

^12-1/2 weeks.

<Babbling: C smiles and gurgles when a toy, like the five-finger exerciser, is dangled so that it touches her nose and upper lip. Only vocalizes when it actually touches her.>

^14-16 weeks.

<Babbling: Cooing begins.>

^0;4-1/2 End 11-70

<Imitation: C imitated a little kissing noise that M had imitated her making. Did it in imitation several times and was very intense and interested. Did not do it again for a couple of weeks except in solitary practice.>

^0;5-1/2 End 12-70

<Babbling: First articulated babbling:>

C: [d& d& d&] .

<Sometimes produces [g] too.>

^0;7-1/2 End 2-71

<Motor dev.: Imitation: C can clap her hands together on purpose. Before, she could wave her arms in unison but couldn't get her hands together. She does it in delight when M or F appears. She'll also imitate another person clapping.>

^0;7-1/2 End 2-71,

<Babbling: C's chief articulated babble is still:>

C: [d& d& d&] .

<Occasionally produces [m] when fussing. Also says softly both:>

C: [&v] <and> [h&v] .

<especially when on the changing table. Less now than a little earlier. She also whispers these sounds loudly, as well as:>

C: [d& d&] , [h& d&d] .

<C has also learned how to click her tongue and does this rhythmically often.>

^0;7(22) 3-8-71

<Motor dev.: C sat up by herself.>

^0;7(27) 3-13-71

<Motor devel: C knelt for the first time.>

^0;8(2) 3-16-71

<Motor devel.: C pulled herself to standing against M's knee.

Returned a toy whistle for the first time so M could blow it again.>

^0;8(2-7) 3-16/21-71

<Motor dev.: C can crawl, but only accidentally, not yet on purpose.>

^0;8(2-7) 3-16/21-71

C: <Comprehension:> patty-cake , Christy

<Games and activities: patty-cake . C now appears to understand both "patty-cake" and her name. She claps hands when M says "patty-cake" out of the blue, although not all the time. Responds to "Christy" by looking up, although not always. Doesn't respond to other names.>

^0;8(13) 3-27-71

<Motor dev.: C now can crawl on purpose. Crawled from the study to the kitchen with much luring.>

^0;8(14) 3-28-71

<Motor dev.: Starting this week, a great increase in motor ability and curiosity. Much crawling, standing, exploring (e.g., the inside of the dishwasher).>

^0;8(14) 3-28-71

C: <Comprehension:> no

<Starting this week, we began to say "no-no" instead of just taking an object away. C seemed to understand the concept of prohibition almost immediately, without training. She would stop reaching out, sit back, and give us a huge smile. She obeys initially, but slightly later begins to test the limits with a very mischievous attitude.>

^0;8(14) 3-28-71

<Babbling: [d& d&] is still almost C's only babble.>

^0;8(28) 4-11-71

<Games and activities: patty-cake . C makes M's hands do "patty-cake" by pushing them together and pulling them apart.>

^0;8(28)-0;9(3) 4-11/17-71

<Babbling: More new sounds. [d& d&] is still the most common, but C now also says:>

C: [a:i] .

<with a characteristic falling intonation. Seems to be a "remark" on an agreeable situation. She does it while exploring, seeing something interesting, sitting in the car seat, being held, etc., but only when she's in a good mood. Imitation: C imitates us if we start it.>

^0;9(3) 4-17-71

C: [bw& bw&b] .

<Babbling: Probably produced in imitation of M saying [ba ba] and [b& b&] in order to elicit a bilabial. Very protruding lips. This sound occurred occasionally after this date, but very rarely.>

^0;9(3) 4-17-71

<Games and activities: C discovered doors and spends lots of time opening and shutting them.>

^0;9(3) 4-17-71

C: <Comprehension:> pat

<Around this time, C begins to recognize the phrase "pat-pat". If M says "pat-pat the X" (usually the bear, always an "animate" object), C pats it with one hand. This was picked up from watching M pat the toy in question while saying "pat-pat the X ".>

^0;9(5) 4-19-71

<Games and activities: night-night , bye-bye . C catches on to waving "night-night" to daddy. Waves spontaneously for the first time. After this, does it regularly. A little wave, and then puts her hand in her mouth. The whole "night-night" ritual is part of what elicits the wave at the appropriate time. C also waves "bye-bye" occasionally. Recognizes the words "bye-bye", as evidenced in her waving at inappropriate times when she hears a similar sound such as [ba ba] or [ai].>

^0;9(13) 4-27-71

C: <Comprehension:> no

<When C was told "no-no" by M from a distance, as she was about to touch a plant, she shook her own head vigorously. The incident was repeated several times. Not certain whether M initially shook her head, but M surely does it often. This head-shaking when told "no-no" increases in frequency and vigor during the next few days. Once C was putting foil candy wrapper in her mouth and pulling off pieces. M removed each piece from her mouth, but did not say "no-no". It became a game. C waited each time for M to remove it, smiling. When M one time did not remove it, C began to shake her head. Evidently associated having the paper removed with "no-no", since she had been told this in connection with having other things taken out of her mouth.>

^0;9(13) 4-27-71

<Babbling: During this week, some new sounds are added: Suddenly gone is the staple babble:>

C: [d& d&] .

<Replacing it are:>

C: [da da] .

<and something very similar to:>

C: [do 'doi] <and> [dE 'doi] .

