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An Empirical Study of the Effects of Output and Model Composition Input on Second Language Writing

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Abstract

Currently, English teaching in China lays excess emphasis on language input but ignores the function of language output. This study aims to conduct an empirical study on the effects of output and model composition input on second language writing. Three problems are going to be explored: (a) The language features noticed by students in the process of model composition study; (b) The validity of the effects of output and model composition study on second language writing from the perspectives of influence, accuracy, and complexity; (c) differences in the noticing process and learning outcomes among different levels of learners. Statistics show that in reading the model composition vocabulary is the first thing that is noticed, not grammar, content, rhetoric or discourse structure. Output and model composition study play an important role in enhancing the accuracy of writing. The learning outcomes vary among different levels of language learners. It is discovered that the output-driven teaching model is conducive to the reform of the traditional teaching concept and model compositions by native speakers could be regarded as an effective way of teacher feedback in second language writing.

Key words: Output; Model composition input; Second language writing; Empirical study; Learning outcomes

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INTRODUCTION

Input and output have always been considered as the core concepts by SLA researchers. According to the input hypothesis (Krashen, 1985), only when language learners receive continuous comprehensible input can they understand the information of language input and then acquire language. Swain (1985) holds that comprehensible output is also the important prerequisite for language acquisition. In order to attain the fluency and accuracy of second language, language learners need not only "comprehensible input" but also "comprehensible output". The two contrasting hypotheses have profounding influence to SLA research as well as other related subjects. In recent years, researchers both at home and abroad have conducted numerous theoretical and empirical studies on input and output, but few have combined the two processes together. Based on the output hypothesis, this study explores the effects of integrating output and model composition input on second language writing.

1. LITERATURE REVIEW OF THE EMPIRICAL STUDY ON THE FUNCTION OF LANGUAGE OUTPUT IN SECOND LANGUAGE WRITING

Up to now, the study on the function of language output is rare. Qi and Lapkin (2001) studies two intermediate-level students' noticing in second language writing output.

Through think-aloud, they found that the noticing of language learners has some effects on the revising of the composition. Another discovery worthy of noticing is that advanced-level learners could be able to notice a large number of language forms in the model composition and apply them in the revision of the first draft.

Hanaoka (2007) found that in the process of language output learners could notice the knowledge gap in their interlanguage, which makes them give full attention to the use of such language forms in the related text. Similar to Qi and Lapkin (2001), Hanaoka studies on whether language output task which consists of several stages of writing could enable the learners to notice the subsequent language input. Through analyzing the learners' notes, Hanaoka (2007) found that learners are more likely to notice the problems in vocabulary instead of grammar in writing their first draft. When they read the model composition, they can pay full attention to the problems they have noticed before and effectively revise their own writing. It is found that advanced level learners can notice more linguistic features than learners with lower proficiency.

In Hanaoka's study, note-taking is a task that arouses students' noticing in the second stage of writing. The study explores the extent to which the language gap they notice and the subsequent input (model composition) can promote the correct use of language forms in the rewriting stage. However, note-taking itself can help to decode the noticed language forms. Therefore, it is necessary to further testify the effect of output and model composition study on second language writing, especially on the development of learners' interlanguage.

2. RESEARCH DESIGN

2.1 Research Questions

This study aims to explore the roles of output and model composition study in solving the language problems and the effects on promoting second language writing proficiency. Three research questions are explored.

(a) What language features are noticed in model composition study?

(b) What effects do output and model composition study have in enhancing learners' second langauge writing proficiency?

(c) Are there any differences between noticing and learning effects for learners at different language proficiency levels?

2.2 Research Subjects

The study takes 21 first-year students of English majors in a class of Jiangsu University of Science and Technology as the research subject. After finishing their first draft, the students are required to study the model composition of the same topic and take notes. The students are classified into 3 groups according to their socres in CET-4 and their middle and final exams: the advanced level(A), the intermediate level(I), and the lower level(L). Each group consists of 7 students.

The research materials include a picture composition and its model composition (see Appendix 1 and Appendix 2).

