

STUDIES AND RESEARCH

Early Verbs: Comments on How and Why a Child Uses His First Words*

RUTH ARONSON BERMAN

1. BACKGROUND

This paper aims to provide further insight into child language within the context of what has come to be called the 'functional' approach. We aim to show that semantic and functional factors determine the choice of verb-forms first used by a child, and that morphological complexity has no relevance in this connection. We also try to provide fresh evidence for the well-established view that child language can offer important insights into linguistic processes in general, with respect both to language change and to internal, structural features of a given language.

The data for our study are based on the spontaneous utterances of a two-year-old Hebrew-English bilingual, the writer's own daughter, Shelli.¹ The discussion which follows must thus be regarded as tentative, representing a pilot-study which will hopefully prove suggestive for more comprehensive investigations of other children and other languages.

Our report covers the bulk of the subject's one-word stage from 18 to 24½ months, when she had started uttering two and three-word strings (considerable acceleration of this being evident from 23½ months, when she started attending daily nursery-school). The present discussion is confined to a class of words which we have formal and/or contextual reasons for defining as VERBS, a category which at the time of this report, age 25 months, constitutes roughly 10% of the child's total productive vocabulary.²

By 'productive vocabulary' we refer to one-word strings having a clear and consistent semantic content. The term applies only to words which the subject has used several times in our hearing with the same semantic intent – that is, items which she has so internalized that she can and will use them again at will. Under this constraint, the subject's two-year-old vocabulary

*Editorial note. Please see below, H. and K. Miyahara's paper 'Development of early syntactic competence in a Japanese child'.

range consists of some 200-220 words, broken down roughly as follows: nouns and names (of specific people or animals) — 75%; 'functors' such as deictics, greetings, interjections, etc. — some 15%; 'verbs' — the rest. If the child has both a Hebrew and an English word for the same object or concept, we have counted the pair as a single item. We consider the implications of this procedure for the category of 'verbs' in section 5 below.

2. THE FORM OF EARLY VERBS

Until starting nursery-school, at the age of 23½ months, Shelli used the following words — all Hebrew — which clearly belong to the morphological category of 'verbs'.³ (The child's version of both Hebrew and English words is generally given in italics; where these deviate significantly from the adult pronunciation, the child's word is given in square brackets, the adult one in italics.)

Table 1. *Verb-forms used by a Hebrew-speaking child at 23½ months*

Imperative	Infinitive
1. [kl] <i>tistakli</i> 'look!'	8. [ede] <i>larédet</i> 'to get down'
2. <i>zuzi</i> 'move over!'	9. [šon] <i>lišon</i> 'to sleep'
3. (k)xi 'give!'	10. [xol] <i>le?exol</i> 'to eat'
4. <i>niri</i> 'see!'	
5. (t)ni 'give!'	
6. <i>bóti</i> 'come!'	
7. <i>sími</i> 'put!'	

For Shelli, the 'basic' form of the verb in terms both of usage and of developmental sequence is first the Imperative and then the Infinitive — both morphologically more complex than any Hebrew past-tense 'stem' forms. And this predominance of Imperative and Infinitive forms is still manifest six weeks later, when some dozen new 'verbs' were added to her vocabulary (see Table 2 below).

Now in English, the basic or stem form of the verb is the same for ALL grammatical categories of regular verbs, and for at least the Imperative, Infinitive, Present Tense and Participial form of ALL verbs. Compare the multiplicity of verb forms in a language like Hebrew for the full root g-m-r 'give' and the defective root n-t-n 'give' both in the same basic B-1 conjugation, as shown in fn. 3).⁴

(1) Root	Imperative		Infinitive	Present Tense Masc./Fem.
	Masc.	Fem.		
g-m-r 'finish'	<i>tigmor</i>	<i>tigmeri</i>	<i>ligmor</i>	<i>gomer/et</i>
n-t-n 'give'	<i>(ti)ten</i>	<i>(ti)tni</i>	<i>latet</i>	<i>noten/et</i>

We see here that formal criteria can be misleading in the absence of appropriate comparative data. For unless semantic and functional criteria are applied to analyse what kinds of verbs a child uses in the early stages, there is no way of interpreting quite what he means when he says something like the English words *go*, *finish*, *give* or *eat*. Sections 3 through 5 below consider this aspect of the question. Furthermore, in analysing the utterances of children in a language with a rich inflectional system like Hebrew,⁵ it might be tempting to give one unique interpretation for a verb-form which in fact is being extended to a variety of grammatical categories.⁶ Our subject's subsequent development, as noted in the sections which follow, provides support for this claim.

Notice, next, that the Imperative forms all end in *-i*, marking FEMININE gender. This cannot be explained in terms of simplicity of FORM, as that would require the masculine, which is more unmarked and basic from all points of view in Hebrew (morphologically as well as syntactically – for instance, in terms of rules of concord – and semantically, too).⁷ Rather, Shelli's usage in this case is clearly a case of the kind of 'autoformulation de règles' characterized by Slama-Cazacu (1973b): the child has heard people constantly addressing orders and requests to her – in the feminine, of course, for she is a girl – and she is addressing them in like fashion, irrespective of their real-word sex and hence of the appropriate grammatical gender. This very general distinction in her usage between the infinitive form, on the one hand, and the clearly differentiated FEMININE form of the imperative in Hebrew contradicts Bar-Adon's (1971: 439) assumption of (morphologically) 'general verbals' at the first stages of the child's language. However such an analysis is, as noted, appealing for a language like English, with its wide-ranging 'base' or unmarked form of verbs – and this kind of 'opacity' is also found in Hebrew, as evidenced both by the forms cited from Zonshain (1974; see fn. 5) and also in Shelli's later usage. When at 24½ months, Shelli started saying *šev*, *šev* 'sit down (Masc.), sit down' – when addressing her father or myself, her intention was clearly Imperative: she was telling us to sit down next to her, so she could tell a story. Formally, she could have meant not only *šev* 'sit down!' (Masc. Imperative) – but also the Infinitive *laševet* 'to sit down' – of which *šev* would be an articulatorily truncated version fully

consistent with this child's own phonology and with the nature of phonological reduction in general.⁸ This assumption is backed up by the subsequent appearance of the English version of words Shelli had used in the Infinitive in Hebrew (see section 5 below). Such morphological 'opacity' reaffirms the need to weigh formal and functional factors very carefully across children and across languages (as in Slobin, 1971).

