



Affectedness in Child Language

with a focus on experimental design

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Affectedness Workshop
Nanyang Technological University
Singapore



- › Language Acquisition / Variation
- › Methodology
- › Aspect, passives



COST Action A33

- › PI: Uli Sauerland (ZAS, Berlin)
 - Vice-chair: Heather van der Lely (Harvard University)
- › *Crosslinguistically Robust Stages of Children's Linguistic Performance, with Applications to the Diagnosis of Specific Language Impairment*
- › 25 languages, 40+ researchers
- › 2006-2010
- › Funded by COST European Cooperation in Science and Technology
- › <http://cost.zas.gwz-berlin.de/cost/>



Van Hout, A, Gagarina, N & Dressler W. and many others (2010)

Co-authors & Languages

- › Basque: Marie-José Ezeizabarrena
- › Croatian: Gordana Hržica, Melita Kovačević, Jelena Kuvač, Ana Bosnic
- › Danish: Kristine Jensen-Lopez
- › Dutch: Angeliek v.Hout, Bart Hollebrandse, Judith v.Dijk, Margreet v.Koert
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- › Russian: Katja Abrosova, Natalia Gagarina
- › Serbian: Darinka Andjelković, Masa Popović, Maja Savić, Ana Bosnic
- › Spanish: Isabel Garcia del Réal, Yolanda Rodriguez



Perfective and Imperfective Aspect





Why is Aspect Interesting?

Crosslinguistic variation

- › Parameterized
- › Form
- › Markedness
- › Grammaticalization



Crosslinguistic Expression of Aspect

- › Germanic English Morphological aspect
- › Greek Modern Greek
- › Slavic Russian, Polish, Croatian, Serbian
- › Romance Italian, Spanish Aspectual past tenses
- › Isolate Basque
- › Germanic Danish, Dutch Aspect periphrasis
- › Fin-Ugric Estonian No aspect on verb



Crosslinguistic Expression of Aspect

› Morphological aspect

	Imperfective built ^{IMP} bridge	Perfective built ^{PF} bridge
Greek	ehtize mia yefira	ehtise mia yefira
Russian	stroil most	poststroil most
Polish	budował most	zbudował most
Croatian	je gradio most	je sagradio most
Serbian	je gradio most	je sagradio most
English	was building	built



Crosslinguistic Expression of Aspect

› Aspectual tenses

	Imperfective built ^{IMP} bridge	Perfective built ^{PF} bridge
Spanish	construía un puente	construyó un puente
Italian	costruiva un ponte	ha costruito un ponte
Basque	zubia <u>egiten</u> ari zen bridge build ^{IMP} PROG was	zubia <u>egin</u> du bridge build ^{PF} has



Crosslinguistic Expression of Aspect

› Aspect periphrasis

	Imperfective built ^{IMP} bridge	Perfective built ^{PF} bridge
Dutch	was een brug aan het bouwen was a bridge on the build	heeft een brug gebouwd has built a bridge
Danish	var ved at bygge en bro was by to build a bridge	havde bygget en bro had built a bridge



Crosslinguistic Expression of Aspect

- › No verbal aspect, but object case marking

	Imperfective	Perfective
	built bridge ^{IMP}	built bridge ^{PF}
Estonian	ehitas sil-da built bridge ^{PART}	ehitas sil-la built bridge ^{GEN}



RESEARCH QUESTIONS AND HYPOTHESIS



Research questions

- › Are there universal milestones in aspect acquisition?
- › Are there language-specific effects?



General Hypothesis

- › Reliable form-meaning relations are easy to acquire
- › What determines reliability?
 - More obligatoriness >> more optionality
 - Less ambiguity >> more ambiguity
 - One-one >> one-many >> many-many

Clark 1993, Slobin 1973, 1985



METHODS



Participants

- › 5-year-olds
 - N ≈ 20 in 12 lgs
 - Total N=247
- › Adults
 - N ≈ 10 in 12 lgs
 - Total N=135



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Tasks & Design

› Truth value judgment

While the music was playing, ...

- › the clown built-PERF a bridge
- › the clown was building-IMP a bridge

› Elicited production

› While the music was playing, ...

