

DIARY JOURNAL 1

LAURA BRAUNWALD

0;8.0—1;3.0

OCTOBER 20, 1971—MAY 20, 1972



The handwritten diary journal begins.

Periodic descriptions of the probable prelinguistic precursors to the onset of language, L, 0;8.0 – 1;0.0, pp. 1-19

Beginning of the format of daily diary entries, L, 1.0.1 – 1;3.0, pp. 20-104

COMPILED BY
SUSAN R. BRAUNWALD, PH.D

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¹ The first linear patterns on Table 4 come from the control data at L, 1;1.0, diary pages 33-36.

PRIVACY RESTRICTIONS

Susan R. Braunwald has archived the original handwritten diary data that she collected between 1971 and 1975 on her second child's language acquisition at the University of California, Irvine. Access to this version of the diary will be restricted until 2071. In order to make these data available for immediate academic research, Braunwald has created pdf files that are a redacted but exact copy of the original diary.

Braunwald's adult children have consented to the creation of the pdf files, but they have requested the following restrictions.

1. Only the first initial of their first names (i.e., L and J respectively) can be used to refer to them in any publication or presentation that comes from the contents of the pdf files.
2. They have granted their consent to the photographs of them in the pdf files in order to clarify the context notes for future researchers. However, these photographs may not be published in any format or included in a presentation until 2071.

Braunwald's family made a tradeoff of its personal privacy so that she could collect the naturalistic ecologically valid data in the diary. Please select qualitative examples that would not be a violation of the social desirability effect in a less naturalistic in-home observational study of the children of upper socioeconomic status professional parents.

The redacted manuscript copy and supplementary materials (except the photographs) are available for public use.

Language Development

Journal 1 (J1) spans the period of L's development from 8 to 15 months of age and describes her earliest verbal communication. From a longitudinal perspective, J1 contains the early data that shed light on the quality of the process of her subsequent language production.

Specifically, the data in J1 depict an indirect transitional process from prelinguistic communication to the production of an ambient natural language. This indirect transitional process solves the problem of a developmental asynchrony between L's experiential readiness to communicate informatively by her first birthday and the slower emergence of an unknown neurological capacity to produce a child-language version of English, the natural language in her environment.

All the data in J1 come from a developmental period that preceded L's transition to a natural language. Based on these data, Braunwald postulates that L's verbal production during late infancy and early toddlerhood represents her slow progress along a single continuum from prelinguistic communication to a child-specific protolanguage. The data in J1 support the hypothesis that there is a discernible qualitative discontinuity between L's initial early transition to verbal communication and the onset of her production of a child-language derivative of English when she was 18-months-old (J3).

Key Words in Journal 1¹ - Language Developmental

Key Word	Notes
Acts of Meaning	Baby-games, and and routine events provide predictable formats in which shared understanding scaffolds emergent verbal communication.
Babbling	Infant vocalizations of English consonants and vowels— A small repertoire of babbled syllables become context-dependent proto-words
Baby Talk	L's family use a speech register which is specifically addressed to babies.
Child-Directed Speech	Refers to speech directed specifically to infants, toddlers and young children; <i>Motherese</i> is an alternative term during this early period.
Child-Invented Speech	Child-invented speech is idiosyncratic and child-specific in its form (e.g., <i>ba</i> = milk) or function (e.g., <i>cookie</i> refers to music-related activities). In contrast to later child-invented terms, this speech is not a derivative of English.
Communicative Intentions	Intentional communication emerges in late infancy many months prior to a natural language and pragmatic intentions in speech acts.
Communication Skills	L's ability to communicate an intention involves her use of vocalizations and gestures to call attention to herself and turn-taking to let her listeners know when they find an intended item. Success or failure are the two possible results.
Comprehension	Behavioral evidence suggests that L's comprehension of English is developing in advance of her production. The data do not assess her level of comprehension.
Contextual Associations	A consistent association between a form and a situation is the basis of L's cumulative context-dependent vocabulary of proto-words.
Decontextualization	The data in J1 show decontextualization in a non-linguistic sense. L is able to generalize a gesture or a vocalization to a new communicative context. (The new context is the source of contrasting homophones.)
General Meaning	L can transfer a gesture or proto-word to a new context of use (e.g., L waves bye-bye when she wants to get down from the high chair).
Developmental Asynchrony	L's experiential readiness to communicate with a language emerges by her first birthday. But her biological readiness to produce a child-language version of an ambient natural language, English, does not begin to emerge until 5-months later during her 18th month.
Developmental Constraints	Some unknown constraint makes the production of an ambient natural language difficult until L's 18th month (e.g., L has difficulty imitating words that she understands).

Key Words in Journal 1¹ - Language Developmental

Length	First proto-words are 1 syllable; longer utterances emerge gradually.
Developmental Plateau	L's communication increases between 8 and 16 months, but L's system of production is immature, linear, context-dependent and limited its potential power..
Dyadic Interaction	
Father-Child	
Mother-Child	
Sibling-Child	
Experiment in Nature	See p. 8 for a preverbal event involving separation. (In J3, L becomes upset in contexts in which she sees a baby nursing.)
Gestures	Gestures play an important role in communication during this early period.
Imitation	L's ability to imitate words is highly constrained.
Deferred Imitation	L can use a gesture from an act of meaning to initiate it (e.g., L rolls her hands round-and-round to initiate a game of pat-a-cake).
Infant Development	8 to 12 months of age.
Intrapersonal Speech	<i>Private Speech</i> —L babbles while playing and appears to practice the production of a vowel or syllable (e.g., L may spend an entire day repetively producing a phonological form.).
Interpersonal Speech	<i>Social speech</i> — L uses a limited repertoire of situation-specific proto-words in intentional communication with her family.
Intersubjectivity	L's consistent use of a form in a mutually understood event is the basis of a child-specific protolanguage.
Longitudinal Diary Data	The data from 8 to 15 months are prior to the production of a natural language.
Names/Proper Nouns	Early error data indicates that L does not differentiate between a name and a proto-word.
Natural Language	Data in J1 come from a period prior to a natural language. L's language-like system of production is qualitatively different from the ambient language input.
Nature / Nurture	L's protolanguage is a developmental solution to an asynchronous interaction between nature and nurture.
Overgeneralization	A single phonological form communicates unrelated context-specific intentions. Her listener's awareness of the context is the source of their contrast in meaning.
Phonology	J1 suggests that L's phonological production is constrained.
Prelinguistic Communication	Verbal, gestural, social, and emotional behavior intertwine to convey L's intention.
Protolanguage	L relies on a constrained, child-specific compensatory system of communication which her family learns to interpret. This system dead-ends and is replaced by the onset of a natural language.

Key Words in Journal 1¹ - Language Developmental

Proto-words	These context-dependent meanings are negotiated in real time.
Receptive Language	L's behavior indicates that she comprehends some English words in a known context.
Self-Reference	See the development of L's self reference (Front Matter J1 & J2).
Theory of Mind	L makes an intention in her mind visible with gestures or vocalizations. (L produced 1 example in which she seems to assess what M has not noticed and informs her [Table 4 #9 and p.47 underlined in red]).
Transitional Overlap	The simultaneous use of an old and emergent form (e.g., the overlapping use of dada and baby to refer to herself at 15 months [See front matter]).
Verbal Ability	This term is used to differentiate between L's early ability to communicate with prelinguistic communication or a protolanguage and her later production of a child-language version of English.
Vocabulary	L creates a vocabulary of proto-words— a few phonological forms convey multiple situation-specific meanings .The context of uses is the source of contrast that differentiates the meaning of the multiple uses of the same form.
Vocalizations	L produces intentional vocalizations.
Word Recognition	L appears to recognize English words in the predictable contexts of routine events.

1. Some of these keywords overlap with the list on language development. Definitions in the notes pertain specifically to

Developmental Narrative

For researchers interested in how language development relates to the expression of preverbal memories, J1 contains an “experiment in nature” that addresses this question. J1 describes a naturally occurring traumatic preverbal disruption in L’s attachment relationship to her mother—an abrupt weaning and a month-long separation. Using pseudonyms, Braunwald (1992) presented a paper that investigated how this preverbal emotional experience influenced the process of language acquisition and whether language would reveal L’s memory of it. She found that the abrupt weaning and the prolonged separation differed in their effects once L began to produce a natural language.

The abrupt weaning was a potentially memorable event, and Braunwald found suggestive empirical examples that L expressed a recollection of this experience in response to unusual and evocative retrieval cues early in the process of the production of English.¹ The effects of the prolonged separation had a more pervasive developmental influence. Separation was a recurrent problem in L’s daily life and language played an important role in helping her to master her anxiety.

M, who was aware of the etiology of L’s separation anxiety, created verbal routines to reassure L many months before L could produce a natural language. During early toddlerhood, L attempted to describe how she soothed herself during a brief separation from her mother.² Even brief separations triggered L’s effort to talk about non-present events and her emotional internal states with whatever verbal ability she could muster. In summary, L’s hypersensitive

¹ See Journal 3 for these examples that Braunwald located in the data.

² See J2 p.82 #1110 for L’s incomprehensible utterance.

reaction to separation and her mother's reliance on language to help L to cope with her anxiety are a leitmotif throughout the longitudinal data in this collection.

References

Braunwald, S. 1992. No mama bye-bye: A case study of the effects of an abrupt separation on language acquisition. Paper presented at the Fifth World Congress of the World Association of Infant Psychiatry and Allied Disciplines. Chicago, Illinois, September 10, 1992.

Key Words in Journal 1¹ - Developmental Narrative

Key Word	Notes
Affiliation Motivation	L enjoys the baby-games her family invents for her.
Attachment	
Separation Anxiety	L's anxiety in response to even brief separations recurs as a leitmotif in all the data because of a traumatic separation (See p. 8).
Separation Reactions	M knows that L is prone to become upset for experiential reasons.
Transitional Object	L uses a pacifier [<i>lolo/lola</i>], a blanket, and a bottle [bobble/baba] to soothe herself. J's presence in M's absence is a source of security.
Child Rearing Practices	
Communication	
Father-Child	F plays with L.
Mother-Child	M is L's primary caregiver and is therefore able to understand her proto-words.
Sibling-Child	J is an important positive developmental model for L and a source of security in her life. J understands L's protolanguage.
Conversations	
Present Situation	L's system of communication is context-dependent and only functions successfully in the "here and now."
Curiosity About:	
Human Body and Its Functions	L is aware of elimination and excrement (i.e., <i>pee-pee</i> and <i>pooh</i>).
Early Childhood Development	Types of developmental data in J1.
Cognitive Development	L seems to understand the routine events in her life.
Emotional Development	L communicates an emotional inner state "I want" with persistent vocalizations.
Language Development	By her first birthday, L is emotionally and psychologically ready to acquire language. (See Language Development, Developmental Asynchrony, for additional and important information about her failure to do so).
Perceptual Development	L pays attention to auditory and visual stimuli. It is harder to establish a joint focus of attention to auditory stimuli.
Psychosocial Development	L is highly motivated to be a social participant in her family.
Early Experiences	See p. 8 for a potentially traumatic preverbal event involving an abrupt weaning and a month-long separation from her mother.
Experiment in Nature	The disruption of L's attachment to her mother is a chance event with the potential to address the question: Will a toddler talk about a preverbal memory once she can produce the language to do so?
Family Structure	L is an integral part of her family and participates socially and emotionally as best she can with any family member.
Father-Child	L's first word, <i>Dada</i> , is in response to seeing a photograph of F.
Mother-Child	M is L's primary caregiver and is therefore able to understand L's proto-words.
Sibling-Child	J is an important positive developmental model for L. J is a source of security in L's
Imitation	Although L imitates other types of behavior, her ability to imitate words from child-directed input is highly constrained.
Deferred Imitation	L can use a gesture from an act of meaning to initiate it.
Infant Development	8 to 12 months of age.

1. Some of these keywords overlap with the list on language development. Definitions in the notes pertain specifically to the period between 8 and 16 month (J1, and month 1 of J2).

Key Words in Journal 1¹ - Developmental Narrative

Key Word	Notes
Intersubjectivity	L's intentional communication from 8 - 15 months depends on the mutual understanding of a shared event or experience. An advance in affect attunement leads to her family's intersubjective interpretation of L's prelinguistic communication and protolanguage.
Longitudinal Diary Data	Data from 8 to 15 months; prior to natural language.
Memory-Types of Memory	L remembers the sequence of routine events.
Preverbal Memory	See p. 8 for a potentially traumatic preverbal experience in J1 that comes up in J3 as a possible preverbal memory in response to a retrieval cue.
Memory-Retrieval	L remembers routine activities.
Cued Recall	L can anticipate the outcome of a routine if she recognizes a cue at the beginning. (e.g., L stops crying if M says the word <i>cookie</i> and waits expectantly).
Play	L is playful, and the family-cat is a favorite playmate
Sibling	
Solitary	L often babbles while playing alone.
Recognitory Gestures	
Sense of Self	This psychological term refers the process of separation and individuation.
Agency	L is capable of two types of self-action: <i>self-action</i> to reach her goal and <i>cooperative-action</i> in which she indicates a need to reach a goal with another person's help or joins in as a participant in another person's activity.
Motivation and Goals	L communicates a social intention to indicate that she needs help from another person to fulfill her goal. (This early social intentionality differs from later pragmatic intentionality.)
Theory of Mind	L understands that she has to make an intention in her mind known with a gesture or a sound.
Temperament	

1. Some of these keywords overlap with the list on language development. Definitions in the notes pertain specifically to the period between 8 and 16 month (J1, and month 1 of J2).

Introduction to the Supplementary Information¹

Journal 1 spans the period of L's development from 8-to-15 months of age, and these early data are the most child-specific in the 9-volume diary study. Therefore, the annotation of Journal 1 includes rich supplementary information to guide a researcher through them.

1. There is substantial descriptive information that identifies the people, places, objects, caregiving routines and social activities in L's life—facts which a parent-diarist needs to pass on to another researcher
2. There is a systematic record of L's vocabulary development that describes the emergence of her earliest production of phonological forms linked to specific recurrent contexts of use. Braunwald has created detailed summaries of the emergence and evolution of L's child-specific proto-words on her month birthdates so that other researchers can follow the developmental progression in Journal 1.
3. There are brief essays and tables of data scattered throughout Journal 1 that define an interesting commonality among multiple observations of L's emergent development. Braunwald introduced new descriptive terms and their definitions to discuss the quality of L's early vocabulary (e.g., *word fusions*) to refer to her constrained two-word utterances between 13-and-15 months of age (e.g., *linear patterns*) and to describe the increase of the length of the linear strings produced in a single utterance between 15-and-16 months (e.g., *linear alignments*).

The empirical observations of L's transition from prelinguistic communication to a protolanguage in J1 in the broader longitudinal context of Journals 2 through 4 are critical to

¹ Journal 1 was not included in the Braunwald-Max Planck version of L's diary in the American English corpora in CHILDES.

an understanding of the developmental process of her language production during her second year. The annotation of Journal 1 now makes it user-friendly so that its content is comprehensible and available to any future researcher interested in tracing the process of L's longitudinal development of language production from her late infancy onwards.

The Emergence of Self Reference in Journal 1

Laura	Age	J/P
The Emergence of Self Reference in the Context of a Visual Image L used <i>dada</i> in a repetitive context to refer to a reflection of herself.		
<i>dada</i> L first used <i>dada</i> to refer to herself in the context of a reflection.		
(L was standing by M's mirror and looking at herself.) L: Dada, dada. (repeatedly)	1;1.28	1/57 #221
(L saw herself in the Creative Play Things mirror in her crib. She was talking to herself.) L: Dada, dada. (repeatedly)	1;1.30	1/57 #227
An Exception to a Visual Image as a Referent In the control data at L, 1;2.0, there was one exception to the context of a visual image as a referent. This exception involved feeling M's touch and motion. L was being rocked in M's arms.		
(L was being rocked in M's arms.) L: Dada <i>dada</i> = L's awareness of the sensation of touch and motion she felt?	1;2.0	1/59 c.d ¹ .
Visual Image (cont.) (M was changing L's diaper on the floor. L saw herself reflected in M's glasses.) L: Dada.	1;2.13	1/77 c.d.
<i>dada hi</i> (L was looking at her reflection in a TV screen.) L: Dada hi.	1;2.13	1/79 c.d.
Clarification of <i>dada</i> meaning L Once L began to use <i>dada</i> with an unmistakable social intention as a request, there was absolute certainty that she was using it to refer to herself. Her use of <i>dada</i> was a clear encoding of her preverbal intention "I want" + some socially negotiable but unspecified something.		
<i>dada</i> = I want " <i>Dada</i> — definitely used for herself. Says 'Dada, dada' when she wants something."	1;2.16	1/79 #292
<i>dada</i> =I want (L wanted to go into her high chair.) L: Uh, uh, dada. (I want to get up.)	1;2.17	1/85 #294
Identification of Herself with a Word from English, <i>baby</i> L had said "baby" only one previous time two days earlier to refer to an inanimate rubber doll in the pool where she took swimming lessons. Her use of <i>baby</i> in discourse with M was the first time L said "baby" with the feature + animate to refer to an actual baby.		
<i>baby</i> = L (No Context Note) M: Uh-oh who tipped the chair? L: Baby.	1;2.25	1/88 #317
L had used the word <i>baby</i> previously to refer to a rubber doll which her swimming teacher used (1;2.23). This is her first use of the word <i>baby</i> to refer to herself. (SRB 2004)		

¹ c.d. refers to the control data.

Use of an English Word *Me* (?)

Although *me* was a recognizable English word, L's use of it in a context was amorphous and idiosyncratic. M could recognize that *me* expressed a nagging social intention, "I want X", but she was initially uncertain of the referent. Once the identification of the referent was definitely L, M could recognize *me* as whiny expression of the known social intention "I want."

<i>me, me, me</i> — notice that she says this when she wants something. She always says this in a whining voice - last five days. I'm not sure if it is a complaining way of saying 'Mommy' or if it means 'ME!, ME!, ME!' It is still not clear from context of situation."	1;2.27	1/90 #327
<i>me</i> (L wanted M to take her to the edge of a swimming pool where there was a rubber duck.) L: Me guckie. (Does <i>me</i> express the intention I want?)	1;2.29	1/90 #327
<i>me</i> (L had fallen down, and M picked her up. M had put her down afterwards. L was now mad.) L: Me,me Mommy.	1;3.0	1/94 c.d.
<i>me</i> (L wanted M to pick her up.) L: Me, me, me. (L then began pulling M's pants.) L: Me, me, dee	1;3.0	1/94 c.d.
"Couldn't get her to say ' <i>Baby</i> ' today. She would only use ' <i>dada</i> '."		c.d.
<i>baby/dada</i> L used the words <i>baby</i> and <i>dada</i> as interchangeable forms of self-reference.	1;3.0	1/101 v.s. ²
L used <i>dada</i> to refer to herself and was just beginning to use <i>baby</i> (1;2.25). She used <i>me</i> briefly (1;2.27 - 1;3.0), but it was unclear from the context whether L was using <i>me</i> to call attention or to refer to herself. (SRB 2004)		

² v.s. refers to the vocabulary summaries in the handwritten diary.

**NARRATIVE DESCRIPTIONS
OF DEVELOPMENTALLY SIGNIFICANT REFERENTS
IN JOURNAL 1**

Irma:

Irma's name was L's seventh word (0;11.4).

Irma was a housekeeper with the family from mid-September, 1971 through March 31, 1972.

Irma was an educated Latino woman in her early thirties who spoke some English. She worked on weekdays and lived elsewhere. As part of her job, Irma cared for L (0;6.15) three mornings a week while M taught French at a private school.¹ Irma had made plans to leave at the end of M's semester so that she could return to school herself. However, when M was injured, she agreed to continue her job until M recovered. She knew L's daily routine, and, more importantly, L (0;10.3) was accustomed to receiving some of her daily care from Irma.

L said "Irma" from 0;11.4 until 1;1.11 when Irma left the household. Between 0;11.14 and 1;0.18, L always identified Irma and M with two different words, *Irma* and *mama*, but by 1;1.0 (n.d.), L no longer said "mama." She used the word *Irma* to refer to both Irma and M. Although L definitely recognized Irma and M as two different people, she began to use the word *Irma* to refer to either of them, perhaps with a functional meaning related to caregiving (i.e., "the two women who take care of me").²

Irma was not a demonstrative person. But she was intelligent. She read to L and established her own interactive labeling routines with her. L acquired her tenth word, *tree*, during a routine interaction which only occurred with Irma.



L, 0;11.4, and Irma reading on the front lawn³

¹ When M was injured, she resigned from her teaching position.

² Unfortunately, I did not record any information about this usage except in the vocabulary summary at 1;1.0.

³ L's age is not exact but a close approximation.

Peanuts:

Peanuts was the referent of L's first attempts to express two meanings in a single utterance, the word fusion *hikee* and the linear pattern *Hi kee*.

Peanuts was the family's cat from 1968 until his death on March 15, 1974 (L, 3;0.23). Peanuts lived outside in a cozy wicker igloo in a protected spot on the back patio. He was allowed into the house to eat. He ate in a small bathroom adjacent to the kitchen, which the family referred to as the "cat's bathroom." Peanuts entered the house through a large sliding glass door which opened directly from the dining room onto the patio. He went through the dining room and kitchen into the "cat's bathroom." At L, 0;8.14, there was observable evidence that she paid attention to and remembered the cat's daily routine of coming into the house to eat.

Peanuts was visible from inside the house through multiple picture windows and sliding glass doors. L could watch him from the dining room, the living room and her parents' bedroom, and she was free to wander into any one of these rooms. When L was outside on the patio, she liked to observe the cat, to touch him and to chase him. Although Peanuts lived outside on the patio, he was a significant presence in L's daily life. During her late infancy and early toddlerhood, Peanuts was L's feline mentor. Her interest in and experiences with Peanuts played a definite role in L's transition to her earliest use of meaningful words.



Peanuts in his igloo



L 1;2.0 and Peanuts

REFERENCES FOR SOME IDIOSYNCRATIC WORDS FROM L'S PROTO-LANGUAGE



1. *lolo* (pacifier in L's mouth)
2. *dada* (doll in L's lap)
3. *dada* (person with "lolo" and "dada")



tee was L's word for shoe
from 1;1.0 through 1;4.16

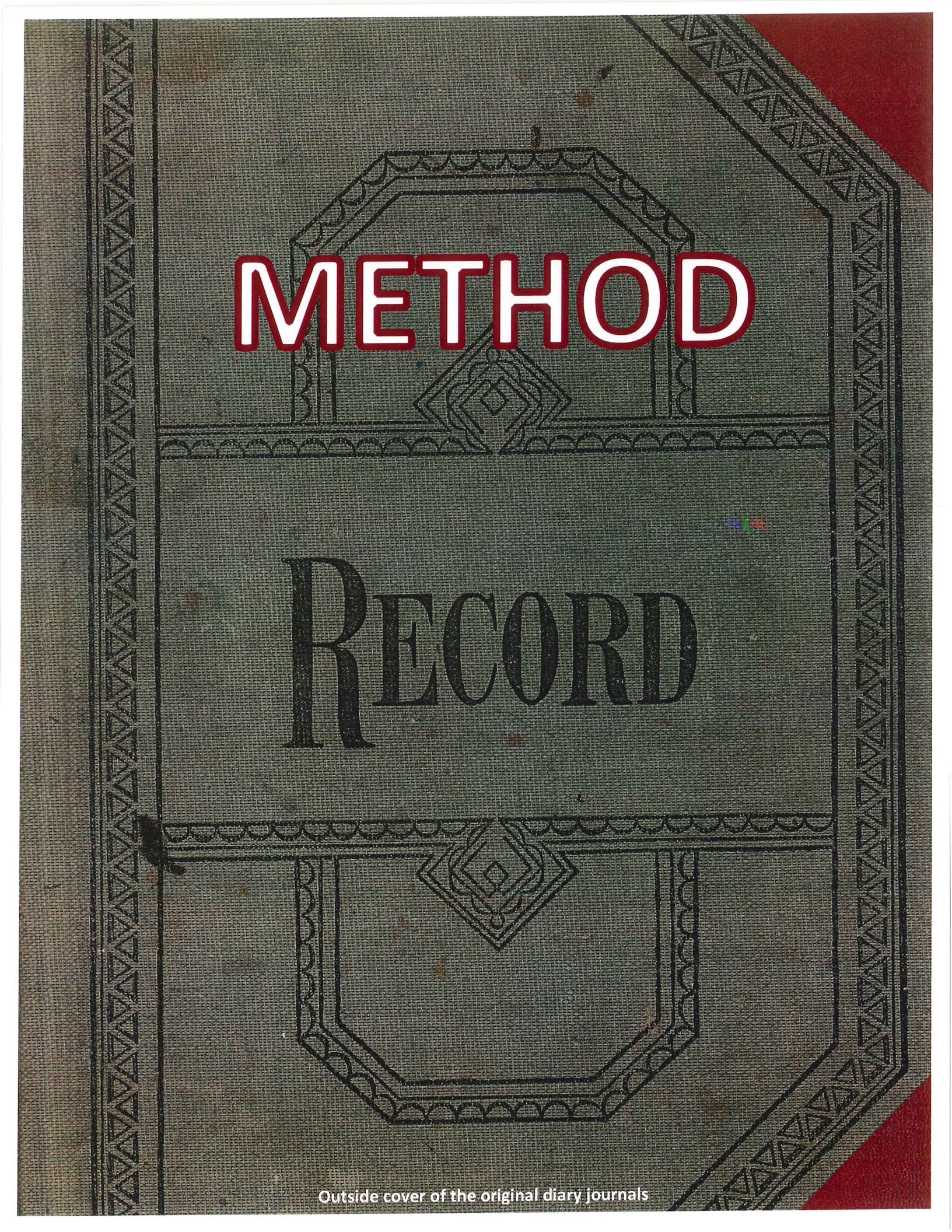
**Z, 1;1.0 →
1;7.19, ride horsie**



L's Child-Specific Words in Alphabetical Order in Journal 1

1

Age	L's proto-word	Referent	Sense	Homophone	Phonetic Approximation	Child Specific
1;0.10	ba	ball		1	1	
1;0.23	ba	banana		1	1	
1;1.11	ba	milk		1		1
1;1.13	ba	juice		1		1
1;3.0	ba		request to ring doorbell	1		1
1;2.9	boo	fork		1		1
1;2.13	boo		peek-a-boo	1	1	
1;2.29	boo	spoon		1	1	
1;1.24	bro	broom			1	
1;0.26	buh	butter			1	
1;1.26	bur	bird			1	
1;0.26	but	button			1	
1;2.20	C	swing?	swinging?	1		1
1;2.29	C		sound of phone ringing	1		1
1;3.0	C		dialing phone	1		1
1;0.25	caca	cracker			1	
0;9.8	dada	F (Daddy)		1	1	
1;1.27	dada	doll		1	1	
1;1.28	dada	L		1		1
1;1.29	dada	pictures of babies		1		
1;2.7	dada		seems to be all people	1		1
1;2.7	dada	M				1
1;2.9	dada	J				1
0;11.4	hi					
	hi		focus of attention for self/other to inanimate	1		1
1;0.18	Hidee		greeting for F	1		1
1;1.0	hi Dee		greeting for F	1		1
1;2.18	hoo		hot		1	
1;1.20	lolo/lola	pacifier				1
1;2.27	me		attention-getting device			
1;2.20	papu	newspaper (paper?)			1	1
1;0.7	tee	tree		1		
1;1.0	tee	shoe		1		1
1;1.0	Z	J's rocking-horse, Shoeby				1



METHOD

RECORD

Outside cover of the original diary journals

TABLE 1

**THE BEGINNING OF THE HANDWRITTEN DIARY DATA IN JOURNAL 1 ON LAURA BRAUNWALD
LATE INFANCY, AGED 0;8.0 – 1;0.0**

<u>Divisions in the Data</u>			<u>Number of Summaries</u>			<u>Number of Individual Entries</u>		
Date	Age	Pages	Date	Age	Total	Date	Age	Total
October 20, 1971	0;8.0	1-8	August 20	0;8.0	4	December 3	0;9.13	7
through	—		November 3	0;8.14		December 15	0;9.25	
December 23, 1971	0;10.3		November 16	0;8.27		December 19	0;9.29	
			November 28	0;9.8		December 20	0;10.0	
						December 21	0;10.1	
						December 22	0;10.2	
						December 23	0;10.3	
There are no diary notes from December 24, 1971, L, 0;10.4 — January 23, 1972, L, 0;11.3 ¹								
January 24, 1972	0;11.4	8-19	January 24	0;11.4	3	January 25	0;11.5	15
through	—		February 7	0;11.18		January 26	0;11.6	
February 20, 1972	1;0.0		February 20	1;0.0		January 27	0;11.7	
						January 28	0;11.8	
						January 30	0;11.10	
						January 31	0;11.11	
						February 1	0;11.12	
						February 3	0;11.14	
						February 7	0;11.18	
						February 9	0;11.20	
						February 10	0;11.21	
						February 13	0;11.24	
						February 14	0;11.25	
						February 15	0;11.26	
						February 17	0;11.28	
TOTALS					7	22		

¹ M, who was injured in an accident, was in the hospital from December 24, 1971 through January 22, 1972.

TABLE 2

**JOURNAL 1: THE BEGINNING OF THE HANDWRITTEN DAILY DIARY ENTRIES ON LAURA BRAUNWALD
EARLY TODDLERHOOD, AGED 1;0.1 – 1;3.0**

<u>Journal Duration</u>		<u>Journal Divisions</u>			<u>Summation of Daily Entries</u>				
Date	Age	Date	Age	Pages	No Note for Date	Total	Entries	Ratio ¹	Percent
February 21, 1972 through May 20, 1972	1;0.1 — 1;3.0	February 21 – March 20	1;0.1 – 1;1.0	20-38	2/21, 2/26, 3/8, 3/15, 3/18, 3/19	6	23	23/29 ²	79% (.793)
		March 21 – April 20	1;1.1 – 1;2.0	39-70	3/25, 3/28, 3/30	3	28	28/31	90% (.903)
		April 21 – May 20	1;2.1 – 1;3.0	71-104	4/21, 4/22, 4/23, 5/1, 5/5, 5/14	6	24	24/30	80% (.8)
		3 Months		85		15	75	75/90	83% (.833)

¹ The ratio represents the number of daily entries per the number of days possible in the month.

² There were 29 days in February 1972 since it was a leap year.

TABLE 3
THE CONTENT OF THE DATA IN THE DAILY DIARY ENTRIES
DURING EARLY TODDLERHOOD, L, AGED 1;0.1 – 1;3.0

<u>Journal Divisions</u>			<u>Content</u>
Date	Age	Pages	
February 21 – March 20	1;0.1 – 1;1.0	20-38	Baby games are acts of meaning. Monosyllabic or reduplicated syllables become the word fusions <i>hikee</i> and <i>hidee</i> . Error data show lack of functional knowledge of words. Word fusions used briefly and discontinued.
March 21 – April 20	1;1.1 – 1;2.0	39-70	Linear patterns, <i>hi kee</i> and <i>hi dee</i> replace earlier word fusions. Linear patterns occur with <i>hi</i> , <i>oh</i> , <i>uh-oh</i> , and <i>off</i> . Linear patterns are constrained, fixed alignments of a baby-talk word and a syllable to identify a referent.
April 21 – May 20	1;2.1 – 1;3.0	71-104	Continuation of linear patterns with <i>hi</i> , <i>uh-oh</i> , <i>off</i> , <i>down</i> , and <i>up</i> . At 1;3.0, L communicated with a constrained, child-specific system that only her family understood.
3 Months		85	

THE BIWEEKLY, HAND-RECORDED CONTROL DATA IN JOURNAL ONE

Continuous Sample

March 20, 1972

L, 1;1.0,

45 minute continuous sample of all L's verbalizations,

from 7:00 to 7:45 a.m.,

diary pp. 33-36.

