

INX199 - Assignment 3
Looking for Patterns in Overregularization

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Task 1: Adam

Syntactic Category : Verbs

Error kind	Description	Example
1. + "s"	using the regular form rule to make a past tense verb plural	fells
2. + "es"	uses a regular rule to create the third person singular	haves
3. + "ed"	to form a past tense for an irregular verb by using the regular inflection	sticked maked
4. + "ed"	adding the regular form to an already irregular form of a past tense word	felled broked
5. * + "s"	not a true overregularization, the misplacement of the regular plural form onto the verb	wents dos

Syntactic Category: Nouns

Error kind	Description	Example
1. + "s"	uses regular form to make a plural	moneys milkmans
2. + "s"	to make a plural form of a noun already in it's irregular plural form	firemens reindeers
3. + "es"	adds the regular plural rule to an already regular plural word	schoolses

* Adam also uses the word "mans" which is marked as an error, however it is not an overregularization of the inflection "s" to make a plural. Instead Adam is adding the "s" as a contraction of the word "is". Ie. "Dat funny mans driving dat" (adam48.cha)

Syntactic Category: Possessive Pronoun

Error kind	Description	Example
1. + "s"	overregularization of the rule add "s" to form a plural, attached to the wrong word	mines

* Adam most often uses "mines" as a contraction of "is", as in the example of "mans", not as an overregularization. In the case of "mines" he has attached the contraction "s" to the wrong word within the syntax of his sentence.

Syntactic Category: Adjective

* Although these errors are not what we studied in class, they appear to be other kinds of overregularizations, applying common rules to form new types of words.

Error kind	Description	Example
*1. + "est"	*adds regular suffix form to emphasize quantity	*mostest
*2. + "y"	*adds regular suffix to form an adjective out of a noun	*poisony
*3. + "ing"	*adds regular suffix to form an adjective out of a verb in past tense	*breaking
4. + "s"	unclear data; may be attempting to form a plural to emphasize quantity of colour	greens

Syntactic Category: Preposition

* Although Adam uses the incorrect form of the word "from" + "s" ("froms"), he is once again using the "s" as a contraction of "is": "where dat froms?".

IB (i). The most obvious qualitative difference across the syntactic categories is in the frequency of specific rule overregularizations, or overgeneralizations within specific categories. The most frequent error across all syntactic categories is the use of "s" or "es" to create a plural form for the stem words which need an irregular form, added to correct irregular forms, and even added to already plural word which is treated as a stem word. Adam also occasionally places the regular plural rule to the wrong word in the sentence ("dos", "wents"). This data coincides with the theory that children learn many forms of the same word as separate stem words as opposed to one word with many forms, causing overregularization errors as the child attempts to use the schema "add s to create a plural" across all forms.

The syntactic category with the most frequent errors are Verbs (34 out of 47 overgeneralizations of rules are applied to verbs). This data points to the complexity of verb

learning, due to its many forms and relations including: tenses, possessives, transitive or intransitive forms etc. many (29 out of 34) verb errors are due to the complexity of creating the past tense forms of the verbs by attempting to add the regular form “ed”. The irregular verbs, which Adam wants to form past tenses of, have to be memorized and stored in the lexicon, as opposed to schematized with rules, which accounts for the high frequency of errors as the irregular forms are not yet learned.

I B (ii). Adam begins to make overregularization errors at the age of 2;7.0. He does not make these errors before that time because he is still in the “imitation” stage of his inflection learning.

Adam does not make an obvious recovery in his errors during the data files. Adam is only 4;10.0 at the end of the data, and still making many overgeneralizations. Adam may be entering the “recovery stage” with only two types of errors in the last two files, however, his pattern shows that he previously had small recoveries as well in files adam36.cha - adam45.cha. As the U shaped curve is really more uneven, more data would be needed to draw a conclusive observation on whether he is in the recovery stage.

Task II

Sarah

TAKE

Age	<took>	<taked, tooked, taked@n, tooked@n>	Pc
3;8.6	1	0	100%
4;1.28	3	0	100%
4;2.9	1	0	100%
4;4.18	1	0	100%
4;7.24	1	0	100%

MAKE

Age	<made>	<maked, maded, maked@n, maded@n>	Pc
3;9.3	2	0	100%
4;0.28	1	0	100%
4;1.28	1	0	100%
4;2.9	1	0	100%
4;5.4	0	2	0%
4;7.24	0	1	0%
4;9.4	0	1	0%

4;9.12	1	2	33%
4;11.13	2	1	66%

Sarah, Continued

GO

Age	<went>	<goed, wented, goed@n, wented@n>	Pc
3;3.7	2	0	100%
3;4.16	2	0	100%
3;5.20	1	0	100%
3;7.23	2	0	100%
3;10.30	0	1	0%
4;0.28	1	1	50%
4;1.28	3	2	60%
4;2.9	1	1	50%
4;7.0	1	1	50%
4;7.24	8	0	100%
4;8.20	2	0	100%
4;10.21	1	0	100%
5;0.16	1	0	100%

