Studia 1	Anglica	Posnaniensia	XXXIV,	1999
----------	---------	--------------	--------	------

# A PARALLEL DEVELOPMENT IN THE HISTORY AND ACQUISITION OF *BE GOING TO* IN ENGLISH<sup>1</sup>

#### Monika Pawłowska

Adam Mickiewicz University, Poznań

The aim of the paper is to compare the history and acquisition of be going to in English, or more precisely to highlight an insight that the results of acquisition studies might offer for the historical analysis. To this end I shall start by offering the current view of the relation between language history and acquisition and by surveying some historical accounts of the evolution of this construction. Then I shall briefly mention the views on the acquisition of be going to to date and present the results of my study of the acquisition of be going to by children. Finally I shall relate these results to the historical accounts and suggest exactly what sort of parallels there might be between the two.

### 1. The relationship between language history and acquisition

These days no one would agree with Haeckel's (1897) deterministic claim that ontogeny recapitulates phylogeny. In biology there is no evidence to suggest that during its lifetime development an organism retraces all the stages through which its species had gone in its history. Nor are there any linguists who would suggest that children acquiring their native language have to retrace the steps of the language's history. There is no causal deterministic relation between the two. However, partial parallels between ontogeny and phylogeny have been widely noted. In the area of grammaticalization Slobin (1994) compares the development of the English perfect in language acquisition and history, and Ziegeler (1997) discusses the development of modal verbs, past tense, grammatical sub-

<sup>&</sup>lt;sup>1</sup> This paper is a revised version of a paper presented at the 10th International Conference on English Historical Linguistics in Manchester in August 1998.

jects and space-to-time mapping in a similar vein. Both these authors agree, however, that such parallel developments are independent of each other and can be attributed to the fact that for independent reasons the two processes happen to begin at similar starting points. The fact that they then proceed along similar routes is attributed to the general reasoning and inference processing common to all humans (cf. Ziegeler 1997: 234).

### 2. The historical accounts of the grammaticalization of be going to

The first step in the grammaticalization of *be going to* was marked by a transition from a construction with a verb of movement in progressive aspect followed by an infinitive clause of purpose to a construction in which the verb of movement gave up its status as a main verb and became part of a fixed auxiliary phrase *be going to*, while the verb in the subordinate clause took over as a main verb (cf. Hopper – Traugott 1993: 88). Semantically, the verb of movement lost its movement in space interpretation, while the whole construction came to signify movement in time.

Hopper and Traugott (1993: 88) see this shift as metonymic in nature. On the formal plane this shift consisted in reconfiguring links between the contiguous elements of the sentence. On the semantic plane it consisted in the strengthening or semanticization of conversational implicatures which were salient in a specific context and the weakening of the aspects of meaning which were backgrounded in this context. Thus, in the original construction the verb to be and the -ing suffix signified an action in progress, the verb to go signified movement in space and to signified the goal of movement. At the same time the combination of these three elements yielded a background inference that the action expressed in the purpose clause was likely to take place in the future. This inference continued to gain prominence at the expense of the original meanings associated with individual elements of the construction.

Other researchers have proposed metaphor as the main mechanism at work here. Bybee and Pagliuca (1987) maintain that the physical path and goal of the original verb of movement were subsequently given more figurative interpretations. They quote the following example from Wekker's (1976) survey:

## (1) I haven't yet decided what I'm going to do when I get to be a grownup. (Bybee - Pagliuca 1987: 117)

and suggest that be going to can be interpreted as referring to the path that the subject enters by virtue of having made a decision and that this path leads to the implementation of this decision (doing something when one becomes a grownup). Likewise, in examples of prediction based on present evidence as in sentences (2) and (3):

- (2) There's going to be a storm.
- (3) She's going to have a baby (Bybee Pagliuca 1987: 117).