Comprehensible Speech

April 3, 1972

L, 1;1.14,

an approximately 6 hour sample of L's comprehensible speech from 6:30 a.m. to 10:30

a.m., 11:00 a.m. to 12:00 p.m., and 2:50 p.m. to 4:05 p.m.,

diary pp. 42-49.

Continuous Sample

April 20, 1972

L, 1;2.0

an approximately 1 hour and 45 minutes continuous sample of all

of L's verbalizations from 5:25 a.m. to 6:50 a.m.,

diary pp. 59-64.

Comprehensible Data

May 3, 1972

L, 1;2.13

an approximately 4 hours and 15 minutes sample of L's comprehensible speech from

7:45 a.m. to 10 a.m. and 10:45 a.m. to 12: 35 p.m. (notes of interest only from 4 p.m. to 5:40 p.m.),

diary pp. 81-90.

Continuous Sample

May 20, 1972

L, 1;3.0

an approximately 30 minute sample of all of L's speech from 7:35 a.m. to 8:00 a.m.,

diary pp. 92-95.

JOURNAL 1
LAURA BRAUNWALD
0;8.0 – 1;0.0
October 20, 1971 – February 20, 1972

**PERIODIC DESCRIPTIONS OF THE PROBABLE PRELINGUISTIC PRECURSORS TO THE
ONSET OF LANGUAGE, PP. 1-19**

1. From 0;8.0 until 0;10.2, the entries were primarily summaries.
2. The frequency of individual specific entries began to increase at L, 0;9.0.
3. L and her mother were unexpectedly separated at L, aged 0;10.3 to 0;11.2. Hence, there were no entries between L, aged 0;10.4 – 0;11.3.
4. At 0;11.2, L and her mother were reunited. M resumed the diary after two days of observation at L, 0;11.4.
5. From L, 0;11.4 – 1;0.0, the entries became more frequent as a function of the increase in L's identifiable language-related behavior.

THE DIARIST'S INTRODUCTION TO THE PERIOD OF LATE INFANCY

In the year 1971-72, there was neither a theoretical rationale for identifying prelinguistic precursors to language development nor a methodological guideline for recording them. Thus, M did not begin L's diary during infancy with the intention of substantiating an a priori hypothesis about the existence and developmental significance of the prelinguistic precursors to language acquisition. She made the decision to begin L's diary during her infancy for a methodological reason. M wanted to understand why the two-word combinations in her diary data on J could coexist empirically with a pivot grammar but differ from it structurally. This contradiction raised a logical conundrum if a pivot grammar was a universal beginning of language acquisition. One obvious solution was to investigate the possibility that the process of language acquisition began prior to the development of two-word combinations.

M began L's diary during her infancy because the absence of language was an empirical certainty. She did not want to miss pinpointing the occurrence of an earlier onset to language acquisition if, indeed, there was one. Given both the limited information on child language available in 1971 and the lacuna in her formal education in child development, she expected that she would observe an unmistakable onset to language. M assumed that she would recognize a discrete developmental milestone that functioned as a harbinger to language acquisition in much the same way that first steps announced the onset of walking.

Method

In 1971 there were no methodological guidelines for observing and recording the developmental transition from nonverbal communication to the onset of language. Therefore, M had to rely on her personal knowledge and experience to intuit a methodology. Given her prior trial-and-error experience with J's diary and her common sense as the parent of a second child, she used one simple criterion for entering an observation. M tried to identify examples of emergent behavior that struck her as plausible developmental antecedents to language.

At the beginning of L's ninth month, M noticed the first examples of nonverbal emergent behavior that struck her as a reasonable beginning of a diary in which her goal was to record a naturalistic longitudinal description of language development from its inception. Basically, she focused on a cluster of emergent advances that were related to L's social and communicative behavior. M recorded her observations of the occurrence and progression of L's emergent behaviors including a) her novel expressions of sociability, b) her unmistakable attempts to communicate social intentionality, c) her first overt indications of language comprehension, and d) her interest in repeating, learning and sporadically using a word.¹

The format of the diary entries evolved as a developmental function of the clarity and frequency of L's emergent behavior. Initially, it often required multiple observations to determine whether L's emergent behavior was an intentional act. Therefore, M entered the notes for L between the ages of 0;8.0 and 0;9.29 as periodic developmental summaries of emergent behaviors that were clearly intentional. She was just starting to keep brief daily notes which described the emergence of L's second word *bye-bye* (0;9.29 to 0;10.1) when she and L were abruptly separated for a month.² Once L, 0;11.2, and M were reunited, she observed L's progress for two days before resuming the diary. She recorded 15 daily entries during the next 27 days. At L, 1;0.1, M began to keep a daily diary record.

¹ M did not consciously perceive this cluster in 1971-72. Between 1999 and 2004, M combed through Journal 1 multiple times. In the process of doing so, she gradually realized how important her sparse but early observations were and that she could group the data into developmental categories.

² M was injured in an accident and in the hospital. during L's eleventh month (L, 0;10.4 to 0;11.2.).

Summary at 0; 8.0 October 20, 1971Oct. 20 8 MONTHS
0; 8.0

① Babbling

A) She is not making odd or random sounds. She "says" in order of apparent frequency.

1) "Dada da da" 5) "Guh, guh, guh gee ah"

2) "Baba ba ba" 6) "Nini ni"

3) "Mama ma ma"

4) "Na na na"

B) She also combines these ^{"babbling syllables"} ~~these~~ (variegated babbling)

C) She continues to say "E-e-e" for "I want."

D) I still hear "Boit" [aia] occasionally as well as "Ang" - an unhappy sound

② Comprehension

A) Still no incued single demonstrable response to a spoken language.

B) On one occasion, she came to me when I said "Come on hang, come to mama." She crawled from the hallway into the bathroom where I was.

③ Games

A) Peek-a-boo — She now pulls my hand over her eyes and then away again when she is ready for me.

October 8 Summary cont.

Jk-2

O, 8, 0 cont.

to say "Peek-a-boo."

B) "Chip, chip, chip, chip"

Her father said this one evening,
and she started to laugh. She adores
this sound and will start to laugh
even if she is in the midst of crying.

④ "Mama"

A) Impossible to prove that she associates
me with the word, but she does yell:

"Mama, mama" in situations of distress.

B) She was sick all this week. She stood
up in the crib and yelled "Mama, mama
mama" until I came. She did this
repeatedly.

C) Early in the morning she also stands
in the crib and yells and now and
then the cries are broken with a call of
"Mama, mama."

D) She does not say "Mama" when she
sees me return after a few hours
away or when I re-enter a
room after a few minutes away.

⑤ "Dada"

A) A happy sound. She says this (cont.)

October 8 Summary cont.

J1-3

O; 8.0 cont.

(cont.)

When she is content.

B) No proof yet that "Dada" = daddy.

- ⑥ Her smiles and delight at seeing us indicate that she clearly recognizes me, Jack, Joannq, and housekeeper, Gina.

Nov 3 8 1/2 MONTHS

Comprehension of a Word

O; 8.14

COMPREHENSION

- ⑦ First demonstrable comprehension
kitty-cat

A) She sits in her high chair in the morning, and when we say "kitty-cat" she turns around and looks down to watch the cat come in for his breakfast. The last two mornings she clearly did this in response to the word kitty-cat. To check that the word was the cue, we said "kitty-cat" when the cat was not at the door. She turned around in her chair + looked down all the same.

Summary at 0;8.27 November 16, 1971Nov 16 - 4 days under nine Months0;8.27⑧ IMITATION

A) First clear cut proof of imitation = she clicks her tongue against the roof of her mouth "cluck cluck sound" in imitation of us.

We click then wait for her + then repeat the process.

- ⑨ She is attentive to my labeling.
 For example I say "Cheese, cheese, cheese" as I hand her a piece of cheese or "Joanna, Joanna" as she pats her sister, and she is clearly listening.
 [I can tell by look of concentration on her face.]

FIRST TOOTH IS JUST BREAKING THROUGH

- ⑩ Vocalizations are more diversified than previously recorded,
 Not just consonant + /a/.
 ⑪ Continues to respond to word kitty-cat. No matter where we are,

(cont.)

November 16 Summary cont.

JI-5

0.8.27 cont.

(cont.)

If we say this word, she stops what she is doing and looks around.

(12) Waves - Sometimes but not always

WAVES

She opens and shuts one hand when we say "Bye-bye" to her as when the family waves good-bye to daddy in the morning.

A) First noticed this about 2 weeks ago

It is now apparent that this is an

intentional rather than accidental gesture

Summary at 0.9.8 November 28, 1971

Nov 28
0.9.8

Nine months 8 days - [2 partly grown teeth on the bottom.]

WAVES

(13)

overgeneralization
of a gesture

A) Definitely waves to the word bye.

B) She also waves when she wants to get down from the high chair.

C) She is delighted with this trick of waving. We play a game in the mirror. I say "Bye-bye baby" as I am ready to step away and she waves to herself.

COMPREHENSION

(14)

A) "Sit down, Laura."

I say this to her when she stands up in the bath, and she sits down.

I do not touch her or indicate in any physical way that she is to sit down.
(cont.)

(cont.)

B) Cookie — She understands this word and will stop crying. I say "Cookie, cookie" and go into the kitchen and get her one. She is in the dining room.
November 28 Summary cont.

0; 9.8 cont.

WORD
LEARNING

(15) dada = seems to know that her father is "dada," although she uses "dada" at many times when he is not there.

(*) Today she saw a photograph of him on the wall and said with great excitement "Ah dada, dada."

(*) First
Unmistakeable
word = dada
SRB 2004

(16) mum, mum = Holds on to my knees and says "Mum, mum, mum." She wants me to hold her or to nurse her.

(17) Ma = If I say to her "Milk, Laura, milk" she will say "Ma." I then go and get her a cup of milk. She does not always respond "Ma," but this is frequent and consistent. She seems to understand the word milk.

(18) Boit = still makes this sound. It is a happy noise.

Subjective Impression at 0; 9.8

(19) General subjective impression = She is much more aware of the people in her environment. She is responsive to them within her capabilities to communicate. She smiles at

(cont.)

November 28 Subjective Impression cont.O, 9.8 cont.

(cont.)
 no, laughs at our games, waves, "Sings"
 (Sings = If we start to sing "Baba black sheep"
 she starts to "sing" with us. She will stop
 crying and begin to laugh and "sing" once we
 begin.), adores pat-a-cake (she will take
 my hands to make me repeat it a second
 time.)

DEC. 3O, 9.13
COMPREHENSION

(20) In bath - I said "It's time to get out, Laura."
 "Laura, time to get out." She crawled
 to side of tub + stood up.

DEC. 15 5 days under 10 MONTHSO, 9.25

(21) "Baba"

She will repeat the sound "Baba."

(22) Game - "Hip, Hip, Hooray"

We say this and clap our hands.

If we say it without clapping,
 she still brings her hands together.

COMPREHENSION (23) "Go find Joanna"

She will crawl into Joanna's room
 if we say this.

DEC. 19O, 9.29WORD
LEARNING

(24) "Bye"

I waved, she said "Bye." She did
 this twice.

(STOOD ALONE)
TODAY

*** = EXPERIMENT IN NATURE = SRB 2013**

Boxes = SRB 2013

Jl-8

DEC. 20

10 months
0.10.0

- (25) "Bye" — She again said "Bye." I waved and said "Bye." She waved and said "Bye" in return.

DEC. 21

10 months 1 day
0.10.1

- (26) "Bye" — Said "Bye" as she waved to her father. We were all saying "Bye-bye dada" and waving to him.

DEC. 22

10 months 2 days
0.10.2

- (27) Clapped hands together until I started playing pat-a-cake with her.

DEC 23, 1971

10. 3 days
0.10.3

- (28) Said "O" as predominant sound today, e.g., Sat at high chair, lips very rounded and kept saying "O."

IN HOSPITAL UNTIL JAN 22, 1972

• NO NOTES. NOTES RECOMMENCE AFTER 2

DAYS OBSERVATION

General Observations

January 24, 1972 0.11.4

***** Summary of Observations at 0.11.4
January 24 1972

- (29) Laura definitely remembers me in spite of the long absence.

A) She hugged me immediately and is very affectionate

Linguistic Status

- (30) Has "forgotten" the word bye, although (cont.)

1972

January 24 Summary of Observations cont.

91-9

0, 11, 4 cont.

(cont.)

she waves,

③① Comprehension

She seems to comprehend more.

A) "Get your pacifier." — She bends down and picks it up.

B) "Stand up Laura." — She stands up

C) Telephone — She uses both a toy telephone and a real one correctly. She holds the receiver to her ear says "Hi" and then babbles. She "spoke" to me on the phone many times while I was away. This may explain her just imitation of using the phone. The phone is a favorite toy.

③② hi — Says this on phone. Also in response to our "Hi" when we greet her. (She smiles and looks up if we say "Hi.")

③③ "O" — says this sound in her high chair when she wants our attention. She says "O," "ö," "o." The family responds in kind.

0;11.4 cont.

NOTE = I am recording noteworthy "speech events" for each day. She verbalizes a great deal but much of it is a growling noise or unrecordable sounds.

J1-10

(34) uh-oh! — Will sometimes imitate us if we say This.

(35) dada — definitely identifies her father as "Dada."

(36) Still claps hands together for pat-a-cake. She will take my hands and clap them.

(37) dat — Says in her high chair when she wants something on the table.

Jan. 25

0;11.5

(38)

Jan. 26

0;11.6

(39)

(40)

(41)

(42)

(43)

(44)

(45)

(46)

(47)

(48)

(49)

(50)

(51)

(52)

(53)

(54)

(55)

(56)

(57)

(58)

(59)

(60)

Repetition of "o" and of "hi." / Much vocalizing. It is unrecordable and includes growling noise.

hi - difficult to elicit.

Sat in a box saying "Ba ba ba ba."

Makes sounds in response to us but they are impossible to record them.

"k" = after we said "Cat," she said "k." Did This 3 times

"o" remains same.

"Uh-oh" — said as her doll fell out of the stroller.

"o, o, o," — said as she heard a dog bark. Happened twice. Will watch to see if this continues.

* "but it is impossible to record them." SRB 2001

(Correction of a grammatical error. SRB 2004)

0.11.7 cont.

Jan. 27 cont.

(45) lots of verbalizing.

Jan 28th
0.11.8
3rd
TOOTH IN

(46) She is standing and holding Joanna's lunch box — which she likes — and is shouting "Baba baba."

(47) She is holding a Familia cereal box with a photo of a baby on it and saying "Da, da dada."

(48) Continues to put receiver of toy phone to her ear and to "talk."

(49) Very verbally active in response to a nine-month-old friend. Much crowing on the part of both babies.

(50) Game — Non verbal

She has a large blue transparent plastic glass. She spits the pacifier into it and then tilts the glass until the pacifier falls into her mouth.

JAN 29th No Note

JAN 30th
0.11.10

(51) It is apparent that we are reinforcing certain sounds. For example, she makes a sound "hi" in an appropriate situation — e.g., crawled up to me on the floor or while holding phone receiver — and we (cont.)

J1-12

0; 11.10 cont.

Jan 30 cont.

(cont.)

become excited and say "Hi," "Hi."

- (52) Initiates pat-a-cake whenever she is in the mood for it by clapping her hands together and "rolling" them until someone plays with her. Also, she takes my hands and claps them together. This initiation differs from past situation in which she would signal her desire to have the game, which we initiated, repeated by clapping her hands.

See p. 7 #19 for first mention that L uses M's hands in relation to pat-a-cake game as a means of expressing an intention
SRB 2004

- (53) Mama She was in the bathroom on the 26th

I yelled something to my husband, she in response to the sound of my voice started saying "Mama," "Mama."

Jan 31 '720; 11.11First use of dada to identify Jack

p. 10 #35
SRB 2002

- (54) which I noticed since note of Jan. 24,

He picked her up, and she said "Dada" then paused, smiled while he kissed her, and said "Dada" again.

- (55) Still only waves without saying

"Bye." — Wave continues as a signal

That she wants to be let down from (cont.)

11-13

0.11.11 cont.

Jan 31 cont.

(cont.)

The high chair.

- (56) "O" "O" "O" has been transformed into a noise meaning "I want," She does this at meals until we figure out what she wants from the table.

Feb 1 12
0.11.12

(57) cheese—

Question with
want facilitates
L's acquisition
of a word.
SRB 2003

She understands this word and tries to say it. She was very hungry this morning, { I DISCOURSE said "Cheese, do you want some cheese?" } She stopped crying and said [ʃ] "Ch, ch." We then reinforced her by saying "Cheese, cheese." }

Feb. 2 '12 No Note

Feb. 3 '12
0.11.14

- (58) Irma said "Irma" to Irma (housekeeper) as she was making the bed—early in morning. She repeated it later in the day. At lunch time, she said "Irma" as Irma entered the room.

- (59) Mama—says this to me quite often the last two days. (e.g., will crawl up to where I'm lying in bed or spot me through the window and say "Mama.")

0.11.14 cont.Feb. 3 cont.

- (60) Says "Hi" when she enters a room
or when someone approaches her.
Very reinforced.

- (61) Pat-a-cake - demands This uncountable times
a day. (WALKED)

Feb 7'7203.11.18

- (62) bow-wow or bow-woowoo (*)

She first made this noise
yesterday while sitting by an open
door. A dog was barking. (We
have been labeling dogs and
also barking as "Bow-wow")

Semantic Mismatch
The correct referent
was unknown. L's
use of the word
was over inclusive
until she learned
to identify the
referent and to
integrate her
auditory and visual
perception of a
dog. SRB 2004

Today each time that she heard
a dog bark, an airplane overhead
or a car motor warming up or idling
she said "Bow-wow."

- (63) hi is firmly established.
(64) mama is firmly established.
(65) She is getting an enormous amount
of reinforcement of any vaguely
recognizable sound.

- (66) dat

Says This when she picks
up items. (e.g., picked up (cont.)

established = consistent habit. Clearly not accidental.

8. 11. 18 cont

Feb 7 cont.

(cont.)

a shoe and said "Dat, dat."
I Then respond "That's a shoe." etc.)
This is repeated many times each day.

(67) ma [long A sound] also um ma —

See Note
Nov. 28

P. 6 #17
SRB 2002

Says This when she wants a cup of milk. This is established. The milk does not have to be visible. (e.g., at lunch today she was eating a peanut butter sandwich. There was no milk or glass to serve as a cue, and she asked "Ma", ..., "Ma", ..., "Ma" until I brought her cup of milk.)

See Note
Jan 31

P. 13 #56
SRB 2001

(68) "O, O, O, O" continues. **

(69) cookie - definitely understands

The word. Stops fussing and waits expectantly.

FEB 9 '72 bow - woo woo
0. 11. 20

(70) Said "Bow-wow" to our neighbor's dog after we said "Look, Laura, bow-wow."
Said "Bow-wow" to a passing car. ***
Still consistent to note of Feb 7.

Semantic Mismatch
L's visual identification of the referent included dogs and cars, see P. 14 # 62 for her over inclusive auditory representation.
SRB 2004

I am entering re-occurrences until a habit becomes clearly established

Feb 9 cont.

0, 11, 20 cont.

Feb 10 (71) um ma — still consistent to note of Feb. 7.

0, 11, 21

"Dada" "Daddy"

(72) A) Said this as she grabbed at a picture of Jack.

(73) "Bow-wow"

A) Said as she picked up an orange stuffed animal dog.

(74) "Irma"

clearly said as she crawled toward Irma.
(on the sidewalk outside.)

Feb 13

0, 11, 24

(75) hi *

A) Definitely means "hi." My father and brother came to visit. Laura sat across from them and said "Hi," "Hi" until they stopped their conversation and said "Hi" back.

B) Jack returned from the hospital. She greeted him with "Hi da" *

(76) bow-wow

A) Saw the neighbor's dog on our lawn where she was playing. She said "Bow-wow."

B) Still consistent to note of Feb. 7.

* hi
The meaning of hi included L's expectation of reciprocity as an emergent addition to her understanding of its interpersonal function
SRB 2004

* "Hi da"
Fluke attempt to make a two-syllable linear pattern, SRB 2003

O. 11. 24 cont.

Feb 13 cont.

(77) PAT-A-CAKE

I handed her a pancake and said "Here's a pancake, Laura." She began to clap her hands as she does for pat-a-cake. Later in the day, I said to her "Pancake." She did not clap.

Feb. 14

O. 11. 25

(78) bow-wow / hi

- A) Says both of these all day long. No one can pass by without receiving a "Hi."
 B) "Bow-wow"—to tap in a store, to the passing cars on a car ride.

(79) "Uh-oh"

Climbed in a box and dropped a toy out said "Uh-oh," Then retrieved the toy, and repeated the sequence.

Feb 15 (80) "Uh-oh"

O. 11. 26

Dropped her cup from the high chair & said.

(81) "Da-dy" (long a)

Said to Jack as he entered room reading paper. Followed by "Hi" until he answered back.

(82) "Not for Laura." — I say this when I don't want her to touch. She then waves good-bye.

Feb. 15 cont.0.11.26 cont.

(83) "Ba, ba" — I said "Ball, ball;" she repeated
"Ba, ba."

(84) "Want a cracker?" * — She took my hand
and led me to The kitchen cupboard
where we keep The crackers.

* Understands
the word want
SRB 2004

(85) "Na na na" — she has been crawling
around saying "Na, na, na." It doesn't
seem to mean anything.

(86) dat ** — points her finger to an unknown
object and says "Dat" "Dat."

** Intonation
pattern was
not noted.
Dat might have
been a question
SRB 2004

(87) hi — Babysitter's friend came over. She persistently
said "Hi" "Hi" to him and smiled in delight
when he answered. This became a game.

Feb 16 No NoteFeb 17 0.11.28

Pat-a-cake

(88) Tried saying "Pancake" instead of
"pat-a-cake" again. She makes no distinction.

(89) bow-wow = car to her. Sits in car seat

A) and says "Bow-wow" to passing cars.

B) (Still consistent to previous notes — orange toy
dog as ^{well as} real dogs + barking = bow-wow)

(90) hi

** Tried to get her to imitate my saying

"Hi bow-wow." She didn't and would (cont.)

*** I was unable to
imitate "Hi bow-
wow" from a
model. She only
repeated "Bow-
wow." SRB 2003

O. 11.28 cont.

Feb. 17 cont.

Only repeat the "bow-wow." (*)

Vocabulary Summary at 1.1.0 February 20, 1972FEB 20 1972 - ONE YEAR - LAURA'S

VOCAB.

1. dada — to her father2. hi — to everyone. She loves to say "Hi" and will do so until she gets an answer. (*)* Definitely a greeting in which I expected a reciprocal response.
SRB 20043. bow-wow — to dogs, to cars, to any outside noise including dog's barking, airplanes, cars, birds' singing. She knows that she gets a response to this word.4. um ma — milk5. mama — to me sometimes6. Irma — very rarely says this to Irma
The housekeeper7. uh-oh — Sometimes when she drops something.8. dat — Sometimes when she picks up an item which she wants labeled.9. bye-bye (xx)Points to things also when asked "Where's?"
(copied exactly SRB 2004)* Left out
in 1972 -
added in
data analysis
in 1976.
SRB 2003

THE EMERGENCE OF SOCIAL INTENTIONALITY

“I Want”

From approximately the beginning of her eighth month, L started to use a consistent sound, “eh, eh, eh” as a cross-contextual indication that she wanted or needed another person to act on her behalf. Her consistent use of “eh, eh, eh,” was the first indication that L was about to make a momentous interpersonal discovery. Basically, L was about to develop nonverbal social intentionality. In the course of developing nonverbal social intentionality, L figured out that she possessed the personal power to purposefully cause another human being to perform an action at her behest. From her eighth month until her first year, L was engaged in the developmental process of increasingly pushing the expression of nonverbal social intentionality to the limits of its efficacy as a form of communication.



L, 0;9.15, and J, 3;6.15, after a Spaghetti Dinner¹

Mealtimes prompted L to express the amorphous social intention “I want” to request a specific and unidentified item from the table. L’s family resorted to a process of trial-and-error to identify her referent. It was usually but not always possible to interact with L and to locate the specific item she desired.

¹ L’s and J’s ages are a close approximation but not exact.

LATE INFANCY: THE NONVERBAL PRELUDE TO LANGUAGE

From birth onward, L functioned as a participant in an interpersonal space—initially with her mother but by three months of age with her father and sister as well. Throughout her infancy, L's ability to make a contribution to a shared interpersonal trajectory became progressively more advanced. During her late infancy, she gradually developed the ability to express a social intention and to influence the outcome of an interpersonal exchange so that it resulted in the satisfaction of her personal wish. The gradual emergence of L's ability to communicate social intentionality and thereby to purposefully influence the action of another person to fulfill her personal intention signaled a developmental sea change in her interpersonal relations. It altered the quality of her affective and social participation as a member of her family and functioned as a powerful impetus to a slow transition from her prelinguistic communication during late infancy to a child-specific protolanguage during early toddlerhood.

THE INSUFFICIENCY OF NON-VERBAL COMMUNICATION

L'S FIRST BIRTHDAY, 1;0.0



Intention = "I want."
Need for language = "Give me cake."



Intention = "I want" interrupted.
Need for language = "No Jo"

J substituted her intention for L's.
Need for language = "Mad, frustrated."



**THE PRELINGUISTIC FOUNDATION OF EARLY VOCABULARY DEVELOPMENT
FOR L FROM THE AGE OF 0;09.08 THROUGH 1;0.00**

1. **0;9.8 *dada*** = L's father in person (L seemed to use *dada* to refer to F, although she babbled "Dada" at times when F was not present.) > 0;9.8 *dada* = clear recognition of F in a photo (L said "Ah, dada, dada" with great excitement when she saw a photograph of F on a wall.) > 0;11.8 *dada* = baby (?) (L said "Da, da, dada" while she was holding a cereal box with a picture of a baby on it.)¹ > 0;11.11 *dada* = definitely refers to F in person (L said "Dada" when F picked her up; smiled when F kissed her and again said "Dada.") > 0;11.21 *dada* = daddy (L said "Dada, daddy" as she grabbed a picture of F.)

2. **0; 9.29 *bye/bye-bye*** = an association with M's gesture of waving (When M waved L said "Bye.") > 0;10.0 *bye* = a reciprocal response to M's gesture and use of the word *bye* (M waved and said "Bye." L waved and said "Bye" in return.) > 0;10.1 *bye* + *waving* = a social routine marking F's departure (M and J were waving and saying "Bye-bye dada" when L joined in and said "Bye" as she waved.) > 0;11.4 *bye* = L discontinued the use of the word *bye*, although she continued to wave in a social routine marking departure.^{2, 3} > 1;5.20 *bye-bye* = good night (L: Bye-bye Dee-dee. Bye-bye Daddy "[Both mean good night.] [L] ran to the patio door and said this [bye-bye] to J and F and then ran to her crib.)

There are no diary notes for L from the age of 0;10.4 to 0;11.4.

(M, who was injured in an accident, was in the hospital during that month.)

3. **0;11.4 *hi*** = a conventional social response to a greeting (L said "Hi" in response to being greeted.) > 0;11.4 *hi* = a conventional routine in a telephone conversation (L said "Hi" followed by babbling on both a real and a toy telephone.)⁴ > 0;11.16 *hi* = a social greeting to people (L said "Hi" as she entered a room and also when someone approached her.) > 0;11.24 *hi* = a social routine involving L's expectation of a reciprocal greeting (L persistently said "Hi" to M's father and brother until they stopped their conversation and said "Hi" back to her.) > 0;11.25 *hi* = a frequently used greeting (L said "Hi" all day long to anyone who passed by her.)

¹ The first unambiguous example of *dada* with "baby" as its referent was noted for L at 1;1.28.

² I hypothesize that L discontinued the use of the word *bye* because she associated it with the sudden month-long separation from M that began just four days after she began to use *bye* in a social routine marking departure.

³ At 0;9.8, prior to the acquisition of the word *bye*, L extended the gesture of waving to indicate that she wanted to get out of her high chair. She continued to wave in this context after her separation from M.

⁴ I hypothesize that L used *hi* on the telephone because she and M remained in telephone-contact during their separation.

4. **0;11.4 *dat*** (possibly the word *that*) = a request for food from the table (L said “Dat” when she was in her high chair and wanted food from the table.) > 0;11.18 *dat* = the proximal initiation of a labeling routine (L said “Dat” many times a day when she picked up an item which M then identified.) > 0;11.26 *dat* = the distal initiation of a labeling routine (L said “Dat” as she pointed her finger to unknown objects.)
5. **0;11.7 *uh-oh*** = notice of accidental dropping (L said “Uh-oh” as a doll fell out of her stroller.) > 0;11.24 *uh-oh* = part of an intentional game involving dropping (L said “Uh-oh” twice when she climbed into a box, dropped a toy out of the box, and then retrieved the toy.) > 0;11.25 *uh-oh* = a marker of L’s intentional action of dropping (?) (L said “Uh-oh” as she dropped her cup from her high chair.)⁵ > 1;5.11 *uh-oh* = an unusual/unexpected object (L: Uh-oh. [L] “saw a pile of shingles on the [back] deck.”) > 1;5.13 (L: Mama, uh-oh [babble]. M: What? L: Uh-oh [handing M a nail]. “[L] found a nail on the back deck and gave it to [M]. She doesn’t know this word.”)
6. **0;11.10 *mama*** = the recognition of the sound of M’s voice (L said “Mama” in response to the sound of M’s voice yelling to F in another room.) > 0;11.14 *mama* = visual identification of M (In the last two days, L frequently identified M as *mama*, e.g., L said “Mama” when she crawled to M’s bedside or noticed M in bed through a window.)⁶
7. **0;11.14 *Irma*** = name of the housekeeper who cared for L during M’s hospitalization and recuperation (Early in the morning L said “Irma” as she watched Irma making M’s bed and at lunchtime as Irma entered the room.)⁷
8. **0;11.17 *bow-wow*** = the sound of barking audible from outside (L said “Bow-wow” while she was sitting by an open door.) > 0;11.17 *bow-wow* = the sound of barking, of an airplane overhead, or of a car motor idling or warming up (L said “Bow-wow” today each time she heard any one of these sounds.) > 0;11.21 *bow-wow* = an imitation of the correct narrowed referent, the sight of the neighbor’s dog, Serena⁸ (L said “Bow-wow” after the parental prompt “Look, Laura, bow-wow.”) > 0;11.21 *bow-wow* = the sight of a car (L said “Bow-wow” to a passing car.) > 0;11.22 *bow-wow* = toy dog (L said “Bow-wow” as she picked up an orange stuffed-animal dog.) > 0;11.24 *bow-wow* = spontaneous identification of the neighbor’s dog, Serena (L, who was playing on the front lawn, saw Serena on

⁵ Note the limited scope of L’s early use of *uh-oh* as an intentional action. to refer to her own action of dropping an object.

