Episode Book

EPISODE #5864

Inside a 15-Month-Old's Head: What Ezra's Brain Is Doing

PUBLISHED	11 October 2026 at 11:22 UTC
DURATION	27:24
LISTEN	myweirdprompts.com/episode/baby-brain-15-months-explained-02239/
HOSTS	Corn, Herman, Hilbert
SCRIPT MODEL	deepseek-flash
VOICES	chatterbox-regular (chatterbox-local)
PIPELINE	V5.3
SOURCES	16 cited by the research (listed at the end)
BOOK GENERATED	19 October 2026 at 17:40 UTC

SYNOPSIS

Ezra is fifteen months old. He says "Dada," "Mamma," and "Up." He's taken a few faltering steps. And he will sit on the floor handling a wire stripper for twenty minutes. In this episode, we triangulate three angles — the CDC's developmental milestones, the neuroscience of infant attention, and one father's observations — to paint a vivid picture of what's actually going on inside a toddler's head. Along the way: why a baby's consciousness is more like a lantern than a spotlight, why pointing is a milestone in its own right, and why the twenty minutes with the wire stripper is a self-directed lab session with a labelling service attached.

TRANSCRIPT



Corn

Okay. So the last time we did one of these, Ezra was still mostly a potato.



Herman

He was a very charming potato.



Corn

He was. But Daniel's noticed something. He's always enjoyed these episodes, the ones where we try to get inside a small baby's head, and he says as Ezra hits each milestone, they've given him a way of imagining what's actually going on in there. So he's sent us an update.



Herman

Fifteen months.



Corn

Fifteen months, give or take. And the picture he paints is specific. He's got a small vocabulary. Dada. Mamma. Up. He's taken a few faltering steps, but he's not walking reliably yet. He's smiley, he's funny, Daniel says they knew from the start he had a comic personality. Loves to crawl. He is absolutely fascinated by whatever Daniel's doing when he's working on DIY around the apartment.



Herman

That's the wire stripper.



Corn

He will sit there handling a wire stripper for twenty minutes. Fixated on the joins, on what the little plastic levers do. He loves music and rhythm and banging on things. And the latest percussion instrument is Daniel's laptop. Which is how he solved the mystery of why the trackpad stopped working. Ezra had been using it as a snare drum.



Herman

There's a detail in there I want to come back to.



Corn

There's a couple. He's in daycare, he's been there a few months, everyone agrees he's a great kid to be around. Fussy days, wiggly days, and the occasional cuddly day that Daniel says are the ones they enjoy most. And he loves the before-bed chase, he clambours down off the bed, waits for Daniel to come after him, and then does that giggle when he gets caught. Sometimes he goes up on the shoulders and they do airplane laps around the apartment.



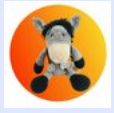
Herman

And the actual question.



Corn

The question is what's going through Ezra's head. Daniel can't ask him and get an answer, so he wants us to do the thing we do. Paint a vivid picture of what it is to be at this age. And he's explicit about what he's not asking. Once he knows Ezra recognizes him as his dad, and once he knows the kid isn't behind, he's happy either way. He doesn't want a worry list. He wants the inside of the head.



Herman

Good. Because the good news is that Ezra's profile maps onto the fifteen-month checklist almost line for line. The CDC's Learn the Signs Act Early milestones, page dated May fifteenth of this year, and the definition matters here. A milestone is something most children, seventy-five percent or more, can do by a certain age. Not a target. Not a deadline. A majority threshold.



Corn

So when we say he hits it, we're saying he's in the top three quarters of children his age. Which is a low bar to clear and he's clearing it comfortably.



Herman

He's clearing it in the social and emotional column, he's clearing it in language, he's clearing it in cognitive, he's clearing it in movement. Daniel said the only thing he actually wants to know is that Ezra knows him, and the checklist's social milestone at fifteen months is showing affection, hugs, cuddles, kisses. So that one's answered.