With respect to the kind of internal evidence provided by a child's language in relation to linguistic processes in general, the following might be noted. A case of language change was noted in fn. 8 above: the formal distinction between Future and Imperative forms in Hebrew is falling into disuse in all everyday usage, with the Future form taking over completely as the Imperative, too. Yet of all the seven Imperative-form verbs listed for Shelli in Table 1, only No. 4 *tiri* 'see!' has the Future *t*-prefix! This reduction of the child's may well be due to PHONOLOGICAL constraints, at a stage where her utterance-inventory would rule out all trisyllabic words such as the Future forms *tazúzi*, *tavóti* or *tasími* and would avoid phonologically complicated strings such as *tíkxi* or *titni* (see Berman (1977) for further evidence concerning such phonological reductions). That is, the following progress can be charted, where [-PREFIXAL] refers to the normative, traditional Imperative forms and [+PREFIXAL] refers to the Future forms used today as the colloquial Imperative as well:

(2)	Imperative	Future
Early child language	[-PREF]	ϕ
Colloquial		[+PREF]
Normative	[-PREF]	[+PREF]

Here we see a relationship between child language and language change.⁹

Note next, that all the child's early verbs in some way deviate from the most regular or complete paradigmatic forms of the language — basically, because the verbs she uses have defective roots (see fn. 4). This indicates that she as yet has no productive system for generating new verb-forms on the pattern of ones she already knows — each form is too different in its surface manifestation from any other she uses at this stage. The prevalence of 'weak' verbs (in the sense of verbs based on defective roots) among the most basic verbs in Hebrew is in some perhaps not so far-fetched manner analogous to the fact that the commonest, most everyday 'concrete action' verbs in English are of the 'strong', irregular native Germanic stock, like *run*, *sit*, *come*, *go*

take, give, put, etc. (see also Guillaume's, 1973: 264-265, similar finding for French).

Another, peculiarly Hebrew aspect of the child's early verbs relates to the internal structure of the lexicon of a language. Elsewhere, I have argued for the view that the lexical prime for verbs in Hebrew must be a 'basic form' of ROOT + CONJUGATION (Berman, 1975), and Shelli's usage clearly indicates that this is so in child language: She uses only 'basic forms' of verbs — in the sense that these are never forms with the same root AND meaning as related, more 'basic' verbs to which are added such notions as Causative, Inchoative, Ingressive, Reciprocal or Reflexive (and indeed, one would not expect a two-year-old to have means of expressing such concepts as yet!). On the other hand, it does not matter how complex the basic form happens to be MORPHOLOGICALLY — for while the verbs she uses in the Imperative or Infinitive form (both those listed in Table 1 and those added in the next month or so) are almost exclusively in the most basic (that is, the morphologically, syntactically, and semantically least complex) conjugation of Hebrew — the B-1 *pa'al* conjugation — where necessary she will use a verb which happens to be basic in some other conjugation, e.g., (*nad/ned* 'swing' in B-3 (at age 25½ months), (*tista/kli* 'look' in B-4, and (*ta/rimi* 'pick up!' in B-5. As the parenthesized material indicates, she handles the morphophonological complexity by appropriate reduction or truncation. More importantly from the point of view of the characterization of modern Hebrew, it seems to me that it is mere chance that she happens to have two verbs of the same root (and, in a sense, of the same meaning) in the following pair, both based on the multiply defective root b-w-?:

(3)	Underlying Form	Adult Version	Shelli's Version
(i)	/b-w-?/ +Conjugation B-1 'come'	<i>tavói</i> 'come' Fut. Fem. Sg. OR <i>bói</i> 'come' Imp. Fem. Sg.	<i>bói</i> 'come here, come with me'
(ii)	/b-w-?/ +Conjugation B-5 'CAUSE + come'	<i>taví###i</i> 'bring me' Fut. Masc. Sg. <i>taví(?)i###i</i> Fut. Fem. Sg.	<i>vili</i> 'give (it) to me'
=	'bring, fetch'		

One cannot generalize from just one example. My claim is that the relationship between the items in (i) and (ii) is both morphologically and semantically opaque for the young CHILD. Hebrew-speaking adults are fully aware of the morphological connection between the members of these pairs – and even English-speakers view them as semantically related (see Clark and Garnica, 1974). What I am suggesting, however, is a detailed investigation of the development of the child's verbal system in Hebrew as a basis for insight into the overall synchronic nature of that system – in an attempt to find answers to such questions as the psychological reality of historically attested relationships between verbs with the same root in different *binyan* patterns, the effect of morphophonological opacity on this relationship, the synchronic productivity of these relationships, etc.

To sum up this section, then: We see that some criterion other than morphological complexity governs the child's choice of his first words. Where the verbs he chooses to use are unwieldy in form, he adjusts them to his own phonologically productive capacities. The specific form of verbs in a language such as Hebrew is of interest in this connection, for the morphologically least complex past tense 'stem' form of verbs is certainly well beyond the child's cognition (and probably the most normal verbal input from his surroundings) at the first stages of his language development. The solution for the Hebrew speaker is to use the Imperative *cum* Future forms most of the time, and the Infinitive to a somewhat lesser extent. That these are akin to the most 'basic form' of verbs in the speech of English-speaking children is attested to by the subject's own bilingual usage, where Hebrew Infinitival forms are rendered as English *eat, sleep, or (get)down* (see section 5 below).