⁶ M was still spending time in bed recuperating from surgery. When L played on the patio she could see M through a large picture window.

⁷ See Referents for Journal 1 for a narrative description of the relationship between Irma and L.

⁸ See Referents for Journal 1 for additional information about Serena and as a referent of *bow-wow*.”

orange stuffed-animal dog.) > 0;11.24 *bow-wow* = spontaneous identification of the neighbor's dog, Serena (L, who was playing on the front lawn, saw Serena on our lawn and said "Bow-wow.") > 0;11.25 *bow-wow* = toys in a store (no context note) > 0;11.25 *bow-wow* = the sight of passing cars (L was riding in the car and said "Bow-wow" to the passing cars.) > 0;11.27 *bow-wow* = L's habitual word for car (When L sat in her car seat and saw passing cars she would say "Bow-wow.") > 0;11.27 *bow-wow* = L's word for the SIGHT OF dogs, her orange stuffed-animal dog, and cars > 0;11.27 *bow-wow* = L's word for the SOUND OF barking, birds chirping, car and airplane engines, and any noise from the outside audible in the house.⁹

9. **0;11.18 *ma/uma*** = milk (L said "Ma" to request a cup of milk; milk did not have to be visible in the context.) > 1;1.11 *ba* = milk (The etiology of "ba" to refer to milk was unknown. *Ba* meaning "milk" became a homonym in L's lexicon.) > 1;1.13 *ba* = juice in an extension (L said "ba" as she drank a cup of juice and wanted more) j> 1;1.13 *ba* = juice in a generalization (L said "ba" as she drank a cup of juice and wanted more) > 1;4.5 *ba* ≠ juice a differentiated form, *du*, emerged (See #82.) > 1;7.19 *ba* ≠ milk > 1;7.19 correct pronunciation *milk* = milk

⁹ L's initial use of *bow-wow* was a mismatch between a word in baby talk and the scope of the referents that it identified. It occurred because there were alternative unknown referents in the context that L must have concluded belonged together given her over inclusive use of this word.

JOURNAL 1
LAURA BRAUNWALD
1;0.1 – 1;1.0
February 21 – March 20, 1972

Daily entries begin.

The frequency and brevity of these early entries reflect the developmental difficulty of L's gradual constrained but sustained transition to a protolanguage.

MONTHLY STATISTICS

Days In The Month: 29

Days Missed: 6

Total Daily Observations: 23

MISSING ENTRIES

<u>DATE</u>	<u>AGE</u>
February 21	1;0.1
February 26	1;0.6
March 8	1;0.16
March 15	1;0.23
March 18	1;0.26
March 19	1;0.27

No Note Feb. 21

Feb 22

1.0.2

(91) uh-oh —

A) Said as she tasted a grapefruit.

Accompanied by a funny face.

B) As a game as she dropped things.

(92) ball

A) Said "Ba, ba," when I said to her "where's the ball?"

Feb 23

1.0.3

(93)

"Bow-wow"

Saw a picture of a monkey

and said "Bow-wow."

(94) uh-oh

Consistently and firmly established.

Feb 24

1.0.4

car

(95) (Note - if I say "Let's go bye-bye" - she goes to door, a walk, but not to the car.)

A) Understands this word. I said

to her "Come on, Laura, let's go

bye-bye car." She took my hand

and led me from the kitchen, across

the house, out the front door and

over to the car.

B) Still says "Bow-wow" when she hears the car.

(96) ball

A) Again repeated "Ba."

B) Understands the word. If I say "Laura go

get the ball," she picks up the ball. (Copied exactly SAB 2004)

Feb 25 "Bow-wow hi" (*)
1,0.5 (97)

(*) Incorrect imitation of the word order in a linear pattern

SRB 2002

We went to see The neighbor's dog.
 Both Jack and I said "Hi low-wow"
 numerous times. First she said "Bow-wow"
 alone. We then said again a few times
 "Hi low-wow." As we were leaving, L
 said "Bow-wow hi." (**)

(**) Meaning of hi?
 L no longer said
 bye. Was she
 substituting hi
 for bye? SRB 2002

No Note Feb. 26

Feb 27 Pat-a-cake
1,0.7 (98)

- A) For the last 5 or more days, There is
 a complete cessation of this game.
 She does not want to play if we
 say "Pat-a-cake, pat-a-cake" nor
 does she clap her hands to initiate the game.
 B) She does, however, play many other
 games which are original to her.

1. Blow game

Blows in my face and waits
 for me to blow back. She then
 laughs. (I started this initially
 by blowing in her face.)

2. Cluck game

Likes someone to cluck his tongue
 against the roof of his mouth. She

(cont.)

1, 0, 7 cont.Feb 27 cont

(cont.)

clucks back.

(99) uh-oh!

Likes to drop Things and say "Uh-oh!"

Does This alone.

(100) Ball

likes to "play catch;" also she plays alone with the ball. She drops it, Then chases it.

bow-wow _____

(101) Says "Bow-wow" when she wants

(102) to see neighbor's dog. Comprehension

Seems generally to comprehend much more of what is said to her. Except in isolated instances, however, it is impossible to know if she is discriminating one word or the sense of the entire sentence.

(103) tree (She says "Twee.")

Said this in the park as she felt the bark. Irma, the housekeeper, has been teaching her this word. She takes her to a tree, also points and says "Tree." She (Laura) repeated this word many times today. (cont.)

J1-23

1.0.7 cont.Feb 27 cont.

(cont.)

In The park, after she said, "Twee,"
+ after she had moved away, I
said "Take Mama to The tree."

She took my hand and took me directly
to The tree. Late in The afternoon
at home, as we were on a walk
I again said "Take mama to
The tree," She took my hand and
walked me through a bank of ivy
to The nearest tree,

Feb. 28
1;0.8

(104) Nose-Blowing

If I give her a Kleenex and
put it to her nose. She snorts
with her mouth to imitate The sound
of loud nose-blowing.

a) Has done this before on several
occasions.

Feb 29
1;0.9

(105) hikee = "Hi Kitty"

all one sound said to cat as he came in.

(106) ba *

Remains ball

(107) twee

* L has repeated the word
ba from M's preceding
speech but has not yet said
"ba" spontaneously. SRB 2002

Took me to the door, said "Twee, twee."
She then repeated this as she took
(cont.)

THE EMERGENCE OF THE WORD FUSIONS *HIKEE* AND *HIDEE*¹

For a brief period of 12 days from the age of 1;0.9 through 1;0.20, L created two productive word fusions with *hi* as the first syllable, *hikee* and *hidee*. L used the fusion *hikee* at an earlier age (1;0.9), with greater frequency, seven examples, and in more contexts than *hidee* (1;0.18) which was limited to two clear instances of greeting her father. All the examples of L's word fusions are included and are quoted directly from the diary entries. The only changes are several slight modifications in the wording of the context notes to make them clearer.

Hikee

Hikee first appeared at L aged 1;0.9 with the presumed meaning "hi kitty." L's only use of the syllable "kee" to refer to a cat occurred in the fusion *hikee*. "Kee" did not function as a separate word meaning "kitty-cat" until L broke down the fusion *hikee* into two one-syllable words, *hi* and *kee*, and recombined them into a two-word linear pattern, *hi kee* at 1;1.0.²

Examples of *hikee* = "hi kitty"

hikee (1;0.9)

"All one sound. [L said] 'Hikee' [to our] cat as he came in."
(J1, p. 23 #105)

hikee (1;0.10)

L "saw cat [probably our cat] rolling on sidewalk and said 'Hikee.'"
(J1, p. 24 #110)

hikee (1;0.11)

L said "'Hikee'

a) Sitting in high chair saw cat outside window.

b) ... to a picture of a kitten in her baby book.

c) ...all day long regardless of the presence of a cue—
the cat or a picture of one. It was as if she were practicing."
(J1, p. 25 #116)

¹ The developmental histories of the individual words, *hikee*, word #11 and *hidee*, word #14, are located in the record of L's lexicon at 1;1.0.

² I noticed the substitution of the linear patterns *hi kee* and *hi dee* for the fusions, *hikee* and *hidee*, for the first time in the control data at 1;1.0 (J1, p. 33 control data).

hikee (1;0.12)

"First thing she said to me this morning as I came to her crib.
Again said this [*hikee*] all day long." (J1, p. 25 #117)

Hikoo

Hikoo was an immediate developmental dead end. L said "Hikoo" to her mother twice, once at 1;0.12 and again at 1;0.13. On both occasions her mother was unable to judge from the available information in the context what *hikoo* meant.

Examples of *hikoo* = meaning unknown

hikoo (1;0.12)

"I don't know what this [*hikoo*] means. She crawled up and said this to me." (J1, p. 25 #118)

hikoo (1;0.13)

"Greeted me with this [*hikoo*], this morning. Don't know meaning."
(J1, p. 25 #119)

Hikee and Bow-wow in the Same Context of Use

At 1;0.13, L said two successive one-word utterances, "Hikee" and "Bow-wow," in the same context of use. These successive one-word utterances represented the zenith of her expressive language. They were her first attempt to use two meaningful words that related to the same subject matter in the immediate context. L said "Hikee" and "Bow-wow" in succession just three times and varied the order of the words for no apparent reason.

Examples of sequences with *hikee* and *bow-wow*³

bow-wow precedes hikee (1;0.13)

L said "'Bow-wow' followed by 'Hikee.' Did this each time we encountered a dog. [We were in the park and many dogs went by]." (J1, p. 25 #120)⁴

bow-wow precedes hikee (1;0.14)

L "brought me a toy monkey. She said 'Bow-wow' then 'Hikee.'"
(J1, p. 26 #121)

³ L's first use of *hidee* at 1;0.18 preceded her production of *hikee* and *bow-wow* at 1;0.19.

⁴ The bracketed information and the use of brackets instead of parentheses come from the original diary note.



Mexican wall hanging in example below

hikee precedes bow-wow (1;0.19)

L “said ‘Hikee’ to weaving of a Mexican cat which I hung on the wall.⁵
Then she said ‘Bow-wow.’”(J1, p.27 #133)

The meaning of L’s use of *hi* in these successive utterances with *hikee* and *bow-wow* was problematic. Nevertheless, these three examples were interesting theoretically because of their possible developmental relation to L’s subsequent use of *hi* as if it were a homonym with a verb-like meaning “take notice of” or “pay attention to.”⁶

Hidee

Hidee, which meant “hi daddy,” was a fusion of two of the earliest words in L’s vocabulary, *hi* (0;11.4) and *daddy* (a derivative of *dada* [0;9.8] that emerged at 0;11 21.) The idiosyncratic fusion *hidee* conveyed a more complex meaning than its single-word components. During this early phase of language development, when L said only one two-syllable word at a time, she had to delete a syllable in *daddy*. It was initially unclear whether L’s transformation of *daddy* into the single syllable “dee” was based on a deliberate phonetic analogy to “kee” in *hikee*.⁷

Examples of *hidee* = “hi daddy”

hidee (1;0.18)

“We put her in bed with us early in the morning. She said
‘Daddy, hidee.’”(J1, p. 27 #129)

⁵ M had just hung the weaving. It was directly in L’s line of sight if she stood in the back of her crib.

⁶ See the discussion of the development of *hi* as a possible homonym with an intended verb-like meaning.

⁷ Earlier in development, L had made two attempts to greet F with a syllable other than “dee.” At 0;11.24, L greeted F with a two-syllable fluke “Hi da” as F came home from work. At 0;11.26, L said “Da:dy” followed by multiple repetitions of “Hi” until F, who was preoccupied with reading the newspaper, responded.

hidee (1;0.20)

““Hidee, hidee, daddy.”— Said to Jack as she walked toward him.

I had just said ‘Daddy, hi daddy.’” (J1, p. 29 #142)

At 1;1.0, L broke down the two-syllable fusions *hikee* and *hidee* into the individual words, *hi*, *kee* and *dee* and then recombined the same two syllables into the sequential linear patterns *hi kee* and *hi dee*. These two-word linear patterns expressed the same meanings as their ostensibly derivative word fusions. L’s retention of the syllable “dee” as a word to refer to F occurred only in the specific linguistic context of the linear pattern *hi dee* which meant “hi daddy.” L’s subsequent use of the syllable “dee” as a word meaning “daddy” suggested that her use of “dee” as a shortened variant of the words *dada* and *daddy* was a phonetic analogy to “kee” in her word fusions

Feb. 29 cont.

NOTE I AM STILL KEEPING A RECORD OF ALL SPEECH WHICH I UNDERSTAND BUT I INDICATE AFTER A FEW DAYS IF SOMETHING IS ESTABLISHED + DO NOT THEREAFTER KEEP TRACK OF EVERY INSTANCE.

1, 0.9 cont.

(cont.)

me to the tree. When we left she got $\frac{1}{2}$ way back to the house said "Twee" and repeated performance

(108) "Chee" = cheese

Said as I was handing cheese to Joanna.

(109)

Pat-a-cake *

Wanted to play this twice today
March 1 - 1, 0.10

See p. 21 #98
For cessation
SRB 2002

(110) "Hikee"

Saw cat rolling on the sidewalk and said this.

(111) Twee (Tree)

1. Again went through sequence of taking me to trees.

(112) Kiss = comprehension.

Understands this word. If I say "Want kiss" or "Give me a kiss." She kisses me.

(113) ba / mama — The distinction between the two is consistent and clear.

(114) ba, ba — identifies ball in baby book.

(115) bow-wow — A) identifies dog in baby book.
B) Also consistent to previous notes.

AM NOTING ALL Hi + a word

I AGAIN NOTE THAT SHE IS GETTING ENORMOUS AMT. OF MODELING + POSITIVE FEEDBACK. I NOW LABEL AS WE GO ALONG - "CHEESE," "LAURA'S SHOE" ETC.

March 2 '72 (116) Hi-kee

1:0:11

- A) Sitting in high chair saw cat outside window.
- B) Said to a picture of a kitten in her baby book.
- C) Said this all day long regardless of the presence of a cue - the cat as a picture of one. It was as if she were practicing.

March 3 '72 (117) "Hi-kee"

1:0:12

First Thing she said to me this morning as I came to her crib.

Again said this all day long.

(118) "Hi-koo"

I don't know what this means. She crawled up and said this to me.

March 4 '72 "Hi-koo"

1:0:13

(119)

Greeted me with this, this morning.
Don't know meaning.

(120)

* The first use of two different words in the same context.
SRB 2003

* "Bow-wow" followed by "Hi-kee"
Did this each time we encountered a dog. (We were in the park, and many dogs went by.)

March 5 '721.0.14(121) bow-wowsequence Brought me a toy monkey. She

said "Bow-wow" Then "Hee."

March 6 '721.0.15(122) Bow-wow

In response to the question

"What does The dog say?"

A) Taught her this. While I change her I ask her What does The (dog, cat, cow, lamb) say?"

(123)

"Urma"

Said many times to Urma.

(124)

bow-wow

Saw a lion puppet on The T.V. She called it "Bow-wow" and became very excited when it talked.

(125)

three = tree

Firmly established word.

March 7 '721.0.16(126) "Ba-ba"

In response to question

"What does The lamb say?"

A) She does not distinguish between the questions "What does The dog say?" + "What does The lamb say?"

(cont.)

March 7 cont.1.0.16 cont.

(cont.)

if they are asked one after another,
but if each is asked on a separate
occasion she responds correctly.

(127) chee *

* Note the
implicit intention
"I want" which
the word chee
specifies. (I want
cheese) SRB 2004

Took my hand + led me to refrigerator
while saying "Chee, chee."

(128) daddy

Hung a picture of Jack and Laura
over Laura's crib. When she saw
it she said "Daddy, daddy."

No Note March 8

March 9 '72 (129) hidee = "Hi Daddy."
1.0.18

We put her in bed with us early in
the morning. She said "Daddy, hidee."

(130) ba = Ball

Saw neighbor's dog ball in ivy;
Said "Ba" and then picked it
up repeating "Ba."

(131) kima

Continues to use this correctly.

(132) Still same status of animal questions.

March 10 '72 (133) "Hi-kee"
1.0.19

Said to weaving of a Mexican
cat which I hung on the wall,
then she said "Bow-wow."

March 10 cont.1,0.19 cont.(134) bow-wow

Saw a large long haired
cat and said "Bow-wow."

(135) Comprehension

Since I can't carry her I
rely on her comprehension
to urge her to go where I
want,

e.g. "let's go see Daddy."

"let's " " " Urma."

"let's find Laura's tree."

"let's get a cookie."

(136) "Ba" = book

I said "Here's your book."

She said "Ba." *

* Imitation; does
not count as
a word. SRB 2004

(137) chee

remains constant (She will say "chee" and then take me
to get it.)

(138) twee

(Knows that she has to go outside.)

remains constant > Also on one
occasion she called
her shoe sole which is
hard twee. ***

(139) uh-oh

remains constant

** Apparent source
of the homonym
twee = shoe
SRB 2003

(140) "Rboozle Game"

When I say "Rboozle" she runs
her hands in my hair and laughs, (cont.)

March 10 cont.1.0.19 cont,

(cont.)

This game arose by accident. I was clapping her hands together, and when I said "Rboozle" as a nonsense noise, I put her hands in my hair.

(141)

She does other babbling but it does not emerge as consistent enough to be comprehensible.

March 11
1.0.20

(142) "Hidee, hidee, daddy"

Said to Jack as she walked toward him. I had just said "Daddy, hi daddy."

(143) da = down

* Question with want facilitates L's acquisition of a word. SRB 2003

{ She sits in her high chair, we say
Do you want to get down?
She says "Da, da" (*)

March 12
1.0.21

(144) "Uh-oh!"

Heard something crash in the next room.

March 13
1.0.22(145) da = down

Same as above.

(146) cookie

** Question with want facilitates L's acquisition of a word. SRB 2003

She was sitting on the kitchen counter.

We said "Do you want a cookie?"

She said "Cookie." (**)

5 minutes later dropped her cookie on the floor.

(cont.)

1, 0.22 cont,

March 13 cont

(cont.)

pointed and said "Cookie."

March 14 1, 0.23(147) da = down

Finished breakfast and said "Da,
da" - (separate as distinguished
from dada run together)

(148) "Cookie"

While eating a cookie, she showed
it to me and said "Cookie."

(149) ba = ball

Picked up her ball, said "Ba."

(150) "More"

Finished her milk. Clearly said
"More," and waited.*

(151) "Ba" = banana

Said as she ate a banana.

(152) "Ba" = bread

Held up some bread. I asked her
"Bread, Laura, bread?" She said "Ba."

(153) cookie

She went to the cupboard. I said
"What do you want Laura?" She
said "Cookie." **

(154) bot = bottle - *** No Context Note

* More did not
become productive.
L used various
idiosyncratic
pragmatic devices
to express her requests
for "more". SRB 2003

** Question with
want in discourse.
SRB 2003

*** I did not note but
assume that
bot = L's nursing bottle
SRB 2001

March 14 cont.1.0.23

(155)

thank you

The last few days, when she is given something, she makes a sound afterwards "deedee" is closest sound that I can distinguish, I answer "You're welcome."

(156)

dat

1. Continues to use dat when she

No Note March 15

wants an object identified,

March 161.0.25

(157) "Caca" cracker

Said while showing me a graham cracker.

(158)

bur = bird

A) Morning - There is a picture of a bird in her book. We said "Bird." She said

"Bur." She returned repeatedly to this page.

B) In late afternoon, we saw a robin on the lawn, we said "Bird." She said "Bur."

March 171.0.26(159) bur = bird, buir = bird

She handed me a plastic hen from a barn yard set. She said "Bur, bur, buir, buir."

(160)

buh = butter

Yesterday, I said "Butter, butter" as I put it on her bread and gave (cont.)

March 17 cont.

1, 0.26

(cont.)

it to her. This morning she held
out the bread and asked "Buh, buh" —
the butter was directly in front of her,

(16) cookie

1. Well established.

No Note March 18 and 19

The rest of this page is blank in the original
diary. SRB 2004

Control Data at 1;1.0 March 20, 1972

J1-33

1.1.0

MARCH 20 TH 1972 CONTINUOUS SPEECH SAMPLE

(6:45)

"Dada, daddy" saw picture of Jack. EARLY MORNING, BREAKFAST

(7 A.M.)

cookie

(Marian had her.)

7:00 - 7:45

1. Said "Cookie, cookie." Joanna + I said "No cookie."
she said "Cookie, cookie" again.

(7:05)

Babble, babble Hi, hi kee linear pattern SRB 2003

In dining room

1. Crawling on floor. Cat was by glass door.

(7:10)

"E, e, e, dat, dat"

1. Said in kitchen standing.

"Dat, dat, dat" — followed by babble and a scream.

Still around this time. 1. Standing by high chair. Marian put her up.

(7:10)

"E, dat, dat, dat, uh-oh, gee"

1. Sitting in high chair with a book.

(7:10)

"B" "Eee" (crying)

1. Sitting in high chair saw her cereal.

"Cookie, um"

1. Eating cereal with her hands.

(7:15)

"Kh, um"

1. Spoon in mouth.

"Hi yee" *

1. Said across table to me, still eating.

(7:20)

"Um, um i um geea"

1. Saw banana which Marian was holding.

"Me gee"

1. Took a piece of banana.

*
Not a linear
pattern. "Yee"
is not a word
in L's lexicon.
SRB 2002

March 20 Control Data cont.

1, 1.0 cont.

MARCH 20 CONT.

(7:20)

"Uh-oh, oh gee, uh-oh chee chee" (*)

1. Heard a macaw parrot caw (*) Still in high chair.

(*) Do not understand L's meaning from the context; "chee" may not mean "cheese." It may be an indication of the sound L heard. SRB 2004

(7:25)

"Hi." — "Cookie — hi kee." (**)

1. Joanna walked into room.

(*) linear pattern? Can't judge. Context note doesn't mention cat. SRB 2003

² No cue from Joanna.
Still around this time.

(7:25)

Babble

1. Said to Maxian.

(7:30)

"Hi, hi — Hi dee" linear pattern SRB 2003

1. Jack walked into room to join us for breakfast.

(7:30)

"Oh dee, hi dee" (***) (Oh daddy, hi daddy)

1. Still to Jack.

(***) "Oh dee" — possible linear pattern.
"Hi dee" — linear pattern. SRB 2003

(7:30)

"Umm" (babble)

1. Still eating cereal with her hands.

(7:30)

"Da beeah, b. gee"

1. Still in high chair.

(7:30)

"B bee"

1. Trying to pick up her banana.

(7:35)

"F umm, umm b. e dee ee"

1. Pointing to something on table. Probably the book she was holding before.

Babble

1. Playing with banana skin which she was given in lieu of the book.

babble = I can't distinguish sound.

1. I.O cont.

MARCH 20 CONT.

"B"

1. Eating cereal with her hands.

7:35

"Gee gi — um"

1. Handed Marian her spoon. She wanted The bowl scraped.

"Uom" — (crying)

1. Still holding out spoon.

(7:40)

"Ca"

1. Marian had just asked "Want a banana?"

7:40

"(Babble) — B"

1. Handing me spoon. I said "what do you want?" She said "B."

7:40

"Uh-oh"

1. Dropped spoon on the floor.

"Uh-oh e (babble)"

1. Dropped banana on floor.

7:40

"Da da da um um b bee"

1. Marian answered "Want some milk?"

"Eh ee"

1. Saw milk.

"Oh dee* e gee, gee (babble) gee oh gee"*

1. Drinking milk.

* Oh dee? are not linear
oh gee) patterns.
The meanings of "dee"
and "gee" cannot be
ascertained from the
context. SRB 2003

March 20 Control Data cont.

J1-36

1.1.0 cont.MARCH 20 CONT.

7:40 "Uh-oh _____ (Gabble)"

1. Joanne just said "Uh-oh look what Laura did!"

"Ba ba ma ba"

1. Playing quietly with garbage on her tray,

"Da, da"

1. "Down Laura, want to get down?" answered

"Da." *

* Question with want
in discourse. SRB 2003

(7:45) Ah gee, ah q, bee

1. While Marian was wiping her hands.

"Da"

1. Sitting in Marian's lap.

"Hi, kiddy" _____ (Gabble) **

1. To eat in window.

"Hi, hi."

1. To eat.

"Ba, ba,"

1. Carrying a jar.

** Note the contrast
between hi kee,
two syllables
and hi, kiddy,
three syllables.
SRB 2004"Z" = horsie. Said as she tried to climb on
rocking horse. ****** L is now in the
playroom. This is
where the rocking
horse is.
SRB 2001

1.1.0 cont.

VOCABULARY AT 13 MOS. March 20, 1972

Note includes all new vocabulary as well as status of previous vocabulary.

PREVIOUS VOCAB. = *

1. * dada — remains used for father
2. daddy — sometimes uses daddy. e.g. sees a picture of Jack and says "Daddy."
3. * hi — uses alone as previously. Also combines with daddy > hi dee
with kee > hi kee L's first two-word linear patterns. SRB 2003
4. * bow-wow — remains same as 1 yr. note.
5. * ma = milk. She has discontinued this.
6. * mama = She has discontinued this.
7. * Irma = Now uses Irma for me and for Irma.
8. * uh-oh = Always says this when she drops something.
9. * dat = remains same as 1 yr. note.
10. tee = tree — Says this when she wants to walk outside and see the trees. Says this as she is actually touching the tree. Says this if we are driving past many trees.
11. tee = shoe — consistently calls her shoe this. Particularly the sole.

1. 1.0 cont.

March 20 Vocabulary Summary cont.

12.

ba = ball, book ** ba ≠ book

Not yet a word

The only note that ba = book is an imitation of a preceding model;

P. 28 #136 SRB 2002

13.

kee = cat

14.

chee = cheese — is very consistent with

This. She takes me to The refrigerator and asks for "Chee."

15.

da = down

When she wants to get out of

1) The high chair 2) the swing 3) the bathtub

16.

cookie = Says this many times a day.

She knows exactly where they are kept.

17.

more = said only once.

18.

caca = cracker

19.

z = horsie

20.

bur = bird (on one day only.)Additional Wordsba = banana p. 30 # 151deedee = thank you p. 31 # 155buh = butter p. 31 # 140

} SRB 2002

EMERGENT VOCABULARY FOR L FROM THE AGE OF 1;0.1 THROUGH 1;1.0
(Between 12 and 13 Months)

10. **1;0.7 twee** = tree (L said "Tee" in the park as she felt the bark of a tree.)¹ > 1;0.9 *twee* = a pragmatic request (L "took me to the door said 'Twee, twee.' [She then] repeated this as she took me to the tree...." J1, pp. 23-24 #107) > 1;0.19 *twee* = hard sole of L's orthopedic shoe (n.d. for the generalization, J1, p. 28 #108 interim note) > 1;1.0 *twee* = tee → *tee* = tree was a homophone with a new systematic production of *tee* = shoe (J1, p. 37 summary of vocabulary development at 1;1.0)
11. **1;0.9 hikee**² = "hi kitty," a fusion of the meanings of two words *hi* and *kitty* into a single word with two non-reduplicated syllables *hi* = a greeting, *kee* = kitty.³ (L said "Hikee" to the family's cat, Peanuts, as he came into the house.)⁴ > **1;0.10**⁵ (L said "Hikee" when she saw a cat [presumably Peanuts] rolling on the sidewalk.) > **1;0.11** (L, who was in her high chair, said "Hikee" to Peanuts. She could see him outside through the sliding glass door to the patio.) > **1;0.11** *hikee* = reference to a cat in a drawn illustration (L said "Hikee" to a picture of a kitten in her baby book.)—**Diarist's Observation:** With the exception of *bow-wow*, *hikee* was L's first two-syllable word that was more complex than the reduplication of the first syllable—**Diarist's Questions:** a) Was *hikee* actually a word fusion (i.e., the idiosyncratic invention of a "compound word")? b) Did L intentionally try to convey two meanings, "hi" and "kitty," although she could only produce two consecutive phonetically different syllables? c) Did L erroneously conclude that a word with two phonetically different syllables expressed two meanings? — > 1;0.11 and 1;0.12 *hikee* = a form for practicing the production of a two-syllable word (?) (L said "Hikee" all day regardless of the presence of a cat as a meaningful cue. "It was as if she were practicing." J1, p. 25 #116c) > 1;0.12 *hikee* = a possible transition from a word with a cat as its specific referent to a more general form of greeting (?) (L said "Hikee" to M when she came to get L from her crib in the morning.) > **1;0.13** *hikee* = final unit in a sequence of two separate words in the same context. (L said "Bow-wow" followed by "Hikee" to each of many dogs she encountered in a park.) > **1;0.14** *hikee* = a word L used in association with the word *bow-wow* (?) (L brought a toy

¹ See J1, pp. 22-23 #103 for a description of how L learned the word *tree* and M's check of L's comprehension.

² See the summary at 1;1.0 for the diarist's *post hoc* assessment of the developmental significance of the word fusions *hikee* and *hidee*.

³ *Kee* = kitty-cat or cat was first noted as an independent word in L's lexicon at 1;1.0 when she broke down the fusion *hikee* into two words. J1 p. 33 control data

⁴ L's first use of *hikee* occurred in the same repetitive situation as the comprehension of her first word, *kitty-cat* (0;8.14).

⁵ The underlined dates in bold face identify the examples that are relevant to the diarist's subsequent comments.

monkey to M and said "Bow-wow" followed by "Hi-kee.")⁶ > **1;0.19** *hi-kee* = initial unit in a sequence of two separate words (L said "Hi-kee" followed by "Bow-wow" to a Mexican weaving of a cat which M had hung on the wall in L's room.)—**Diarist's Observation:** The sequences with the words *hi-kee* and *bow-wow* were L's first attempt to produce two consecutive one-word utterances that related to the same referent in the immediate context. The meaning of *hi-kee* in these sequences was idiosyncratic and opaque.—**Diarist's Questions:** a) What meaning was L attempting to express when she said "Hi-kee" in these sequences with *bow-wow*? b) Did *hi* in *hi-kee* in these sequences convey a meaning that differed in its function from *hi* as a greeting? c) Was *hi* in these sequences a subtle initial step in the derivation of a homophonous meaning related to perception (i.e., intrapersonally, "I am paying attention to" and interpersonally, "I want to establish a joint focus of attention with you.")—> By 1;1.0 L had separated the word fusion *hi-kee* into two words *hi* and *kee* meaning "kitty-cat" and recombined them into a linear pattern (L was crawling on the floor. The cat was by the glass door. L: "Babble, babble, hi, hi kee." J1, p. 33 control data)

12. **1;0.9** *chee* = cheese (L said "Chee" as M was handing cheese to J.) > 1;0.16 *chee* = a pragmatic expression of volition (L "took my hand and led me to refrigerator while saying 'Chee, chee.'" > 1;3.26 generalization *chee* = *ham* (L said "chee" to a package of ham; did so a second time after M modeled the word *ham*.) > 1;5.11 semantic extension *chee* = *ham* (L: Chee. Said while L was eating ham.)
13. **1;0.10** *ba* = a picture of a ball (L identified a picture of a ball in a baby book.) > 1;0.18 *ba* = a real ball (L saw Serena's dog-ball in the ivy in our front yard and said "Ba." She then picked it up and repeated "Ba.") > 1;0.23 *ba* = L's ball (L picked up her ball and said "Ba.")⁷ > 1;5.5 *ball* = imitation of correct pronunciation (M: Your ball is outside. L: Sigh ball. "[L] was looking for her ball.")
14. **1;0.18** *hidee* = "hi daddy," a fusion of the meanings of two existing words in L's vocabulary, *hi* = a greeting and *dee* = a shortened one syllable variant of *daddy* (M and F put L in bed with them early in the morning. L said "Daddy, hidee.") > 1;0.20 *hidee* = an imitation of "hi daddy" (M said, "Daddy, hi daddy." L then said, "Hidee, hidee, daddy," said as she walked toward F.) > by 1;1.0 L had separated the word fusion *hidee* into two words *hi* and *dee* and recombined them into a linear pattern.⁸ (L said "Hi, hi — hi dee" when F walked into the dining room to join the family at breakfast. A moment later she said "Oh dee, hi dee." J1, p. 34 control data)⁹

⁶ L's production of the word *bow-wow* for a toy monkey was a generalization of a "word" for a known referent to an unidentified referent.