2.3 Research Procedure

Similar to Hanaoka (2007), the students are asked to finish the three stages of output task: writing a picture composition, comparing with the model composition, and rewriting the composition. The main purpose of the output task is to let the students recognize the knowledge gap in their second language. Before the task, the researcher gives a brief introduction to the assignments in each stage.

During the first stage, the learners are asked to finish a picture composition within 30 minutes in class without consulting dictionaries or materials. The composition should be about 200 words with no restriction on the genre. The teacher collects all the compositions after 30 minutes.

During the second stage, the researcher hands out each student a model composition of the same topic by a native speaker three days after the first stage. The students are required to make a comparison with their first drafts and take notes. Based on the classifications of Hanaoka (2007) and Saeidi & Sahebkheir (2011) as well as the contents of sutdents' notes, this study divides the contents of students' notes into five categories: vocabulary, grammar, discourse, content, and others. For sake of data analysis, the research suggests that students can make a comparison in terms of the above five categories and also encourages students' freedom and creativity in taking notes. In the end, the students handed in their notes as well as the model composition.

The five categories include:

(a) Vocabulary: The use of words and phrases;

(b) Grammar: The grammatical forms of words and sentence structure;

(c) Discourse: Genre and discourse structure; cohesion and coherence;

(d) Contents: Descriptions about the picture and the related associations and imaginations;

(e) Others: Other aspects such as rhetoric and creativity in writing.

During the third stage, the students are asked to rewrite the same picture composition a week after the comparison with the model composition. The researcher collects all the compositions.

2.4 Research Findings

2.4.1 Language Features Noticed by the Students

In order to answer the first research question, we marked and classified the parts that are noticed by the students. Then we calculated the number and percentage of each category. The results are as follows.

Table 1
Statistic Analysis of Language Features Noticed by the Students

	Vocabulary	Grammar	Content	Discourse	Others	Total
Number of notes	86	27	20	11	8	152
Percentage	56.6%	17.8%	13.2%	7.2%	5.3%	100%
Number of students	20	16	11	10	6	21
Percentage	95.2%	76.2%	52.4%	47.6%	28.6%	100%

As can be seen in the table, 95.2% of the students notices the use of some words and expressions which occupy a percentage of 56.6% of all the noticed items. Some words or phrases are frequently noticed, such as *tickle, stir, shut off, peacefully,* and *sleep with her head at the foot of the bed,* which were noticed by more than five students.

As for grammar, 76.2% of the students notice the grammatical phenomena in the model composition which account a percentage of 17.8% of all the items. From students' notes, it can be seen that students paid much attention to some complex sentences and sentences with special structures. Exclamatory sentences and sentences with the structure *such…that* are the two sentence types that are most frequently noticed. Each is noticed by six students. Through the comparison, most students find that they are not good at using complex sentences in their writing.

In content, 52.4% of the students miss or ignore some details which amount to 20 items with a percentage of 13.2%. What they ignore most is the detail that the girl brushed the teeth and combed the hair at the same time. The appearance and feeling after the girl left home is another detail which is ignored.

In discourse, 47.6% of the students noticed the discourse features of the model composition which amount to 11 items with a percentage of 7.2%. Among the 11 noticed discourse features, 4 items are in genre, 3 in discourse structure, and 2 in cohesion device. Besides, one or two students noticed the style and theme of the story. From the macro perspective, the genres include narrations, argumentative essay, and advertisement. Some students notice the structure and language style of the writing from a macro perspective. From the micro perspective, some students noticed the cohesion devices such as the use of conjunctions which could make the writing more coherent and readable.

In other aspects, 28.6% of the students observe some creative and imaginative aspects of the writing. There are 8 items being noticed, with 4 items on creative and imaginative thinking, 2 items on critical thinking about the language errors or inappropriate use of some expressions, and the use of some rhetoric devices such as personification and metaphor.