Corn

Alright. Then let's do the thing. How do we actually answer a question like this? We can't ask Ezra.



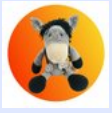
Herman

You triangulate. Three angles. You take the developmental checklists, which tell you what a child at this age reliably does. You take the neuroscience, which tells you what's happening underneath while he does it. And then you take the observation, the stuff Daniel's describing, and you see whether the first two explain the third. When a theory predicts a boy sitting on the floor with a wire stripper for twenty minutes, the theory's earning its keep.



Corn

And there's a framing I want to put on the table early, because it changes how everything else reads. Alison Gopnik, the Berkeley developmental psychologist, wrote a piece in Scientific American back in two thousand nine, and the line in it is that a baby's consciousness is more like a lantern than a spotlight. It illumines the entire world around them. Adults have flashlight attention. We point it. Babies are bad at not paying attention.



Herman

Bad at not paying attention.



Corn

Which sounds like a deficiency until you flip it. The reason Ezra cannot ignore the plastic levers on a wire stripper is that he has not yet developed the machinery for ignoring. Everything is lit. Nothing is background.



Herman

And that is not a defect of a brain that's still booting. That's the signature of a brain that hasn't pruned yet. The flashlight is cheap to run. The lantern costs a fortune, which is why we stop paying for it.



Corn

We'll come back to that, because I think it's the spine of the whole episode. But let's start where Daniel started, which is the most visible thing. Language. Dada, mamma, up. Three words.



Herman

The CDC frames early words as incomplete, and that's the point. It lists ba for ball, da for dog, and it advises parents to repeat and expand. Ball, yes, that's a ball. The word arrives mangled and the parent hands it back whole.



Corn

So up is probably not a word in the sense I'd mean it. It's a sound that does a job.



Herman

It's a sound that has reliably produced a result. And here's what I find exciting about this stage. Zero to Three's fifteen to eighteen month handout says the child is using language to understand the world. To understand it. The same document says the child can understand simple questions and directions. Kick the ball to me. And there's a line in it I want on the record. By eighteen months, I may say as many as twenty words.



Corn

Twenty.



Herman

Twenty. So Ezra is at three, and in three months the ceiling moves to twenty. He's not behind. He's at the leading edge of an explosion.



Corn

The confusion is that we hear a toddler and we hear a small vocabulary. What's actually happening is a small output attached to a large and rapidly growing input.



Herman

The comprehension runs years ahead of the production, and it does so from very early. And the mechanism connecting them is pointing. The CDC lists pointing as a milestone in its own right at fifteen months. Points to ask for something or to get help.



Corn

A gesture as a milestone.



Herman

A gesture as a milestone, because it's the moment the child works out that another person's attention is a thing that can be directed. There's a study by Igualada and colleagues in Infant Behavior and Development, back in twenty fifteen, that looked at twelve-month-olds, and it found that the babies who produced pointing and speech at the same time, pointing at a cup and saying wawa at the same time, those combinations positively correlated with their lexical and grammatical development six months later. The gesture and the word together predicted where the language went.



Corn

So the pointing isn't decoration on top of the word. It's part of the word.



Herman

It's doing work. And there's an even earlier finding I like. Boundy and colleagues, in Infancy, twenty nineteen, showed that infants display declarative communication, that is, sharing attention and interest with another person purely for the sake of sharing it, before twelve months. Just to say look at that with me.



Corn

Which is the thing Daniel would recognize instantly. Ezra points at the wire stripper and says up, and up is not a request for the wire stripper.



Herman

No. It's up, look, I'm doing this with you, which is the whole thing.



Corn

Okay, so that's the last six months of Ezra's brain we've just described. What about the tools? Because when Daniel listed the wire stripper, I thought that was the most specific detail in the whole prompt, and it turns out it's textbook.



