A new study suggests that babies learn to speak by lip reading. The study was published on Monday in the Proceeding of the National Academy of Sciences.

“The baby, in order to imitate you, has to figure out how to shape their lips to make that particular sound they’re hearing,” said developmental psychologist David Lewkowicz of Florida Atlantic University, leader of the study. “It’s an incredibly complex process.”

The researchers studied 180 babies from 4 to 12 months old. They observed that at four months babies focus mostly on eyes; at six months they focus equally on eyes and lips; at around nine months they focus mostly on lips and at a year old they go back to focusing mainly on the speaker’s eyes, unless they hear an unfamiliar word.

“It makes sense that at six months, babies begin observing lip movement,” Lewkowicz said, “because that’s about the time babies’ brains gain the ability to control their attention rather than automatically look toward noise.”

“It’s a pretty intriguing finding,” University of Iowa psychology professor Bob McMurray said. The babies “know what they need to know about, and they’re able to deploy their attention to what’s important at that point in development.”