

How do children produce negation?

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## Abstract

12    this is the abstract

13        *Keywords:* keywords

14        Word count: X

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## Introduction

Claim: Children start producing all types of English negation by age 18 months and by 36 months, they produce them at the rate parents do. types of negation in English: no, sentential (not, nt), lexical (nothing, nobody, nowhere, none, un-in-de-dis-). For no: higher frequency in imperatives For sentential negation: ... For lexical negation: ...

- How frequent are different negative forms in children's input?
- What is the developmental trajectory of different negative forms?
- How prevalent are different negative forms in different sentence types (imperative, declarative, interrogative)?
- Do lexical negatives develop first or sentential negatives? Could one help the other?
- What percentage of children at each age produce negation? different forms?

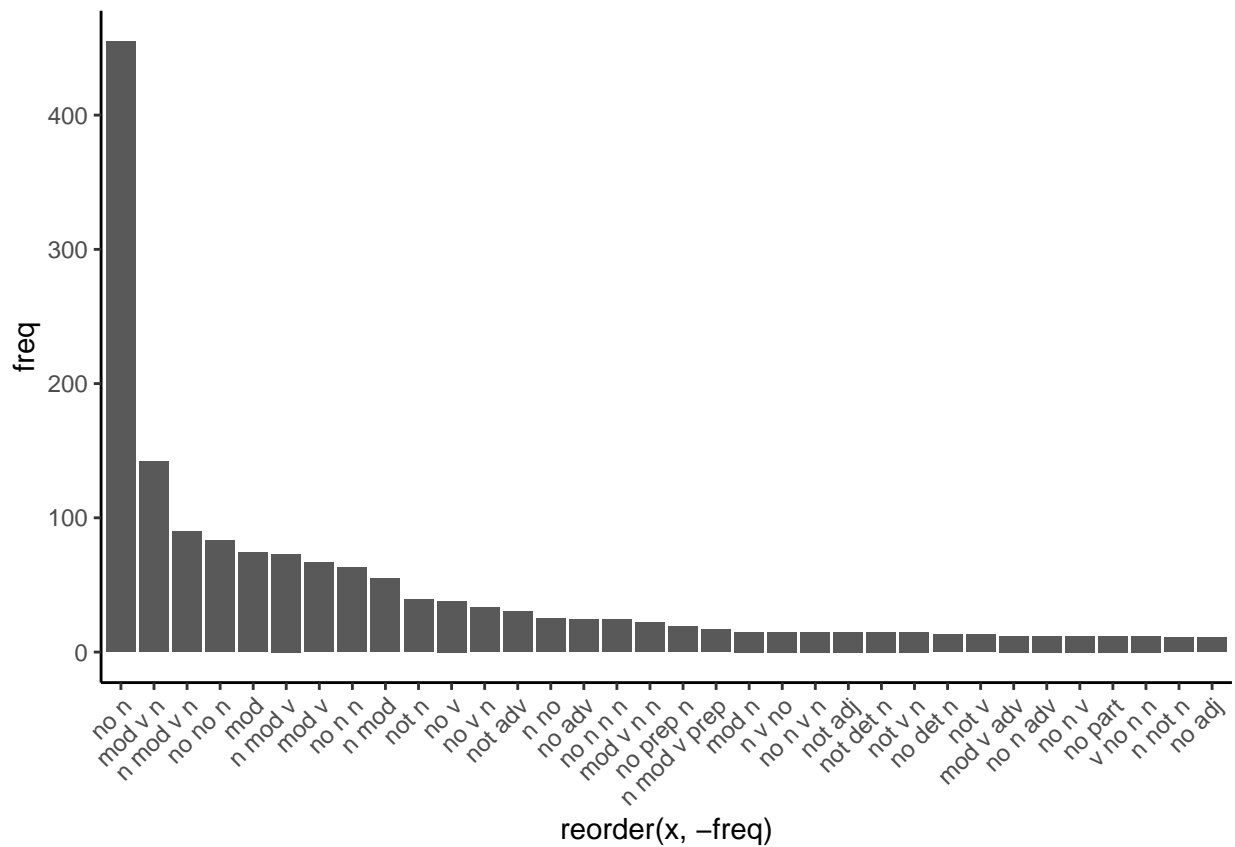
Study 2: \* What syntactic constructions host negative forms? \* How productive are negative morphemes?