3. THE FUNCTION OF EARLY VERBS

In this section we attempt to analyse why and under what circumstances children use the particular verbs they happen to acquire productively at a relatively early stage. Below are listed the verbs Shelli added to her lexicon between 23½ and 25 months of age – that is, since starting to attend nursery-school – where, for the time being, 'verb' is still defined morphologically, as a combination of ROOT + CONJUGATION. The subject's acquisition of verbs shows the following pattern: her initial verbs serve to express her own immediate desires and needs, in the form of requests and injunctions to those around her – for the purpose of their doing or giving her what she wants. That is, her verbs are used to tell her interlocutor(s) to give her something, bring her something, to move over, to come to a certain place, to put

Table 2. *Verbs added between 23½-25 months*

Imperative	Infinitive
1. <i>šev</i> 'sit (down)'	6. [rok] <i>lizrok</i> 'throw away'
2. [éxi] <i>laxí</i> 'go away (Fem)'	OTHER
3. [rími] <i>tarími</i> 'pick(it) up'	7. [fal] <i>nafal</i> 'fell down'
4. [vîli] <i>tavi li</i> 'bring it to me'	8. <i>boxa</i> 'cry, is crying (Fem)'
5. [kúmi] 'get up'	9. <i>roca</i> 'want (Fem)'
	10. [xola] <i>yəxola</i> 'can, am/is able to (Fem)'

something in a certain place, to look, to watch, to sit down or get up, etc. This accords with what Halliday (1975: 55) describes as 'the INSTRUMENTAL model'. Notice that this function is served primarily but not only by a given grammatical form – the Imperative (Feminine) as discussed in section 2 (see items 1-7 of Table 1 and items 1-5 of Table 2). The subject's early verbs in the Infinitive – the Hebrew words for 'get down', 'sleep', and 'eat' as listed in Table 1, items 8-10 – also all express her own needs and desires. Thus, *(to) get down* means 'I want to get down, help me to get down, let me get down (out of my high-chair, out of bed, out of my buggy' etc.). Thus the child does not describe as yet the state of her own feelings as such – of being tired or hungry – but rather refers to the activity which will satisfy the particular state she is in.

This claim is borne out by the subject's subsequent introduction of two isolated nonaction verbs – items 9 and 10 in Table 2. A very early 'pivot' type word, first introduced at around 24 months and used constantly ever since then is *roca* 'want' (Fem. Sg. Present Tense). Consider such combinations as: *roca* + NOUN (e.g., *buk* 'book'), when she wants the particular object or substance; *roca* + LOCATIVE (e.g., *po* 'here'), when she wants herself or the object to be in that place; and also *roca* + VERB (e.g., *šon* '(to) sleep' meaning that she wants to perform that particular activity. There is indication of an early ability to verbalize needs and desires quite explicitly, the child's basic use of verbs being to express the 'performative *I demand*' (Gruber, 1973: 443). The only other nonaction verb listed is item 10 of Table 2 – her version of the Present Tense Feminine for 'can, be able to'. Unlike *roca* 'want', *(ye)xola* is used infrequently, and it is used alone, without any other element in the sense of 'I can't (do it)' as when she tries to climb something too high for her, to reach something too far from her, etc. Again, her usage is what Gruber (1973) has termed 'performative' rather than 'reportative'.

Related to this is the nonoccurrence of verbs as 'descriptive' items (in the

sense of Lee, 1975: 85-101) to talk about or comment on what she herself or someone else is or has been doing. No such 'reportatives' are noted in Table 1. At the later stage, Table 2 includes three such items to refer to actions, as distinct from states. (*liz*)/*rok* '(to)throw away', (*na*)/*fal* 'fell(down), Past Tense, Masc.' and *boxa* 'cry, is crying, Present Tense, Fem'. As the glosses indicate, her descriptive verbs take three disparate forms grammatically — though they seem semantically to all function in the similar fashion: (i) The child's version of infinitival *lizrok* 'to throw away' is used, for instance, when she has just thrown something away in the garbage pail (no doubt she has been instructed to do so by her nursery-school teacher, who tells the children after they eat their sandwiches *lizrok* the wrappings, etc. — using the Infinitive rather than the Imperative, as explained in fn. 8); (ii) The form *fal* is used when she or some other object or person has fallen down, and she is describing what has just happened. Here the meaning or function of the expression is very clear — though its precise FORM is not: this is a more 'advanced' version of her earlier use of the nursery-word *opala*, the Hebrew counterpart of English 'boomps!' or 'all fall down!', I guess. This indicates a progression between the ages of 22 and 25 months from the nursery-word to its more conventional counterpart. This is also an isolated instance where Hebrew and English happen to have a like-sounding word for the same notion, cf. Shelli's *fal*, Hebrew *nafal*, and English *fall* or *fell*! However, as we note in section 5, the chances are that she is 'talking Hebrew' here too. (iii) The third verb used descriptively by Shelli at the age of 24½ to 25 months is *boxa* — the Present Tense, Feminine for the verb 'cry; weep'. This is used descriptively as are *fal* or *rok* — when she talks about herself or someone else having cried (a little while ago, or that day at nursery-school, etc.). Why, then, is the Present Tense form used here, rather than the Past? It seems to me that here the verb is not a comment on a one-time immediate occurrence — as in the case of punctive verbs like 'fall (down)' or 'throw away'. Rather, the child is commenting on something durative, describing the state a person was in rather than something which happened to him.

