

# What Developmental Milestones Are You Missing?

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**Epistemic status:** *Speculative. I can't make this post less condescending and elitist, so if you don't like condescending elitist things, this might not be for you.*

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Developmental psychology never struck my interest in the same way as a lot of other kinds of psychology. It didn't seem to give me insight into my own life, help me understand my friends, or explain weird things about society.

I've changed my mind about all of that after reading David Chapman's [Developing Ethical, Social, and Cognitive Competence](#).

First, a refresher. Developmental psychology describes how children go from helpless infants to reasonable adults. Although a lot of it has to do with sensorimotor skills like walking and talking, the really interesting stuff is cognitive development. Children start off as very buggy reasoners incapable of all but the most superficial

forms of logic but gradually go on to develop new abilities and insights that allow them to navigate adult life.

Maybe the most famous of these is “theory of mind”, the ability to view things from other people’s perspective. In a classic demonstration, researchers show little Amy a Skittles bag and ask what she thinks is inside. She guesses Skittles, but the researchers open it and reveal it’s actually pennies. Then they close it up and invite little Brayden into the room. Then they ask Amy what Brayden thinks is inside. If Amy’s three years old or younger, she’ll usually say “pennies” – she knows that pennies are inside, so why shouldn’t Brayden know too? If she’s four or older, she’ll usually say “Skittles” – she realizes on a gut level that she and Brayden are separate minds and that Brayden will have his own perspective. Sometimes the same mistake can extend to preferences and beliefs. Wikipedia gives the example of a child saying “I like Sesame Street, so Daddy must like Sesame Street too.” This is another theory of mind failure grounded in an inability to separate self and environment.

Here’s another example which tentatively sounds like a self-environment failure. Young children *really* don’t get foreign languages. I got a little of this teaching English in Japan, and heard more of it from other people. The really young kids treated English like a cipher; everybody started out knowing things’ *real* (ie Japanese) names, but Americans insisted on converting them into their own special American-person code before talking about them. Kids would ask weird things like whether American parents would make an exception and speak Japanese to their kids who were too young

to have learned English yet, or whether it was a zero-tolerance policy sort of thing and the families would just not communicate until the kids went to English school. And I made fun of them, but I also remember the first time I visited Paris I heard somebody talking to their dog, and for a split second I was like “Why would you expect your *dog* to know *French* ?” before my brain kicked in and I was like “Duuhhhh....”

The infamous “magical thinking” which kids display until age 7 or so also involves confused self-environment boundaries. Maybe little Amy gets mad at Brayden and shouts “I HATE HIM” to her mother. The next day, Brayden falls off a step and skins his knee. Amy intuits a cause-and-effect relationship between her hatred and Brayden’s accident and feels guilty. She doesn’t realize that her hatred is internal to herself and can’t affect the world directly. Or kids displaying animism at this age, and expecting that the TV doesn’t work because it’s angry, or the car’s not starting because it’s tired.

Psychology textbooks never discuss whether this progression in and out of developmental stages is innate or environmental, which is weird because psychology textbooks usually love that sort of thing. I always assumed it was innate, because it was on the same timeline as things like walking and talking which are definitely innate. But I’ve been moved to question that after reading some of the work comparing “primitive” cultures to primitive developmental stages.

This probably isn’t the most politically correct thing to do, but it’s notable enough that anthropologists have been thinking about it

for centuries. For example, from [\*Ethnicity, Nationality, and Religious Experience\*](#):

Primitive people are generally as intelligent as the people of any culture, including the contemporary industrial-electronic age cultures. That makes it all the more significant that their publicly shared cognitive style shows little identifiable formal operational thought. The probable explanation for this, if true, is simply that formal operational thought is more complexly difficult than earlier modes of thought and will be used in a culture in a publicly shared way only if that culture has developed techniques for training people in its use. Primitive cultures do not do that, and thus by default use easier styles of thought, ones closer in form to concrete operational and even pre-operational thought, as defined by Piaget.

Primitive cultures certainly exhibit the magical thinking typical of young children; this is the origin of a whole host of superstitions and witch-doctory. They exhibit the same animism; there are hundreds of different animistic religions worldwide. And although I didn't talk much about theories of moral development, primitive cultures' notion of taboo is pretty similar to Kohlberg's conventional stage.

But if different cultures progress through developmental milestones at different rates or not at all, then these aren't universal laws of child development but facts about what skills get learned

slowly or quickly in different cultures. In this model, development is not a matter of certain innate abilities like walking “unfolding” at the right time, but about difficult mental operations that you either learn or you don’t depending on how hard the world is trying to cram them into your head.

So getting back to David Chapman: his post is mostly about Robert Kegan’s account of “stages of moral development”. I didn’t get much from Kegan himself, but I was fascinated by an idea just sort of dropped into the middle of the discussion: that less than half of the people in modern western countries had attained Kegan’s fourth stage, and only a small handful attained his fifth. This was a way of thinking about development that I’d never heard before.

On the other hand, it makes sense. Take *General Semantics* (please!). I remember reading through Korzybski’s [giant blue book of General Semantics](#), full of labyrinthine diagrams and promises that if only you understood this, you would engage with the world totally differently, you’d be a new man armed with invincible cognitive weapons. And the key insight, maybe the *only* insight, was “the map is not the territory”, which seems utterly banal.

But this is a self-environment distinction of exactly the sort that children learn in development. It’s dividing your own representation of the world from the world itself; it’s about as clear a reference to theory of mind as you could ask for. Korzybski considered it a revelation when he discovered it; thousands of other people found it helpful and started a movement around it; I conclude that these people were missing a piece of theory-of-mind and Korzybski gave

it to them. Not the whole deal, of course. Just a piece. But a piece of something big and fundamental, so abstract and difficult to teach that it required that whole nine-hundred-something page book to cram it in.

