling of the writer's/ author's intended views, postulates, and presumptions is firmly based on both astute meta-awareness of the linguistic features typifying the textual input and the cumulative metacognitive knowledge (e.g., declarative, procedural, conditional knowledge) of reading heuristics. In brief, the dynamic interface between metalinguistic awareness, as a deeply rational reflection on language, and metacognitive knowledge, as a keen awareness of memory processes, is of pivotal significance in the analysis and synthesis of the L3 input embedded in advanced-level written texts.

2.2. Metacognition & EFL Reading Comprehension

The utmost potentiality of metacognition in text processing and meaning comprehension has been emphatically stressed in myriad research studies (e.g., Baker & Brown, 1984; Brown, 1981; Garner, 1987; Msaddek, 2013, 2015; Lawrence, 2007). The concept of metacognition was initially devised and brought to the vast psycho-cognitive landscape by Flavell (1971) who considers it as one's overall knowledge of the cognitive processes and mental mechanisms involved in language learning. Indeed, metacognition, as a meta-conceptual mode of high-order thinking, denotes the learners' shrewd awareness of the core strategic moves depended upon in the execution of tasks as well as the potential reflection on one's overall progression in learning. As declared by many researchers (e.g., Veenman *et al.*, 2006), metacognition, construed as 'cognition about cognition' in the domain of education, initiates the learners into critical thinking and analytical processing for absorbing any encountered written input and producing differing output. It constitutes a reasonable, rigorous assessment of one's strengths and shortcomings with a view to achieving a great measure of efficiency in learning performance.

Further, many eminent researchers (e.g., Stewart & Tei, 1983; Tonks & Taboada, 2011) espouse the vital usefulness of metacognition in reading comprehension. For instance, Stewart and Tei (1983) postulate that the robust knowledge of reading, textual meaning, and strategies formulates the core nature of metacognition. Further, other researchers (e.g., Jacobs & Paris, 1987; Schraw & Moshman, 1995), tending to reinforce the critical function of metacognition in textual processing, confirm that there exists a dynamic interplay among declarative, procedural, and conditional knowledge of RSs in analyzing and synthesizing the textual content. These typologies of metacognitive knowledge (i.e., declarative, procedural, conditional knowledge) assist the learners in immersing themselves in a cohesive course of action that orients them toward the fulfilment of the task requirements (Msaddek, 2015). The engagement in analytical, critical reading entails not only planning and self-regulating the activity of reading at the outset, but also monitoring and assessing one's reading performance for the sake of realizing a substantial level of efficacy in comprehension. This unravels that metacognition enhances the purposeful procedure of reading L3 texts in a well-conceived fashion.

Grabe and Stoller (2001) confirm that "*the reader will begin to interpret the information from the text in terms of his or her own goals, feelings and background expectations*" (p.27). This shows that the reader can make sense of the text according to his/ her general knowledge, viewpoints, expectations, beliefs, and attitudes. In essence, the learners interpret the meaning of any text and analyse its incorporated statements by depending upon their rich schematic knowledge (i.e., content, formal, and cultural schemata) possessed through frequent, extensive reading practices (Msaddek, 2015). Thus, it is the background knowledge base, along with the working memory, that initiates the EFL readers into the multifaceted processing and the metacognitive analysis of the text, and thus enabling

them to fully understand the L3 content. Overall, the interaction between the readers' prior knowledge and the written text, as some reading researchers (e.g., Carrell, 1984; Rumelhart, 1980) outstandingly affirmed, constitutes the robust cornerstone for the construction of inferential, high-level comprehension.

In effect, metacognition, deemed the higher-order form of cognitive monitoring in language learning (Flavell, 1981), is potentially central to the efficient derivation of the meaning embedded in the textual content. In that sense, granted that metacognition necessitates utter consciousness of one's cognitive abilities (i.e., person variable), task requirements (i.e., task variable), and strategy repertory (i.e., strategy variable), it is evident that the conscious exertion of cognitive efforts is part and parcel of decoding and comprehending the inherent ideologies, perceptions, and claims stated by the writer/ author in the written input. By thinking metacognitively and applying RSs resiliently, learners can regulate their adopted reading behaviors and adjust their strategic modalities to grasp what the writer/ author intends to convey. Hence, whereas cognitive reading strategies (CRSs) facilitate cognitive progression in understanding (Flavell, 1981), metacognitive reading strategies (MRSs) are tapped for regulating strategy use and reflecting upon the written input (Lawrence, 2007).

2.3. The Interplay of Text Genre & EFL Reading

It is manifest that EFL learners are invariably exposed to a wide spectrum of English (L3) text types ranging from narrative, expository, argumentative, to descriptive discourse in tertiary education. In fact, in trying to decipher the incorporated content of each text type, it is expected that learners invoke, transfer, and use CMRSs. More significantly, text genre, as straightforwardly declared by Pappas and Pettegrew (1998), is conceptualized as a critical feature in the cognitive reading process. Therefore, the multifaceted act of reading, which requires the flexible recruitment of CMRSs (i.e., predicting, goal-setting, background knowledge use, inferring, main idea selection, visualizing, underlining, note taking, self-monitoring, self-questioning, rereading, paraphrasing, recalling, summarizing), is firmly governed by the genre variable which incarnates the linguistic input embedded in the written text (Msaddek, 2015).

Many established researchers (e.g., Best *et al.*, 2008; Horiba, 2000; Sun *et al.*, 2024; Yoshida, 2012) tacitly affirm that there exist stark, marked discrepancies between the narrative and the expository written discourse. Clearly, though university-level learners cognitively engage in reading and processing a diversity of advanced-level written input, they are supposed to be astutely aware of the strategic courses of action required for the assimilation of the narrative and expository content. The explicit perspective held by the majority of EFL university learners is embodied in the fact that the proactive analysis and the critical synthesis of narrative texts do not entail an abundant amount of cognitive efforts and attentional capacities needed to decipher the expository textual passages. This was underscored by Best *et al.* (2008), who postulate that narrative texts follow a simple structure and a sequence of causally related events. As regards the expository texts, they

necessitate cognitive control, word-processing abilities, and sophisticated thinking mechanisms (Best *et al.*, 2008; Ghazali & Baa, 2023). Obviously, utter familiarity with the events and stories reflected in the narrative discourse helps learners understand the embedded input in a flexible manner.