Why this detail on three isolated verbs as used by one isolated child? It seems to me that at this stage of research in child language conducted within the framework of the kind of 'functional' or 'rich semantic' approach (represented by, for instance, Bloom, 1970, 1973; Slobin, 1971; and Brown, 1973), such information may be of more than anecdotal value. Thus, in terms of 'function', the bulk of the subject's verbs are used primarily and quite consistently to express and obtain gratification of her needs; a few isolated verbs may also perform a descriptive or reportative function — but this type of expression is functionally peripheral and formally unpredictable. At this stage

of her development, where the child has over 200 items in her productive lexicon, and where she is moving in formal, structural terms from the one-word stage to stringing together two and multi-morphemed utterances, we would predict that her verbs, too, would tend to change in both form and function. And, in fact subsequent development — between the ages of 25 and 27 months — shows the reportative, descriptive function beginning to establish itself much more firmly, along with a proliferation of Present Tense indicative forms of verbs. On the other hand, however, as we try to show below, in general the same set of functions still cannot be associated in any unambiguous way with only one set of forms — in this case 'verbs'.

4. ON CATEGORIZING VERBS

Our claim here is that the entire notion of 'verb' is an essentially open-ended one, and that it represents a case where 'form and function in emerging grammars' (the subtitle of Bloom, 1970) cannot be equated in any clear one-to-one or even *n*-to-one or one-to-*n* manner. Below we try to show that even in a language like Hebrew where, as noted, the notion of 'verb' can be quite clearly specified in morphological terms, the range of functions traditionally associated with the grammatical category of verb is neither exclusively nor necessarily carried by words with the *form* of verbs in a child's early grammar.

Consider, firstly, the question of the descriptive or reportative use of verbs discussed earlier. Linguists have provided cogent arguments for subsuming the traditional categories of Verb and Adjective together as Predicators (see, for instance, Lakoff, 1970: 115-133). Just as Shelli uses the verb *boxa* 'cry, is crying' to describe what someone was doing, she can and does COMMENT on events and states with the few adjectives at her disposal, specifically: *vet* (if she has gotten her shoes wet, if she sees her father's hair wet after a shower, if she has spilt some soup or milk on her seat, etc.); *yofi* 'nice, fine, grand' — indicating approval (usually of something she herself has done!); *xam* 'hot' (of her food or bathwater, seeing me put a cake in the oven, turning on the heater, etc.). These 'adjectives' make predications about states — compared with the activity-oriented verbs noted in the preceding section. Developmentally, they emerged later than her first strictly 'verb-form' words — a sequence which is cognitively quite feasible.

Another contrast in the VERB/NONVERB duality is the following: when the child wants to go to sleep, she uses the verb for 'to sleep', not the word for 'bed'; but when she wants to take a bath, she says *bet*, 'bath', Hebrew

ambátya. Again we see that similar concepts may be expressed by different grammatical categories, by a verb in the Infinitive, Imperative, or Indicative as noted earlier — but also by some other nonverb part of speech. The same 'open-endedness' exists with respect to Locative expressions. Thus, to express predications of going, coming, or being (and wanting oneself or someone else too to, come, or be) somewhere, Shelli will quite generally use ADVERBIALS, e.g., Hebrew *xuca* — English *say* when she wants to go outside; Hebrew *bayta* or English *om* for going 'home'; *po* and *šam* 'here' and 'there' as well as *mála* 'up' when she wants to climb up on top of something, and English *don* 'down' when she wants to get down. (On the common occurrence of adverbial particles like *on*, *off*, *down*, and *away* in a 'verb-like' sense in English and German-speaking children, see Slobin, 1971: 332–333, and also Bloom, 1973: 68, 150–152.) This claim with respect to predications lacking in any overt verb-form at the early stages is substantiated by the many verbless sequences noted in Shelli's (as well as other children's) first two-word utterances, e.g., *máyim kay* 'water sky' on seeing water (i.e., rain) coming down from the sky, *šeli gan* 'Shelli nursery-school' on describing herself on her way to, going to nursery-school, as well as *aba avoda* 'Daddy work' for 'Daddy went to work, Daddy has gone to work'. Again, we see the minimal use of verbs in a descriptive sense, for COMMENTING on activities rather than for eliciting them, at the early stage of the child's speech development.

Notice, next, the question of the GAPS in the child's inventory of verbs at this stage (what Leopold, 1939, refers to as 'omissions'): why does her lexicon include the verbs listed in Tables 1 and 2 but exclude others, given that the determining factor here is NOT morphological — as we tried to show in section 2 above? For instance, Shelli early on said *(le?)xol* '(to)eat' — but she still does not use a generic verb-form for 'to drink'; instead, she will specify WHAT she wants to drink: *máyim* 'water', *mək* 'milk', *mic* 'juice', *ti* 'tea', or *šóko* 'cocoa'. This is clearly a question of linguistic AND cognitive development, of how the child first categorizes what: for though she may use *xol* 'eat', she can say the names of a wide variety of foods, and presumably will quite soon start using the cover-term for 'drink' as well. (In fact, it appeared some six weeks later, at 26½ months, first as *(li)štot* 'to drink', and about 10 days later as *šri* 'drink!' [Fem.] as well.) Does this order of utterance (taken here as evidence of order of ACQUISITION) mean that the overall notion of 'hungry' is somehow more salient than that of 'thirsty'? And if so, how is salience to be defined? In terms of Piagetian cognitive theories 'emphasizing the importance of the child's action to his definition of the world . . . (and) of actions external to the child', as advocated by Nelson (1973:33)?

