How do children produce negation?

First Author¹ & Ernst-August Doelle^{1,2}

- ¹ Wilhelm-Wundt-University
- ² Konstanz Business School

Author Note

- Add complete departmental affiliations for each author here. Each new line herein must be indented, like this line.
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5

Correspondence concerning this article should be addressed to First Author, Postal address. E-mail: my@email.com

Abstract

this is the abstract

13 Keywords: keywords

Word count: X

15

21

22

29

How do children produce negation?

16 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 prevelant are different negative forms in different sentence types (imperative, declerative, 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

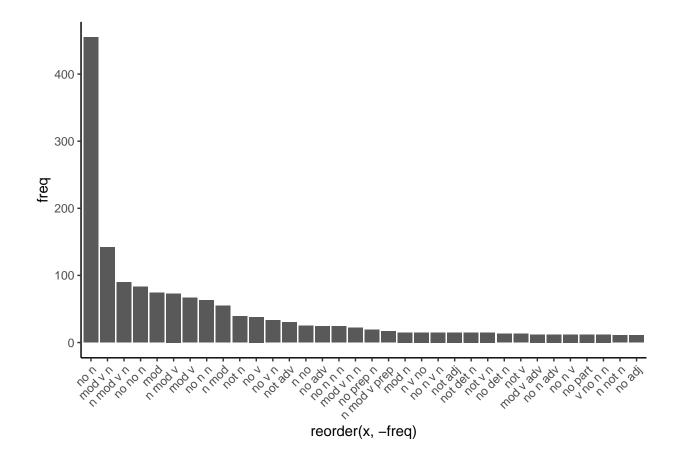
Formal and functional development of negation

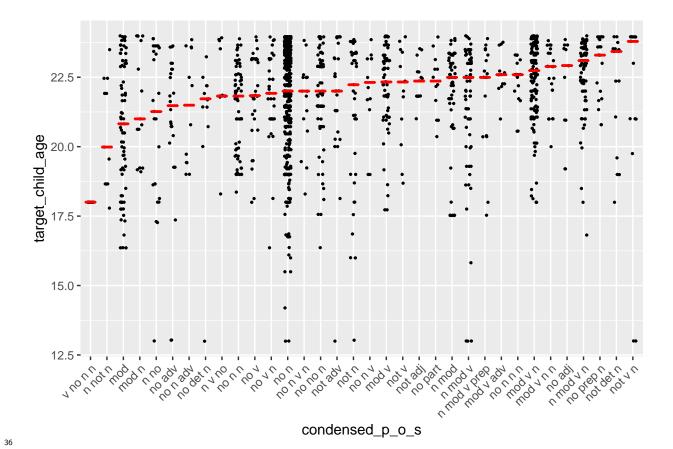
31 Methods

35

Participant information: 1. what is the distribution of words per participant? 2. what

proportion of children in each monthly age bin produce negative morphemes?





[1] no baby no mama no door no car 37 [5] no pillow no straws no game no pages 38 [9] no bath ## no celery no house no milk 39 [13] no box ## no boot no baseball no caca swing 40 [17] no supper ## no cuppie no thank_you no car carpark 41 no cat ## [21] no color no back no water 42 ## [25] no bubble no juice no milk no nose 43 ## [29] no way no goggie no letter no pen [33] no puppy no orange no glove ## no cookie 45 [37] no horsie ## no play no pentagon no moon [41] no boats ## no book no bricks no cars [45] no park ## no tickle 48 no toys no touch [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		
## 1807 Levels: a don't turn a ice no ice+cream a no Zoe not Zoe										
70	##	[1] ₁	no r	nore stuff	no	more people	n (moro pooplo		
						no car		-		
				more bath		•		-		
				nore machine				_		
76	##	[13] 1	no r	more fire	no	no mouse	no	o no pram		

[31] no Emily

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

no Mama

127

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

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

1807 Levels: a don't turn a ice no ice+cream a no ... Zoe not Zoe

153

... with 914 more rows

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

180 ## [1] 0.6919721

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

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

186 Participants

87 Material

88 Procedure

Data analysis

190 Results

191 Discussion

192 References

Abbreviation	Meaning
n	noun (includes pronouns and proper nouns)
V	verb
adj	adjective
adv	adverb
prep	preposition
det	determiner
part	participle
mod	modal

Construction	Examples	Negation Categories	
no n	no baby, no horsie, no juice	Existence, Desire,	
		Metalinguistic?	
no no n OOPS	PROBLEM HERE no more stuff, *no		
	car, no no pram, #no like doggy		
no det n	no my turn, no a cow, no the hammer		
no adj	no happy, no pretend, no brown		
no adv	no there, no up, no behind		
no n adv	no jacket on, no monkey there, *no lie		
	down		
no n n	no baby bubble, no this one, *no brush		
	hair		
no n n n	no night night moon, no mummy this		
	side, *no hold daddy hand		
no n v	no mail came, no mummy go, no I		
	wanted		
no n v n	no car go car, no comb want brush, no		
	mummy do it		
no part	no bouncing, no eating, no hurting		
no prep n	no in tree, no with this, *no like bubbles		
no v	no read, no pooped, *no zipper		
no v n	no sit chair, no have cracker, no eat		
	milk		
not n	not noodle, not home, not right		
not det n	not my car, not a cat, not a white		

Construction	Examples	Negation Categories
not adj	not good, not dirty, not real	
not adv	not today, not there, *not asleep	
not v	not shush, not work, not blanket	
not v n	not eat rocks, not have coffee, not green	
	one	
n no	mammy no, apple no, train no	
n not n	pizza not pizza, pizza not apples, that	
	not knees	
n v no	doll sit no, I take no, Joana say no	
mod	don't, can't	
mod n	can't tea, don't Mommy, didn't I	
mod v	don't go, doesn't work, can't catch	
mod v adv	can't come in, don't fall down, doesn't	
	fit here	
mod v n	don't touch that, don't fit car, can't	
	open it	
mod v n n	don't eat skin part, (?) don't touch	
	that book, *can't find bunny rabit	
n mod	I can't, Jane doesn't, mine didn't	
n mod v	I don't know, they don't fit, I can't	
	open	
n mod v n	I don't want juice, I can't find duck,	
	cow won't go Mama	
n mod v prep	I don't want to, Laura don't want to	

Construction	Examples	Negation Categories
v no n n	man no taste it (???)	