FALL

Age	<fell>	<falled, felled, falled@n, felled@m>	Pc
4;4.18	1	0	100%
4;7.24	0	1	0%

COME

Age	<came>	<came, comed, came@n, comed@n>	Pc
3;3.7	1	0	100%
4;1.28	1	0	100%

4;7.24	3	0	100%
4;9.12	0	1	0%

SARAH, Continued

Age	DO	<did>	<doed, dided, doed@n, dided@n>	Pc
3;4.16	3	3	0	100%
3;5.20	1	1	0	100%
3;7.23	3	3	0	100%
3;8.6	4	4	0	100%
3;9.3	6	6	0	100%
3;10.30	3	3	0	100%
3;11.29	6	6	0	100%
4;0.28	2	2	0	100%
4;1.28	1	1	0	100%
4;2.9	2	2	0	100%
4;3.7	3	3	0	100%
4;4.18	4	4	0	100%
4;5.4	5	5	0	100%
4;6.5	2	2	0	100%
4;7.0	15	15	0	100%
4;7.24	5	5	0	100%
4;8.20	5	5	0	100%
4;9.4	3	3	0	100%
4;9.12	4	4	0	100%
4;10.21	2	2	0	100%
4;11.13	3	3	0	100%

5;0.6	5	0	100%
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EVE

COME

Age	<came>	<camed, comed, camed@n, comed@n>	Pc
1;8.0	22	0	100%
1;9.0	4	0	100%
1;10.0	2	0	100%
1;11.0	4	0	100%
2;1.0	1	3	25%
2;2.0	6	0	100%
2;3.0	0	1	0%

TAKE (0)

MAKE

Age	<made>	<maked,, maded, maked@n, maded@n>	Pc
2;1.0	1	0	100%
2;2.0	4	0	100%
2;3.0	4	0	100%

GO

Age	<went>	<goed, wented, goed@n, wented@n>	Pc
1;8.0	1	0	100%
2;0.0	1	0	100%
2;1.0	2	3	40%

2;2.0	14	5	74%
2;3.0	3	0	100%

EVE, continued

DO

Age	<did>	<dided, doed, dided@n, doed@n>	Pc
1;6.0	1	0	100%
1;8.0	1	0	100%
1;9.0	3	0	100%
1;10.0	1	0	100%
2;0.0	2	0	100%
2;1.0	1	0	100%
2;2.0	10	2	83%
2;3.0	4	0	100%

FALL

Age	<fell>	<falled, felled, falled@n, felled@n>	Pc
1;7.0	1	0	100%
1;10.0	0	6	0%
1;11.0	0	2	0%
2;0.0	1	0	100%
2;1.0	0	1	0%
2;2.0	0	4	0%

II B (i). Eve and Sarah mostly use the correct past tense form for the verb “do”. This is most

likely because the verb do and its past tense form have a high token frequency in everyday utterances. This is consistent with the theory that the high token words are used in their correct forms, as the children have so much exposure to the stem word and its other forms.

(ii). For Eve, there is very little visible learning curve for the verbs “make” and “do”, as she uses mostly correct past tenses. This most likely reflects the high token percentages for these verbs. The word “go” has the closest evidence of a U shaped learning curve, and she appears to already be entering the recovery stage for that particular verb which is also high token. In general, Eve’s graphs are very sporadic, which is expected, as the U shape pattern that develops over a longer time, and Eve’s data only covers a 7 month period, from the age of 1.7 - 2.2. From her age and the data presented, Eve appears to still be in the earlier stage of inflection learning, using imitation, not rules yet, so she is less likely to make overregularizations.

Sarah displays patterns that are closer to the U shape curve for the verbs “make” and “go”, appearing to have begun with correct forms, gone through the overregularization stage, and has recovered, using the correct inflections again, following the pattern discussed in class. Sarah’s graph shows a 100% correct inflection usage for the verb “do”, a high token verb in her files. This is consistent with the theory of high token verbs being learned quickly. In contrast, there is little data for the verbs “fall” and “come”, and the graphs both show a large drop in correct inflection usage, suggesting that as lower token words, Sarah has a more difficult time memorizing their irregular forms.

(iii). The difference in the learning curve between the two children is that while Eve’s data reveals an irregular, jagged pattern (not really any curve) , there is an emergence of a true learning curve in Sarah’s data, as noted above. This reflects two important differences in the children. First, as Sarah is older, she has had an opportunity to not only make rule overgeneralizations, but in some cases the opportunity to recover from her errors by the final file age of 5; 0.16. Eve, on the other hand is still only 2;3.0 at the end of her data, and only beginning to make the overregularizations that create the dip in the U curve. In addition, because the length of the study observed Eve’s errors over a 7 month period, while Sarah’s data spans a 1yr; 9 month period, there is a greater opportunity to see a true U shape emerge for Sarah, as the irregular pattern begins to make a more clear picture over time. This is also true for the less documented uses of verbs with in their files (“make” for Eve, and “fall” or “come” for Sarah) where no real pattern has the opportunity to emerge over only a few documented ages of use.