The issue of SALIENCE crops up so frequently in the literature on child language development that it seems well worth pursuing. Thus, for instance, Clark (1975: 80 and 95) comments on the need to investigate this notion further in relation to the specific phenomenon of overextension of early vocabulary. Here we choose to consider it with respect to the order of acquisition of words standing for CONVERSE types of actions. Table 3 below charts Shelli's emerging verbs at two stages of her development, Stage I when she was still fully 'one-word' in production, Stage II when she had started stringing words together according to her own syntactic structure.

Table 3. *Order of acquisition of converse verbs*

I 18-22 months		II 23-25 months	
<i>bóí</i>	'come(here)'	<i>(l)éxi</i>	'go away'
<i>sími</i>	'put (X) down'	<i>(ta)rími</i>	'pick (X) up'
<i>(lar)edet</i>	'(to)get down'	<i>kúmi</i>	'get up'
<i>kxi</i>	'take'(X)'	<i>(t)ni</i>	'give (me X)', <i>tavi</i> 'bring (me X)'

No clearcut conclusions can be drawn on the basis of such meager evidence, but the hypothesis that the initially acquired verb is more 'salient', less marked than the one acquired later seems highly plausible. The interrelation of what we have called CONVERSE terms is referred to in various contexts in the literature on child language (for instance, by Shvachkin (1973: 93) or Bloom (1973: 88-89); the findings of Clark and Garnica (1974: 560), as well as other research cited by them indicate clearly that 'children consistently acquire the meaning of the positive member of positive-negative pairs first' — a claim which was confirmed by a pilot-study conducted by Eva Shiff (Tel Aviv University, Linguistics Department) on the acquisition of the Hebrew words for *smooth-rough* and *transparent-opaque* among Israeli 5 to 8 years olds. Our suggestion is that further investigations be conducted into the acquisition of 'converse terms', as an important potential indicator of developmental strategies in children's language acquisition.

To sum up this section, we trace the functioning of one single item in Shelli's lexicon which seems to us to manifest a unique case of cross-categorization of so-called 'verbs'. The word in question is *délet*, very clearly translatable by the English noun 'door' in normal adult usage, pronounced [déle] by Shelli. Table 4 charts the following development: (1) the word referred to a door, any door — in or outside a house, the door of a car, etc.; (2) the reference was extended to include the object known to us as 'a

Table 4. *The evolution of the one word delet*

Stage	Age (in months)	'Meaning'
(1)	19	door
(2)	20	door, window
(3)	22-23	door, window, open
(4)	24	door, open
(5)	24½	door, open, close

window' – again, the window of her room, of the car, etc.; this extension continued until 23 months, when she started using the Hebrew word *xalon* 'window'; (3) Shelli started using [*déle*] as a verb in the sense of 'to open', at first only when she wanted someone to open the door for her to go outside, but then for all instances of her wanting someone to open something for her: opening a box, a drawer or closet, taking off a lid or cover, etc.; and from there she moved on to what might seem like a case of gross over-extension but which could simply be her using the more colloquial, general Hebrew cover-term *liftóax* 'to open' rather than the more specialized verbs available (and preferred in normative style) for such various activities as 'removing' or 'taking off' (clothes), 'undoing', 'untying', 'unbuttoning', etc., and also 'switching on' or 'turning on' (the light, the radio, the gas, etc.). This vast extension of one very circumscribed noun to perform all the functions of a wide range of specific verbs in child-speech (generally collapsed into one single, morphologically quite unrelated verb in Hebrew) has continued from age 21 months right up until the present (25 months), including the time when the child's speech has taken rapid strides subsequent to her starting nursery-school. By stage (4) of Table 4, at 24 months, she already had a separate word, as noted, for the other noun, 'window'. I now started asking myself how this noun of hers, meaning 'to open + GENERAL' would relate to its 'converse' meaning – in the sense depicted in Table 3 above. That is, when and how would she express the idea of 'closing'? The answer is given at Stage (5) of Table 4: for the past two weeks or so, Shelli says *déle* not only when she is asking for something to be opened, but also when she wants it closed!¹⁰

Here, then, we see the highly individual nature of children's categorial extensions – not only across lexical items (as summed up in Clark, 1973, and reviewed in Clark, 1975)¹¹ but also across grammatical categories. For Shelli, *déle* is a 'verb' expressing a need or desire, her way of getting things done to her liking and at her behest, no less than is the phonologically similar

(*lar)ede(t)* 'to get down' — or her English *dan* (for 'down'). This should show once again that we cannot analyse and interpret child language simply as 'adult language filtered through a great deal of cognitive noise and impoverished of vocabulary' (McNeill, 1966: 16). And it should help us understand better how the same things are said in different ways from one language to the next. In the last section of this paper, then, we briefly compare Shelli's early verbs in Hebrew and in English.

5. BILINGUAL USE OF VERBS

Hebrew is definitely dominant in Shelli's productive usage, though she seems to understand the two languages she is exposed to equally well. She did, however, right from the outset say certain words in both English and Hebrew — with the Hebrew word generally though by no means always the first one she used. Yet until the age of 24 months, when she was already using some twenty words clearly belonging to the grammatical category of 'verb' in Hebrew — she did not say a single word that could be formally classed as a 'verb' in English. This indicates that the dominant language dominates quite conspicuously among verbs — probably, in fact, among all lexical items other than ones referring to physical objects or substances. Hence, where Shelli by now has two- or three-word combinations, even if a noun might be in English, the verb will still be in Hebrew, as in: *roca buk* '(I) want=H book=E', or *sími doli kova* 'put=H (on the) dolly=E (a) hat'; she has Hebrew words for *book* and *doll* too — but she will just as likely use the English ones with me. Not so her verbs; these are all in her 'primary' language, regardless of her interlocutor.

