

Linguistic and Non-Linguistic Factors Affecting Input Processing of English Passives by L2 learners

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INTRODUCTION

The present study aims to investigate the First Noun Principle (VanPatten, 1996; 2004; 2007) in the acquisition of English passives by L2 learners. The First Noun Principle describes the situation in which second language 'learners tend to process the first noun or pronoun they encounter in a sentence as the subject or agent' (VanPatten, 2004, p.15).

This study examines linguistic factors (Verb type, Person and Number), and non-linguistic factors (Level of learner and Context) affecting input processing of English passives in relation to the First Noun Principle.

RESEARCH QUESTIONS

1. How accurately do learners of three levels (Level 1, Level 2 and Level 3) interpret English passive forms?
2. Does contextual factor contribute to learners' accuracy of interpreting English passive forms?
3. Do linguistic factors such as Verb type, Person and Number contribute to learners' accurate interpretation of English passive forms?

WHY ENGLISH PASSIVES?

Theoretically, the English passive structure is a good target for the study of the First Noun Principle of Input Processing Theory. In English passive forms, though the first noun or pronoun of the sentence is the syntactic subject, it is not the semantic agent of the sentence. L2 learners would have problems in processing the English passive forms efficiently because the first noun or pronoun should be processed as the patient instead of the agent.

METHODS

Participants: N=129, Level 1 (Grade 8, n=40), Level 2 (Grade 10, n=46), Level 3 (non-English major first year university student, n=43). All were native speakers of Chinese (Mandarin/Cantonese).

Task: a general English grammar test (to confirm the learners' level of English)
English Listening comprehension task (15 target items and 5 distractors)

Manipulation of context (adapted from Lee and Malovrh, 2009)

Same-agent context

Betty (agent) often talked to her teacher Mr. Liang. He was admired by her (agent).

Different-agent context

We (agent) wanted to go out on Sunday. We (patient) were invited by Peter to go to the park.

Neutral context

The English class was difficult. I was helped by Steven.

The distribution of variables across the target items

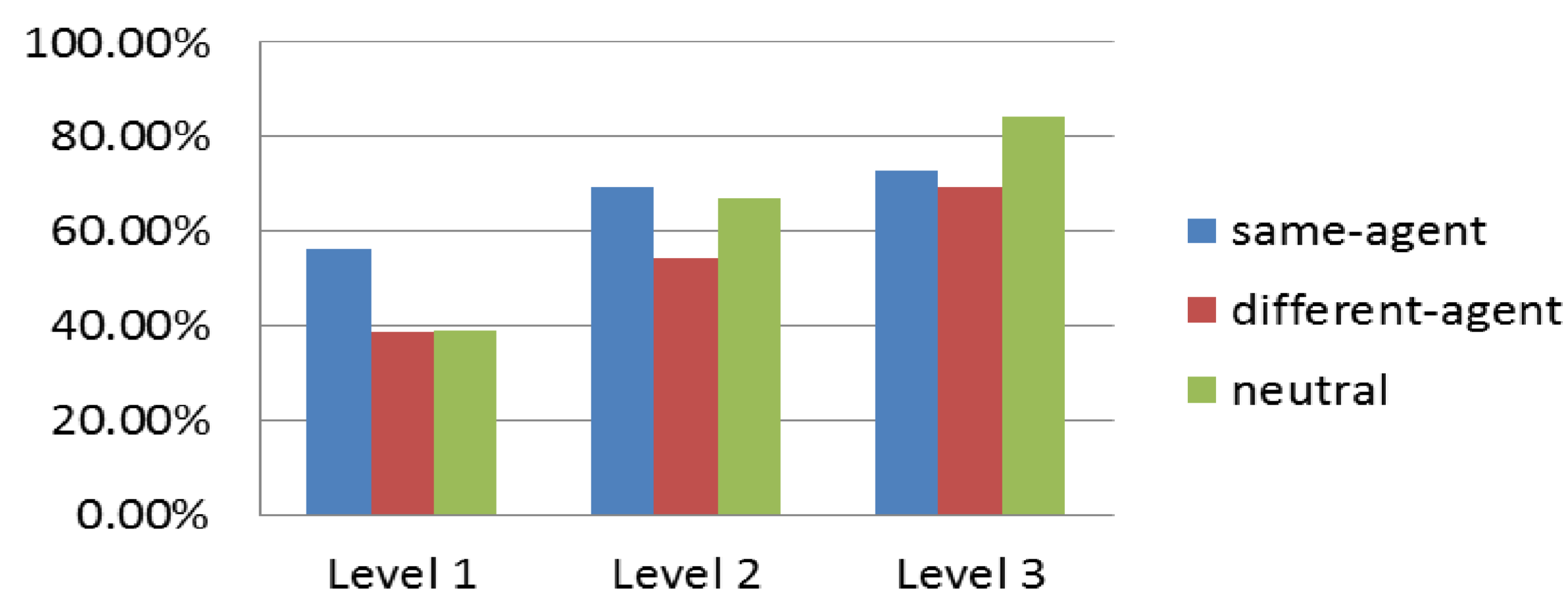
Context	Same-agent	Different-agent	Neutral	Total
	5	5	5	15
Verb type	monotransitive	ditransitive	/	15
	8	7		
Person	First person	Second person	Third person	15
	5	3	7	
Number	Singular	Plural	/	12
	6	6		*