2.4.2 The Effects of Output and Model Composition Study on Second Language Writing

In order to answer the second question, this thesis conducts the analysis in two ways. One is to give scores to the pretest and posttest. In order to enhance the credibility and feasibility, the scores are given by two experienced teachers of English major according to the grading standard of CET-4. They know nothing about the research process. They give the scores in terms of language, contents, and discourse structure. The total score of CET-4 composition is 15. The final score is the average of the scores give by the two teachers. Another way is to conduct a statistical analysis on the fluency, accuracy, and complexity of the pretest and posttest.

Table2
Statistic Analysis of Pretest and Posttest Scores

Paired Sample Statistics

		Mean	*N*	Standard deviation	Standard error
Pair 1	Pretest	70.25	20	6.816	1.524
	Posttest	65.925	20	7.3561	1.6449

Paired Sample Correlation

		N	Correlation coefficient	Sig.
Pair 1	Pretest & posttest	20	.349	.132

Paired Sample Test

		Paired differences					*t*	*df*	Sig
		Mean	Standard deviation	Standard error	95% confidence of interval of difference				
					Upper	Lower			
Pair 1	Pretest -posttest	4.3250	8.1002	1.8112	0.5340	8.1160	2.388	19	.027

Statistics show that the mean scores of pretest and posttest are 70.25 and 65.925. The mean score of the posttest is decreased. The paired sample correlation statistics show that the correlation coefficient is 0.349 which is relatively low and the sig. is .132 (>.05), which means it does not fit for paired sample test and there is no significant difference between them.

2.4.4 Statistic Analysis of the Proficiency of Pretest and Posttest

Table 3
Statistic Analysis of Fluency of Pretest and Posttest

Paired Sample Statistics

		Mean	*N*	Standard deviation	Standard error
Pair 1	Number of words (pretest)	172.00	20	37.483	8.381
	Number of words (posttest)	165.40	20	29.518	6.600

Paired Sample Correlation

		N	Correlation Coefficient	Sig.
Pair 1	Number of words (pretest) & number of words (posttest)	20	.427	.061

Paired Sample Test

		Paired difference					*t*	*df*	Sig.(2-tailed)
		Mean	Standard deviation	Standard error	95% confidence of interval of difference				
					Upper	Lower			
Pair 1	Number of words (pretest) & number of words (posttest)	6.600	36.493	8.160	-10.479	23.679	.809	19	.429

Statistics show that the means of words of pretest and posttest are 172.0 and 165.4, respectively with a standard difference of 6.600. The paired sample correlation statistics show that the correlation coefficient is .427 which is relatively low and the sig. is .061 (>.05) which means it does not fit for paired sample test and their difference is insignificant.

Accuracy: We count all the grammatical errors in the pretest and posttest and calculate the percentage, and then conduct a paired sample analysis with SPSS 17.0.

Table 4
Statistic Analysis of Accuracy of Pretest and Posttest

Paired Sample Statistics

		Mean	*N*	Standard deviation	Standard error
Pair 1	Erro percentage of pretest	3.0565%	21	3.25840%	0.71104%
	Erro percentage of posttest	1.8973%	21	1.42565%	0.31110%

Paired Sample Correlation

		N	Correlation coefficient	Sig.
Pair 1	Erro percentage of pretest & erro percentage of posttest	21	.618	.003

Paired Sample Test

		Paired difference					*t*	*df*	Sig.(2-tailed)
		Mean	Standard difference	Standard error	95% confidence of interval of difference				
					Low	Upper			
Pair 1	Erro percentage of pretest & erro percentage of posttest	1.15921%	2.62851%	0.57359%	-0.03728%	2.35569%	2.021	20	.057

Statistics show that the error percentage of the pretest decreases from 3.0565% to 1.8973% compared with that of the posttest. The correlation coefficient is .618, and the sig. is .003(<.05), indicating that difference between the two variables is significant.

Complexity: It includes syntactic complexity and lexical complexity.

Syntactic complexity is measured by the percentage of subordinate clasues in all the sentences (Ishikawa, 2007).