Note, next, that right towards the end of the period discussed here, Shelli started to occasionally use English words for three of the verbs she had long since acquired in Hebrew: *iyt* vs. *xol* '(to) eat', *siyp* vs. *šon* '(to) sleep', *kamin* vs. *bói* 'come, Fem. Imperative'. In the first two instances, the base form of the English verb functions like the Hebrew Infinitive to express the desire to eat or go to sleep. The participial form of 'come', however, is not used like the Hebrew Imperative 'come', to ask someone to come with her, but rather as an announcement that she is going away (and maybe will be back shortly) — evidently as a truncation of her mother's oft-repeated 'I'm coming, Shelli!', an assumption that is borne out by the declamatory intonation the child uses for 'coming' as against the demanding-requesting intonation pattern for *bói* 'come, Imperative'. As with the Hebrew instances, her use of verbs is invariant in formal terms: she has one and only one form of

the particular verb at this stage of her development, irrespective of morphological complexity. In Hebrew, this form is most typically Feminine Imperative, with a truncated version of the Infinitive also occurring occasionally, and even fewer instances of Indicative forms. The data for English are too sparse to draw any conclusions — but it would seem that the categorial 'crossing' noted in the preceding section might occur here, too: the adverbial particle *down* is used for the verb 'get down' in English, as an exact replica of the Hebrew infinitival 'to get down' in the child's usage, something noted above as quite typical of English children's usage (e.g., *off* being used for 'take off', 'get off', 'switch off') indicating that here Shelli is using a peculiarly English device, Hebrew having nothing akin to the English Verb + Particle construction in formal terms.¹²

In sum, then, the dominance of Hebrew for Shelli is clearly and most specifically manifested in her use of the category of verbs. Insofar as she has any 'verbs' at all in English at this stage, her usage indicates precisely what one would expect: in her repertoire of Hebrew verbs she makes use of peculiarly Hebrew formal devices, in her English verbs she uses forms and devices of English. But in both languages these 'verbs' express the same kinds of basic notions — mainly physical activities such as moving, eating, sleeping — and perform the same kind of communicative function or 'speech act role' of expressing physical needs and requesting action on the part of others. And the subject is now moving into the stage where more and more she can and does comment on activities and states — by a variety of different kinds of predicators, cutting across the traditional boundaries of verb, adjective, and adverb in BOTH her languages alike.

6. CONCLUSIONS

Even such a very limited study as the present one seems suggestive of certain more general properties of child language acquisition. Firstly, at this early stage, form alone is not a true indicator of either intention or interpretation. On the other hand, as we try to show in section 2, the forms used by the child can indicate clear directions of linguistic change — particularly in a language like Hebrew, which for socio-historical reasons manifests an accelerated rate of change. Moreover, the child's forms may give insight into the nature of the lexical prime in a root-based Semitic language like Hebrew: for instance, the independently motivated notion of a 'basic form' of verbs in Hebrew seems well substantiated by the range of verbs used by our subject — quite independently of morphological complexity as such; and the way in

which children manipulate verbs with shared roots and more or less transparently related meanings might shed light on the nature of the *binyan* conjugation system in contemporary Hebrew grammar.

In terms of the methodology of child language studies, our findings substantiate the independence of the child's grammar, specifically the view that 'it is inappropriate to think of children learning adult "parts of speech" in the course of their development before the use of syntax' (Bloom 1973: 112).

As for what determines the CHOICE of these first 'verb-like' elements in the child's productive usage, occurrence-nonoccurrence and early-later appearance are clearly related to some sort of 'salience'. The question remains open, however, as to what underlies this salience. Is it related mainly to the child's interaction with his environment, with the centrality of his own activities and needs (as suggested, in rather different ways, by Gruber, 1973, Nelson, 1973, and Halliday, 1975, and by the 'speech acts' approach of Dore, 1975)? Perhaps early and dominant use is due to internal linguistic factors of semantic complexity as suggested by Clark (1973, 1975) either exclusively or combined with certain nonlinguistic cognitive strategies — as indicated by the findings of Clark and Garnica (1974) as well as Bloom (1973). The development of our own subject, Shelli, suggests that all three factors need to be taken into account in explaining what underlies the child's use of 'early verbs', universals relating to semantic complexity, to cognitive strategies, and to interaction with the environment — all in the context of the individual child's idiosyncracies of selectivity with respect to what is more salient for him.

NOTES

1. Her father and I, both native speakers of English who are fluent in Hebrew, try to use only English with the child. The rest of her environment is almost exclusively Hebrew-speaking, and from birth she has been exposed to a great amount of Hebrew inside her home. With respect to methodology, all the subject's utterances made in the presence of the investigator throughout the period under discussion here were noted down in rough phonetic transcription together with comments on the linguistic and pragmatic context of these utterances. In addition, cassette-tape recordings have been made of her speech from the age of 18 months, totalling one to two hours of recorded utterances per week for the period in question.
2. This proportion accords with other findings reported for the one-word stage, such as McCarthy, 1930; Nelson, 1973: 17-19; Huttenlocher, 1974: 361.
3. The division between verbs and other parts of speech is formally manifest in Hebrew (as in other Semitic languages) because all verb-forms occur in a limited set of some half-dozen *binyan* conjugation patterns, consisting of set affixes associated with root consonants. Thus, all verbal forms can be characterized in

terms of a morphological combination of [ROOT_x + PATTERN_y].