the path can be interpreted as a process which leads to a particular outcome. The shift from a verb of movement to a verb of future reference is assumed to have occurred in contexts where the subject was human and the verb was agentive. Subsequently, the construction spread to inanimate subjects and nonagentive verbs. The first of these developments is described by Heine, Claudi and Hünnemeyer (1991) as an instantiation of the PERSON TO OBJECT metaphor, where the human subject is replaced by an inanimate one. This marked a change in which be going to moved from a root modal signifying intention to an epistemic modal signifying prediction. Heine, Claudi and Hünnemeyer (1991) claim that it was after it had spread to inanimate subjects and acquired the epistemic sense of prediction that be going to started to be used with human subjects to mark prediction as well. They fail, however, to offer a scenario explaining how and when be going to spread to nonagentive verbs (although these are the verbs which feature in the examples they use to illustrate the spread of be going to from human to nonhuman subjects). Hopper and Traugott (1993) also fail to provide details in their description of the further development of be going to after its initial shift from a verb of movement to a verb of future reference. They simply state that it was later generalized to verbs of mental experience (nonagentive). Like Heine, Claudi and Hünnemeyer, Hopper and Traugott view this change as metaphorical in nature.

### 3. The acquisition of be going to

I now turn to the accounts of the acquisition of be going to by children acquiring English as a first language. In her overview of the development of modality in first language acquisition, Stephany (1986) observes that, cross-linguistically, deontic modals tend to emerge prior to epistemic ones. Likewise, a modal verb with both deontic and epistemic uses develops the former before the latter. Stephany concludes that be going to fits in with the overall pattern of development in that the intention (deontic) sense of be going to emerges before the prediction sense (epistemic). In the studies Stephany (1986: 392) reviews in her article the earliest uses of be going to are predominantly intentional with 1st person subjects.

Stephany's general observations are fleshed out in perhaps the most extensive studies of the acquisition of *be going to* by Gee (1985) and Gee and Savasir (1985). The two studies are based on data from a total of eight children aged between 3;2 and 4;2. In both cases, pairs of children were videotaped during play sessions. The findings in both studies are interpreted within the framework of "activity-types" which are arrived at inductively by looking for regular patterns

in the children's behavior and discourse, and by correlating them with the use of be going to and will with which be going to is contrasted. Thus, be going to is characteristic of planning, an activity-type in which children strive to impose an order on future events. Planning is a way of verbally rehearsing or construing future activities and as such is a cognitive rather than action-oriented practice. The speaker does not commit himself to the planned course of action and very often does not follow through with it. Planning often involves remote or imaginary events.

Gee's data are cross-sectional rather than longitudinal, yet she does make a diachronic comment stating that the prediction use of *be going to* arises out of the intention (or planning, in Gee's terminology) use (Gee 1985: 219). It inherits the non-intentional flavor of *be going to* used for planning. Thus, the predictions expressed by *be going to* are usually based on "the way things go" or "the course of events" (Gee 1985: 218) rather than on the speaker's actions or intentions. Unfortunately, Gee does not offer a detailed account of how the transition from the intention to the prediction sense of *be going to* is accomplished.

In order to address this question, I carried out a longitudinal analysis of the development of *be going to* in two children. The data used in this analysis come from Brown's corpus (cf. Brown 1973) and were obtained from the CHILDES database (cf. MacWhinney – Snow 1985). One child, Adam, was followed from age 2;3 to 4;10 during which time two-hour samples of his speech were tape-recorded at approximately two week intervals. The recordings were done while Adam was engaged in play and conversation with his mother, one or two of the investigators and two other children. The other child, Sarah was followed from age 2;3.5 to 5;1.6. Her speech was recorded every week for half an hour while she played and talked to her mother, father, the investigators and other children.

In agreement with previous studies I have found that by far the most common sentences containing *be going to* are ones with first person subjects and agentive verbs.

(4) Adam: I going to set the table for you.

I going to set
dat my end.

Mommy where
I going to make a fork for you.
I going to cook.

d(o) you want some pepper on it? (age 3;3.18)

An obvious way to interpret them is thus by saying that they refer to the speaker's (and subject's) intentions and that *be going to* is thus used as a deontic modal. But perhaps it is worth pointing out that they also typically refer to immediate future and are used in the context of an activity in progress. Thus, the

child is engaged in some activity and uses *be going to* to announce his next step. The utterance with *be going to* is part of an unfolding activity, which in some way provides a framework for it and gives it the flavor of a plan.