Herman

It's almost a line-for-line match. The CDC's cognitive milestone at fifteen months is tries to use things the right way, like a phone, a cup, or a book. Those are the examples they give because they're the objects most children have access to. Change the household and the object changes. A boy whose father is doing DIY sees a wire stripper as the thing that gets used the right way, and he handles it the right way because he watched it be handled.



Corn

So the fixation on the levers isn't eccentricity. It's the milestone, wearing the clothes of the specific apartment he lives in.



Herman

And the second cognitive milestone at fifteen months is stacks at least two small objects. Which sounds trivial until you think about what it requires. It requires holding an intention across a sequence. Pick this up, put it there, don't drop it on the way. That's the early version of the same machinery that later lets you plan the order of operations on a job.



Corn

And the hands are doing something more than practising stacking. There's a paper I want you to get to, because it's the one that changed how I think about the twenty minutes.



Herman

Schroer and Yu, in Advances in Child Development and Behavior, twenty twenty-four. Their argument is that when an infant manually engages with an object, three things happen downstream. The handling supports their visual attention, which sounds backwards, hands driving eyes, but it's right. It creates salient and diverse views of the object, so the child is generating their own data set of angles and behaviours. And it elicits labelling utterances from parents, so the parent starts naming things, which feeds language. Their summary line is that hands matter so much for learning.



Corn

Hands matter so much for learning. So the twenty minutes with the wire stripper is not twenty minutes of a child being kept quiet while his father works. It's a self-directed lab session with a labelling service attached.



Herman

And it compounds. There's older work by Soska, Adolph and Johnson, Developmental Psychology twenty ten, which linked the acquisition of motor skills like sitting and visual-manual exploration to three-dimensional object completion. Their finding was that motor development and object knowledge are linked in developmental time. The body is not a vehicle that carries the mind around until the mind is ready. The body is part of how the mind gets built.



Corn

Which leads us to the legs. The faltering steps. Because Daniel flagged that and I want to put it down cleanly, since it's the one place this could tip into worry.



Herman

It's the cleanest one of the lot. The CDC's movement milestone at fifteen months is takes a few steps on his own. Takes a few steps. Reliable walking is a later milestone. Ezra is doing precisely the thing that's on the list for his age, and the crawling he loves is not him refusing to graduate. Crawling is fast, it's efficient, it's how he gets around a flat, and he'll keep using it while the walking is still the more expensive option.



Corn

And let me be careful here, because I know there's a popular story that the day a toddler starts walking, their language takes off.



Herman

That story is around, and I could not find support for it in what I looked at. The causal walking-to-language link didn't show up. What the work actually supports is the broad picture. Motor development and object knowledge move together, and object exploration feeds language. So the movement matters. It just doesn't matter in the tidy way the popular version implies, where one Tuesday he walks and the next Tuesday he talks.



Corn

Good. Because that's the version I'd have been tempted to reach for. Now, the other half of the checklist, which I think Daniel undersold, is the social column.



Herman

He undersold it because it sounds so ordinary. Copies other children while playing. Shows you an object she likes. Claps when excited. Hugs a stuffed doll. Shows affection, hugs, cuddles, kisses. Every one of those is a fifteen-month milestone, and every one of those is something you cannot do without a working model of another person as a thing with a mind in it.



Corn

The clapping detail is the one I keep chewing on. Why does the checklist list clapping as a social milestone instead of a motor one?



Herman

Because the clapping they mean is shared clapping. Clapping when everyone else is clapping. Clapping because something happened and the room reacted. The physical act is motor, but the trigger is social, and doing it at the right moment is the whole skill. It's the same reason he hands you things. He hands you something he likes because he's worked out that you might like it too.



Corn

And the daycare piece Daniel mentioned fits here. A few months in, copying other children.



Herman

It's the one milestone on the list that we could not have predicted from the flat. Copies other children requires other children. The default assumption about toddler development is that it unrolls on a clock, and the checklist keeps reminding you it doesn't. Half of these milestones are things that require a world.



