

The Many
Adventures of
Bear:
2 Astronauts

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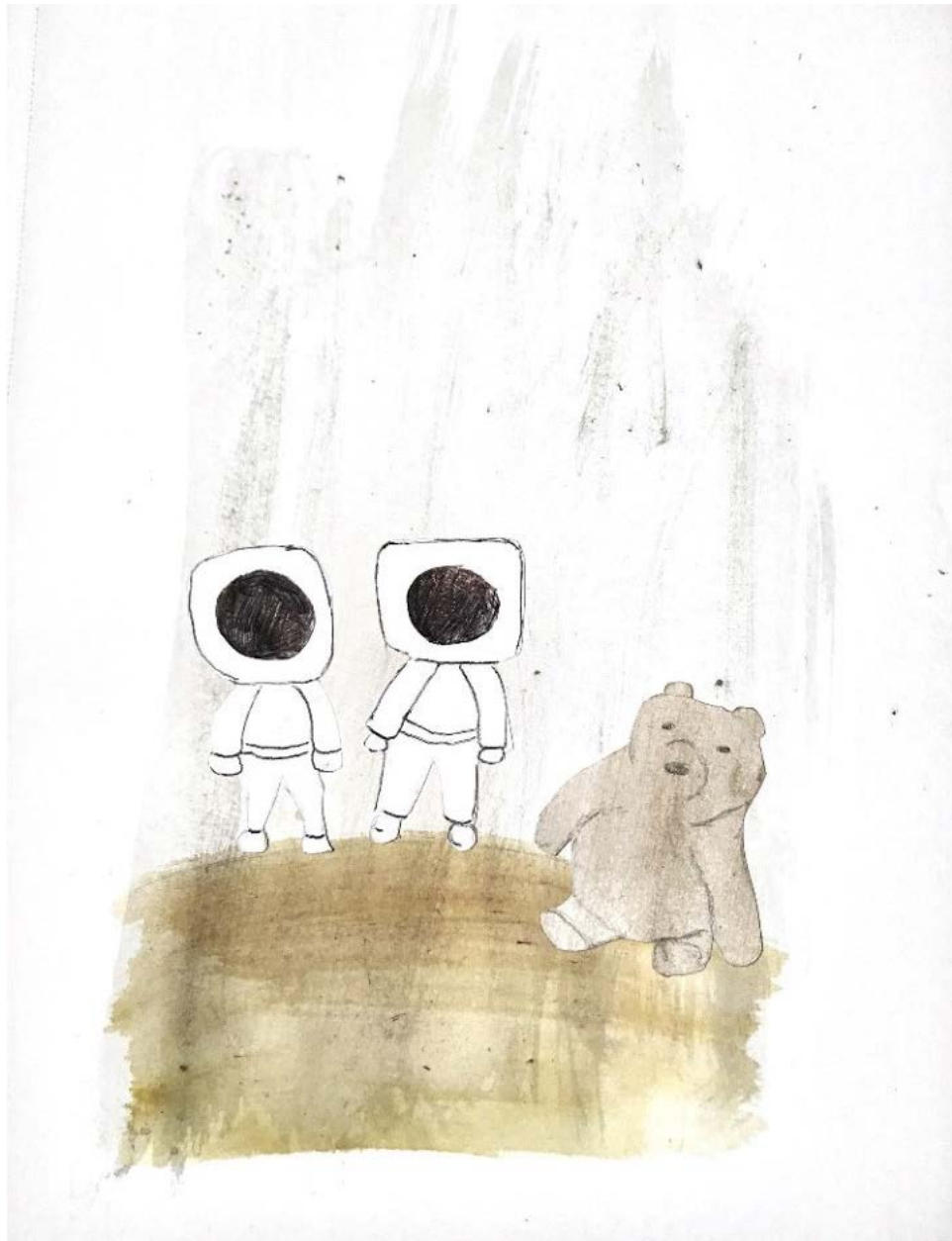
One day the Bear from the planet known as Vilia was visited by a peculiar aircraft that spat fire and was painted in white and red. He watched in wonder as it landed in a small ditch where he was sat admiring the night sky, and he curiously waited for whoever it's were inhabitants to reveal themselves. It had been several days since he had a visitor.