More significantly, the self-regulated processing of L3 textual content substantially involves strategy transfer. The latter occupies a large part of any learning endeavor and reading behavior within the parameters of education. This displays that varying L3 text types (i.e., narrative, expository) and reading scenarios prompt the learners to coordinate a methodical sequence of CMRSs that potentially enhance self-directed L3 reading. In this regard, many researchers (e.g., Stebner *et al.*, 2022) put forward that metacognitive skills and strategies are transferred to many learning scenarios. In this vein, transferring reading heuristics from one particular text genre to another one whilst processing the L3 content can only be effected through metacognitive reflection. It is worthwhile to state that not only does the transferability of CMRSs across narrative and expository written discourse require working memory resources and skills, but it also necessitates the execution of logical reasoning and the reliance on cognitive flexibility, which facilitate the process of decoding the textual input. Hence, the adaptation of the concerted use of RSs to a diversity of genres, such as narrative and expository written input, remains a rigorous footstep taken by mature learners toward the attainment of a sufficient understanding of the writer's/author's underlying conceptions.

In addition, the succinct view to be articulated is that some CMRSs are utilized more frequently than others while reading the narrative and the expository L3 written discourse. For clarification purposes, the efficient conduct of an enquiry-driven, reflective form of reading diverse written texts (i.e., narrative, expository) in tertiary education entails methodical recourse to text-processing heuristics for attaining an optimal level of L3 comprehension. This reveals that lexical density and structural complexity, which prototypically typify the expository rather than the narrative text (e.g., Best *et al.*, 2008; Botsas, 2017; Sun *et al.*, 2024), direct the learners to resort to such meta-level, higher-order processing modes as controlled processing and metacognitive thinking. Thus, learners cope with and assimilate the narrative written discourse more easily than the expository written input (Best *et al.*, 2008). This particular postulate is to be brought to light and tackled from a metacognitive angle in the present research study.

3. The Current Study

3.1. Participants
A total of 113 participants (Experimental Group: n=63; Control Group: n=50) belonging to the English Department at the Faculty of Letters and Human Sciences- Mohamed V University in Rabat took part in this study. They were undertaking their English Studies in the first- semester during the Autumn Semester (2012-2013). In fact, the majority of

them had been studying English (L3) for four years and their ages were between 18 and 23 years old. Yet, it should be admitted that a tiny number of the learners participating in this study were aged over 23.

3.2. Research Objectives & Research Questions

The present study was geared toward unravelling the recurrent use as well as the proactive transferability of (meta) cognitive reading strategies (CMRSs) in processing differing English (L3) written discourse (i.e., narrative, expository) among Moroccan EFL first-semester university learners at the pre- and post-testing levels. Thus, two research questions were crafted:

1) Do Moroccan EFL university learners use and transfer cognitive and metacognitive reading strategies (CMRSs) from the narrative text to the expository one with similar frequencies at the pre- and post-intervention stages?

2) To what extent does explicit strategy instruction impact the frequent use and transfer of cognitive and metacognitive reading strategies (CMRSs) across text types (i.e., narrative, expository) among Moroccan EFL university learners?

3.3. Procedure

The study under focus is grounded in exploratory and experimental research design. It targeted 113 college-level learners (Experimental Group: n=63; Control Group: n=50). Worthy of note is that the current study is basically predicated on the principle of 'randomization'. In other terms, 'a two-group simple randomized design' was adopted in this experimental research for obvious comparability purposes. Essentially, both the first group and the second group were randomly selected by the researcher from a broad range of first-semester groups majoring in English Studies at the Faculty of Letters and Human Sciences at Mohammed V University, Agdal, Rabat. It is assumed that all the EFL groups, from which the two groups were drawn, included learners of varying levels of language proficiency and dissimilar reading capabilities. Accordingly, it was decided that the first group be assigned to the control condition and the second one be introduced to the experimental condition. This did contribute some measure of rigor and credence to the results relative not only to reading strategy acquisition, which can be considered as the by-product of the explicit cognitive and metacognitive reading strategy instruction (CMRSI), but also to reading strategy transfer across differing L3 written texts.

The explicit CMRSI received by the experimental EFL subjects lasted for a semester-long period (from October 2012 to January 2013). Each instructional intervention session was allotted three hours per week. Notably, throughout the training sessions, a constellation of varying reading comprehension texts of both narrative and expository kinds were assigned to the EFL group under investigation and effectively studied in an attempt to enable the actual applicability of the considered and instructed RSs. After diagnosing the learners' reading strategy knowledge, strategy use, and strategy transfer by means of the reading comprehension pre-test and the retrospective

questionnaire (RQ), the experimental group was instructed in CMRSs that are part and parcel of the achievement of an effectual text understanding, whereas the EFL group in the control condition remained intact. The latter group was taught reading comprehension in L3 without being exposed to any strategy intervention. At the conclusion of the CMRSI, a post-reading comprehension test including a narrative as well as an expository text, alongside the RQ, was assigned to the participant EFL groups (i.e., control, experimental).

Being exploratory and descriptive in nature, the adopted RQ in this case study was practically administered to the EFL subjects belonging to both the control and experimental groups. This was done with a view to tapping into the frequently implemented and retrospectively transferred reading 'heuristics' across text typologies (i.e., narrative, expository). Further, the RQ was intended to unravel any potential effect of CMRSI on the learners' reading strategy transfer and application during textual processing. Thus, all the targeted EFL subjects (control and experimental), upon completing the reading comprehension tests (e.g., pre-test, post-test), were asked to fill out the RQ at both the beginning and the end of the training sessions. In fact, the questionnaire delivered in the pre-test session was also given to the involved groups in the post-test session. This enabled the researcher to explore whether the group being exposed to the experimental treatment had acquired the target text-based strategies and transferred them from the narrative to the expository L3 written discourse.

The data assembled were computed via the Excel Software Program for the manifestation of the extent to which Moroccan EFL first-semester university students utilize and transfer cognitive (e.g., predicting, inferring, main idea selection, visualizing, underlining, note taking, paraphrasing) and metacognitive reading strategies (e.g., goal-setting, background knowledge use, self-monitoring, self-questioning, rereading, recalling, summarizing) in processing differing advanced-level English (L3) written discourse (i.e., narrative, expository). Thus, CMRSs, which were retrospectively reported among the control and treatment groups at both the pre-test and post-test stages, were numerically counted and presented in the form of percentages through illustrative figures.