^0;9(13) 4-27-71

<Games and activities:, Imitation: For some time (say two weeks?), C has smiled when M imitates a whispered sibilant (something between [TH] and [s]), and C then repeats the sound. Mostly a changing table game.>

^0;9(13) 4-27-71

<Games and activities:, Imitation: During this week, C has begun to initiate phony coughing routines. F, or occasionally M, coughs back, and C repeats at length. Not so much discrete coughs as extended little guttural noises, impulses on the same breath. She realizes this is a game.>

^0;9(17) 5-1-71

C: <Comprehension:> pat , dolly

<C has become very attached to an orange lambs-wool doll. M treats it as though it were animate, stroking it, cuddling it and patting it. M said "pat-pat the dolly". C was very attentive, rushed over to grab the doll, and imitated some of M's motions. Rubbed the doll on her own head. Put it down, and later lay down on it. When told to "pat-pat the dolly", she would pat it with one hand. When M asked "where's your dolly", C would pick it up. Once it was not too easily seen. C looked around for it, finally saw it, crawled over and picked it up.>

^0;9(17) 5-1-71

<Babbling: Today a new babble entered and replaced [do 'doi] as the sound most often made when C is exploring, interested in something, in a receptive, "remarking" mood. It is:>

C: ['ai 'di] .

<With variants:>

C: [ai ti] , [ai THi] , [&i di] , [& di] <etc.>

<Stress is fairly even. The sudden appearance and consistency of this "comment" are remarkable.>

^0;9(18-20) 5-2/4-71

<Babbling: [ai di] and variants are still almost the exclusive sounds. [ai:] alone has dropped out, as has [do doi] and the like.>

^0;9(18-20) 5-2/4-71

<Imitation: In the last few days, C imitates:>

1. When we click our tongues.

2. When we pull in our cheeks and make a very exaggerated kiss.

Watching M and F kiss each other, C immediately makes the same sound with drawn-in cheeks.

^0;9(21-25) 5-5/9-71

<C often says:> C:

[d& di:] .

<I think she is somewhat more likely to say it when

F is present, especially since M often models it then. For example, May 9, she had been up for an hour without saying it. Then daddy appeared. M said "here comes daddy", etc., and then she said very clearly:>

C: daddy .

<Babbling: [ai ti] is becoming much less frequent. By May 9, almost gone.>

^0;9(21-25) 5-5/9-71

<Cognition and memory: During this week C seems to have learned something important about an object's enduring existence. M tried to test this last week or so and C seemed to forget about a hidden object. This week she:>

1. Looked repeatedly for a nipple she had been playing with. When M hid it under a diaper, C picked up the diaper with a sweeping gesture and would lose the nipple.
2. May 9: Looked for daddy under a sheet, after M drew the sheet over his head.
3. May 9: Looked in a wooden box for her bootie after F placed it there and closed the box, all in front of her eyes.

^0;9(21-25) 5-5/9-71

<Games and activities: M and C played a game. C was behind the bathroom door. She would push it shut, then make an anxious sound, [E?] , which worked as a signal to M to open the door from the other side.>

^0;9(21-25) 5-5/9-71

<Imitation:, Games and activities: C likes to make loud noises, not very well articulated. Then F imitates her and she does it again and so on.>

^0;9(25) 5-9-71

<Cognition and memory: Games and activities: C has gotten the principle of putting something into a container instead of just taking it out. This came suddenly. She tried to put her pop-beads into the bowl in her bath tub; she also plays a game putting the beads into a small wooden box, closing the box, opening it (sometimes needs help), and taking them out again. Interesting that she has learned to do this more or less at the same time as she realized that an object in the box is still there even when the box is shut (see 5-5/9-71).>

^0;9(26) 5-10-71

<M took C for a walk in her backpack. C saw a dog and said:>

C: [d&di:] "doggie" (?)

<very clearly, repeated it several times. M said "doggie" many times during the walk and after a while, after encountering several more dogs, C began to say something close to [dadi:] , as though she were trying to get the sound closer to M's model. On seeing a cat, C did not say [d&di:] , but rather:>

C: [aiti] "kitty" (?)

<M said "kitty" and C continued variations on [aiti].>

^0;9(27) 5-11-71

<M and C went for a walk. M told C that we might see some doggies, that we saw doggies yesterday, etc. C mumbled several times:>

C: [dadi:] "doggie" .

<Several minutes later, we passed a dog in a front yard. M did not use the word "doggie" or call much attention to it, but as we walked away, C suddenly murmured [dadi] . Later on the walk, after seeing another dog, she began saying [dai:] instead, as though trying to find the right sound. She then saw a robin in a front yard and called [dadi]. Perhaps [dadi] now means any small creature. A few minutes after the robin, she saw men painting a house and seemed to try to attract their attention by shouting:>

C: [hA] .

<A half-hour after the walk, M gave C her lambs-wool doll, saying "here's your dolly", etc. C was excited, began to say:>

C: [dai:] <and once:> [daji:] "dolly" . (?)

<Perhaps she thinks it is the same word as [dadi].>

^0;9(27) 5-11-71

<Babbling: For some time now, C has used semi-vowels [w] and [j] in her babbling, particularly when she first wakes up in the morning. She says:>

C: [wa wa wa] <and> [aj aj aj] .

<For a few days, she's produced a labial fricative by blowing out between her lips while voicing--much burbling.>

^0;9(27) 5-11-71

<When M put C in her car seat when she picked her up from her babysitter's, she gave her her doll. C then said:>

C: [daji] "dolly".

<or something similar, with delight, looking straight at M.>

^0;9(27) 5-11-71

C: <Comprehension:> dolly , doggie

<In the evening, we tested C. Several toys were laid out behind C, who was playing with the cupboard doors. M said "Where's your dolly?" and "Go find your dolly", etc. C looked around right at the doll. She went toward it, was slightly distracted by the other toys, but soon threw them aside and picked up the doll. Next M introduced a stuffed dog as "doggie" and tried to see if C distinguished between "doggie" and "dolly". C seemed confused and rather agitated, did not act upon commands.>

^0;9(27) 5-11-71

C: <Comprehension:> give it to daddy , give it to mommy , DAT

<Games and activities: M, C and F went to Mr. Steak for dinner. In the restaurant highchair, C instigated her most elaborate game to date. She would lean over the side of the chair, bending back, and wait till M leaned over and put her face next to hers. Then with glee she would snatch M's glasses off, straighten up, and hand them to F on the other side. F would give them to M. As M put them on, C would start leaning over again to begin another round of the game. Possibly C is beginning to understand the phrases "Give it to daddy", "Give it to mommy". She sometimes complies, but situational support for the action is usually strong.>

^0;9(27) 5-11-71

<Babbling: In the car seat, C produced:>

C: [bebebe]

<[b] has been a very rare and seemingly not repeatable sound up to now.>

^0;9(28) 5-12-71

C: [m& m&] .