	Imperfective	Perfective
Complete	yes	yes
Incomplete	yes	no

	Form
Complete	
Incomplete	

Completion entailment



Materials

- › Telic VPs: Transitive V + singular count noun
- › 6 Items per condition
- › Lexical effect: Verbs from 2 aspectual classes
 - Incremental theme
 - *Build, make, draw*
 - Change of state
 - *Open, close, blow out*



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More



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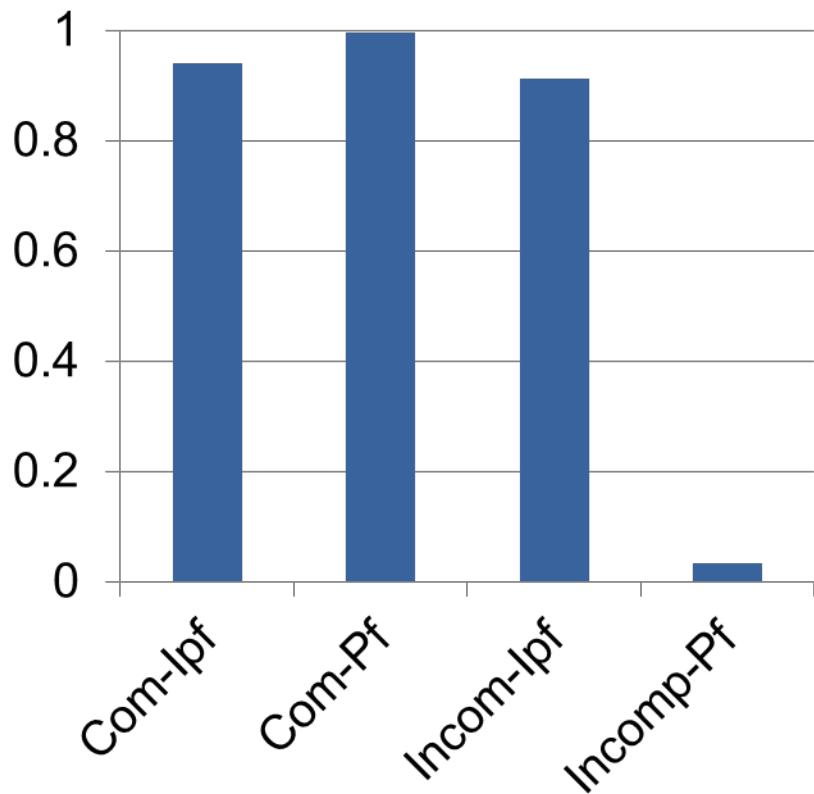