4. Results

4.1. EFL Learners' Reading Strategy Use and Transfer across Narrative & Expository Reading Texts at Pre-testing

It is of paramount significance to state that the EFL learners' use of some CMRSs does differ slightly with regard to the genre of written discourse being analyzed and interpreted (See Figures 1, 2, 3, & 4). In particular, some, but not all, CRSs, which were utilized by the experimental subjects (n=63) to construct the meaning included in the narrative reading passage, were not extensively used and applied in their endeavor to

comprehend the content of the expository reading text and vice-versa. In this respect, the results attesting to this stated view are manifested in the figure below.
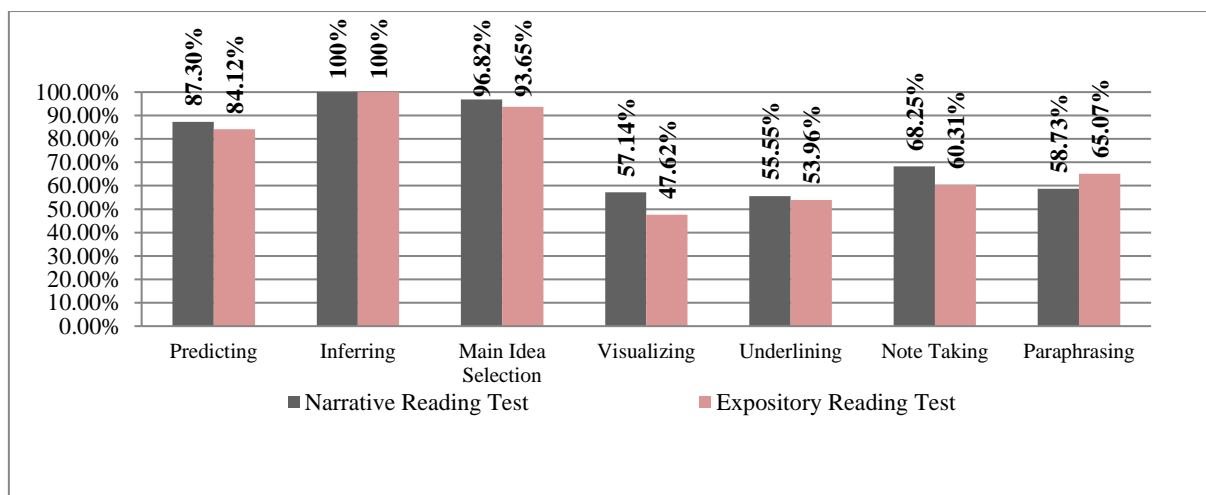
Figure 1: The Experimental Group's Use & Transfer
of CRSs across Text Types at Pre-testing Level

It is clear that the experimental group resorted to CRSs and transferred them across narrative and expository texts with differing degrees. While 57.14% represents the frequent recruitment of visualizing in reading the narrative text among the experimental group, only a percentage of 47.62% relative to the use of this cognitive strategy was resorted to by the subjects belonging to this group in reading the expository text. Additionally, note-taking was utilized by the experimental group, with proportions of 68.25% for the narrative text and 60.31% for the expository text. As to paraphrasing, it is, to some extent, equally genre-dependent. It was observed that a great number of the experimental subjects relied on this technique with differential proportions of 58.73% and 65.07% in dealing with the content of narrative and expository written discourse, respectively.

As to the EFL learners belonging to the control group (n=50), they tended to transfer and implement some CRSs more frequently than others for deciphering the intended meaning and constructing a comprehensive understanding of the L3 narrative and expository textual input. This is evident in the ensuing figure.
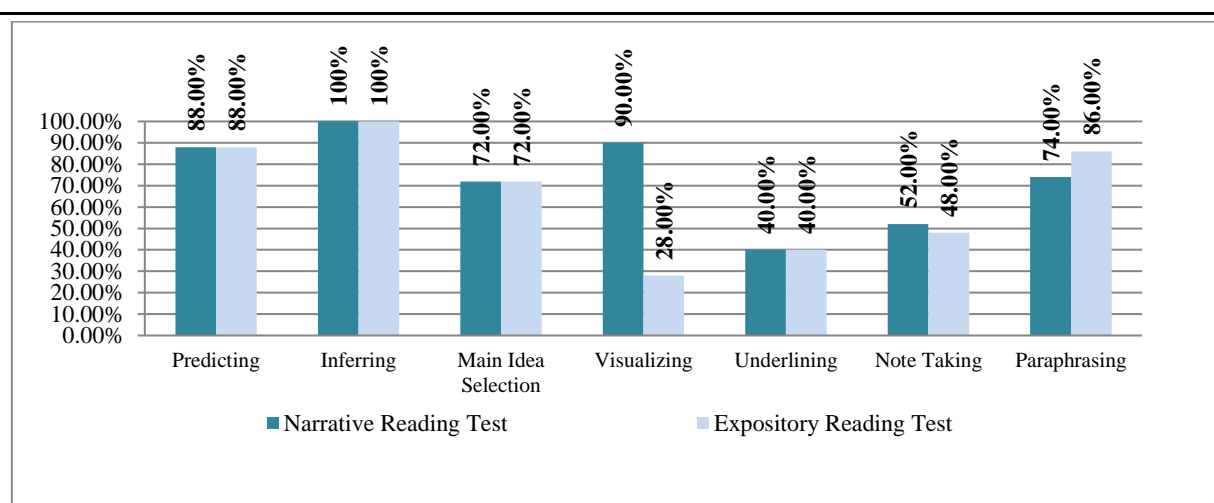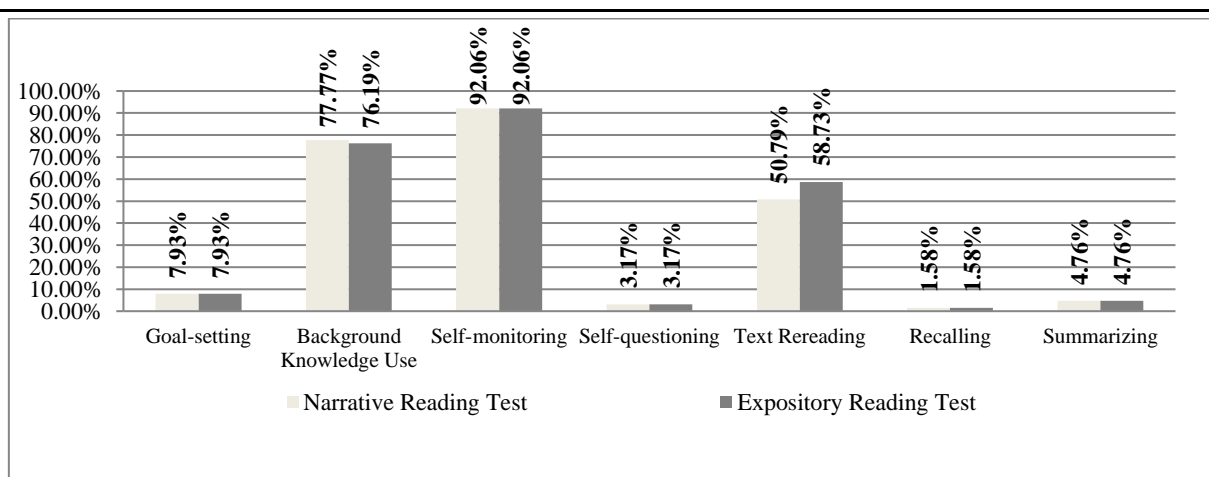
Figure 2: The Control Group's Use & Transfer of CRSs
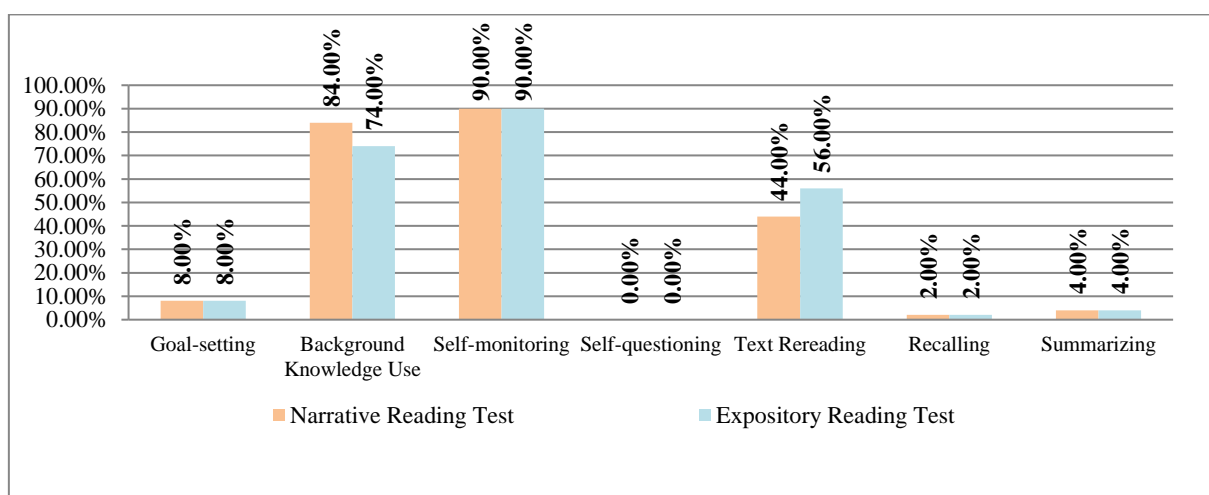across Text Types at Pre-testing Level