<Said briefly. Babbling: This is virtually C's first nasal.>

^0;9(29) 5-13-71

C: <Comprehension:> bear

<After M had talked about "bear" and patted it, C murmured:>

C: [bEbEbE] " bear ".

<Later when M asked "Where's bear?", C went to the bear and picked it up, although the dolly was also present. C calls the bear:>

C: [d&di] " dolly "(?) <= bear >

<Her word for dolly is similar, but sometimes more [daji] , or almost [dali]. She often says:>

C: [?'& 'd&di] .

^0;9(29) 5-13-71

<Babbling: C said again today:> C:

[m& m&] .

<She also says:>

C: [b& b&] <and> [bw& bw&b] .

<especially on the changing table.>

^0;10(0) 5-14-71

C: <Comprehension:> doggie , dolly

<When M went to get C up in the morning, C was standing by the foot of her crib. When M entered, she turned around excitedly, saying several times:>

C: [dadi] " doggie "(?) " dolly "(?)

<Behind her were both dolly and doggie. M said "Where's doggie?" C looked first at dolly, then at doggie, sat down, and picked up doggie. Then when M said "Where's dolly?", C picked up the doll.>

^0;10(0) 5-14-71

<M and F are trying to teach "radio" and "telephone", both of which are on the headboard of their bed. C is fascinated by them. No comprehension evident, but this morning, C seemed to say:>

C: [wewe] <and> [ewe] " radio ".

<and similar sounds in imitation of "radio", as she banged on it. M also emphasizes "keys", "milk", "juice", "Cheerios" and "cereal" when talking to C.>

^0;10(1) 5-15-71

<Today we took C to a dog show. She seemed somewhat withdrawn and solemn at the crowds and dogs, although not frightened. Later, upon seeing from a distance one dog at a time being walked, she began to call:>

C: [dadi dadi] " doggie doggie ".

^0;10(1-3) 5-15/17-71

C: [dadi] " doggie ", " dolly ", " daddy "(?)

<[dadi], which is now often pronounced something like [dazji] (palatalized [z] , or [d] as a fricative), has been used inappropriately many times. C murmurs it whenever we leave the house, perhaps because she recalls her walks with M when they saw dogs. Murmurs it indoors with no apparent referent, or occasionally in response to a block, keys, Cheerios, or some object that attracts her attention. But she uses it very joyfully and confidently in connection with the doll and dog (use as "daddy" is uncertain). When she sees these toys, she crawls to them crying

[dadi] all the way, picks them up, cuddles them, and lies down lovingly on them. Phonology: When murmuring [dadi], C sometimes produces [badi] instead; then goes back to [dadi] apparently without noticing the difference. [dadi] is always pronounced with falling intonation, except when it is murmured, in which case intonation may be level.>

^0;10(1-3) 5-15/17-71

C: <Comprehension:> bear , ball

C: [dadi] " doggie ", " dolly " <= bear >

<C calls her bear [dadi] but understands "Where's your bear?", etc.

M tried to teach "ball" one morning. C understood it enough to look at the ball when asked "Where's the ball?", but later in the day seemed to have forgotten it.>

^0;10(1-3) 5-15/17-71

<Games and activities: C has been experimenting more with putting objects into a container. Puts her spoon in her cereal bowl, takes it out. Puts pop beads into a bowl in the tub, takes them out. Another game: The last week or so, she has really gotten the hang of dropping objects and waiting for us to pick them up. She makes a game of it.>

^0;10(3) 5-17-71

<Imitation: C imitates many gestures. Today she learned to pull one hand with other with a wiping gesture by watching M. She does not imitate specific sounds much, although she imitates loud, non-articulated noises.>

^0;10(11) 5-25-71

<Games and activities: Imitation: For the last few days, C has been fascinated by a new game. She sticks her tongue out and waits for us to do the same; then is delighted. She is also pleased if we initiate it.>

^0;10(11) 5-25-71

<Cognition and memory: C has lately shown a much clearer understanding of our ability to make certain things happen, and often directs our hands with her own to the desired place. For example, this morning M demonstrated how she

could turn a light on on the radio by pressing a button. C tried unsuccessfully several times to do it, then picked up M's hand and moved it toward the button for another "demonstration". This was repeated several times. Similarly, she sometimes finds her bottle on the floor and purposefully hands it to M so that M will feed her. Along with this new "directive" skill, or perhaps slightly preceding it, is a new definiteness about what she does not want done to her. She pushes our hands away with great force when we interfere with her, e.g., trying to wipe her nose, feeding her when she's not interested, getting in her way.>

% AG

^0;10(11) 5-25-71

C: [d&di] "doggie", "dolly", "daddy".

C: <Comprehension:> dolly, doggie

<C now uses [d&di] and variants less often as random remarks, seems to restrict them more to possible referents for "dolly" and "doggie". Also, more evidence of associating such a sound with "daddy". When F appears, C is likely to say [d&di] spontaneously, even though she had not been saying it before his entry. C clearly distinguishes between "dollie" and "doggie" in comprehension.>

^0;10(11) 5-25-71

C: <Comprehension:> where's bear?

