Asymmetrical development of grammatical aspect: Evidence from typical development and specific language impairment

Background: Research on grammatical aspect in typically developing (TD) children has revealed conflicting results: early mastery (Bar-Shalom, 2003; Weist, 1983), late development (Delidaki, 2006; Wagner, 2002), and asymmetrical development of perfective-imperfective aspect (Kazanina & Phillips, 2003; van Hout, 2005, 2008). Relevant research on SLI is limited and the conclusions conflict as well: impaired aspectual system (Fletcher et al., 2005; Leonard & Deevy, 2010, Leonard et al., 2012 for production) vs. target-like performance (Leonard et al., 2003; Leonard et al., 2012 for comprehension). We examined comprehension and production of aspectual distinctions in Greek-speaking children (TD and SLI) in an attempt to pinpoint the age of acquisition of grammatical aspect and to determine whether the aspectual system in SLI is deviant, intact or delayed.

Methods: 98 TD children (group A: mean: 4;7; group B: mean: 5;6; group C: mean: 6;5) and 18 adults were compared to 8 children with SLI (5;11-7;10, mean: 6;7), 16 age-matched (AM: 5;10-7;9, mean: 6;6) and 16 language-matched TD children (LM: 3;7-6;2, mean: 4;5). All participated in a task[1], which involves clips of a clown performing completed vs. interrupted actions. While watching the films, participants judged descriptions of complete situations with imperfective or perfective aspect, and incomplete situations with imperfective or perfective aspect. They were also prompted to produce aspect forms for both types of situations. All verbs were transitive and telic with regular aspect inflection in the past.

Main findings: Comprehension (Figures 1 & 3): All TD children performed worse compared to adults on the incomplete-imperfective combination, incorrectly rejecting it too often (all p values < *.001*). Similarly, the SLI and the LM group rejected the incomplete-imperfective combination too often compared to the AM group (both p values < *.05*). There was no significant difference between the SLI and the LM group. Production (Figures 2 & 4): Groups A and B overused imperfective when referring to complete events (both p values < *.05*). No group effect was found between the SLI group and both their controls. For incomplete situations, all TD children produced fewer imperfectives and more negative perfectives[2] compared to adults (all p values < *.05*). Similarly, the SLI and the LM group produced fewer imperfectives and more negative perfectives compared to the AM group (all p values < *.05*). There was no significant difference between the SLI and the LM group.

Discussion: Our results indicate that typical aspectual development follows an asymmetrical pattern, namely, early target knowledge of perfective vs. immature understanding of imperfective (Kazanina & Phillips, 2003; van Hout, 2005, 2008).

[1] The task was designed within COST Action A33 (van Hout et al., in preparation).
[2] E.g. "He did not draw the circle", "He did not build it" etc.

Moreover, our data do not support the idea that children with SLI face severe difficulties with their aspectual system (Fletcher et al., 2005; Leonard & Deevy, 2010; Leonard et al., 2012 for production). Instead, the SLI group did not differ from the younger controls, exhibiting the same asymmetrical pattern that was established for TD. We suggest that the aspectual system in SLI appears delayed rather than impaired –at least for Greek–, since it coincides with the error pattern observed in TD[3].

Word count: 500

References:

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[3] It should be mentioned here that SLI children were also tested on various morphosyntactic phenomena. Their performance concerning production of compound words and past tense was vulnerable indicating language impairment and not a delay.

Appendix

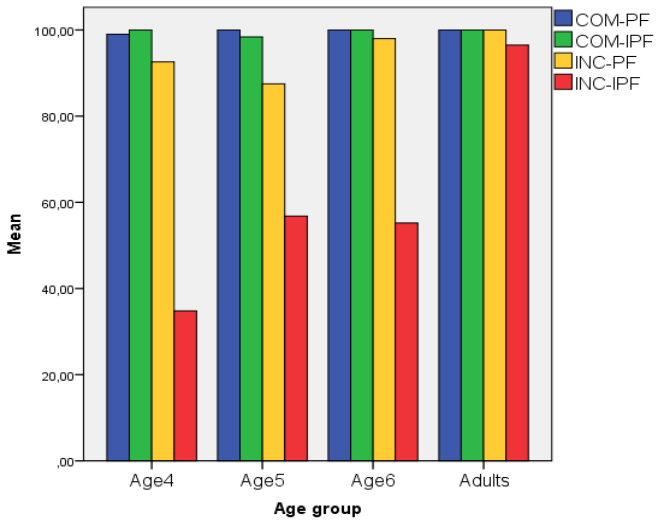

Figure 1: TD comprehension – Mean percentages of target answers for each situation-aspect combination