As plausibly shown in Figure 2, given that most text-related strategies were recruited with roughly similar percentages, it is fairly observable that some strategies (e.g., visualizing, note-taking, paraphrasing) were used and transferred with rather different proportions across the narrative and expository reading texts by the controls. For instance, the control subjects depended on the strategy of creating mental images in reading the narrative text with a frequent occurrence of 90%, whereas in processing the expository written text, the same group made use of this strategy only with a percentage of 28%.

Moreover, the use and transfer of note-taking and paraphrasing also appear to be basically genre-oriented. Indeed, in engaging in the analysis of the narrative text, the EFL learners belonging to the control group did report taking notes for the sake of facilitating understanding with a rate of 52%, whilst the reliance on this strategy in synthesizing the expository textual input is represented only by 48%. Further, the controls tended to rephrase the narrative textual input with an occurrence of 74%, whereas recourse to the process of paraphrasing the expository written text among the same group was made with a percentage of 86%.

With regard to MRSs such as planning (i.e., goal-setting, background knowledge use), monitoring (i.e., self-monitoring, self-questioning, rereading), and evaluating (i.e., recalling, summarizing), it is conspicuous that whereas a set of these strategies were used and transferred with equal proportions across text types (i.e., narrative, expository), rereading was invoked more frequently in processing the expository textual content amongst the experimental and control subjects at the pre-intervention level. This is illustrated in the two figures below.

Figure 3: The Experimental Group's Use & Transfer
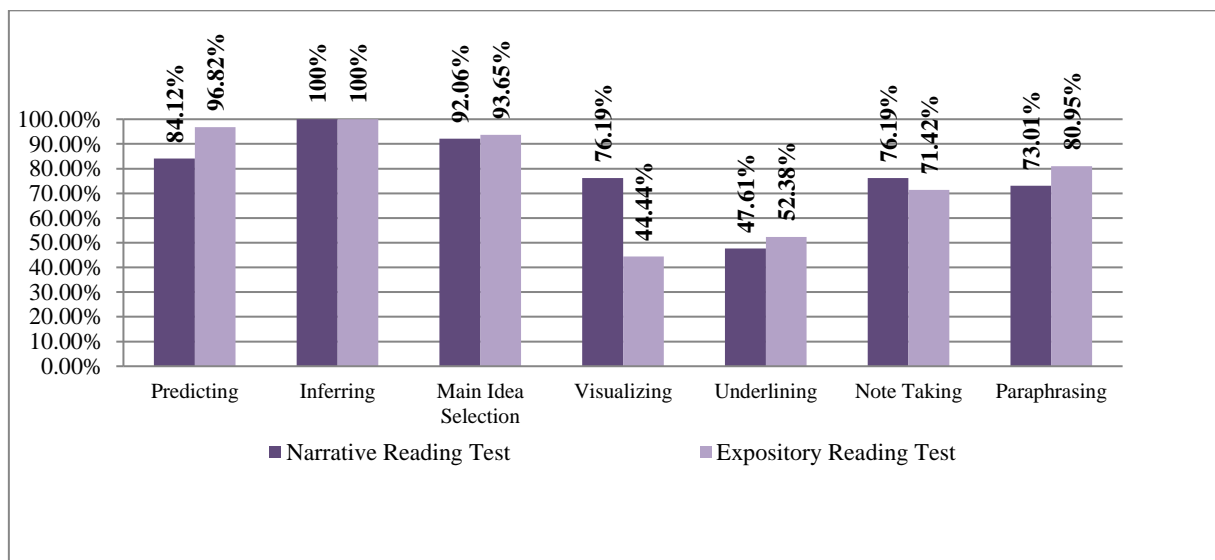of MRSs across Text Types at Pre-testing Level

Figure 4: The Control Group's Use & Transfer of MRSs
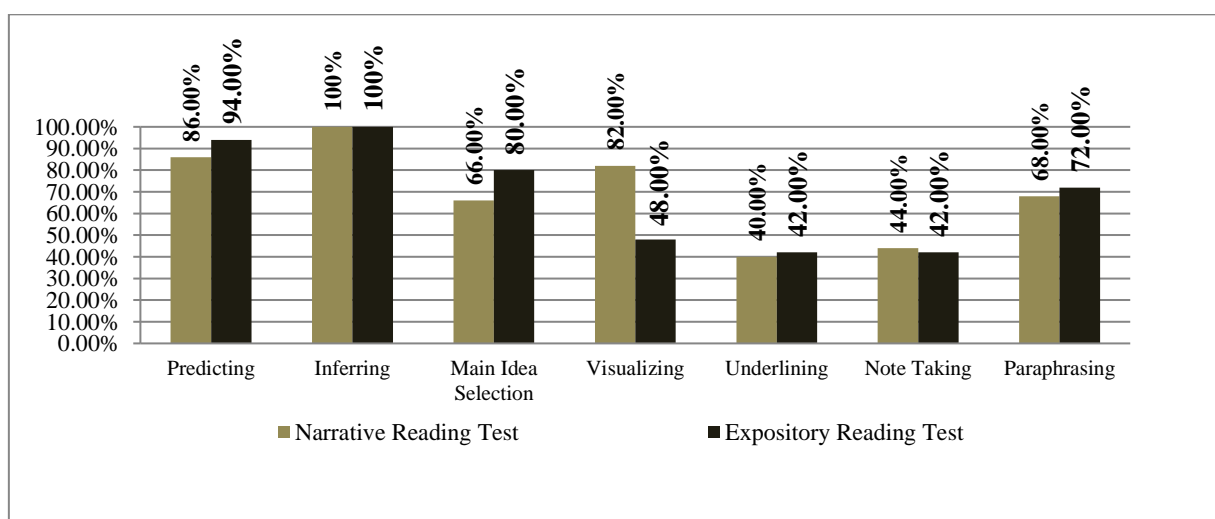across Text Types at Pre-testing Level