RESULTS

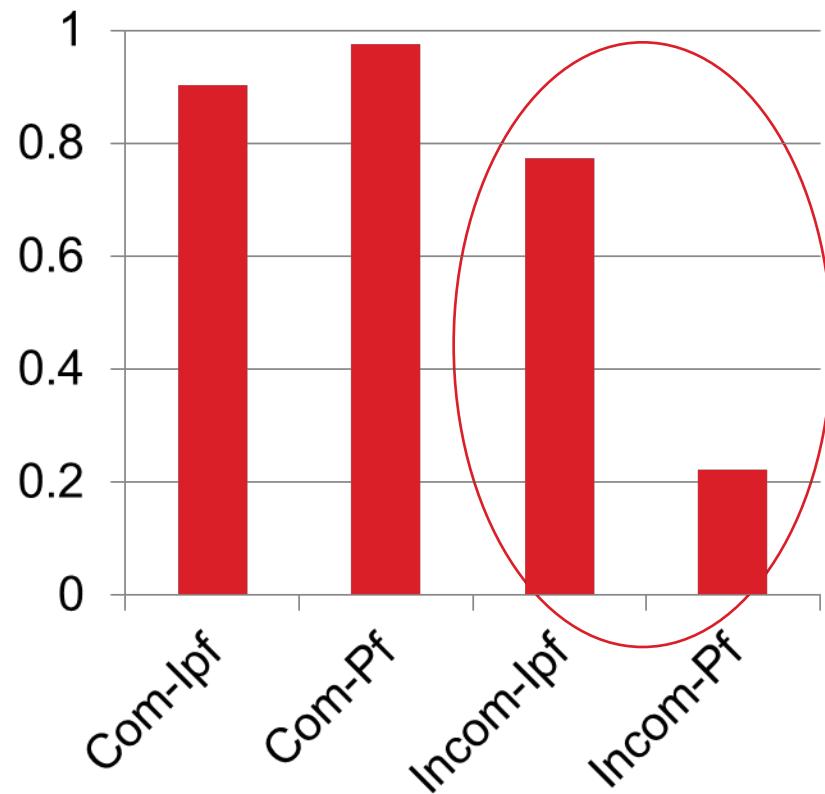


Comprehension

Adults



Children



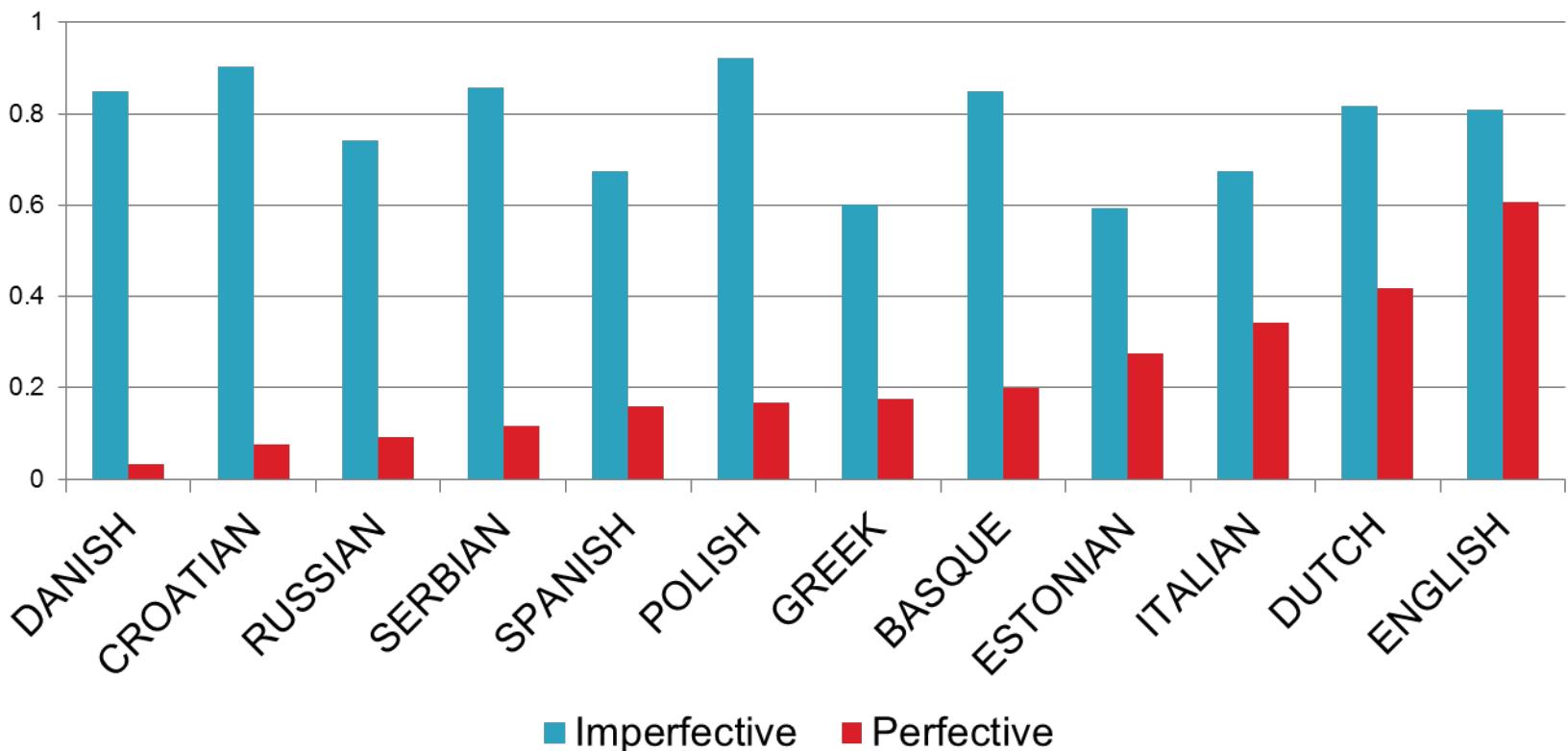
Age not significant



*Reject IMP
for Incomplete*

*Accept PERF
for Incomplete*

Children–Incomplete: imperfective vs perfective



Aspect; Language; Aspect x Language across lgs: $p < .001$; Aspect within each lg: $p < .001$



