

THE (RE)EMERGENCE OF A BILINGUAL;  
CASE-STUDY OF A HEBREW-ENGLISH SPEAKING CHILD

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Ruth Aronson Berman  
Department of Linguistics  
Tel Aviv University

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THE (RE)EMERGENCE OF A BILINGUAL:  
A CASE-STUDY OF A HEBREW-ENGLISH SPEAKING CHILD\*

This paper provides a detailed account of "primary language acquisition" (in the sense of Lamendella 1977) of two languages - English and Hebrew - by a single child, with the aim of yielding deeper insight into the processes involved in child bilingualism in general. The subject of this study is my own child, Shelli, aged 4½ at the time of writing. As described in two earlier studies of her linguistic development (Berman 1977 and Berman 1979, both dealing with the one-word stage), Shelli was born into a generally Hebrew-speaking environment in which both her natively English-speaking parents addressed her almost exclusively in English. To date, her history reflects three different types of interplay between the two languages, as follows:

STAGE	AGE	COUNTRY	SPEAKS	UNDERSTANDS	LANGUAGE USE
I	to 2.11	Israel	HEB	+	+
			ENG	-	+
II	3.3 to 4.1	U.S.A.	HEB	-	-
			ENG	+	+
III	4.3 to now	Israel	HEB	+	+
			ENG	+	+

Of central concern to the present discussion are the transitions between Stage I of understanding both Hebrew and English but speaking only Hebrew and the switch to all English in Stage II (between her arrival in the U.S. at age 2.11 and her full acculturation there by 3.3) and, more particularly, from Stage II to her emergence as a fully bilingual user of both languages in both speaking and understanding between her return to Israel at age 3.11 and the present time (aged 4.6).

The material is presented as follows: The background to Shelli's bilingualism is given by a brief survey of her language development during Stages I and II (Section 1); in the detailed review of her re-entry to Hebrew in Stage III which forms the core of the present study, our hypotheses as to how this would be accomplished are set out (Section 2.1); specific features of her reacquisition of Hebrew during the first 8 weeks of her return to Israel - PHASE A - are analysed in light of these hypotheses (Section 2.2); her subsequent development is again subdivided into Months 3 and 4 - PHASE B - when she achieved a command of Hebrew nearly equal to that of her monolingual Israeli contemporaries - and Months 5 and 6 - PHASE C - when Hebrew became the

dominant of her two languages (Section 2.3 and 2.4). Finally (in 2.4 and 3), we suggest ways in which such case-studies might be extended and deepened so as to develop a more complete body of descriptive data on child bilingualism in terms of such parameters as individual learning strategies (see, for instance, Fillmore 1976 and Olshtain 1978), structural and other properties of the two languages, nature of exposure and circumstances of bilingual acquisition, on the one hand, and so as to provide more empirical and theoretical content to such notions as language-dominance, mixing, interference, and code-switching, on the other.

## 1. BACKGROUND TO THE CHILD'S BILINGUALISM

This section, as noted, provides a brief review of the stages preceding Shelli's emergence as a speaker of both Hebrew and English at around age four.

### 1.1/ Stage I: Hebrew-Producing - to age 2 years 11 mos.

By the time she was a month short of her third birthday, Shelli was speaking fluently in Hebrew<sup>1</sup> - and in Hebrew alone, irrespective of her interlocutor (including, for instance, her maternal grandmother who, unlike her parents, knows almost no Hebrew). The only exceptions were a few isolated lexical items and formulas in English - e.g. cookies, pull = 'flush (the toilet)', angki (used to refer to her security blanket even after she could say the word for 'blanket'), shower, I love you, and other expressions confined to her home-environment. However, she clearly understood everything said to her in English, at a level normal for English monolinguals at this developmental stage. For instance, she would often repeat what was said to her in E(nglish) with her own paraphrased H(ebrew) version, thus:

(1) Aged 2:7 - Mother: Do you want to come with me?

Shelli: ari roca lavo imax<sup>2</sup>  
I want to come with-you

(2) Aged 2:8 - M: It's nighttime, and they have to go home.

Sh:lama ze kvar erev, ve hem crixim lalexet abayta?  
Why (is) it already night, and they have to go home?

There were many other indicators of the child's comprehension of our E input, which she manifested in semantically and pragmatically appropriate responses, both verbal and nonverbal. Examples are given below, as follows: Parentheses are used for linguistic information - e.g. ellipses, glosses; square brackets are used for situational information; footnotes indicate deviations from normative H usage.

Elsewhere - as in examples (1) and (2) above - the H usage conforms to that common in adult speech as well.

(3) 2:5 - M: Let's go outside. It's a beautiful day.

Sh: hayom eyn gešem baxuc  
today (there's)no rain outside

2:6 - Sh: at roca uga?  
(do)you want (some)cake?

M: No thanks, I'm not hungry. You have it.

Sh: lo roca  
(I) don't want (it/to)

2:7 - [Looking at her favorite book]  
Sh: roca lirot od pam še aciporim yošnim<sup>3</sup> ba'ec  
(I)want to see again that the birds are sleeping in the tree

M: So, turn the page and you'll find the picture

Sh: [Does so] hiney hem!  
here they (are)!

2:8 - [Seeing a man go by on a tractor]  
Sh: mi ze?  
Who's that?

M: I don't know, I'll have to ask aba ('Daddy')

Sh: tagidi<sup>4</sup> le'aba ma še korim lo  
tell=ask Daddy what(that) he's called

2:9 - M: You take off your slippers before you get into bed.

Sh: hiney! yaradeti hem<sup>5</sup>  
There! I went off they = I took them off

tiri, ani yodat levad  
See, I know (how) alone = by myself

Shelli's Hebrew by this stage is like that of other, monolingual Israeli children for her age (as attested, for instance, in Bar-Adon 1971, Eyal 1976, Dromi 1977) with regard to both <sup>n</sup>content and form. She has a typical three-year old Israeli's vocabulary and command of grammatical structure, and the kind of immature forms she manifests - largely in morphology, as illustrated above and described in fns. 2 to 5 - are also typical of monolingual Hebrew-speakers at this developmental stage.

1.2 Stage II: Transition to English - from age 2 years 11 mos.

One month before turning three, Shelli accompanied us for a year's stay in the U.S. For the first month there, she continued to speak only Hebrew with everyone she came into contact with. After a month in the U.S., Shelli started attending an all-day nursery-school in Berkeley, California - and within six weeks of that time, she had switched to speaking entirely English. At first, she retained a distinctly H accent, and her usage was below that of her H. But by age 3:3 (3 months after entering day-care), she was speaking like her American contemporaries from all points of view: pronunciation, syntax and lexicon, and local idiomatic and conversational style and usage. Moreover, she increasingly refused to say anything in H; within six months of arriving in the U.S., by age 3:5, insisted that she be read to only in E, and that even her grownup sister - whose English is clearly non-native - use only E with her. I unfortunately failed to document in detail this transition from Stage I (Hebrew production plus E comprehension) to Stage II (all E production, reduced H comprehension) within the space of a few months. The following features were, however, noted:

- a) She kept to her character of being a one-language producing child. After the short initial transition-period, she would - perhaps could? - speak only in E, regardless of interlocutors or other situational factors.
- b) Her switch to E as her only medium of production was total, so that by age 3½ she was a highly proficient user of children's American English - at least on a par with her classmates and in some ways ahead of them (She is a very verbal and outgoing child, rather like the "expressive" type characterized by Nelson 1973 for rather younger children).
- c) The only trace of her H-speaking origins were a few isolated vocabulary items. These included highly affective areas such as the words mocec 'sucker-pacifier', kaka, pipi, occasionally ima 'Mommy', rarely aba 'Daddy' (though she kept the nursery version of E 'blanket' for her own favorite blanket), and some other items she evidently talked about mainly at home - e.g. peca 'cut, sore', šoko 'cocoa' (her favorite drink), kola 'coke' and, for quite a long time, šaršeret 'chain, necklace'.
- d) By the latter part of her year in the U.S., she was no longer bilingual - even in the restricted sense of her Stage I. Not only did she show increased intolerance for being addressed in H by anybody (including by her parents and also by non-English speaking Israeli visitors, who thus had a hard time communicating with her), she began to show signs of not understanding anything said

to her in H. In other words, as Leopold (1954) says of five-year old Hildegard, "the child had turned rather resolutely to English".

As Shell's integration into life and language in the U.S. became more complete, we became convinced that she had genuinely "out off" from H, and was unable (and/or primarily unwilling?) to comprehend even the simplest of exchanges in her native tongue<sup>6</sup>. Thus, Shelli seemed to afford a clear instance of "the phenomenon of forgetting" (other examples are cited in Hatch 1978:149 and Schmidt-Mackey 1977: 136-37) rather than a more partial type of "language loss" of the kind noted in Ervin-Tripp 1974. And she lends further credence to the point made by Hatch that "simultaneous and sequential acquisition of two languages is not as easy for the child as we might want to believe" (1978:77 and studies cited there). One more general issue, then, that emerges from this set of observations is the whole question of language "loss" and "forgetting" in bilingual situations. Clearly, contemporaries of Shelli as well as older children spending a year in the U.S. whose home-backgrounds remained strictly H-speaking did not "lose" their Hebrew in this way - but neither did they reach her level of proficiency in English. The question which needs to be investigated is whether they retain any English on their return to Israel - and what factors are involved in relative degree of loss/retention then.

## 2. THE PERIOD UNDER STUDY

This study is based on detailed notes of the period following Shelli's return to Israel exactly one year after we left, at age 3.11. For the first few weeks (from the second week on, as I returned a week later than Shelli and her father), I noted down everything Shelli said in Hebrew<sup>7</sup>, to whom, and under what circumstances. This of course excluded the time she spent at nursery-school, which she started attending 2½ weeks after her return, where she spends 5 hours a day 6 days a week with thirty 4-5 year-olds - all monolingual Hebrew speakers - and teachers who have the barest smattering of English. Information on Shelli's language-use at school was obtained through reports of her teachers and schoolmates, as well as occasional observations of my own.

### 2.1 Hypotheses Regarding the Re-Acquisition of Hebrew

On the basis of prior experience with Shelli's linguistic development as well as familiarity with studies of other child bilinguals and naturalistic second language acquisition, I assumed that the following properties would characterize Shelli's

re-entry into Hebrew.

