

# Language Acquisition Experiment Log

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## Contents

<b>1</b>	<b>Experiment Parameters</b>	<b>2</b>
1.1	Experiment Rules For Participant B . . . . .	2
1.2	Notes on glosses . . . . .	2
<b>2</b>	<b>Session 1 - June 1st</b>	<b>2</b>
<b>3</b>	<b>Session 2 - June 6th</b>	<b>5</b>
<b>4</b>	<b>Session 3 - June 4th</b>	<b>6</b>

# 1 Experiment Parameters

- Duration: From June 1st to June 25th, 2021.
- Experimenter: Samuel Pearce
- Participant A: Julian Werner, Male, 18
- Participant B: Amin Haidar Male, 19

## 1.1 Experiment Rules For Participant B

1. The experimenter is, at no point during the experiment period, allowed to explain anything about Toki Pona to the participant in any language other than Toki Pona.
2. The participant is not allowed to independently seek resources about Toki Pona. Any external resources for them are to be provided by the experimenter.
3. The participant may take notes and review them outside of experimentation times.
4. The experimenter may not confirm or deny any of the participant's notes or guesses.

## 1.2 Notes on glosses

A few non-standard gloss abbreviations and elements are used throughout this document, so I have defined their meaning here:

- The pictographic elements will be replaced in the glosses with simple descriptions of their contents and meaning in square brackets ([ Image ; Intended Meaning ]) E.g.: [Tree Image; Plants/Trees/Nature]
- Toki Pona includes context phrases that add extra information about the context of a sentence and build conditionals. The separator will be abbreviated as "CTXT" in glosses.

# 2 Session 1 - June 1st

The first session began in a text chat with the ability to send emoji and images. The experimenter attempted to establish the basic sentence structure with comprehensible pictographic substitution.

- (1) pona li [Thumbs Up; Good]  
good PM [Thumbs Up; Good]  
"pona" (is) "good"
- (2) ike li [Thumbs Down; Bad]  
bad PM [Thumbs Down; Bad]  
"ike" (is) "bad"

Which was generally perceived correctly, but the participant did not understood the meaning of the subject-verb separator “li”. The next concepts to be introduced were “yes/correct” and “no/incorrect” to enforce the participant’s correct usage of phrases.

- (3) ala li [Red X-Shape; No/Incorrect]  
no PM [Red X-Shape; No/Incorrect]  
“ala” (is) “No/Incorrect”
- (4) lon li [Green Checkmark; Yes/Correct]  
yes PM [Green Checkmark; Yes/Correct]  
“lon” is “Yes/Correct”

After the basic structure was grasped, the word for person — a prefix required to write names in Toki Pona — was explained along with the basic pronouns by using the participant’s names. For this, it was fortunate that there were at least three people present, in order to explain the concepts of first, second, and third person.

- (5) mi jan. sina jan. [Face; Person] li jan  
1SG be-person. 2SG be-person. [Face; Person] PM be-person  
I am a person. You are a person. People are people.

At this explanation, the participant independently responded with variations on the following:

- (6) jan li [Face; Person]  
person PM [Face; Person]  
“jan” (is) “person”

To which, the experimenter could now respond with “lon” meaning, “Yes” or “Correct”. Given the informal nature of the experiment, the participant took the opportunity of having the basic “X is Y” sentence structure to insult the other participant and the experimenter, in a jovial fashion, by saying variations of the following:

- (7) jan Julian li ike.  
person Julian PM be-bad  
Julian is bad.

It was around this time that correct Toki Pona spelling was explained, through emphasized corrections. The participant used the other’s name in lower case, which the experimenter corrected by responding to it, with the corrected capital letter emphasized. This concept was quite quickly understood.

Once everyone began speaking face-to-face, the experimenter explained the Toki Pona demonstrative “ni” by pointing at various things and explaining what they were using the established vocabulary.

- (8) ni li ijo.  
this PM be-thing  
This is a thing.

With the basic framework of these 10 words, explaining other novel concepts through the use of images was quite easy and got both participants forming basic sentences to describe their environment and what they were doing quite quickly:

Toki Pona	English
li	Predicate Marker
mi	I, me, my, we, us, our
sina	you, your
ona	he, she, it, him, her, his, hers, its
pona	good, simple
ike	bad, complicated
lon	yes, correct, true
ala	no, not, none
ni	this, that
ijo	thing

After some basic nouns were learned through pictograms, the more complicated concept of motion and giving/receiving things was discussed. At first the word “tawa”, meaning “to move” was explained by the experimenter getting up and walking across the room while saying “mi tawa.” (“I go/walk.”). After this, the preposition form of “tawa” was explained using the help of the word “pana” which means “to give”. The participant handed the experimenter a book and asked what they was doing, to which the experimenter replied:

- (9) sina pana e ni tawa mi.  
 2SG give ACC this PREP.to 1SG  
 You are giving this to me.