The second group are sentences with third person subjects (most often *it*, *this* or *that*) followed by the verb *to be* and a noun or an adjective (or less often a passive infinitive). These sentences are used to talk about the outcomes of the child's actions.

(5) Adam: Mommy want to see my new colors?

Mother: oh that's very pretty Adam.

Adam: now I'm gonna get black.

(monologue while he paints)

I have to get black color huh? dere're two black color.

and den [: then] white and den [: then] black.

dis black and white.

paint it all over dis gonna be white.

I gonna do black.

and now it's gonna be black.

Mommy see my new color?

Mother: yes that's very very pretty Adam. (age 4;0.14)

(6) Adam: what dat look like?

Mother: it looks like a wolf.

there are his ears and there's his nose.

Adam: I gon draw his mouth.

dat's a dat his ears.

dat his nose.

what cha going draw?

Mother: nothing.

Adam: I got draw dat.

Mother: see?

Adam: I gon draw everything I like.

dat gonna be a big wiggleworm. (age 3;5.15)

How are we to interpret these sentences? Does be going to mark intention or prediction? On the one hand, the child is drawing something and clearly intends it to be a wiggleworm. On the other hand, this intention is not explicitly encoded and the sentence is open to a predictive interpretation. Thus, the child is talking about what the outcome of his activity is going to be when he has finished. The schema in which the agent is on the way to reaching a goal is replaced here by one in which an ongoing activity is about to have a particular outcome. Thus the agent and the activity in progress are not overtly expressed, although they are a

salient part of the nonlinguistic context, while the goal or result of the activity is highlighted here.

A third common type of sentence that the child uses is linked to situations in which he manipulates different objects and toys and constructs stories around them or talks about imaginary characters and events. In this case, the child uses be going to to talk about what the next step in the story is going to be, acting it out by moving toys, assuming different roles and impersonating different characters.

(7) Adam: a busy bulldozer going run over baby.
busy bulldozer run over to the baby.
baby's going for a ride in the busy bulldozer.
she going get in the moving van. (age 3;0.25)

These contexts also have the broad structure of an activity or story in progress and allow the child to use sentences with be going to to advance the action. These sentences typically have third person subjects (as we can see in (7) with the car, the truck, and Bozo) and verbs which denote action. Again, however, a question should be asked about how they should be interpreted. Since the child is in control of the situation as he is the one who is manipulating the toys and deciding what is going to happen next, there is an element of intentionality or a plan which can associate with sentences like these. But intention does not appear to be a very salient inference here. These sentences seem to be much more conducive to an immediate future or prediction interpretation.

Apart from using sentences in which be going to could mark either intention or prediction, children gradually begin to use be going to with a more clearly predictive meaning (cf. 8, 9 and 10).

(8) Gloria: look at that.

oh boy!

Sarah: look at that.

it's going to fall.

Gloria: you think it's going to fall?

whoops!

(one piece falls down)

Mother: did you get all that up there?

(yells as the whole building comes tumbling down)

(Sarah 3;5.20)

(9) Sarah: looks if you gonna make a mistake.

Melissa: yep pretty soon.

Sarah: oh you made a mistake.

Melissa: yeah I did.

that's too bad.

(Sarah 4;6.11 – drawing criss-cross)

(10) Adam: we have de doggie.
Ursula: where's your doggie?

Adam: upstairs.

Mother: how big is he now?

Adam: (demonstrates)
Mother: he's growing.

Adam: yeah he's growed a lot.

do you hear him growl?

sometimes when somebody come he say woof woof. see when you go outside he's gonna say woof woof.