Based on the findings presented above, it is explicit that text rereading, as a metacognitive monitoring technique, was resorted to and transferred by both EFL groups (e.g., control, experimental) with markedly differing percentages across the assigned narrative and expository written texts at pre-testing. Actually, 44% and 56% of frequent recourse was made to the process of rereading the narrative and expository written discourse among the control group (n=50), respectively. As to the experimental subjects (n=63), they engaged in rereading the narrative textual input with merely a frequent execution of 50.79%. However, reprocessing the expository text for the mere achievement of an adequate comprehension of the content was achieved with a high frequency of 58.73%. This shows that attempts at constructing an understanding of texts of expository type require the strategic move of rereading more regularly on the part of EFL learners.

4.2. EFL Learners' Reading Strategy Use and Transfer across Narrative & Expository Reading Texts at Post-testing

It is apparent, from the findings stated below, that the same RSs (e.g., visualizing, note taking, paraphrasing, text rereading) did remain, to some extent, genre-sensitive across the pre-post-test continuum. This noticeable difference regarding the employment of these strategies in processing diverse written texts (i.e., narrative, expository) underscores the fact that the potential variable of genre does have a determining role in the act of textual reading. The following two figures show the frequent use as well as the dynamic transfer of strategies in dealing with text types.
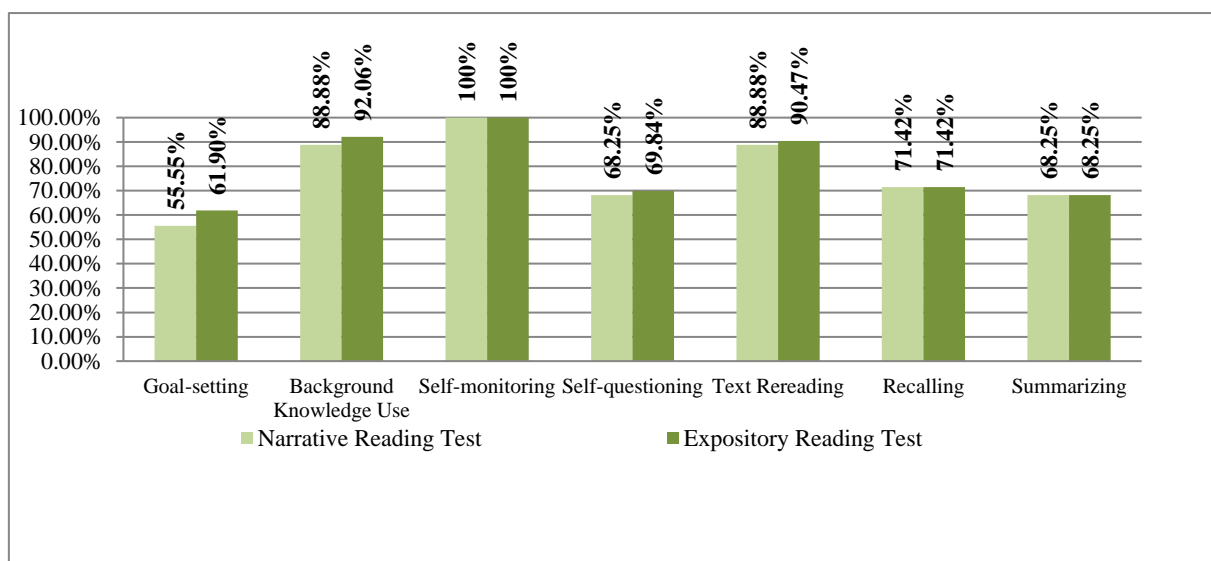

Figure 5: The Experimental Group's Use & Transfer
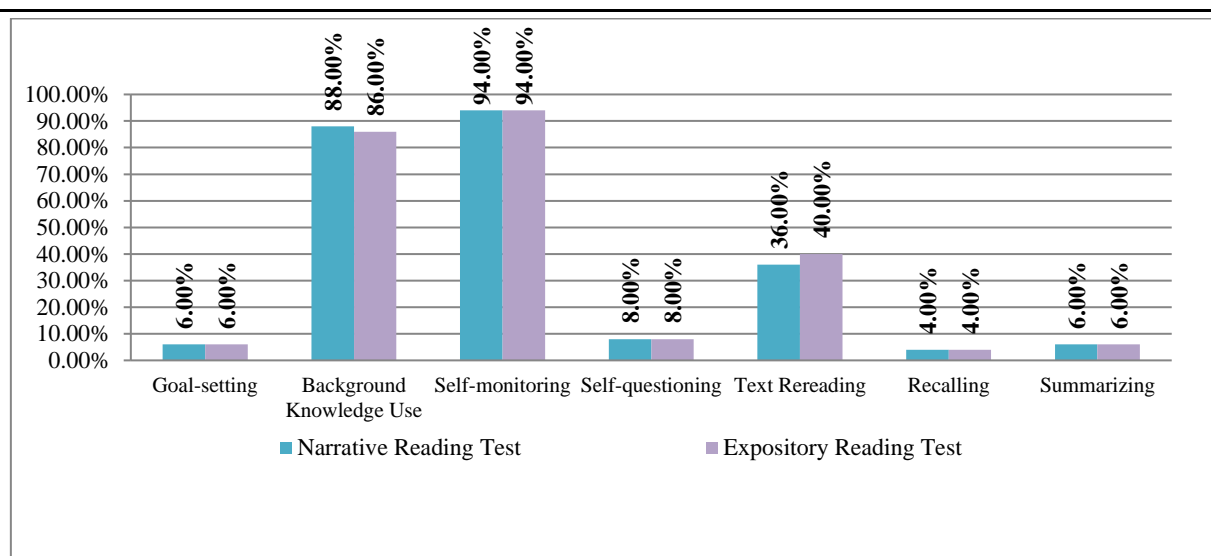of CRSs across Text Types at Post-testing Level

Figure 6: The Control Group's Use & Transfer of
CRSs across Text Types at Post-testing Level

As was the case at pre-testing, visualizing, note-taking, and paraphrasing were transferred and implemented with differential proportions among the participating EFL groups (e.g., control, experimental) at post-testing. Respectively, the controls depended on visualizing in reading the narrative and expository texts with percentages of 82% and 48%, whereas the experimental group made use of this technique in coping with these types of texts (narrative and expository) with different rates of 76.19% and 44.44%. Note-taking was made recourse to by the controls during the reading of the narrative and expository texts, with 44% and 42% of frequent use for each. As to the experimental subjects, they reported taking notes while processing the narrative and expository content with respectively stated frequencies of 76.19% and 71.42%. Also, paraphrasing was differentially recruited by the control group in processing the narrative (68%) and expository text (72%). Similarly, the treatment group depended on rephrasing in reading the narrative and expository written discourse with proportions of 73.01% and 80.95% sequentially.