- (1) Return to One-Language Production: I assumed that within a period of weeks, or two to three months at most, Shelli would shift back to speaking only H, regardless of circumstances or interlocutors - that is, she would revert to her pre-American behavioral pattern of Stage I. I also assumed that she would continue to understand anything her father and I, as well as other E-speakers, say to her in E, but that she would show increasing reluctance to accept other E input - such as books, records, television programs, all readily available to her in E at home.
- (2) Immature Character of Initial H Speech: I hypothesized that to some extent at least, Shelli's attempts at speaking H in the early, transitional period prior to clear establishment of H dominance would mirror earlier stages in child language-acquisition, including such features as:
- a) Predominance of H for instrumental functions - in the sense of Halliday 1975, and see also Berman 1979a - rather than for purposes of self-expression, description, or obtaining information.
  - b) Early use of H in formulaic type unanalyzed or ritual expressions - noted by Lily Fillmore 1976:639-649 and see also Bolinger 1976 - such as H beseder 'in order = okay, fine', ma haša'a 'what (is) the time?', lo expat li 'not care to-me = I don't care', or bo hena 'come here'.
  - c) Grammatical errors manifested mainly in incorrect morphological forms<sup>8</sup> to indicate, for instance, gender and number marking and agreement (obligatory between subject and main-verb, in choice of pronoun, and between nouns and adjectives in H) as well as of verb-patterns distinguishing between the basic sense of a verb and the forms it takes in expressing semantic-syntactic relations of causative, middle-voice, inchoative, reflexive, etc. (as described in Berman 1978, 1979b, and noted in fn. 5 above).
- (3) Upsurge Followed by Reduction of "Mixing" and Move to Code-Switching: On the basis of data regarding language-mixing in the early stages of second language acquisition<sup>9</sup> - in the sense of interspersion of L<sub>x</sub> material in the stream of L<sub>y</sub> speech - I hypothesized that: at first Shelli would introduce an occasional content-word from H into her E speech; that subsequently she would begin mixing in H function words and even bound forms (to yield, say, [r'anti] =English 'run' plus H 1st person past tense -ti suffix to mean 'I ran'); that then the reverse pattern would emerge - an occasional E word cropping up in the stream of H speech.

In lines with Hypothesis (1), I did not expect Shelli to manifest much real "code-switching" or moving over from  $L_x$  to  $L_y$  and back again as observed for more established bilingual speakers.

- (4) Effect of Interlocutors: I assumed that Shelli would start out - and continue through the transitional period - by using H mainly with children and, perhaps rather less, with other people she had no way of communicating with effectively in E (such as her regular baby-sitter); that with H-speaking adults who know some E she might tend to use H less; while with her parents and other adults fluent in E she would stick more closely to using only E. In other words, she would try out her initial, most tentative use of H where most important for communicative purposes - and her use of H with E-speakers would come at a later stage, being indicative of a total reversion to all-H production.
- (5) Shift Back Into H Easier than to E: I also hypothesized - granted the lack of detailed documentation of the period when we first came to the U.S. when Shelli moved out of H-speaking to all-E - that she would have an easier and swifter transition back into H once in Israel. For, after all, she had had lots of practice in being a H-speaker till the age of three.

In summing up our findings to date, six months after the start of this study, it appears that: (1) and (5) were not well-founded - for Shelli now speaks both H and E with the same degree of ease and fluency, but her move back into H seems to have taken longer and to have been no less difficult than her entry into E speech when she first settled down in the United States. The other three hypotheses were largely borne out by the facts - but at different stages during the period in question: Thus, with regard to (2), her H usage manifested normal developmental immaturities mainly during the first two months; on (3), she mixed some H into her E stream largely as expected at first, but quite differently later on; and on (4), interlocutor-sensitivity manifested itself only towards the end of her second month in Israel. In view of our findings on (1) overall language use, including production, and on (3) language-mixing, it seems we should, rather, have hypothesized some developmental pattern relating to language dominance - a theme quite crucial to our evaluation of this subject's emergent bilingualism.

Below we document some salient aspects of what actually happened - starting with a quite detailed account of the first weeks and then proceeding to a more general discussion of the later stages, when both H and E became equally prolific.



2.2 Phase A: The First Two Months - English Dominant

As the heading suggests, for the first 8 or 9 weeks after Shelli got back to Israel, five weeks short of her fourth birthday, she remained an English-speaking child for whom H was clearly an incipient "second language". Yet, and this is no doubt an important factor attitude to H, she was from the outset clearly pleased to be back in her own home, in a rural, village setting with lots of friends and family in and out of the house all day, surrounded by neighbors - children and adults alike - who knew and loved her from before.

Weeks 1 - 2

At this point, Shelli clearly understand almost nothing of what was said to her in H, the adults all making a great effort to communicate with her in E even when they themselves were H speakers. Her contemporaries were a source of frustration - and neither they nor Shelli enjoyed playing with one another. But she got on well with babies who were not as yet speaking any intelligible language, and with older girls who would pet and mother her, and who could ask others to act as their interpreters when needed.

In this period, Shelli's H output was confined to single contentives, as illustrated below: the equals sign indicates the normative H version of a word she mispronounced, parentheses are used for elliptical material, square brackets for contextual information.

## (4) Words she had used all along in H, e.g:

mocec 'sucker, pacifier'      peca 'sore, cut'      pipi 'wee-wee'

kaka 'B.M.'      [She had previously used the E euphemism, too]

tusik 'bottom'      [Again, she had also used 'fanny' before]

kafkaim 'clogs' = kafkafim

[Used for her toe-thonged beach-shoes, which I always refer to by the H term]

## (5) Occasional words highly salient in H child-culture - which Shelli had mostly used early on, and frequently, in her original H acquisition:

ima 'Mommy'      [the H word took over almost entirely right away]

aba 'Daddy'      [at first in free variation with the E word]

mic 'juice, pop'      e.g. "I can't taste the mic hardly at all"

"Give me some more mic in my blue cup"

kartiv 'popsicle'      e.g. "Why can't I have another kartiv yet?"

"Let's go to the kartiv store after my nap"

tiyul 'trip,outing' e.g. "Are we going on a tiyul again soon?"

košim = kišu'im 'zucchini'

e.g. "Ima, I want some more košim with my chicken".

[Again, a word referred to in H at home]

Her pronunciation at this point was very American - for instance, she articulated kartiv with E-sounding /a/ and /r/ - and she seemed to have a hard time adjusting her speech organs to H combinations, as in her renderings of H kafkafim or kišuim above or the way she said H names, e.g. kefaviktin for Kfar Vitkin, the village where her school is located. These are clearly developmental errors of the kind manifested by monolinguals in the early stages, too - as were other instances of metathesis in her 3rd and 4th month back in Israel, e.g. maxcik for macxik 'funny', or kacafti for kafacti 'I jumped'. But notice that as this point she also typically rendered 'interesting' as instering in English, too. No further attention is paid to pronunciation in this study. Our assumption that within a few months her H will sound native is borne out by the observation that before her second month in Israel was up, she had started using the velar fricative version of /r/ similar to that of other children in H, while retaining American /r/ in E. At the time of writing, Shelli has a native accent in both E and H - and it is too soon to check our guess that she will eventually start sounding foreign in E.

In these initial two weeks, Shelli was clearly feeling her way into occasional H outputs.<sup>10</sup> Moreover, she evinced increasing comprehension of H; for instance, when the girl next door called out to her dog bo hena, ziko!, Shelli repeated the same string to me in E 'Come here, Ziko!'. Thus, she mirrored what she had formerly done in reverse - when she would reword E input in her "first" language H (as in examples (1) and (2) of this paper). And the words she used in H seemed to largely recapitulate expressions she had used originally, between the ages of 1½ and 2½ as well as to refer to items salient in her everyday life - e.g. "When I start going to the gan next week", where gan = 'garden, nursery-school, kindergarten' is used rather than betsefer 'school' quite appropriately (for in California she had gone to "school") and the definite article required by this context in H is correctly supplied (though in E).

#### Weeks 3 - 4 ; Hebrew Starts to be Comprehensible

This was when Shelli started school, and the period is marked by a clear upsurge in both the number and type of expressions she produced in H, as well as in her understanding of the language spoken around her.

Our hypothesis (2b) is borne out by preponderance of formulas in this period, e.g.

(6) layla tov 'good night' (lit: night good)

-When going to bed

goal nefes 'disgusting' (lit: disgust of the soul)

-Seeing a cockroach, or some stew spilled on the floor

od pam 'again' (lit: another time)

-Playing with bigger children, wanting to be picked up on the wall again

eze kefi 'What fun!'

-Cuddling under her blankets with her doll ready to go to sleep

lo roca '(I) don't want to' (lit: not want + Fem)

-On being told to get ready for her bath

litra'ot, ima 'bye-bye, Mommy' (lit: to see + Reciprocal)

-Waving to me as she leaves the house to go for a walk with her father

ze maspik 'that('s) enough'

-On being told by her father to "Stop talking now, turn around and go to sleep"

zau, zau [=zehu] day, day 'That's it, enough' = 'No more!'

-When having her hair combed, so that it hurts

These expressions were used appropriately as an expression of her feelings or reactions (as indicated), and they are also exactly suited to the kind of language used by Israeli children in such contexts. And they were clearly acquired as unanalyzed wholes (thus, words like tov 'good', pam 'time' or ze 'it, this' did not show up elsewhere in Shelli's output at this stage) - in accordance with our Hypothesis (2b) and with the findings of Lily Fillmore's study of 5-7 year old Mexican children in their initial exposure to American English (1978:639-649) as well as with the observations of Huang & Hatch regarding the "global comprehension" of a five-year old Chinese boy acquiring English (1978:122).<sup>11</sup> Shelli thus provides further evidence for the suggestion that this reliance on very common, as yet unanalyzed set phrases might be a necessary strategy for children trying to feel or push their way into the stream of alien speech surrounding them.

Hypothesis (2a) was not borne out: In functional terms, Shelli had already made the transition from predominantly "instrumental" language of requests and directives, and she was able to make use of the very limited H at her disposal for descriptive and affective expression, too - e.g.

(7) [Very excited because the neighbor's cat Mitsi has come in]:

"You know, ima (Mommy), Mitsi came into our house? Yofi!  
(great, lovely). Yofi, Mitsi. Aba (Daddy), you know what?  
Mitsi's inside! Yofi! come and see her!

[To her father, who's blowing bubbles on her bubble-pipe]:

"Aba, xalaš. (weak) No, I mean the bubbles are xalaš."  
(Should be in plural form - xalašim)

[After falling down]:

"Uf! ko'ev, ko'ev!" (Ouch! (It) hurts, hurts!)

[Making an appropriate gesture of small size with her hand]:

"The baby's katan, katan, katan" (small, small = very, very small)

[Talking to her doll]:

"Let me comb your hair, xamuda" (darling, honey)

[To her teddy-bear, which she has dressed up in her pinafore]:

"simla yafa me'od" ( (a) very pretty dress - correct feminine form)

Thus, in partial contradiction of Hypothesis (2), while her linguistic resources in Hebrew are very limited, hence immature, at this stage - the little Hebrew she does use is functionally and conceptually (certainly stylistically) appropriate to the speech of a four-year old Israeli child. These examples show that, as assumed by Hypothesis (3), her speech is beginning to evidence a fair amount of language mixing, and that the Hebrew material interspersed takes the form of different words and parts of speech, as further shown below:

(8) - "Mommy, Ziko (dog's name) is going axuca" (outside)

- "Ima (Mommy), open the delet (door) for me"

- "I'm going to the gan šaašum (playground) with the other kids"

- "Talli (girl's name), boi (come + Fem). Come see what I did in my room"

- "lex abayta (go home), dog! Get out of our garden, kelev (dog)!"

