

Some facts on negation: Wode's four-stage developmental theory of negation revisited*

TSCHANG-ZIN PARK

University of Berne

(Received 17 November 1977)

According to Wode (1977), the development of negation in children's speech goes through four stages.¹ *Stage I* consists of one-word negation, i.e. children using a single *nein*, 'no', to express negation. *Stage II* consists of two-word negation, which is developmentally further divided into II*a* for anaphoric negation and II*b* for non-anaphoric negation. In the former, *nein* is used correctly in its proper grammatical function, but in the latter, *nein* stands for adult *nicht* 'not'. *Stage III* consists of intrasentential negation wherein non-anaphoric *nein* of II*b* moves from the utterance-initial position to an utterance-medial position and is at the same time replaced by *nicht*, the non-anaphoric Neg proper (although the position of *nicht* still does not always live up to the adult model). In *Stage IV* children finally learn the correct position of *nicht*.

Wode intended to set up a general theory of the development of negation with predictive capacity at a cross-cultural level. Unfortunately, sufficient relevant data were not presented. His theory was based on data which were mainly obtained from one of his two children in naturalistic situations without any fixed time schedule for observations. Questions such as whether *nein* is used in the anaphoric or non-anaphoric function, whether the former developmentally precedes the latter, and how the replacement of the non-anaphoric *nein* by *nicht* takes place can only be reliably answered by a distributional analysis of data. Yet Wode failed to do that. What he presented in support of his theory was limited to a total of 13 example utterances, six for *Stage II* and seven for *Stage III*, although there was a strong suggestion that he had abundant data available. It is also unclear how large the size of his sample was, and how many negative constructions were obtained in all. No data could be more fragmentary than these, especially if he intended to formulate a theory based on empirical findings. Readers are simply forced to believe in his statements, without being able to get insight into how the development of negation took place. In fact, there is evidence denying Wode's theory. The evidence stems from longitudinal studies

[*] The author is indebted to Dr W. E. Redlinger, who improved the English of this paper. Address for correspondence: Psychologisches Institut, Universität Bern, Forschungsabteilung, Sennweg 2, 3012 Bern, Switzerland.

[1] Wode's 'stage' has nothing to do with Brown's, which is defined in terms of MLU. In order to draw a distinction between the two terms, Wode's stage is always italicized, *Stage v. Stage*.

of one High German-speaking and two Swiss German-speaking children in Stages I-II (in Brown's terms).

Evidence from High German

The child, a girl, was observed twice within a week at the ages of 2;0.0 to 2;0.7 (MLU = 1.22, Early Stage I) and three times within a week at the ages of 2;1.19 to 2;1.26 (MLU = 1.92, Late Stage I) (Park, forthcoming). She produced in Early Stage I a total of 134 multi-word utterances, 15 of which referred to negation, consisting of Neg in one or two major categories, 13 *nein*+X(+Y) type, one *nicht*+X type and one *nicht-da*+X type ('not here/there') constructions (*nicht-da* was treated as a functionally single word, since there was no indication that the two words were differentiated). In Late Stage I there were a total of 502 multi-word utterances, 56 of which expressed negation, 43 *nein*+X(+Y+Z) type, 11 *nicht*+X(+Y) type and 2 *kein*+X type constructions (yet, one of the last type utterances expressed the Subj-Loc relation, *keiner drin* 'nobody therein'). Other negative utterances such as Neg+Vocative or Adverb were disregarded.

In Early Stage I *nein* was indeed used in the non-anaphoric function, but, contrary to Wode's theory, ALL of the 13 *nein* constructions referred to non-anaphoric negation. There was no instance of anaphoric *nein*, i.e. Stage IIa was missing completely. The utterances were structured sequentially as follows:

<i>nein</i> +X	6
X+ <i>nein</i>	3
<i>nein</i> +X+Y	2
X+Y+ <i>nein</i>	2

In the two *nein*+X+Y utterances X was the sentence subject, and Y either the object or the predicate (i.e. the latter referred to nomination). And in the two X+Y+*nein* utterances X was either the subject or the main verb, and Y the object. Although the sentence-initial position is slightly dominant for the Neg, it seems reasonable to assume that the position of Neg is variable.

In Late Stage I, as already mentioned, there were a total of 43 *nein* utterances, 17 of which involved the anaphoric function, and 26 the non-anaphoric function. *Nein* as anaphoric Neg appeared for the first time in Late Stage I. In order to trace the development of this anaphoric *nein*, the frequencies are partitioned among the three recordings involved:

Recording 1 (multi-word utterances = 138, age 2;1.19):

Anaphoric		Non-anaphoric		Non-anaphoric Neg proper	
<i>nein</i> +X	1	<i>nein</i> +X	6	<i>nicht</i> +X	1
<i>nein</i> +X+Y	1	<i>nein</i> +X+Y	1		

SOME FACTS ON NEGATION

Recording 2 (multi-word utterances = 142, age 2;1.21):

nein + X	3	nein + X	2	nicht + X	3
nein + X + Y	2	nein + X + Y	3	kein + X	1

Recording 3 (multi-word utterances = 222, age 2;1.26):

nein + X	4	nein + X	5	nicht + X	2
nein + X + Y	5	X + nein + X*	1	X + nicht	3
nein + X + Y + Z	1	nein + X + Y	4	nicht + X + Y	1
		nein + X + Y + nein*	1		
		X + nein + Y	2		
		nein + (X + Y) + Z**	1		

(* the same X or *nein* was repeated; ** (X + Y) builds a NP.)

