Passives

Early Syntax

- As multi-word combinations emerge
  - Children describe properties of objects
    - Pretty cat; big truck; Lucy Mommy
  - Children describe locations of objects
    - Daddy bed; doggie garden

- Syntax and Morphology initially separate
  - Lucy Mommy (syntax); Lucy's (morphology)
  - By third year, syntax/morphology combined
    - That's Lucy's Mommy

Mean Length of Utterance (MLU)

- How to quantify complexity of children's speech?
  - MLU counts words and grammatical morphemes

- Between ages 2-4, MLU increases from about 2 to 8 or more

To calculate MLU, follow these steps:

1. Choose enough consecutive utterances to have 100 completely intelligible utterances to analyze. (i.e. if even one word in an utterance is not understood, that utterance is excluded from the analysis. Words that are unintelligible are transcribed as x.)
2. Count the morphemes in each utterance.
3. Add the number of morphemes for all 100 utterances.
4. Divide by 100 to get the mean, or average.

How to Count Morphemes:

DO NOT COUNT

1. Do not count words which are false starts, reformulations, or repetitions unless the repetition is for emphasis. (e.g. "[then] then [he go] he went to the zoo" is counted as 6 morphemes; "No! No! No!" is counted as 3)
2. Compound words, reduplications, and proper names count as single words. (e.g. railroad, choo-choo, Big Bird)
3. Irregular past tense verbs and irregular plurals count as one morpheme. (e.g. took, went, geese, men)
4. Diminutives (e.g. doggie, horsie, dollie) and catenatives (e.g. gonna, wanna, hafta) count as one morpheme. It is assumed that the child understands these catenatives as single units, as opposed to understanding they are short for "going to," "want to," "have to," etc.
5. Do not count fillers (e.g., um, well, oh).

DO COUNT

1. The –s plural marker (e.g. cat/s, apple/s). Count it even when used on irregular plurals (e.g. mouse/s). Exception: plurals never occurring in the singular (e.g. pants, shoes, clothes) count as just one morpheme.
2. The –ed past tense marker (walk/ed, count/ed). The –ed morpheme is counted even when used improperly (go/ed, drink/ed).
3. The –ing progressive tense marker (walk/ ing, count/ing).
4. The –s third person present tense marker (e.g. He like/s candy. Sue walk/s faster than Sara.) Exception: "does" counts as one morpheme.
5. Possessive –'s marker (e.g. mom's, boy's)
6. Contractions (e.g. she's, he'll, they're, what's, she'd, we've, can't, aren't). Exceptions: "let's," "don't", and "won't" are assumed to be understood as single units, rather than as a contraction of two words, so are just counted as one morpheme.

EXAMPLE: Calculate the MLU for the following utterances:

#	Child's utterance	# of morphemes	Notes
1	I want ball.	3	
2	That blue.	2	
3	Give it to me.	4	
4	Doggie's hungry.	3	Doggie = 1 morpheme 's (is) = 1 morpheme
5	Doggie eated .	3	eated = 2 morphemes
6	xx wagon.	-	utterance excluded because of unintelligible word
7	I hafta go potty.	4	hafta = 1 morpheme
8	She likes toys.	5	likes = 2 morphemes toys = 2 morphemes
9	(He go) he go bye-bye.	3	bye-bye = 1 morpheme "he go" is repeated, only counted once
10	The mice are sleeping.	5	mice = 1 morpheme sleeping = 2 morphemes
	TOTAL	32	

32 total morphemes divided by 9 utterances (since #6 was excluded) = a mean (average) of 3.6 morphemes per utterance, or an MLU of 3.6.

Passives

- Syntactic Structures (Chomsky, 1955)

- active:
  - The girl hits the boy

- passive:
  - The boy is hit by the girl

What is a passive?

active: The girl hits the boy
passive: The boy is hit by the girl

Government and Binding Theory:

$$[\text{the boy}]_i \quad \text{is} \quad \text{hit} \quad t_i \quad \text{by the girl}$$

Passives require movement, which creates a trace. This also makes passive sentences more complex than active ones.