As for Hypothesis (2c), her total H output is too restricted at this stage to posit any claims about the child's (lack of) control of grammatical categories such as gender and verb-conjugation. Yet Shelli's earliest re-entry to H speech does recapitulate certain developmental patterns; for she does at this stage make use of expressions

which showed up early in her original language acquisition (as reported in Berman 1977 and 1979a) - e.g. axuca 'outside' or the use of od 'more' as a coverall term for repetition, addition, increase in amount, etc. Moreover, the only question-word she uses in H now is efo 'where', to be followed in the next stage by ma 'what' and subsequently by repeated use of lama 'why' and mi 'who'. That is, the non-occurrence of words like matay 'when' and ex 'how' which she uses quite freely in E by now, reflects what has been observed for first-language development of information-questions (as in Klima & Bellugi 1966, Brown 1968, 1973 and for Hebrew Eyal 1976).

As for her comprehension of Hebrew by the end of her first month back, Shelli feels much more at home in H surroundings by now, and follows a good deal of the interaction between children at play, or with adults in ritualized contexts of eating, bathing, or being put to bed. However, she is far from understanding any more extended or non-situationally evident speech in H. For instance, when a teenage cousin was telling me about her plans for a trip, Shelli asked me: "What's Tal saying?", and on another similar occasion "What are they talking about?" - which would certainly not have been her reaction to comparable E speech. It is also clear that she follows little if anything of what her teacher talks about during circle-time at school (which she informed me is called rikuz, literally 'concentration'). She still asks to be read to in E, and for E television when confronted by children's programs in H.

As for her attitude, despite the disparity between her verbal abilities in E compared with the limitations of her H to the immature, "here and now" concrete, activity-oriented situations typical of an earlier stage in children's language development, Shelli does not seem upset or disturbed. Two factors might explain this lack of distress: Firstly, there is evidently enough balance between physical activities and game-playing with all-H interlocutors, on the one hand, and her being able to communicate in E at all levels available to her with her parents and other adults or older children, on the other. And, secondly, her environment is exceedingly tolerant and accepting of her - not only the adults around her, but her younger relatives, neighbors, and playmates at school and at home show great affection for her, and willingly include her as an active participant in their interchanges and activities.

During these first weeks, Shelli manifested a brief return to a special kind of developmental jargon (the term is used, for instance, by McCarthy 1954). In her original language-acquisition, Shelli had jargonized extensively, and for a long period, from the age of 10 months or so until well into her third year, as follows: She would produce long streams of "speech without words" - strings of sound with highly accentuated intonation contours, at first containing no recognizable semantic elements or words, then subsequently including more and more items from her conventional Hebrew lexicon, and ultimately being abandoned altogether. Now, faced once again with a language situation in which her production is not adequate to her needs, she started to "jargonize" as follows: Traveling with us in the car, she began singing a kind of gibberish, in which she interspersed numerous words and phrases from H, seemingly at random - e.g. ma ništana 'What's different?', the first words in a H song she recalls; yomuledet 'birthday' from a favorite H record she had in the States; ex omrim 'How do you say (X in language Y)?'; ani, ani, yeladim 'me, me, kids'; šeli, šelxa 'mine, yours'.<sup>13</sup> Other occasions when she indulged in this kind of chanting-talk included when "reading" a book, when haranguing a favorite cousin, or when watching a H show on television. And, as in her original jargonizing, these vocalizations contained many Hebrew-like sounds such as a low /a/ and a velar /x/, and they became increasingly interspersed with Hebrew words.

These "monologues" are not dissimilar to those noted for the Persian 6-year old Homer in Wagner-Gough's 1975 study of second language acquisition; and they represent a gestalt type of strategy, like the "mushmouth" speech of Peters' subject Minh (1977). Unlike these cases, however, Shelli's monologues are incomprehensible to speakers of either of her languages, as well as to her bilingual parents. This is her way of talking about more than she has the necessary linguistic means of expressing appropriately (the first time round, in natural language in general, now - in the old-new language Hebrew) and also of trying out the production of words and phrases she has picked on as salient - even though she does not know what they mean.

Just as this kind of jargon vanished when Shelli could first say a lot in H (by around age 2½), so now, too, as the gap between what she was cognitively able to express and emotionally needful of expressing, on the one hand, and her linguistic capacities in H, on the other, started to diminish in size and intensity - her recourse to the gestalt strategy noted in Peters 1977 in the form of private monologues grew less marked. By the end of her 2nd month back in Israel, Shelli no longer jargonized.

Weeks 5 - 6 , Upsurge of Hebrew Output

This period saw a big jump in the amount of H that Shelli was able to understand, although she still wanted to be read to only in E, and was irritated by television shows in H. Two main trends were observed in her H-producing abilities: (i) increasing mixing in of syntactic and not only strictly lexical elements, including the use of several function words in H - as illustrated in (8); and (ii) more sentence-like strings uttered all in H.

- (8) a. [Telling me about a movie she had just seen about an airplane] :  
 "It all poses [=hitpocec] 'exploded', kol, kol [=hakol, hakol]".  
 ('everything, everything = the whole lot')
- b. "Ziko, go home! Come habayit šelax" ('your+Fem house')
- c. "Ima, efo ha scissors šeli?" - 'Mommy, where (are) the scissors of me = my scissors'
- d. "I want od pam ('again') go to sleep" = 'I want to go back to sleep'
- e. "lo roca ('(I) don't want') go to school"
- f. "Yes, I called you on the telephone all the way to New York. (lama?) 'why'  
 Cos I missed you" [Analogous to her use of "You know why?" in similar contexts in E]
- g. "Ima, let's fold them [=napkins] kaxa" ('this way')
- h. "I've got a peca po" ('cut here') [Pointing to her chin]
- i. "I'm going lišon ('to sleep') now"

The following gives a good idea of her increased mixing of H into the stream of her E speech, in clear support of our Hypothesis (3):

- (9) "Ima, what you gonna buy me for my birthday? A typewriter - no, maybe a watch would be better. No, I know, sakiyot ('(surprise) packets') like those - no, not like the ones from Ori's birthday, like - like the ones baxuc ('outside')- eh - habayit ('the house') Referring to a bag of such packets on the back porch I want a very katan ('little') one, just so small like this [Gesturing]

Two points are of interest here: Firstly, there is some indication (as suggested, too, by the remarks of Swain & Wesche 1975), that introduction of  $L_y$  material in the  $L_x$  stream may be accompanied by various kinds of hesitation phenomena. We did not record this in any systematic way in the present study, unfortunately, but suggest that this line of

investigation be carefully pursued in future studies of the well-documented phenomenon of language mixing (see references in fn. 9). Secondly, the examples in (8) and (9) of the text are indicative of precisely what happens to Shelli's English in the next phase - when, on nearing Stage III in her development, of being fully bilingual, she mixes H into an enormous proportion of her E output, but not the reverse.

Note, next, that the second month of her re-entry to H showed the start of whole strings of utterances in H, with a move away from the largely formulaic expressions noted earlier (although such fixed collocations as layla tov 'good night', ma haša'a 'what's the time' or eze kef 'what fun!' are still common) to a more analytical manipulation of syntax, for instance:

- (10)a. "aba, efo at?" 'Daddy, where (are) you+Fem'
- b. "ima, ma kara?" 'Mommy, what happened?'  
[When I yelled because the pot had boiled over]
- c. "o, ze yafe me'od" 'Oh, that's very pretty'  
[To herself, commenting on a picture she had drawn]
- d. "lo, lo (le)saxek" 'No, not (to)play = Don't play'  
[Telling her friend not to touch her doll]
- e. "lo, lo (lehit)asek" 'No, not (to)mess (around)'  
[Admonishing another child not to play with her blocks]
- f. "kelev, boi hena" 'Dog, come+Fem here'
- g. "efo habayit šelax?" 'Where the-house of-you' = 'Where's your house?'  
[In response to a guest saying, in H, 'I'm going home now']
- h. "yomuledet šeli, lo šelax" '(It's) my birthday, not yours+Fem'  
"ve bayomuledet ye [=yihye] beseder, tov?" 'And at the birthday (party) it'll be fine, okay?'  
[To her uncle, who'd jokingly asked if he could come to her party]
- i. "ze camid, al hayad, po, po" 'It's a bracelet, on my arm, here, here'  
[Demonstrating to a cousin who'd asked her what she'd made]
- j. "Ima, ani po, babayit" 'Mommy, I'm here, at home'  
[Announcing she was back home from school]
- k. "Roni, boi tiri ma kara!" 'Ronnie, come see what happened!'  
[When her frisbee went up in the tree]
- l. "ani avo od me'at, tov?" 'I'll come in a little while, okay?'
- m. "ari roca kcat mayim lištot" 'I want a little water to drink'
- n. "haxatul halax labayta šelo" 'The cat went to his house +Directional' = 'to his homewards'
- o. "O, o, miskena, tinoket boxa" 'oh, oh, poor (thing), baby is crying'  
[Petting her favorite doll]



Shelli is clearly manifesting the strategy which Lily Fillmore (1976:649-655) aptly defines as "Making the most of what you've got". Thus, in (d) and (e) above she is clearly evading the use of a word she has not "got" as yet, the verb for 'tough' (morphologically opaque in Hebrew, in the sense of being constructed from a weak root). Similarly, in (h) she is using all the devices currently available to her to assure her uncle that her birthday (party) will be something she and everyone else is sure to love, and of course he can come. And in (i) she uses both repetition and gesture to clarify just what she means.

As noted, she has moved beyond the strictly formulaic, unanalyzed stage. This is shown, for instance, by her use of efo 'where?' appropriately in different contexts such as (a) and (g); her use of other grammatical formatives such as lo 'no, not' or od 'more, further' in various linguistic and situational contexts; her productive use of possessive markers - literally, the particle šel 'of' plus pronominal suffix - in (g), (h), and (n); and in her incorporation of earlier formulas into larger contexts - e.g. ma kara 'what happened?' occurs alone in (b), embedded in (k). This move into syntax is clearly illustrated in the following interchange:

- (11) Shelli: lo roca lišon, lo roca piyama, lo roca klum  
 '(I do)n't want to sleep, don't want pyjamas, don't want anything'
- Mother: What does that mean?
- Shelli: I don't want anything!

Her H output at this stage does to some extent recapitulate an early stage of her L<sub>1</sub> acquisition, and hence Hypothesis (2) is partially supported. Thus her truncation of the verbs in (d) and (e) - omitting the prefixal infinitive marker le- and the verb-pattern prefix hit- - mirrors her usage at the one-word stage (Berman 1977); and her overuse of feminine gender in (a), (f), and (h) rather than the morphologically and syntactically unmarked masculine accords with how she handled gender in her earliest Hebrew output at around age two (Berman 1979a). Moreover, her speech is in many ways typical of telegraphic usage - e.g. in (o) she omits the definite marker ha- before the word tinoket 'baby+Fem'. However, this attractive hypothesis needs to be qualified because, of the special nature of Hebrew structure, which allows for many formulations which in a language like E might be considered telegraphic or "reduced",

yet in H are well-formed in more mature usage, too. For instance, (i) H has no indefinite article and (ii) no present tense copula verb in attributive constructions - so that in (i) ze camid 'it (is a bracelet)' and in (j) ani po 'I (am) here' are fully grammatical strings; (iii) H has no grammatical construction equivalent to E tag-questions, so the use of tov 'good' = 'okay?, alright?' as a confirmation-marker in (h) and (l) is a legitimate device in more mature usage; (iv) even in the present tense, which unlike past and future does not include inflectional marking for person, the subject need not be specified overtly when the context makes it clear, and (v) H forms the negative by simply inserting the particle lo before the verb, so that lo roca 'not want +Fem' of (ll) is an acceptable rendering of 'I don't want'; while (vi) inalienable possession does not require owner-specification, so that in (10-i) al ha+yad literally 'on the+hand' is a wellformed way of saying 'on my hand'. Hence Shelli's H sentences at this point are not strictly telegraphic at all - and, moreover, she does use the definite article, prepositions, possessive markers, and other functors typically omitted at the early stages of telegraphic usage as reported for English-speaking children (Brown 1973:74-83).