(Adam 4;3.13)

Tables 1 and 2 present the development of the three uses of *be going to* in which it marks intention, prediction or is conducive to both interpretations. Although the pattern seems to be more clear in the case of Adam, the data from both children show a rise in the use of predictive *be going to* preceded by a temporary increase in the use of *be going to* which allows for both an intentional and a predictive interpretation. This suggests that perhaps the latter usage can be seen as a transition between clearly intentional and clearly predictive uses of the construction.

Table 1. The meaning of *be going to* in Adam's speech during six age periods. The numbers in parentheses indicate the number of tokens.

Age	Intention	Intention/ prediction	Prediction	Other
1) from 2;3.4 to 2;7.14	(7)	(0)	(1)	(10)
2) from 2;8 to 2;11.28	<b>76%</b> (72)	<b>13%</b> (12)	<b>3%</b> (3)	<b>8%</b> (8)
3) from 3;0.11 to 3;4.1	<b>73%</b> (331)	<b>15.5%</b> (71)	<b>7%</b> (30)	<b>4.5%</b> (21)
4) from 3;4.18 to 3;8.26	<b>62%</b> (180)	<b>23%</b> (67)	<b>11.5%</b> (33)	<b>3.5%</b> (10)
5) from 3;9.16 to 4; 4	<b>64%</b> (200)	<b>15%</b> (48)	<b>19%</b> (60)	<b>2%</b> (6)
6) from 4;4.13 to 4;10.23	<b>65%</b> (248)	<b>10%</b> (39)	<b>23%</b> (88)	<b>2%</b> (8)

Table 2. The meaning of be going to in Sarah's speech during six age periods. The numbers in parentheses indicate the number of tokens.

Age	Intention	Intention/ prediction	Prediction	Other
1) from 2;3.5 to 2;8.2	(1)	(0)	(0)	(0)
2) from 2;8.25 to 3;1.24	(9)	(3)	(0)	(4)
3) from 3;2.2 to 3;7.23	<b>53%</b> (41)	5% (4)	<b>12%</b> (9)	<b>30%</b> (23)
4) from 3;7.30 to 4;1.18	<b>78%</b> (103)	<b>5.4%</b> (7)	<b>8.3%</b> (11)	<b>8.3%</b> (11)
5) from 4;1.28 to 4;7	<b>65%</b> (77)	<b>18%</b> (21)	<b>8%</b> (10)	<b>9%</b> (11)
6) from 4;7.11 to 5;1.6	<b>69%</b> (87)	11% (14)	1 <b>6%</b> (20)	<b>4%</b> (5)

### 4. A parallel in the history and acquisition of be going to

In this section I return to the historical accounts. We do not know exactly in what contexts the transition from intention to prediction was made in language history. However, the following early examples in (11, 12 and 13) give some clues.

Thys onhappy sowle ... was goyng to be broughte into helle for the synne (11)and onleful lustys of hes body.

> (1482, The Revelation to the Monk of Eveshamn (Arber) 43 (*OED*, s.v. go, 47 b))

- He is fumbling with his purse-strings, as a School boy with his points. when hee is going to be Whipt (John Earle's Microcosmographie, quoted in Scheffer 1975: 71)
- both her peace, and comfort, and estate, and liberty, and person, and all, are going to her burial, when she was going to be married to Mr. Badman (J. Bunyan's The Life and Death of Mr. Badman, quoted in Scheffer 1975: 110)

The first example comes from the *OED* and has been quoted by Scheffer (1975: 270) and also by Hopper and Traugott (1993: 83) who also provide a detailed analysis of it. The next two examples appear in Scheffer (1975: 271) who uses them to illustrate his observation that in the course of the 17th century be going to became somewhat more widespread and acquired its present meanings.

In all of these examples the inference of the subject's intention is impossible, since the passive form of the verb is used (cf. Hopper – Traugott 1993: 83). However, there is marginal evidence for someone's intention or plan to do something, though the subject is not its source. The passive construction implies the existence of a volitional agent even if it is not overtly expressed. What is perhaps more prominent in these sentences, however, is that the present situation is likely to lead to a future result and that this result is imminent.