After a few clarifications and re-enunciations, the participant understood the meaning. At around this point, They began compiling a dictionary.

The final concept explained was the opposite of “tawa”: that of “kama” meaning “to arrive/come” or “to become” and the concept of “tan” meaning “from”. “kama” was fairly easily explained by a pictograph of a person walking in the opposite direction from a similar pictograph labelled “tawa”. After that, the experimenter attempted to strengthen the understanding by passing around the book again and trying to explain that the book came from him:

- (10) mi pana e ni tawa sina. ni li kama tan mi.  
 1SG give ACC this PREP.to 2SG. this PM come PREP.from 1SG  
 I give this to you. This came from me.

Though the efforts were not fruitful, it eventually occurred to the experimenter to use the mutual knowledge of each other’s lives to cement tan’s meaning:

- (11) mi kama tan ma New Zealand<sup>1</sup>.  
 1SG come PREP.from country New Zealand.  
 I come from New Zealand.

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<sup>1</sup>New Zealand would normally be referred to as “ma Nusilan”— like all foreign words — to conform to Toki Pona’s phonetics, but it was decided to choose the style of simply using words’ native forms, to simplify referring to external subjects.

This was immediately understood and served to make the participants sure of their guesses as to its meaning.

This first session ended and all members discussed (in English) the plans of when to meet and what the scope of the experiment should be. It was suggested that they could also learn Sitelen Pona, Toki Pona's own logographic writing system. This was left open as an option depending on how much the participants were able to learn in the time allotted. Both participants seem enthusiastic to continue the experiment out of their own curiosity.

### 3 Session 2 - June 6th

To begin this session, the next most important beginner phrase was explained: "What is this?". By explaining this, the participant would be able to request new information or ask for clarification of existing information independently. A dialogue was used to clear up the meaning:

- (12) A: ni li seme? B: ni li moku. A: a! mi sona!  
A: this PM be-what? B: this PM be-food. A: EXCL! 1SG understand!

A: What is this? B: This is food. A: Ah! I understand!

Next, the basic colours were explained to participant B through pictures. The following phrases were told which they immediately understood.

- (13) [Image of colour spectrum; Colour] li 'kule'.  
[Image of colour spectrum; Colour] PM be-colour.  
Colour is "kule".
- (14) [Red Circle; Red] li 'loje'.  
[Red Circle; Red] PM be-red.  
Red is "loje".
- (15) [Green and Blue Circle; Grue] li 'laso'.  
[Green and Blue Circle; Grue] PM be-grue.  
Grue (Green & Blue) is "laso".
- (16) [Yellow Circle; Yellow] li 'jelo'.  
[Yellow Circle; Yellow] PM be-yellow.  
Yellow is "jelo".

The participant's knowledge was then confirmed by asking the following:

- (17) kasi li jo e kule seme?  
plants PM have ACC colour what?  
What colour do plants have?

Which was answered with "laso". The correct answer was reinforced with a "lon" and a few more similar examples were tested. After the session, the participants were polled on the idea of learning the writing system, which they were against given the very tight time scope of the project.

## 4 Session 3 - June 4th

During an impromptu gaming session, it was suggested that participant B and I attempt to play the video game Minecraft while only conversing in Toki Pona. This served mainly to expand the vocabulary, as the most basic required grammatical concepts were already fairly well understood.

The virtual environment provided an excellent way to strengthen connections through visual confirmation; the experimenter could point to an in-game item and explain its meaning with the participant able to respond in kind. At this point vocabulary like “Stone”, “Wood”, “Table”, “House” and “Sleep” could be acquired through direct examples.

Near the end of the session, the concept of time and tenses was attempted to be explained by use of the in-game day/night cycle. The word for sky was explained by stating “The sky is blue.” during the day and “The sky is black.” during the night. Next, names for day and night and the heavenly bodies were explained by pointing them out when they were visible. “tenpo pimeja” was soon picked up to mean “night time” (LIT. “dark time”). Finally, tenses were explained with the following phrases after a night of sleep:

- (18) tenpo pini,    la    sewi li    pimija.  
time finished, CTX sky PM be-dark.  
LIT. In finished time, the sky is dark.  
“Then, the sky was dark.”

- (19) tenpo ni,    la    sewi li    walo.  
time this, CTX sky PM be-light.  
LIT. In this time, the sky is bright.  
“Now, the sky is bright.”

- (20) tenpo kama,    la    sewi li    pimija.  
time coming, CTX sky PM be-dark.  
LIT. In coming time, the sky is dark.  
“Soon, the sky will be dark.”

It took a few examples and laying out the tenses on a physical timeline, but the participant eventually understood.