Lexical effects

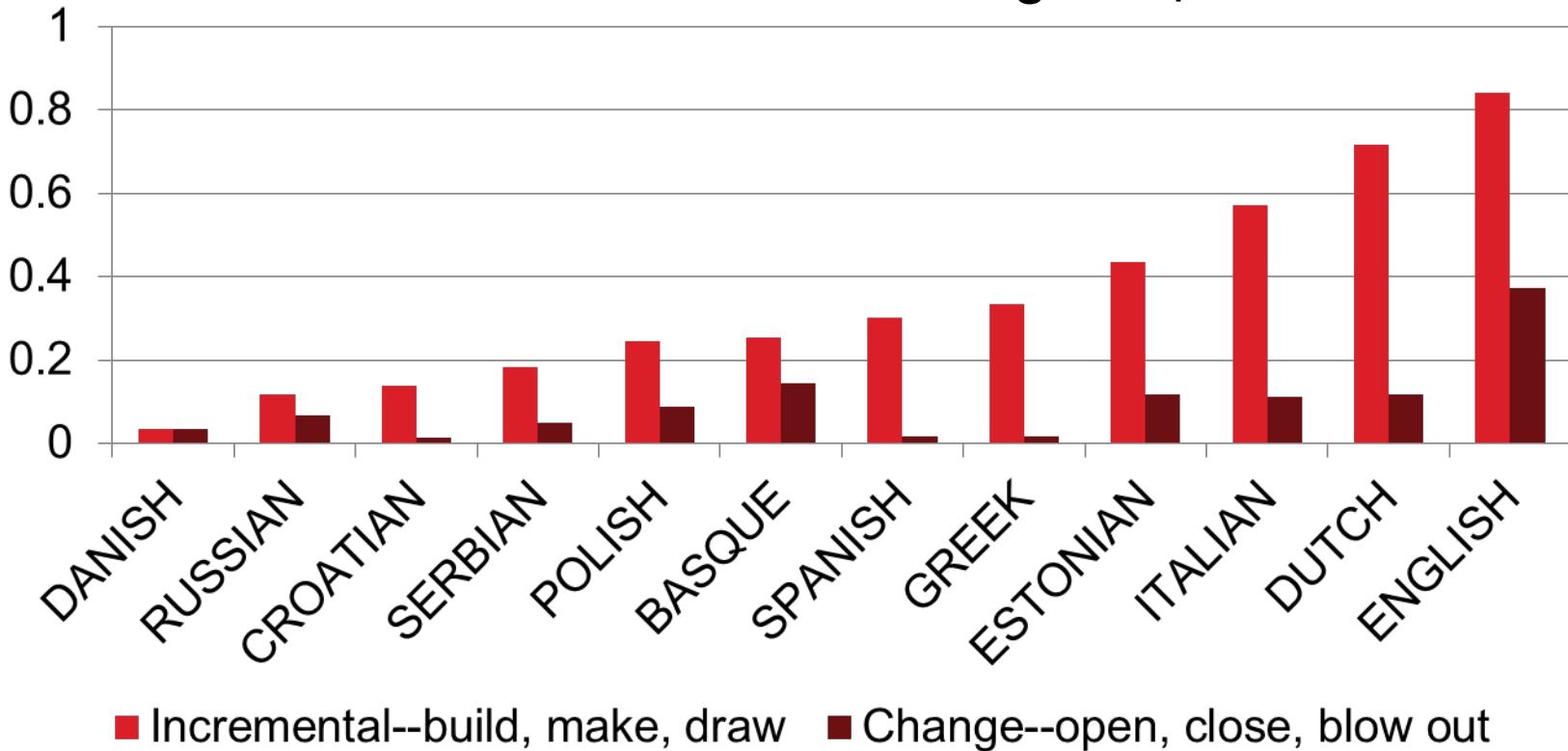
Aspectual class plays role too

- › Change verbs -- *open, close, blow out*
 - Firm completion entailment in all lgs
- › Incremental verbs -- *build, make, draw*
 - Fewer completion entailments
 - Even for adults in some lgs
 - Crosslinguistic variation



