



Theory of Mind Video

<http://www.youtube.com/watch?v=TJkB6nrk1CA>

0:06 [Narrator] It's as if the three-year-old mind somehow doesn't know what it knows.

0:10 [Teacher talking to child] We're gonna have snack now...

0:12 [Narrator] Nothing demonstrates that better than a simple--yet startling--experiment that Janet Astington—also from the University of Toronto—does with three year olds like Jacob and a juice box.

0:24 [Janet to child, Jacob] What's in the box?

0:26 [Jacob] Juice

0:28 [Woman checks the box and then laughs] Look at that. What are they?

0:36 [Jacob] ropes

0:38 [Narrator] Jacob calls the ribbons ropes, which is fine because it's the next question that counts.

0:41 [Janet] What did you think was inside the box before I turned it over?

0:46 [Jacob] Ropes

0:47 [Janet] Ropes?

0:50 [Janet to camera] Its surprising when you think we should think they can remember they just said juice a moment ago . It's really surprising when they say that they thought that there were ribbons in there and you realize that they don't they just don't think about the world in the same way that we do.

1:05 [Janet to Jacob] Okay. Sorry, Jacob I just... [Narrator voice speaks over woman's conversation with child]

1:06 [Narrator] Not only is Jacob now convinced that he always thought there were ropes in the box, he also believes if he thinks something, so must everyone else.

1:15 [Janet to Jacob]...Jesse hasn't seen inside this box. What will Jesse think is inside before I turn it over?

1:22 [Jacob] ropes



1:25 [Narrator] The innocence of the three-year-old mind is both wonderful and a little spooky and it's led Toronto's Tom Keenan and David Olson to play an elaborate game to find out if young children understand deception.

1:39 [Narrator] One of the players is three-year-old Ross.

[A man, woman, and child are in a room seated at a small table.]

1:44 [Man] This is John and this is Katie. And that's John's mother [points to doll held by woman] John and Katie's mother. And I want you to pretend that they're real people just like you and me, okay?

1:52 [Child named Ross] yeah

1:53 [Tom] now look at John. John has big feet and Katie has little feet. Now watch what happens when they walk through the flour. They make footprints. Do you see the footprints they make? Now can you tell me which footprints are John's footprints? Which ones did he make? [Ross points]

2:12 [Tom] That's right. Those are John's footprints. Okay. Now can you point to Katie's footprints? Which ones did Katie make? [Ross points]

2:20 [Tom] Very good! Okay. Now. What were gonna do. So I'm gonna tell you a little story about Katie and John. And I just have to take their shoes off.

2:27 [Narrator] The story takes place in the family's kitchen. Mom spilled flour all over the floor while baking the muffins that John and Katie now can't wait to eat.

2:36 [Tom] so they ask Mom if they can have some muffins but Mom says "You can't have muffins right now. Dinner's almost ready." So Katie and John go back to their bedroom. Now Mum hears the phone ring, so she goes downstairs to answer the phone and when she's downstairs she can't see us and she can't hear us, okay? Now you know what Katie does. Katie decides she's gonna take some muffins so here comes Katie. But before she takes the muffins, she puts on John's great big shoes.

3:07 [Narrator] Tom spells out for Ross exactly why Katie switches shoes.

3:10 [Tom] So here goes Katie. She put on John's shoes so she'll leave big footprints in the flour and so that the mum will think that John took the muffins, okay? So here she goes [Tom makes the doll walk through flour] Katie grabs the muffins. She eats them all up. Now Katie hears her mother coming back so she runs off to the bedroom. Here comes Mum. Now Mum sees that the muffins are all gone and Mum also sees the big footprints in the flour. Now can you tell me who ate the muffins? Which one ate the muffins—was it Katie or was it John?

3:51[Ross] Katie



3:52 [Tom] Right. Did mom see Katie eat the muffins? [Ross shakes his head] No, she didn't did she. Okay. Now are there big or little footprints in the flour? Are those the big ones or the little ones?

4:04 [Ross] big ones

4:05 [Tom] they're the big ones. Okay. So who will Mum think ate the muffins? Will she think it was Katie or will she think it was John?

4:16 [Ross] Katie

4:18 [Tom] Okay...

4:19 [Narrator] Despite apparently following the logic of the story every step of the way, Ross still can't see that Mom doesn't know what he knows. This belief that thoughts in your head are somehow public knowledge and what you think everyone thinks is almost the definition of childish innocence.

4:38 [Narrator] Watch this wonderful example with psychologist, Joan Pesk, and three-year-old Jacob.

4:41 [Joan] You're going to choose one of the stickers and he's going to choose one of the stickers but he always chooses first. And he always wants the one that you really want. He doesn't care if you're sad. Let's put monkey into another room so that he doesn't know what sticker you really want. [Joan puts toy monkey away] Okay. You tell me which sticker do you really like? Which sticker do you not want? Okay. Now I'm going to bring back mean monkey and he's going to choose first. Remember, he always wants the sticker that you really want. He doesn't care if you're sad, so think of what you can do or say so that he doesn't get the one that you really want. Here comes mean monkey.

5:38 [Joan pretending to be toy monkey's voice] Hmm. Which sticker am I going to choose? Umm. Jacob, which sticker do you really want? [Jacob points to the sticker] Oh. Well then I'm going to take that one. So you get to take this one. [toy monkey pushes the other sticker over to Jacob]

5:57 [Narrator] Joan repeats the experiment several times with each child. Giving them ample opportunity to deceive the monkey as to what they really want.

6:06 [Joan to Jacob] Okay. Tell me which sticker you really like. That one. And which sticker do you not want? [Jacob points] That one. Okay.

6:19 [Joan pretending to be toy monkey's voice] Umm. Jacob, which sticker are you going to take? [Jacob points to the sticker that he wants] Well then I'm going to take that one. And you get to take this one.

6:27 [Narrator] gravely accepting three year old Jacob never figures out that the monkey can be fooled.



6:35 [Narrator] But what about Patrick (eighteen months older and already with a knowing gleam in his eyes)

6:40 [Joan to Patrick] ...so that he doesn't know which sticker you really want. Okay? Which one do you really like? Point to which one you really like. [Patrick points] That one. And which sticker do you really not want? Which is the yucky sticker? [Patrick points] That one. Okay. We'll leave those stickers there and I'm going to bring in mean monkey.

6:59 [Joan pretends to be the voice of toy money] Hmm. Let me see which one I want. Patrick, which one do you really like? [Patrick points to the one that he does not like] Oh, well then I'm going to take that one and you get to have that one.

7:16 [Patrick] I had my fingers crossed.

7:19 [Narrator] Patrick has also crossed a threshold into the adult world. He's now old enough to know that he can think things that others don't. That his thoughts are his alone.

7:29 [Joan to camera] From about four-and-a-half to five, they suddenly and rapidly get that knowledge. They begin to think about other people's thoughts. They begin to think that somebody can think something different from what they know. That people's thoughts vary..are private..um..may be incorrect. People can have false thoughts about something that they know to be true.

7:51 [Janet to camera] Once you understand that then you can explain all sorts of things about why people do things which seem strange to you. They're looking for things and you know that that's not where they are. It also means, then, that you can understand how to surprise people, how to trick people because once you've made this split between the mind and the world, then you can think about people's minds and manipulate the way the world is so that they come to believe certain things about it.