In fact, Shelli's use of H at this point - the first half of her second month back in Israel - seems to reflect certain characteristics of foreigner-talk type reductions (as reviewed in Katz 1977, see examples and references there), rather than of the more systematic or rule-bound reductions noted for early telegraphic speech<sup>14</sup>. Consider the following string, addressed to a neighbor who had called to Shelli not to go in the street for fear of traffic:

- (12) "otobus kan, kan, le+netanya. lo baxol [=barexov] , šam, šam, otobus  
 (the)bus (is) here, here, to Natanya. Not in-the-street [mispronounced],  
 there, there, bus'

The child is telling the neighbor that the bus to Natanya passes by here, and that she is not in the street, but waiting at the bus-stop (there is one just outside our house). She clearly lacks certain verbs as well as the word for (bus)stop - so she compensates by repeating the lexical items she does have available. And everything she says is accompanied by a good deal of pointing, gesturing, and gesticulating - as aids in communicating what she wants to say with her limited H resources. In effect, her usage manifests the kind of "simplicity and redundancy" characteristic of the speech addressed by adults and older children to small children (Snow 1977:49), together with the kind of "simplifying processes" noted for baby talk by Ferguson (1977:223) - such as repetition and exaggeration of intonation contours. Like an

adult with a small child, or a person talking to a foreigner, Shelli gestures and uses other accompaniments to speech to ensure her message is getting across: pulling someone as she says bo hena 'come here', pushing me when she says zuzi kcat 'move (over) a-bit', beckoning with her finger when she wants someone to join her, making a "hushing" gesture with finger to lips when she says šeket, tinok lišon 'quiet, baby to-sleep (sic)' in referring to her doll, etc.

Finally, at this stage of "upsurge of H" during Weeks 5-6, Shelli comes out with bits of H irrespective of interlocutor - hence violating our Hypothesis (4). Thus, she increasingly uses mixed speech with us, her parents - although we continue to speak in E to her; she knows we are both fluent in H, but she uses the same mixing with an eight-year old cousin from the U.S. who knows no H at all. True, her longer and more entirely H utterances, like those illustrated above, tend to be directed to all-H speakers, particularly but not only children. But she is moving over into H in a far more general, interlocutor-free fashion - indicating that her use of H is not merely a function of an immediate need to communicate in a given situation, but part of a more general transition back into being a H-producing, E-understanding type of bilingual. That is, at this point our Hypothesis (1) seems likely to be well borne out. It thus seems reasonable to expect that at the next stage, as Shelli moves into the end of her second month back in Israel, the occurrence of all-E utterances will decrease considerably, and her speech will manifest a combination of (as yet simplified and immature) all-H utterances plus E interspersed with H. Insofar as there remain all-E utterances in her repertoire, these will be increasingly interlocutor-sensitive, and will be used mainly with us, her parents, and less and less with the H-speaking world all around her.

#### Weeks 7 - 8: Hebrew "Clicks"

This period witnessed a dramatic shift on Shelli's part into the linguistic abilities and behavior patterns of a "bilingual", in the simplistic sense of someone who is more or less equally at home in two languages. That is, here we notice "the suddenly acquired fluency and facility with the target language" termed by Lamendella (1977:185) the process of "clicking" or, following Pike 1960 as cited by Lamendella, the point of "nucleation", where all kinds of accumulating data forms a kind of "knowledge (which) 'clicks' and is thereafter available for use in natural-style communication" (Lamendella op cit).

In keeping with the nature of this kind of "nucleation", H still remains a "target language" for Shelli, and her proficiency in H lags far behind her E: in the topics she can and does talk about, size and range of lexicon, and grammatical - particularly morphological - wellformedness. Thus, in this period, all aspects of our "immaturity" Hypothesis (2) are confirmed: (a) The uses to which Shelli puts her H are still more restricted than the communicative domains she commands in E; though not simply instrumental in function (she is, after all, four years old), her H still serves her for more basic developmental purposes. Following Halliday 1975, Shelli's H manifests such functions as Instrumental tni li lištot 'give me (something) to-drink', Regulatory lo (le)daber axšav 'not (to)=don't speak now', Interactional bo (ne)saxek beyaxad 'let ('s) play together', and Personal ima, ani po 'Mommy, I('m) here=home' or eze yofi aciyur 'how pretty the-picture (I drew)'. The more advanced developmental functions - Heuristic 'How d'you fix this?', 'Why does the clock go tick?', Imaginative pretending, role-playing, story-telling, and Informative 'You know what happened at school today ...' - are still handled in E by Shelli at this stage. As for (b) of our "immaturity" Hypothesis (2), Shelli still comes out with numerous unanalyzed strings, even though these are often more complex than the ones noted earlier - e.g. she frequently responds to comments and situations by saying ma expat lax 'What d'you (+Fem) care?' but she does not modify the pronoun appropriately, nor has she yet used the related lo expat li 'not care to-me' = 'I don't care' (je m'en fiche).

Further, in accordance with (2c), her grammar is still very shaky: She is inconsistent and usually incorrect in her use of Gender for pronouns, verbs, and adjectives; she usually has one or at the most two forms of any given verb - not having command of the full range of distinctions in Person, Number, Tense, as well as Gender (inflectionally marked in H); and she has far fewer relational markers - prepositions and conjunctions - than she has in E or than her contemporaries have in H. The following examples manifest typically developmental errors, and are on a par with those noted for Shelli as well as for other Hebrew-speaking children aged 2-3:

- (13) a. tistakli šaršeret šeli  
look+Fem necklace of-me  
'Look my necklace' - Preposition omitted
- b. at holexet labayta šelax?  
you+Fem go+Fem to house of you+Fem  
'Are you going to your house-to' - Both directional prefix la-  
and suffix -a used together
- c. ani lo gadol, ani katan  
I (am)not big, I(am) small - Both adjectives in unmarked  
masculine instead of feminine

d. axšav anaxnu lo (me)sadrim hakol habubot  
 now we (are) not arranging the-all the-dolls

- omission of me- verb-pattern marker and repetition of definite marker ha- on quantifier, and omission of direct-object marker et before the object NP 15

e. tasimi habuba al ani  
 put the doll on I

- non inflection of object pronoun to yield alay 'on me'

Thus, while her H remains immature, Shelli is not confirming Hypothesis (1) - for she has not reverted to being a one-language child. She produces both languages concurrently now, hence moving into Stage III as outlined at the outset of this paper, and pronounces each with its own distinctively native accent. That is, she has moved into the production of all-H utterances, and the conduct of all-H conversations and other communicative interchanges (e.g. when playing on her own with her dolls, conducting conversations on her toy telephone, etc.<sup>16</sup>). Her use of mixed speech now manifests the converse of her earlier pattern (where an occasional H word or phrase crops up in the stream of her E speech), as illustrated by the following:

(14) a. [To the 9-year old neighbor she goes to school with in the morning, referring to her nursery-school teacher Bina]

"im bina lo kan, then ani olex lagan šelax, tov?"

'if Bina isn't here (should be šam 'there'), then I go (should be olexet in Fem. or elax in Future) to your kindergarten (instead of betsefer 'school')'

b. [To the little girl next door, walking across the lawn to our house]

"ani lo baa (le)saxek itax because ani lo xavera šelax

'I'm not coming (to) play with-you because I'm not your friend = I'm mad at you'

c. [Telling me she is going to visit her aunt, Miriam, across the road]

"ani lo lavo levad axšav but miryam bring oti od me'at, tov?"

'I won't to come (sic) alone now, but Miriam bring me in a little while, okay?'

The parenthesized comments on (14) indicate the same sort of immature ingrammaticalities as noted with respect to the examples in (13) - but the strings in general show how much, and how effectively, Shelli can communicate by now in H. Note, further, that with regard to language-mixing, this kind of use of an occasional E word in her H stream of speech - mainly for lexical items she simply didn't know (e.g. the conjunctions 'because' 'then' and 'but') but also for verbs she might have known but not been able to handle

morphologically, e.g. the highly defective root of the verb lehavi 'to bring - was very short-lived, indeed. Below we look ahead to the next stage of Shelli's use of mixing, to arrive at the following chart:

(15) SHELLI'S USE OF LANGUAGE-MIXING (within sentence-boundaries)

PHASE A: 1st 6 weeks	-	Steady increase in use of H words, then whole phrases, in E stream of speech, plus more and more all-H utterances
"move into L <sub>2</sub> "		
Weeks 7-8	-	Constant mixing of H elements in E utterances, plus occasional use of isolated E words in all-H utterances
"clicking"		
PHASE B: Months 3-4	-	Constant, more extensive use of H in E stream of speech, but <u>no</u> further use of E words in H speech
"bilingual"		

We examine the implications of this pattern in more detail in discussing the next stage of development. Note that in general, as she comes to the end of her second month of exposure to H surroundings, Shelli is using all and only H with: children, babies (including the use of "baby-talk" with young babies, in role-playing, and with animals!); when at play on her own - with her dolls, puppets, teddy-bears or stuffed animals, when building blocks, playing with puzzles, etc. (see fn. 16); and with any person who she views as H speaking. That is, for the first time she is manifesting the kind of interlocutor-sensitivity we had hypothesized (4) - a clear sign that she has achieved a cognitive "separation of the two systems" (Swain & Wesche 1975:17). For instance, with an aunt who insisted on talking to Shelli in H, even though the woman's H is clearly nonnative in accent and general tenor, the child insisted on using E; but although at first her babysitter, who knows virtually no E, tried to communicate with Shelli in E, Shelli uses H with her as much and as far as she is able to. Moreover, in functional terms, as suggested by the contexts noted above, Shelli's H is very activity-oriented at present, linked to the here and now kind of speech, to physical actions and game-playing so typical of early child development.

At this stage, too - for the first time in her short history - Shelli manifests considerable code-switching. For instance, eating lunch with her baby-sitter, she used only H - but switched to E the moment I walked in; playing with a friend from school in her room at home, she used all H - again switching to E when she left her room to ask me something; and talking on her toy telephone, she had a long make-believe conversation with her father and then her grandmother in E - then switched to H to start

up a conversation with a friend. And, within the confines of her limited H output now, the switch is total; articulation and intonation patterns, the very tone of speech, change with the language and the interlocutors for whom each is appropriate.