Children–Incomplete perfective

Incremental -- *build, make, draw* vs Change -- *open, close, blow out*



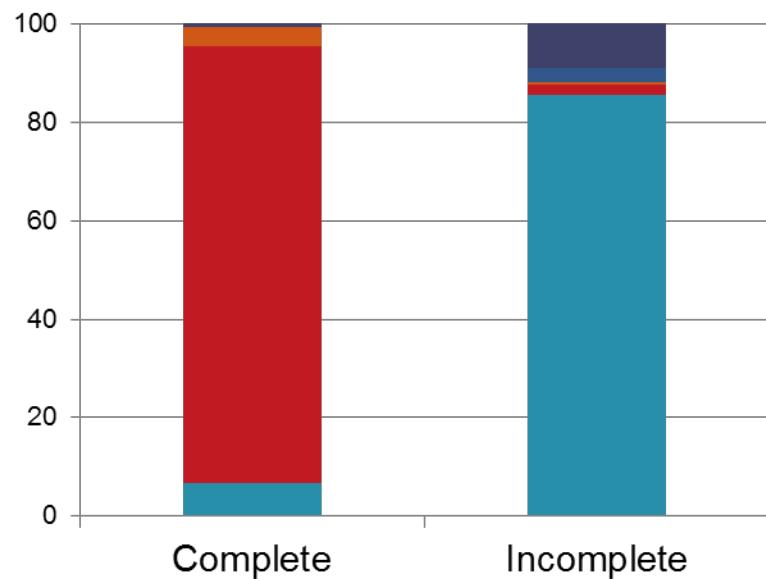
■ Incremental--build, make, draw ■ Change--open, close, blow out