Important Aspects of Passives

- Long passive: specifies agent in by-phrase
  - The boy is hit by the girl
- Short passive: no agent is specified
  - The boy is hit

- Short passives are very similar to predicate adjective constructions
  - N [be] Adj
  - The boy is tall

Passive Ambiguities

- Active:
  - The truck hits the car
- Passive:
  - The car is hit by the truck
- Short Passive:
  - The car is being hit
- Ambiguous short passive:
  - The car is hit
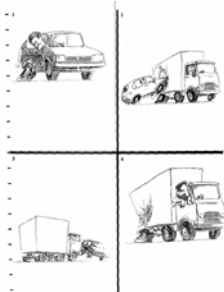
- "reversible passive": participants can fit into either role:
  - The girl bumps the boy
  - The girl is bumped by the boy

- "irreversible passive": provides semantic clues:
  - The boy kicks the ball
  - *The boy is kicked by the ball

Functions of the Passive

- Why use a passive?

  - "we use the active or passive turn accordingly as we shift our point of view…" (Jesperson, 1965)

  - "…the function of passive sentences in language is to code sentences in the context in which the non-agent is more topical (Givon, 1979)

  - The passive functions to move a less topical agent out of subject position (Van Oosten, 1985)

Functions of the Passive

- Semantic, pragmatic and discourse reasons
  - Use passive when agent deviates from prototypical agency
    - When agent is general (people) or the act of a corporation (no specific agent)
  - Use passive when you want to leave the agent vague or unspecified
    - "mistakes were made"
  - Use passive to switch focus of attention to the patient (logical object), or away from the agent

Get Passives

- "get" can act as a passive auxiliary
  - He got arrested
- Developed from inchoative *get*
  - *He got sick*
  - not from causative *get* (*He got himself arrested*).
- *Inchoative*, refers to a verbal, nominal or adjectival category that describes entering into a state.
- Passive *get* arose in cases where inchoative *get* took an adjectival passive participle as complement and where viewpoint aspect was perfective. Perfective aspect, which yields a bounded-event reading, encouraged the reanalysis of the adjectival passive participle as a verbal passive participle.
- Similar to ambiguity between short passive and predicate adjective

Get vs Be

- What differentiates a 'get' passive from a 'be' passive?

  - 'get' passives may less often be used when an animate agent is expressed

  - What factors govern the choice between 'get' and 'be'?

- 'get' passives used in scenes deviating from prototypical agency (Standwell, 1981)

  - If there is deliberate planning, use 'be'
  - For accidental events, use 'get'

  1. George was executed by a firing squad yesterday
  2. George got executed by a firing squad yesterday
  3. My cat got run over by a bus

- Use 'get' when logical object shares responsibility for action, or when logical object plays causal or catalytic role (e.g., arrested)
  - Another way to deviate from prototypical agency

- Use 'get'
  - when the action is detrimental to the logical object
  - to express discontent on part of speaker
    - My cache of marijuana was found
    - My cache of marijuana got found
    - Our grant was cancelled
    - Our grant got cancelled
  - Compare: My car got repaired

  - But, speaker's attitude may be positive or negative
    - 'Happy' events:
      - get elected, get nominated, get invited
      - get fixed, get repaired, get funded

Development of passives

- How do children make the distinction between 'get' and 'be'?
  - Do they use both forms?
  - For different functions?

- Lots of studies of children's passive
- Several studies contrasting active / passive
- Few examining 'get' vs 'be'

Background

- Children used more passives when patient is highlighted (e.g., picture of patient seen first)
- Young children use more truncated passives
  - particularly for inanimate patients, stative verbs (confused, tired)
  - When use full passives, use with action verbs and animate patients
- Use active when animate agent causes change in object; use passive when change of state affects animate patient
- Most research focused on 'be' passives

"Get" passives in children?

- 3 prior explanations of what a child's 'get' passive is:
  - Transitional structure from adjective constructions
  - "childhood" or colloquial form of 'be' passive
  - Get + pp is used to distinguish passive from active

- Do children have both 'get' and 'be' passives?

- What distinguishes them for the child?

Study 1

- Methods

- Examine all examples of passive from standard diary source

- Bowerman 1973
- Kept records of two daughters' speech (Eva, Christy) - forms a database for language acquisition research

- Excluded truncated passives referring to a state
  - "it is broken"
  - "the barn is locked"

Function Coding

- Passives coded for:
  - Choice of auxiliary
  - Full vs truncated form
  - Characteristics of patient (logical object)
  - Characteristics of logical subject
  - Semantics of verb
  - With modal form

Choice of auxiliary

- 3 age ranges examined

- More 'be' passives than 'get' passives

- Pattern more pronounced with age

An Exploration into Children's Use of Passives

Table 14.1 From characteristics: distribution of passive constructions by auxiliary form: % (n = 142)