⁷ At 1;0.2, L understood and repeated the word *ball* ("ba") with her own ball as the referent.

⁸ L's only use of *dee* to refer to F was in the linguistic context of the linear pattern *hi dee* (1;1.0 to 1;2.4).

⁹ The utterance *oh dee* was the only exception to L's exclusive use of *dee* in the linear pattern *hi dee*.

15. **1;0.19¹⁰ twee** = shoe (*Twee* meaning “shoe” was derived from an unusual tactile generalization (n.d.) of *twee* meaning “tree” to the hard wood-like sole of L’s orthopedic shoes. J1, p. 28 #108 interim note on word #10 *twee* = tree) > 1;1.0 *twee* = *tee* as a homophone meaning shoe that was derived from L’s original generalization of *tee* = tree—(“consistently calls her shoe this; particularly the sole.” J1, p. 37 summary of vocabulary development at 1;1.0) > 1;3.27 (Labels shoe as *tee* in Platt and Monk ABC book) > 1;4.15 *shoe/tee* (L: Hi shoe hi shoe. M: What’s that! Say *shoe*. L: Tee.” said on changing table as L picked up [her] orthopedic shoe. [First time I’ve heard *shoe*].”) > 1;4.16 **shoe** = shoe (L repeated the word *shoe* after M many times during the morning.) > 1;4.19 (L: Shoe, shoe. “[L] saw her shoes on the floor.”) > 1;4.25 (interim note “*Shoe* has definitely replaced *tee* as [L’s] word for shoe.”)
16. **1;0.22 cookie** = cookie (L dropped her cookie on the floor, pointed and said “Cookie.”)¹¹ > 1;0.23 (L, who was eating a cookie, showed it to M and said “Cookie.”) > 1;0.23 (L went to the cupboard. M: What do you want, Laura? L: Cookie.) > 1;4.11 **Cookie** = an idiosyncratic generalization to unrelated sources of enjoyment? *cookie* = music? (L: Cookie, cookie “said as L picked up a xylophone; she then proceeded to play it.”) > 1;4.16 *cookie* = taste of old coffee? Or is L thinking about cookies while drinking cold coffee? (L: Cookie, um goo[d], goo[d], goo[d] “said as L drank some old coffee which she found in a cup.”) > 1;5.17 *cookie* = rocking chair or its movement? (L: Cookie. “Said as [L] pushed the rocking chair back and forth.”)
17. **1;0.23 da** = a possible particle of the verb *get down* (L, who was in her highchair, finished her breakfast and said “Da, da.”)¹² > by 1;1.0 L said “Da” in three different contexts a) to get down from the highchair b) to get off the swing and c) to get out of the bathtub.” J1, p. 38 summary of vocabulary development at 1;1.0, word #13¹³ > 1;4.29 **down** = down (L: Dow, Dee-dee sigh sigh. [Get me down. I want to go outside and play with Jo.] > 1;5.30 **correct pronunciation down** = down (L: Mom. Down Mommy. “L wanted me to get her off of the patio bench. I ignored her.”)

¹⁰ L’s age is an arbitrary assumption based on an interim note at 1;0.19 and the vocabulary summary at 1;1.0.

¹¹ Five minutes prior to this spontaneous use of the word, L had answered “Cookie” in response to the question “Do you want a cookie?”

¹² L, 1;0.20 practiced *down* in discourse in this same context. “She sits in her highchair, we say ‘Do you want to get down?’ She says ‘Da, da.’” J1, p. 29 #143.

¹³ M interpreted the meaning L’s use of *da* in these contexts as if L were expressing the meaning of a single verb particle, “out” in *get out* rather than an instantiation of different possible verb particles of *get* (i.e., *get down* and *get off*).

18. **1;0.23 more** = more (L finished her milk, clearly said "More" and then waited.)¹⁴
 > from 1;0.24–1;5.7 L relied on idiosyncratic pragmatic routines instead of the semantic meaning of a word to request "more." > 1;2.14 *boo* = the object spoon and also L's way to request more of whatever food was previously on the spoon.
 > *Hi baby* = more > 1;4.22 (interim note "[L] still yells 'Hi baby' when she wants more food.") > 1;5.7 *more* reappears in L's speech. (L: More. "L wanted more lemonade and was climbing on the coffee table after it.") > 1;5.9 ("[L] had been eating brown sugar from a measuring spoon while J and M were baking, and she persistently said 'more' until she got some.") > 1;5.9 *more* ≠ recurrence (L: Chee, more chee. "Said as [L] stood at the refrigerator. She had not yet had any cheese.") > 1;5.10 *more* + *food* = recurrence (L: More. M: gave L a second grape. L: More olv [olv = grape] "Said in kitchen as M was preparing lunch; [L] was standing next to M.") > 1;5.11 Multiple appropriate uses of the word *more*.
19. **1;0.23 ba** = banana (L said "Ba" as she was eating a banana.)
20. **1;0.23 bot** = nursing bottle (No context note) > *bobble* = bottle > *baba* = bottle > 1;5.5 correct pronunciation *bottle* = bottle (M: Does Laura want to go night-night? L: Bottle baby. L was on the changing table at bedtime. She gets a bottle to sleep with.) > 1;5.20 *bottle* = the goal of L's intention in an unordered sequence of words in an utterance with a verb (L: Mama. M: What? L: Bottle go me ni-ni. [I want to go to sleep with my bottle] "[L] wanted to be put in her crib with the bottle. [M] had put the bottle in the crib as an inducement. [L] came to [M].")
21. **1;0.23 dee-dee** = thank you ("The last few days, when she is given something, she makes a sound afterwards; 'Dee-dee' is closest sound that I can distinguish. I answer 'You're welcome.'" J1, p. 31 #155) > 1;4.15 *tatu* = L's new word for *thank you*. > 1;4.16 What does *tatu* mean to L? ("[L] built a tower of 9 blocks and said 'Tatu' as she put each block down...") > 1;4.17 (L: Boo, eh tatu [spoon, egg thank you] M handed L her spoon. She wanted it to put egg on it. L then thanked M.) > 1;4.17 (L: Tatu Dee-dee "Not clear why L said this. J pushed the milk toward L.) > 1;4.26 (L: Dee-dee oh tatu. "[L's] thank you to J who had just put on her socks for her.") > 1;4.28 (interim note "*Tatu* is said countless times a day. The babysitter informs me that L says 'Thank you' there too.")
22. **1;0.23 caca** = cracker (L "said 'Caca' while showing me a graham cracker." J1, p.31 #157) > from 1;0.24 – 1;5.11 L used *cookie* to refer to both cookies and crackers. > 1;5.8 *cracker* = cracker > 1;5.12 *caca* reappears to refer to crackers once again. ("Caca = cracker all day today.")

¹⁴ L did not use *more* productively until 1;5.1. when she said "More" as she was climbing onto the coffee table to get more lemonade. J2, p. 82 #1115/85

23. **1;0.26 *bur*** = bird (L said "Bur, bur, buit, buit" as she handed M a plastic hen from a barn yard set.)¹⁵ > 1;2.24 *bur* = bird ([L] "says 'Bur, bur' when she wants me to return to the page about the bird in her cat-book.") J1, p. 89-90 #325
24. **1;0.26 *buh*** = butter in a request (The butter was directly in front of L. She held out her bread and asked "Buh buh.")^{16, 17}
25. **by 1;1.0 *kee*** = kitty-cat or cat (L discontinued the use of word fusions. She broke up *hikee* into two words *hi* and the emergent separate new word, *kee*.) > 1;1.0 *kee* = Peanuts (L was crawling on the floor. The cat was by the glass door. L: Babble, babble, hi, hi kee. J1, p. 33 control data) > 1;4.11 *kiddy* = kitty (L: Hay kiddy kiddy [Here kitty kitty] "M and L were looking at a book about a cat. The cat is not in all the illustrations. She was looking for one with the cat in it.") > 1;5.29 correct pronunciation *kitty* = kitty
26. **1;1.0 *Z*** = J's rocking horse, Shoeby (L said "Z" as she tried to climb onto J's rocking horse in the playroom.) > 1;3.21 ***C*** = J's rocking horse, Shoeby (L said 'C,C,C, C ' until we put her on the horse. She then repeated it throughout the ride.)

¹⁵ Yesterday morning, L, 1;0.25, imitated and practiced the word *bird* to refer to a picture of a bird in a book and in the late afternoon to refer to a robin on our lawn.

¹⁶ Yesterday, at L 1;0.25, M had said "Butter, butter" as she put it on L's bread and gave it to her.

¹⁷ The location of the butter in relation to L and her gesture of holding out the bread made her utterance a clear cut situation specific request.

REVIEW OF L'S VOCABULARY BETWEEN THE AGES OF 1;0.1 AND 1;1.0
February 21—March 20, 1972

Number of Days in the Month	29
Number of Days with Entries in the Diary	23

Discontinued Words in L's Vocabulary Between 1.0.1 and 1.1.0

Word	Date of Acquisition Vocabulary Number	Date Discontinued	Reason for Discontinuation
<i>hikee</i>	1;0.9, Word #11	1;0.20	L discontinued the use of word fusions.
<i>hidee</i>	1;0.18, Word #14	1;0.21	L discontinued the use of word fusions.

Tally of the Words in L's Vocabulary at 1;1.0

Total Number of Prior Emergent Words in L's Vocabulary	9
Emergent Words Recorded Between 1;0.1 and 1;1.0	17
Total Number of Emergent Words Recorded in the Vocabulary at 1;1.0	26
Discontinued Words in L's Vocabulary Between 1;0.1 and 1;1.0	2
Discontinued Words in L's Vocabulary Prior to 1.0.1	0
Total Number of Words in L's Cumulative Vocabulary at 1;1.0	24

The number of words in the developmental record of the process of L's vocabulary development was greater than the total number of actively used words in her cumulative vocabulary. The numbering in the developmental record perforce included any emergent word regardless of its duration in her extant vocabulary. Thus, the number of productive words in L's cumulative vocabulary always represented the total number of every emergent word L ever said minus the total number of words she subsequently and permanently discontinued.

THE TOTAL WORDS IN THE SEQUENTIAL DEVELOPMENTAL RECORD AT 13 MONTHS = 26

THE TOTAL PRODUCTIVE WORDS IN L'S CUMULATIVE LEXICON AT 13 MONTHS = 24

JOURNAL 1
LAURA BRAUNWALD
1;1.1 – 1;2.0
March 21 – April 20, 1972

MONTHLY STATISTICS

Days In The Month:	31
Days Missed:	3
Total Daily Observations:	28

MISSING ENTRIES

<u>DATE</u>	<u>AGE</u>
March 25	1;1.5
March 28	1;1.8
March 30	1;1.10

March 21 ⁽¹⁶²⁾ ba => grapefruit. She saw a grapefruit in the refrigerator and patted it while saying "Ba."

March 22 ⁽¹⁶³⁾ "C, c" = cereal. She was sitting in her high chair. I said, "Want some cereal?" She said "C, C." I repeated "Cereal," she said "C, C" again. *

*Question with want facilitates L's repetition of a word. SRB 2003

⁽¹⁶⁴⁾ ba => grapefruit. She saw a grapefruit on the kitchen counter.

⁽¹⁶⁵⁾ ba => round large seed pod. She found this pod and began rolling it and saying "Ba."

⁽¹⁶⁶⁾ Hi kee = still says this whenever she sees cat. (interim note)

⁽¹⁶⁷⁾ Z = harsie — We were in the kitchen, she took my hand and said "Z, Z," repeatedly as she took me to the rocking horse in her room.

⁽¹⁶⁸⁾ "Bobie" = bottle. She saw a dirty ^{by by} ~~bottly~~ bottle lying on the table and said this.

March 23 ⁽¹⁶⁹⁾ "Z" = harsie. Went over to horse said "Z," "Z" until I put her on.

March 24 ⁽¹⁷⁰⁾ Bot, bot, bobie = We were visiting friends with a baby. She wanted baby's bottle.

1;1.4 cont.

March 24 cont.

(171) dee-dee — We gave her an old alarm clock.
Each time she wants the bell
to ring, she brings it to me and
says "Dee dee."

(172) "Da" = up — Standing by her high chair.
No Note March 25 }
March 26 1.1.6 } She wants to climb in.

(173) dee-dee — Same as previous note

March 27 1.1.7

(174) "C" = cereal. First cereal since
previous note. I said "Cereal,"
she repeated "C."

No Note March 28

March 29 1.1.9

(175) Bye dat — linear pattern SRB 2003 said in response to

Question with want in discourse SRB 2003 my saying "Bye-bye milk?" "Want more milk?"

She handed me the cup as she said this.

(176) da = "down" and "out" — always say this now when
(SRB 2004) she wants to get down or out of
something. e.g., today for getting
out of high chair, bath tub + car seat.

COMPREHENSION

1. "Let's get your shoes off."

a) Sat down and started pulling
at her shoe laces.

2. "Phone call for Laura."

a) Went from the kitchen to dining
room, picked up toy phone
and dialed + then said "Hi."

INTERIM NOTE = way to indicate status of a previously noted word e.g. bow-wow or hi so that I can follow an evolution in her usage.

1;1.9 cont.

3. "lie down so I can change your diaper."

a) She lies down and lifts up her legs so that I can change her.

bow-wow — no longer used for cars and mechanical noises. She uses it for dogs and for barking.

(INTERIM NOTE)

March 30
1;1.10

No note - status quo

March 31
1;1.11

(177) dee-dee = clock broke ∴ no longer used.

(178) thank you — (interim note) She still consistently makes a sound, "Tee-tee" is most frequent, after she is given something.

* Emergence of "Ba" to mean milk. SRB 2001

(179) ba = milk ^(*) — Says "Ba" when she wants to have milk. She has been doing this for about a week.

(180) um um — I say this when I pretend to eat food which she offers me. When she wants me to pretend to eat, she hands me the food and goes "Um, um."

1) We have played this game sporadically for a long time.

The Emergence of Linear Patterns during L's Fourteenth Month

Although L used the word fusions *hikee* (hi kitty) and *hidee*, (hi daddy) for just 12 days from 1;0.9 through 1;0.20, she appeared to derive her first two sequential linear word patterns from them about 9 days later. She broke down or unpackaged her two-syllable word fusions into separate words and recombined them in the same order into a single two syllable utterance; that is to say a sequential linear pattern without an underlying structure. Both her word fusions and linear patterns suggest that L's transition from prelinguistic communication to speech production was a tightly constrained process.

Example 1

Word fusions become linear patterns

hi kee

L, 1;1.0, was crawling on the floor. The cat was by a glass door.

L: Babble, babble, hi, hi kee.

(J1, p. 33 control data)

F just entered the room to join the family for breakfast.

hi dee

L: Hi, hi, hi dee.

L then immediately said to F.

L: Oh dee, hi dee.

(J1, p 34 control data)

Insofar as I could tell from the observations of L's subsequent production of linear patterns in their contexts of use, this modification was a different solution to the same problem: the production two non-reduplicated syllables in a single utterance.

From 1;1.1 to 1;2.1, L's linear patterns with *hi* involved either *kee*, or *dee*. Moreover, she retained the syllable "dee" as a one-syllable variant of *dada* or *daddy*, but

Only in one specific linguistic context, the linear pattern *hi dee*.¹ Once *kee* became a separate word meaning “kitty-cat,” L used it often both as a single word and in her most productive linear pattern, *hi kee*. The daily diary entries for *hi* in a linear pattern (12x) were either typical examples in control data, interim notes or summaries, all of which basically documented L’s continued use of *hi kee* and *hi dee*. The only exceptions to this use of *hi* were “Hi bow-wow” (1;1.22) and “Hi pooh”(1;1..30). In sum, the number of dairy entries of L’s use of *hi kee* and *hi dee* were an underestimation of the actual frequency which was unknown.²

In the month from 1;1.1 through 1;2.0, L began to align just three other words in addition to *hi* into linear patterns with the intonation contour of a single utterance. L produced 12 utterances with *uh-oh/oh* and 2 utterances with *off* and *bye*. In contrast to *hi*, the number of utterances for *uh-oh*, *bye* and *off* indicated the frequency of my observations in the diary. To follow the development of L’s linear patterns, refer to Table 4 and Table 5. Table 4 follows this introduction and traces the chronological order of L’s emergent linear patterns. Table 5 follows the diary data from L’s 14th month³ and illustrates the developmental interface between L’s emergent linear patterns with *hi* and her subsequent production with *uh-oh/oh*, *bye*, and *off*.

A substantial number of experiments indicate the young toddlers understand their social environment in a uniquely human manner (e.g., the extensive research of Tomasello and his colleagues). That is to say, young toddlers demonstrate their social comprehension of human communication in an experimental context. Example 2 is a

¹ Toward the end of the month (n. d.), L used *dee* to refer to J as well and said “hi dee” to her.

²The interim and summary notes indicated that L used these two linear patterns frequently.

³

spontaneous and naturalistic observation of L competent social comprehension of the informative function of human communication.

Example 2

Informative communication outpaces language production

L, 1;1.14, was reporting to M that the cat, who was not allowed in the house, had run in the open patio door.

L: Uh-oh, oh kee, oh.

M: What?

L: Kee.

M: put the cat outside.

The theoretically interesting point of this example is that L's psychological know-how as a communicator is evident well in advance of her ability to produce a natural language.

TABLE 4 – JOURNAL 1

**THE CHRONOLOGICAL EMERGENCE OF L'S TWO-WORD LINEAR PATTERNS
FROM 1;1.0 – 1;2.0**

1	L, 1;1.0, was crawling on the floor; the cat was by the glass door. L: Babble, babble hi, <u>hi kee</u> . (J1 p. 33 control data)
2	F joined the family for breakfast. L, 1;1.0, addressed F. L: Hi, hi — <u>hi dee</u> . (J1 p. 34 control data)
3	L, 1;1.0, continued to address F. L: <u>Oh dee</u> , hi dee. (J1 p. 34 control data) (<u>Oh dee</u> is a possible linear pattern) ¹
4	L, 1;1.0, continued to address F. L: Oh dee, <u>hi dee</u> . (J1 p. 34 control data)
5	L, 1;1.2, continued to say “Hi kee” whenever she saw the family’s cat, Peanuts. L: <u>Hi kee</u> . (J1 p. 39 interim note)
6	L, 1;1.9, was responding to M’s question. M: Bye-bye milk? Want more milk? L: <u>Bye-bye dat</u> . (as L handed her cup to M.) ² (J1 p.40 #75)
7	L, 1;1.13, commented on her perception of F breaking wind very loudly. L: <u>Uh oh dada</u> . (J1 p. 42 #185)
8	L, 1;1.14, picked up a book of hers which has a picture of a cat in it. L: <u>Hi kee</u> . (J1 p. 46 control data)
9	L, 1;1.14, was reporting to M that the cat, who was not allowed in the house, had run in the open patio door. L: <u>Uh-oh, oh kee, oh</u> . ³ M: What? L: Kee.

¹ With the exception of this one utterance, L never substituted “Oh dee,” for daddy in a linguistic context other than the linear pattern, *Hi dee*.

² Note that L’s use of *bye* coincided with her action and was not a social routine involving departure of a person.

³ L was very motivated to tell M what happened with the cat, but was also limited in her ability to create a novel utterance.

- 10 L, 1;1.14, ran into her parents' bedroom and dialed the phone.
L: Oh dat. (J1 p. 47 control data)
- 11 J had just said "Uh-oh" immediately before L, 1;1.14, uttered this comment.
L: Uh-oh Dee, Dee.⁴ (J1 p. 49 control data)
- 12 L, 1;1.22, and M were on a walk and stopped to see Serena, our neighbor's dog.
L: Hi kee. (to Serena)
M: Hi bow-wow. (J1 p.53 #199)
- 13 About ten minutes after M corrected L in utterance #12, L, 1;1.22, passed an unfamiliar barking dog.
L: Hi bow-wow. (J1 p. 53 #199 continued))
- 14 L, 1;1.22, was lying on the changing table and threw her pacifier onto the floor.
L: Uh-oh bye-bye. (J1 p. 53 #201)⁵
- 15 L, 1;1.22, was trying to drag M's broom when it crashed to the floor.
L: Uh-oh broo. (J1 p. 54 #202)
- 16 L, 1;1.24, was having her diaper changed.
M: Pooh.
L: Uh-oh pooh.
(L's first use of *uh-oh* as an interjection in discourse.) (J1 p. 54 #206)
- 17 L, 1;1.24, tried to untie her shoes during a diaper change.⁶
L: Tee, tee aw.
L said this twice within the course of a diaper change. (J1 p. 54 #206)
- 18 L, 1;1.24, was sitting in her high chair; she urinated and defecated.
L: Pooh, pooh, uh-oh pooh. (J1 p. 55 #208)
- 19 L, 1;1.25, was sitting on M's bed. Her shoes were on and she was pulling on the laces.
L: Tee aw. (J1 p. 55 #212)

⁴ I did not capitalize "dee" when it meant "Daddy". When L used *Dee* to refer to J, I assumed it was her name for her sister and required a capital D.

⁵ Note that L's use of *bye-bye* coincided with her action of throwing the pacifier, and was not a social routine. (See number 6 for a similar use of *bye-bye*.)

⁶ *Tee aw*, with the meaning "shoe off", was the only use of *off* in a linear pattern.

20	L, 1;1.30, said “ <u>Hi kee</u> ” to our cat, to pictures of cats and dogs, and to a picture of a cat on her blocks. L: <u>Hi kee</u> . (J1 p. 58 #228, interim note)
21	L, 1;2.0, was walking out of the playroom. L: Tee tee, dada, <u>oh daddy</u> . (J1 p. 60 control data)
22	L, 1;2.0, was on her way to F’s room. L: Dee, <u>dee hi</u> . (J1 p. 60 control data)
23	L, 1;2.0, babbled these words throughout her diaper change. L: <u>Hi pooh</u> . (J1 p. 60 control data)
24	L, 1;2.0, was riding J’s rocking horse; she then stopped rocking and addressed M. L: <u>Hi daddy</u> . (J1 p. 61 control data) (Why is L addressing M as <i>daddy</i> ?)
25	L, 1;2.0, After rocking her doll in the chair, L took the doll off the chair. L: <u>Oh dada</u> . (J1 p. 62 control data)
26	L, 1;2.0, saw her pacifier on the counter. L: <u>Oh lo</u> , lolo. (lolo = pacifier) (J1 p. 62 control data)
27	1;2.0, L saw the cat. L: Kee, <u>hi kee</u> . ⁷ (J1 p. 63 control data)
28	L, 1;2.0, has been saying “Hi kee” frequently to the cat, to M, and to miscellaneous objects. L: <u>Hi kee</u> . (J1 p. 65 #235a vocabulary summary)
29	L, 1;2.0, has been saying “Hi dee” to F and “Hi Dee” to J frequently. L: <u>Hi dee</u> . (J1 p. 65 #235c vocabulary summary)

⁷ At the time, I spelled *kee* “ke”. However, there is no note indicating why I made this change.

(*) In the sample of comprehensible speech, the time is noted under each example. SRB 2001

J1-42

1.1.11 cont. March 31 cont

(181)

Cookie — (interim note) She asks for cookies all day long. She will either ask + go to The cookie-cupboard or just ask. She does not distinguish between graham crackers and cookies.

April 1

12.1.12

(182)

"Tee" — holding Jack's shoe, I say "Shoe," she says "Tee." (around 8:30 a.m.)
holding Joanna's shoes in the park. (around 4 p.m.)

April 2

13.1.13

(Much babbling each day but very little of it is repeated in a comprehensible or consistent pattern.)

(183)

"Z" = horsie — Said as she bounced on the rocking horse.

(184)

ba = juice. Said while drinking a cup of juice. She wanted more.

(185)

"Uh-oh dada" — linear pattern SRB 2003 Said when Jack broke wind very loudly.

(*)

Control Data at 1.1.14 APRIL 3, 1972

COMPLETE NOTE OF
EXAMPLES OF
COMPREHENSIBLE

SPEECH

"Da" = Up — Standing by her high chair. She clearly wanted to get in it.

(6:38)

ba

(7:00)

= milk. (Whenever she wants milk or a refill, she holds out the cup and says "Ba.") Held her cup out to me. Did this 3 times during meal.

Age 13½ months

1.14 cont.

April 3 CONT.

"U m u m u m" — played this game with me
(7:15) and Joanna at breakfast.

"Uh-oh" — Sitting on living room floor,
(7:40) She is saying "Uh-oh" to Jack.

"Da" — Sitting in Jack's lap. She wanted
(7:40) to get out.

"Hi" — I walked into living room where
(7:50) she was playing.

"Hi" — She walked into my room. Said
(7:55) "Hi." left went to Joanna's room said "Hi." left and returned to my room, again said "Hi."

"Uh-oh" — Said while Jack was rattling a
(7:55) broken sliding door.

"Hi" — Came to my legs + gave me a hug
(7:55) and said "Hi."

(8:00) wave — In response to my saying "Bye dada."

(8:10) "Da" — She covered herself with paint,
and had to be bathed. She wanted
to get out of the tub.

(8:30) "Tee" — "Tee" — We went outside she took me
to the tree (We came back in after
a minute.)

1.14 cont.

April 3 CONT.

ti tee = thank you "Ti tee" — Joanna handed her a doll
(8:45) which they are now throwing
back and forth. This game
is causing both girls to
shriek with delight.

(8:50) "Tee, tee" — We went back outside. She
wanted to see the tree. Also
said this when she bucked tree.

"Da" — Still outside. She wanted to
(9:00) be lifted off a wall. (Joanna now gone.)

"Cookie" — We are back in the house — in the
(9:05) kitchen. She asked for a cookie.
I said "No cookie; cookie bye-bye."
She did not ask again for a
minute. She then picked up
two plastic lids from the
cupboard and walked around
the kitchen with them repeating
"Cookie."

"Cookie" — Said as she walked around kitchen
(9:10) with two measuring spoons.

Silence Then repeated twice more.
"Cookie" — Still carrying spoons. (In interim
(9:15) since last "cookie" she very (cont.)

Interest in cookies explained by fact that hired help, who lived with us while I was sick, used cookies as a way to keep Laura busy. This is the 3rd day since help left

Jl-45

1.1.14 cont,

April 3 CONT.

(cont.)

busily

ba

(9:20)

= left the room and took dust out of plant. Ball. She went out onto the patio.

I yelled to her from house. "Laura, play ball." She said "Ba," picked up ball, bounced it and repeated "Ba." She is now bouncing the ball.

"Cookie" — returned to kitchen and went to the cracker cupboard. A minute later she repeated this. I then gave her a cracker. She laughed and

walked out of room and onto patio. "Ba" — returned to kitchen. I guessed that "Ba" in this situation was a request for a drink. I gave her some juice. She seems satisfied.

"Cookie" — returned to cookie cupboard. I said "No more cookie," she started to cry, then repeated "Cookie."

(9:30) We are in the playroom. I gave her a party favor. She is sitting on the floor holding a book cut in the shape of a bear and babbling while she turns the pages.

~~tee~~
(9:30) = shoe

She stood up bent over and put both hands on her feet and said "Tee."

~~bee~~
(9:34) = beads. Took my beads and said "Bee."

Earlier in the day I had labeled them for her as "Beads." (I was lying on the floor.)

1.1.14 cont.

APRIL 3 CONT

"Poooh" — Said in response to my saying that
(9:35) I was changing Laura's pooh.

"Tee" — Shoe. I pulled her feet up so
(9:35) That she saw her shoes as I was changing
her.

(9:40) ba = milk. She wanted a sip of my glass
of milk which she saw on
the kitchen counter. Repeated a few
minutes later. Again repeated.
Fourth repeat, I gave her my
glass of milk which she drank as she
said "Ba" at intervals.

(10 - 10:25) — Held her in my lap + rocked. Not much
verbalization. She mainly cuddled and
sucked her pacifier.

"Hi kee" — Said as she picked up a book of
hers which has a cat in it.
[cat page was not open] Then picked
up a doll and repeated this (**)

(10:30)

11:00

"Ba"

(11:00)

— I came in carrying the milk
Gottle. She was already in high chair
+ eating.

"Ba"

(11:05)

= milk — She wanted her cup of milk.

"Ba-ba"

(11:05)

= banana — Said as I handed her a
banana.

"Ba"

(11:10)

— Said as she dumped the milk. She
is now rolling the banana in the spilt
milk and saying "Ba ba ba ba." (**)

"Ba-ba"

(11:12)

— Said as she squashed the banana between
her hands and then showed it to me.

"Ba"

(11:12)

= milk — wanted her cup which was on the table
she is now holding it and babbling.

First use is
a meaningful
linear pattern.
SRB 2002

The
meaning of
"Hi kee"
to a doll
is unknown.
SRB 2002

*** I failed
to use commas,
but I am
uncertain whether
it was an
oversight
or intentional
SRB 2004

1.1.14 cont.

APRIL 3 CONT

(11:20)

Now she is spitting food at me and laughing
"Ba-ba" — I handed her some fresh banana and
(11:20)
said "Banana, eat it." She said
"Ba-ba."

(11:22)

* L's use of "Dada" appears to be an expression of a thought about F. Regardless of L's intention, M. responds as if this were the case. M. treats L's comment "Dada" as if it were decontextualized.
SRB 2004

"Dada" — Just started saying This. I answered "Dada Bye-bye." She repeated "Dada" and followed with babbling.

"Ba" — handed me the empty cup.

(11:25)

"Da" — Wanted to get out of high chair.
(11:25)
Lunch ended She is now alone on the patio and running back + forth.

** Flexible use of a linear pattern in discourse.
SRB 2003

"Uh-oh, oh kee, oh" — I said "What?" She said "kee" and ran back to cat's bathroom. The cat, who is not allowed in the house, had run in the open patio door. Now she is chasing him. Put cat in his bathroom which ended episode.