RESULTS

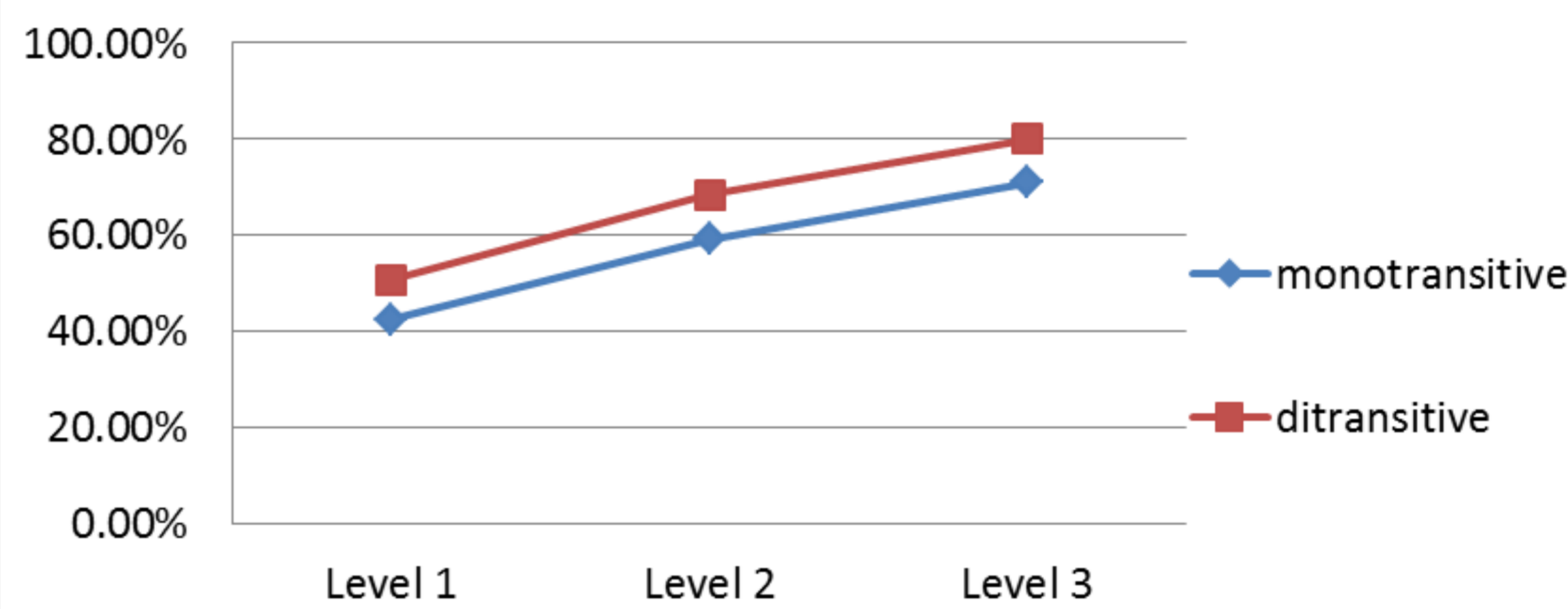
Summary of the results of the Chi Square tests conducted on each variable

Variable	χ^2	df	small cells?	Cramer's V
Context				
level 1	14.511***	2	no	.156***
level 2	6.122*	2	no	.094*
level 3	13.756***	2	no	.146***
Verb type				
level 1	5.079*	1	no	.092*
level 2	6.112*	1	no	.094**
level 3	8.950**	1	no	.118**
Person				
level 1	169.26**	2	no	.594**
level 2	1.479	2	no	.046
level 3	0.827	2	no	.036
Number				
level 1	0.837	1	no	.042
level 2	1.134	1	no	.045
level 3	6.460**	1	no	.112**