Table 5
Statistic Analysis of Sentence Complexity of Pretest and Posttest

Paired Sample Statistics

		Mean	*N*	Standard difference	Standard error
Pair 1	Percentage of subordinate clauses of pretest	27.7622%	21	11.51395%	2.51255%
	Percentage of subordinate clauses of posttest	42.9593%	21	20.63783%	4.50354%

Paired Sample Correlation

		N	Correlation coefficient	Sig.
Pair 1	Percentage of subordinate clauses of pretest & Percentage of subordinate clauses of pretest	21	.098	.674

Paired Sample Test

		Paired difference					*t*	*df*	Sig.(2-tailed)
		Mean	Standard difference	Standard error	95% confidence of interval of difference				
					Lower	Upper			
Pair 1	Percentage of subordinate clauses of pretest & percentage of subordinate clauses of pretest	-15.19709%	22.63027%	4.93833%	-25.49826%	-4.89592%	-3.077	20	.006

Statistics show that there is a significant increase (15.19709%) in the syntactic complexity of posttest, from 27.7622% to 42.9593%. 95% confidence of interval of difference does not include 0, which shows that there is no significant difference between the two variables.

Lexical complexity is mainly measured by the type-token ratio (Larsen-Freeman, 2006). The types and tokens are calculated by Range 32.

Table 6
Statistic Analysis of Lexical Complexity of Pretest and Posttest

Paired Sample Statistics

		Mean	*N*	Standard deviation	Standard error
Pair 1	Lexical complexity of pretest	0.594292	21	0.0426343	0.0093036
	Lexical complexity of posttest	0.577790	21	0.0482594	0.0105311

Paired Sample Correlation

		N	Correlation coefficient	Sig.
Pair 1	Lexical complexity of pretest & lexical complexity of posttest	21	.378	.091

Paired Sample Test

		Paired difference					*t*	*df*	Sig.(2-tailed)
		Mean	Standard difference	Standard error	95% confidence of interval of difference				
					Lower	Upper			
Pair 1	Lexical complexity of pretest-Lexical complexity of posttest	0.0165016	0.0508971	0.0111067	-0.0066665	0.0396697	1.486	20	.153

Statistics show that there is a slight decrease of complexity of the pretest, from 0.594292 to 0.577790. 95% confidence of interval of difference includes 0, showing that there is no significant difference between two variables.

From the above comparative statistic analysis, we can conclude that the model composition study and note taking can efficiently enhance the accuracy of writing. By comparing the first draft of the rewriting, we find that note taking as an efficient way of noticing can help students apply the linguistic forms in model composition to their rewriting. In the third stage of rewriting, most students can solve the problem they encounter in the first stage and can consciously make use of some words and expressions in their rewriting to make the composition more accurate and vivid.

2.4.5 Differences in Noticing and the Learning Effects

There are some differences in the learning effects of model composition study and note-taking between advanced level learners and lower level learners. In noticing, advanced level learners could notice the aspects beyond language forms, such as discourse and contents while intermediate and lower level learners pays more attention to vocabulary and grammar. In addition, we can see that advanced level learners make more progress in using complex sentences. For lower level learners, there is significant progress in the accuracy of the writing but the complexity of the writing does not improve significantly. Model composition study could not solve all the linguistic problems in their writing for lower level learners.

3. RESEARCH FINDINGS AND DISCUSSION

The study aims to explore the language forms noticed by the students in output and model composition study as well as the effects of output and model composition study on enhancing second language learners' writing proficiency.

From the quantative anlysis of students' notes, we can see that in comparing the first draft with the model composition students paid much attention to vocabulary instead of grammar, discourse, contents, and other aspects. Among them vocabulary accounts for the largest share, grammar is the second, and then contents, discourse and other aspects. This can be explained by Van Pattern (2004) who holds that most learners would pay attention to meaning rather than grammatical forms when they receive new second language input.

