

Passive comprehension in bilingual acquisition: L1 English, L2 Hebrew

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Introduction. Previous studies found cross-linguistic differences in the age of acquisition of passives. Some anchor the difficulty in the syntactic component, A-movement of the internal argument. Others attribute children's performance to conceptual, processing or morphological factors [1,2,3,4,5]. Focusing on the comprehension of passive in sequential bilingual acquisition of L1 English (L1E) and L2 Hebrew (L2H), which have similar word orders but differ in their marking of passives, we are able to disentangle the conceptual, syntactic, and processing factors from the morphological ones. In Hebrew, unlike English, the passive is marked solely on the verb by three verbal templates: *pual* and *hufal* (exclusively passive) and *nifal* (passive and other voices as well). The present forms of *pual* and *hufal* are ambiguous between adjectival and verbal passives, while its **past** forms are unique and non-ambiguous. Based on our results, we argue that the differences in children's performance on the Hebrew and English tasks are rooted in the morpho-lexical component of Hebrew, indicating children's lack of knowledge of the **unique passive** forms in the **past** tense.

Methods. Two bilingual groups - 15 **younger**, 4;4-5;4, 20 **older**, 5;5-6;4, LoE to Hebrew at least 1;6 years, AoE not later than 4;0, and two groups of Hebrew age-matched monolinguals were tested on 10 sentences in the past and 10 in the present (Table 1) using a picture selection task with 4 pictures (*correct, theta-reversal, wrong agent, end-state*).

Results. Bilingual children performed better on L1E than L2H, with a significant gap among **younger** participants in the past tense passives (55% vs. 36%), ($t(14)=-2.20$, $p<0.05$). Moreover, there was no correlation between L1E and L2H in the past tense. There was also a significant difference in the rate of **reversal errors** between the two languages (Tables 2,3) (younger - past, present: ($t(14)=2.44$, $p<0.05$; $t(14)=2.69$, $p<0.05$); older - past: ($t(19)=2.56$, $p<0.05$)). Yet, **monolinguals and bilinguals** scored similarly on the Hebrew task for both tenses, showing a developmental trajectory. Error analysis showed that older monolinguals made significantly fewer *reversal* errors in the past tense compared to older bilinguals (8% vs. 33%), ($F(1,28)=8.98$, $p<0.01$).

Discussion. The aforementioned differences within the bilingual group cannot be attributed to the conceptual, processing or syntactic complexity of this construction as difficulties appear in one of the child's languages but not the other. This is further supported by the lack of correlation between L1E and L2H in the past tense, indicating that a language specific factor plays a role in the levels of success. Since conceptual, syntactic and processing factors are identical, it has to be a morphological one. Therefore, it is reasonable to attribute the differences to the morpho-lexical component, namely to the fact that Hebrew uses unique verbal forms (*pual*) for the passive in **the past tense** which have to be acquired. We propose that as long as the forms are not acquired, children interpret the unfamiliar passive forms as their active counterparts (e.g. instead of *kusa* 'was covered', *kisa* 'covered'). This results in a high rate of reversal errors by younger and older bilinguals in Hebrew but not in English, as well as in a similarity in the rate of reversal errors between younger Hebrew monolinguals and bilinguals, with a decline among older Hebrew monolinguals but not among older bilinguals.

Conclusion. Focusing on bilingual acquisition of passives in languages with similar word orders but different morphological marking, we isolated a Hebrew-specific factor which clearly plays a role in the comprehension of Hebrew passives by monolinguals and bilinguals alike: the

acquisition of the unique passive forms which is somewhat delayed in sequential bilingual acquisition of L2H.

Table 1. Items from the English and Hebrew passive comprehension task

Past	Present
English	English
The little boy was covered by dad.	The little boy is covered by dad.
Mom was combed by grandma.	Mom is combed by grandma.
Hebrew counterparts	Hebrew counterparts
ha-yeled ha-katan kusa al yedey ha-aba.	ha-yeled ha-katan mexuse al yedey ha-aba.
ha-ima surka al yedey ha-savta.	ha-ima mesureket al yedey ha-savta.

Table 2. Distribution of results (correct and types of errors) in the **past** tense (%)

		Correct	Reversal	Other agent	End state
L1E:	young	55	27	11	7
	older	66	18	8	10
L2H:	young	36	47	9	9
	older	58	33	6	3
Hebrew monolinguals:	young	34	42	17	7
	older	72	8	9	11

Table 3. Distribution of results (correct and types of errors) in the **present** tense (%)

		Correct	Reversal	Other agent	End state
L1E:	young	69	14	6	11
	older	79	13	3	6
L2H:	young	52	39	5	5
	older	77	14	3	8
Hebrew monolinguals:	young	44	43	9	4
	older	76	13	0	11

References

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