<C understands "Where's bear?", even when this is inserted conversationally, with no special emphasis, in a stream of otherwise non-understood conversation by M. Responds by looking at the bear or going to get it.>

^0;10(13) 5-27-71

<Cognition and memory: C put her booties back up against her feet after M took them off. She now seems to know where they belong, but can't put them on herself.>

^0;10(13) 5-27-71

C: doggie , dolly

<Games and activities: When we go to C's room to get her up, she stops crying instantly and begins to show off what she can do in her crib, moving quickly from one activity to another. She "names" and picks up her doggie and dollie, rings the bells, pulls the cord on her bird music box, and works the puzzles on her "Busy Box". She also likes to drop things out of the bed and wait for us to retrieve them. Often she is so anxious to begin her show-off time that she doesn't even look at us when we enter, but rushes right to her first activity.>

^0;10(13) 5-27-71

<Games and activities: C enjoys the "chasing" game--if she crawls away, pauses, and senses that she will be playfully followed, she wheels away in great delight and crawls on. As soon as she is followed, she often lies down flat instantly with her head turned to one side. She is very amused by this. Seems to be a sort of "submission" posture. She has done this for quite a while. She recognizes a "chasing" noise M makes as C crawls away, a certain "call" or intonation, and responds to this as though M were coming even before she moves. Recognizes this noise from the next room.>

^0;10(13) 5-27-71

C: doggie , dollie , <= bear>

<[d&di] and [daddi] are still C's only words. Used very generally, although she always uses them in connection with the doggie, dolly, and bear. We drove past a cow in a field on May 21 and she swung her head around after it, exclaiming [dadi]! A couple of days later M was pointing out figures in a picture of Jack selling a cow for magic beans. When M pointed to the cow C murmured [dadi]. May have been a coincidence.>

^0;10(13) 5-27-71

C: <Comprehension> bath , milk , juice , ball , give it to daddy

<C does not yet respond reliably to words that have been stressed, like the above.>

^0;10(13) 5-27-71

C: [bw& bw&b] , [dadi]

<Babbling: [bw& bw&b] still occurs, though not often. Mostly C produces variants on [dadi] as she roams around the house in a good mood. For several days she was saying [3d& 4d&di1] or [d& d& d&di] frequently. Things like [didi] have also been heard. Consonants identical or similar to [d, b, m, t, dentalized s] have occurred, but never [p, k, g] nor, I think, [n].>

^0;10(18) 6-1-71

<Babbling: A striking development has occurred since the last entry. On May 30, we noticed that C began to "talk" at length with very adult-sounding intonation contours. Earlier, babbling was limited to two or three identical or similar syllables at a time--intonation not especially English-like. Now, sequences are longer and phonetically more varied (most often on a [d& d&] theme however), and the intonation rises and falls as in English sentences. Sentence-final falling intonation contour. Also, C often looks at us rather confidentially as she begins these sequences, as if she feels that she is "telling" us something. It is odd how we feel as though we should understand, as though she expects us to. Response seems called for. "Expansion" by M already is beginning at this stage. M chooses most likely "meaning"--e.g., "Yes, daddy gave you a big red ball, didn't he?"--as a response. This is not by way of experimentation or training, just comes naturally.>

^0;10(18) 6-1-71

C: [d&di] "doggie" , "dollie" , "daddy"

<[d&di] and variants took a phonetic shift on about May 29 to [si si], [tsi si], [tsji tsji] and similar untranscribable sounds. Used in exactly the same non-linguistic contexts as [d&di] was before. By June 1, these sibilant variants are still occurring, but less decisively than a few days ago.>

^0;10(18) 6-1-71

<C has begun to have miniature temper tantrums the last few days--e.g., gets frustrated when she can't do something and screams with rage.>

^0;10(18) 6-1-71

<Games and activities: C has developed handing something to M and F and taking it back again to a fine art. She gets angry if she holds out something for M to take from across the room and M does not come and take it. Often takes something away from one parent, such as glasses, and hands it to the other.>

^0;10(22) 6-5-71

<C laughed in a very adult, self-conscious way while M and F amused her in her high chair.>

^0;10(23) 6-6-71

C: <Comprehension:> ride

<M asked "do you want to go for a ride?" while C was standing next to the couch in the living room. After a pause, C got down, crawled into the dining room, and stopped expectantly by the rock-and-spin chair.>

^0;10(23) 6-6-71

<Motor dev.: Today the idea of walking really clicked with C. We have been walking her around a little, holding her hands, but she hasn't begged for it. Today, she suddenly wanted to do nothing else. We stand in front of or behind her, holding her hands, and she leans forward and staggers along. From this day on, her balance has improved quickly.>

^0;10(26) 6-9-71

<Today C got glasses. These have more comfortable earpieces than the ones we tried a few days ago. She kept taking those off; she hasn't seemed to mind these at all and very rarely tries to take them off. F makes much of their similarity to ours and she seems to understand this. If we take ours off and play with them, or put two pairs on her at once, she wants to look at hers too. Sometimes when she sees M coming to put them on her, she smiles.>

^0;10(30) 6-13-71

C: <Comprehension:> gently

<In the last week, C shows signs of understanding "gently". Told to touch F's speaker "gently", she stopped pounding it and began to stroke it, as he has shown her to do in the past.>

^0;10(30) 6-13-71

C: <Comprehension:> walk

<Motor dev.: When F asked "Do you want to go for a walk?", C looked up hopefully with a big smile. She wants to walk all the time and gets impatient if we don't cooperate. If F lies down on the floor, she gets especially mad because she can't even stand up against him to plead. She tries to maneuver our hands into the appropriate position.>

^0;11(1) 6-15-71

<Motor dev.: Today M was ironing in the basement, with C crawling around. C went up about 5 steps like lightning before M could stop her. She has almost never had access to stairs before. She went up several times today, and has been efficient from the first time. Puts her left knee on the step, then right foot on the next step.>