“Hello,” Greeted one of two astronauts who approached him, “We’re scientists looking to continue some tests we started with your parents, do you have time?”

The Bear pondered it for a moment, he was due to have tea and tonight he had prepared cake. He wondered if there would be enough time and considered turning them down, but he thought about the thousands of miles they must’ve travelled, and how tea could wait.

“Yes.”



They joyfully asked, “You can still speak two languages and are older than two, right?”

“Yep.” He remembered his birthday celebrations last month with the red balloons lining the planet with friends visiting from many planets. He smiled to himself at the thought of those memories.

The Astronauts explained their research to help him understand what they were doing. They were comparing monolingual and bilingual speech to investigate if one may be weaker than the other. They hoped it would provide more information about a topic people knew little about as it had only recently gained scientific attention.



“Wow, so you’re astronauts, scientists and detectives!” exclaimed the Bear in wonder, and the Astronauts laughed nodding their heads.

“We have hypotheses linked to bilingual deficit and the unitary language system we’d like to look at.”

“What does that mean?” He asked, looking between them in confusion.

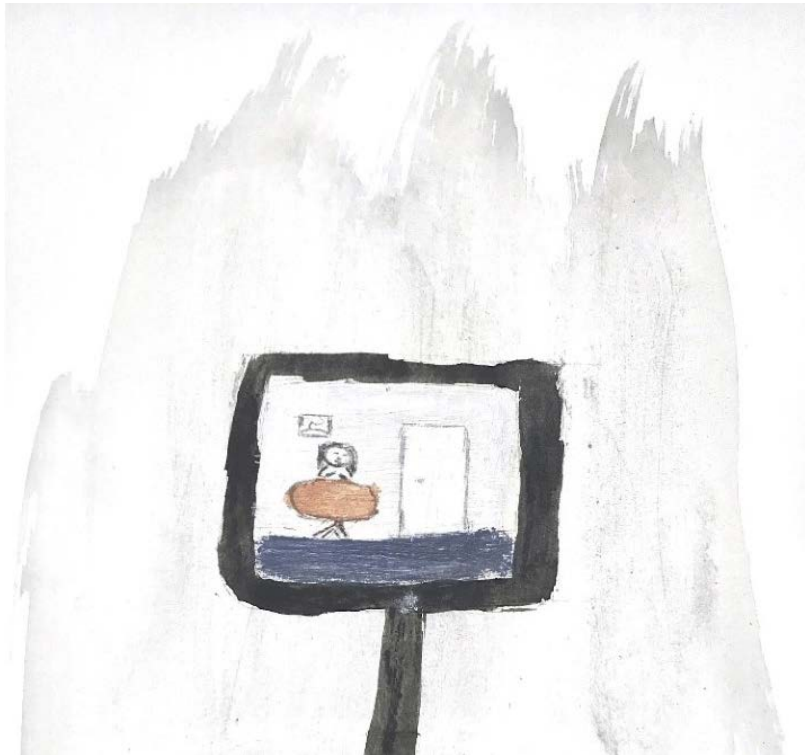
“Bilingual deficit is about if learning two languages at once slows down the whole language learning process.” Explained Astronaut one.

“And the unitary language system,” started Astronaut two, “is whether children use a language system containing features from both languages. We want to do this to expand knowledge on bilinguals like yourself as there is little information.”

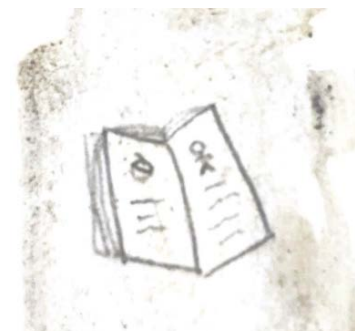
The Bear nodded, taking in the new information.

The Astronauts went on to explain they had done research in the past on Earth, the Bear's home planet, with a toddler called Manuela. An astronaut brought out a monitor from their bag and showed it to the Bear, hoping to explain the studies more.

“She was an only child in Brighton, where she learnt English and Spanish equally from her Cuban dad and English mom. Here is a tiny bit of the years of recordings that took place during her childhood,” Said Astronaut one as footage played of her eating dinner at a table, talking. “She spoke in Spanish with her father and English with her grandmother.” The Bear couldn't help but notice how easily she was able to code-switch between them both. “In the end we found that she mostly spoke English followed by Spanish and then a mix of both languages.”