Corn

And the fussy days. Daniel mentioned them, and I want to name what's happening rather than let it sit there looking like a problem. The CDC says tantrums are normal at this age and more likely when the child is tired or hungry.



Herman

And it says one to two year olds need eleven to fourteen hours of sleep a day, including naps. Which is a huge amount. That's more sleep than a teenager needs, and we notice when a teenager is short on sleep.



Corn

We do. We don't let the teenager run the flat on nine hours and then wonder why he's screaming about a spoon.



Herman

The other thing in the same document, and it's a small one but it reframes the whole day, is that the CDC recommends limiting screen time for under-twos to video calling only. Which is a striking recommendation until you line it up with the lantern. A screen is a spotlight. It trains the child to attend to one thing. A fifteen-month-old is supposed to be attending to everything.



Corn

Ezra typing incoherent messages to Claude Code at ten at night is, by the letter of that guidance, fine, because that's a person on the other end of it.



Herman

It's a language event with a participant. That's video calling with extra steps.



Corn

Alright. So we've got the checklist covered. Language, gestures, tools, motor, social. And the checklist is oddly reassuring, because everything on it is either a thing Ezra already does or a thing he's about to do. But it's a description of him from outside. Daniel asked for the inside. What does it actually feel like to be him?



Herman

Then you go past the checklist to the work on rhythm and music, and I think that's where the strongest findings are, because they're strange.



Corn

Start with the bouncing.



Herman

Trainor and Cirelli, in the Annals of the New York Academy of Sciences, twenty fifteen. By fourteen months, if you bounce an infant in synchrony with an adult, in time with the music, that infant later shows more altruistic behaviour toward that adult. The measure they used is handing back objects that the adult has just accidentally dropped.



Corn

He drops his keys, the baby hands them back.



Herman

The baby hands them back, and the baby who was bounced in time does it more. And the second half of the finding is the one I can't get out of my head. The helpfulness generalizes to a friend of the bounce partner, another adult who was in the room while the bouncing happened, but not to a neutral stranger. Same age, same situation, no shared bouncing, no help.



Corn

So the rhythm built a bond, and the bond stretched to cover whoever was standing next to the person it was built with.



Herman

Fourteen months. Ezra is one month past that. So every time Daniel has him on his shoulders doing airplane laps around the apartment, and every time they bounce to music, that's not just play. That's the raw material that the social milestones are made of, and it's measurably altering how he treats the people around him.



Corn

That's a bigger deal than it sounds. We usually file nursery rhymes and bouncing under entertainment. What you're describing is the entertainment doing the bonding.



Herman

And the tempo isn't arbitrary. de l'Etoile and colleagues, in Perceptual and Motor Skills in twenty twenty, looked at infant movement and found it was significantly more regular at one hundred and twenty beats per minute than at an irregular cue or at one hundred and thirty-two. Which points to one hundred and twenty as a preferred tempo for infants.



Corn

One hundred twenty bpm.



Herman

One hundred twenty. That's the tempo of a lot of pop music, a lot of rock, a lot of the dance music DJ Herman Poppleberry has been known to play.



Corn

Don't.



Herman

I'm just noting the correlation.



Corn

You're noting that the entire species has a tempo preference and you happen to work in it.



Herman

It's a reasonable working hypothesis.



Corn

There's a deeper finding here though, which is that the rhythm processing isn't learned late. There's work by Edalati and colleagues in the Journal of Neuroscience, twenty twenty-three, and again in Developmental Science in twenty twenty-four, on premature newborns. Those brains already track beat and meter frequencies. The line is that even at this early stage of development, neural mechanisms for processing auditory rhythms beyond simple sensory coding are present.



Herman

So it isn't just that the baby hears the beat. The baby's brain is doing something structural with the beat. It's picking out periodicity. It's building a model of when the next one's coming, and that's the same machinery language rides on.



Corn

Which is the last piece. Van der Wulp and colleagues, Developmental Science, this year, found a correlation between neural entrainment, the brain syncing to a rhythm, and rhythmic ability in six to nine month olds. And they read that entrainment as a marker of statistical learning. Which is the process by which you work out that certain sounds tend to follow other sounds.