^0;11(2) 6-16-71

<Motor dev.: C climbed to the next-to-top step, then paused and turned around, wanting to come down. Holding M's hands, she came down, walking. A day or two after this, she began to want to come up walking too. She raises each leg high and puts each foot on a different stair, as adults do.>

^0;11(3) 6-17-71

<Cognition and memory: M offered C her bottle. C looked at it and began to take pieces of cracker out of her mouth; only after this did she attempt the bottle.>

^0;11(3) 6-17-71

<Motor dev.: C's balance has gotten good. She can stand for several seconds without support, if she doesn't realize she is doing it. When she does realize it, she squats carefully down rather than just collapsing.>

^0;11(3) 6-17-71

<Babbling: for the last several days, C's favorite "word" has been [d&dn]. She also says [2he 3'd&dd2i:1], ['si si], [na na na], and [ma ma ma]. The conversational intonation she had earlier has largely disappeared, but she seems to use "sentence"-final intonation contour.>

^0;11(5) 6-19-71

<Motor dev.: For quite a few days, C has occasionally crawled for a short distance on hands, one knee, and one foot, and sometimes done a push-up onto both feet. Today, for the first time, she crawled for long periods on hands and both feet. She was on the driveway, and the roughness of the pavement seemed to drive her to get her knees up. She doesn't do it in the house, but has perfect control outdoors.>

^0;11(6) 6-20-71

<Games and activities: M played "Where's Christy?" by throwing a towel over C's head and letting her pull it off. After a while, C began to try to put the towel back over her head herself.>

^0;11(6) 6-20-71

<In the last couple of days, C tries to help as M pulls a shirt or dress off over her (C's) head.>

^0;11(11) 6-25-71

<Motor dev.: C tried to feed herself with a spoon today for the first time. She took the spoon away from M and put the end in her mouth, getting the food off. She couldn't fill it herself, but would wait for it and take it after M filled it. Always with her left hand. She always feeds herself food off her tray with her left hand too. Note added years later: C turned out to be definitely right-handed.>

^0;11(13) 6-27-71

<Motor dev.: During this past week, C has made progress in walking. She walks very steadily holding onto two parental hands, and can guide the walk by leaning, pushing and holding back in various directions. She also is becoming fairly steady holding onto only one hand. She can stand alone for several seconds playing with a toy with both hands. She never collapses, but simply squats down when she can't or won't stand any more. When she sets out on a walking expedition, she plunges forward with little growls of pleasure.>

^0;11(13) 6-27-71

<Cognition and memory: Along with C's progress in walking has come a definite will. She knows what she wants and doesn't hesitate to demand it. She tries to make us walk her around or lift her onto counters. She especially likes to sit in our bathroom sinks and play with the nearby fascinating objects. If we don't pay enough attention to her, she has begun to whine--though now I think this may be due also to a cold she has been developing.>

^0;11(13) 6-27-71

C: <Comprehension:> shoe

<Yesterday we bought C her first pair of shoes. She was very interested in the operation and likes the shoes. Knows they belong on her feet. Today M asked "where is Christy's shoe?" (shoes were right behind C), and she went to get one and held it out to M.>

^0;11(13) 6-27-71

<Cognition and memory: C seems to have learned more about love lately. She is very cuddly and comes to lay her head down on our laps or legs more often than she used to. Yesterday she began patting M's face for the first time instead of trying to nip her nose or eyes off. When we go to pick her up in the

morning or after her nap, she flings herself down from where she has been standing at the foot of the crib and cuddles her dolly, lies down on it, etc., looking up at us and seems to enjoy our patting and stroking her as she does this. Offers us her dolly, then accepts it back and cuddles it some more. This can go on for a long time before she is ready to get up. While she is up, she also is doing a lot of tipping her head to one side in a very endearing gesture.>

^0;11(13) 6-27-71

<Games and activities: Today C discovered that she can open the cupboard doors in F's office by pressing one door in with one hand, and pulling the freed edge of the other door with the other hand. Cognition and memory: More about doors: F reports that when he walks C, she stops right in front of a door, lets go of his hand, waits while he opens the door, then holds up her hand again.>

^0;11(13) 6-27-71

<Games and activities: C has recently appropriated the shower stall. She opens the door and crawls in and out, pulling the rug in after her and taking it out again.>

^0;11(13) 6-27-71

<Games and activities: In the last few days, C has begun to move toys and objects around. She piled pebbles on the front porch, then dropped them off, then piled them back again. She put a cup and spoon on the dishwasher door, then took them off. She takes her xylophone or cobbler's bench or Crawligator and scoots it all around the floor.>

^0;11(13) 6-27-71

C: [d&di] "doggie", "dollie", "daddy" (?)

<Although C still says [d&di] and the like, this word has become pretty general and doesn't seem to apply just to dolly, daddy, doggies and related objects. More of a "remark".>

^0;11(13) 6-27-71

C: <Comprehension:> juice

<M said in the morning "do you want some juice?" C smiled eagerly and looked up at the counter where M usually fixes juice.>

^0;11(14) 6-28-71

<Babbling: C doesn't babble as much as a few weeks ago. She makes many short remarks though, with falling intonation.>

^0;11(14) 6-28-71

C: <Comprehension:> gently , Fifi

<C understands "gently", in that she will stop pounding on an object and begin to stroke it. She learned this gesture with F's speaker. Today when C was slapping M's face, M said "gently" and C began to stroke it instead. When asked "Where's Fifi?", C gives the white dog in her crib.>

^0;11(14) 6-28-71

C: <Comprehension:> glasses , POSS

<Today C was taking M's glasses off and giving them back. She had left them behind her on the ground for a while. M asked "Where are mommy's glasses?" C turned around with a real look of recognition and went to pick them up for M. We've never tried to teach the word "glasses". But when asked, just after this, "Where are Christy's glasses?", she made no response.>