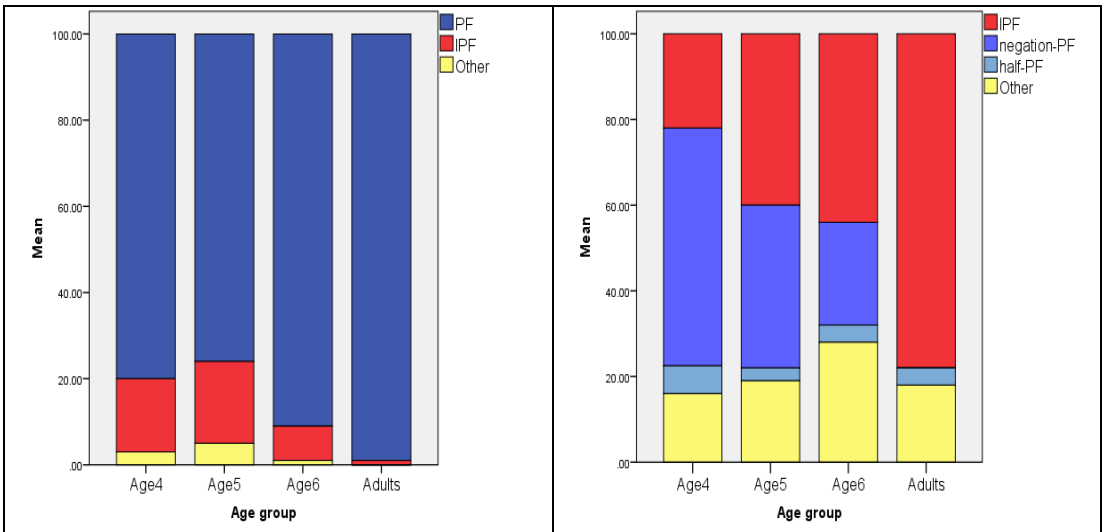

Figure 2: TD production

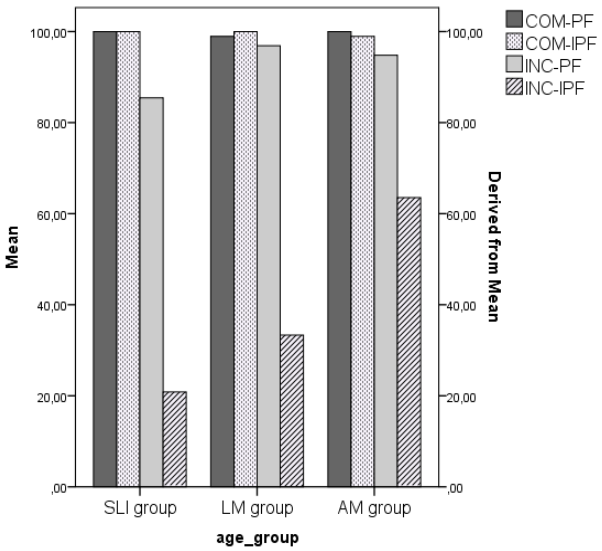

Figure 3: SLI comprehension – Mean percentages of target answers for each situation-aspect combination

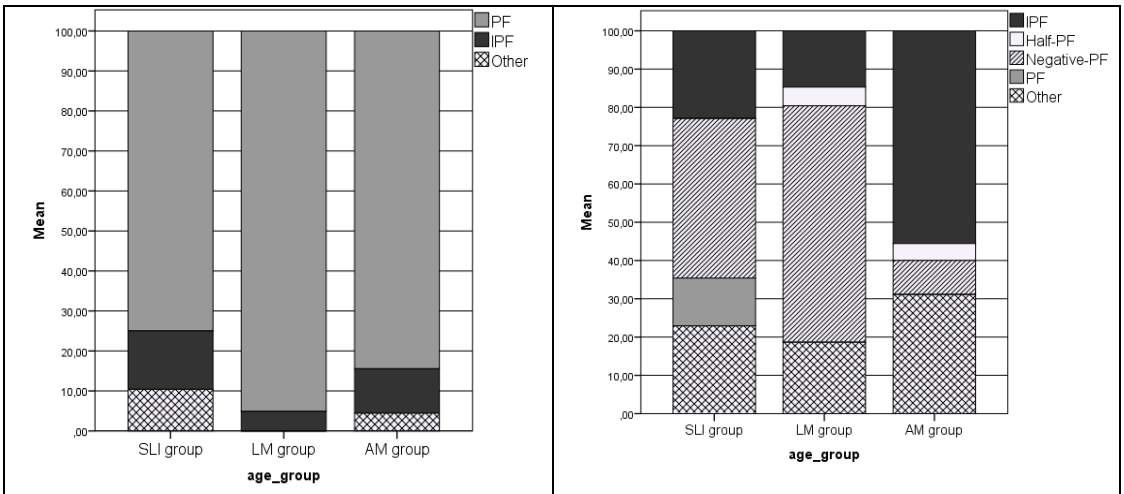

Figure 4: SLI production