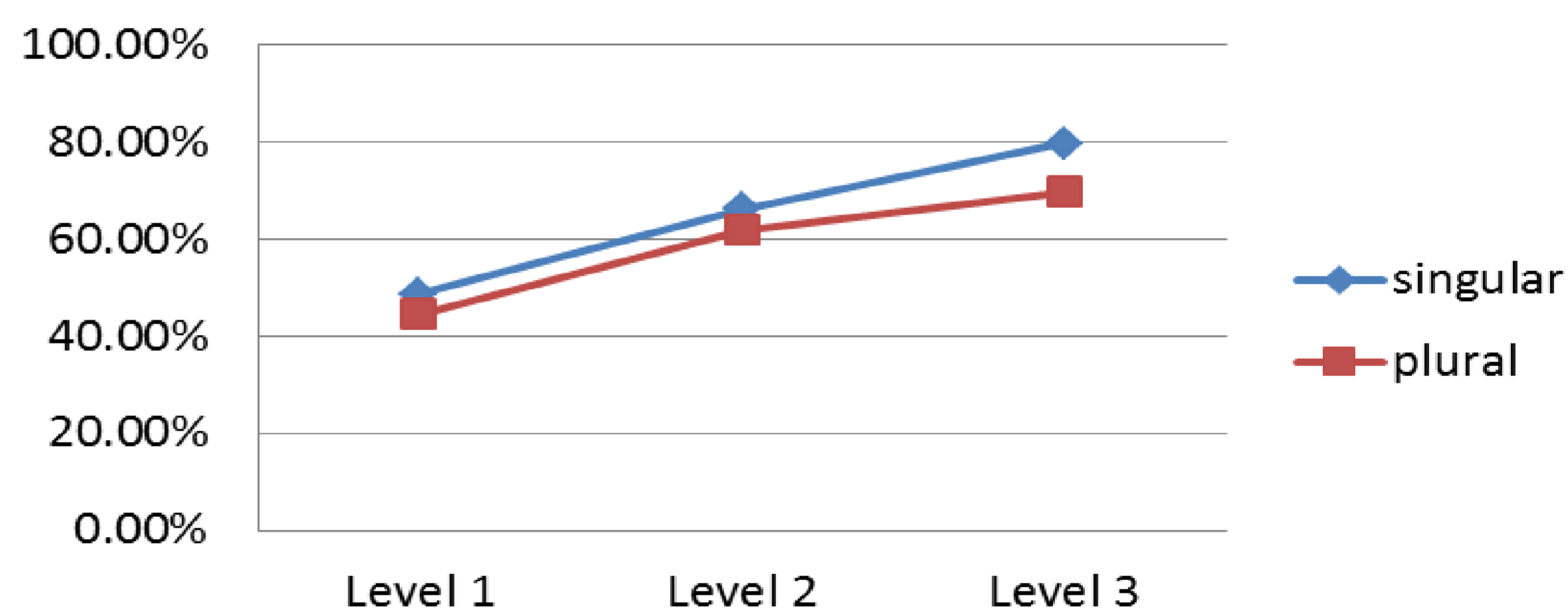
percentage of accuracy across levels (sorted by context)



percentage of accuracy across levels (sorted by verb type)



percentage of accuracy across levels (sorted by number)



CONCLUSIONS

1. The more advanced the learners are, the less they use the First Noun Strategy.
2. Contextual factor significantly contributes to the input processing of English passives. The accuracy of processing same-agent sentences is higher than that of different-agent sentences across all levels of learners. However, contextual information becomes less important as learners' proficiency develops.
3. All levels of learners use the First Noun Strategy less often when processing passives sentences with ditransitive verbs than those with monotransitive verbs.
4. Level 1 learners use the First Noun Strategy less often with the first person compared to the second and third person. However, the effects of person are not significant for Level 2 and Level 3 learners.
5. Singular forms are less likely to be misassigned the semantic role of agent to a patient and the effect of Number is only significant for Level 3 learners.

SELECTED REFERENCES

- Lee, J. F., & Malovrh, P. A. (2009). Linguistic and non-linguistic factors affecting OVS processing of accusative and dative case pronouns by advanced L2 learners of Spanish. In Collentine, J. et al (Eds.) *Selected proceedings of the 11th Hispanic Linguistic Symposium* (pp. 105-116). Somerville, MA: Cascadia Proceedings.
- VanPatten, B. (1996). *Input processing and grammar instruction*. Norwood, NJ: Ablex.
- VanPatten, B. (2004). Input processing in SLA. In B. Van Patten (Ed.) *Processing Instruction: Theory, research and commentary* (pp. 5-31). Mahwah, NJ: Erlbaum.
- VanPatten, B. (2007). Input processing in adult second language acquisition. In B. Van Patten & J. Williams (Eds.) *Theories of second language acquisition: An introduction* (pp. 115-135). Mahwah, NJ: Erlbaum.

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