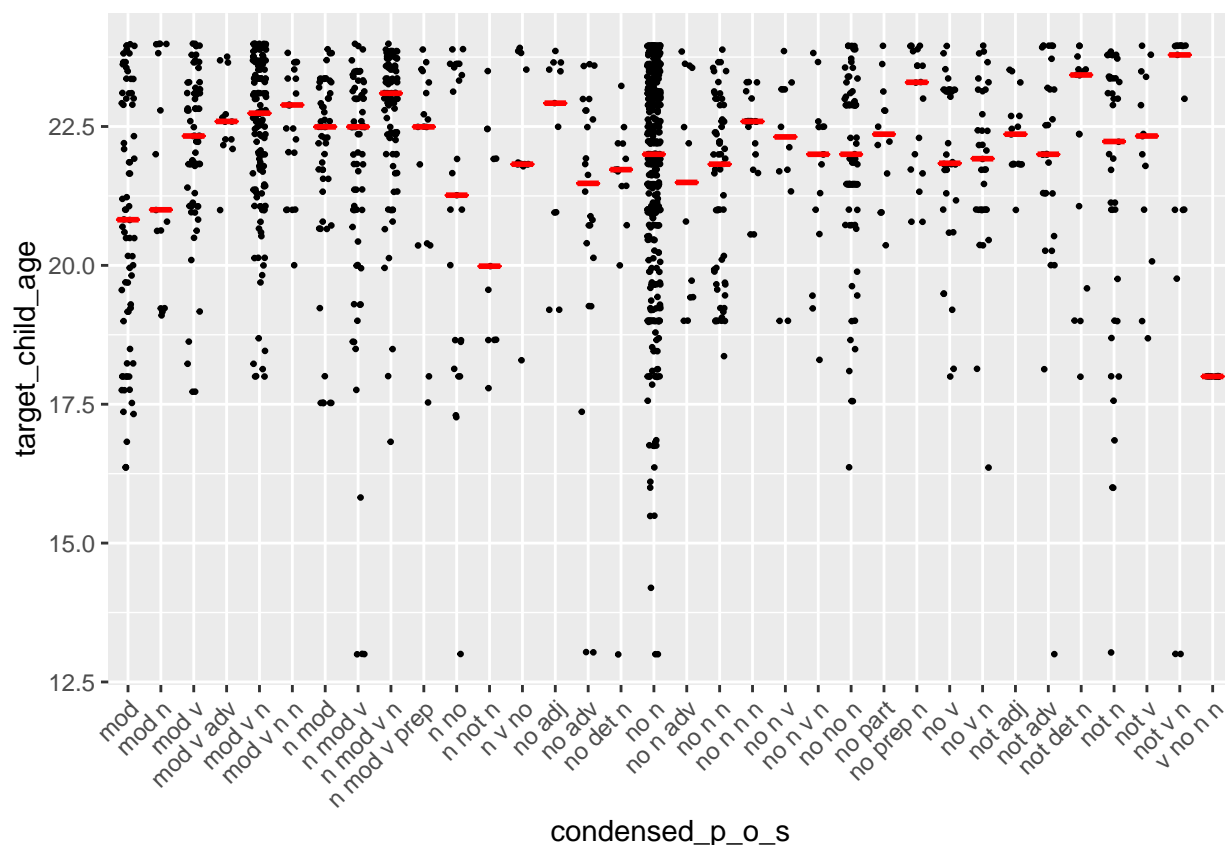
## Literature Review

Formal and functional development of negation

## Methods

33 Participant information: 1. what is the distribution of words per participant? 2. what  
 34 proportion of children in each monthly age bin produce negative morphemes?