Finally, we can now ask whether - by the end of Phase A, the first two months, our Hypothesis (5) is confirmed: Is Shelli's switch back into H proving "easier and swifter" than her transition to E a year earlier? Given that the notion of "ease" is one which we have no established method for defining, the answer is a tentative "No". Thus, in chronological terms, by the same time in the U.S., Shelli was communicating entirely in E, and her transition there seemed both swifter and more total than her re-entry into H here. Two factors seem operative here: Firstly, when we came to the States, Shelli knew E - even though she did not speak it. All she had to do was put into operation her language-producing mechanism, formerly operative only for H, in order to speak E at the level appropriate to her cognitive-linguistic development as a three-year old. Her task, then, was analagous to that of children who start to speak relatively late, who have a lengthy latency period, in their first language - but once they do start speaking, their usage is on a par with that of their contemporaries. With regard to H, however, Shelli "left" it at age 3, re-entered it at age 4 - the gap in her H exposure hence corresponding precisely to a period crucial to children's acquisition of proficiency in their native tongue.

Secondly, Shelli's environment in the U.S. was far more fully English than the mixed E-H situation she had known till the age of three (many of the adults she has daily contact with aside from her parents are E-speaking here in Israel). Back in Israel, she did not have to adjust to new surroundings and new faces to any great extent - and, as noted, she was in a highly receptive and encouraging situation in her home-village. In the U.S., however, moving over to E was part of her winning entry into an entirely new world - at school, with neighbors and family friends, and on the street. E was the norm to which she needed to adjust and, aided by her prior exposure to the language, she did so rapidly and totally. Here in Israel, she is sailing her way back into H with no great signs of stress or conflict - but she can and does fall back on E a lot of the time, secure in her knowledge that whatever and however she speaks, she has been "accepted" or integrated all along. Hence, while getting back to H may be emotionally no more difficult than her switch to E at age three, she can and does take her time about it. She has enough H to get along fine with friends, family, and schoolmates in numerous situations; but H has a rich and complex morphology, typically mastered by Israeli children precisely between the ages of 3 to 4, and this Shelli is finding tough and not managing to handle after a short two months back. Moreover, her vocabulary in H remains immature, in the sense that whole blocks

of words which she first acquired in E - names of colors, numbers, of geometrical shapes, etc. - are still lacking in her H lexicon.

Thus, the relative "ease/difficulty" of Shelli's task in bilingual re-acquisition can be characterized in terms of factors generally recognized as crucial in language development: (i) individual personality - sense of security, need to succeed or to identify; (ii) social factors of communicative needs and of the expectations and attitudes of the environment; (iii) the linguistic task involved in acquiring the specific forms and patterns of a given language; and (iv) cognitive development and conceptual apparatus compared with the linguistic resources presently available to the child. Shelli's performance in H during these first two months was very positively affected by the first two of these parameters, while her relative immaturity in H at this stage, compared both to her Israeli peers and to her own command of E, can be attributed largely to linguistic and cognitive factors (iii) and (iv).

### 2.3 Phase B: 3rd and 4th Months - Move into Bilingualism

This phase ended with Shelli for the first time being really bilingual: She now communicates in both languages, in a way and via processes described below. Her development during months 3 and 4 is traced according to relevant features of her usage in both E and H between the ages of 4;2 and 4;3.

#### 1) Functioning in Two Codes:

Our first hypothesis (Section 2.1) is refuted, for Shelli now speaks both H and E, and she has continued to do so up to the time of writing (aged 4½, seven months after her return to Israel). It now seems clear that, although this makes her different from her peers, she will very likely continue to speak E - at least to us at home. She relates to her knowing an extra language as something enjoyable, rather than as a source of any negative kind of "being different". The explanation lies partly in the child's personality and subjective situation: As she is thoroughly integrated and very much accepted by her peers, she need not view having another language as a weakness or an impediment to her social functioning. At times it is clearly to her advantage; she can "show off" with friends by addressing adults in E, by being able to follow stories and television programs in E and then explaining to others. Moreover, unlike the children in many of the bilingual case-studies observed in the literature, both of Shelli's parents are native E speakers who thus quite naturally use E with her as well as with each other.



## 2) Language Dominance, Mixing, and Code Switching

Shelli's use of the two languages at this stage provides insight into the complexity of the notion of what constitutes the "dominant" language in a bilingual situation (see, for instance, Ervin-Tripp 1961, Haugen 1961:Section 4.5, Lambert 1955). On the one hand, H is clearly dominant in the child's usage, certainly in quantitative terms; she uses H with more people, under more circumstances, and in more situations - and her E output is increasingly restricted to her parents and the few other adults she has contact with who address her in E<sup>17</sup>. When playing on her own, chances are about equal which language she will use - as illustrated by the mono/dialogues recorded in Appendix A and B. By the next stage, however, half a year back in Israel, when she is alone talking to herself or role-playing - H will have taken over almost completely.

During months 3 and 4, however, E is in some sense "dominant" in that her command of E is clearly superior to her H, in terms of correctness of grammatical forms as well as range of vocabulary. The dominance of E in cognitive-conceptual terms - as contrasted with situational factors of range and amount of use of H - is evidenced by her questions about semantic equivalents - usually, for quite obvious reasons, addressed to me. When she asks me what word X is in English - e.g. "Ima, how do you say pina (corner) in English?" or "Ima, what's met (dead) in English?" - she is asking me for an explanation, she wants to know what the H words means. When, however, she asks the same question in reverse - e.g. "How do you say 'mauve' (=segol) in Hebrew?" or "What's 'memory-game' (=misxak hazikaron) in Hebrew?" - she needs to know how to talk about that thing in H. (See examples in Appendix B transcript). From this point of view, then, E is clearly her L<sub>1</sub> - her source language - and H is her target. I am sure, however, that this will be true only of her "transitional period" prior to full entry into Stage III as charted at the outset of this paper: By the time the year is up, and she has matured in and through Hebrew, at school and with her friends, through storybooks and so forth, her H will start to outstrip her E: It will shift into being the source, and not the target any more.

Further evidence of the "inequality" of the two systems is provided by the child's use of language mixing - as charted in (15) above, and as amply illustrated in Appendix A and B. Notice that in this connection, we consider the distinction made by Lindholm & Padilla between "language mixos" as referring to "interactions that occur within a sentence boundary" and "switching" as "an interaction which occurs at the sentence boundary" (1977:271) to be rather too mechanistic for our purposes. A more dynamic distinction is afforded by Swain & Wesche (1975)

who characterize "lexical mixing" as "utterances in which words from both languages were used" as compared with "the points at which language switching from French to English or English to French occurred" (1975:17). The distinction we would like to suggest, based on our data from Shelli, is as follows: (i) Lexical mixing is evidence of linguistic inadequacy on the part of the second language learner (see, for instance, the data on teenager Ricardo and adult Rafaela reported in Hatch 1978:428-430) as well as of the well-established bilingual<sup>18</sup>. It reflects indeterminate separation of the two systems; lower recall ability for items in the less dominant language (Ervin-Tripp 1961); or sheer lack of knowledge of given items in the language being spoken.<sup>19</sup> By contrast, (ii) code switching reflects "a communicative skill, which speakers use as a verbal strategy much in the same way that skillful writers switch styles in a short story" (Gumperz 1970:136). In other words, as a mother and a linguist, what I would like Shelli to evince eventually is avoidance of mixing combined with skilful, and socially and communicatively appropriate recourse to code switching as between E and H respectively.

As things stand at present - both during the still transitional period of Months 3 and 4 (and by her 6th month back in Israel) - Shelli is in fact showing increasing competence in her use of switching. But she continues to mix excessively - and in one direction only: She never introduces E material into her H utterances (compare the examples in (14) above at the earlier stage of her re-entry to H); yet her all-E utterances are few and far between - nearly everything she says in E will have some H items mixed in with it. One explanation is the social factor: When she talks E to us, her parents, she knows very well that we will understand anything she puts in in H, while the converse is not necessarily the case with people she talks H to; besides, it is H she uses with her peers and in achievement-oriented activities at school and competing in the playground, so she is busy proving her H is the same as that of her companions. In cognitive terms, moreover, H has become dominant for her: She may as yet not know H as well as E, but it constitutes far more of her reality, and has upper place in her consciousness accordingly.

Examples of her code-switching abilities are as follows. (a) At the beginning of her 3rd month back in Israel (October 20, 1978 - aged 4:1) she was over at the neighbors, telling them about her adventures the night before, when she had gone out onto the street alone as her baby-sitter had fallen asleep. She used very fluent

but impoverished and error-ridden H in doing so, so I suggested to her that she tell her very dramatic tale in E. She turned to me and said "But I'm telling Irit!" - referring to a H-speaking young woman, who knows E well but whom it is by now already natural for Shelli to address in E. (b) Playing with the little girl from next door, some 6 months younger than herself, she came up to me and said "Ima, I want to catch my cat and hold him in my arms, okay?", then turned to the child and, using higher pitch and more marked intonation, she said axakax at, tov? 'afterwards you, okay?' - to tell her friend that she could have a turn playing with the cat, too. (c) At the beginning of her 5th month back (aged 4;4), playing with a friend from school, she took part in the following interchange:

(16) Shelli: Ima, Michal wants to ride my bike inside the house.

Mother: Okay, she can.

Shelli: mixal, at yexola, ima šeli omeret še ze beseder  
Michal, you can , my Mommy says that it (is) alright

Here, unlike in the earlier case reported under (a) below, Shelli's H is exactly on a par with that of her peers, and in code-switching she also evinces the ability to undertake what Swain & Wesche (1975) term "spontaneous translation" which we noted for her initial H usage in the very first section of this paper.

Shelli's mixing throughout Months 3 and 4 was so ubiquitous, we merely give a few illustrative examples. In (17) we list the only two examples we noted of mixing of E words with Hebrew inflections or other bound morphemes; that is, the kind of intra-word confusion we had anticipated - say in the form of ranti 'ran + 1st person past' = 'I ran' or penselim 'pencil + Hebrew plural -im' for 'pencils' showed up hardly at all in Shelli's usage, indicating to us a fairly advanced cognizance of the separateness of the two levels from the outset.<sup>20</sup>

(17) a. Once, and only once, she said imaut Hebrew im 'with' + Eng out in the sense of 'without' = bli in H

b. "I haven't finished mecayering yet, later on, okay?" - i.e. Eng -ing was appended to the Hebrew present tense verb mecayer 'draw, paint'

This, as noted, was so rare as to be totally nonoperative in the child's acquisition - though other children might be observed to do this more, in case of a real confusion between the two codes. Her mixing of whole lexical items or groups of words was, as noted, so ubiquitous throughout as to defy listing. As illustrated below, this mixing seemed to revolve around items which could in some sense be viewed as salient to the child: They were predominantly sentence-final strings (in keeping with the strategy suggested in Slobin 1973), as though she had changed gear midstream, so to speak,

or else consisted of isolated words with powerful emotional import to her, thus:

(18) a. ima, pretend this is the telefon šel hagan  
'school telephone'

b. I don't care if all the kids shout at me at gan. ma xpat lahem?  
'school. What do they care?'

c. Maybe at night, rika šomeret aleyhem  
Ricka looks after-them

These examples indicate that once she moves into a word she perceives mainly in H - the cognate telefon, the word gan invariably used for her school, even by us, and the name rika - she continues in H. But this very attractive explanation - in terms of sequential processing of output - is not borne out entirely by other examples, such as those in Appendix B and C. Note, also, the following:

(19)"Aba (Daddy), pretend that you're a miflecet (monster) and we're sleeping, and she (sic) comes and creeps into my room."