And now I'm looking for other things in the discourse that sound like developmental milestones, and *there are oodles of them*.

I remember reading [this piece](#) by Nathan Robinson, where he compares his own liberal principles saying that colleges shouldn't endorse war-violence-glorifying film "American Sniper" to some conservatives arguing that colleges shouldn't endorse homosexuality-glorifying book "Fun Home":

It is hypocrisy for liberals to laugh at and criticize the Duke students who have objected to their summer reading book due to its sexual and homosexual themes. They didn't seem to react similarly when students at other universities tried to get screenings of American Sniper cancelled. If you say the Duke students should open their minds and consume things they disagree with, you should say the same thing about the students who boycotted American Sniper. Otherwise, you do not really have a principled belief that people should respect and take in other opinions, you just believe they should respect and take in your own opinions. How can you think in one case the students are close-minded and sheltered, but in the other think they are open-minded and tolerant? What principled distinction is there that allows you to condemn

one and praise the other, other than believing people who agree with you are better?

He proposes a bunch of potential counterarguments, then shoots each counterargument down by admitting that the other side would have a symmetrical counterargument of their own: for example, he believes that “American Sniper” is worse because it’s racist and promoting racism is genuinely dangerous to a free society, but then he admits a conservative could say that “Fun Home” is worse because in their opinion it’s homosexuality that’s genuinely dangerous to a free society. After three or four levels of this, he ends up concluding that he can’t come up with a meta-level fundamental difference, but he’s going to fight for his values anyway because they’re his. I’m not sure what I think of this conclusion, but my main response to his article is *oh my gosh he gets the thing*, where “the thing” is a hard-to-describe ability to understand that other people are going to go down as many levels to defend their self-consistent values as you will to defend yours. It seems silly when I’m saying it like this, and you should probably just read the article, but I’ve seen *so many people* who lack this basic mental operation that this immediately endeared him to me. I would argue Nathan Robinson has a piece of theory-of-mind that a lot of other people are missing.

Actually, I was kind of also thinking this with his [most recent post](#), which complains about [a Washington Post article](#). The Post argues that because the Democrats support gun control and protest police, they are becoming the “pro-crime party”. I’m not sure whether the Post genuinely believes the Democrats are pro-crime by inclina-

tion or are just arguing their policies will lead to more crime in a hyperbolic figurative way, but I've certainly seen sources further right make the "genuinely in favor of crime as a terminal value" argument. And this doesn't seem too different from the leftist sources that say Republicans can't *really* care about the lives of the unborn, they're just "anti-woman" as a terminal value. Both proposals share this idea of not being able to understand that other people have different beliefs than you and that their actions proceed naturally from those beliefs. Instead of saying "I believe gun control would increase crime, but Democrats believe the opposite, and from their different perspective banning guns makes sense," they say "I believe gun control would increase crime, Democrats must believe the same, and therefore their demands for gun control must come from sinister motives."

(compare: "Brayden brought the Skittles bag with him for lunch, so he must enjoy eating pennies." Or: "Daddy is refusing to watch Sesame Street with me, so he must be secretly watching it with someone else he likes better instead.")

Here are some other mental operations which seem to me to rise to the level of developmental milestones:

1. **Ability to distinguish "the things my brain tells me" from "reality"** – maybe this is better phrased as "not immediately trusting my system 1 judgments". This is a big part of cognitive therapy – building the understanding that just because your brain makes assessments like "I will definitely fail at this" or "I'm the worst person in the world" doesn't



mean that *you* have to believe them. As [Ozy points out](#), this one can be *easier* for people with serious psychiatric problems who have a lot of experience with their brain's snap assessments being *really* off, as opposed to everyone else who has to piece the insight together from [a bunch of subtle failures](#).

2. **Ability to model other people as having really [different mind-designs](#)** from theirs; for example, the person who thinks that someone with depression is just “being lazy” or needs to “snap out of it”. This is one of the most important factors in determining whether I get along with somebody – people who don’t have this insight tend not to respect boundaries/preferences very much simply because they can’t believe they exist, and to simultaneously get angry when other people violate their supposedly-obvious-and-universal boundaries and preferences.
3. **Ability to think probabilistically** and tolerate uncertainty. [My thoughts on this](#) were mostly inspired by another of David Chapman’s posts, which I’m starting to think might not be a coincidence.
4. **Understanding the idea of trade-offs** ; things like “the higher the threshold value of this medical test, the more likely we’ll catch real cases but also the more likely we’ll get false positives” or “the lower the burden of proof for people accused of crimes, the more likely we’ll get real criminals but also the more likely we’ll encourage false accusations”. When I hear people discuss these cases in real life, they’re

almost never able to maintain this tension and almost always collapse it to their preferred plan having no downside.

Framed like this, both psychotherapy and LW-style rationality aim to teach people some of these extra mental operations. The reactions to both vary from enlightenment to boredom to bafflement depending on whether the listener needs the piece, already has the piece, or just plain lacks the socket that the piece is supposed to snap into.

This would have an funny corollary; the [LW Sequences](#) try to hammer in how different other minds can be from your own in order to develop the skill of thinking about artificial intelligences, but *whether or not AI matters* this might be an unusually effective hack to break a certain type of person out of their egocentrism and teach them how to deal with other humans.

This raises the obvious question of whether there are any basic mental operations I still don't have, how I would recognize them if there were, and how I would learn them once I recognized them.