4. A 'defective' verb is one whose triconsonantal root contains one or more phonologically 'weak' consonants (see Berman, 1978, section 3.2).
5. Regrettably little data are available on Hebrew child language (see Bar-Adon, 1959; Zonshain, 1974).
6. Examples of such extensions of one particular form of the verb in French are noted in Guillaume (1973: 244), and in a Latvian-speaking subject, in Rúke-Dravina (1973: 262).
7. An explanation for the ubiquitous *-i* ending might be sought in PHONOLOGICAL factors, in terms of the young child's preference for CV syllable structure and hence for words ending in vowels (as suggested by Popova, 1973: 274). This type of syllable-structure, often entailing consonant-final deletion, is widely evident in Shelli's one-word phonology, too (Berman, 1977). However, Popova's claim for his Russian-speaking subjects is not borne out by the usage of Hebrew-speaking BOYS: They may delete word-final consonants, but they will not add the feminine suffix *-i* to any of their imperative form verbs!
8. In some forms of Hebrew usage – particularly that favoured by nursery-school teachers – the infinitive form is increasingly used as a pseudo-imperative. That is, the nursery-school teacher might say to the children: *axšav lašévet* 'now to-sit-down' or *kulam lašévet* 'all to-sit-down' as a general injunction to them to perform that action. Besides, choice of the infinitive *cum* Imperative resolves another problem – that of LEVEL of usage: whether to use Normative style or make an overt morphological distinction between Future forms and their Imperative counterparts; use of the more neutral Infinitive resolves this conflict, too. It might be worthwhile investigating in some depth the effect of nursery-school usage, particularly in our culture where the 'teacher' and peer-group begin playing an important role quite early.
9. Valuable insight into the relationship between child language and language change is provided by Slama-Cazacu (1973a). Her analysis of Romanian children's speech is borne out by the facts of Hebrew construct-state noun compounds (representing the 'synthetic' form) which constitute the classical Biblical as well as the contemporary literary norm for possessives, as compared with the more analytical form with the genitive particle *šel* 'of': the latter is typical of colloquial, everyday Hebrew usage, on the one hand, and is the ONLY form manifested by pre-school age children, on the other! On the general trend towards more analytical forms in Modern Hebrew, according well with Slama-Cazacu's claims for Romanian in general and children's usage in particular, see Berman (in press), section 12.1. And there are other examples of language change in Hebrew reflected first and foremost in child language as 'deviating' from the literary norm.
10. Our analysis is substantiated by Shelli's subsequent development: at 26 months, Shelli began to use the form [təfxi] = *tiftaxi* 'open, Fem. Imp.' – often together with the dative *li* 'to me' – for a short while along with, then by 26:10 in place of *délet* – the latter by 26½ months being confined to the accepted sense of 'door' alone.
11. These important studies of Clark (1973: 83) include only two examples of over-extended verbs or of 'overextensions involving actions rather than objects'. Note, however, that Shelli's 'verbs' include yet another overextension (*li)šon* 'to sleep' is still used by her not only to talk about sleeping, but also for: 'lie down', 'rest', and 'lean back' (for instance, in an easy chair) in general!
12. Again, later developments bear out this claim. While still using her version of 'open, Imp. Fem' in Hebrew at 27 months, she will say *off* to me when she wants me to remove her bib or her shoes.

REFERENCES

- Bar-Adon, Aaron (1959). Children's Hebrew in Israel. Ph.D. dissertation, Hebrew University, Jerusalem. (In Hebrew.)
- (1971). Primary syntactic structures in Hebrew child language. In A. Bar-Adon and Werner F. Leopold (eds.), *Child language: A book of readings*. Englewood-Cliffs, NJ: Prentice-Hall. 433-472.
- Berman, Ruth Aronson (1975). The lexical representation of verbs, roots, and conjugations. In Ben-Zion Fischler and Uzzi Ornan (eds.), *Rosen memorial volume*. Jerusalem: Council on the Teaching of Hebrew. 25-36. (In Hebrew.)
- (1977). Natural phonological processes at the one-word stage, *Lingua*, 42.
- (1978). *Modern Hebrew structure*. Tel Aviv: Universities Publishing Projects.
- Bloom, Lois (1970). *Language development: Form and function in emerging grammars*. Cambridge, MA: MIT Press.
- (1973). *One word at a time*. The Hague: Mouton.
- Brown, R. (1973). *A first language: The early stages*. Cambridge, MA: Harvard University Press.
- Clark, Eve (1973). What's in a word?: On the child's acquisition of semantics in his first language. In Timothy E. Moore (ed.), *Cognitive development and the acquisition of language*. New York: Academic Press. 65-110.
- (1975). Knowledge, content, and strategy in the acquisition of meaning. In Daniel P. Dato (ed.), *Georgetown University round table on languages and linguistics 1965*. 77-98.
- and Garnica, O. K. (1974). Is he coming or going?: On the acquisition of deictic verbs. *Journal of Verbal Learning and Verbal Behavior*, 13 (5): 559-572.
- Dore, John (1975). Holophrases, speech acts and language universals. *Journal of Child Language*, 2 (1): 21-40.
- Ferguson, Charles A., and Slobin, Dan Isaac (eds.) (1973). *Studies of child language development*. New York: Holt, Rinehart and Winston.
- Gruber, Jeffrey S. (1973). Correlations between the syntactic constructions of the child and of the adult. In Ferguson and Slobin (eds.), 1973: 440-445.
- Guillaume, Paul (1973). The development of formal elements in the child's speech. In Ferguson and Slobin (eds.), 1973: 240-251. First published in French in 1927.
- Halliday, M. A. K. (1975). Relevant models of language. In Sinclair Rogers (ed.), *Children and language: Readings in early language and socialisation*. London: Oxford University Press. 53-65.
- Huttenlocher, Jannellen (1974). The origin of language comprehension. In Robert L. Solso (ed.), *Theories in cognitive psychology: The Loyola symposium*. Potomac, MD: Lawrence Erlbaum Associates. 331-369.
- Lakoff, George (1970). *Irregularity in syntax*. New York: Holt, Rinehart and Winston.
- Lee, Laura L. (1974). *Developmental sentence analysis*. Evanston: Northwestern University Press.
- Leopold, Werner, F. (1939). *Speech development of a bilingual child: A linguist's record*, Vol. 1. Evanston: Northwestern University Press.
- McCarthy, Dorothea (1930). *The language development of the preschool child*. University of Minnesota Institute of Child Welfare Monograph Series, No. 14.
- McNeill, David (1966). Developmental psycholinguistics. In Frank Smith and George Miller (eds.), *The genesis of language*. Cambridge, MA: MIT Press. 15-84.
- Nelson, Katherine (1973). *Structure and strategy in learning to talk*. Monograph of the Society for Research in Child Development. Chicago: Chicago University Press.
- Popova, M. I. (1973). Grammatical elements of language in the speech of pre-school children. In Ferguson and Slobin (eds.), 1973: 269-280. First published in Russian

in 1958.