Herman

Which is what language acquisition is. So the music and the language are not two hobbies running on separate tracks. They share the machinery.



Corn

So when Ezra bangs on Daniel's laptop, he is not making a noise. He is running the same circuit that he will later use to work out that the sounds coming out of Daniel's mouth have structure.



Herman

He is also, objectively, destroying a trackpad. Both things are true.



Corn

Now. The one that turns the episode. Daniel said he's worried sometimes about time, about whether he's spending enough of it, and he described the before-bed chase with real affection. So let's talk about what a fifteen-month-old sees when he looks in a mirror.



Herman

The rouge test. You put a mark on the child's face without them noticing, and you put them in front of a mirror. If they reach for their own face rather than the reflection, they've recognized the reflection as themselves. And the review evidence is that this response appears in some infants around fifteen months.



Corn

Some.



Herman

Some, and the timing is more variable than the classic account suggests. There's a study published this year in Frontiers in Developmental Psychology, on ni-Vanuatu toddlers, fifty-six of them, seventeen to thirty-six months, and it documents the trajectory there and raises real questions about how much of the timing is cultural rather than neural. What's universal is that the transition happens, and what it means.



Corn

What does it mean?



Herman

It means the lantern gets a lantern-holder. Up to that point, the child is in the world. After it, the child is in the world and can see that they are in it. That's the spotlight arriving. That's the moment the self becomes an object the child can look at.



Corn

And there's a trade. Because the child who can look at himself is the child who can be embarrassed, and the child who can be embarrassed is the child who's about to spend the rest of his life managing how he appears.



Herman

That's the cost. But the benefit is enormous, because the self is what lets you plan for a future version of yourself, and that's the machinery that everything else gets built on. And I'd like to flag here that Gopnik's bigger claim is speculative, and she says so herself. She calls the consciousness chapter a speculative exploration.



Corn

Which claim?



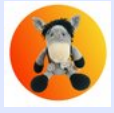
Herman

That babies may be more conscious than adults. More.



Corn

That's the one I wanted you to say out loud, because it's the one that changes what Daniel's asking. He's asking what's going through Ezra's head, and he's assuming the answer is a dimmer version of what's going through his own.



Herman

And it might be a brighter one. If attention is the thing that narrows as we get good at filtering, then the child has more of the world arriving, not less. Every wire stripper lever is a revelation because there's no mechanism yet for deciding it isn't.



Corn

There's a quote from Gopnik I want in the room, and it's the one Daniel will remember. For babies, every day is like first love in Paris.



Herman

Every day.



Corn

Which sounds sentimental until you put it next to the wire stripper. Twenty minutes on a tool that Daniel has used a hundred times and barely sees anymore. Twenty minutes because there is no such thing as a familiar object in Ezra's apartment yet. Every one of them is new every morning.



Herman

And she has a second frame for it, which is that play, not necessity, is the mother of invention. Her argument is that babies are the R&D division of the human species. They run experiments. They form expectations and test them.



Corn

So the chase game before bed.



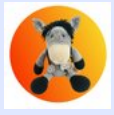
Herman

That's an experiment. The giggle is the result.



Corn

The airplane.



Herman

An experiment in a very specific hypothesis about what a father's shoulders can be made to do.



Corn

And the banging on the laptop is an experiment on a surface he has not yet been told not to bang on, with a result he will be told about shortly.



Hilbert

I've still got the stopwatch.



Hilbert

Seth Thomas, brass case, forty-seven millimetres, I paid nine pounds for it, and I want to say something about the wire stripper.



Herman

Go on.



Hilbert

I used to work at a place that did assessments. Children's assessments, one room, one-way glass, a carpet that was green. I didn't run the tests. I was on the other side of the glass with a clipboard, and my job was to write down what the child did with the objects, minute by minute. Thirty-one children over about four years, and I got to know the wire stripper problem before I ever heard the phrase.