Across lgs: Language x Aspectual class x Aspect: p<.001

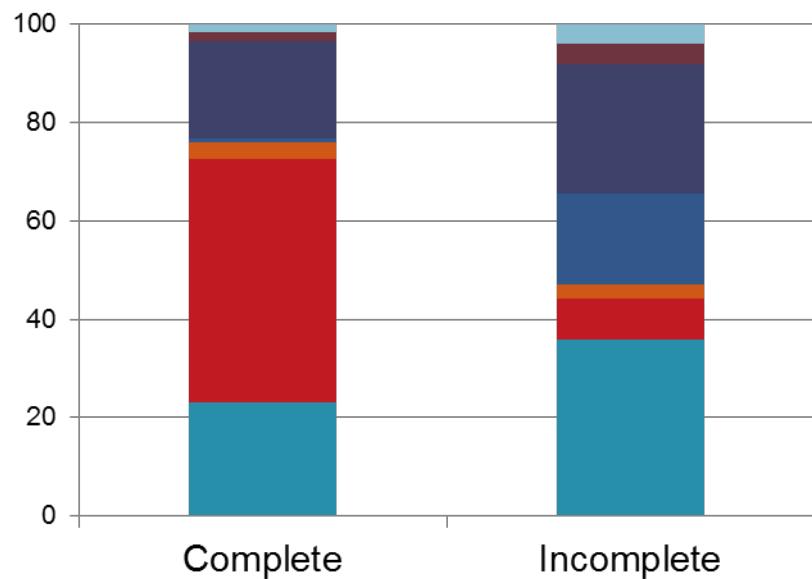


Production

Adults



Children



■ 1-IMP

■ 5-Other verb

■ 2-PERF

■ 6-Other

■ 3-Ambiguous

■ 4-Negated PERF

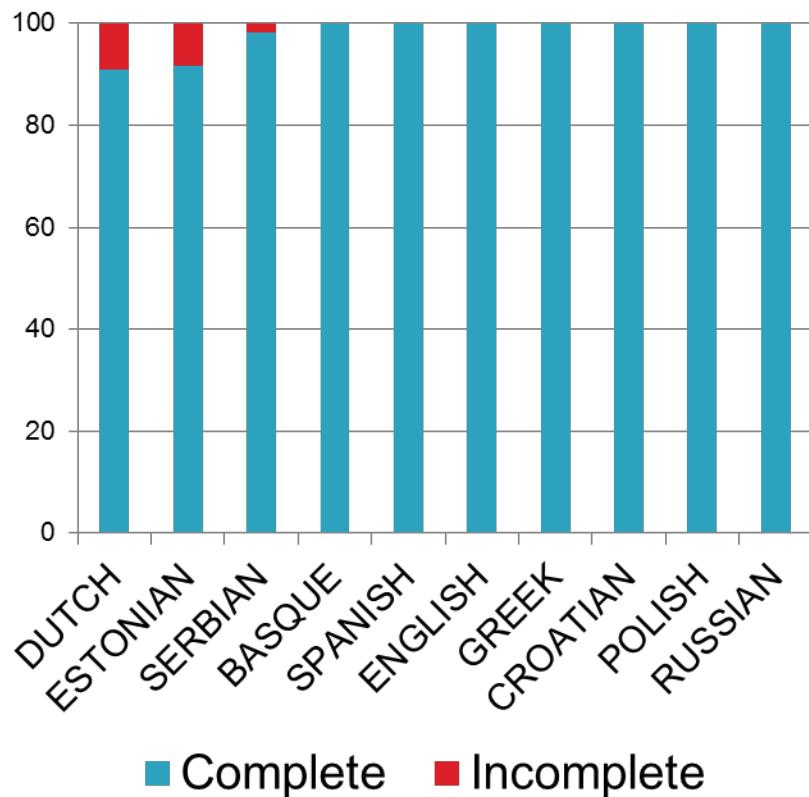
■ 7-No answer



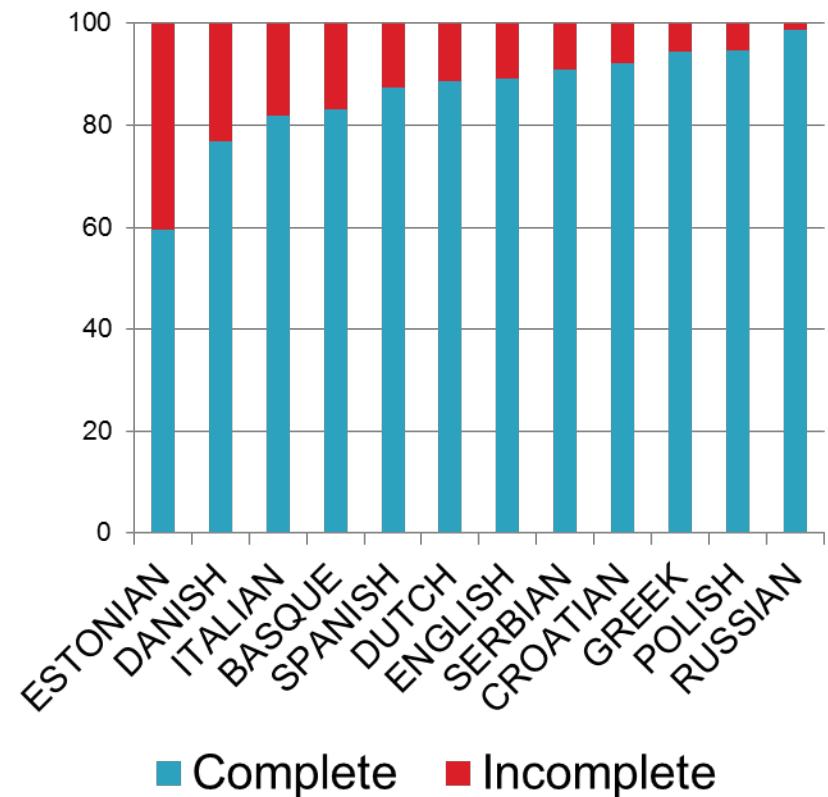
*Underuse PERF
for Complete*

Production PERF

Adults



Children

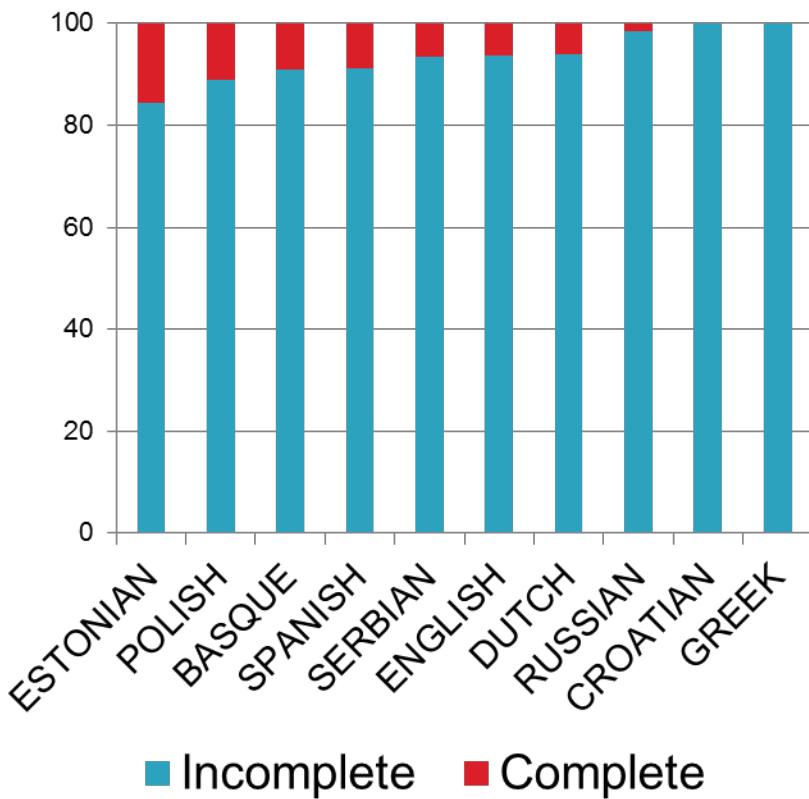




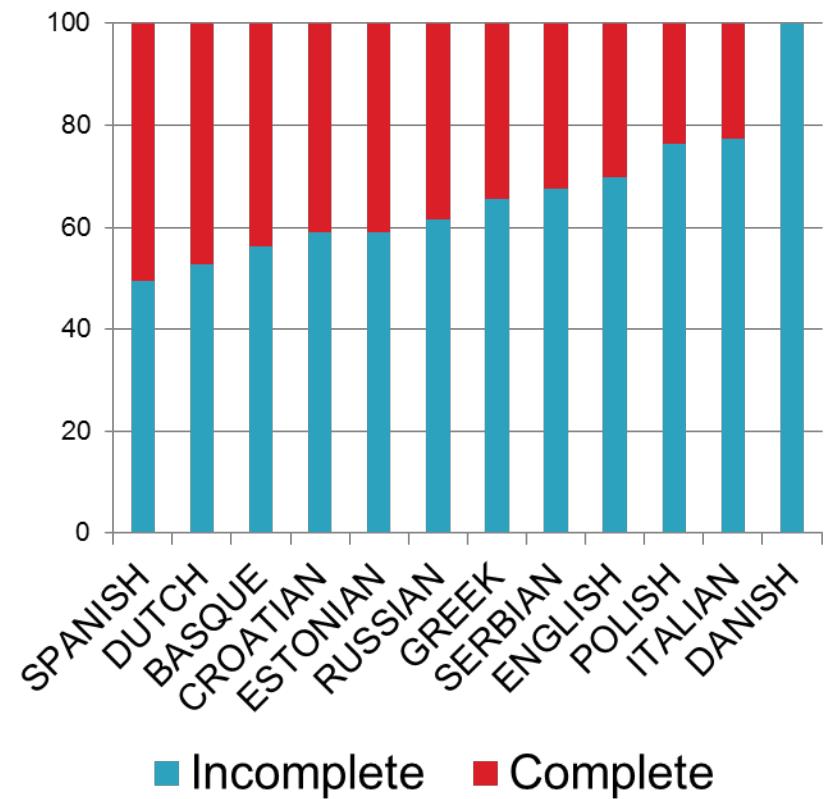
*Overuse IMP
for Complete*

Production IMP

Adults



Children





Dutch

- › Periphrasitic => Imperfective

De clown was een brug aan het bouwen.

the clown was a bridge on the build

- › Present perfect => Perfective

De clown heeft een brug gebouwd.

the clown has a bridge built.

- › Simple past => either one

De clown bouwde een brug.

the clown built a bridge



Summarizing

- › Language variation in Indo European language acquisition
- › Movies for comprehension and productio
 - Beavers (2013) (my modification)
 - John walked (to the cafe)
 - $\exists e \exists s \exists g [walking'(j, s, e) \wedge result'(s, g, e)]$



Passives



11 languages (274 + 198 children)

- Catalan
- Cypriot Greek
- Danish
- Dutch
- English
- Estonian
- Finnish
- German
- Hebrew
- Lithuanian
- Polish



Design + Materials

- › Method: Picture choice
- › Verbs used:
carry, examine, comb, cover, draw, feed, hug, make-up, push, scratch, tickle, wash, wipe/dry.
- › Long – short passives