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37	##	[1]	no baby	no mama	no door	no car
38	##	[5]	no pillow	no straws	no game	no pages
39	##	[9]	no bath	no celery	no house	no milk
40	##	[13]	no box	no boot	no baseball	no caca swing
41	##	[17]	no supper	no cuppie	no thank_you	no car carpark
42	##	[21]	no color	no cat	no back	no water
43	##	[25]	no bubble	no juice	no milk	no nose
44	##	[29]	no way	no goggie	no letter	no pen
45	##	[33]	no puppy	no orange	no cookie	no glove
46	##	[37]	no horsie	no play	no pentagon	no moon
47	##	[41]	no boats	no book	no cars	no bricks
48	##	[45]	no park	no tickle	no toys	no touch
49	##	[49]	no man	no tape	no bite	no nana

50	##	[53]	no baby's	no bits	no egg	no machine
51	##	[57]	no mail	no tractor	no Ma	no tanker tanker
52	##	[61]	no right	no lady	no bug	no wood
53	##	[65]	no babies	no pocket	no move	no push
54	##	[69]	no teddy	no walk	no bed	no dolls
55	##	[73]	no no monkeys	no couch	no mom	no shoe shoe
56	##	[77]	no mummy	no hold	no kisses	no blue
57	##	[81]	no no no powder	no powder	no clock	no valentines
58	##	[85]	no cream	no bottle	no train	no bus
59	##	[89]	no doll	no soup	no tigers	no pigs
60	##	[93]	no cheese	no girl	no window	no paper
61	##	[97]	no face	no mummy's	no boy	no mommy
62	##	[101]	no pictures	no picture	no hands	no fall
63	##	[105]	no soda	no lady	no food	no rice
64	##	[109]	no truck	no bucket	no noise	no eggs
65	##	[113]	no knee	no shoes	no socks	no baba
66	##	[117]	no tea	no bee	no sir	no balloons
67	##	[121]	no balloon	no motorcycle	no fork	no dance
68	##	[125]	no work	no nappie	no glue	no cookies
69	##	[129]	no works	no daddy's	no squirrel	no pink
70	##	[133]	no cakes	no wheels	no yellow	
71	##	1807	Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe			
72	##	[1]	no more stuff	no more people	no more people	
73	##	[4]	no more ball	no no car	no no paint	
74	##	[7]	no more bath	no more toy	no more juice	
75	##	[10]	no more machine	no more noise	no more light	
76	##	[13]	no more fire	no no mouse	no no pram	

77 ## [16] no more pegs            no more car            no more apple  
 78 ## [19] no more blocks        no more monkey        no more squirrels  
 79 ## [22] no more whale        no more wheels        no other pennys  
 80 ## [25] no more horse        no more meat  
 81 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 82 ## [1] no push        no hat        no dada        no mommy        no fish  
 83 ## [6] no pig        no bottle    no juice        no mommy        no picture  
 84 ## [11] no sweeties no uncle    no hug        no boat        no match  
 85 ## [16] no neck un    no pink        no monkey    no boy  
 86 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 87 ## [1] no Mummy                      no Mommy  
 88 ## [3] no Mum                      no Baura  
 89 ## [5] no Joshua                    no Papa  
 90 ## [7] no Jen                      no Mom  
 91 ## [9] no Brittany                  no Naima  
 92 ## [11] no Nana                      no Fraser  
 93 ## [13] no Davy                      no Fraser no Fraser  
 94 ## [15] no Ma                      no No  
 95 ## [17] no Mumm                      no Zita  
 96 ## [19] no Daddy                    no Percy  
 97 ## [21] no Toby                      no Nana's  
 98 ## [23] no Mummy's                  no Abi  
 99 ## [25] no Pooh                      no Mommy  
 100 ## [27] no Papa                      no Eve  
 101 ## [29] no Ernie                    no Pat  
 102 ## [31] no Emily                    no Mama