Corn

The wire stripper problem.



Hilbert

You put a good object in front of a fifteen-month-old, they don't do the thing with it. They do seventeen other things with it, and the seventeen other things take a long time, and that is the whole assessment. I watched one boy spend forty-five minutes trying to get a square block into a round hole.



Herman

Forty-five minutes.



Hilbert

I timed it. I had the stopwatch because the tests were timed, and he wasn't distressed. He wasn't crying. He wasn't asking for anything. He just kept turning it and pushing it, and every so often he'd look at the hole like the hole had moved, and then he'd go again. Forty-five minutes, and then his mother came for him and he dropped the block like he'd never seen it.



Corn

What did you write down?



Hilbert

I wrote "persisted." That's the word I used. There's not a lot of room on the form. And then I remember thinking the kid had lasted longer on a hopeless task than any of the adults I knew, including me, and I resolved to stop pretending I was the patient one.



Herman

That's not in the research.



Hilbert

It's in my handwriting though.



Corn

Hilbert, you said the stopwatch was Seth Thomas, you paid nine pounds for it.



Hilbert

It was my great-grandmother's.



Corn

There it is.



Hilbert

She was a competitive napper. Regional champion, three years running. She trained with it, she'd set the alarm for a target, and if she came up under, she'd go again. Very serious about it.



Herman

Corn, don't.



Corn

I'm not saying anything.



Hilbert

I've been thinking about lending it to Daniel, actually.



Corn

To Daniel.



Hilbert

So he can time Ezra on the wire stripper. Daniel said twenty minutes. I don't think that's the record. I think there's a boy in that apartment who can go longer than twenty minutes, and someone should be keeping the number. I've already had Ezra's name put on the back.



Herman

You've had it engraved.



Hilbert

It's a small plate. It's on the inside of the lid, so it doesn't interfere with the reading.



Corn

Hilbert, we're going to come back to this.



Hilbert

I'll be here.



Herman

Okay. Where does that leave us? Because there is a real question buried in there about the difference between exploring and persisting, and I don't think the research sorts them.



Corn

It doesn't, but Hilbert's boy with the round hole is also doing something the checklist describes. He's holding an intention across a sequence. Pick it up, turn it, test it, don't drop it, go again. The persistence is the machinery that the stacking milestone is the first evidence of, run for forty-five minutes without a supervisor.



Herman

So the twenty minutes on the wire stripper is the early version of the forty-five. Daniel's just seeing the short form.



Corn

And here's the piece of the research I want to put next to it before we close, because it's the one that didn't make it into the main run. We talked about the hands mattering for learning, but the study's actual finding is the chain. The manual engagement drives the visual attention, the handling creates diverse views of the object, and the diverse views elicit labelling from the parent. And it's the labelling that predicts the later vocabulary size.



Herman

So the wire stripper is doing three jobs. It's holding his attention, it's generating his own data, and it's making Daniel talk.



Corn

Daniel's instinct, the one he mentioned, that he doesn't get to spend as much time with Ezra as he'd like, and then he feels bad about the twenty minutes on the floor with the tool. Except the twenty minutes is happening because Daniel's in the room working. The two of them are in the same place doing the same thing, and the boy is learning the object and the language and the person all at once.



Herman

Which is the argument for not scheduling it. If you booked a session for it, he wouldn't come.



Corn

No. He comes because the wire stripper is on the floor and his father's using the other one.



Herman

He recognizes the mirror, or he's about to. And then he recognizes Daniel as a separate person who does things to objects. And then he recognizes that he does things to objects too, and that's the whole story of the next twenty years compressed into one week.



Corn

One open question before we go and I'll keep it to one, because I think it's the one that actually sits under Daniel's prompt. Gopnik's lantern is a hypothesis. The mirror test is a behaviour, not an experience. We can watch a child reach for his own face, and we can measure his brain tracking a beat, and we still cannot say what it is like to be him. The hard problem of consciousness applies to a fifteen-month-old with a wire stripper just as much as it does to anything else, and we're as far from solving it as ever.