Regarding the use of MRSs, it is of particular relevance to declare that some of these types of strategies (i.e., rereading) were called upon and recruited more frequently in analyzing the expository textual input among the treatment and comparison subjects at the post-intervention stage. This is showcased in the following two figures.

Figure 7: The Experimental Group's Use & Transfer
of MRSs across Text Types at Post-testing Level

Figure 8: The Control Group's Use & Transfer of MRSs
across Text Types at Post-testing Level

According to the results, it is clear that both the control and experimental groups used and transferred MRSs across text genres (i.e., narrative, expository). It is perspicuous that most MRSs were orchestrated and applied by the target two groups with relatively equal percentages when processing the narrative and expository L3 written texts. However, text rereading, as a remedial step taken by learners to strengthen their mastery of the encompassed L3 content and remediate any encountered comprehension breakdown, remained subject to the genre effect at post-testing. Whilst the controls resorted to text rereading in coping with the narrative and expository texts with 36% and 40%, respectively, the strategy-trained group depended on this metacognitive strategic move (i.e., rereading) with 88.88% in tackling the narrative written discourse and with 90.47% in processing the expository one. Thus, the engagement in text reprocessing was more overwhelmingly reflected by the target groups in reading the expository than the narrative text.

Overall, the group being subject to the experimental treatment showed fruitful, seeming advancement from the pre- to the post-test where reading strategy use (RSU) and transfer are concerned. In fact, a considerable increase in the rigorous implementation and transferability of CRSs across narrative and expository texts was remarked along the pre-post-test continuum. As for the proactive utilization and transference of MRSs across text genres, it is noticeable that the percentages of this type of strategies made recourse to in processing the narrative and expository texts incrementally increased at the post-test level.

5. Discussion

This study was intended to showcase the extent to which Moroccan EFL university learners use cognitive and metacognitive reading strategies (CMRSs) and transfer them

from the narrative written text to the expository one with similar or different frequencies across the pre- and post-testing levels. The attained findings substantiated the notion that EFL learners, namely at the first-semester level, retroactively invoke, transfer, and apply some RSs more frequently than other ones whilst coping with differing texts. This is notably traceable to the variable of text genre (i.e., narrative, expository) which directs and dictates to the learners the strategies which facilitate the accessibility to the textual input in a flexible, effective manner.

It is plain that at the pre-testing stage, the targeted groups (i.e., control, experimental) did have recourse to a robust corpus of coping reading heuristics (i.e., cognitive, metacognitive). Though the learners of both groups deployed more cognitive than metacognitive RSs for decoding the L3 textual content on the pre-testing, it is of significant relevance to put forth that text type did impact their text-processing mode, strategic approach, and strategy transfer since the efficient comprehension of the expository textual content requires the concerted orchestration and usage of some particular text-oriented strategies (i.e., paraphrasing, rereading) on a frequent basis.

Hence, text genre had a slight impact on the sampled EFL students' RSU and transfer throughout the multidimensional process of comprehension. In fact, though the reported findings conveniently accord with the underlying perspective that MRSs were not deployed by the target subjects on a larger scale compared to the CRSs, namely on the pre-testing, it is obvious that the disparity at the level of strategy utilization frequency in coping with narrative and expository reading texts is an undeniable principle and a consistent variable in L3 text processing. It can be deduced that the perceived effect of the text type on the learners' RSU and transfer is to be underscored. Clearly, some, and not all, of the strategies used by the EFL learners targeted in this study slightly differed according to the type of written text (i.e., narrative, expository) being processed. This slight variability concerning strategy selection, transfer, and deployment is predominantly governed by the typology of the L3 written discourse, which presupposes effective strategic processes that are certain to fulfill and facilitate the reading comprehension task among EFL readers. Thus, based on the reached outcomes, it is claimed that the main strategies that seemed to differentiate the learners' way of tackling the included meaning along the continuum of the narrative and expository texts are visualizing, note-taking, paraphrasing, and re-reading.

Whereas some text-processing strategies (e.g., visualizing, note taking) were highly made use of by the target subjects in coping with the L3 narrative text, other strategic moves (e.g., paraphrasing, rereading) were heavily depended upon in an attempt to achieve an adequate and efficacious comprehension of the L3 expository text. This postulate does align with some researchers' (e.g., Botsas, 2017; Duke *et al.*, 2011) tacit perspective that learners engage in varying processing techniques when analyzing diverse written texts. In other words, the genre factor plays a great role in the extent to which EFL readers tend to strategize the assigned L3 written discourse. Therefore, some

dissimilarity starkly typified the targeted EFL learners' strategic approach to diverse types of L3 written passages (narrative, expository).

Particularly, the targeted learners recurrently implemented visualizing primarily for processing the narrative written discourse. This genre-specific strategy enabled the subjects to construct a mental picture of the setting, characters, space, time, and events, which are the major components of any typical narrative. The premise that visualizing is specific to the analysis of the narrative text buttresses Denis's (1982) view that *"one interesting feature of narrative texts, in particular, is that they appear to induce visualization in the reader as part of the reading process"*. This indicates that the creation of mental images in the reading process is basically directed by a certain range of events, which presuppose the process of visualizing to facilitate the cognitive act of comprehension. However, though used in an extensive way in synthesizing the narrative text, visualizing was reported to be used and transferred by some of the participating EFL learners when dealing with the expository text as well. Yet, the magnitude of the genre effect on the learners' use of the visualizing technique in an attempt to interpret the narrative content was more substantial.

With reference to note-taking, it is manifest that this cognitive strategy is genre-dependent. Indeed, the targeted EFL learners relied on it more frequently in the reading of the narrative written input. Nevertheless, the participating EFL subjects had recourse to and transferred this reading strategy in coping with the expository textual content. Obviously, the heavy trend was invariably for the use of this strategic step in attempting to develop a sense of the narrative text. By way of contrast, underlining, which was reported to be used in an interchangeable manner with note-taking by both groups (control, experimental), was not influenced by the genre of the L3 written discourse (narrative, expository).