	BE	GET	Total
Eva			
under 3;6	58 (7)	42 (5)	(12)
3;6–5	59 (23)	41 (16)	(39)
over 5	80 (16)	20 (4)	(20)
Total	65 (46)	35 (25)	71
Christy			
under 3;6	63 (12)	37 (7)	(19)
3;6–5	61 (23)	39 (15)	(38)
over 5	71 (10)	29 (4)	(14)
Total	63 (45)	37 (26)	71
Combined			
under 3;6	61 (19)	39 (12)	(31)
3;6–5	60 (46)	40 (31)	(77)
over 5	76 (26)	24 (8)	(34)
Total	64 (91)	36 (51)	142

Full vs truncated passive

- Prior results suggest few full passives
  - In children
  - And in adults

- Full passives rare in adult input to children

- Full passives rare
- More likely with 'get' than 'be'
- 'get' vs 'be' doesn't influence choice of preposition

Table 14.2 Distribution of passives by age according to type: % (raw numbers)

	Passive type		Total
	Full	Truncated	
BE			
under 3;6	11 (2)	89 (17)	(19)
3;6–5;0	30 (14)	70 (32)	(46)
over 5;0	27 (7)	73 (19)	(26)
Total	25 (23)	75 (68)	(91)
GET			
under 3;6	33 (4)	67 (8)	(12)
3;6–5;0	48 (15)	52 (16)	(31)
over 5;0	38 (3)	63 (5)	(8)
Total	43 (22)	57 (29)	(51)

Frequency of use of various prepositions with full passives by age and auxiliary choice (raw numbers)

BE	under 3;6	3;6–5;0	over 5;0	Total
by	(1)	(8)	(5)	(14)
from	(1)	(4)	(2)	(7)
of	(0)	(1)	(0)	(1)
with	(0)	(1)	(0)	(1)
Total	(2)	(14)	(7)	(23)
GET				
by	(0)	(9)	(2)	(11)
from	(2)	(5)	(0)	(7)
of	(2)	(1)	(0)	(3)
with	(0)	(1)	(0)	(1)
Total	(4)	(16)	(2)	(22)

Patient Characteristics

- Coded for:
  - Animacy (inanimate vs animate)
  - Self (patient is speaker or non-speaker)
  - Consequences (positive or negative)

- Inanimate patients more than animate ones
  - 'get' passives more likely than 'be' passives to have animate patients
- 19% of passives have 'self' as patient ('me first' principle?)
- 'get' for negative consequence
- 'be' for neutral consequence

Table 14.3 Characteristics of patient: distribution of passives: % (n)

1. According to animacy of patient

Form	Animate	Inanimate	Uncoded	Total
BE	12 (30)	65 (59)	3 (2)	(91)
GET	59 (30)	41 (21)		(51)
Combined	42 (60)	56 (80)	2 (2)	(142)

2. According to relation of patient to speaker (Self, Not self)

Form	Self	Not self	Total
BE	15 (14)	85 (77)	(91)
GET	26 (13)	75 (38)	(51)
Combined	19 (27)	81 (115)	(142)

3. According to consequences of action (negative, positive, neutral)

Form	Negative	Positive	Neutral	Uncoded	Total
BE	18 (16)	3 (3)	74 (67)	6 (5)	(91)
GET	65 (33)	6 (3)	26 (13)	4 (2)	(51)
Combined	35 (49)	4 (6)	56 (80)	5 (7)	(142)

Logical Subjects

- Agentive vs. non-agentive

- Specific vs general agents
  - "I don't want to be splashed by you" (spec)
  - "Hair needs to be brushed" (gen)

- Do passives provide means to discuss non-prototypical agency?
  - Predicts non-agentive or general subjects

Table 14.4 Proportion of logical subjects that refer to specific agents, general agents, and nonagent entities: % (n)

Form	Non-agent	Specific agent	General agent	Uncoded	Total
BE	12 (11)	21 (19)	58 (53)	9 (8)	91
GET	45 (23)	20 (10)	18 (9)	18 (9)	51
Total	24 (34)	20 (29)	44 (62)	12 (17)	142

- 'get' passives more non-agents
- 'be' passives more general agents

Verb Semantics: Eva

- What verbs are used in passives?
  - Prior claims that children's passives limited to action verbs

- Are they highly transitive?
  - Do they have agent and patient arguments

- Eva did not passivize mental state verbs
- Did passivize highly transitive verbs