(11:35)

"Da" — Said as she tried to climb into her high chair. I put her in it. She is now making a high sing-song sound like "Lo lo lo" and is very pleased with herself. She wants my pen and has both arms out; is going "O O O O."

(11:36)

1.1.14 cont.

APRIL 3 CONT

"Um um um" (11:40) — Is trying to feed me a plastic letter. She then laughs.

"Da" (11:40) — Wants to get back out of high chair.

"Oh dat" (11:40) * Ran into my room and dialed phone.

"Dat dee" (11:40) ** Brought me my pen.

11:40-50 Interrupted by phone, Outside in front. We are waiting for

Joanna.

(11:50) "Da" — wants to get inside her stroller, I did not put her in.

"Ah" (11:55) — Wanted to be lifted on to the wall. I did so. (Joanna home)

12-12:30 — We saw a neighbor's new baby. She was very quiet. Also she played with the older children.

12:30-1:40 Nap

1:40-2:45 Trip to park.

"Da" (2:00) — Wanted to get out of the swing at the park.

2:45 Returned home.

(2:50) "Ba" — This time I'm not sure of meaning. We are in kitchen baking cookies.

(2:55) "B ah dee" — Said while holding broom. (cont.)

* Linear pattern — "Dat" refers to the phone. SRB 2003

** Not a linear pattern — the meaning of "dee" is unknown. SRB 2003

*** There is a low wide wall that L&J liked to be on near the end of the driveway. SRB 2001

April 3 Control Data cont.

J1-49

(*) broo = broom was not added to L's lexicon until 1;1.22 when a much clearer example of the relation between her attempted word and the context occurred - see p.54 SRB 2001

APRIL 3 CONT

(cont.)

Followed by "Dee, dee, dee, broo." (*)

"Cookie" — à propos of nothing in particular.
(2:55)

"Cookie, cookie, cookie" — I said to Joanna
(8:00)

"You'll eat enough sweets when you eat the cookies."

(3:10) "Ba" = milk. — Saw milk bottle on counter.

"Oh oh oh" — Saw cookie batter she wants
(3:25) some badly

(3:30) "Uh-oh Dee, Dee" (**) Said immediately after Joanna said "Uh-oh." (***)

(3:45) Playing on the back patio with Joanna.

"Chee" — Hungry. Came in the kitchen said

(4:05) "Chee, chee" and cried. Joanna gave her some cheese.

(thank you) "Ti dee" — Said to Joanna as she gave her cheese.
(4:05)

TOO CHAOTIC TO CONTINUE END APRIL 3 SAMPLE

April 4 In these four days she has added.

1;1.15-1;1.19 (186) bottle = bottle

Says this whenever she sees her bottle.

(187) 2) pooch

Says this when she is making a pooch.
First time at breakfast - followed since

(cont.)

(**) Possible linear pattern.
SRB 2003

(***) It may be that "dee" in this utterance refers to J.
SRB 2003

April 4-8 cont.

(cont.)

Then on every occasion when she has full pants.

e.g., I was washing dishes. She came to me and said "Pooh, pooh pooh" until I stopped.

I tell her that I am cleaning her pooh. (See April 3 note in which she repeated word after me.)

- (188) 3) "Dub, dub dub"—while reading books. ~~*~~
- On April 3 I had her in my lap with a book and I read to her "Rub-a-dub-dub three men in a tub."

~~*~~ Dub, dub, dub
was not
entered in
L's lexicon.
SRB 2002

Notes of interest on comprehension.

- (189) 1) We were in the park and she likes to slide on a small wide slide. She was trying to climb up it; without any cue other than verbal one, I told her "Go around to the stairs." She did so. ^(Was able to follow this same cue on second visit April 9)
- (190) 2) Realizes that a word works as well as crying. I was in the kitchen she was in the playroom. I suddenly heard her yelling "Da, da," (cont.)

April 4-8 cont.

(cont.)

which is her word for down. I came in to find her stuck at the top of her rocking chair which was on the verge of falling over.

April 9, 10 (191)1;1.20 - 1;1.21

pooh = any wee, pooh or fart. She knows that I will change her if she comes to me and say "Pooh" so she does so if the diaper is very wet as well as for caca.

(192) bobble = a baby oil bottle as well as her bottle.

(193) lo/lo = pacifier. e.g., It was sitting on the table in front of her high chair. She wanted it and said "Lo/lo, lo/lo" until I gave it to her.

(194) dub-dub-dub — did not babble this in particular, although she continues to imitate reading with babble.

Comprehension.

(195) Serena (name of neighbor's dog) elicits the word bow-wow from her.

(196) da = (Interim note) Da is now used to

signal her need for positional change. She uses it where: a) up — to get into her crib or her high chair; b) down, or out — to get out of her car seat, the bathtub her crib —

(Cont.)

* The presentation of the order with a colon and other aspects of the punctuation were altered for clarity. None of the content was altered.

SRB 2004

1.1.20-21 cont.

April 9-10 cont.

(cont.)

c) in — to get into the car, the bathtub, the crib, and d) outside — standing by door to patio or front yard, would be appropriate.

April 11 1.1.22

Comprehension of Her Environment

(197) 1. She is beginning to know what things belong where — not just from a verbal point of view.

(197a) e.g., If she finds a pair of socks, she tries to put them on her feet.

(197b) e.g., She scrapes her spoon across her plate in imitation of our eating although the final result is still primitive.

(197c) e.g., She knows where to look for cookies, cheese, milk + bananas, puzzles which she dumps + bangs in an imitation of Banna.

(198) 2. She understands the household routine

Baba = banana

She wanted a snack. She took me to the refrigerator and said "Baba." I opened the door and said "Where's the banana?"

She pointed to the banana. I then said

"If you want to eat a banana you'll have to sit in your high chair." She (cont.)

April 11 cont.

(cont.)

Then ran to the high chair which is in the dining room. She continued to say "Baba" while she was eating the banana.

(199) Hi bow-wow linear pattern SRB 2003

We were on a walk and stopped to see the neighbor's dog. She said to it "Hi kee". I said "Hi bow-wow." About ten minutes later, we passed a barking dog. Laura distinctly said to it "Hi bow-wow!"

(200) ah = (up) in contrast to da = (down.)

On our walk she wanted to climb up on a wall. She said "Da" I said "Not down, up." She said "Ah" so I picked her up onto the wall. She said "Da" when she wanted to get down and "Ah" again for up several times.

(201) "Uh-oh bye-bye" linear pattern SRB 2003

Said as she threw her pacifier onto the floor. She was lying on the changing table.

bur = bird

She saw a robin on the lawn.

April 11 cont.

J1-54

(202)

"Uh-oh broo" = Uh-oh broom linear pattern SRB 2003

Said as my broom, which she was trying
to drag, crashed to the floor.

April 12 1:1.23(203) lo lo = pacifier (interim. note)

She said "Lolo," then bent down
and picked up her pacifier. (Her bottle was
right next to it.)

(204) "Aw" = off

She is walking across the living room
trying to pull her robe off.

April 13 1:1.24(205) "Pooh" - told me she had made a pooh."Uh-oh pooh" linear pattern (in discourse) SRB 2003

(206)

While I was changing her ^I she said
"Pooh." She responded "Uh-oh pooh."

"Tee, tee aw" = shoe, shoe off linear pattern SRB 2003

(207)

As I was changing her, she tried
to untie her shoe as she did this,
she said "Tee, tee aw." She said
this twice within the course of a
diaper change. (Note: She wears
corrective shoes which she doesn't like.)

April 13 cont.

J1-55

(208) "Pooh, pooh, uh-oh pooh" linear pattern SRB 2003

- Said in her high chair. She urinated and made a pooh.

(209) aw = off

I took off her shoes and socks off. I had one sock left, and I deliberately paused. She said "Aw," I ~~✗~~ said as I was taking her shoes off; "I'm taking off your shoes."

✗
The word
had was
left out
SRB 2004

(210) ah = up

- 1) She stands by her high chair and says "Da."
I then say "Up?" She says "Ah."
This has happened 3 times today.
- 2) Held my legs and clearly wanted to be picked up. She said "Ah, Ah," repeatedly.

April 14 (211) key = keys

1.1.25

Saw my keys lying on the counter and wanted to play with them.

(212) "Tee aw" = Shoes off. linear pattern SRB 2003

She is sitting on my bed. She wants me to take off her shoes. She is pulling at the laces and saying "Tee aw."

(213) ah = up

Walked over to horsie. Said "Ah, ah" (cont.)

*** Key = key

April 14 cont

(cont.)

until I put her on. She is now pulling at my skirt and saying "Ah, ah."

214

pooh = pooh

3 times today she notified me correctly that she was making a pooh. Did not use incorrectly today.

April 15 1:1.26

215

pooh = urine twice This morning and once.

April 16 1:1.27

but = button *

Laura is pulling at Jack's pajama buttons and saying "Uh-h." Jack said "Uh-h! What are you doing?" She pointed to the button and said "But."

* Appropriate response to a Wh-question with what SRB 2003

217 pooh = pooh in her pants

April 17 1:1.28

218

dada = doll *

*** L's realization perhaps that a doll is meant to resemble a person. SRB 2001

I have noticed on many occasions in the last 3 to 4 days that dada is used to mean "doll."

If I say to her "Doll, Laura, doll," she will say "Dada doll."

219

pooh = urine made on floor. Also pooh.

220

*** Key = key - SEE TOP OF PAGE

*** The entry is copied legibly on the top of the page, SRB 2001

Saw my purse and apparently wanted my keys since she said "key, key, key." I gave her the keys and said "What's that?" She said "key." (Copied SRB 2001)

April 17 cont.

(221) "Dada" = self.

She is standing by my mirror and looking at herself. She repeats "Dada, dada."

April 18 (222) "Dada" = doll
1:1:29

Doll on block. She points it out and says "Dada."

(223) "Dada" = baby.

She is reading a book "Babies" and saying "Dada" to the photos.

(224) key - (interim note) did not identify picture of key as key. Did identify my key as key.

April 19 (225) "Mama" = mama. (first time since last note of many weeks ago)
1:1:30

I was holding her in my arms and stroking her. She said "Mama, mama" and kissed me.

(226) "Dada" = baby

She is looking at a book of photographs of babies. She put her finger on one and said "Dada."

(227) "Dada" = self.

Saw herself in the creative playthings mirror in her crib and repeated to herself "Dada, dada."

1:1.30 cont. April 19 cont.

(228) Hi kee - (interim note) linear pattern SRB 2003

Says This to The cat, to pictures of cats and dogs, to a picture of a cat on her blocks.

(229) "Bun" = bird

The birds are singing loudly outside.

I said "Birds." She repeated "bun."

(230) pooh = pooh or urine is now clearly established pattern.

(231) dat = (to get what she can't ask for for lack of a label.)

Jack had her in his arms, I walked by and we kissed. Laura then said "Dat" and pulled our heads towards her. We then kissed her, and she kissed us.

(232) lolo = clearly established as pacifier.

The rest of this page is blank in the original diary. SRB 2004

babble = no pattern that I
discern or can phonetically
capture.

1; 2.0

APRIL 20 - MORNING SPEECH SAMPLE - ALL SPEECH

1; 2.0

- (5:25) "Dada" — rocking in my arms From awakening through breakfast.
- (5:30) "Pooh, pooh" — standing in kitchen. Followed by "Hi hi (babble)."
- (5:33) "Chee, chee" — walked to refrig. is repeating "Chee, chee, chee." [gave her cheese]
- (5:35) "Uh, uh" (up) — holding my legs. I said "No not right now." She is crying.
- (5:40) Joanna joined us. Now 2 children + self up. Laura is crying.
- (5:40) "Cookie, chee (babble)," No Context Note
- (5:40) Babble — She is looking at Joanna's block building in playroom.
- (5:40) "Dada" — Reading baby book on floor.
- (5:41) "Cookie, ay, ay" — Wandering around playroom.
- (5:41) Babble — long babble, apparently directed at hamper, which she walked over to.
- (5:42) "Ba — (babble)" picked up a toy car + ran it across floor. Put car in mouth. Then continues to run it across floor.

(5:43) (Babble) — "dada dis" (*) Walked to rocking chair.
(e?c? SRB 2004) Then to open baby book.

(5:44) cha — holding toy piano stool + examining it.

(5:45) "Ay, ay" — climbed on stool.

*The referent of "Dada" is not clear in this note. Does L mean to refer to herself or to her goal, the open baby book?
SRB 2004

*** daddy's room } refer to M & F's bedroom SRB 2001 J1-60
Jack's room }

1, 2, 0

APRIL 20 CONT.

- (5:45) Crying — Joanna took her off stool. She is mad.
- (5:45) "I i i i" — Joanna is instructing her.
- (5:45) Crying — fell off stool.
- (5:46) Babble — Still playing with stool, crying when stool fell.
- (5:46) "Tee tee, dada, oh daddy." — linear pattern SRB 2003
said while walking out of playroom.
- (5:46) "Dee, dee hi." * — linear pattern SRB 2003
Now in other room on the way to daddy's room.
- (5:46) "Dada, dee, dee, dee" — I said "No we aren't going to see daddy."
- (5:50) "Hi, pooh, uh-oh, hi" ** — in Jack's room,
- (5:50) diaper change — couldn't record all babbling + "talk," said "Tee tee, tee," to shoes +
"Hi pooh." *** Babbled throughout change.
- (5:55) "Cookie, cookie, chee, cookie" — She obviously is hungry. Found her cheese on floor. *** linear pattern SRB 2004
- (5:55) "Um um" — Playing game with Joanna.
Pretending to have her eat cheese.
- (5:55) Squeals of delight — playing with Jo.
- "Pooh, pooh" — Sitting on floor; watching Jo who has no pants on.

* The meaning seems to be "Daddy, daddy hi" i.e., I am going to see/find daddy.

*** Note the underlined (SRB 2001) commas. See p. 66 # 240 for the reason why this utterance is not a linear pattern. SRB 2003

1, 2.0

APRIL 20 CONT.

(6:00) "Ah dab, dada" — Talking to Jo. *

* Unclear if dada has a referent or if it is beginning of sound play with J. SRB 2004

(6:00) "Dada" * — Jo repeats — then says "Dada." *

(6:00) "Chee, chee" — Walked to me, pointed to cheese.

(6:01) "Ah (babble), Ah dada, dada, ah" (long babble). — pulling at my note book. **

** dada = L uh = up
Is ah dada a linear pattern meaning "up baby"?
SRB 2004

(6:01) Crying — Joanna Threw her on floor.

(6:01) "Pooh, pooh" — Trying to pull off night-gown.

(6:01) "Z, z, z" — wanted to ride horse. to now

riding hobby horse. Stopped and said "Hi daddy" to me.

hi daddy *** linear pattern SRB 2003

"Ba boo" — I said "Ride pony" to her. scream of delight.

*** L knew M was not daddy; also used daddy instead of dee. SRB 2004

Babble — on horse pointing to pile of laundry.

while riding hobby horse

"Hi-dee" *** — Joanna came over to horse + said "Hi."

"Eh dee" *** — In a whining voice.

{ Joanna standing next to her

"Eh, eh, eh, eh" — Still on horse.

*** Context notes suggest that dee = Dee, L's name for J. SRB 2004

"Z, z" — Still on horse.

"I, i, i" — pulling on nightgown + patting horse.

"Hi" No Context Note

(6:05) "Da, da." — Wants to get off the horse.

(6:05) "Cookie, chee chee" — off horse. I complete Context Note

(6:05) "Z, Z" — Standing and patting horse.

1:20 cont. **(**)** headed toward Jack's room. Babbling can't hear clearly. No note while she is out of room.

April 20 CONT

(6:05) **(6:05)** = minimal
(6:10) Babble — to a lock board. She is pulling chain.

"Pooh, pooh" — walking away from sideboard.

(6:10) "Daddy" — tangled in wire, going towards doll.

"Daddy, dada, ah dee" **(*)** walking around with doll in her arms.

(*) "ah dee" is not a linear pattern
The meaning is unknown SRB 2003

"Dada, dada" — still carrying doll. Put doll on rocking chair, is rocking it.

"Oh dada" — linear pattern SRB 2003 took doll off chair.

"Pooh!" — Asked Joanna if she had to go pooh, hawa is following her. I am making a pot of coffee!

(6:14) Both girls returned to kitchen.

"Oh lo, lo lo" — linear pattern SRB 2003 Saw her pacifier on counter Joanna gave it to her. She is now sucking it.

(6:15) "Chee" — In response to Joanna who said "Want one, cheese?"
She is now dumping a box.

(6:20) "Chee, chee, chee" — sees cheese on counter.

"Chee eh eh ah, chee" — wants Joanna's cheese (Crying) Finally, picked up own cheese.

(6:20) "Dadady" — headed toward Jack's room. Babbling can't hear clearly. No note while she is out of room + cont.

()** See copy of note above SRB 2001

Note:
Unusually quiet meal may be due to Jack's absence and also failure of cat to appear.
(copied from side note - SRB 2001)

1, 2, 0 cont.

APRIL 20 CONT. Morning speech sample

I fix breakfast [5 min] 6:20 to 6:25

(Both girls are playing in living room.)

(6:25) "Ke. hi ke" - linear pattern SRB 2003 Saw cat.

(6:25) "Ba, ba, ba, ba" - Sees milk on counter. (crying)

(6:25) "Daddy, daddy" - **No Context Note** **Could L be noticing F's SRB absence? 2001**

(6:30) At breakfast - Joanna + I are present.

(6:30) "Ba - ba" - holding out cup for more milk.

(6:32) " " " " " " " " " "

(6:32) eh "Eee" (happy sound) - spilling milk on high chair tray.

"Ba, ba, ba" - again more milk.

She is very silent. Quite engrossed in eating.

(6:40) "Ba ba" - wanted milk.

"boo" - **Banging** spoon in bowl + scraping it across. Now laughing as she bangs. Bangs waits for Joanna to laugh.

(6:40) "Ah, aah oooo" - wanted a piece of bread.

(6:41) "Ba, ba, ba" (milk) - Poured milk into her bowl + is splashing it around. This game with the milk is very engrossing.

(6:45) "Ba" - handed me empty bowl.

"Ba, ba, ba" - " " " cup.

(6:47) "Ba, ba" - Wanted her cup which I had left on table.

Note: M failed to notice that boo must have been L's word for spoon. L's focus was on the action of banging and not the labeling of an object. See contrast p. 72, 228 SRB 2004

Note: SEE ABOVE
UNUSUALLY QUIET MEAL MAY BE DUE TO JACK'S ABSENCE ALSO FAILURE OF CAT TO APPEAR

1, 2, 0 cont.

April 20 cont

She seems to be playing a game of asking for milk + then spilling it.

Laugh — Threw cup on ground.
"Da" — down

End of note.

Subjective Impression

I notice that her speech is much more purposeful + less random than one month ago. I may be the only person who could understand her at this point, but she is consistent enough in her use of "e words" so that she does clearly communicate to me her most fundamental needs.

The rest of this page is
blank in the original diary SRB 2004

Vocabulary Summary at 1;2.0 April 20, 19721;2.0 Cont.Status of previous vocabulary - April 20 14 mo(233) 1. dada

(233a) a. Remains used for Jack.

(233b) b. Apparently means doll. Says this when she holds her doll or when she wants it.

(233c) c. Apparently means baby. Says this to drawings and photographs of babies, also to her own image in the mirror.

(234) 2. daddy — remains Jack. Used interchangeably with dada.(235) 3. hi

(235a) a. Continues to use frequently + correctly

b. Frequently combines with.

(235b) Hi kee — linear pattern SRB 2003

1. Says to cat

2. Says to me, to miscellaneous objects.

(235c) Hi dee linear pattern SRB 20031. Says to Jack (lower case d SRB 2004
Hi dee2. Says to Joanna (upper case D SRB 2004
Hi Dee(235d) c. Hi bow-wow

1. On one occasion only. (See April 11 note)

(236) 4. d. Hi pooh (April 20 note)a. bow-wow

(236a) a. Used for dogs + barking. (cont.)

April 20 Vocabulary Summary cont.

JL-66

1;2.0 cont.April 20 14 mo. Status of previous vocab.

(cont.)

(236b) 6. No longer used for cars, outside noises. (See March 29 note)

(236c) c. Occasionally used for other large animals.

1. Picture of a lamb

2. Picture of a lion.

(237)

5 ma = milk. Completely discontinuedReplaced by "ba"
See p. 41 #179 SRB 2001

(238)

6 mama = April 19 is only use of mama during this period.

(239)

7 Urma = Discontinued. [Urma no longer works here]

(240)

8 Uh-oh

** left March 31 L, 1;1.11 SRB 2001

(240a) 1. Remains same as 13 mo. note

2. Combined on occasion.

(240b) a. April 2. "Uh-oh dada."

(240c) 6. April 3 "Uh-oh, oh kee, oh."

(240d) c. April 3 "Oh dat."

(240e) d. " " "Uh-oh dee dee." [No apparent meaning]

(240f) e. April 11 "Uh-oh bye-bye."

(240g) g. April 11 "Uh-oh 'soo."

(240h) h. April 13 "Uh-oh pooh."

(240i) h. April 13 "Pook, pook, uh-oh pooh."

(240j) April 20 "Hi, pooh, uh-oh, hi."

*** The original note may be incorrect. This utterance may have been a meaningful linear pattern SRB 2004

** This example is not a linear pattern
The comma between "hi" and "pooh" in the original entry indicates that I heard a brief pause between the two words - SRB 2001 - (See p. 60 at 5:50)

(240k)

(240l)

April 20 "Oh dada" p. 62 (SRB 2001)
April 20 "Oh lo." p. 62 (SRB 2001)

April 20 Vocabulary Summary cont.

Lines = SRB 2001

Boxes = SRB 2003 + 2004

JL-67

1;2.0 cont.

April 20 14 mo. Status of previous vocal

(241) 9. dat

1. Used rather infrequently. She appears to use this when she has no label for an item.

(241a) a. ^{March 29} "Bye-dat."

(241b) b. April 3 "Oh dat."

(241c) c. April 3 "Dat dee"

(241d) d. See April 19 note P. 58 231 SRB 2001

(242) 10.

tee * - Clearly established in two usages.
(242a) Tree } ^{April 3} same as 13 mo. note. (kept note only)
Shoe } 8 examples.

(242b) 2. Shoe } April 1, 3

(242c) 3. Combined with aw (off). tee = shoe

a. April 13 "Tee, tee aw,"

b. April 14 "Tee aw."

* Tee = shoe is derived from an extension and was entered in the computerized lexicon as the word tee = shoe, Word # 15 [1;0.19] SRB 2003

(243) 11. ba

(243a) 1. ball lexicon # 13

(243b) 2. No longer used for book **

** ba = book was never used spontaneously SRB 2004

(243c) 3. round objects - seedpods which she finds in the yard, grapefruits, oranges
lexicon # 13

(243d) 4. ba is primarily used to denote milk or any liquid which she wants refilled in her cup. ***

(See many notes on ba = milk)
beginning on p. 41 SRB 2001

ba = milk was a homonym. It is treated as a separate word in the updated version of L's lexicon.
SRB 2004

1;2.0 Cont.April 20 Status of previous vocab.(244) 12. kee = cat - clearly established.13. (245) chee = cheese - clearly established.14. (246) da(246a) 1. Initially this month da = any positional change. This is true until April 11 (see note) when I "taught" her the word up.(246b) 2. She now consistently uses ah for up and da for any other positional change.15. (247) cookie

1. No change in status. Very frequent use.

16. (248) more = Never said this again.(249) caca = cracker. Never said this again. *17. (250) z = horsie - clearly established.18. (251) bur = bird

1. Says this rarely but is consistent.

TOTAL active previous VOCAB = 14 *[Not counting double meanings given to some sounds
Not counting vocab. used only once in entire month]TOTAL NEW MEANINGS ADDED = 4 *

To previous vocab

dada = doll + self = 2ba = milkba = round object = 2

** These totals are inaccurate. They indicate how hard it was to keep track of even a small lexicon prior to the advent of the computer.

SRB 2004

There are errors on this list which were corrected on the computerized lexicon S RB 2001.

JL-69

l;2.0 cont.

April 20

New vocab. period March 20-April 20

(252) 1. bottle = bottle prior lexicon #20L, l;0.23

prior (lexicon #20
L, l;0.23)

* [s two uses of
bye were not inter-
personal. bye =
description of an
action on an object

(a) transfer of a
cup p. 40 #175

(b) dropping
her pacifier
p. 53 #201,
S RB 2003

a. March 22 bottle = bottle

b. March 23 "Bot, bot, bottle" = bottle

c. April 4-8 bottle = bottle

At present bottle = bottle

(253) bye - Used only twice as recorded. Prior lexicon
#20.9.2

(254) pooh = pooh, urine, fart - signal that
she wants clean diapers.

She uses this word whenever:

(254a) 1) She is dirty + wants her pants
changed.

(254b) 2) Very frequently but not infallibly
when she is in the actual act
of making eaca.

(254c) 3) See April 3 note + Thereafter
for evolution of the word.

(255) 4. baba = banana [April 3 on]

(256) 5. lolo = pacifier [April 9, 10 on]

(257) 6. aw = off [April 12 on]

(257a)

1. Says this when she wants a robe
or clothing off. She pulls at the
item and repeats "Aw," "Aw."

(257b)

2. Combines with tee [shoe]. She says
this frequently as she is bothered
(cont.)

1.1.2.0 cont.

April 20 Vocabulary Summary cont.

Subjective Impression

*** Subjective Impression = It is very difficult to get her to say a word. The number of repetitions is enormous, and yet she does not produce. ? = Is there a phonetic limitation or what? e.g. Why do I say "pee-pee" each time she tells me "pooh" for urine without any response? (See below - copied exactly as it appears in diary SRB 2001)

(cont.) by an orthopedic shoe which she wears.

* Off is not used in a linear pattern with any word other than tee, with L's shoe as the referent. SRB 2004

(258) 7. ah = up [April 11 on]

This word was clearly taught to her. She would say "da" where up was appropriate. I would then say "Not down, up" and wait for her to say "ah!" - She now says "ah" on her own when she wants to get into her high chair, the stroller or be picked up.

(259) 8. key = key [April 14 on]

(260) 9. hdee = Thank you Prior lexicon # 21 L, 1, 0 + 23

This is the closest I can come to recording the sound she quite frequently makes when she is handed something.

11. Broo = Broom lexicon # 30, L, 1, 1.2

(261) 10. but = button on one occasion

TOTAL NEW VOCAB = 9
[Not recording one occasion item]

Total previous = 14
Total new meanings = 4
Total new vocab = 9

27 ***

Total "meanings" attached to consistently repeated sounds or to actually correctly pronounced words = 27

*** See prior note p. J1-69. SRB 2004

*** Subjective impression = It is very difficult to get her to say a word. The number of repetitions is enormous and yet she does not produce. ? = Is there a phonetic limitation or what? Why do I say "pee-pee" each time she tells me "pooh" for urine without any response.

*** See top of page. I have copied this so it is clearer to read. SRB 2001

TABLE 5¹

**THE EMERGENCE OF TWO-WORD SEQUENTIAL LINEAR PATTERNS WITH
HI, UH-OH/OH, BYE AND OFF FOR L DURING THE MONTH 1;1.0 – 1;2.0**

DATE	Hi	Uh-oh/Oh	Bye	Off (aw)
1;1.0 ²	1. Babble, babble, hi, <u>hi kee</u>			
	2. Hi, hi — <u>hi dee</u> (to F)			
		3. <u>Oh dee</u> ³ , hi dee		
	4. Oh dee, <u>hi dee</u> (to F)			
1;1.2	5. Hi kee			
1;1.9			6. Bye dat ⁴	
1;1.13		7. Uh-oh dada (about F)		
1;1.14 ⁵	8. Hi kee	9. Uh-oh, <u>oh kee</u> , oh		
		10. Oh dat		
		11. Uh-oh Dee, Dee (about J)		
1;1.22	12. Hi kee ⁶ (to dog)			
	13. Hi bow-wow			
		14. <u>Uh-oh</u> bye	14. Uh-oh <u>bye</u>	
		15. Uh-oh broo (broom)		
1;1.24		16. Uh-oh pooh ⁷		
				17. Tee, <u>tee aw</u> (Shoe, shoe off)
		18. Pooh, pooh, <u>uh-oh pooh</u>		
1;1.25				19. Tee aw (Shoe off)
1;1.30	20. Hi kee ⁸			

¹ The linear patterns and their contexts from the control data at 1;1.0 (end of previous month) begin this table. The numbers correspond to the order of emergence on Table 4.

² L's first linear patterns appeared in a forty-five-minute control sample of her continuous verbalizations at 1;1.0. Examples 1-4 come from these data.

³ The meaning of *oh dee* as a linear pattern was uncertain.

⁴ This example comes from a dialogue between M and L. M: "Bye-bye milk?" "Want more milk?" L: "Bye dat," as L handed her empty cup to M.

⁵ Examples 8-11 come from an approximately six-hour control sample of L's comprehensible language at 1;1.14.

⁶ Example 12 comes from a dialogue in which M corrected L's language. L: "Hi kee." (to Serena) M: "Hi bow-wow." Example 13 in which L said "Hi bow-wow" occurred about ten minutes after M's correction when L heard the bark of an unfamiliar dog.

⁷ Example 16 comes from a dialogue between M and L while M was changing L's diaper. M: "Pooh." L: "Uh-oh pooh!"

DATE	<i>Hi</i>	<i>Uh-oh</i>	<i>Bye</i>	<i>Off (aw)</i>
1;2.0 ⁹	22. Dee, dee hi (seeking F) ¹⁰ 23. Hi pooh 24. Hi daddy (to M) 27. Kee, <u>hi</u> kee 28. Hi kee (to cat) ¹¹ Hi kee (to M) Hi kee (to miscellaneous objects) 29. Hi dee (to F) Hi Dee (to J)	21. Tee, tee, dada, <u>oh</u> daddy 25. Oh dada (Oh doll) 26. <u>Oh</u> lo, lo-lo (Oh pacifier, pacifier)		

⁸ L said "Hi kee" to our cat, to pictures of cats and dogs, and to a picture of a cat on her foam blocks. (J1, p. 58 #223 interim note)

⁹ Examples 21-27 come from a one-hour-and-fifteen-minute control sample of L's continuous verbalizations.

¹⁰ Note the reversal of the word order. L was not greeting F. She was on her way to find him.

¹¹ Examples 28 and 29 come from a summary of L's vocabulary development at 1;2.0.