^0;11(3 weeks) Early 7-71

<Games and activities: During the first few days of July we bought C a "walker" --a low wagon with blocks and a high handle like a carriage. She is a little afraid of it for walking, since it gets going too fast and runs away with her. But she likes the toys on it. Later, M sat her on it and pushed her around the house. She loved this and since then asks for this by walking over to the wagon when we hold her hands, and trying to step up on it. She doesn't know how to sit down on it.>

^0;11(20) 7-4-71

<C's Uncle Bob and Aunt Jan came to visit. C was very pleasant and smiley the whole time. She seems to like any stranger who smiles and plays little face games with her.>

^0;11(24) 7-8-71

<Motor dev.: C took about 6 steps unaided today. She has tried one or two in the recent past, then squats down. This time, M set her down off the couch as she was fussing, in a rather abrupt way. C had a little momentum up and just kept staggering forward. She squatted rather than fell at the end.>

^0;11(26) 7-10-71

<Babbling: In the last week or two, much more conversational babbling with English sentence intonation. More variety of sounds than ever before. C often scolds or is cross with [didi].>

^0;11(26) 7-10-71

C: [d&ddi:] " daddy "

<C says [d&ddi:] a lot--often says it clearly when F is present, but says it other times as well, sometimes over and over. Today, she seems to have called F for the first time. When he left the room, she got up on her knees and called [d&ddi: , d&ddi:] after him.>

^0;11(26) 7-10-71

C: <Comprehension:> bath

<M asks "Do you want to take a bath?", then is interrupted by someone else. C waits, then starts toward the bathroom. M asks again, C smiles and continues. Stands up by tub.>

^0;11(26) 7-10-71

<Babbling: Today C began to say lots of [g] sounds sort of like [gadn] and [gatl] (very hard to transcribe), while her tongue worked back and forth.>

^0;11(26) 7-10-71

<C's Uncle Richard came to visit. C was initially thrilled and smiley; reached for his mustache. A warmer welcome than for other strangers. I think she thought he was Uncle Bob again. Later she must have realized he was not, because she became more reserved.>

^0;11(27) 7-11-71

C: <Comprehension:> glasses

While C was having her juice, she saw bubbles in a bottle and tried to touch them. M said "Those are through the glass". C reached up and took off her own glasses. M removed them. C tried to touch bubbles again. M said "Those are in the glass". C again reached for her glasses, but of course they weren't there.>

^0;11(27) 7-11-71

<Motor dev.: C took 3 unaided steps today, then squatted down.>

^0;11(27) 7-11-71

C: <Comprehension:> bath

<C understood when asked about a bath today again. Walked, leading F, from his study into the bathroom.>

^0;11(27) 7-11-71

<We took C to a small carnival. She was completely mystified and very serious, never once smiling. Probably it was too much for her.>

^0;11(28) 7-12-71

<Cognition and memory: Today C wore just diapers with no plastic pants. She was in the bedroom. She suddenly crawled all through the bathroom into her room and stood up expectantly by the bed. I found that she'd wet her diapers. First indication that she cares about wet diapers and especially that she knows the appropriate thing to do for them.>

^0;11(29) 7-13-71

<Motor dev.: Christy started to walk today. She has recently been very steady being walked with one hand, can stand alone for long periods of time, and can squat and then stand up again. Today M and F began to encourage her to stagger a few steps from one to the other. She could do this. Suddenly the idea seemed to click and she began to stagger drunkenly for distances up to about 10 feet. She would go too fast and not be able to stop unless she fell or ran into something.>

^1;0(4) 7-18-71

<C has been sick these last 6 days, perhaps with German measles. She has been fairly miserable and has given up walking. Nevertheless, there have been big developmental steps in terms of vocabulary and games (see separate entries).>

^1;0(4) 7-18-71

C: <Comprehension:> tummy , tongue

<Vocabulary: C has demonstrated knowledge of several new words. One night M talked about C's tummy. The next day M used the word "tongue" while C felt her own tongue, and C began to pat her tummy. Confusion between "tummy" and "tongue" on basis of sound. After this C pats her tummy when asked "Where's your tummy?" >

^1;0(4) 7-18-71

C: <Comprehension:> ice , milk , T.V. , outside , foot , ride

< When C is asked if she wants a piece of ice or some milk, she smiles and hurries to the refrigerator. Once as C stood at the refrigerator M asked if she wanted milk. No response. Then, asked "Do you want a piece of ice?", she gave a huge smile and held out her hand greedily. She would suck on ice all day if we kept giving it to her. When the word "T.V." appears in a sentence while we are in the bedroom, she looks At the T.V. She has known what the remote-control box does for a long time, always looks at the T.V. when we pick it up. When asked "Do you want to go outside?", C smiles and goes to the door. M asked "Where's your foot?" on July 19. C looked down at it and wiggled her toes. She still understands "Do you want to go for a ride?" as referring to her rock-and-spin chair.>

^1;0(4) 7-18-71

<Games and activities: Cognition and memory: C developed some elaborate games this week. When M put F's tennis hat on, C would crawl away and wait for M to chase her. After a few feet, C would look back to see if M still had the hat on. After a couple more checks, M hid the hat somewhere along the route. When C would look back and see that the hat was gone, she would immediately start back to look for it, and retrace the steps logically until she found it and gave it back to M. Then the game began again.>

^1;0(4) 7-18-71

<Cognition and memory: C is fascinated by F's sandals. Looking in the bedroom closet, she saw them and handed them back and forth to M for a while. Then she led (walking) M to the hall closet where M keeps her sandals. Handed her the sandals, waited for her to put them on, then went back to the bedroom closet to inspect F's sandals again.>

^1;0(4) 7-18-71

C: <Comprehension:> mouth

<C found a hunk of maple sugar she had once licked. She had forgotten what it was for and just held it, didn't put it in her mouth. Finally F said "Put it in your mouth", and she did.