Further, there is a clear difference in the degree of the use of paraphrasing between the EFL participant learners in handling the different types of L3 texts. Though the operation of coming up with paraphrases is part of achieving comprehension of diverse sorts of texts, most learners from both groups (i.e., control, experimental) reflected a somewhat higher dependency on this strategic move while reading the expository text. The latter entails that readers know a wide array of synonymous concepts and rephrasing techniques that allow for a full grasp of the content. In this respect, the processes the participants in both groups engaged in while attempting to paraphrase the content are incarnated in translating the words/sentences into Arabic (L1) or French (L2) and coming up with the equivalent words/concepts that can be used interchangeably with the ones used by the writer/author in the written discourse. Clearly, the performance of the paraphrasing process by the target EFL learners seemed to be widely directed toward the written expository text type. This, indeed, cannot negate the overriding principle that rewording the terminologies and statements contained in the L3 narrative text did help the EFL learners in the process of attaining understanding.

Text rereading, as a metacognitive strategic step facilitating comprehension, is somehow impacted by text type (i.e., narrative, expository). In other terms, the focused EFL subjects made excessive use of this comprehension-checking strategy in reading the expository written passage. Actually, the difficulty, the expository text content is characterized with, did make the participating learners resort to rereading (e.g., sentence rereading, paragraph reading) more frequently to achieve better understanding. In contrast, although the narrative written text requires student-readers to reread the included message with a view to comprehending the writer's/author's postulated ideas, learners deal with the narrative written text with somewhat greater ease. This state of affairs backs up Geva and Ryan's (1985) assertion that learners encounter greater difficulty in unraveling the logical relations in expository texts than the narrative ones.

Contrarily, it should be mentioned that predicting, which constitutes an important platform for building an overall representation of the textual content, does not significantly vary depending on the genre among both the control and experimental groups. This shows that the act of coming up with predictive guesses pertaining to the written texts is similarly undertaken for both the narrative and expository texts. Actually, concentrating attention on the keywords, reading the first sentence/paragraph of the text, and reading the text title are the main 'sub-heuristics' used in forming expectations about the content of any given L3 written discourse. The postulated finding that the target EFL learners involve themselves in almost comparable 'predictive' processes whilst coping with the narrative and expository written texts contradicts some previous research findings (e.g., Afflerbach, 1990), which emphasize that text genre determines the learner readers' use of prediction.

Furthermore, despite the learners' ineffective quality of comprehension monitoring at pre-testing, most subjects tended to utilize similar techniques in this regard. Notably, the EFL learners, from both control and experimental groups, converged on the use and transference of some sub-techniques such as depending on the context, slow reading, sentence/paragraph rereading, and stopping for checking comprehension in reading the narrative as well as the expository passages. However, the overwhelming majority of both EFL groups did not report the implementation of goal-setting, self-questioning, recalling, and summarizing whilst coping with the narrative and expository texts at the pre-testing level. This justifies the fact that the insufficient use of MRSs is apparent across the different text types. Thus, though they significantly differed in terms of the frequency of use and the intensity of transfer regarding some RSs (i.e., visualizing, note taking, paraphrasing, rereading) in approaching various written texts (e.g., narrative, expository), the targeted EFL learners did not sufficiently resort to other efficient text-processing strategies (i.e., goal-setting, self-questioning, recalling, summarizing) with the purpose of achieving an effectual comprehension at the pre-testing stage.

At the post-testing level, it is noteworthy to state that the use and transfer of some RSs (i.e., visualizing, note-taking, paraphrasing, rereading) had remained subject to the

influence of text type. This indicates that the significant variable of genre predetermines the flexible usage and potential transferability of some strategies in different ways and to dissimilar degrees. Being exposed to the reading strategy instruction, the treatment subjects seemed to reflect improved, unparalleled progress in terms of RSU and transfer. Yet, the frequency of using some RSs and the rate of transferring them across L3 narrative and expository written texts remained heavily dependent on the agent of the genre throughout the explicit CMRSI. This refers to the indisputability of the fact that the flexible execution of some reading 'heuristics' is basically governed by the type of text (i.e., narrative, expository) being processed.

Even if the use of visualizing, note-taking, paraphrasing, and rereading was substantively enhanced among the experimental subjects at post-testing, they were differentially transferred and implemented in interpreting and making efficient sense of the narrative and expository texts by both EFL groups (i.e., control, experimental). This overriding principle places tremendous stress on the inevitability of the genre impact on the frequency of strategy use and the rate of strategic transfer among EFL university-level learners since the characteristic features and the inherent content of the written text entail heavier dependency on some overarching CMRSs that facilitate the attainment of an effective understanding. More essentially, the probability of the genre effect, in all likelihood, cannot be precluded so long as the EFL learners under focus frequently called upon and retrospectively transferred some strategies according to the type of text they were engaged in.

The process of visualizing was undertaken differently across diverse text genres (e.g., narrative, expository). As was the case at pre-testing, the higher frequency of the use of visualizing was observed in the analysis and interpretation of the narrative written discourse among both groups (control and experimental) at post-testing. Further, the strategic step of note-taking was, in a way, frequently utilized by the participants of both groups in reading the narrative text as compared to the expository one. Paraphrasing, in itself, had remained subject to the impact of text type. It was used at a highly frequent rate by the experimental group in reading the expository written text as compared to the narrative one. In a similar way, the control group made more slightly frequent recourse to this content-analysis technique while reading the expository text. As for text rereading, both participating EFL groups revealed heavy dependency on this strategy in dealing with the expository text as opposed to the narrative one.

The above-stated facts attest to the view that the influence of the text type on strategy utilization and transfer had been consistent throughout the reading strategy intervention. The deployment of the 'genre-specific' strategies (i.e., visualizing, note-taking, paraphrasing, rereading) is directed by the typology of the textual content targeted. This is corroborated by Francis and Hallam (2000) who affirm that learning in higher education is influenced by such variables as prior knowledge, learning strategies, and the ability to cope with text type. This features that the text type constitutes one major variable impacting the learners' strategic reading mode. Apparently, the cognitive

engagement in text processing varies according to genre as the accessibility to textual input entails more frequent use of some RSs among EFL learners for the main goal of attaining a certain kind of sufficiency in reading comprehension. Hence, the finding that learners methodically transfer CMRSs across narrative and expository texts and utilize some of them more frequently is in line with prior research outcomes (e.g., Botsas, 2017; Kraal *et al.*, 2018; Niforoushan *et al.*, 2024; Schmitz & Dannecker, 2023) testifying to the conceived impact of text genre on reading strategy use (RSU).

