

A Double Regularity in the Acquisition of English Verb Morphology*

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Some of the most valuable information to be gained from children's acquisition of language concerns the nature of their expectations of language, the regularities in the form taken by their 'analogical extensions' of the speech they hear. The present note treats an aspect of the development of verb forms in the speech of one child, my daughter, Elizabeth, between the ages of four and five. As Leopold remarks of his older daughter, 'the more important morphological forms were learned, with many mistakes along the way. Such mistakes are more interesting than the correct forms, because they show the grasping of a pattern more clearly' (Leopold 1953-4:13). This note concerns Elizabeth's stages in grasping the rather complex patterns of regularities and subregularities in part of the English verbal system, the relations among the present (I often take a cookie), the past (I often took a cookie), and the participle (I've often taken a cookie, A cookie was taken), within the class of verbs having participles in -n. My intent is to demonstrate the conjunctive, rather than disjunctive, character of two principles of participle formation:

- (1) The participle is identical to the past.
- (2) The participle is formed by the suffixation of -n.¹

Certain aspects of the acquisition of verb morphology are sufficiently well known not to require extensive comment here. There

is an early stage in which the present, the past, and the participle normally are all realized by a single form, with a few exceptional forms learned in context. There follows the apprehension of principle (1) together with (in several stages) the content of principle (3):

- (3) The past is formed by the suffixation of [t - d - əd], distributed according to the (phonological) nature of the verb.²

The child thus may go from saying I gave to saying I gived, to his parents' annoyance. Next, while continuing to follow principle (1) he learns that (3) is restricted:

- (4) Some verbs are special, in that they have past forms which are not phonologically predictable, but must be individually learned.

At this stage the child will retrieve I gave, and produce I have gave as well. This was characteristic of Elizabeth's speech on her fourth birthday, at which time she had acquired some of the most conspicuous irregular pasts (e.g. gave, went, came, knew, took, saw, ate, got) and acted in accord with principle (1) in all except a few cases, the participles gone, seen, and given, in which (1) is restricted:

- (5) Some verbs are special, in that they have participles which are not identical to the corresponding past forms, but must be individually learned.

The succeeding developments I cannot speak about with any assurance in general, but only in Elizabeth's case.³ Shortly after her fourth birthday her speech suggested that her understanding of irregular verb forms involved more than the item-by-item learning of (4) and (5).

Instead, she began to class verbs together with respect to the applicability of principles like (2)--a subregularity not expressed in (5)--and like (6)--a subregularity not expressed in (4).

(6) Presents in [I] correspond to pasts in [æ].

The evidence for this more sophisticated treatment of a class of exceptions comes from the rapid acquisition of sets of items conforming to the class principle, from the extension of the principle to verbs other than those to which it properly applies, and from the resistance of such 'false analogies' to adult correction (subtle or straightforward). From such evidence, it is fairly clear that Elizabeth had perceived the subregularity of (6), as in sat, sang, rang, and drank, and possibly also that of (7).

(7) The vowel of the past is [uw].

as in blew, knew, grew, flew, drew, and threw, but not the principle operative in the formation of such pasts as built and bent. However, the clearest and most striking example of the progression from pure exceptions to subregularities is her treatment of the -n participles.

As already remarked, Elizabeth's first -n participles were gone, seen, and given. By age 4:2 she produced -n participles for most of the 28 irregular verbs for which she can reasonably be supposed to have had models.⁴ Principle (2) was extended least easily to some of the verbs ending in t (notably beat, get and forget) and to the seven verbs to which both (2) and (7) apply in adult speech; but even here, by age 4:4 Elizabeth acted in accord with principle (2) with only one exception, invariable beat. New verbs were added to the -n class quite rapidly, including some verbs not in the -n class in adult speech (baken,

dranken, and singen).

Principle (2) does not specify the form of the stem to which the -n is to be added. In adult speech this is sometimes identical to the present (e.g. blown, fallen, seen, eaten), sometimes identical to the past (e.g. bitten, spoken, torn), sometimes different from both (e.g. flown, written, driven). Insofar as it was possible to observe Elizabeth's development reliably, she seemed to imitate the adult models at first, but by the time (4:4) that she had determined the membership of the -n class she was beginning to produce 'doubly regular' forms, participles in which the suffix -n was attached to the past despite the adult models: aten, gaven, reden, sawn, shooken, tooken, and wronen. At age 4:6 she invariably produced these instead of eaten, given, ridden, seen, shaken, taken, and written. And six subsequent months of frequent corrections by her parents had no noticeable effect. At age 5 she is beginning to replace the doubly regular forms, only occasionally in unstudied speech but with some frequency when she is asked to complete sentences like 'After someone writes you, you can say that he has _____' and 'If someone eats an apple, then that apple was _____'.

The extent of the double regularity is considerable. Of the 28 verbs in question, ten do in fact have participles identical to the past with an -n suffix. Next, the learning of principle (7) seems to have interfered with the learning of principle (2) in all the relevant cases, so that no forms with participles having the vocalic nucleus [uw] exhibited the double regularity. The participle wone was probably not treated as an instance of principle (2), but rather learned

as a unit, and beat was never properly assigned to the -n class. Of the remaining verbs, eight exhibit the double regularity, only two do not (fallen and the not very frequent risen). That is to say, there are eight instances, six explicable counterinstances (the [uw] class), two exclusions (gone and beat), ten neutral cases (those in which the past and participle stems are identical in adult speech), and only two anomalies (no fellen or rosen).

There are at least two observations to be made about these developments in Elizabeth's speech. First, she treated suffixation of -n (principle (2)) as a 'grammatical process' of the same type as formation of the irregular pasts. She can be said to have learned (on good, but misleading, evidence) that in English there are two logically coordinate operations: (a) form irregular past; (b) in certain cases add the suffix -n to form the participle.

Second, Elizabeth cannot be said to have generalized in any straightforward way on the basis of the -n participles she had heard. Presumably, she heard about as many participles identical to the present with suffixed -n as she did participles identical to the past with suffixed -n; indeed, the two early -n participles seen and given (presumably the bases for the formulation of principle (2)) are constructed on the present, not the past. It seems an inescapable conclusion that the crucial factor was the prior existence of principle (1) relating the past and the participle.

Footnotes

¹With regular alternants [n] after a consonant or l, [ŋ] otherwise.

²Berko 1958 observed that children typically acquire the [əd] alternant later than the two others, so that there is a period during which the past of jump is jumped, but the past of verbs like pat and wade remains identical to the present.

³Ervin and Miller's observations on seven children turned up relatively little 'extension of irregular patterns' (Ervin 1966:178).

⁴I have excluded eight participles (borne, proven, shorn, sworn, woken, woven, forbidden, and forsaken) for which the models were infrequent (in the case of woken and woven because waked and weaved were the adult standards) or were probably treated as isolated forms (forbidden). Also excluded were verbal forms in -n that are used only attributively (shrunken) and certain archaic or literary participles in -n that I felt sure were unfamiliar to Elizabeth (e.g. shriven, slain, smitten, striven, trodden).

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