EMERGENT VOCABULARY FOR L FROM THE AGE OF 1;1.1 THROUGH 1;2.0
(Between 13 and 14 Months)

27. **1;1.5 *dee-dee*** = a request that M make the bell of an old alarm clock ring ("... Each time she wants the bell to ring, she brings it to me and says 'Dee-dee.'" J1, p. 40 #171) > 1;1.11. L discontinued the use of *dee-dee* when she broke the clock.
- 1;1.11 *ba*** = milk (See word # 9 *ma/uma* = milk) (The etiology of *ba* to refer to milk was unknown. *Ba* meaning "milk" became a homophone in L's vocabulary.) > 1;1.13 *ba* = juice in a generalization (L said "*ba*" as she drank a cup of juice and wanted more) > 1;4.5 *ba* ≠ juice; a differentiated form, *du*, emerged (See word # 83.) > 1;7.19 *ba* ≠ milk > 1;7.19 correct pronunciation *milk* = milk
28. **1;1.11 *um, um*** = way to initiate a pretend eating game (L said "Um, um" to initiate a game in which she wanted M to pretend to eat. L handed M food, and M said "Um, um!" as she pretended to eat it.)¹ > 1;1.14 (L said "Um, um, um" as she played the pretend eating game with M and J during breakfast. J1, p. 43 control data) > 1;2.0 (L was playing with J and said "Um, um" as she pretended to make her eat cheese. J1, p. 60 control data) > 1;3.27 (L said "Um,um,um" to comment on the taste of a strawberry) > 1;4.9 *um goo[d]* = L is eating or chewing **etiology of the word good** ("said after L ate a bite of scrambled eggs; said as she was chewing on an old wallet; said as she was chewing a small plastic dog.") > 1;4.10 *um um goo[d]* = positive comment on a taste ("said while L was eating a cookie.") > 1;4.11 *um, um, um* ("said while L was looking at a very realistic picture of a cookie.") > 1;4.11 *um goo[d]* ("said while sucking a lemon [L likes lemons.]") > 1;4.13 *goo[d]um um goo[d]* (L: *Goo[d] um um goo[d]* "said while eating a nectarine.") > 1;4.15 *um goo[d]* (L: *Ba um goo[d]* [Milk um good] "said while drinking milk.") > 1;5.11 (L: *Um goo[d]*. "Said as [L] ate an onion roll.") > 1;5.14 *um goo[d]* = one of two descriptions of the same taste of egg (L: *Um e goo, hot hot* "[Um the egg is good, hot, hot.] As [L] tasted her egg.") > 1;5.16 **emergence of the word good from um goo[d]** correct pronunciation of final consonant *good* = good (L: Good. "Said as L bit into a fresh peach at her grandmother's house.")
29. **1;1.14 *bee*** = beads (M was lying on the floor. L took her beads and said "Bee." Earlier in the day M had labeled them for L as "beads." J1, p.45 control data) > 1;4.17 *beas* = L's teething beads (L: *Bea[d]s, bea[d]s, bea[d]s* off. "said as L pulled teething beads over her head.") > 1;4.27 *beas* = teething beads (L: *See, see, see, see bea[ds]*. "Said as [L] ran to some teething beads.") > 1;5.16 correct pronunciation *beads* = beads M is wearing (L: *Beas* [Beads]. Mama. Mama. Me Mama. "[L] wanted to wear [M's] beads. M put them on her.")

¹ M and L had played this game sporadically for a long time.

30. **1;1.14 Dee** = Joanna (?) (L said "Uh-oh Dee, Dee" immediately after J said "Uh-oh.") > 1;2.0 *Dee* = Joanna in a reciprocal greeting to J (L was bouncing on the horse. J came over to the horse. J: Hi. L: Hi — Dee.) > 1;2.0 adjacent utterance (L was still on the horse. J was standing next to the horse which apparently annoyed L. L replied, "Eh Dee" in a whiny voice. J1, p. 61 control data) > 1;2.0 *Dee* = J in a linear pattern with *hi* (L said "Hi Dee" to J, as well "Hi Dee" to F. The frequency was not noted. J1, p. 65 #235c summary of vocabulary development at 1;2.0) > 1;3.0 *dada/Dee* = Joanna (vocabulary summary) > 1;3.10 *Dee-dee* = L's name for J > 1;3.13 *Dee-dee* = J (L: Mommy, oh Dee-dee [L was pointing at J] M: Who is that? L: Dee-dee) > 1;4.4 *Dough/Doe* & *Dough-dough/Doe-doe* = J (L: Dough papu Dough- Dough [Jo paper Jo-Jo] "said as L saw J bringing in the morning [news]paper. L still mainly calls J Dee-dee.") > 1;4.6 *Doe-doe* & *Dee-dee* = J in same utterance (L: Doe-doe, Doe-doe, hi Dee-dee. Said to J.) > 1;4.28 (interim note "Dee-dee and Doe continue to co-exist.")
31. **1;1.15 pooh** = defecating and pooh in diaper (L "says 'Pooh' when she is making a pooh.... Followed since then on every occasion when she has full pants." J1, p. 49 #187)² > 1;1.20 *pooh* = any pooh, urine or fart³ > 1;2.0 > *pooh* = a request to have her diaper changed. ("She knows that I will change her if she comes to me and says 'Pooh' so she does so if the diaper is very wet as well as for caca." J1, p. 51 #191) > 1;1.28 *pooh* = urine made on the floor⁴ > 1;2.0 *pooh* = bum (L said "Pooh" while she was sitting on the floor and watching J. L could see J's bare bum since J was not wearing underwear. J1, p. 60 control data) > 1;3.25 *pooh* = pooh or fart (*Pooh* is now used for caca and farts. L is always correct.)
32. **1;1.20 lolo/lola** = pacifier (L was sitting in her highchair. Her pacifier was on the table in front of her. She said "Lolo, lolo" repeatedly until M gave her the pacifier.) > 1;1.22 *lolo* = pacifier ("She said 'Lolo' then bent down and picked up her pacifier. Her bottle was right next to it." J1, p. 54 #203 interim note) > 1;2.0 *lo* = pacifier in a two syllable linear pattern *oh lo* (L said "Oh lo, lolo when she noticed her pacifier on a counter. J gave it to her.)
33. **1;1.22 broo** = broom (L said "Uh-oh broo" as M's broom, which L was trying to drag, crashed to the floor.) > 1;5.30 correct pronunciation *broom* = broom (L: Hi broom. As L took the broom from M.)
34. **1;1.23 aw** = off; possible particle of the verb *take off* (?). (L used *aw* in the context of removing her own clothing. She said "Aw" for the first time as she was "walking across the living room and trying to pull her robe off." J1, p. 54

² At 1;1.14, L said "pooh" in an imitation of M's descriptive comment "I am changing Laura's pooh."

³ I only noted the meaning and did not include what L said.

⁴ The new use is the only information in the note.

#204) > 1;1.24 *aw* = off in a linear pattern with *tee*, a word which referred to L's orthopedic shoes (M was changing L's diaper. L said "Tee, tee aw" as she tried to untie her shoes. L said "Tee, tee aw" twice during this diaper-change.)⁵ > 1;5.6 *aw* = possible verb particle of *get off* (L: Chair aw. " [L] wanted me to get off her chair—a low child's chair.")

35. 1;1.24 *ah* = up; possible particle of the verb *pick up* as a request to be picked up ("L held my legs and clearly wanted to be picked up. She said 'Ah, ah' repeatedly." J1, p. 55 #210)⁶ > 1;1.25 *ah* = on with the meaning "get on/put me on"(?) (L walked over to the rocking horse and said "Ah, ah" until M picked her up and put her on it.)⁷ > 1;1.25 *ah* = up; possible verb particle with the meaning "pick me up" (L said "Ah, ah" while she was pulling at M's skirt.) > 1;5.0 *uh* = up; possible verb particle with the meaning "pick me up" (L: Uh, uh, uh, me. "L wanted M to pick her up.") > 1;5.10 *uh* = up (L: Chair uh. M: Yah, chair. L: Uh, uh. L was "trying to lift her booster seat onto a dining room chair.") > 1;5.11 *uh* = up? (M: Do you want to ride C? L: No uh [up] L was standing by the rocking horse. M put her on it. [No = yes in this example]) > 1;5.15 (L: Chair uh [up] "In response to an overturned chair.") > 1;5.29 correct pronunciation *up* = up (L: M outside. Up. "Said as L tried to take M outside. She tried to pick him up like a doll.")
36. 1;1.25 *key* = keys in a request (L said "Key" when she "saw my keys lying on the counter and wanted to play with them." J1, p. 55 #211) > 1;1.28 *key* = key in a request (L saw M's purse and apparently wanted M's keys. L said, "Key, key, key" until M gave L the keys. M then asked, "What's that?" and L answered, "Key." J1, p. 56 #220) > 1;1.29 *key* = recognition of real keys only (L did not identify a realistic picture of keys with the word *key*, but she did say "Key" in response to M's real keys.) > 1;3.27 *key* = picture of keys (Labels key in Platt and Monk ABC book)
37. 1;1.26 *but* = button ("Laura is pulling at Jack's pajama buttons L said, "Uh-oh!" F responded, "Uh-oh! What are you doing?" L pointed to the button and said, "But." J1, p. 56 #216)
38. 1;1.28 *dada* = doll ("I have noticed on many occasions in the last 3 to 4 days that *dada* is used to mean 'doll.'" J1 p. 56 #218) > 1;1.29 *dada* = doll on the cloth of a foam block (L pointed out the doll on the block and said "Dada.") > 1;2.0 *dada* = L's doll (L was carrying her doll and said "Dada, dada.") > 1;2.0 adjacent

⁵ L wore orthopedic shoes which she didn't like. Her only use of *off* in a linear pattern was with *tee*, her idiosyncratic word for these shoes. Once at 1;2.6 she said *tee ah* in a generalization of *tee* = shoe to refer to her socks.

⁶ At L, 1;1.24, M modeled the differentiation of *up* from the overgeneralized use of *da*. L was standing by her highchair, L: "Da." M: "Up?" L: "Ah." (3x)

⁷ The intention and the implied meaning of L's single word utterance *ah* was basically equivalent to a sentence, "Pick me up, and put me on the rocking horse."

utterance *dada* = doll in a linear pattern with *oh*. (L had put her doll on the rocking chair and rocked it. She said "Oh dada" as she took the doll off the chair. J1, p. 61 control data)

39. **1;1.28 *dada*** = L's visual notice of herself in a reflection ("She is standing by my mirror and looking at herself. She repeats 'Dada, dada.'" J1, p.57 #221) > 1;1.30 (L "saw herself in the Creative Playthings mirror in her crib and repeated to herself 'Dada, dada.'" J1, p. 57 #227)
40. **1;1.29 *dada*** = babies in photographs ("She is reading Babies and saying 'Dada' to the photos." J1, p. 57 #223) > 1;1.30 *dada* = a baby in a photograph(L was looking at a book with photographs of babies in it. She put her finger on one of the photos and said "Dada.") > 1;2.0 *dada* = baby in a book(L said "Dada" while she was sitting on the floor and reading her baby book. J1, p. 59 control data)⁸

⁸ Did L's use of *dada* identify her own reflection and to photographs of babies represent a generalization which foreshadowed her earliest attempt to use a word to refer to a category based on similarity?

REVIEW OF L'S VOCABULARY BETWEEN THE AGES OF 1;1.1 AND 1;2.0
March 21— April 20, 1972

Number of Days in the Month	31
Number of Days with Entries in the Diary	29

Discontinued Words in L's Lexicon Between 1;1.1 and 1;2.0

Word	Date of Acquisition Number in Lexicon	Date Discontinued	Reason for Discontinuation
<i>dee-dee</i>	1;1.5 Word #27	1;1.11	The alarm clock broke. Therefore, L discontinued the use of <i>dee-dee</i> as a request to hear it ring.

Tally of the Words in L's Lexicon at 1;2.0

Total Number of Prior Emergent Words in L's Lexicon	26
Emergent Words Recorded Between 1;1.1 and 1;2.0	14
<u>Total Number of Emergent Words Recorded in L's Lexicon at 1;2.0</u>	<u>40</u>
Discontinued Words in L's Lexicon Between 1;1.1 and 1;2.0	1
Discontinued Words in L's Lexicon Prior to 1;1.1	2
<u>Total Number of Words in L's Cumulative Lexicon at 1;2.0</u>	<u>37</u>

The number of words in the record of the process of L's vocabulary development was greater than the total number of actively used words in her cumulative lexicon. The numbering in the developmental record performance included any emergent word regardless of its duration in her extant vocabulary. Thus, the number of productive words in L's cumulative lexicon always represented the total number of every emergent word L ever said minus the total number of words she subsequently and permanently discontinued.

THE TOTAL WORDS IN THE SEQUENTIAL DEVELOPMENTAL RECORD AT 14 MONTHS = 40

THE TOTAL PRODUCTIVE WORDS IN L'S CUMULATIVE LEXICON AT 14 MONTHS = 37

JOURNAL 1
LAURA BRAUNWALD
1;2.1 – 1;3.0
April 21 – May 20, 1972

MONTHLY STATISTICS

Days In The Month:	30
Days Missed:	6
Total Daily Observations:	24

MISSING ENTRIES

<u>DATE</u>	<u>AGE</u>
April 21 – 23	1;2.1 – 1;2.3
May 1	1;2.11
May 5	1;2.15
May 14	1;2.24

TABLE 6

**THE CHRONOLOGICAL EMERGENCE OF L'S TWO-WORD LINEAR PATTERNS
FROM 1;2.1 – 1;3.0**

1	L, 1;2.4, L said this to F. L: <u>Hi dada</u> (J1 p. 71 #263) ¹
2	L, 1;2.5, was pulling at her shoe laces. L: Tee, tee, <u>tee aw</u> (Shoe, shoe, shoe off) (J1 p. 71 #266)
3	L, 1;2.5-6, used <i>Hi kee</i> frequently. (J1 p.71 interim note)
4	L, 1;2.6, wanted her socks off. L: <u>Tee aw</u> (J1 p. 71 #267)
5	L, 1;2.7, said this to the cat. L: <u>Hi kee</u> (J1 p. 72 # 274 (interim note))
6	L, 1;2.7, said this to a book with a picture of a cat. L: <u>Hi kee</u> (J1 p. 72 # 274 (interim note))
7	L, 1;2.8, continues to use <i>Hi kee</i> frequently. (J1 p. 72 #271)
8	L, 1;2.12, was sitting on the bed by F. L: Hi da, <u>hi daddy</u> (J1 p. 74 # 284)
9	L, 1;2.13, put her doll into the toy basket. L: Dada, dada, dada, <u>dada dow</u> (J1 p. 75 control data)
10	L, 1;2.13, heard F's car leaving the house. L: <u>Hi dada</u> ² (J1 p. 75 control data)
11	L, 1;2.13, was grabbing M's legs. L: Um mama, <u>mama uh</u> , mama (J1 p.76 control data)
12	L, 1;2.13, handed J a toy phone. L: Hi, <u>hi dada</u> (J1 p. 76 control data)
13	L, 1;2.13, saw her own reflection in the TV. L: <u>Dada hi</u> (J1 p. 79 control data)

¹ This was the first time L used the two-syllable word, *dada*, instead of *dee* in a linear pattern with *hi*.

² Note the semantic error. L said "Hi" instead of "Hi" instead of *bye*.

14	L, 1;2.13, was sitting in her high chair when she said this to M. ³ L: <u>Hi dada</u> (J1 p. 80 control data)
15	L, 1;2.13, was on her way out the front door. L: <u>Bow-wow hi</u> (J1 p. 83 control data)
16	The cat walked over to L, 1;2.13. L: <u>Hi kee</u> (J1 p.84 control data)
17	L, 1;2.13, pet the cat and gave the cat a leaf. L: <u>Hi kee</u> (J1 p. 84 control data)
18	L, 1;2.13, ran up to M outside the house. L: Mama, mama, <u>hi mama</u> (J1 p. 84 control data)
19	L, 1;2.13, addressed the cat. L: <u>Hi kee</u> (J1 p. 84 control data)
20	L, 1;2.13, wanted her pacifier. L: <u>Oh lo-lo</u> (J1 p. 84 control data)
21	L, 1;2.14, addressed M as M entered the room in the morning. L: Bobble, bobble, <u>tee aw</u> , hi lala, hi, hi (J1 p. 85 #287)
22	L, 1;2.16, was looking for her pacifier. L: <u>Oh lo-lo</u> (J1 p. 85 #293)
23	L, 1;2.18, walked past the cat's bathroom and the cat meowed. L: <u>Oh keke</u> (J1 p. 86 #298)
24	Immediately after the utterance above, L, 1;2.18, said the following. L: <u>Hi keke</u> (J1 p. 86 #298)
25	L, 1;2.18, addressed the neighbor's dog, Serena. L: <u>Hi bow-wow</u> , <u>hi bow-wow</u> (J1 p. 86 # 301)
26	L, 1;2.19, said this to a dog. L: <u>Hi bow-wow</u> (J1 p. 86 #303)

³ L knew that M was not "dada". This error raised the question of why she used the word *dada* to greet M.

- 27 L, 1;2.19, identifies the lamb and cow on her foam blocks.
L: Hi kee (J1 p. 86 #303)
- 28 L, 1;2.20, wanted M to pick L up.
L: Mama, mama, mama uh (J1 p. 86 #304)
- 29 The following is an example of what L, 1;2.22, says whenever she finds her pacifier.
L: Lo-lo, oh lo-lo, oh lo-lo (J1 p. 88 #316)
- 30 M was rocking L, 1;2.23, who badly wanted something to suck
L: Oh lo-lo, bobble, bobble (J1 p. 88 #316)
- 31 L, 1;2.25, wanted M to put her into M's lap.
L: Uh mommy (J1 p. 89 #319)
- 32 L, 1;2.25, used the pattern, *mama, mama, uh mama*, many times during each day.
(J1 p. 89 #)
- 33 L, 1;3.0, was eating an egg with her spoon.
L: Uh-oh boo, boo. (J1 p. 92 control data)
- 34 L, 1;3.0, wanted milk.
L: Oh ba, ba, ba. (J1 p. 92 control data)
M: You have milk.
L: (L stopped asking for milk.)
- 35 L, 1;3.0, was in her high chair.
M: Where's the kitty?
L: Hi kiddy (as she turned around and looked at him) (J1 p. 92 control data)
- 36 L, 1;3.0, addressed the cat.
L: Hi kiddy (J1 p. 93 control data)
- 37 L, 1;3.0, was trying to climb on to the sofa.
L: Uh-oh uh, uh uh (J1 p. 93 control data)
- 38 L, 1;3.0, fell and wanted M to pick her up.
L: Oh mama, mama (J1 p. 94 control data)
- 39 L, 1;3.0, was bouncing a ball.
L: Uh-oh ba.
- 40 Immediately after the utterance above, L, 1;3.0, said the following.
L: Uh-oh ba (J1 p. 95 control data)

* Clarification
I was watching for
hi + variable word
uh-oh + variable word
variable word + aw (off)
SRB 2004

* April 24 I am watching for a
pivot grammar to appear
will record all combinations
of hi + _____
+ uh-oh + _____
+ aw which I hear,

(262) April 24 Broo = broom
1; 2.4

last few days I noticed that she
says this when she drags the broom
around the house.

(263) "Hi dada." — linear pattern SRB 2003

said to Jack. Note until now
she said "Hi dee."

(264) "Z" = horrie

said as she tried to climb on a
4-wheeled plastic horse at a friend's
home.

(265) dada = baby

(265a)

Saw two baby pictures hanging on
a friend's wall. She ran to them and
said "Dada, dada" over over again.

(265b) = doll

Picked up friend's doll & called it "Dada."

(266) April 25 "Tee, tee, tee aw" — linear pattern SRB 2003
1; 2.5

— Pulled at her shoe laces as she said this.

1 (267) "Dada, hi"

— Said as she picked up her doll.

(268) April 26 "Tee aw" — linear pattern SRB 2003
1; 2.6

— Wanted her socks off.

* Overextended
the word tee
meaning shoe
to socks SRB 2004

Both 25 + 26 TH uses lots of hi kee.

April 27 1, 2, 7(269) dada = mommy

Saw a picture of me holding her.

Pointed to me + repeated "Dada"

regardless of my telling her "Mama."

(270) Pooh = urineSaid she pulled off diaper, squatted +
peed on the rug!(271) hi kee = to cat, to look with cat picture, linear pattern(272) dada = Seems to be used for all people.April 28 1, 2, 8(273) mama = mamaShe is sick; came to me saying "Mama,
mama."(274) hi kee remains constant. (Am mentioning this since
possible
I'm watching for emergence of a pivot grammar)(275) pooh = fart.

Jack broke wind. She said "Pooh."

(276) bobble = bottle (interim note) She asked many
times today for "Bobble."April 29 1, 2, 9She makes noises the last few days which
almost sound "comprehensible" and yet are not.(277) dada = Joanna(278) boo = spoon* — last few days at meals, she
has been identifying her spoon.

* See note on page
63 for first use of
boo = spoon but associated
with an action.
SRB 2004

April 30

1.2.10

(279)

mama = mama

Seems to understand that I'm
mama now.

2

"Mama, mama, mama, hi, hi"

Sat down next to me and said this.

3

(280)

"Dada, dada, dada, hi" (*)

*Dada can mean "F" or "doll."
It is likely that "dada"
refers to F but the context
is ambiguous. SRB 2001{ Said while walking toward Jack: She
was dragging her doll.

(281)

fee - definitely now also used for sock. She takes them
from hamper and says "Tee."
Subjective Note (**)

1) It is impossible to "teach" her something.

(**) Developmental
Probe SRB 2004For example, I play a game with animal
sounds.

What does The dog say ? — "Bow-wow"

" " " lamb ? — "Ba"

" " " cat ? — "Meow"

" " " cow ? — "Moo-moo"

If I do not vary this sequence she
responds : "Bow-wow"

"Ba"

"Hi-kee"

"Ba"

If I vary the cue and change the order
she still responds the same way. In other
words, she has learned a sequence to
the game what does the X say but
(cont.)

1.2.18 cont

April 30 cont.

(cont.)

apparently makes no distinction

between the words dog, lamb, cat & cow.

- 2) No amount of repetition will get her to say "dall" instead of "dada," "ball" instead of "ba," "wee-wee" instead of "poo" for urine, "milk" or anything resembling it instead of "ba" for milk or shoe instead of "tee" for shoe.

(282) No Note May 1

(4) "Dada dada, hi" } Looking for Jack
May 2 1.2.12

(283) "Daddy, hi"

(284) ⁵ "Hi da, hi daddy" — sitting on bed by Jack linear patterns SRB 2003

(285) mama = I definitely am mama now.

(286) dada = baby

To a friend's baby.

The rest of this page is blank in the original diary. SRB 2004

Control Data at 1;2,13 May 3, 1972

RUNNING SAMPLE OF ALL COMPREHENSIBLE SPEECH

Began after breakfast 7:45 - Did not record before this hour

May 3
1;2,13

(7:45) "Uh, uh, uh" = up - Holding my robe.

(7:45) "Hi" — looked up + said "Hi."

(7:45) "Hi, hi, hi" — Ran into bathroom to see daddy.

(7:45) long babble, followed by "Uh, uh, uh" — she is pulling my robe while Joanna cries.

(7:50) "Daddy" — Pulling doll along.

(7:50) "Hi, dada, dada" — Put doll on chair + said this.

"Dada, dada, dada, dada, dada, dow" — Put her doll into the toy basket.
(Doll, doll, doll, doll, doll, down.)
linear pattern SRB 2003

"Oh (babble, babble,) dada, dada, dada e eh" — Picked up doll again + ran to living room.

"Hi, hi, hi, uh, uh, uh" — Ran into dining room from living room. Wanted me to pick her up.

"Uh, uh, uh" — Second try to get me to pick her up.

(7:53) "Hi, hi, Hi" — running across living room.

"Uh, hi, uh, hi hi, uh" No Context Note

"Hi dada" — She should have said "bye." Heard Jack's car leaving. * linear pattern SRB 2003

(7:53) "Uh, dow, hi" — In my lap. * Note error of hi instead of bye. SRB 2001

"Uh, uh" — put her down. She wanted up.

(7:55) "Chee" — Saw cheese fall on floor.

"Hi, hi, hi" — Grabbed my legs.

Marking 5 min. intervals.
(Began at 8:00 SRB 2001)

Boxes = SRB 2001 & 2003

1.2.13 cont.

MAY 3 CONT

(7:56)

"Chee, chee" — ran to refug.

"Chee chee, chee, chee" — still at refug.

(7:57)

"Ti dee" — (Thank you) — Jo handed her cheese.

"Chee, chee, ah" — trying to feed Jo-Jo cheese (Jo-Jo = J SRB 2001)

"Chee, chee," — put her cheese on Jo's lap.

"La, la, la oh la" — still with Jo + cheese.

(8:00)

"Hi" — picked up a book.

"Hi" — banging counter from stool.

"Hi" — back on ~~to~~ stool. She is babbling to a hot plate.

"Ti dee" — Jo took hot plate away, I gave it back.

"Uh, uh" — in a yell. She wants to climb on the counter.

"Uh, uh" — Very irritated yell.

(8:05)

"Um mama, mama uh, mama" — grabbing my legs.

"Ba hi" — Pulling bags from cupboard. (Meaning of ba is unknown SRB 2001)

"Hi, hi, dada" — In playroom. I can't see.

Jo in room too.

*** Dada can refer to J.
SRB 2001

"Da, da, da da" — carrying a glass case.

5 MIN OUT TO GET J READY FOR SCHOOL ALL CHAOS!

(8:05)

"Hi, hi, dada" — handed Jo a toy phone.

(8:30)

"Boo, boo, boo" — putting pillows from the bed to a chair.

* "la oh la" is not a linear pattern
"La" is not a meaningful word.
SRB 2003

* "Um mama" is not a linear pattern.
** "Mama uh" is a possible linear pattern meaning "mama up." SRB 2003

May 3 Control Data Cont.1.2.13 cont.MAY 3 CONT.

"Daddy, dada, dada" — to picture of McGovern on Time
Mag.

Has kleenex in hand. Trying to get Jo to blow.
"Dada, dada" — Walked to door of Jo's room &
pointed.

"Hi, hi, hi" — following us down hall.

"Ah ah" — standing by front door } Wants
"Ah" — still " " " " } to go
outside.

"Hi, hi" — pulling my leg.

(8:35) "Uh" — Trying to reach my purse on
the mantle.

"Dada, dada" — Saw herself reflected in my
glasses as I changed her on floor.

(8:40) "Hi, hi" — to Jo who was putting her socks on
for her.

"Tee, tee, tee" — Saw shoes.

(8:45) "Hi" — to Jo.

"Boo, boo" — picked up a dust mop.
Running around + laughing with a toy.

"Ah dee" — trying to open closed closet.

"Ah, hi" — Then turned + opened front door
She is standing at door yelling
"Hi, hi."

(**) "Ah dee."
is not a
linear pattern.
The meaning
is unknown.
SRB 2003

(*) "Boo" may be
an attempt to
say broo, L's
word for broom.
SRB 2001

May 3 Control Data cont.

J1-78

1:2:13

MAY 3 CONT.

(8:50)

"Hi" — opened closed hall door. Now wandering in hall saying "Hi, hi."

(8:55)

Babble — found bread on floor.

"Uh" — pulling leg. *

"Dada, uh, uh" — still pulling *

Missing the information needed to ascertain the meaning of L's utterances SRB 2004

"Bow-wow" — to my cue "Find doggie."

"Dada, dada, dada" — Found doll instead.

"Dada, dada, dada" — running with doll. Now trying to put doll in egg box. Babbles + says "Dada."

(9:00)

"Dada, dada" — found a 2nd doll.

"Uh, uh" — wanted to get in my lap.

"Hi, -hi" — in my lap.

"Ba, ba, ba" — trying to feed me bread from floor.

(9:05)

"Dow" — dropped pacifier on floor. Got down to get it.

"Uh" — Wanted up again.

"Ba, ba, ba" — Saw cups in dishwasher. I gave her a cup of milk.

(9:15)

Playing in crib with bottle.

Out of crib.

(9:30)

Sucking pacifier.

May 3 Control Data cont.

J1-79

1, 2, 13 cont.MAY 3 CONT

(9:40) "Uh, uh" — I took her off bed.

6 "Dada hi" (*) — saw own reflection linear pattern SRB 2003
on T.V.(*) Note inverted
word order from
usual hidada.
SRB 2003(9:45) ~~kay, kay~~ (**) — I handed her her record."Hi" — To record. She wanted mine. I
gave her hers.

(9:50) "Kay kay" (**) — Same as above.

(10:00) "Hi" (babble) — Sitting in my lap grabbing at
The phone."Dow!" — foot caught in a chair.
left house went on errand in car.
In store:

(10:40) "Key" — dropping key on store floor.

(**)

kay = okay?
Kay was
not recorded
in L's lexicon
at this time.Okay was
recorded at
1;5.18 when
L said it in
a clearly
appropriate
context.

SRB 2001

"Kay, kay, kay" (**) — I gave her back the key.

"Hi" — to me in store.

"Key, key, key" No Context Note"Key, key" No Context Note

"Key, key, key, key" — key was on floor.

The rest of this page is
blank in the original diary SRB 2004

1, 2, 13 cont.

MAY 3 CONT.

(11:10)

"Cookie" — to cracker on counter.

Lunch

"Boo" — Wanted spoon of peanut butter.

"Hi dada" — To me I think,
from high chair across
table.

linear pattern SRB 2003

⊗ dada = M. L seemed
to say "dada" to M on
occasion to mean "people"
or "person-like"
SRB 2001

"Tee, dee, tee" — admiring her shoes. Stopped
when I said "I see your shoes."

"Ti dee" — Gave her a 2nd spoon of peanut butter.

"Ba, ba, ba" — Wants milk.

"Boo, boo, boo" — wanted more peanut butter or spoon.

"Cookie" — to cracker on high chair tray.

"Uh-oh, ba, ba" — milk gone in her cup.

"Boo, boo, boo" — Still more peanut butter.

"Tee tee, tee" — Kicking table with feet.

"Ba, ba, ba" — wants milk.

"Ba, ba" (scream babble) — wanted milk bottle lid

"Ti dee" — I gave her the lid.

"kay, kay, kay" — whispering to herself as she drops
things in a cup of milk.

⊗ See note
p. 79 about
the meaning
of Kay
SRB 2001

"Ba" (shout) — I answered "No more milk."

"Cookie" — held up cracker as she took mouthful.

"Ba e ah" — frustrated. Playing with
upside down cup.

"Uh-oh" — Threw a toy off in frustration.

May 3 Control Data cont.

Jl-81

1. 2. 13 cont.

MAY 3 CONT.

* Not a linear pattern. "Da" and "dow" both mean down. SRB 2003

"Uh-oh!" "Boo" — Then threw off spoon.

"Da dow" * — wants down.

(11:30) Off high chair.

"Key, key" — Saw my purse + wants the keys.

"Dada" — I said "What is that?" She is holding picture of baby.

"Daddy, daddy" — To picture of man in paper.

"Dada" — " " " " " "

"Tee" — to large house plant.

"Tee, hi, tee, tee" — To house plant. She is trying to distract me so she can dump the dirt.

(11:35) "Uh-oh" — dumping paper rack.

"Hi" — dragging paper rack back into room.

"Tee, tee" — back to plant.

"Tee, tee" then "Hi, hi" to me — she has one hand in dirt. Distraction again.

I sent her outside.

(12:45) "Dat, dat, dat, dat" — I'm tickling her. She wants more.

"Dow" — down off couch where we were playing.

"Hi" — to piece of paper. Now babbling to me about paper.

1.2.13 contMAY 3 CONT.

"Bow-wow, bow-wow" — Still holding papers. Not clear what she means. Went back outside with papers. Ran back to me + babbled. Still with papers.

"Uh-oh" — fell down. I said "Uh-oh bump." She said "Uh-oh."