Here, the word miflecet - newly acquired in H only two weeks earlier - is highly charged for the child; and she uses the feminine pronoun she as its anaphor, in keeping with what she would do in H, given that miflecet 'monster' is feminine gender in H.

To sum up, then - and see in this connection the transcripts in the appendixes - the child intersperses H into the stream of her E speech as follows: with single lexical contentives by now more salient to her in H; and as a follow-on from utterances started in E but switched midway to H; as well as in whole utterances in H as, within a given situation, she switches from one language to the other and back again. This kind of mixing continued well into her 5th and 6th months of H, too. Moreover, the period under discussion here - Months 3 and 4 - evidenced considerable ungrammaticality of form in her H output as well as evidence of interference of H in her E output.

### 3) Nature of Errors in Language Usage

The main difference between Shelli's H output during Months 3-4 and Months 5-6 respectively lies in the extent of grammatical - largely morphological - error she showed at the earlier stage, and her subsequent move into H which is grammatically almost on a par with that of her monolingual H-speaking peers. Below we give some examples of misusages which clearly bear out our Hypothesis (3c), in that they are typical of what is to be observed in H first-language acquirers between the ages of 2 and 4, and hence not evident in the speech of Shelli's peers.

(a) Developmental errors took various forms, chief among which were the following:

(i) Immature pronunciations - largely in the form of reductions and transpositions similar to those noted at a much earlier stage of her original Hebrew acquisition (Berman 1977), e.g. anaxnu saxkim ve mištolim 'we('re) playing and being-wild' - where the verb-forms should be mesaxakim and mištolelim respectively; lo kelkalti [=kilkalti] '(et hasefer še heveti)' '(I did) not spoil the book I-brought' ; ze lo maxfid [=maxfid] 'It('s) not scary'; (ii) Imperfect control of the inflectional system of H including over-regularization of irregular forms, e.g. tinokim 'babies' with the regular -im plural suffix rather than the required feminine tinokot, or using yikra 'will-happen' in place of normative yikre by analogy with, say, yišma 'will-hear'; occasional (by now) lack of gender concord, e.g. ani tesaxek [=asaxek] 'I'll play' im ele 'with these' - using the 2nd rather than the 1st person prefix on the verb; and use of the free nominative form of pronouns following prepositions, rather than the required suffixal form, e.g. \*leyad ani 'next-to I' = leyadi, \*bli at 'without you(FEM)' = biladex, \*bišvil hu 'for he' = bišvilo, etc; (iv) Use of more basic, general verbs instead of the more appropriate specific ones (noted, for instance, in Clark 1978) - e.g. hem halxu me haxalon 'they went from the-window' rather than yacu derex haxalon 'went-out[exited] through (the-window)' or ima ve aba halxu le telaviv 'Mommy and Daddy went to Tel Aviv' where the verb should be nasu 'went (by vehicle)'. (v) Use of an inappropriate verb-pattern with the appropriate verb-root and inflectional forms - including non-use of causative forms where required by context, e.g. ima toxli oti 'Mommy eat me' = taaxili 'feed', az ovrin kaxa et haxutim 'so (you) pass this-way the ribbons' = ma'avirim 'pass + Causative', tiri ex ani mistovevet et ze 'look how I turn+INTRANS ACC this' = mesovevet 'turn + TRANS' when referring to a top she is spinning; ani elex lišon še haseret gomer 'I will-go to-sleep when the-film finishes' = nigmar 'is finished', or ani ekšor elex ve gam hu yikšor (elay) 'I will-call you and also he will-call (me)' with the transitive verb pattern yielding ekšor/yikšor instead of the middle-voice intransitive etkašer and vitkašer respectively required here. Here, particularly, Shelli's H is typical of three-year old monolingual speakers of H, who tend to use one invariant verb-pattern with a given verb-root, the ability to use a variety of patterns to express such notions as causativity, active/passive/middle-voice distinctions, transitive/intransitive, or inchoative and reflexive - expressed largely through the system of verb-pattern morphology in Hebrew (Berman 1978, 1979b) being a sure indicator of more highly developed language acquisition, stabilizing at around age five - but already far more controlled by Shelli's peers at this stage than in her usage at age 4;2 - 4;3. (See Berman in preparation for further explanation of this aspect of H child language. )

These deviations from the norm for H-speaking four-year olds, as noted, closely parallel the kind of errors made by monolinguals acquiring H, but at a younger age, and they also mirror patterns of Shelli's own usage when she first acquired H two years earlier. That is, Shelli is now acquiring - rather, re-acquiring H - much as though this were her "first time round" with the language, although at a highly accelerated pace. Errors of another type manifested at this stage are not typical of "primary" H acquisition, and can be attributed to direct impingement of E on her H output.

(b) Interference errors provide further evidence of "dominance", indicating that from this point of view, H is her source language, E now her target during months 3 and 4. Thus, evidence of E patterns transferred into her H speech were and have remained rare, and I noted only the following three instances throughout the period of Months 3 to 6. (i) Telling me she did not want to have her sweater tucked inside her jeans, she said "At school, I'm not gonna put it it, I'm gonna stay it out" - where her use of 'stay' instead of 'leave' is exactly parallel to the kind of neutralization between basic/causative or intransitive/transitive verb forms noted for her H in the preceding paragraph (e.g. a month earlier she had said in H ve ima mašira babavit levad 'and Mommy leaves (sic) at-home alone' instead of the same verb-root in the intransitive pattern nišara 'stayed' or nišeret 'is staying'<sup>22</sup>. (ii) Use of English collocations with the carry-all verb for "put" rather than the appropriate lexical item in H, specifically: ima, at sama oti lišon 'Mommy you're putting me to-sleep' which is ill-formed in H, substituting for ima, at maškiva oti 'Mommy, you're putting-down = lying+CAUSATIVE me', and similarly ani asim levad et habegadim 'I'll put (on) alone my clothes' instead of ani etlabeš levad 'I'll dress+REFLEXIVE alone'. Such forms, while rare, are interesting because they are the kind of literal translations made by adult speakers of E when learning H - even when they have a good command of H - for it is precisely in the use of single words lexicalized within the verb-pattern morphology of the language that H verb usage differs quite systematically from E, with its very general tendency to use general verbs such as "put, get, make" with a noun in such cases. (iii) Several times, and quite consistently during Months 3 and 4, Shelli used the preposition bišvil on a par with E 'for' in contexts where Hebrew requires the dative/benefactive prefixal marker le- 'to' and 'for', e.g. boi nexake bišvil rega 'let's wait for (a) minute' and ima, rak bišvil rega, bevakaša! 'Mommy, only for (a) minute, please!' - where normal H of children as well as adults would omit the preposition altogether or else used le-. Again, the bišvil/le- distinction is a source of considerable confusion for E-speakers using H in general.<sup>23</sup>

Far more common, and more systematic, are misusages in her E which can be clearly traced to H interference for two reasons: (a) they are obviously rooted in equivalent H forms, and are quite typical of the E usage of Israeli high school students' use of E; and (b) they are errors which did not show up in Shelli's E during the period she spent in the U.S. These include: (i) sporadic, nonsystematic translations - e.g. (Aged 4:2) "You're the doctor, you're the nurse, and I'm the sick" - haxole 'the sick' also meaning 'the patient' in H; (ii) systematic use of H-type Verb+Infinitive constructions, e.g. "When I finish to do that, I'll tell you", "Aba, why don't you give (=let) me to climb up there?", "But I didn't let the dog to get in " and a related use of that as a complementizer instead of to on the H pattern - e.g. "Ima, I want that you'll eat - eh, I mean feed me" (see fn. 21) instead of "I want you to feed me"; (iii) neutralization of the do/make distinction, both rendered by the verb asa in H - e.g. "So now I'm the Mommy and I'm doing the cake" or "Come see what a beautiful house I did with my blocks"; and also "Well, you see, I'm doing for you a farm to all the animals". This last example also illustrates (iv) systematic neutralization of the dative/benefactive to/for distinction, both rendered by le- in H as noted earlier; as well as (v) increasing use of word order which is favored in H but impossible in E, where indirect and oblique objects regularly precede the direct object - particularly where the fronted material is pronominal in form, e.g. I'm doing for you a farm, "But, ima, he's taking from me all my blocks!" , "Do you want to see how I can make from this a beautiful picture?" , etc., and (vi) very general use of that corresponding to the Hebrew subordinator se- attached to E subordinating conjunctions, e.g. "I'll read the story how that I want to", "I'm gonna hide where that I want, okay?", "But I don't understand what that he's saying" , "Ima, tell me when that you're going to the universita, okay?" Finally, note (vii) that H, not being a habere language, uses a form of be + to for the possessive sense of 'have'; thus, (age 4:2) Shelli: "Is Judy Aaron's wife?" (I say "Yes"), "Well, you know, to my sister there's a baby, and he's a boy!", again, aged 4:3 "Ima, so when will be to my cat puppies, I mean kittens?" in the sense of 'When will my cat have kittens?', and, aged 4:6, we had this interchange:

(20) Shelli: Right that there isn't to you another little girl?

Mother: What? (requesting clarification)

Shelli: Right that you don't have another little girl?

As this example indicates, Shelli clearly "knows" the appropriate E form, and can come out with it when she is using her "monitor" (in the sense of Krashen 1976). However,

although both her earlier all-E use of these forms, and her ability to correct herself when prompted, shows that the appropriate items and constructions are available to her in E, her very consistent and systematic use of the Hebraized forms right through to Months 5 and 6 indicate that the latter might be taking the shape of "fossilized" interlanguage forms in her E in general (in the sense of Salinker 1972). These usages are significant because: They are so consistent, and persistent in her E; they are typical of H-speaking second-language use of E; and, as such, they indicate that H has turned into a source language for her E, rather than the other way around, and that in this sense, at least, H is now "dominant" for Shelli.

#### 2.4 Phase C : 5th and 6th Months - Establishment of Bilingualism

At this point, half a year after her return to Israel, Shelli is an established bilingual, the interaction between her two languages taking the following shape:

- A) She uses both languages fluently and easily, at a level appropriate to the norm for her age and general level of development, though her standard of expression is still very slightly richer and more sophisticated in E than in H - a distinction we assume will be neutralized, possibly weighted in the opposite direction, by the time the year is out. This suggests that for assessment of "primary language acquisition" of pre-schoolers - certainly in Israel where children attend nursery-school half-day all week long from the age of two - a period of one year attendance at nursery-school/kindergarten should be taken as a criterion in assessing the developmental level of bilingual children whose home-language differs from that of their surroundings.
- b) Her code-switching in terms of interlocutor is complete by now: She uses all H with H speakers, all E with non-H speakers, and mixes H into the stream of her E speech with people like her parents, whom she knows to be proficient in H though they interact with her in E. This accords with what is known of the 4-year old's cognitive/social ability to adjust his usage differentially in terms of his linguistic interaction with younger children, peers, older siblings, parents, schoolteachers, etc.



c) H is well onto the way of becoming her dominant language, in the following senses at least: To the extent that she has continued with language-mixing, she will intersperse H items and whole phrases into the stream of E speech, not vice versa; she uses H quantitatively more than E - in more situations (school, playground, out visiting, on the street and in the village) - and with more people (including her grownup siblings, her regular babysitter, friends, teachers, neighbors); she uses H when she is alone - at play, with her dolls and other toys, in her bath, in all role-playing and "let's pretend" situations; she has moved totally into H child-culture - in all ritualized activities or language-contexts, e.g. of games, counting, doing "eeny-meeny-miny-mo", singing songs, making up rhymes - all these are in H by now; finally, "fossilized" types of interlanguage errors in her E show evidence of the interference of H patterns of usage and grammatical constructions, whereas there is virtually no E interference in her H usage by now.