Table 14.5 Verb semantics: Eva

Verbs appearing with BE		Verbs appearing with GET	
ashed 1	messed up	bumped	stinked up
bandaided 2	picked up	burned	striked 12
blowden up 3	pictured on	buried up	untucked
bushed up 4	played with	drowned	unmes*
called	putted on	eaten*/eten	washed up
changed	readen to	fastened 7	
cooled	scrunched	floated 8	
cut hald	splashed*	gone out 9	
descripted	stepped on	hurt	
dried/up	sticked on	kill	
eaten*/up	throwed up/off	lightninged 10	
fired 5	throwned away	losed	
glued	tooken away/out/down	pinched	
guessed in 6	used*/up	pricked	
ground	voted	sent (to jail)	
hided	whipped toppinged	splashed up*	
invaded	written	staled 11	

* Indicates verb appears with both auxiliary forms.
Key: 1 = covered; 2 = bandaid applied; 3 = inflated; 4 = overgrown, said of bushes; 5 = caused to erupt, said of volcano; 6 = oriented in, said of toilets; 7 = affected by a cold sensation; 8 = caused to float imagining the effects of a flood on a house; 9 = spilled, said of juice; 10 = struck by lightning; 11 = caused to become stale; 12 = struck by lightning.

Verb Semantics: Christy

- Same pattern as for Eva

- Some verbs not immediately clearly transitive (punish) – may be so at a more abstract level of affectedness

- Little overlap between verbs used with 'get' and 'be' passives
  - (* indicates both)

Table 14.6 Verb semantics: Christy

Verbs appearing with BE		Verbs appearing with GET	
bloomed 1	lost*	burn*	spanken
breaked/broaken	made	caught	splashed
broken out	mummied 5	cut	sucked
brush	paint	dressed	reinsed*
burn*	plugged out	fended*	unsnapped
chewed off	put to/putten on*	feed 6	washed*
cut	shoelaced	fix*/fixed*	
died 2	speak/sparked	gone 7	
eaten	stayed open	hitten	
feeded*	sugared	hurt*	
filled/failed	surrounded	knocked over	
fix*/fixed*	swinged	learned 8	
gone 3	take care of	loses*	
hazed about 4	taught	mixed up	
hurt*	tied up	punished	
invented	tooken	putten on*	
loosed	treated for	scratched	
	washed*		

* Indicates verb appeared with both auxiliaries.
Key: 1 = caused to bloom; 2 = killed; 3 = taken; 4 = told about; 5 = made into mummy; 6 = caused to catch on fire; 7 = said of object about to be eaten; 8 = taught.

Modals and Passives

- Modals reduce amount of control of agent over a situation
  - John throws the ball
  - John must throw the ball

- Modals may downplay role of agent
  - may be common in passives

- Modals express subjective attitude toward situation
  - may be more common in 'get' passives?

Table 14.7 Percentage of passives with and without modal forms (n)

Form	With modal	Without modal	Total
BE	26 (23)	75 (68)	91
GET	20 (10)	80 (41)	51
Combined	23 (33)	77 (109)	142

Rank order and frequency of modal forms in BE and GET passives
BE passives (n = 23)
- can (7)
- gonna (5)
- need (4)
- will (4)
- hafta (1)
- should (1)
- supposed to (1)
GET passives (n = 10)
- will (5)
- gonna (1)
- can (1) (negative)
- should (1)
- might (1)
- would (1)

- 'be' more likely with 'can' / 'gonna'
- 'get' more likely with 'will' (likely negative)

Summary

- Before age 5, English-speaking children use the passive productively

- Children primarily passivize action verbs

- Characteristics of passive differ viz. auxiliary

Be vs get

- Be passives

  - More frequent than 'get' passives
  - Tend to be truncated
  - Tend to involve inanimate patients
  - Logical subjects were generic agents
  - Modal forms refer to norms and conventions

- Get passives

  - Typically involve animate patients
  - Logical subjects tend to be non-agent entities
  - Self as patient more frequent in 'get' passives
  - More often express an attitude about negative consequences than 'be' passives

Discussion

- 'get' and 'be' reflect two distinct ways of talking about actions from a non-agent perspective
  - Be passive: agent is generic, irrelevant, or unknown
  - Get passive: perspective taking device to focus on actions that have painful or negative outcomes (in contrast to adults, who may use 'get' for positive or negative outcomes')

Future Directions

- This study based on naturalistic data

- What about experimental approaches?

- What about other languages?