In the acquisition of be going to sentences with first person subjects and agentive verbs vastly predominate and can thus be seen as a starting point. The historical starting point was similar in that the subject referred to a human being and the verb was agentive (though I am not aware of any studies showing how often be going to was used with first, second and third person subjects). Thus in both cases the subject was in control of the action and could be attributed with having the intention to perform the action. In acquisition, the second most frequent group are utterances with third person subjects and agentive verbs or the verb be followed by a noun or adjective (less frequently with a passive infinitive). In these sentences the inference of the speaker's intention is possible though it is backgrounded. A more prominent inference is that of a prediction that something is about to happen as part of an ongoing activity. In the history of English, passive sentences, which can be found alongside active sentences from the earliest days of be going to, likewise resulted in the backgrounding of intention and the highlighting of imminence and prediction.

When we compare the early examples from the history of English and the examples of early child usage, it appears that, although the contexts are admittedly somewhat different, both early uses bear a certain similarity. They both include a group of sentences in which the agent is a crucial element of the situation although it is not overtly expressed. What gains prominence in these circumstances is the imminent future result of the present situation. Thus such examples open up the way to the reinterpretation of be going to as a marker of imminent future or prediction. In conclusion I would like to suggest that perhaps this clearly metonymic shift in emphasis played a role in the historical change from deontic to epistemic uses of be going to.

#### **REFERENCES**

Brown, Roger

1973 A first language. The early stages. Cambridge, Mass.: Harvard University Press.

Bybee, Joan L. - William Pagliuca

1987 "The evolution of future meaning", in: Anna Giacalone Ramat – Onofrio Carruba – Giuliano Bernini (eds.), 109-122.

Dittmar, Norbert - Astrid Reich (eds.)

1993 Modality in language acquisition. Berlin: Walter de Gruyter.

Fletcher Paul - Michael Garman (eds.)

1986 Language acquisition. Studies in first language development. Cambridge: CUP.

Gee, Julie

"An interpretive approach to the study of modality: What child language can tell the linguist", *Studies in Language* 9, 2: 197-229.

Gee, Julie - Iskender Savasir

"On the use of will and gonna: Toward a description of activity-types for child language", Discourse Processes 8: 143-175.

Haeckel, Ernst

1897 The evolution of man: A popular exposition of the principal points of human ontogeny and phylogeny. 2 Vols. New York: D. Appleton and Co.

Heine Bernd - Ulrike Claudi - Friederike Hünnemeyer

1991 Grammaticalization. A conceptual framework. Chicago – London: The University of Chicago Press.

Hopper Paul J. - Elizabeth C. Traugott

1993 Grammaticalization. Cambridge: CUP.

MacWhinney, Brian - Catherine Snow

1985 "The child language data exchange system", Journal of Child Language 12: 271-296.

Murray, John A. J. et al. (eds.)

1989 The Oxford English dictionary. (2nd edition.) Oxford: OUP.

Pagliuca, William (ed.)

1994 Perspectives on grammaticalization. Amsterdam - Philadelphia: John Benjamins.

Ramat, Anna Giacalone - Onofrio Carruba - Giuliano Bernini (eds.)

1987 Papers from the Seventh International Conference on Historical Linguistics.

Amsterdam - Philadelphia: John Benjamins.

Scheffer, Johannes

1975 The progressive in English. Amsterdam: North-Holland.

Slobin, Dan I.

"Talking perfectly. Discourse origins of the present perfect", in: William Pagliuca, (ed.), 119-133.

Stephany, Ursula

1986 "Modality", in: Paul Fletcher – Michael Garman (eds.), 375-400.

"Modality in first language acquisition: The state of the art", in: Norbert Dittmar – Astrid Reich (eds.), 133-144.

Wekker, Herman Christiaan

1976 The expression of future time in contemporary British English: An investigation into the syntax and semantics of five verbal constructions expressing futurity. Amsterdam: North-Holland.

Ziegeler, Debra

1997 "Retention in ontogenetic and diachronic grammaticalization", Cognitive Linguistics 8, 3: 207-241.