Herman

The good news is that the boy doesn't need us to solve it. He's got a trackpad to destroy and a father to chase him around a bed.



Corn

For now, the lantern's still lit. Every wire stripper is a revelation. Every bounce is a conversation. And there's a stopwatch somewhere in a drawer with a small plate on the inside of the lid.



Herman

Thanks to producer Hilbert Flumingtop, who will be timing something.



Corn

For more along these lines, there's episode seventy-nine, The Mystery of the Missing Years; and episode twelve oh five, System Update. This has been My Weird Prompts. If you're enjoying the show, a review on whichever podcast platform you use helps other listeners find us.



Herman

We'll be back soon.

SOURCES

What the research for this episode read before the script was written. Primary sources first.

1. **CDC, Milestones by 15 Months, Learn the Signs. Act Early., page dated May 15, 2026 [primary]**
   https://www.cdc.gov/act-early/milestones/15-months.html

2. **Zero to Three, Your Baby's Development: 15**
   18 Months (PDF)
   https://www.zerotothree.org/wp-content/uploads/2022/04/Your-Babys-Development_-15%E2%80%9318-Months.pdf

3. **Alison Gopnik interview, Scientific American, What Is It Like to Be a Baby?, Sept 1, 2009**
   https://www.scientificamerican.com/article/what-is-it-like-to-be-a-b/

4. **Alison Gopnik, TED Talk, What do babies think?, July 2011**
   https://www.ted.com/talks/alison_gopnik_what_do_babies_think

5. **Trainor & Cirelli, Rhythm and interpersonal synchrony in early social development, Ann. NY Acad. Sci., 2015, PMID 25773616**
   https://pubmed.ncbi.nlm.nih.gov/25773616/

6. **de l'Etoile, Bennett & Zopluoglu, Infant Movement Response to Auditory Rhythm, Perceptual and Motor Skills, 2020, PMID 32389057**
   https://pubmed.ncbi.nlm.nih.gov/32389057/

7. **Edalati et al., Rhythm in the Premature Neonate Brain, J. Neuroscience, 2023, PMID 36914264**
   https://pubmed.ncbi.nlm.nih.gov/36914264/

8. **Edalati et al., Neural oscillations suggest periodicity encoding..., Developmental Science, 2024, PMID 39010656**
   https://pubmed.ncbi.nlm.nih.gov/39010656/

9. **van der Wulp et al., Words and Meters, Developmental Science, 2026, PMID 41472612**
   https://pubmed.ncbi.nlm.nih.gov/41472612/

10. **Schroer & Yu, Word learning is hands-on, Adv. Child Dev. Behav., 2024, PMID 39074925**
    https://pubmed.ncbi.nlm.nih.gov/39074925/

11. **Soska, Adolph & Johnson, Systems in development..., Developmental Psychology, 2010, PMID 20053012**
    https://pubmed.ncbi.nlm.nih.gov/20053012/

12. **Igualada, Bosch & Prieto, Language development at 18 months..., Infant Behavior & Development, 2015, PMID 25756420**
    https://pubmed.ncbi.nlm.nih.gov/25756420/

13. **Boundy et al., Intention or Attention Before Pointing, Infancy, 2019, PMID 32677199**
https://pubmed.ncbi.nlm.nih.gov/32677199/

14. **The development of self-recognition: a review, PMID 6199243**
https://pubmed.ncbi.nlm.nih.gov/6199243/

15. **Frontiers in Developmental Psychology, Mirror self-recognition in ni-Vanuatu toddlers, 2026**
https://www.frontiersin.org/journals/developmental-psychology/articles/10.3389/fdpys.2026.1690962/full

16. **PNAS, tool-use understanding in infants, 2023**
https://www.pnas.org/doi/10.1073/pnas.2309669120