^1;0(4) 7-18-71

<Games and activities: For the last several weeks, C has loved to sit in the bathroom sink and play with the surrounding paraphernalia. She puts the toothbrushes in her mouth, touches M's barrette to her hair, chews on the soap. The soap in the bathtub has lost its mysterious fascination for her since M began to let her chew on it.>

^1;0(4) 7-18-71

C: [d&di:] "daddy", "doggie", "dolly" (?)

<Babbling: very conversational intonation today. A recurrent "word" is [bA'dei] and variants like [dAbAdei]. [d&di:] is still C's most frequent word, used at both appropriate and inappropriate times. Can't tell if she has any idea of its meaning or if it's just a general remark.>

^1;0(6) 7-20-71

C: <Comprehension:> NEG

<C was fishing for ice with her hand in M's glass. M said "Just take one, please, don't fish". C briefly shook her head "no". M had not said "no" nor shaken her head. Did C understand the negative sentence structure? Seems unlikely. A little later while C fished again, M said "Don't fish", being very careful not to give any other negative cues. C again shook her head. A third time C shook her head with no prior comment from M--the association between hand in glass and "no" seems strong by now. Each time, though, C continued to fish.>

^1;0(8) 7-22-71

<Games and activities: Today in the car C got very good at blowing a whistle. She can do it every time. She never tries to "sing" the noise any more since she has learned how to do it the right way.>

^1;0(10) 7-24-71

<Motor dev.: C has been practicing walking again in the last few days since she got over being sick. By today she is good; she has much more control than she did on 7-13 when she first walked alone. She can walk slowly, turn corners, and stop when she wants. She can even walk while holding and drinking a bottle of milk. She falls when she gets excited and tries to go too fast. She can get up to a standing position from squatting, and doesn't have to push up with her hands, which Dot thinks is unusual.>

^1;0(11) 7-25-71

<Motor dev.: Today C is walking with confidence all over the house, carrying her bear, or a book, or whatever. She's very pleased with herself.>

^1;2(3) 9-17-71

C: <Comprehension:> bed

<M asked "Do you want to go to bed?" C shook her head vigorously and said several times:>

C: [na] " no ".

^1;2(3) 9-17-71

<C was at the Varsity House nursery for a short while in the afternoon. The other children left to go home. As they departed, C said:>

C: [ba] " bye ".

^1;2(4) 9-18-71

<We visited at Ann H.'s house. C picked up a picture and handed it to M, saying:>

C: mommy .

<In retrospect, I think this may have been accidental, since "mommy" was not used for months afterward in such a way. Then, as we left the house and got ready to get into the car, C said:>

C: [ba] " bye ".

^1;2(5) 9-19-71

<Games and activities: C began to hum to herself while playing, while we were visiting Great Grandma B. in Topeka.>

^1;2(6) 9-20-71

<Games and activities: Around this time C begins to enjoy bouncing on M's stomach as M lies flat on the bed or floor. Also, she begins to lean forward to "kiss" M or F on the cheek (she just puts her lips to our cheek).>

^1;2(14) 9-28-71

C: <Comprehension:> tummy , belly-button , nose , ear , mouth

C: <Comprehension:> knee , eyes

<Today while C was on the changing table:>

1. M asked "where's your tummy?" and "where's your belly-button?" and got appropriate points. C has shown before that she knows these words.
2. Then M said "Where is Christy's nose?" C put her hand on her mouth, then pushed it up to her nose.
3. "Where is mommy's nose?", C touched M's nose.
4. "Where is Christy's ear?", C touched it.

5. "Where is Christy's mouth?", C touched it.
6. "Where is Christy's knee?", C patted both knees vigorously.
7. "Where are Christy's eyes?", C put her hands to her glasses, then tried to pull them off.>

^1;2(14) 9-28-71

C: <Comprehension:> straws

<C was playing in F's office. She has often played there with a box of straws. M asked "Where are the straws?" C whipped her head around and went to get them. First time she has shown she knows the word.>

^1;2(15) 9-29-71 <Approximately>

C: bye .

<Games and activities: C began to perform a little game which continued for a number of days, but has long-since faded out as of this writing (Nov. 23). She backs out of a room, closing the door, leaving M or F inside, and saying "bye" while she closes it. Then pushes it open and runs in, only to start again. Several times C has been playing with her toys, then suddenly jumped up, saying "bye", and run to a door to play the "bye" game.>

^1;2(17) 10-1-71

<C imitated m saying "bottle" with something similar to:>

C: [bai] " bottle ".

<Later she began to say [ba:] when she saw a bottle.>

^1;2(18) 10-2-71

<Time to record some activities from the last weeks; we've been away part of this time.>

1. Imitation:, Games and activities. Starting at about a year, C began to tilt her head far to one side or the other, grinning, and waiting for us to do the same. Then she'd switch and tilt to the other side. This was very frequent for a few weeks, but died out after about a month.

2. Since she was about a year old, C has been taking one of us by one finger and leading us to where she wants us to be.
3. For a long time C has held her bottle tilted up by the end, palm on the bottom. Most babies seem to hold it around the middle.
4. Motor dev.: C learned in mid-Aug. (during our trip to Berkeley) to turn herself in circles, to run, and to look between her legs.
5. Cognition and memory: Since about Aug. 24, when we moved into our new house, C has known where the phonograph is and runs toward it excitedly and waits impatiently until we start a record.
6. Since moving, C has begun to take her glasses off to tease us, and to fling herself stomach-down on the beds, which are low.
7. Cognition and memory: since moving, C has learned where many things go and what to do with objects. For example:
 - a. She takes keys to the door and holds them up toward the lock.
 - b. She holds safety pins up to the appropriate area of her diaper.
 - c. She puts barrettes, hair clips, and rollers on her head.
8. Motor dev.; Games and activities: Since mid-Sept. (14 months), C has done the following:
 - a. Tiptoeing.
 - b. Leaning forward to receive a kiss on the forehead.
 - c. Backing up toward an object to sit down on it.
 - d. Being contrary, in order to tease--e.g., running away from me when she sees I want to change her diaper.
 - e. Stamping her feet for fun.

