

Arguments against Hurford's 'Aux Copying Rule'

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Hurford (1975) has claimed that children's mistakes of the form *what's that is?*, *whose is that is?*, and *what did you bought?* in the early stages of language acquisition are the result of the child having internalized an imperfect version of an adult rule. Hurford reports that his daughter frequently asked questions such as the following from 1;10 to 2;6:

What's that is?	What did you did?
What's this is?	Did you came home?
Whose is that is?	What did you found?
What did you bought?	

Hurford wishes to account for these errors by postulating that the child has internalized an inaccurate version of an adult rule, so that instead of 'moving the tense marker, plus sometimes another Auxiliary element, from one position in a sentence to another, the child's grammar copies the elements from one position to another, leaving the originals intact (300)'. On the basis of this claim, he suggests that the young child who makes errors such as *what is you is doing?* has an 'Aux Copying Rule' of the following form:

$$\text{NP-Tense} \left\{ \begin{array}{l} \text{Modal} \\ \text{have} \\ \text{be} \end{array} \right\} -X$$

1 2 3 => 2 1 2 3

In an investigation of the development of modal and temporal referencing in the course of language acquisition, I have observed errors which suggest that Hurford's notion of an 'Aux Copying Rule' is unjustified. Some of the errors I observed are consistent with his notion of an 'Aux Copying Rule'.

I

- Is it's Stan's radio? (N.E., 2;6)
- What's he's wearing on his neck? (A.K., 2;7)
- Did we ate...? (N.E., 2;5)
- Did Chris got...? (N.E., 2;5)

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- Did he broke...? (N.E., 2;5)
 Did we left...? (N.E., 2;5)
 Did we bought...? (N.E., 2;5)
 What did I told? (I.B., 3;1)
 Don't he wanted to help somebody? (H.K., 3;6)
 What did she bought you? (H.K., 3;6)
 Did you bought those? (V.Q., 3;6)

However, the following errors are not explainable by recourse to an 'Aux Copying Rule':

II

- What's was that? (M.Z., 2;6)
 What are you did? (V.Q., 3;7)
 Can you broke those? (A.K., 3;6)

If the 'Aux Copying Rule' was being consistently applied by the above three children (two of whom did produce errors consistent with the hypothesized rule), one would have expected the utterances in II to have the following forms:

- What was that was?
 What did you did?
 Can you can broke those? *or* Could you could broke those? *or* Could you broke those?

These errors, which are inconsistent with the 'Aux Copying Rule', coupled with other related errors and some consideration of what it means to say that a child has internalized a rule, demonstrate that Hurford's notion of an 'Aux Copying Rule' is wrong, and that such errors are the result of a phenomenon quite distinct from that of internalizing an incorrect rule. Consider the following errors:

III

- I like listen to who's is on this tape. (M.Z., 2;6)
 That's makes a truck. (N.E., 2;5)
 He's do take his, take his clean pants off. ('he took his...', M.Z., 2;6)
 I'm want some dinner. (M.Z., 2;6)
 It's don't have any oil in here. (M.Z., 2;6)
 What's happen with Santa Claus? ('what happened to...'; M.Z., 2;6)
 It's looks like a bus. (M.Z., 2;6)
 That's are pretty ladies, aren't they? (V.Q., 3;7)
 It's have two. ('it has two', V.Q., 3;7)
 I think it's have a pile. (V.Q., 3;7)
 Know what's this? (A.K., 2;11)
 I thought so 'cept they're weren't. (A.K., 3;1)
 That's means 'get hawks'. (A.K., 3;4)
 That what's the witch says to her brother. (A.K., 3;4)

Although Hurford does not tell us if his daughter made errors such as these, errors of the type found in III are well documented in the literature (Brown 1973, Brown, Cazden & Bellugi 1969, Menyuk 1963, 1969, 1971, Miller & Ervin 1964). Some of these errors may be due to the child's lack of knowledge concerning restrictions on certain syntactic forms co-occurring, but the majority of the errors are probably a result of the child's difficulty with segmenting the speech stream. Brown (1973), Brown *et al.* (1969), and Miller & Ervin (1964) have all suggested that young children experience difficulty in segmentation, 'the breaking up of the essentially continuous stream of speech into morphemes and words' (Brown 1973: 265). Because of this difficulty children treat *that* and *that's* (Miller & Ervin) and *it* and *it's* (Brown *et al.*), respectively, as allomorphs of a single morpheme, rather than as two distinct constituents. In other words, for the young child, forms like *that's* and *it's* are unanalysed entities (i.e. they are not equivalent to *that is* and *it is*) and as such are alternate pronunciation choices for *that* and *it*, respectively.¹ It seems likely that forms such as *what's* and *who's* are also initially produced in an unanalysed fashion and are alternate pronunciation forms of their counterparts (e.g. *what*, *who*). If this is the case, then Hurford errs when he suggests that such errors are due to the child having formulated an incorrect version of an adult rule. Instead, these errors are due to the fact that children have failed to analyse forms such as *he's*, *it's*, *what's*, etc. as *he + is*, *it + is*, *what + is*, etc. If the child has in fact failed to properly analyse the forms, there is no need to postulate an 'Aux Copying Rule'. The child who has not analysed *what's* as *what + is* is not copying the auxiliary elements from one position to another when he produces a sentence such as *what's this is?* but is instead simply using *what's* as a variant of *what*.

What, though, can be said about utterances such as *whose is that is?* and *what did you bought?* Such errors cannot be said to occur as the result of segmentation errors, so perhaps Hurford's analysis holds up here. Menyuk (1969) has reported similar types of errors in the children she studied (e.g. *is this is the powder?*, *how can he can look?*), so these types of errors, though rare, do seem to be a characteristic of the acquisition of English.