It is indicated that output and model composition study can effectively enhance students' writing proficiency, especially in the accuracy of language. Note taking is considered to have encoding function of promoting the transfer of input stimulus into long-term memory. (Divesta and Gray, 1972). As an efficient way of noticing, it can help students to apply noticed linguistic forms to the rewriting process. Ellis (1994) proposes that learners can reconstruct the current linguistic knowledge through the comparative process in cognition so as to promote acquisition of the second language. Therefore, model composition by native speakers can be used as an efficient way of feedback and research result is thus not uncommon.

Through the analysis of the posttest, we can find that learners does not make use of all the linguistic forms they notice in the model composition study. There are some differences as to the effects achieved by model composition study between advanced level learners and lower level learners, which may result from several reasons. One of the factors is the limit of learners' learning aptitude, i.e. the learners can only notice the linguistic forms within the comprehension sphere of their interlanguage (Mackey & Phillip, 1998; Pienemann, 1998; Schimidt, 1990). Another reason lies in the multifaceted nature of vocabulary. Laufer & Parubakht (1998) distinguished between passive vocabulary and positive vocabulary, holding that knowing the basic meaning of a word does not mean that one can make use of the word spontaneously. Receptive words and productive words are two separate entities. Only by transforming passive words into action words can learners attain a higher stage of vocabulary acquisiciton.

To sum up, model composition is an efficient way of writing feedback which can stimulate the noticing function of output. In the wring output process, learners notice the gap in their second language, attempts to find a solution in model composition study, and then apply it to the rewriting process. However, all these are based on the comprehension of the linguistic forms and the receptive knowledge can not always be transformed into the ability of using them actively without further study.

Output and model composition study can also make students autonomous learners and also cultivate sutdents critical and creative thinking. Of course, it is not sufficient to enhance students' writing proficiency only by this way, especially for lower level language learners who also needs other means of study such as teachers written feedback and peer correction.

REFERENCES

Di Vesta, F. J., & Gray, S. G. (1972). Listening and note taking. *Journal of Educational Psychology, 63*, 8-14.

Ellis, R. (1994). A theory of instructed second language acquisition. In N. Ellis (Ed.), *Implicit and explicit learning of languages* (pp.79-114). San Diego, CA: Academic Press.

Hanaoka, O. (2007). Output, noticing, and learning: An investigation into the role of spontaneous attention to form in a four-stage writing task. *Language Teaching Research, 11*(4), 459-479.

Krashen, S. (1985). *The input hypothesis: Issues and Implications*. London: Longman

Laufer, B., & Paribakht, T. S. (1998). The relationship between passive and active vocabularies: Effects of language learning context. *Language Learning, 48*(3), 365-391.