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MIJN FOTOBOEK



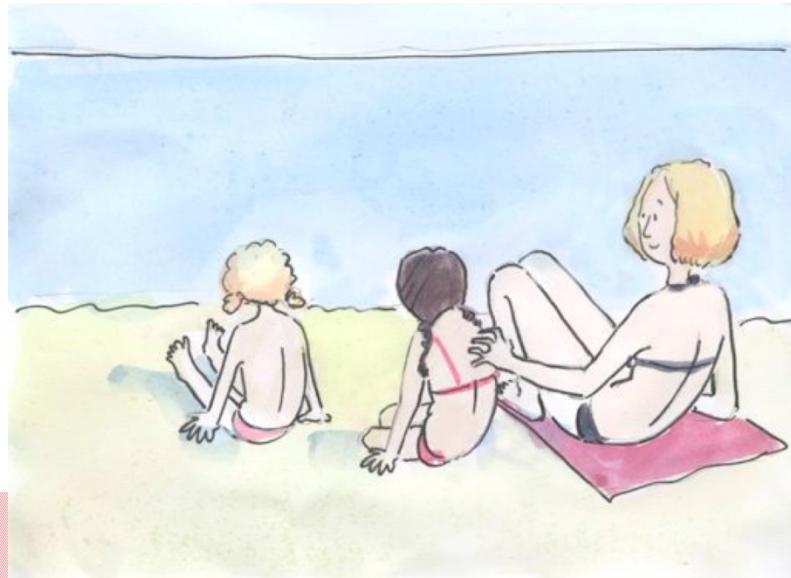






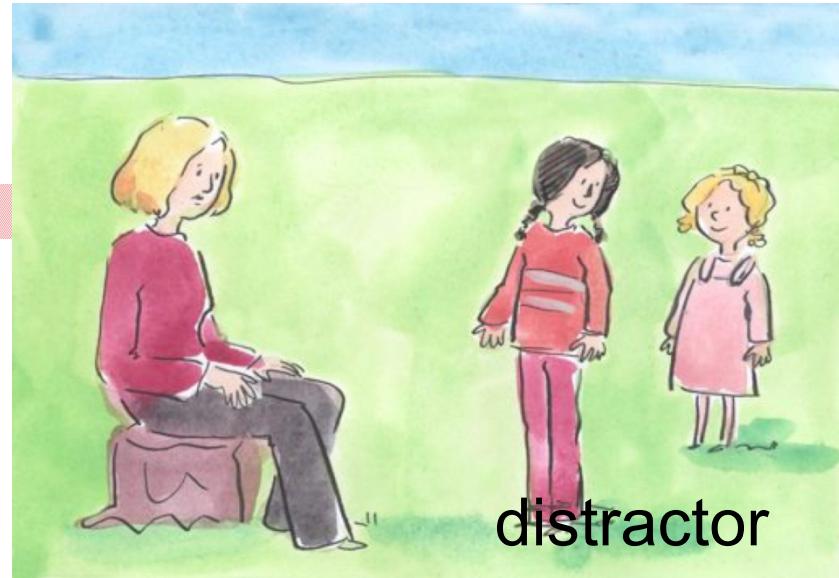






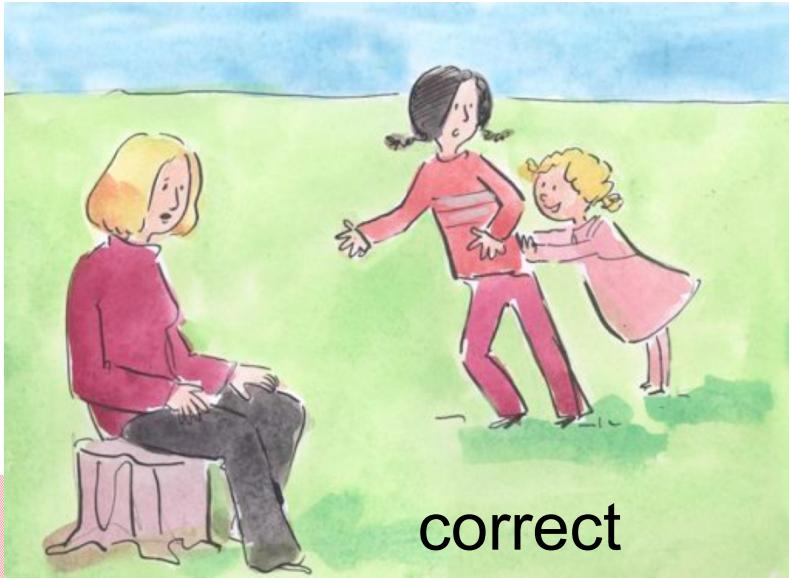


mislabelling



distractor

The big girl was pushed by the little girl.



correct



reversal



Results

- › Short earlier than long passives
- › Mistakes are reversals (to active)



THANK YOU