^1;2(18) 10-2-71

<When M lifted C out of the crib for her early morning bottle, C said:>

C: [ba:] " bottle ".

<I'm not sure whether she saw the waiting bottle or simply remembered that this was "bottle time".>

^1;2(19) 10-3-71

<A new word: when C sees a ball, she says:>

C: [ba:] " ball ".

<and runs over to it. Has happened several times.>

^1;2(19) 10-3-71

<When C saw a baby in a high chair in a restaurant, she said:>

C: baby .

<Not a direct imitation, although M had said "baby" earlier.>

^1;2(19) 10-3-71

<For several days now, C has said:>

C: hi .

<Usually it is at least somewhat appropriate. She said it on Sept. 29 as she toddled past a man at a volleyball game.

He responded "hi" right back. Very cute.>

^1;2(19) 10-3-71

C: no .

<C does not say "no" much, if at all, the last few days.>

^1;2(19) 10-3-71

C: <Comprehension:> knee

<When asked "Where is C's knee?", C patted her knee, then turned her attention to F's knee, bent under the sheet.>

^1;2(19) 10-3-71

<Imitation: C has been trying to imitate words. M models, for example, "1pow:3der" or "1mu:3sic" with very exaggerated intonation. C imitates the intonation well and does a very approximate rendition of the word.

She has also imitated:>

C: more .

^1;2(20) 10-4-71

<Cognition and memory: C put a stray Kleenex up to her nose and snuffled.>

^1;2(20) 10-4-71

C: <Comprehension:> nose , mouth , eye

<M and C playing with doll. M asks "Where's dolly's nose?" C touches her own nose. M persists but C doesn't touch doll's nose till M does.

Then M asks "Where's dolly's mouth?" C touches her own mouth (tooth, actually). Then "Where's dolly's eye?" C a little confused between her own eye and ear. Puts her hand somewhere between. Then touches the doll's eye. C then saw a bottle on the floor, and said:>

C: [ba:] " bottle ".

<She was hesitant to pick it up (she knows "old" bottles are not allowed) until M said "Give it to Mommy." Then she smiled and handed it to M.>

C: <Comprehension:> give it to mommy , DAT

^1;0(20) 10-4-71

<C and M went up to F's study. While F was talking on the phone, C walked over to him, leaned over in an attention-attracting way, and said:>

C: hi .

^1;0(20) 10-4-71

<C saw a baby in a cart in the grocery store. Before M realized what she was doing, she had about six times said:>

C: baby .

^1;0(21) 10-5-71

<Several more times since Oct. 3 C has seen a ball and said:>

C: [ba:] " ball ".

<Usually she does this with the beach ball in her room. Once also, though, when she saw another ball on the patio, through the living

room window. In a store today she saw a rack of basketballs, and said "ball" without any prior naming by M. This is the first time she has extended a word beyond the objects it is used with at home, except perhaps for:>

C: baby .

<which was used first to label a strange child.>

^1;2(21) 10-5-71

<When M asked if C wanted more milk, C imitated:>

C: [mE:] " more ".

<C has seemed to understand "more" in this context for at least a week.

She hands her bottle to M with a smile, and waits while M fixes it.>

^1;2(21) 10-5-71

<Games and activities: C has not played the "bye" game for several days.>

^1;2(21) 10-5-71

<C saw a picture of herself, said several times:>

C: baby .

^1;2(21) 10-5-71

<While playing with the T.V., C imitated:>

C: [bi bi] " T.V. "

^1;2(21) 10-5-71

C: what that ?

<For several days at least, C has had a phonologically and gesturally distinctive pattern: she says [2d&3'di:1], [2di 3'd&], [2dA 3'd&1], or something similar to these, while pointing at something. A stranger today interpreted it as meaning "what's that?" and answered appropriately. This also elicits a label from M, but it's hard to tell if this is what C wants, since she often continues to repeat the phrase. She also uses it when she is holding an object and offering it to M.>

%WHQ

^1;2(21) 10-5-71

C: <Comprehension:> tummy , tongue

<M asked "Where's your tongue?", "Where's Christy's tongue?" as C made mouth motions. C patted her bare tummy. She made this same mistake once months ago. She has heard "tongue" only rarely, and the perceived similarity to "tummy" evidently is strong.>

^1;2(22) 10-6-71

<C hears a dog barking. M tells her that doggies go "bow-wow-wow". C imitates as:>

C: [bababa] . <= bow-wow >

<C does this several times during the day whenever M says "bow-wow" (but not when asked "What do doggies say?", although M tried to set up this association.>

^1;2(22) 10-6-71

<C sees the picture of a baby on a Curity diaper box. Pats or points to it and says:>

C: baby .

<First time this particular picture of a baby has been called attention to either by C or M.>

^1;2(22) 10-6-71

<M goes outdoors in the evening for a minute. When she comes in again, C is standing waiting. Slightly anxious, C says spontaneously:>

C: hi .

^1;2(22) 10-6-71

<Imitation: Barb, C's temporary baby-sitter, reports several interesting things:>

1. C imitates almost anything vocal. F has sung notes to her. C reproduces their relative (though not exact) frequency.
2. C playing with panting dog in the park yesterday. She herself "panted" in observation of the dog.

END OF CHR01 (FIRST CHRISTY FILE)