Additionally, it should be highlighted that, as a result of the (meta) cognitive reading strategy training, the EFL learners from the treatment group tended to adopt and deploy certain basic strategies (e.g., goal-setting, self-monitoring, self-questioning, recalling, summarizing) which added to their pre-existing reading strategy repertory. In effect, these cited strategies were made use of by the student-readers under the treatment condition at rather comparable levels and transferred across text types (i.e., narrative, expository) in somewhat similar ways. Almost all the target learners stated the same goals and initiated questions that had a facilitative effect on their overall understanding of the text content. This indicates that text genre does influence only some RSs that EFL learners employ in the course of text reading. In other words, whereas the execution of some strategies is genre-dependent, other strategies can be applied and transferred, in a likely similar manner, to different types of written discourse (i.e., narrative, expository). Further, though background knowledge was heavily depended upon by the control and treatment groups in reading the narrative rather than the expository reading text at pre-testing, the reverse occurred at post-testing as the treatment participants resorted to their schematic knowledge more regularly in reading the expository text than the narrative one. This evidences that reliance on prior knowledge in L3 textual processing is not genre-specific.

On the whole, though the influence of text type on reading strategy use (RSU) and transferability is not a deniable fact, the employment of CMRSs across the pre- and post-testing phases revealed a significant difference as to the proportion with which they were executed among the treatment group. Realistically, it is posited that the noticeable improvement in regard to the retrospective application and potential transfer of the text-processing strategies under focus (e.g., cognitive, metacognitive) across the L3 narrative and expository textual input among the target treatment group at post-testing is the by-product of (meta) cognitive reading strategy awareness which constitutes the core element of the conducted instructional strategy intervention.

In light of what has been stated above, it is indicative that the cognitive processing of the written discourse, be it narrative or expository in type, does entail the exertion of mental efforts and thinking capacities for formulating an adequate representation of the textual message, and thus achieving an efficient understanding. In effect, both types of the assigned L3 written texts (i.e., narrative, expository) required from the target EFL learners to depend on their working memory mechanisms and executive functioning, which enable them to fluidly operate a coordinated set of RSs. The latter does contribute

to the facilitation of an effective, if not an utter, assimilation of the overall included meaning. However, what is worth bringing forward is the premise that, despite the experimental group's exposure to CMRSI, the potential influence of text genre remained prevalent in their reading modality, processing mode, and strategy transfer.

6. Conclusions, Implications, & Limitations

This undertaken study aimed at disentangling the use and transferability of cognitive and metacognitive reading strategies (CMRSs) across text genres (i.e., narrative, expository). Granted the attested premise that EFL Moroccan university learners' reading achievement scores are not genre-dependent (e.g., Cervetti, Bravo, Hiebert, Pearson, & Jaynes, 2009; Msaddek, 2017), it is obvious that the deployment of some RSs, namely cognitive and metacognitive ones, is inherently governed by the typology of the L3 written discourse. Indeed, EFL university-level learners do immerse themselves in the cognitive act of shifting and transferring all the strategic techniques from one particular type of written text to another one with a view to making complete sense of the included content. Yet, some strategies (e.g., visualizing, note taking, paraphrasing, rereading) are evoked, transferred, and implemented more frequently than the other ones among the learners due to the characteristic features typifying the reading text under critical study.

The attained results indicate that RSU does vary at the level of text type. In effect, the subjects depended heavily on some strategies (e.g., visualizing, note taking) while attempting to tackle written texts of narrative type. However, somewhat heavy reliance on paraphrasing was reflected among the EFL participating groups (i.e., control, experimental) in their attempts to tackle the expository written passage. Also, the metacognitive strategy of rereading was largely executed by EFL learners when exposed to the expository written text. To some extent, this stated assertion highly reveals that RSU among the EFL learners is genre-sensitive since some cognitive (e.g., visualizing, note taking, paraphrasing) and metacognitive text-processing techniques (e.g., rereading) were disproportionately deployed and transferred by the target subjects for reaching an effective understanding of the assigned written texts (i.e., narrative, expository). Accordingly, the learners' potential use and active transfer of some RSs were proved to be guided, to some extent, by text type.

Thus, it can be claimed that, while the learners' reading achievement scores are not governed by 'genre-sensitivity' (Cervetti *et al.*, 2009; Msaddek, 2015, 2017), their strategy utilization and transfer are influenced, to some degree, by the genre of the textual passage they are exposed to. Noteworthy is that the cognitive process of reading was not uninfluenced by the typology of the studied text insofar as the proactive use and potential transference of some RSs were more recurrent in reading the narrative text than reading the expository one among the learners targeted. This fluctuating, differential frequency at the level of (meta) cognitive reading strategy use and transfer when processing differing text types (i.e., narrative, expository) does not have any impact on the EFL

learners' reading comprehension scores which are not genre-dependent (Msaddek, 2015). Obviously, the influence of the component of the text type on the transferability and usage of some RSs seemed to persist from the pre- to the post-test stage. This can be mainly attributed to the salient features characterizing each text genre. Hence, it can be stated that the learners' processing of the L3 texts is potentially genre-sensitive.

With reference to the implications drawn from this study, it is recommended that academic practitioners select a broad plethora of L3 narrative and expository texts and assign them to university learners. Indeed, the analysis and synthesis of these types of written discourse can maximize the learners' reading potential and assist them to engage more substantially in the act of text processing. Further, it is deducible that the assignment of written texts characterized by difficulty can increase the learners' reading efficiency, processing efficacy, and monitoring competency. This consolidates their way of strategizing the content throughout the performance of textual reading. Actually, the generalized application of CMRSI, along with the administration of challenging written texts (i.e., narrative, expository), to the Moroccan higher education context is a necessary requirement in EFL reading instruction. In that way, the learners will foster the potent capability of making frequent recourse to and shifting some strategic moves that fit the type of written discourse under focus. This 'genre awareness' can direct the EFL learners' thinking processes towards the optimal way of transferring and putting into action the RSs for gaining an overall understanding of the textual information. Therefore, the recommendation that a wide range of L3 narrative and expository written texts be assigned to first-semester university EFL learners is of prime consideration in this regard.

Granted the insightfulness of the outcomes generated through the conduct of this study, which is derived from one of the sections of my unpublished doctoral dissertation (Defended in 2015), some limitations are to be acknowledged. The first limitation is that the study focused on the use and transference of CMRSs in processing only the narrative and expository L3 written discourse. This paves the way for future research to address a multiplicity of written texts, which are of descriptive, argumentative, technical, and scientific types. The second limitation pertains to the small sampling of the participants belonging to the Faculty of Letters and Human Sciences in Rabat. Thus, further research should target learners from differing Moroccan higher education institutions for the assurance of global representativeness. The third limitation is embodied in the gender variable as the study did not take into account the use and transferability of CMRSs in textual processing among male and female EFL learners. In that respect, the tackling of (meta) cognitive reading strategy use and transfer from a gender perspective would afford viable, intriguing insights into the dynamically multifaceted process of reading in English (L3).

Conflict of Interest Statement
The author declares no conflicts of interest.

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