Out of the total of eight anaphoric *nein* + X + Y utterances, two referred to the relation Obj-V, one to the relation Subj-Loc and the other five to the relation Subj-V, whereby the position of V is variable. The unique utterance with three categories, *nein* + X + Y + Z, expressed the relation Subj-Obj-V. As for the total of 13 non-anaphoric *nein* utterances with two categories, four referred to the relation Subj-V (including two predicative adjectives), five to the relation Obj-V, and one was a NP. *Nein* + (X + Y) + Z also expressed the relation Subj-Obj (the NP being the Subj). Finally, the unique *nicht* utterance with two categories, *nicht* + X + Y, contained the sequence Neg + V + Obj.

The distributional features apparent from Early Stage I and Late Stage I clearly indicate three conclusions. (1) Non-anaphoric *nein* occurs prior to anaphoric *nein*, i.e. *Stage* IIb precedes IIa. (2) The movement of non-anaphoric *nein* within utterances (in *Stage* III) is not tied to its replacement by *nicht*. The latter is demonstrated by the two X + *nein* + Y utterances: *Baby nein Messer* 'baby no knife' (taking toy knife away – setting the table in a play situation, the child's mother put a knife for the doll on the table) and *Biebie nein Baby* 'pudding no baby' (the baby would not eat pudding). Note that English *no knife* is realized in adult German by *kein Messer*, not by *nein Messer*. As for the single *nicht* + X + Y utterance, *aber nicht machen Ringel-rosen* 'but do not ring-around-the-roses' (standing up with doll and making circular movements, but without singing *Ringel-rosen*), it is not an unspecified imperative, i.e. imperative without a specific addressee. This type of *nicht* would, in adult speech, be moved from the initial position to the final or medial position. This time, the replacement by *nicht* failed to be accompanied by its movement, contrary to *Baby nein Messer* or *Biebie nein Baby*. (3) Anaphoric negative utterances do not differ from non-anaphoric ones in syntactic complexity. Along with the prior occurrence of the non-anaphoric function, this indicates that the anaphoric function is a development differentiated from the non-anaphoric function, and not vice versa. The anaphoric *nein* is not that which is anaphorically added to an affirmative utterance without contributing to syntactic complexity. In this sense, Wode's distinction of

anaphoric/non-anaphoric or Bloom's (1970) distinction of anaphoric-syntactic is misleading. Taking into account the syntactic nature of both anaphoric and non-anaphoric/syntactic functions, Park (1970, forthcoming) has referred to them as extrinsic and intrinsic.

Evidence from Swiss German

Two children, a girl and a boy, were observed for a period covering Stages I-IV (Park, in preparation). In Stage I, the girl produced a total of 189 multi-word utterances in four 45 min. sessions between the ages of 1;9.0 to 1;11.7 (MLU = 1.28-1.76) and the boy produced 462 multi-word utterances in six 45-90 min. sessions between the ages of 1;9.0 to 2;1.0 (MLU = 1.19-1.72). Yet, so far as negation is concerned, the girl, with 13 utterances, was more productive than the boy, who produced merely nine utterances.

The children's negative utterances showed intriguing properties, even deviating from the above-cited High German-speaking counterpart. First, what occurred as one-word utterance was not *nei* 'no', but *nid* 'not' and *nümmeh* 'no more', literally 'not-more', in the girl, and /ä-ä/ in the boy. Both *nid* and *nümmeh* are non-anaphoric Negs proper, and /ä-ä/ is an expressive sound which is widely used as the equivalent of the anaphoric *nein* (no native informants were ready to regard /ä-ä/ as a word). Stage I involves only *nei* 'no'. On the other hand, no High-German-speaking children so far studied by Park produced *nicht* 'not' (counterpart of *nid*) as one-word utterances; second, the first multi-word negative utterances consisted of *nid* (*nid-da*)/*nümmeh* and N/V (*nid-da* is treated here functionally as a single word). There was no instance in which *nei* was associated with a noun or a verb. Some examples: *nümmeh uftue* 'no-more open' *geit nümmeh* 'goes no-more' (= it's impossible), *nid näh* 'not take' (= the toy pig would not eat the bonbon), *Mami nid* 'mommy not' (mommy cannot do that), *Schäre nid-da* 'scissors not-here' (while looking for it). The girl produced 3 *nümmeh-X*, 6 *nid-X* and 4 *nid-da-X* constructions and the boy produced 7 *nümmeh-X* and 2 *nid-X* constructions. The *nei*-equivalent, /ä-ä/, was never combined by the boy with another word. In the High German-speaking child, Stage IIa and IIb were just reversed. In the two Swiss German-speaking children, Stage II is even lacking completely. *Nei* appeared first during Stage III in both children, correctly in the anaphoric function, in multi-word utterances. It never occurred in the non-anaphoric function. In the boy, both /ä-ä/ and *nei* coexisted as single word utterances.

The evidence here presented is clearly at variance with Wode's theory, and that referring to the development of the same language that he studied. Even if Swiss German is disregarded, the discrepancy is very surprising, especially since the High German data fully confirm Park's earlier findings on three High German-speaking children (1970). Sadly, there is no possibility of further

SOME FACTS ON NEGATION

comparison between the two studies because of Wode's crucial failure to present distributional data. Although the discrepancy cannot be accounted for at present, one thing is clear: Wode's theory is questionable.

REFERENCES

- Bloom, L. (1970). *Language development: form and function in emerging grammars*. Cambridge, Mass.: M.I.T.
- Park, T. Z. (1970). The acquisition of German syntax. Working paper, Psychology Institute, University of Münster, West Germany.
- (forthcoming). *The development of syntax in the child with special reference to German*. The Hague: Mouton.
- (in preparation). *Kindersprache: Erwerb der deutschen Sprache in ersten Stadien*.
- Wode, H. (1977). Four early states in the development of L₁ negation. *JChLang* 4. 87–102.