This suggests that both the wealth of literature on naturalistic child language bilingual acquisition and commonsense observation are correct in pointing to two complex and interrelated parameters in the interrelation between the child's two languages. These consist of (i) social and pragmatic factors of nature and amount of exposure to each language, its relative prestige in the community and its importance for purposes of identification and belonging; and (ii) cognitive and linguistic factors relating to the structural properties of the two codes, the developmental maturational level of the child in acquiring each language, and general availability and retrievability of items in one language or another in terms of immediate verbal context, on the one hand, and long-term memory storage, on the other (for some discussion of this, see Ervin-Tripp 1961 and Swain & Wesche 1975).

d) The pattern of Shelli's mixing - as traced for the first 4 months in (15) of Section 2.2 above - shows that despite her having in a sense been like a second language learner of H at this stage, she showed the same developmental sequence as other bilinguals from birth: At first she manifested interspersion of occasional lexical items in the stream of E; then she would switch languages quite "smoothly, apparently unconsciously, and without translation of what (s)he had said before" in mid-sentence (Swain & Wesche 1975:19) "showing extraordinary skill at passing from one language to another during the same verbal interaction" (Volterra & Taeschner 1978:320). Our assumption, in keeping with the findings of these and other studies, is that this language-mixing will decrease after the

present stage, when she reaches the point where "one can say a child is truly bilingual" (Volterra & Taeschner 1978:326). Should she continue to mix H into her E speech as she does now, then she will be on a par with the adult E-H bilinguals described in fn. 18 above, who acquired H long after their first language, English!

### 3. SOME FURTHER IMPLICATIONS

- a) Shelli affords an interesting instance of language loss - and subsequent re-acquisition. Further studies on monolingual and H-E bilingual children spending extended periods of time in E-speaking countries, as well as of children with different language backgrounds and exposures, are necessary to evaluate how general are her patterns of language-loss, and to what extent they were functions of factors of age, personality, and type and extent of exposure.
- b) Shelli's rapid re-entry to H was facilitated by her own personality - as a very gregarious and self-confident child - as well as by maximal social reinforcements in her environment. The extent to which her prior knowledge of H, up to age 3, was significant in this process is hard to judge in the absence of comparative data along the lines suggested in (a) above. Clearly, her age was to her advantage: She is still well within the optimally "receptive period" for acquiring H, given moreover, that she was exposed to the language during her "pre-receptive" period, too (in the sense of Lamendella 1977: 168). Where she took the longest, relatively speaking, was in getting command of lexical items and of grammatical - particularly morphological - properties of H which she would normally have acquired during the year she spent in E, aged 3-4. On the other hand, she could and did immediately apply the conversational strategies and other pragmatic functions of language-use she had acquired as a three-year old in E to her H situation, moving immensely rapidly into Israeli child-culture via her re-acquired H.
- c) More indepth, detailed analysis is required of the precise content of her language-mixing behavior, along the lines suggested in Lindholm & Padilla 1977, 1978, and more particularly, Swain & Wesche 1975. For this type of diary study makes it possible to investigate exactly what words, items, phrases, utterances are inter-

dispersed in terms both of immediate verbal context and of overall communicative situation. It is hoped that the data given here may provide the basis for further study along such lines.

- d) The pattern of interference of H structures in her E usage suggests that this is an indicator of language-dominance, and that E is already receding into "second language" status for Shelli. This is clearly what one would expect in most cases of child bilingualism, particularly in immigrant situations, where the first language or mother-tongue spoken at home becomes secondary to the language of the surroundings, particularly with the advent of literacy at school. That is, our assumption is that by the time Shelli is in 1st grade, she will be a H-speaker who also knows E and speaks it "like a native" in terms of fluency, perhaps of pronunciation - not much more. What this suggests is that studies of "established bilinguals" (for instance, like those in Ben-Zeev 1977a, 1977b) might be enhanced by longitudinal, or at least cross-sectional, studies of children when home language is environmentally dominant (at preschool age) and when second language takes over as primary after some years of schooling and establishment of literacy.
- e) Finally, insofar as Shelli's re-entry into H can be taken to constitute an instance of second language acquisition, then she provides strong ammunition for those who would wish to equate first language and (presumably only naturalistic "primary") second language acquisition; for her H, particularly in the phase of "moving into bilingualism" in months 3 and 4, is replete with errors typical of children acquiring H as their first language, too. On the other hand, this may have merely been the result of her squashing into three or four months what her monolingual peers had a full year to get command of, in view of the year-long hiatus in her H acquisition. Besides, Shelli's systematic use of H constructions in her E speech is precisely reminiscent of the E learned (formally) as a second language by Israeli adolescents. Again, this study might usefully be extended by comparison of the development of E in younger Israeli children acquiring it naturalistically (i) in Israel and (ii) abroad with (iii) the E used by older Israeli children learning the language as "a foreign language" in a school setting.

Underlined forms indicate (i) errors in E, (ii) H forms. Square brackets give situation.

Date: Saturday, December 16, 1978

Age: 4 yrs. 2 mos. 25 days - 4 months after her return to Israel

[Shelli is playing with her blocks on the living-room floor, I am sitting reading on the couch nearby]

"Look how much brothers I've put in the house. We'll have to zuz et ze,  
move (INTRANS)ACC this

so we'll have makom. So let's farek et ze. Ima, there needs to be a uga. Look  
room break it up cake

how much now! More and more! Wow! Ima, the mommy and daddy are here, sitting.

[To herself] axsav ha'axim. Now the brothers. hine, one brother, two  
now the brothers Here,

brothers. uf! lama ze nofel! Yuk! Why's it falling! tss! Ima, go  
Ugh! Why (is) it falling! Oh, damn!

call Dalit to see my gur, okay? [To herself] More babies. Ima, look how much  
puppy

babies! Look how much brothers! I'm gonna call Dalit, okay? ima, tišmeri li et ze,  
look after it for me,

tov? [Comes back and announces] Dalit saw my gur. [In answer to my query "Where's  
okay?

he now?"] Inside, and he bite me, the gur. [Settles back to her blocks again]

ima, naxon kaxa osim bayit? Ima, look! Right this is a house?  
right(that's)how(we)make(a) house

So come and help me! [I get down on the floor with her] Ima, mi yišmor al  
abayit? [I make a "guard" which topples over] wid#ill look after  
the house?

Ima, you need to do it small, like this, see? No, not like that! ze haxi katan  
that('s) the smallest

Now you put it where that you want, okay? [Her father comes in and gives her a

box of seashells] Ima, all my kesef is in here, see. Now pretend you're going  
money

to buy kartiv. kama at roca, kartiv? Here's three. More you need?  
(a)popsicle how {much(do)you want, popsicle?  
many

[Returns to her blocks] Ima, look how much mitot. All this. And these are the  
beds

pillows. Ima, look at the šulxan. I'm so tired. I need somebody to help me.

You do one thing and I do one thing. Let's make a surprise for aba, okay?

And we'll put this one on top of it. Now I need to do three things and you need  
to do three things, too. Ima, let's use all the blocks. What will this be? No,  
you need to do not with this. Now we need two of these. Ooo! I forgot! But

if you lefazer (the blocks), then aba will be upset cos he won't see the  
break up

afta'a we did for him. You know, when aba matxil livkot, he goes like this  
surprise Dad starts to cry

[Demonstrates] He's so funny! :

## APPENDIX A (CONTINUED)

[At my suggestion, we move over to her room to be with the puppy]

"Okay, now let's pretend we're gonna have a birthday. In the afternoon, in (sic) arba, okay ...."  
four

## APPENDIX B

[The next day, Shelli has just come home from school, having walked home with her friend Orit. We're together in her room, I'm changing her shoes and socks]

"Ima, you know who's šaxar? hu ben šnatayim ve hu bendod šel orit.  
he(is)two years old and he(is)Orit's cousin

He does only kaka in his mixnasayim, not pipi. And you know at school I saw  
B.M. pants

a seret, not a real seret, a seret on the wall. And I saw someone baseret  
movie in-the-movie

and he's met. vatyodat, mišeu baseret, there's somebody, and now  
died and you know, someone in the movie,

he's met in the seret, you know that?  
dead movie

[TOPIC SWITCH]

ima, ma ze be'anglit 'yevenim'? [I give nearest word I can think of, and  
what is in English 'yevenim']

say 'bricks' = levenim in H] Not that! yevenim!! [Angry, upset] I don't

know how ... what it is in English, uf! [I ask her: "Do you play with them?"]  
yak!

No, it's in a šir! [I calm her down by saying I'll ask her teacher next day \*\*  
song

and she changes the subject] Ima, are you writing my name? tixtevi li et hašem.  
write my name for me

kaxa lo kotvim et hašem šeli, at yodat?  
that's not how my name, you know?  
you write

Clearly APPENDIX A is a much more all-English day, Saturday alone at home with us. Next day, Sunday, she is still in the atmosphere of school, the movie she saw there, the kids she walked home with, the song she was taught, how they write their names at school - hence the preponderance of Hebrew.

\*\*It turned out the word was yevanim 'Greeks'. Had I related the child's query to the fact that they were currently learning songs about Channuka and the Greeks' treatment of the Jews on that occasion, I would have answered the unlikely query more appropriately!

## FOOTNOTES

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<sup>1</sup> She had been attending an all-Hebrew nursery school six mornings a week for a full year by this stage, and had additional, extensive Hebrew input from her adult siblings, from neighbors, relatives, and a baby-sitter 4 afternoons a week. By "fluent" Hebrew we mean, of course, H suited to the general cognitive, social, and linguistic maturity of normal monolinguals of her age as discussed further below, with certain grammatical deviations from normative H as illustrated in fns. 2 through 5 below.

<sup>2</sup> The form imax consists of the free form of im 'with' plus the 2nd person feminine suffix for possession -ax - the normative form being itax 'with you (2nd Fem Sg)'. That is, Shelli here has the rule for Preposition+PRONoun inflection in Hebrew (see, for instance, Berman 1978:77-79), but has not learned this particular exceptional form.

<sup>3</sup> The form yošnim 'sleep (Pres.Masc.Plur)' violates normative usage in two ways: (i) It regularizes the exceptional verb yašen to yošen in a way done by all children as well as by many adult speakers of H; and (ii) it uses the masculine plural -im instead of feminine -ot to agree with the noun cipor-im 'bird-s', which again is idiosyncratically feminine in gender, though masculine in morphological form.

<sup>4</sup> The imperative (appropriately feminine) form tagidi 'tell' is used here instead of 'ask' in the sense of 'inquire' (H has a different verb for 'ask' = 'request'), which would here be tišali. This confusion between 'tell' and 'ask' accords with the findings of Carol Chomsky (1969) as well as of Ziv 1976 for older English and Hebrew-speaking children respectively. And in fact, Shelli continued to use "tell" instead of "ask" in directives of this kind for the next few months in H as well as in E, too.