103 ## [33] no Laura\_Lastname                      no Mummy  
 104 ## [35] no Carl                                      no Thomas  
 105 ## [37] no Thomas\_the\_Tank\_engine  
 106 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 107 ## [1] can't catch it                      don't want it                      can't do it  
 108 ## [4] can't get it                              don't touch it                      don't do it  
 109 ## [7] can't have it                              tan't blow it                      don't throw it  
 110 ## [10] don't like it                              can't reach it                      don't touch you  
 111 ## [13] didn't eat it                              can't open it                      don't hear you  
 112 ## [16] don't pour it                              don't eat it                      don't don't pour it  
 113 ## [19] can't fix it                              don't lose it                      can't find it  
 114 ## [22] don't push it  
 115 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 116 ## [1] no more                      no noone                      no one                      no more                      no everybody  
 117 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 118 ## [1] don't                              can't can't                      can't                      can't  
 119 ## [5] don't                              don't don't                      doo+doos can't  
 120 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 121 ## [1] I don't                      I didn't                      I can't                      I couldn't I can't                      I won't  
 122 ## [7] she don't                      I won't  
 123 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 124 ## [1] don't go                              don't talk                              can't catch  
 125 ## [4] don't know                              can't come                              don't touch  
 126 ## [7] don't kick                              can't put                              doesn't work  
 127 ## [10] don't fit                              don't want                              don't cry



128 ## [13] don't worry            leeb's don't know    can't push  
 129 ## [16] don't jump            don't wiggle        can't reach  
 130 ## [19] don't push            can't move        don't nurse  
 131 ## [22] can't open            willn't fit        won't open  
 132 ## [25] willn't willn't go can't eat            don't put  
 133 ## [28] willn't work        don't throw        don't stop  
 134 ## [31] won't go            can't talk  
 135 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 136 ## [1] don't touch that    don't do that       don't want that  
 137 ## [4] don't want these    don't say that       didn't put this  
 138 ## [7] didn't took this    don't put that       don't do this  
 139 ## [10] don't want this    don't spoil that    don't like that  
 140 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 141 ## [1] I don't know            I don't play        I can't open  
 142 ## [4] I don't remember       they don't fit        I can't tie  
 143 ## [7] I don't come            I can't sing        hh I can't sing with  
 144 ## [10] my can't eat            I don't want        I didn't cry  
 145 ## [13] I couldn't predict    I can't go living+room I don't blanket  
 146 ## [16] I can't see  
 147 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 148 ## [1] no read            no write            no pooped            no go  
 149 ## [5] no want            no zipper            no want din+dins no draw  
 150 ## [9] no bumble            no draw            no sit            no go bathroom  
 151 ## [13] no eat            no fit            no finish            no f finish  
 152 ## [17] no think            no left  
 153 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe

154 ## [1] I don't want it I don't see it I can't do it  
 155 ## [4] I can't find it I don't need it I can't see you  
 156 ## [7] I don't like it I can't hear you I didn't like it  
 157 ## [10] I can't see it I can't can't do it  
 158 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 159 ## [1] not there not again not yet not quite not here  
 160 ## [6] not off not not there not on not now not asleep  
 161 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 162 ## [1] no have black no sit chair no eat lunch no have cracker  
 163 ## [5] no want truck no want paint no want food no spill milk  
 164 ## [9] no eat milk no want bottle  
 165 ## 1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe  
  
 166 ## # A tibble: 924 x 2  
 167 ## part\_of\_speech utterances  
 168 ## <fct> <chr>  
 169 ## 1 adj co hot no,wet no  
 170 ## 2 adj cop pro:per naughty isn't it,cold isn't it  
 171 ## 3 adj mod v mum don't know  
 172 ## 4 adj n co conj mod v little bun birthday ho but can't ~  
 173 ## 5 adj n co n:prop coord n:prop coord n~ big kids like Emmy and Carl and L~  
 174 ## 6 adj n neg pro:dem just crayon not these  
 175 ## 7 adj prep n:prop n cop pro:per close to Rachel's feet wasn't it  
 176 ## 8 adv aux there aren't  
 177 ## 9 adv cop there isn't ,there isn't  
 178 ## 10 adv cop qn n there is no moon  
 179 ## # ... with 914 more rows

180 **##** [1] 0.6919721

181 Susan's Questions: Are you sure it is a quantifier or a marker of non-existence? Check  
182 the difference between no+N and no-more+N how about single "no"s?

183 To do: 1. cluster the most frequent categories 2. look at the age distribution for the  
184 cluster (what about the distribution of age in communicative function: nonexistence,  
185 nondesire, imperative)

186 **Participants**

187 **Material**

188 **Procedure**

189 **Data analysis**

190 **Results**

191 **Discussion**

## References