Now pretending to bump head.

Refound her paper + is babbling.

(11:50)
"Bur" = bird

— heard a bird chirp. I said "A bird, right?" She is now saying "Bur, bur, bur."

babbling to me. I don't understand.

"Uh-oh" — dropped a piece of paper.

"Dada, dada" — holding a piece of paper. Meaning not clear.

"Hi" (*) — Ran in to see me.

(*) She is running back and forth from dining room to patio. Copied exactly from side margin. SRB 2001

"Dada, dada" — to me. I told her "I'm Mama." See note J1-80

dada = M
SRB 2004

"Tee, tee" — Back to dirt in houseplant.

(12:00)
"Boo, daddy" (**) — Instigated a game of peek-a-boo.

— diapers change —

"Powba" — Said until I put talcum powder on her stomach.

(**) Referent of "daddy" is unknown. The context note fails to clarify it. SRB 2004

"Dada" — to picture of Laura + me.

May 3 Control Data cont.

J1-83

1.2.13 cont.

MAY 3 CONT.

played animal game during diaper change.

She said "Bow-wow," "Ba" + "Boo" for "moo."

(12:05) "Boo" — Said as she put box under table cloth.
She is babbling + repeating game.

"Ti dee" — I helped her with game. She was
frustrated at the table cloth.

"Hi" — lifted up table cloth + pad so that she
sees table — repeated 4 times.

"Da, da" — end of game. She was lifted off chair.

(12:10) "Ah ah" — I said "What?" She said "Bow-wow."
We always go out to see neighbor's dog
around now.

"Bow-wow hi" * linear pattern SRB 2003

* Note the inverted word
order. L is not greeting Serena.
SRB 2003

"Bow-wow, bow-wow" — on way to neighbor's to
see dog.

"Bow-wow" — at neighbor's.

"Hi" — sees dog.

"Tee, fee" — stopped in her path grabbed shoes.

"Hi" — ran + grabbed my knees.

"Bow-wow" — pulling me to dog.

(12:15) "Bow-wow" — repeating many times. she wants to go
back.

"Hi, bow-wow, bow-wow (cry) bow-wow" — Now is hitting
me.

"Bow-wow" — Said while pulling petals off a
flower. Now trying to put flower back on plant.

May 3 Control Data cont.

J1-84

1.2.13
cont.

MAY 3 CONT

(12:20)

"Bow-wow, bow-wow" — 1-track mind!

"Hi kee"

— Cat walked over to her. linear pattern
SRB 2003

"Hi kee"

— petting cat. Gave leaf to eat. linear pattern
SRB 2003

"Bow-wow" — I said "What?" She said "Bow-wow" again.

"Hi"

— hugging me and grabbing this book.

"Gen, gen, gen" — I'm rubbing her back + tickling.

"Mama"

— Said as she patted me on head.

(12:25)

"Bow-wow, bow-wow, bow-wow"

"Uh"

— Wanted to stand on wall. **

"Hi"

— Yelling this from wall.

"Bow-wow, bow-wow" — still on wall.

"Hi"

— to me.

"Da, da"

— Wanted to be lifted from wall.

(2:35)

On way to swimming lesson.

Swimming lesson + nap. to 3:30.

3:30-4 walk in stroller. ***

"Cookie, cookie" — She is eating one.

Standing by door yelling "Ah, ah, ah, ah."

Went outside with Jack.

(4:30)

"Mama, mama, hi mama" — Ran up to me outside. linear pattern SRB 200

(5:00)

"Hi kee" — to cat linear pattern SRB 2003

(5:30)

"Mama, mama, mama, mama" — Very frantic. She
couldn't find me.

(5:40)

"Oh lo-lo" — wanted her pacifier. linear pattern SRB 2003

Wall separates
our front yard
from the neighbor
who has the dog
L likes to visit,
SRB 2001

{ From 4:00 — Only
recorded events of
interest } Copied from
Side of page. SRB 201

* Recorded at the time the diary was kept. SRB 2001

* Notice That There are some words which she uses regularly, which do not appear on the running sample Z, bobble, lol, simply as a result of circumstance - That is what we did that day. [This may be the primary defect of relying on a periodic sample alone]

May 4 (287) "Bobble, bobble + tee aw, hi lala, hi, hi" said (Bottle, bottle) + (shoe off, hi lala, hi, hi) } when I went into her room this morning.
1, 2, 14 linear pattern SRB 2003

* "hi lala" was not a linear pattern. The meaning of "lala" was unknown SRB 2003

(288) boo — definitely is spoon. She yells "Boo, boo" when she wants more of whatever was on her spoon as well as for the spoon itself.

(289) pooh = Has not been telling me the last few days.

No Note May 5

May 6 (290) "Tee, hi, tee tee" — to Joanna's shoes,

1, 2, 16 (291) "Pooh" — announced "pooh" as she was about to make it.

(292) dada — definitely used for herself. Says "Dada, dada" when she wants something.

May 7 (293) "Oh lo-lo" — Looking for her pacifier, linear pattern SRB 2003

1, 2, 17 (294) "Uh, uh, dada" — She wanted to go into the high chair. [She seemed to mean I want to get up since dada is self.]

(295) "Mama mama, uh, uh, mama, uh, uh" — Holding my legs. She wanted to ^{be} picked up.

(296) "Pooh" — again announced "Pooh" correctly.

(297) boo = spoon is now clearly established.

May 8 1; 2.18

(298) "Oh keke" — Walked past cat's bathroom. linear pattern SRB 2003
He meowed.

(299) "Hi keke" — Followed first event. linear pattern SRB 2003

(300) ooo = hot last few days.

* I don't know why I wrote
"keke" instead of "kee-kee"
SRB 2004

Say this when her food is hot. or
after I have warned her not to touch
something hot.

(301) "Hi bow-wow" — twice to Serena, neighbor's dog. linear pattern SRB 2003

(302) "Mama, cookie" — She wanted me to give her a cookie.

Last few days — today + yesterday — I notice
that she is starting to combine two words.

She has definitely returned to announcing excretory
offerings!

May 9 1; 2.19

(303) "Hi bow-wow" — Said this to a dog but says
"Hi kee" to lamb + cow on her blocks.

May 10 1; 2.20

(304) "Mama, mama, mama uh" linear pattern SRB 2003

(305) "Uh Uh, mama mama" } 2 separate instances
when she wanted me
to pick her up. ***

(306) "Hoo, hoo, hooo" = hot

(306a) 1) Saw me taking toast from oven.

(306b) 2) Said before blowing on her hot food.

(306c) 3) Said twice when we returned
to find that her car seat was hot.

(307) papu = paper

Each week we get a Throw-away newspaper.
Laura loves to carry it. (cont.)

*** Combine
was a poor
word choice
here. L is not
making two-word
combinations.
She is aligning
two content
words. The
commas in
these entries
indicate that
I heard a
pause between
the two words.
SRB 2004.

*** Note the
contrast between
#304 and #305
in the way the
utterances
express a
comparable
intention.
SRB 2003

1, 2, 20 cont

May 10 cont.

(cont.)

Around the driveway: last week she said "Papu" as she carried it. She repeated it again today.

(308) "C" = Swing

Goes to her swing + says "C, C" until I swing her.

* Could this repetition be an intentional pragmatic strategy?
SRB 2001

* I notice that she will persistently repeat what she wants over + over until she gets it
"Ba, ba, ba" etc. until she gets milk
"Chee, chee, chee" etc.
"Uh, uh, uh" etc.

This repetition occurs with all her vocabulary.

(309) May 11 "Mama, keke" — The cat was tattering her paper.

1; 2.2.1

XX See note on the spelling of keke p. J1-86. Is keke an error or an emergent change in the word?
SRB 2004

There was real consternation in her voice as she said this.

(Brings up Chomsky - Did she have a deeper structure + only able to perform "Mama, keke"?)

(310)

Mommy

— Just started calling me "mommy" out of a clear blue sky.

Note - *
beginning of words ending in "y" mommy
baby
dolly

May 12 1.2.22

(311) "Mama, mama, uh, uh, uh" — pulling at my legs.

(312) Can = can.

(312a) Said this yesterday as a car passed the house.

(312b) Said it to our car today.

(313) Oh lo-lo — Say this now whenever she finds her pacifier. linear pattern 2003

(313a) e.g. just now said "lo-lo, Oh lo-lo, Oh
lo-lo."

May 13 1.2.23

(314) "Baby" — Said to a rubber baby doll
which her swimming teacher
uses. I then elicited this by
holding up the doll + asking
"What's that?"

(315) "Dolly" — Said to her doll as she was trying
to dress her. When I asked her
"What's that?" she said "dada," however.

(316) "Oh lo-lo, bobble, bobble." I was rocking her linear pattern SRB 200
(Oh pacifier, bottle, bottle) She badly wanted something to suck.

No Note May 14

May 15 1.2.25

(317) BABY = LAURA ** First use of baby to indicate
herself. I said "Uh-oh who
tipped the chair over?"
She answered BABY. **

**
Underlining
added.
SRB 2003

May 15 cont.1. 2. 25 cont.

(318) car = car. [pronounced with a Boston accent]

She definitely identifies cars correctly.

(319) "Uh mommy" — wanted me to linear pattern SRB 2003
put her in my lap.

Also continues to use pattern of mama, mama,

(320) uh mama many times each day. linear pattern SRB 2003

(321) Baby and dada coexist today as the way to identify baby.

(321a) 1. e.g. Saw picture of a baby said "Dada."

(321b) 2. Saw a friend's toddler getting changed said "Baby."

(322) hoo-hoo — consistently used for hot.

(322a) 1. e.g., while walking on hot tiles at a friend's pool, while touching hot car seat.

May 16 (323) dada/baby still interchangeable.

1. 2. 26

(324) car — showed me our car.

Subjective note = when I listen to her babble or "talk" her utterances are now longer.

Than just one word. e.g.,

She consistently says "Oh lo-lo"

when she finds her pacifier instead of just "lo-lo", "Hi kiddy" to the

cat instead of "Kee" or "Hi kee."

(325) "Bur" — is definitely bird. Says "Bur, bur" when she

(cont.)

1; 2.26 cont.May 16 cont.

(cont.)

wants me to return to the page about the
bird in her cat-book.

May 17 1; 2.27

(326) "Ah dada" — to picture of a baby

(327) me me me — Notice that she says this
when she wants something. She
always says this in a whining
voice — last 5 days — I'm not
sure if it is a complaining
way of saying "Mommy" as if
it means, "ME! ME, ME." It is
still not clear from context of situation.

May 18 1; 2.28 [I will watch this.]

(328) "Dada" = baby — to a friend's baby + to picture
today. Will say "Baby" on correction.

(329) "Uh, me me" — Mad, wants me to pick her up.

(330) Car — to all car horns the last 2 days.

May 19 1; 2.29

(331) broo = broom [interim note] very consistently uses
this. e.g., She is now holding the broom
+ saying "Broo."

(332) "Me guckie" (*) = I want the duck.

(*) Beginning of a transitional
pattern of aligning two
content words in a sequence?
SRB 2004

We were in the pool where she takes
lessons, there are rubber toys on the
edge. She likes the duck. We were (cont.)

May 19 cont.

Box 2 SRB 2004

JI-91

guckie - said this "me guckie"
previous to Jack's mother spent an afternoon
recently saying guckie to her many
times. There was a duck on her block.
(cont.)

1; 2.29 cont.

about 10 ft. away + she wanted me
to take her to The duck, which I did
She then grabbed it + said "Guckie."

(333) C = telephone

I notice in The last week that
she says this when she hears The
phone ring.

(334) "Goggie bow-wow-wow" *

* Imitation of F's
three-word combi-
nation in English.
SRB-2004

goggie = doggie

Low response to Jack's saying "Doggie"
goes bow-wow-wow.

She has been saying something approximating
"Goggie" recently, but this is The first
instance where The meaning is clear.

The rest of the page is blank in
the original diary SRB 2004

MAY 20 - Running Sample

all speech [Short note since it was Joanna's birthday.]

Began Breakfast

(7:30)

boo = spoon

Eating an egg with her spoon.

"Uh-oh boo, boo." }
(Uh-oh spoon, spoon.)

linear pattern SRB 2003

"Hi" — trying to get me to notice her.

"Ba" — wanted more milk in her cup.

"Hi" — No Context Note

"Oh ba, ba, ba" — linear pattern SRB 2003 Wanted milk.

I answered "You have milk" so she quit.
(Context note copied exactly SRB 2003)

"Hi kiddy" — linear pattern SRB 2003 I said "Where's the kitty?"
She turned around + said "Hi" to him.
(Context note copied exactly SRB 2003)

"Ba boo" * — Wanted more of my egg on her spoon.

* "Ba boo
is not a
meaningful
transitional
pattern. The
meaning of
ba is unknown
— SRB 2004

"Boo, boo" — meaning? No Context Note

babbling to Joanna

(7:35)

"Dat ga, ga, ga" ** ?

** Not a meaningful transitional pattern.
The meaning of ga is unknown. SRB 2003

"Boo" — Putting spoon of egg in mouth.

"Ba, ba, ba, ba" — watching Jo drink milk. Then
demanded more of her own.

"Boo" — spoon showed it to Jack.

"Car" — Jack said to her "We could go
for a walk."

"Car-car" — Jack said "Let's go bye-bye car-car."
She said this in reply.

Elicited
by Jack.

7
"Dada, hi" — Jack still speaking to her. He
said "Get your fingers out of your
mouth so you can talk."

(XX) This linear pattern aligned two words, uh-oh and uh, which L had already used as a basis for creating a linear pattern (e.g., "Uh-oh ba" 5-95 "Mama, mama, uh mama").

1, 3, 0

May 20 Control Data cont.May 20 Running Sample CONT

"Cookie" — Teasing a piece of bagel.

"Down" — down

"Oh" (whining noise) — } Wants to get out of high chair.

"Ba" — turned to milk cup.

"Ba ba, ba, ba," — " " " wants more.

"Ba, ba," — Threw milk on the floor.

"Bea" — taking bagel.

out of high chair.

whining while running on floor.

"Hi" — to cat,

"Hi" — to Jack + Jo.

Gabble to me.

"Hi — hi" — to Jack.

"Hi kiddy" — to cat. linear pattern SRB 2003

(7:40)

In living room Jo dragging her out.

"Gen" — Wants Jo to drag her again.

"B, bow-wow" — I told her "Go get bow-wow."

"(Babble,) bow-wow" — while bringing my chair.

(7:45)

Sitting banging cup on stones by fireplace.

"Mama ba da (babble)" * Jo took her cup away.

"Ba, ba" — At coffee table

"Me" — running to me

"Uh-oh uh, uh" ** Trying to climb on to sofa.

(Uh-oh up, up)

** SEE NOTE ON TOP MARGIN

* "Mama bada" is not a meaningful transitional pattern, but L may want M to help her get the cup back, SRB 2001

May 20 Control Data cont.

JI-94

13.0 cont

May 20 Running Sample CONT.

(7:45)

Went to kitchen

"Hi" — to a toy.

"De kay" — patting a chair.

"Eh, eh, eh," — on floor fussing.

caukie = my coffee, she likes a taste.

"Oh mama, mama" — linear pattern SRB 2003

fell wants me to pick her up.

"Hi," — I picked her up.

squeaky happy noise in my arms. like a puppy yapping.

"Me me mommy" — mad I put her down.

(*) Me is probably a volitional means to call my attention to her and convey the intention "I want."
SRB 2004

"Uh, uh, uh" — grabbing my legs.

(7:50)

Went off to find her baby per my instructions.

"Dada, dada" — calling her doll.

"Baba, baba" — meaning not clear. No Context Note

"Kiddy" — to cat.

"Hi" — to Jack.

"Me, me me" — wants me to pick her up.

"Me, me, dee" — pulling my pants.

(7:55)

"Ba" (**) throwing a ball.

"Ba, ba," — running to the ball.

"Ba" — putting ball in basket.

"Ba" — banging ball. (cont.)

(**) Note L's use of "ba" with a long series of self-initiated actions with her ball beginning at (7:55). SRB 2001

May 20 Control Data Cont.

JL-95

1.3.0 cont.May 20 running sample, cont.(cont.)
"Ba, ba" — closing lid over ball.

"Gea, gea" — ? bouncing ball.

* The meaning is unknown, SRB 2004

"Ba"

"Uh-oh ba" } bouncing ball.

"Uh-oh ba"

"

"

linear patterns
SRB 2003

"Ba, dada" — retrieving ball.

** Dada might refer to L as the person engaged in an action related to her ball. SRB

"Ba" — chasing ball.

"Ba" — (babble) — still ball.

"Ba"

"Ba"

}

"

ball.

*** L's action in relation to the ball is no longer described clearly in the context note. SRB 2001

(8:00)

Stopped recording.(335) May 20 Couldn't get her to say "Baby" today.

She would only use "Dada."

car is firmly established.

*** Dada refers to L. SRB 2001

(336) Laura: Dada, key, key. (I want your purse.)

Sue: Here they are. Saw my purse + said this.

Laura: Ti dee. (Thank you)

(337) "Pee, pee, pee" — repeated after me. She was watching me in the bathroom.

(338) ooo = cold as well as hot today. We got in the car. Her seat was cold. She said "Ooo." She also kept saying this while sucking ice cubes in a restaurant.

TABLE 7¹

THE CONTINUED USE OF SEQUENTIAL TWO-WORD LINEAR PATTERNS WITH THE WORDS
HI, UH-OH/OH, OFF, DOWN AND UP FOR L DURING THE MONTH 1;2.1 – 1;3.0

DATE	<i>Hi</i>	<i>Uh-oh/oh</i>	<i>Off (aw)</i>	<i>Down (dow)</i>	<i>Up (uh)</i>
1;2.4 1;2.5	1. Hi dada ²		2. Tee, tee, <u>tee</u> aw (Shoe, shoe, shoe, off)		
1;2.6	3. Hi kee ³		4. Tee aw (Sock off)		
1;2.7	5. Hi kee 6. Hi kee				
1;2.8	7. Hi kee ⁴				
1;2.12 1;2.13 ⁵	8. Hi da, hi daddy			9. Dada, (4x) <u>dada</u> <u>dow</u> (doll, [4x] doll down)	
	10. Hi dada				11. Um mama, <u>mama uh</u> , mama (mama up)
	12. Hi, hi dada (to J) 13. Dada hi (to reflection of herself) 14. Hi dada (to M) 15. Bow-wow hi ⁶				

¹ The linear patterns and their contexts of use are on Table 6. The numbers correspond to the order of emergence on Table 6.

² First use of *dada* instead of *dee* to mean “daddy” in the linear pattern “*Hi daddy*”

³ Both at 1;2.5 and 1;2.6 L used *hi kee* frequently. J1, p.71 interim note

⁴ “*Hi kee*” remains constant. [I] am mentioning this since I’m watching for possible emergence of a pivot grammar.” J1, p.72 #274 interim note

⁵ Examples 10-19 come from an approximately four-hour and fifteen minute control sample of L’s compensable language at 1;2.13.

DATE	<i>hi</i>	<i>uh-oh/oh</i>	<i>off (aw)</i>	<i>down (dow)</i>	<i>up (uh)</i>
	16. Hi kee				
1;2.14	17. Hi kee 18. Mama, mama <u>hi</u> mama 19. Hi kee	20. Oh loo-loo (oh, pacifier)	21. Bobble, bobble, <u>tee</u> <u>aw</u> , hi lala, hi, hi (bottle, bottle, shoe off, hi lala? hi, hi)		
1;2.16		22. Oh lo-lo (oh pacifier)			
1;2.18		23. Oh kekee			
1;2.19	24. Hi kekee 25. Hi bow-wow 26. Hi bow-wow 27. Hi kee				
1;2.20					28. Mama, mama, <u>mama uh</u> (mama up)
1;2.22		29. Loo-loo, <u>oh loo-loo</u> , <u>oh loo-loo</u> ⁷ (pacifier, oh pacifier, oh pacifier)			
1;2.23		30. <u>Oh loo-loo</u> , bobble, bobble (oh pacifier, bottle, bottle)			
1;2.25					31. Uh mommy (up mommy) 32. Mama, mama, <u>uh mama</u> ⁸ (up mama)
1;3.0		33. Uh-oh boo, boo 34. Oh ba, ba, ba ⁹ (oh milk, milk, milk)			

⁶ L was not greeting a dog. She was on her way out the door to see Serena.

⁷ *Oh, loo-loo* is an example of a pattern L used at about 1;2.22 whenever she found her pacifier. The frequency is unknown.

⁸ *Mama, mama, uh mama* is an example of a pattern L used many times a day at 1;2.25 as a request to be picked up. The frequency is unknown.

⁹ Example 34 comes from the dialogue between L and M. L: Oh ba, ba, ba. M: You have milk. L: Stopped asking for milk.

DATE	<i>hi</i>	<i>uh-oh/oh</i>	<i>off (aw)</i>	<i>down (dow)</i>	<i>up (uh)</i>
1;3.0	35. Hi kiddy (hi kitty) 36. Hi kiddy (hi kitty)	37. <u>Uh-oh</u> uh, uh (uh-oh, up, up) 38. Oh mama, mama 39. Uh-oh ba (uh-oh ball) 40. Uh-oh ba (uh-oh ball)			37. Uh-oh <u>uh</u> , uh (uh-oh, up, up)

Notes to P. 96

- My choice of the word *combination* was naïve and incorrect. None of the examples was a combination. The commas indicate that I heard a brief pause before *hi* in the final position. Number 6, *dada hi*, was a linear pattern without an underlying structure. L, 1;2.13, said “Dada hi” to her own reflection. SRB 2004

** Corrected examples of *hi* (Please see the numbered yellow circles in the text. SRB 2004)

- 1 “Dada, hi” / 1;2.5 p 71 #267
- 2 “Mama, mama, mama, hi, hi” / 1;2.10 p. 73 #279
- 3 “Dada, dada, dada, hi” / 1;2.10 p. 73 #280
- 4 “Dada dada, hi” / 1;2.10 p.74 #282
- 5 “Daddy, hi” / 1;2.12 p.74 #283
- 6 “Dada hi” / 1;2.13 p. 79 c.d.
- 7 “Dada, hi” / 1;3.0 p. 92 c.d.

The example with *tee* was not included because *hi* was in a medial position.

1;3.0 cont.

MAY 20TH

Status of previous vocabulary

(339) 1. dada — status unchanged from April 20 note.(340) 2. daddy — status unchanged from April 20 note.(341) 3. hi — (341a) a) status unchanged. hi kee = hi kiddy on occasion.

* I misused the term combination

(341b) b) also used terminally in combination * SEE NOTE ON OPPOSITE PAGE

With: ** SEE NOTE ON OPPOSITE PAGE FOR THE CORRECTED EXAMPLES BELOW.

dada, hi Apr. 25 dada, dada, hi, daddy hi - N. 2
mama, mama, mama, hi, hi, Apr. 30
dada, dada, hi
tee hi, - tee, tee May 6

(341c) c) Subjectively, I would say this is one of the most frequently used words.

(342) 4. baw-wow — status unchanged from April 20 note.(343) 5. mama — a) I am now definitely mama, and this word is used frequently.(344) 6. uh-oh (344a) a) Status unchanged.

(344b) b) Continuous to deliberately drop something and say "Uh-oh."

(345) 7. dat — a) Used extremely infrequently.(346) 8. tee — a) Status unchanged from April 20 note.
- b) tee = sock(347) 9. ba (347a) - a) Status unchanged from April 20 note.(347b) b) Additional meaning ba = doorbell.

She loves to ring our doorbell and says "Ba" at the threshold if I don't lift her up to ring the bell.

(348) 10. kee = cat
She also says "kiddy" for "kitty."

MAY 20

Status of Previous Vocabulary

(349) 11. chee = cheese status unchanged. When she is hungry, she asks "Cookie?" I say "No cookie" She then says "Chee?" I say "Okay cheese." She then says "Chee, chee, chee" until she gets it. This is a regular oft repeated routine.

(350) 12. da > dow = down otherwise status unchanged from April 20 note.

(351) 13. bye a) Just beginning ^{last few days} to use this word more frequently. She accompanies it with a wave.

(352) 14. peoh - status unchanged from April 20 note.

(353) 15. baba - status unchanged from April 20 note.

(354) 16. lo lo > oh lo lo = pacifier. She almost always combines oh + lo-lo. When she wants her pacifier, she coos "Oh lo lo, lo lo." Note the entire family seems to have adopted her word and calls the pacifier oh lo lo e.g. "Laura, where's your oh lo lo?"

(355) 17. aw = off status unchanged from April 20.

May 20 - Status of Previous Vocabulary

(356) Uh = up a) status unchanged from April 20 note b) combines, e.g., "Mama, mama, uh mama." Copied exactly SRB 2004

(357) key - She loves to play with my keys and brings me my purse and demands "Key, key, key." She also wants them in the car.

(358) ti dee = Thank you, Status unchanged from April 20 note.

(359) but = button. Very rarely used, but she does say this if she plays with my shirt buttons.

(360) Z = horse, consistent & established.

(361) bur = definitely means "bird." She identifies a picture, an actual bird, and the sound of birds chirping as bur.

(362) lobble = bottle

TOTAL PREVIOUS VOCABULARY WHICH REMAINS
[NOT COUNTING DOUBLE MEANINGS]

ACTIVE = 24

2 new meanings Ga = bell,

fee = sock

Additional previous vocabulary SRB 2001

cookie L, 1;0.23 (lexicon #

um-um game L, 1;1.11 (lexicon

broo = broom L, 1;1.21 (lexicon

The rest of this page is blank
in the original diary SRB 2004

May 20 New Vocabulary

(363) 1. broo = broom (Not new, lexicon word # 33, L1;1.22
SRB 2004)

She says this when she sees me sweep and wants the broom. She also says this when she wants to play with Jo's mop as is actually playing with the mop as broom.

(364) 2. boo = spoon. She uses this to identify the spoon and to get me to put more food on her spoon. She will wave the spoon and say "Boo, boo, boo" until I refill it.

(365) 3. gen = again. If I am tickling her, loving her or doing something else she wants repeated, she will say what sounds to me like "Gen, gen, gen" until I repeat whatever it is she wants.

(366) 4. hoo, hoo or ooo, ooo = a) hot } Initially hoo was used
Cold } only for hot - to signify
The hot oven, hot food + hot car seat.
Yesterday, however, she used it to mean cold ∴ may mean an unexpected temperature.

(366 b) 6). She usually says "Hoo hoo" when she
(cont.)

1; 3.0 cont.

May 20 Vocabulary Summary cont.

J1-100

May 20 New Vocabulary

(cont.)

walks by the oven, regardless of whether it is actually hot.

(367) 5. yapu = paper a) to newspapers.

b) to paper which she feeds and tears.

This word is not used frequently, but it is used consistently.

6. (368) C = (368a) a) swing - Say this when she sees her swing or spies one in the park.

(368b) b) telephone

1. Says "c" "c" when she hears the phone ring and also when she dials our phone.

7. (369) mommy a) Used interchangeably with mana as of May 11.

8. (370) dolly Used instead of dada to mean doll on May 13 only.

9. (371) car a) Pronounced with a "Boston accent."

(371a) b) Used to identify cars when she sees them. E.g., today she saw cars on Freeway and said car. car. (copied exactly SRB 2013)

(371b) c) First and primary source of eliciting the word is the sound of a car horn. First said word when she heard a car horn honking at the curve in back of our home.

1;3.0 cont.

May 20 New Vocabulary

(372) 10. baby = baby doll, baby and self.

This is not fully operational + is used interchangeably with dada for the same purposes [May 11, 13, 15]

(373) 11 me = on occasion = haura; otherwise meaning is still not clear from context

* Me was a false start and did not become a functional word in L's lexicon.
SRB 2004

one sentence "Me gockie" — "Me" was clearly haura.

(374) 12 guckie = duckie } She appears to have learned these 2 words from our repetition of duckie + doggie. Whenever we change her, she plays with some soft blocks + we label the animals on them.

(375) 13 goggie = doggie

(376) powba = powder

TOTAL NEW VOCABULARY = 13

TOTAL PREVIOUS STILL ACTIVE = 25 - left out cookie

TOTAL NEW MEANINGS = 2

~~#9~~ 50 [left out cookie by error]

TOTAL = 44 consistently used sounds or words.

The rest of this page is blank in the original diary. SRB 2004

FORMAT CHANGEAddition of monthly subjective impressions of L's development.

Jl-102

1;3.0 cont.Subjective Impression at 1;3.0 May 20May 20 - SUBJECTIVE IMPRESSION

1. She definitely uses combinations of:

a) oh eg.,

1) "Uh-oh ba" — bouncing a ball

2) "Oh la" — for pacifier

3) "Uh oh boo" — threw down her spoon.

b) hi

1) always say "Hi kee" or "Hi kiddy" to the cat.

2) "Hi dada"

3) Beginning to use "Hi bow-wow."

4) " " " " "Hi mama."

5) May reverse the order + say "Dada, hi." *

c) uh1) Frequently say "Mama, mama, uh, mama" *
when she wants to be picked up.

2. She definitely repeats the same word over and over until she gets a response.

a) "Mama, mama, mama" until I answer.

"Ba, ba, ba, ba" until she gets milk.

"Cookie, cookie, cookie, "

"Chee, chee, chee, " are examples of this.

*
A sequence using more than one word meaning. Commas indicate a slight pause between words.

SRB 2001

[Note still say "Tee, tee aw"]

1;3.0 cont.

May 20 Subjective Impression cont.

* These were sequences of two content words with a brief pause between them. They were closely spaced in real time, but not structurally integrated. SRB 2004

** These two-word sequential utterances were a fluke. They were a developmental dead end. SRB 2004

3. She is just beginning to combine words into two word "sentences" other than "Uh," "Hi," "Uh" [last 2 weeks] [See note for circumstance]

- * { a. Mama, kee kee May 11
b. "Oh lo -lo, bobble, bobble" May 13
c. "He guckie." May 19
d. "Googie bow-wow." May 19

I am recording all instances. This is a very slow process.

4. In effect, she has "invented" a system which we alone understand since it gets her what she wants she uses it. That is to say ba, tee, laba, dada in its many meanings only make sense to us because we are aware that Laura uses them to consistently mean milk, shoe, banana, baby, daddy Joanna

5. Subjectively speaking her speech is more frequent and purposeful. She says what she is doing

a) "Ba" — as she bounces a ball = e.g. what she wants

a) "Ba" — milk

b) "Tee aw" — shoes off (cont.)

May 20 (cont.)

c) oh lo -lo = pacifier etc.

Who she sees

a) "Bow-wow"

b) "Hi kee"

c) "Dada" — Joanna, Jack, baby or self

d) "Mama"

6. She seems to understand me better in the last week.

a) I will say to her "Mommy is going bye-bye - Laura is going to swim with Jen."

Then Mommy will come back and Laura will say "Hi Mommy" when I leave her to swim. I can tell from her face that she is listening, and she seems to understand because she doesn't cry when I leave her.