“There was also another study,” Continued Astronaut two, “where two Spanish-English males aged 18-30 months old were tested using stimulus materials, you know like books and toys, to see if they had any equivalent words for both languages. It turns out they did!”

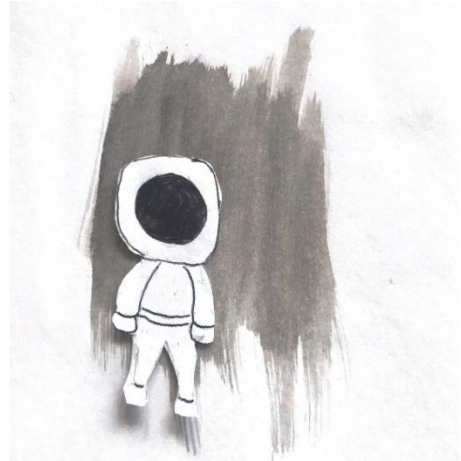




“What did that mean for your study?”
Inquired the Bear, curious as they finished explaining the study.

“It goes against our hypothesis of a unitary language system, showing that both languages were separate and can’t operate with a single language system.”

“We should get started as we need to get home soon.” Interrupted the other Astronaut. The one who was speaking nodded his head. “We’ll be assessing your expressive vocabulary through a Language Development Survey. We’ll be checking your vocabulary size by checking off different words in English and German and then adding them together, except for words that sound the same such as fish and Fisch.”



“We typically associate the number of verbs with how rich a vocabulary is. We asked your parents to keep a count of this, do you have it?”

The Bear thought for a moment, and then he thought of the small cabinet in the corner of a small ditch in the ground. It would surely be there.

He left to go get it and then returned with a file full of documents he’s never seen before, he then handed it to them. They looked at some of the pages in silence before one of them broke it “Yes! This is it! Thank you Bear!”

The Bear went to go and get the cake while the Astronauts brought out a calculator to work out the score of vocabulary and then add them findings to all the other results they had collected. He had finished three slices before they had finished.

“What did you find?” The Bear said with a mouthful of cake.

“Both your parents were asked to rate and assess your vocabulary score, they were then asked to compare them. For bilingual groups, with your results now added, 74% agreed. When lexical forms were also calculated we found that bilinguals had a slightly larger vocabulary compared with English monolinguals who actually scored lower agreement rates with 87%. We found out here as well that your expected vocabulary for someone your age is above the 50 mark which is good.”



“This goes against the unitary language hypothesis,” continued the other astronaut “as all the evidence shows that bilinguals as young as two don’t avoid using language equivalent of each language. You produced 288 lexical forms with 60.5% of them having a translation equivalent. This, again, goes against our hypotheses that bilinguals are weaker language learners. They also show that children can be exposed to two languages without being scared of environmental delayal.”

“Of course, there are still many things we still need to explore, this is just the beginning. We need to go beyond these languages and see if others have a different impact. We also need to research if environments have an impact, most families we asked were educated and middle class.”

The Bear nodded at this information, and he was about to say something before they noticed the sun just start to rise on the horizon.

“I’m afraid we’ve overstayed! We must set off back home!” said the Astronauts in a hurry.

Before they left the bear offered some cake for their lengthy travels and they gladly accepted it.

“Goodbye Bear! It was lovely meeting you!” They shouted as they boarded their rocket. The Bear waved as they shot up in the sky and disappeared into nothing less than a star.



References/bibliography:

Article (includes references to studies explored: <https://pubs-asha.org.libproxy.ncl.ac.uk/doi/full/10.1044/1058-0360%282002/042%29>) (Dörte A. Junker and Ida J. Stockman (2002), 'American Journal of Speech-Language Pathology', *Expressive Vocabulary of German-English Toddlers* vol 11, iss. 4, pages 381-394)

Research about Manuela: (Suzanne Quay (1995), 'Journal of Child Language', *The bilingual lexicon: implications for studies of language choice*, Volume 22, Issue 2, pages 369 – 387)