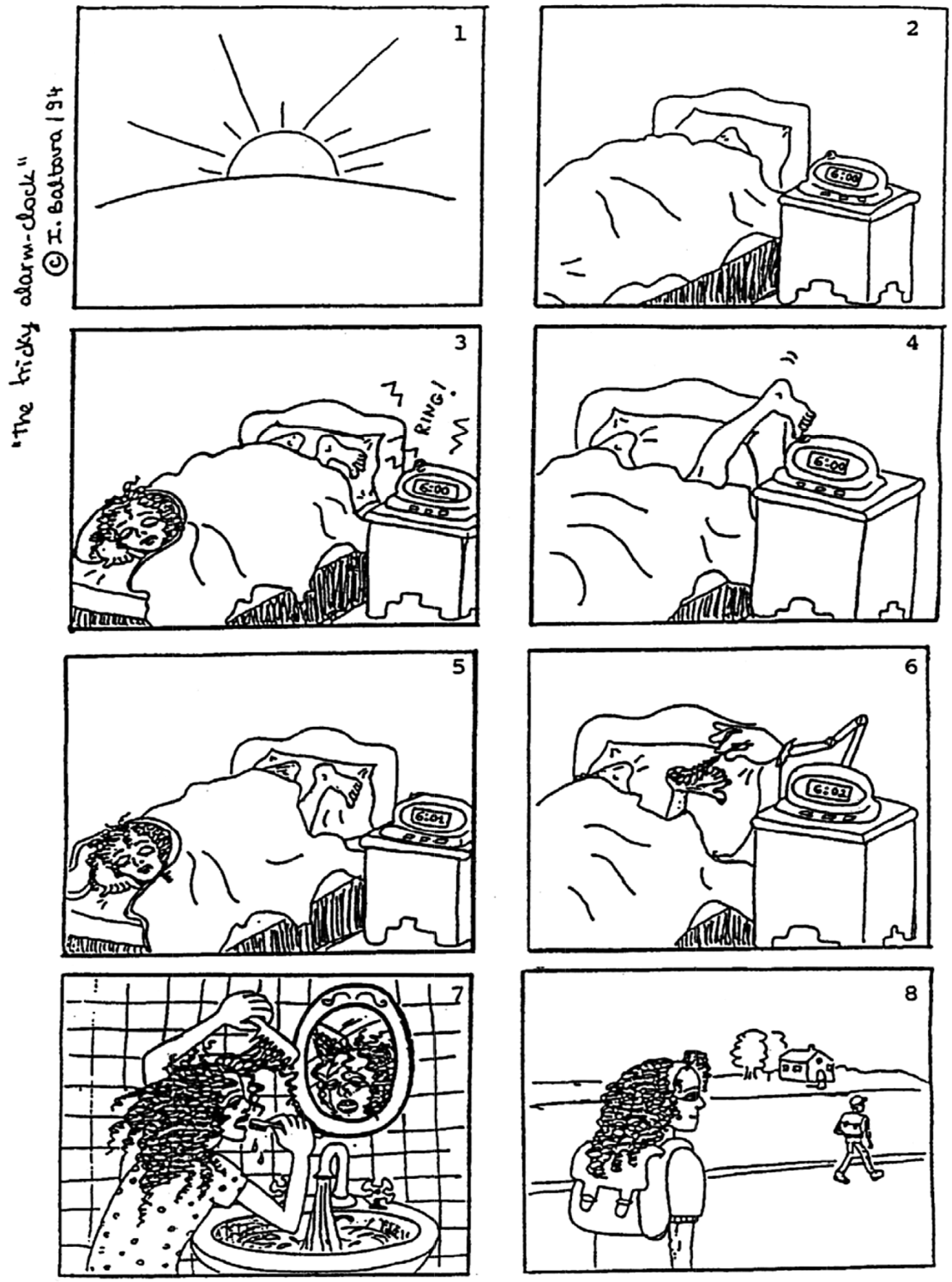
Mackey, A., & Philip, J. (1998). Conversational interaction and second language development: Recasts, responses, and red herrings? *Modern Language Journal, 82,* 338-356.

Pienemann, M. (1998). *Language processing and second language development: Processing theory.* Amsterdam: John Benjamin.

Qi, D. S., & Lapkin, S. (2001). Exploring the role of noticing in a three-stage second language writing task. *Journal of Second Language Writing, 10,* 277–303.

Swain. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. M. Gass & C. G. Madden (Eds.), *Input in second language acquisition* (pp.235-253). Rowley, MA: Newbury House.

APPENDIX 1: A PICTURE COMPOSITION



APPENDIX 2: MODEL COMPOSITION

The sun was rising brightly on a new day. A girl was sleeping peacefully at 06:00 am when her alarm clock rang loudly. She stirred in bed which showed that the girl had an odd habit; she slept with her head at the foot of the bed. This allowed her to shut off the alarm clock with her toe, so she was able to go back to sleep immediately after shutting off the alarm. However, her clock was unique because it had a special hand grasping a feather. Rising out of the clock, the hand used the feather to tickle the bottom of the girl's foot at 06:02 am. How unique, clever, and amazing this clock was; it could wake anyone because nobody can ignore being tickled on the foot! After getting out of bed, the girl hurried to the bathroom. She was in such a hurry that she had to brush her teeth and comb her hair at the same time. Finally, she finished getting ready and left home. She didn't seem to be in a hurry anymore as she walked calmly outside. Her special alarm clock had prevented her from being late.