<sup>5</sup> Here the verb is used in the right tense, person, and number, but in the wrong verb-pattern; instead of intransitive yarad+ti 'go-off Past + 1st Person' it should be

horad+ti 'took-off+1st Person'. However, until age 3 Shelli consistently used the noncausative, basic verb stem in contexts which both syntactically and semantically were clearly causative, neutralizing the distinction in Hebrew between such root-sharing pairs as the words for eat-feed, move Trans-Intrans, wear-dress, see-show, etc. She subsequently did the same thing in English - e.g. "Mommy, please climb me up the wall", or "Why don't you wear me this dress?". This accords well with the findings of Bowerman 1974, as further discussed in Section 2.3(3) and fn.21 below.

<sup>6</sup>This total withdrawal was shown, for instance, in Shelli's rendering of a wellknown H folksong, which formerly she had sung without error, in a kind of gibberish, saying alalaze for halayla haze 'the-night this = tonight', whereas layla 'night' had been one of the first words she had acquired as a baby. She genuinely seemed to have a hard time getting her tongue around H words and expressions when we tried to get her to imitate them.

<sup>7</sup>It was soon clearly not feasible to use a taperecorder if I wanted to get anything like a full coverage of her usage at this stage; and as details of articulation were not of interest to me here, I preferred the more convenient method of having pencil and paper wherever the child was located at a certain time. Besides, most of her speech at this time - except in the occasional intimacies of her being alone with one of us, at bedtime, or in her bath - was conducted against a background of considerable "noise": playing indoors and out with children and animals, in the company of numerous friends and family that constantly filled the house during this period, and so on.

<sup>8</sup>H has a much richer and more complex system of inflectional morphology than E, and 2-3 year old Israeli children do not normally have full control of the system. By age 4-5, they usually have most of it mastered, except for a few occasional anomalous forms (e.g. nouns with masculine form but feminine gender, verbs with highly defective roots, etc.) By age 4, Shelli's command of E morphology was complete, except that (i) she still regularized past tense forms to yield hitted, singed, etc. and (ii) as noted in fn. 5, she often neutralized the distinction between causative/transitive and more basic, intransitive verbs in different contexts.

<sup>9</sup>The notion of language-mixing is discussed and documented in several recent studies, most notably: Swain & Wesche 1975, Lindholm & Padilla 1977, 1978, and Volterra & Taeschner 1978. For other comments, see Hatch 1978:34; case-studies by Imedadze 1967, Leopold 1954, Raven 1978:153, Yoshida 1978; as well as more comprehensive

surveys by Wode 1976 and Christian 1977; and reports of Joel Katz, in progress, on two Israeli five-year olds acquiring English in the United States.

- <sup>10</sup> She had one unusual type of communicative interchange with her cousin Dalit, 3 months older than she is, with whom she has always spent a lot of time. Sitting at the table, Shelli started talking jargon-like gibberish in what she conceived of as H-sounding strings, with Dalit answering her in what she considered to be E utterances - both equally meaningless in any literal semantic sense, yet highly satisfying to the two little girls.
- <sup>11</sup> Huang & Hatch report that their subject, Paul, used the expression "I'm finished" in a highly restricted context (1978:122). Strangely enough, Shelli also said gamarti 'I (have)finished' from week 4 through 8 in one specific, though appropriate, context alone: when she'd finished doing her B.M. on the toilet.
- <sup>12</sup> A special kind of formula at this point was the genitive particle šel 'of' for identification: When I asked her which Pnina she was going to visit, she replied pnina šel feigi 'Feygie (the mother)'s Pnina', and when I told her I was talking on the phone to Bina, she asked me bina šel yosi? 'Yossie (the husband)'s Bina?'; yet at this point she did not use šel in any other, nonfamilial contexts, as the ordinary way of expressing possession in Hebrew. She also started coming out with maša = ma haša'a 'what ('s) the-time?' at all odd times of day at home and at school, being satisfied with any kind of numerical answer. (She as yet has no clear concept of time or hours of the day of course). This constant asking of the time continued well into her 2nd month of H, evidently constituting some special kind of "phatic communion" for the child, in order to establish some, however semantically empty, conversational interchange with the H-speakers around her.
- <sup>13</sup> She by this time was already distinguishing by appropriate stress between her name šeli (penu imate stress, like most H names) and possessive 'my, mine' = šeli word-final stress. This was a distinction which was manifest as soon as she acquired mastery of possessive pronominals in her original acquisition of H, too.
- <sup>14</sup> Shelli's H usage in this transitional stage back into H is reminiscent of that of adult immigrants to Israel who had never acquired more than a pidginized kind of H. Just recently, I had occasion to spend some time in the company of a middle-aged truck driver from Roumania who spoke H in just this way (interspersed with a fair amount of Yiddish mixing) who informed me he had been in Israel for 27 years. In terms of morphology, this "dialect", like Shelli's at this point, combines two



seemingly opposite phenomena: (i) extreme variability of form, indicating a lack of clear differentiation of systematic differences between markers of such categories as Tense, Gender, Number, Person, Voice, etc; and (ii) a certain invariance of form, where one given form - e.g. the Imperative or Infinitive form of a verb, the Feminine form of a noun - is used in all environments, regardless of syntactic or semantic appropriateness. It seems to me that in the language development of H-speaking children, the invariance of (ii) is manifested only very early on - mainly at the one-word stage (see Berman 1979a), being followed by a short period of the kind of fluctuating forms of (i) with the early emergence of syntax. Older, unsuccessful second language learners of H, like the man in question, seem to resort more largely to strategy (ii) of invariant "fossilized" forms.

<sup>15</sup>This may have been an error of processing, as the sentence is well-formed up until and including hakol 'everything' which is used with the definite marker ha- when it stands alone, but not preceding a noun marked for definiteness like habubot 'the dolls'.

<sup>16</sup>This is borne out by her use of jargonizing at this stage: In her 7th week back in Israel, Shelli was "reading" to herself at naptime - and at least 75% of her utterances - which together could not be interpreted as forming any connected discourse (though this is true of such monolingual monologues as well) - took the form of words and whole phrases which were clearly from her Hebrew repertoire, and as such identifiable with ordinary H usage.

17. This is conditional to their having a native or near-native command of English. H speakers whose E is mediocre will be pushed back into the H "slot" by Shelli. This indicates that her separation of the two systems is cognitively very advanced by now, in that she recognizes proficient language use in each case. That is, she shows the same kind of sensitivity as does a 4-year old child in adjusting his own speech to his interlocutors, addressing babies, peers, and adults differently in each case. And her code-switching behavior thus confirms the view of those who have interpreted this shift from one language to another as a form of "register-shifting", as noted in Ervin-Tripp 1970, Gumperz 1970, and Lance 1969 as referred to in both Gumperz and Ervin-Tripp.
18. That well-established bilinguals do engage in language-mixing is clearly evident in the usage of many members of our village: Native-born Americans who came to Israel some 20 to 30 years ago when in their early twenties, they constantly tend to intersperse H lexical items into the E they use when speaking to one another - to the extent where some of them use H when talking E not only to refer to cultural or institutional aspects of their life most salient to them in H (often including concepts which are culturally untranslatable), but even when referring to objects and activities which have quite straightforward E counterparts. This is clearly the kind of "mixing" which causes laymen to contend that people who know two languages do not really have full command of either. However, in a manner precisely analagous to Shelli's subsequent development in the two languages, these adult bilinguals will not introduce E words into their H stream of speech - as though to prove that their H, clearly a "second language" for them both chronologically and in terms of their overall proficiency and level of literacy when compared with E, is in fact fully under their control. Being secure in their native E, they manifest cultural identification (perhaps a kind of "laziness") by interspersing it with lots of H words! That this "mixing" is a performance kind of phenomenon, not due in any simple sense to lack of knowledge of the E items is manifested in the E speech of such people when traveling abroad, or even in Israel with people who know no H: their E speech then becomes considerably "purified" - even though on occasion they show evidence of having difficulty in retrieving the appropriate word or phrase in E, they will persist then in a fully E stream of speech.
19. For a very similar account of the reasons for language mixing, based on data from three children reared as bilinguals from birth, see Volterra & Taeschner 1978.

<sup>20</sup> Clearly, such kinds of mixings (termed "loan blends" by Lindholm & Padilla 1978, who note 4 such instances in the 110 cases of Spanish-English mixing they observed out of their total corpus of over 5000 utterances) are the strongest kind of evidence for nonseparation of the systems, and as such merit further investigation.

<sup>21</sup> I note particularly the neutralization of the basic/causative form of verbs, as it has received some attention in the literature (see, for instance, Bowerman 1974), and was the most typical kind of error of this type in Shelli's original acquisition of H at the one-word stage (Berman 1979a) and now in her re-entry into the language. Other examples include:

(1) Aged 4:1 - roni, ex lacet [=lehoci] et ze?  
Ronni, how to go-out =take out ACC this?

[when playing a game with plastic buttons]

(ii) Aged 4:2 - aba, tered [=torid] oti!  
Daddy, go-down = take down me!

[asking her father to get her down from the table she had climbed onto]

(iii) Aged 4:3 yehuda, tazuz [=taziz] et hakise!  
Yehuda, move(INTRANS) move TRANS ACC the-chair

Moreover, this is exactly the kind of error she would make in E, too. Thus:

(iv) Aged 3½: I want to wear this dress cos it sees [=shows] my freckle

(v) Aged 3:9: When we have a pool, then aba will learn me to swim

(vi) Aged 4:2: When I get home, I'll feed my gur ('puppy'), and then I'm gonna eat (sic) my cat something, too!

<sup>22</sup> This might, of course, be an intra-English error, too - especially in view of the examples noted in fn. 21 above. Other immaturities in her 4½ year-old English include (i) continued over-regularization of past-tense forms - brang for 'brought' on the one hand, and also catched, swimmed, throwed, and so on; (ii) non-inflection and non-segmentation of be as a main-verb, e.g. "At gan ('school') we pretend, and Orit be's the baby and I be the Mommy" and also "Now you gotta be be careful", or "But why won't he be be ready yet?"; (iii) sporadic inversion of Subject-Aux in embedded questions and also occasional non-inversion of Subject-Aux in more complex main-clause questions; (iv) persistent use of much before plural nouns as well as noncount nouns (See examples in Appendix A) - although note that in H a single word kama is used for 'how much/how many' and a single quantifier harbe for 'much/many'.

23 She also manifested one or two, occasional translations of E lexical items, e.g.

(i) ima, toridi et haor  
 Mommy, take-down ACC the light

where the more appropriate verb in H would be taxabi 'extinguish=put off' in a way exactly analogous to the instance of Italian-German "loan-translating" reported by Volterra & Taeschner 1978, and

(ii) ani ekra lax batelefon  
 I will call you on the phone

where, again, the verb is a literal (grammatically correct) translation of E 'call' in place of H acalcel 'I'll ring'. Such examples were so short-lived as well as infrequent, that they serve to confirm our claim that at this stage, E is receding as a "source-language" for the child.

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