Ruke-Dravina, Velta (1973). On the emergence of inflection in child language: A contribution based on Latvian speech data. In Ferguson and Slobin (eds.), 1973: 252-269. First published in German in 1959.

Shvachkin, N. Kh. (1973). The development of phonemic speech perception in early childhood. In Ferguson and Slobin (eds.), 1973: 91-126. First published in Russian in 1948.

Sama-Cazacu, Tatiana (1973a). The learning and use of oblique cases by children. In *Introduction to psycholinguistics*. The Hague: Mouton. 239-250.

— (1973b). La régularisation: l'un des universaux de l'acquisition de la langue. *Cahiers de linguistique théorique et appliquée*, 10 (1): 63-92.

Slobin, Dan I. (1971). Developmental psycholinguistics. In W. O. Dingwall (ed.), *A survey of linguistic science*. University of Maryland Press. 289-411.

Zonshain, Yaffa (1974). One-word utterances of Hebrew-speaking children aged 12-18 months. M.A. Dissertation, Tel Aviv University. (In Hebrew.)

Received: March 1977

Department of Linguistics

Tel Aviv University

Ramat Aviv

ABSTRACTS

We examine the emergence of 'verb-like' words in the speech of a two-year-old Hebrew-English speaking bilingual in terms of: their form (section 2), their function (section 3), the problem of what constitutes a 'verb' (section 4), and the bilingual usage of such words (section 5). The (girl) Subject's first verbs are all in the Feminine Imperative form; this indicates that morphological complexity is irrelevant in determining what kinds of words the child first uses. It is suggested that the form of early verbs in Hebrew might provide insight into the structure of a root-based lexicon. In functional terms the child's early verbs refer mainly to concrete, physical activities concerned with the child's own immediate needs and desires. The subject's developmental pattern indicates a move from such preoccupation to an ability to comment on states and events outside of self. Evidence is provided to substantiate the claim that the traditional category of 'verb' needs to be reexamined, with respect to child speech at all events. Finally, it transpires that language dominance in a potentially complete bilingual is clearly manifested in the subject's use of verbs.

LES PREMIERS VERBES: COMMENTAIRES SUR LA FAÇON ET LES RAISONS DE L'UTILISATION PAR UN ENFANT DE SES PREMIERS MOTS

Nous examinons l'apparition des mots 'd'apparence verbale' dans le langage d'un bilingue hébreu-anglais âgé de deux ans, en termes de forme (section 2), de leur fonction (section 3), du problème de ce qui constitue un 'verbe' (section 4), et de l'utilisation bilingue de ces mots (section 5). Le sujet (une petite fille) emploie tous ses premiers verbes sous la forme de l'impératif féminin; ceci indiquerait que la complexité morphologique n'est pas pertinente pour déterminer les sortes de verbes employés tout d'abord par l'enfant. On suggère alors que la forme des premiers verbes en hébreu permet un regard sur la structure d'un lexique à base de racines. En termes fonctionnels, les premiers verbes de l'enfant se rapportent surtout à des activités concrètes et physiques touchant aux besoins

et aux désirs immédiats de l'enfant. La structure développementale du sujet indique aussi un déplacement de pareilles préoccupations vers une capacité de commenter les situations et les événements qui lui sont extérieures. Les données soulignent la thèse selon laquelle la catégorie traditionnelle du 'verbe' a besoin d'un réexamen, tout au moins en ce qui concerne le langage enfantin. Il s'avère, finalement, que la primauté d'une langue chez un bilingue potentiellement complet se manifeste nettement dans l'usage des verbes fait par le sujet.

ПЕРВИЧНЫЕ ГЛАГОЛЫ: КАК И ПОЧЕМУ РЕБЕНОК УПОТРЕБЛЯЕТ СВОИ ПЕРВЫЕ СЛОВА.

Мы исследуем появление "глаголообразных" слов в речи двухлетнего ребенка, осваивающего одновременно два языка: иврит и английский, с точки зрения их формы (раздел 2), функции (раздел 3), пробоемы того, что представляет собой "глагол" (раздел 4), и двукязычного употребления таких слов (раздел 5). Первые глаголы ребенка (девочки) все представляют собой форму женского ргда повелительного наклонения: это свидетельствует о том, что морфологическая сложность не является существенной в определении того, с каких слов начинается детская речь. Мы полагаем, что форма ранних глаголов в иврите может содействовать пониманию структуры корневого лексикона. С точки зрения функциональной ранние глаголы детской речи относятся прежде всего к конкретным физическим действиям, связанным с непосредственными потребностями и желаниями ребенка. С развитием ребенка намечается сдвиг от этих ограниченных интересов к способности высказываться о событиях и явлениях внешнего мира также. В работе приводятся доказательства в поддержку мнения о необходимости пересмотра традиционной категории глагола с учетом детской речи. В заключение выясняется, что употребление ребенком глаголов свидетельствует о первичности одного языка у потенциально абсолютного билингва.