STATUS OF TEETH

4 bottom

4 top

1 molar

EMERGENT VOCABULARY FOR L FROM THE AGE OF 1;2.1 THROUGH 1;3.0
(Between 14 to 15 Months)

41. **1;2.9 boo** = spoon ("Last few days at meals, she has been identifying her spoon." J1, p. 72 #278)¹ > 1;2.13 **boo** = spoon in a request (L said "Boo" to ask for a spoon of peanut butter. A few moments later, she said "Boo, boo, boo" again to ask for more peanut butter; she then said "Boo, boo, boo" a third time to request yet more peanut butter!) > 1;2.14 **boo** = the object spoon and also L's way to request more of whatever food was previously on the spoon. > 1;3.24 **boo** = fork (L said "'Boo boo' as she picked up her fork from the floor.") > 1;3.24 **boo** = knife in a generalization in a developmental probe of the basis of an overgeneralization.
42. **1;2.10 tee** = sock ("Tee definitely now also used for sock. She takes them from hamper and says 'Tee.'" J1, p. 73 #281)² > 1;3.12 **C** = sock (L pulled her socks off while saying "C. C." M has been trying to teach L the word *sock*.) > 1;3.17 **C** = sock (L brought M a sock and repeated "C, C, C" as she handed it to her.) > 1;3.22 **sa** = sock (L: "Sa" said while carrying around J's socks.) > 1;5.7 correct pronunciation **sock** = sock (L: Smacking noise of kiss sock. "[L] held up her sock and wanted M to kiss it.")
43. **1;2.13 ah** = out in a request (L said "Ah, ah" as she was standing by the front door. She clearly wanted to go outside. A moment later, L, who was still at the front door, said "Ah" again.)³ [Listed as a separate word because L's meaning was indeterminate between the words *out* and *outside* that later emerged as separate words]
44. **1;2.13 powba** = talcum powder in a request (M was changing L's diaper. She said "Powba" repeatedly until M put talcum powder on her stomach. J1, p. 82 control data) > 1;5.7 **power** = talcum powder (L: Power, hi power. "Said on changing table. There is a large bottle of baby powder which [L] can reach.") > 1;6.0 correct pronunciation **powder** = talcum powder (L: Powder, powder, powder. Pour, pour, pour. "Holding the powder as if to pour it. I had already put on Vaseline. She was on the changing table.")

¹ L first said "boo" at 1;2.0 while she was banging her spoon (J1 p. 63 control data). The focus of her utterance was on the action of banging. M failed to recognize that *boo* was a word which referred to the object L was using to perform the action of banging.

² *Tee* meaning "sock" was derived from a generalization of *tee* meaning "shoe." At 1;2.6, L wanted her socks off and said "Tee aw." This generalization was most likely based on the similarity of either the function or the proximity of shoes and socks (i.e., "I put shoes and socks on my feet," or "I wear these two items together on my feet").

³ When L began to say "Uh" instead of "Ah" to mean "up," *ah* became a new word that meant "out." The differentiation between *ah* and *uh* is clear in the control data at L, 1;2.13, when a minute after the examples with *ah*, L said "Uh" as she was trying to reach M's purse on the kitchen counter.

45. **1;2.13 boo** = peek-a-boo (?) (L was playing a game in which she put a box under the table cloth. She said "Boo" as she put the box under the table cloth. J1, p. 83 control data) > 1;3.3 **Boo-boo** = peek-a-boo (putting her head under M's shirt; wanted M to play peek-a boo with her.) > 1;3.9 *peek-boo* = peek-a-boo (hiding her head on a stool.) > 1;3.24 *pee-boo* = peek-a-boo (interim note—"continues to play this. In particular she puts the spaghetti strainer over her head and then says 'Pee-boo' ...also does this with J's fire hat.") > 1;4.24 Correct pronunciation *peek-a-boo* = peek-a-boo (L: Peek-a-boo Doe-doe [J] J "snuck up on L.") > 1;5.7 *pee-boo* = peek-a-boo (L covers her own eyes (L: Pee-boo, boo, boo, mama. "Said as L covered her eyes with F's socks."))
46. **1;2.13 gen** = again as a request for the repetition of an action (L said "Gen, gen, gen" while M was rubbing her back and tickling her. J1, p. 84 control data) > 1;3.0 *gen* = again as a request for the repetition of an action (J had been dragging L out of the living room. L said "'Gen' — wants Jo to drag her again." J1, p. 93 control data) > 1;5.16 *gen* = again as a request for the repetition of an action (L: Gen, gen, gen. "F was tickling L, and she repeatedly asked to have it repeated.")
47. **1;2.18 ooo** = hot ("Last few days [L] says this [ooo] when her food is hot, or after I have warned her not to touch something hot." J1, p. 86 #306) > 1;2.20 *ooo* = hot (said in multiple appropriate contexts a) watching M take toast from the oven, b) blowing on her own hot food, c) on two separate occasions when her car seat was hot) > 1;2.25 *hoo-hoo* = hot (L consistently says "Hoo-hoo" for the word *hot*; "e.g., while walking on hot tiles at a friend's pool, while touching her hot car seat." J1, p. 89 #322) > 1;3.0 generalization *ooo* = cold (L used *ooo* to mean "cold" as well as "hot" today. L said "Ooo" with the meaning "cold" a) as she felt her car seat which was cold and b) many times as she was sucking an ice cube in a restaurant) > 1;3.0 *hoo, hoo* = a) hot ("Initially *hoo* was used only for hot— to signify the hot oven, hot food and hot car seat; b) cold (at 1;3.0 L used *hoo* to mean "cold.") c) may now mean an unexpected temperature (?) and d) a word associated with the oven. ("She usually says 'Hoo hoo' when she walks by the oven regardless of whether it is actually hot.") summary of vocabulary development at 1;3.0 > 1;3.24 *hoo, hoo* = hot (interim note — "Hoo, hoo continues to mean 'hot' for hot car seat hot food and the oven.") > 1;5.12 correct pronunciation *hot* = hot_ (L: Hot car. "Said as we were riding in a very hot car.") > 1;5.13 *hot* (L: Baby hot. "As [L] walked barefoot across hot asphalt.") > 1;5.14 *hot* = one of two descriptions of the same taste of egg_ (L: Um e goo, hot hot "[Um the egg is good, hot, hot.] As [L] tasted her egg.") > 1;5.20 *hot* (L: Hot, hot hot. Baby hot. Hot baby. [Said when M "put L into the hot car.] M: Is baby hot? L: Baby hot. ["Latter part of [speech] event was elicited by [M] to verify the first [part]."])
48. **1;2.20 papu** = throw-away newspaper (L said "Papu" to refer to a weekly newspaper which she liked to pick up and carry around our driveway. L loved to

- carry this newspaper and would say "Papu" as she was carrying it. "Last week she said 'Papu' as she carried it. She repeated it again today." J1, p. 86-7 #306) > 1;3.0 *papu* = any paper that L found and tore. J1, p. 100 summary of vocabulary development at 1;3.0)
49. 1;2.20 *C* = swing as a signal to express a specific request. ([L] "goes to her swing and says 'C,C' until I swing her." J1, p. 87 #308)
50. 1;2.22 *car* = car⁴ (L definitely now identifies cars with the correct word. Yesterday, at 1;2.21, L said "Car" as a car drove by our house. Today, she said "Car" to our car.)⁵ > 1;2.25 *car* = car ("She definitely identifies cars correctly." J1, p. 89 #318) > 1;2.26 *car* = our car (L said "Car" as she showed M our car.) > 1;3.0 *car* = SIGHT of a car ("Used to identify cars when she sees them; e.g., today [L] saw cars on freeway and said Car. Car.") > 1;3.0 *car* = SOUND of a car ("First and primary source of eliciting the word is the sound of a car horn. First said word when she heard a car horn honking at the curve in back of our home.") J1, p. 100 summary of vocabulary development at 1;3.0^{6,7} > 1;4.1 generalization *car* = trash truck (L: Mommy, mommy, car, car. L saw a trash truck out the front window.) > 1;5.14 > *car* ≠ trash truck ; *tuh* = trash truck (L: Tuh, tuh. [Truck, truck] "[L] heard the trash truck go by.")
51. 1;1.23 *baby* = a rubber baby doll ([L] "said 'Baby' to a rubber baby doll which her swimming teacher uses. I then elicited this [repetition of the word] by holding up the doll and asking 'What's that?'" J1, 88 #314) > 1;2.25 *baby* = Laura (M: Uh-oh who tipped the chair over? L: Baby. J1, p. 88 #317) > 1;1.25 *baby* = part of a transitional pattern with *dada* (L used either *baby* or *dada* to refer to a baby. [L] "saw picture of a baby and said 'Dada;' [L] saw a friend's toddler getting changed [and] said 'Baby.'" J1, p. 89 #321) > 1;3.0 *baby* = baby doll, babies and Laura (L continued to use *baby* and *dada* interchangeably in a transitional pattern in which two different phonetic forms identified the same referent. J1, p.101 summary of vocabulary development at 1;3.0)⁸ > 1;3.27 *baby* = picture of a doll (Labels doll in Platt and Monk ABC book as "baby.") > 1;5.19 *baby* = drawing of small boy in a book (L: Mom, baby, baby, Mom. "Showing M a picture of Harold in *Harold and the Purple Crayon*."

⁴ The word *car* was differentiated from a perceptual mismatch *bow-wow* = car. (See lexicon word #8.) L understood the word *car* and stopped using *bow-wow* to refer to the sight of a car at 1;0.14 and to the sounds associated with a car at 1;1.19

⁵ "Our car" probably refers to M's car since L sees it in the driveway, and it is the car she rides in.

⁶ Apparently, M failed to enter this first and primary use of *car* in the daily notes, although she most have noticed it repeatedly.

⁷ It is of note that the context for the aural identification of a car is comparable to the context of L's original use of *bow-wow* to refer to the sound of cars which she also heard in the same location..

⁸ M could not get L, 1;3.0, to say "Baby" today. She only said "Dada."

52. **1;2.27 *me*** = a volitional word to call attention to L's needs (?) ("Notice that she says this [word] when she wants something. She always says this in a whining voice—last 5 days—I'm not sure if it is a complaining way of saying 'Mommy' or if it means ME! ME, ME. It is still not clear from context of situation.") J1, p. 90 #327) > 1;2.28 *me* = "I want" (?) (L was mad and said "Uh, me, me" when she wanted M to pick her up.) > 1;2;29 *me* = "I want" (L said "'Me guckie'⁹ [I want the duck] We were in the pool where she took swimming lessons. There were rubber toys on the edge of the pool. She liked the duck. We were about 10 feet away, and she wanted me to take her to the duck which I did. She then grabbed it and said 'Guckie.'" J1, p. 90-91 #332) > 1;3.0 *me* = (?) (L said "Me" as she was running to M.) J1, p. 93 control data) > 1;3.0 *me* = a pragmatic device for a) calling attention to herself or b) expression of an intention, "I want " (?) (L, who was mad because M had put her down, said "Me, me mommy." Five minutes later, L said "Me, me, me" when she wanted M to pick her up.) J1, p. 94 control data > 1;3.25 *me* = L as a participant in a performative ("L said "'Mommy, me bye' as we were waving good-bye to friends) > 1;4.15 *me* = L as an agent of an action(L: Me ba. "said as L wiped up spilt milk.") > 1;4.16 (L: Me cy no context note) > 1;4.25 (L: Mommy, me baba. "Said as L took her night bottle from M.") > 1;5.0 six uses of *me* including the emergence of *me be* (See lexicon #115 for *me be*) (L: Me cy. On two separate occasions within the space of 5 minutes while M was holding L.) > (L: Me do. "Said in great frustration as [L] tried to fit a lid on a pen.") > *me* = the expression of an intention and an action(Me baba. [banana] "L wanted and got a banana." > 1;5.0 unexplained substitution of *my* for *me* (L: Mommy, my bye-bye. My bye-bye car-car, Mama. "Said as [L] stood at the front door. She is waiting for F to come home.") 1;5.14 *me* = L as a person who notices her environment (L: Me see. "Said as [L] opened some bathroom cupboards.") > 1;5.15 (L: Bow-wow, me. Bow-wow. "Said as we drove past a large German Shepherd dog.") > 1;5.16(L: Beas [Beads]. Mama. Mama. Me Mama. "[L] wanted to wear [M's] beads. M put them on her.") > 1;5.17 *me* = inclusion me too or I want? (L: Me pool. "Yelled at [M] as the family was in the midst of getting ready to swim. ") > 1;5.20 *me* = the intention of a verb in an utterance (L: Mama. M: What? L: Bottle go me ni-ni. [I want to go to sleep with my bottle] "[L] wanted to be put in her crib with the bottle. [M] had put the bottle in the crib as an inducement. [L] came to [M].")
53. **1;2.29 *guckie*** = visual identification of the toy rubber duck at her swimming lesson and of the picture of a duck on her foam block. Discontinued between 1;3.0 and 1;5.13 > 1;5.13 correct pronunciation *duck* = clay ducks ("Said as L played with some clay ducks in a garden at J's school picnic.")

⁹ L already said "Guckie" prior to her use of the word in the utterance "Me guckie." F's mother had recently spent an entire afternoon with L repeating the word *duckie* to refer to a duck on a foam block.

54. **1;1.29 C** = notice of the sound of a telephone ringing ("I notice in the last week that she says this [C] when she hears the phone ring." J1, p. 91 #333) > **1;3.0 C** = dialing the telephone. > **1;3.27 C** = picture of a telephone (Labels telephone as C in Platt and and Monk ABC book)
55. **1;2.29 goggie** = doggie (F said, "Doggie goes bow-wow." L imitated him and said "Goggie bow-wow-wow.")¹⁰
56. **1;3.0 ba** = a request to ring the doorbell ("She loves to ring our doorbell and says "ba" at the threshold if I don't lift her up to ring the bell." J1, p. 96 summary of vocabulary development at 1;3.0)

¹⁰ L said a word that sounded like "Goggie" during the preceding week. This was the first example in which M was certain that "goggie" meant "doggie."

REVIEW OF L'S VOCABULARY BETWEEN THE AGES OF 1;2.1 AND 1;3.0**April 21 — May 20, 1972**

Number of Days in the Month	30
Number of Days with Entries in the Diary	24

Discontinued Words in L's Lexicon Between 1;2.1 and 1;3.0

Word	Date of Acquisition Number in Lexicon	Date Discontinued	Reason for Discontinuation
<i>Irma</i>	0;11.14 Word #7	1;.2.1	Irma left the household on March 31 st .
<i>Dada</i>	1;1.28 Word #39	1;2.25	<i>Baby</i> = Laura

Tally of the Words in L's Lexicon at 1;3.0

Total Number of Prior Emergent Words in L's Lexicon	40
Emergent Words Recorded Between 1;2.1 and 1;3.0	16
Total Number of Emergent Words Recorded in the Lexicon at 1;3.0	56
Discontinued Words in L's Lexicon Between 1;2.1 and 1;3.0	2
Discontinued Words in L's Lexicon Prior to 1;2.1	3
Total Number of Words in L's Cumulative Lexicon at 1;3.0	51

The number of words in the record of the process of L's vocabulary development was greater than the total number of actively used words in her cumulative lexicon. The numbering in the developmental record perforce included any emergent word regardless of its duration in her extant vocabulary. Thus, the number of words in L's cumulative lexicon always represented the total number of every emergent word L ever said minus the total number of words she subsequently and permanently discontinued.

THE TOTAL WORDS IN THE SEQUENTIAL DEVELOPMENTAL RECORD AT 15 MONTHS = 56

THE TOTAL PRODUCTIVE WORDS IN L'S CUMULATIVE LEXICON AT 15 MONTHS = 51

The Importance of the Data in Journal 1

Compared to the technologically sophisticated data that exist today, the observations in Journal 1 seem outdated and imprecise. In fact, these data are not included in the CHILDES version of L's diary. Nonetheless, these limited subjective descriptions of L's early verbal communication are pivotal to the identification of an inflection point in a longitudinal process that defines the onset of her sustained production of an ambient natural language. The point is that these initial observations of L's verbal communication are essential to teasing apart *when* and *how* she began to produce a natural language during her second year. In summary, the data in J1 show that L did not rush headlong into the production of a natural language. Instead, she dragged her feet over the rocky terrain of a constrained and self-invented protolanguage.

APPENDIX Journal 1

This appendix contains an extensive description of all of the referents mentioned in Journal 1.

This information is important because the interpretation of the data is child-specific and context-dependent.

IDENTIFICATION OF REFERENTS IN JOURNAL 1
October 20, 1971 – May 20, 1972
L, 0;8.0 – 1;3.0

Laura's Family

LAURA		
<u>Subject of Study</u>	Age	J / P
<i>dada</i> L referred to herself in a self-reflection in which she was visible as the referent.	1;1.28	J1/57 #221
<i>dada</i> L referred to herself without a self-reflection as a visual referent.	1;2.0	J1/59 c. d.
<i>baby</i> = L M said "Uh-oh who tipped the chair over? L answered "Baby." L had used the word <i>baby</i> previously but never to refer to herself.	1;2.25	J1/88 #317
<i>me</i> = the intention "I want" (?) L wanted M to take her to the edge of a swimming pool where there was a rubber duck and said "Me guckie." A possible gloss = (I want the duck).	1;2.29	J1/90 #332
<i>baby/dada</i> L used the words <i>baby</i> and <i>dada</i> as interchangeable forms of self-reference.	1;3.0	J1/101 v. s.

JOANNA		
<u>Older Sister</u>	Age	J / P
<i>Dee</i> = J (?) L said "Uh-oh Dee, Dee" immediately after J said "Uh-oh."	1;1.14	J1/49 c. d.
<i>Dee</i> = J J came over to L, who was bouncing on the rocking horse, and said "Hi." L said "Hi — Dee."	1;2.0	J1/61 c. d.
<i>Dee</i> L said "Hi Dee" to J. She used the same linear pattern <i>Hi dee</i> to greet F	1;2.0	J1/65 v. s. #235c
<i>dada</i> L referred to J as "Dada."	1;2.9	J1/72 #277
<i>dada/Dee</i> L referred to J as "Dada." She also referred to herself and F as <i>dada</i>	1;3.0	J1/104 s. s.

Laura's Family – (continued)

SUE		
<u>Mother</u>	Age	J / P
<i>mama</i> L said "Mama" in response to the sound of M's voice calling to F from another room.	0;11.10	J1/12 #52
<i>Irma</i> L stopped saying "Mama" and instead referred to M as "Irma."	1;1.0	J1/37 v. s.
<i>Irma</i> ≠ M Irma left the household. L no longer said "Irma" to refer to M.	1;1.11	N/A
<i>mama</i> L reinstated the word <i>mama</i> to refer to M. M was holding L and stroking her when L said "Mama, mama" and kissed M.	1;1.30	J1/57 #225
<i>daddy</i> L's word was not an error but most likely a reference to M as a member of a category meaning "people."	1;2.0	J1/61 c. d.
<i>dada</i> L's word was not an error but most likely a reference to M as a member of a category meaning "people."	1;2.7	J1/72 #269
<i>mama</i> L definitely knew that <i>dada</i> did not refer specifically to M. She always said "Mama" whenever she needed M to care for her	1;2.8	J1/72 #272
<i>dada</i> L: Dada, dada. (said to M for no apparent reason) M: I'm mama.	1;2.13	J1/82 c. d.
<i>mama</i> L definitely knew that <i>mama</i> referred to M. L said "Mama" as she patted M on the head.	1;2.13	J1/84 c. d.
<i>mommy</i> L suddenly used the word <i>mommy</i> for no apparent reason.	1;2.21	J1/87 #310
<i>mommy/mama</i> L used the words <i>mommy</i> and <i>mama</i> as interchangeable forms to refer to M.	1;3.0	J1/96, 100 v. s.

Laura's Family – (continued)

JACK		
<u>Father</u>	Age	J / P
<i>dada</i> L said "Ah dada, dada," when she saw a picture of F on the wall.	0;9.8	J1/6 #15
<i>dada/daddy</i> L said "Dada" "Daddy" as she grabbed at a picture of F.	0;11.1 2	J1/16 #72
<i>daddy</i> L said "Dada" "Daddy" when she noticed a picture of herself with F that M hung over her crib.	1;0.17	J1/27 #128
<i>dee</i> L used <i>dee</i> as a one syllable variant to refer to F in the word fusion <i>hidee</i> .	1;0.18	J1/27 #129
<i>dee</i> L replaced <i>hidee</i> with a linear pattern <i>Hi dee</i> . In every other linguistic context she used <i>dada</i> or <i>daddy</i> to refer to F.	1;1.0	J1/34 c. d.
<i>dada</i> L substituted <i>dada</i> for <i>dee</i> in a linear pattern and said "Hi dada."	1;2.4	J1/71 #263
<i>daddy/dada</i> L used the words <i>daddy</i> and <i>dada</i> as interchangeable forms to refer to F.	1;3.0	J1/96 v. s.

Helpful Paid Acquaintances

HOUSEHOLD HELP		
<u>Irma</u> - Live-out housekeeper until 3/31/72 (See narrative description.)	Age	J / P
<i>Irma</i> L identified Irma by name when she saw her.	0;11.4	1/13 #58
<i>Irma</i> <i>Irma</i> = Irma > < M (n.d.)	1;1.0	1/37 v. s.
<i>Irma</i> Irma left the household on March 31, 1972. L no longer said "Irma" to refer M.	1;2.0	1/66 v. s.

Animals

HOUSEHOLD PETS		
Peanuts - Family's cat until 3/15/74 L's interest in Peanuts influenced her transition to language (See narrative description.)	Age	J / P
<i>kitty-cat</i> Peanuts was the referent for the first word L comprehended, <i>kitty-cat</i> .	0;8.14	1/3 #7
<i>hikee</i> Peanuts was the referent for L's first use of the word fusion, <i>hikee</i> .	1;0.9	1/23 #105
<i>hi kee</i> Peanuts was the referent for L's first use of <i>kee</i> , which occurred in the linear pattern <i>hi kee</i>	1;1.0	1/38 v. s.
<i>hi kee</i> → <i>hi kiddy</i> L could use a longer utterance, <i>hi kiddy</i> , instead of <i>hi kee</i> , if she wanted.	1;2.26	1/89 s. n.
<i>hi kee</i> / <i>hi kiddy</i> These two linear patterns were interchangeable.	1;3.0	1/96 v. s.
<i>kee</i> / <i>kiddy</i> L used the words <i>kee</i> and <i>kitty</i> as interchangeable forms to refer to Peanuts.	1;3.0	1/96 v. s.

L'S PET ACQUAINTANCES		
Serena - The neighbor to the south of L's house had a gentle, black Labrador Retriever named Serena.	Age	J / P
<i>bow-wow</i> Serena was a visual referent for L's narrowing of her original mismatched word meaning for <i>bow-wow</i> .	0;11.24	1/16
<i>bow-wow</i> L said "bow-wow" as a request to visit Serena.	1;0.7	1/22 #101
<i>bow-wow</i> L said "bow-wow" in response to the word <i>Serena</i> .	1;1.21	1/5b, #195
<i>hi kee</i> L and M were on a walk and stopped to see Serena, whom L greeted as <i>hi kee</i> . M corrected the word <i>kee</i> to the word <i>bow-wow</i> .	1;1.22	1/53 #199
<i>bow-wow hi</i> L used the linear pattern, <i>bow-wow hi</i> , on her way out the door to see Serena.	1;2.13	1/83 c. d.
<i>hi bow-wow</i> (2x) L used the linear pattern, <i>hi bow-wow</i> , to address the neighbor's dog.	1;2.18	1/86 #301

Items in L's Environment

L'S SIGNIFICANT PERSONAL ITEMS		
Pacifier - L's pacifier was a source of enjoyment and an object that could be used to help her to calm herself. She invented an idiosyncratic, onomatopoeic word to refer to her pacifier which appeared to be derived from the sound of sucking it.	Age	J / P
<i>lolo/lola → oh lo → oh lolo/oh lola</i> L used <i>lolo</i> and variants of it to refer to her pacifier from 1;1.20 – 1;3.0. <i>Oh lolo/lola</i> was initially a linear pattern, but became a single word meaning "L's pacifier." Her family incorporated this word into their expressive language to refer to L's pacifier.	1;1.20	1/51 #193
L's Orthopedic Shoes - L wore corrective shoes which she disliked.		
<i>tee</i> L said "Tee" to refer to the hard sole of her orthopedic shoes in a generalization of her word meaning "tree."	1;0.19	1/28 #108
<i>tee aw</i> L's orthopedic shoes were the only referent for <i>shoe</i> in her recurrent use of the linear pattern <i>tee aw</i> (shoe off) between 1;1.24 and 1;3.0. The only	1;2.24	1/54 #207
exception was a semantic extension at 1;2.7 when L said "Tee aw" the meaning "Sock off."		

Items in L's Environment – (continued)

ITEMS IN L'S DAILY ENVIRONMENT			
Family Cars - There were two family cars. F's light blue Dodge Dart and M's metallic olive-green Plymouth Valiant. The cars were referred to by their colors and named "Blue Car" and "Green Car" respectively. References to "our car" in the context notes were presumably to M's car, since that was the car L rode in and saw standing in the driveway.		Age	J / P
<i>bow-wow</i> L said "bow-wow" to refer to the sight and sound of cars in a semantic mismatch in which the referent for the word <i>dog</i> was over inclusive.		1;0.0	1/19 v. s.
<i>car</i> —comprehension L understood the word, <i>car</i> . She could take M to her car in response to the word, but still said "bow-wow" when she heard a car she could not see. She did not use any word when she saw a car.		1;0.4	1/20 #95a
<i>car</i> —expressive language L said "Car" as she showed M "our car."		1;2.29	1/91 #33c
L's Swing			
<i>C</i> L said "C" to request that M swing her on her swing.		1;2.20	1/87 #308
The Ringing of a Telephone			
<i>C</i> L noticed of the sound of a phone ringing. L said "C" in response to hearing a telephone ring.		1;2.29	1/91 #33c
<i>C</i> L said "C" when she dialed the telephone.		1;3.0	1/100 v. s.

Toys & Games

GAMES			
Eating Game - L and M played an eating game in which M said, "Mm, mm," during L's late infancy.		Age	J / P
<i>um-um</i> L said "um-um" to initiate a game which involved making someone pretend to eat (e.g., handed M food and said, "Um, um," to play the eating game with her). L offered actual food or an object as food for a family member to pretend to eat. There were multiple examples of this game in Journal 1.		1;1.11	1/41 #80

Toys & Games – (continued)

Toys		
J's Rocking Horse - J had a rocking horse on springs which bounced back and forth. J's name for the horse was Shoeby.	Age	J / P
<i>Z</i> L used <i>Z</i> as a global word for any purpose related to the rocking horse (e.g., naming, requests to be put on the, horse, her action of bouncing).	1;1.10	1/3b c.d.
Foam Blocks - L had a set of soft foam blocks with pictures on them. The blocks were on her changing table. Her parents labeled pictures on the blocks whenever they changed L's diaper. L began to use words to identify some of the pictures.		
<i>dada</i> L pointed out the doll on the block and said "Dada."	1;1.29	1/57 #222
<i>hi kee</i> L said "Hi kee" to a picture of a cat on a block.	1;1.30	1/58 #228
<i>hi kee</i> > L said "Hi kee" to a picture of a lamb and a cow on the blocks.	1;2.19	1/86 #303
<i>guckie</i> (n.d.) L said "Guckie" to a picture of a duck on a block. F's mother used these blocks to teach L the word <i>duckie</i> .	1;2.29	1/90 #332
<i>goggie</i> (n.d.) L may have learned the word <i>goggie</i> from parental labeling in the context of their identification of the dog on her blocks	1;3.0	1/101 #371 v. s.
Rubber Doll at Swimming Lesson - L's swimming teacher used a rubber baby doll during L's lesson.		
<i>baby</i> L's first use of word <i>baby</i> occurred when L spied the rubber doll and said, "Baby." M held up the doll and said, "What's that?" L said, "Baby."	1;2.23	1/88 #314
Rubber Duck at Swimming Lesson - There were rubber toys at the pool where L took swimming lessons. She liked the rubber duck.		
<i>me guckie</i> In her first attempt to combine two content words, L said "Me guckie" (I want the duck). L wanted M to take her to the duck and said, "Me guckie." M took L about 10 feet to the duck, and L said, "Guckie," as she grabbed it.	1;2.29	1/90 #332

IDENTIFICATION OF REFERENTS IN JOURNAL 1
October 20, 1971 – May 20, 1972
L, 0;8.0 – 1;3.0

The Referent is Mentioned in A Context Note

Referent	Age	J / P	Description of Referent
chip-chip	0;8.0	J1/2 #3b	“Chip chip” was a <i>sound</i> that caught L’s attention and delighted her. She laughed whenever she heard it even if she was crying.
cluck game	0;8.27	J1/4 #8a	The cluck game was the first clear-cut example of imitation that involved a <i>movement of L’s mouth</i> as a social response.
cluck game	1;0.7	J1/21 #98b	The cluck game developed into an idiosyncratic reciprocal social game which required L to take her turn using a <i>movement of her mouth</i> —her ability to imitate a clucking sound made with her tongue against the roof of her mouth.
blow game	1;0.7	J1/21 #98b	The blow game was an idiosyncratic reciprocal social game which required L to take her turn using a <i>movement of her mouth</i> —her ability to blow air out onto M’s face.
tree	1;0.7	J1/22 #203	There were three large trees in the front yard. L learned the word <i>tree</i> as part of a routine interaction with Irma that involved going outside to touch these trees. L used <i>tree</i> to refer to trees anywhere.
Rboozle game	1;0.19	J1/28 #140	This idiosyncratic love game was based on L’s recognition of the <i>sound</i> of M’s nonsense word.
Marian	1;1.0	J1/33 c. d.	Marian was a college student who lived-in as a mother’s helper from approximately January 1 to March 31, 1972. She helped M during the early morning, late afternoon and early evening. One of her jobs was to lift and carry L since M could not.
Macaw parrot	1;1.0	J1/33 c. d.	A parrot escaped from Universal Studios and was often in the back yard. The parrot made a shrill, raucous noise which was audible in the house. The family named him Thor.
the wall	1;1.14	J1/48 c. d.	A low, wide ledge on the top of a wall separated our property from the neighbor’s to the south. The wall was tall on our neighbor’s side but not on ours. J and L liked to walk on the ledge as if it were a balance beam.
lock board	1;2.0	J1/62 c. d.	M made J a toy involving different kinds of locks attached to a board.
Jo-Jo Jo	1;2.13	J1/76 c. d.	M and F used these nicknames for Joanna to refer to J.
Reason for L’s confusion of the doors in the entry	1;2.13	J1/77 c. d.	There were four doors in the small entry way of the house. It was not surprising that L might initially open the wrong door instead of the front door.
animal game	1;2.3	J1/84 c.d.	The animal game was a didactic game which M played with L during a diaper change. M: What does the <u>(name of animal)</u> say? L: (makes the sound of the animal). (e.g., M: What does the cow say? L: Moo.)
swimming lessons	1;2.13	J1/84 c. d.	L took swimming lessons at a large fee-for-entry pool. Her teacher’s name was Jen. These swimming lessons were L’s first regular activity away from home in which a person other than a family member taught her a skill.
bow-wow	1;3.0	J1/93 c. d.	L had a pull-toy dog that barked when she pulled it along behind her.