Is an 'Aux Copying Rule' needed to explain these errors? Consider the following errors:

[1] Michael Maratsos has pointed out that it is unlikely that forms such as *its* and *whats* are totally unanalysed even for the very young child. If such was the case, one would expect to observe many more errors and many more types of errors (e.g. *what's you will eat?*) than are found in young children's spontaneous speech. Such forms, then, are not completely unanalysed by the young child, but are rather partially unanalysed. This still means that forms such as *its* may not mean *it + is* to the young child (i.e. that such forms are not analysed by the child to contain a variant of *be*), which maintains the force of the above argument.

IV

- I did fell when I got blood. (M.Z., 2; 5)
 You didn't had some. (I.B., 3; 1)
 Don't struck me. (V.Q., 3; 6)
 They wouldn't haved a house. (V.Q., 3; 6)
 I didn't got... (G.D., 3; 11)
 She didn't goed... (G.D., 3; 11)
 It didn't has any. (A.B., 5; 0)
 You don't has much money. (A.B., 5; 0)
 The plant didn't cried. (A.K., 2; 5)
 It don't hurts. (A.K., 2; 8)
 This don't had a map. (A.K., 2; 8)
 I didn't saw that. (A.K., 2; 9)
 They didn't spilled. (A.K., 3; 0)
 'Cept you didn't started it, so I started it. (A.K., 3; 1)

Many of these errors are of the same type as those supposedly due to the child's having created an 'Aux Copying Rule', but occur in declarative sentences rather than interrogatives. These errors, then, are out of the domain of the 'Aux Copying Rule', and can be explained by assuming that the children are being redundant because they have not learned not to do so or because they do not have the processing skills necessary to prevent unnecessary repetition of auxiliary forms. This is certainly not isomorphic with stating that children have acquired an 'imperfect' rule (imperfect from the point of view of a transformational grammar account of adult English). Moreover, it is not even necessary to assume that forms involving *did* and an irregular past tense verb (*what did you found?*) redundantly express the past tense, since the young child may not code irregular past tense verb forms as syntactically past. Still, utterances involving *did* and a regular past tense verb probably do redundantly express the past tense even for the young child, and utterances involving *did* and an irregular past tense form are redundant in terms of the past tense for children who have analysed the particular irregular past tense forms as syntactically past. Again, such utterances may be accounted for by assuming that the child has been redundant because of processing difficulties or because of not knowing that to be redundant is to err in so far as auxiliary verbs are concerned.

I believe that the above data invalidate Hurford's claim that children acquire an 'Aux Copying Rule'. There are errors of the same type which caused the existence of the rule to be hypothesized for which the rule cannot account, and it is parsimonious to assume that the same variables produce the deviant forms in both declaratives and interrogatives, as opposed to accepting Hurford's analysis for interrogatives and looking elsewhere for the cause of the deviant declarative forms. In addition to the error data, Hurford's notion of a rule

encounters another problem which I believe renders it unacceptable. The argument centres on what it means to say that a child has internalized a rule. Brown (1973) has pointed out that if the child is acquiring categorical rules, one would expect each particular rule to be acquired quite abruptly and for this sudden acquisition of the rule to be manifested in performance. Such has not proved to be the case. Children do not seem to acquire rules suddenly, but create rules gradually. Of more concern for this discussion, one would expect the child who has internalized a rule (ignoring whether the rule was slowly constructed or acquired suddenly) to consistently produce utterances which are in accordance with the rule but no utterances which violate the rule (unless it is a variable rule akin to those discussed by Labov (1969), which Hurford's 'Aux Copying Rule' is not). Hurford reports that his daughter produced forms like *what's that is?* and *what did you bought?*, but provides no information about whether or not she also produced correct forms (e.g. *what's that?*, *what is that?*, *what did you buy?*) or other types of incorrect forms (e.g. *what that?*, *what you bought?*, *what you did buy?*) during this same time period. Thus, one cannot decide with certainty whether she only produced utterances consistent with the rule Hurford suggested she had internalized. However, the children I observed who produced the incorrect utterances cited earlier, also frequently produced correct utterances of the same construction types and/or produced different types of errors (e.g. *I eating*, *what you did eat?*, *where you going?*) with the same construction types. Brown (1973), Menyuk (1963, 1966, 1971), and Wall (1974) have reported similar findings. Children who make errors like those reported by Hurford also produce other variations of the same construction-type(s) (both correct and incorrect versions), which is strong evidence that they have not internalized a rule such as that postulated by Hurford. Instead, it seems that such errors are due to other factors, particularly segmentation problems (in comprehension) and processing limitations (in production).

REFERENCES

- Brown, R. (1973). *A first language*. Cambridge, Mass.: Harvard University Press.
 Brown, R., Cazden, C. & Bellugi, U. (1969). The child's grammar from I to III. In J. P. Hill (ed.), *Minnesota symposia on child psychology* Vol. II. Minneapolis: University of Minnesota Press.
 Hurford, J. (1973). A child and the English question formation rule. *JChLang* 2, 299-301.
 Labov, W. (1969). Contraction, deletion, and inherent variability of the English copula. *Lg* 45, 715-62.
 Menyuk, P. (1963). Syntactic structures in the language of children. *ChDev* 34, 407-22.
 — (1971). *Sentences children use*. Cambridge, Mass.: M.I.T.
 — (1973). *The acquisition and development of language*. Englewood Cliffs, N. J.: Prentice-Hall.
 Miller, W. & Ervin, S. (1964). The development of grammar in child language. In U. Bellugi & R. Brown (eds), *The acquisition of language*. Monogr. Soc. Res. Ch. Devel. 29, 9-34.
 Wall, C. (1974). *Predication: a study of its development*. The Hague: Mouton.