

Language as Science

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QUESTION PROBLEM SETS

Japanese

English

French

Unangam tunnu

Tiwa

Chinese

Maori

Haitian Creole

Armenian

Forming Questions in Japanese

About the language:

Note: These examples are written using the Roman alphabet. [435 - briefly describe and/or link to info about Japanese writing system (and also about syllabaries?)]

Examine the data:

Examine the data in the three pairs of sentences below, the statements in the (a) examples and the corresponding questions in the (b) examples.

- | | | |
|-----|---------------------------------|----------------------|
| 1a. | watashiwa gakusei desu | 'I am a student.' |
| 1b. | watashiwa gakusei desu ka | 'Am I a student?' |
| | | |
| 2a. | Soto wa atsui desu. | 'It is hot outside.' |
| 2b. | Soto wa atsui desu ka? | 'Is it hot outside?' |
| | | |
| 3a. | Kimu wa kankokujin desu. | 'Mr. Kim is Korean.' |
| 3b. | Kimu-san wa kankokujin desu ka? | 'Is Mr. Kim Korean?' |

State your findings:

What are some things you notice as you examine the data? Discuss some of these findings with others.

Make a hypothesis:

Develop a hypothesis for how questions are formed in Japanese.

Forming Questions in English

About the language: According to Ethnologue, there are 1,348,145,850 speakers; 369,935,930 first language users and 978,209,920 second language users. It is a first language in the United States and the United Kingdom, Australia, New Zealand, and much of Canada.

Examine the data:

Examine the data in the three pairs of sentences, the statements and the questions.

1a. You will eat this sandwich.

1b. Will you eat this sandwich?

2a. They have walked to the park.

2b. Have they walked to the park?

3a. The kids can see the teacher.

3b. Can the kids see the teacher?

State your findings:

What do you notice as you examine the data? Discuss some of these findings with others. You might notice that a particular type of word appears at the beginning in questions. What kinds of words are these? Do you have a name for them?

Make a hypothesis

Develop a hypothesis for the formation of questions (that can be answered with *yes* or *no*) in English.

Test your hypothesis:

Based on your hypothesis, turn these sentences into questions.

4. The fox should eat the food.

5. My friend is watching the fox.

6. They might see a shooting star.

Do they all confirm your hypothesis? If not, describe the findings, and if possible, how you might revise the hypothesis. Remember too that it's always a good idea to collect more data.

[Add something about echo-questions and in-situ with intonation]

Forming question in French

About the language:

Examine the data:

Examine the data in the three pairs of sentences, the statements and the questions.

1a. Vous aimez du pain.

You like the bread

'You like bread.'

1b. Aimez-vous du pain.

Like-you the bread

'Do you like bread?'

2a. Elles voient le chat.

They see the cat

'They see the cat.'

2b. Voient-elles le chat?

See-they the cat

'Do they see the cat?'

State your findings:

What do you notice as you examine the data? Discuss some of these findings with others. You might notice that a particular type of word appears at the beginning in questions. What kinds of words are these?

Make a hypothesis:

Hypothesize about how questions are formed in French.

Examine more data:

There's another way to make questions in French that is perhaps more common than the method you saw above. The (a) and (b) examples are repeated from above and (c) is the other way to ask a question, with the same basic meaning as in (b).

3a. Vous aimez du pain. 'You like bread.'

3b. Aimez-vous du pain. 'Do you like bread?'

3c. Est-ce que vous aimez du pain. 'Do you like bread?'

4a. Elles voient le chat. 'They see the cat.'

4b. Voient-elles le chat? 'Do they see the cat?'

4c. Est-ce qu'elles voient le chat? 'Do they see the cat?'

Note that even though you may not know the meanings of all of the words in the languages you're examining, you can still figure things out. This is part of doing science; you can make educated guesses - or hypotheses - and then test whether those are right.

You should always be thinking about what assumptions you are making and what knowledge you are using.

Questions in Unangam tunnu (also known as Aleut, Anangax, and Unangax)

About the language:

A language of Alaska, spoken by about 150 people, on the Aleutian and Pribilof Islands and the Alaskan peninsula, and also being learned as a second language by a growing number of children. These examples are from a speaker from the Pribilof Islands. (Data collected by Kristin Denham from Aleut speaker Michael Lestenkof in 1994.)

Examine the data:

Examine the data in the two pairs of sentences, the statements and the questions.

- | | |
|--------------------------|--------------------|
| 1a. Awaltxin | 'You are working.' |
| 1b. Awaltxin ii | 'Are you working?' |
| 2a. Mariiyax hilalix | 'Mary is reading.' |
| 2b. Mariiyax hilalix ii. | 'Is Mary reading?' |

State your findings:

What do you notice as you examine the data?

Make a hypothesis:

Hypothesize about how polar questions are formed in Aleut

Question in American Sign Language

Questions in Tiwa

[will add] About the language:

These examples were collected by Virginia Dawson (personal communication) in her fieldwork on Tiwa in India with Mary Maslai.

Examine the data:

Examine the data in the three pairs of sentences, the statements and the questions.) The first one gives translations for the words in order to show the order of words.)

1a. Saldi laigo prega.

Saldi book bought

'Saldi bought a book.'

1b. Saldi laigo prega na?

'Did Saldi buy a book?'

2a. Mukton liga.

'Mukton went.'

2b. Mukton liga na?

'Did Mukton go?'

3a. Ne ma now thaído.

'My mom is at home.'

3b. Ne ma now thaído na?

'Is my mom at home?'

State your findings:

What do you notice as you examine the data?

Make a hypothesis:

Hypothesize about how polar questions are formed in Tiwa.

Saldi lai-go pre-ga.

Saldi book-ACC buy-pfv

'Saldi bought a book.'

Saldi lai-go pre-ga na?

Saldi book-ACC buy-pfv PQ

'Did Saldi buy a book?'

Saldi inda-go pre-ga?

Saldi what-ACC buy-PFV

'What did Saldi buy?'

Mukton li-ga.
Mukton go-PFV
'Mukton went.'

Mukton li-ga na?
Mukton go-PFV PQ
'Did Mukton go?'

Shar li-ga?
who go-PFV
'Who went?'

Ne ma no-w thai-do.
your mom house-LOC stay-IPFV
'My mom is at home.'

Ne ma no-w thai-do na?
your mom house-LOC stay-IPFV PQ
'Is my mom at home?'

Ne ma pajing thai-do?
you mom where stay-IPFV?
'Where is your mom?'

Questions in Chinese, Maori, Haitian Creole

In the languages we've investigated so far, a question is indicated via the **syntax** of the language - either a word is added, like in Aleut and Japanese; a non-manual marking like eyebrow raising is added, like in ASL; or words move around, like in English and French. But some languages indicate questions only by sound, by changes in **intonation**. Chinese, Maori, and Haitian Creole, for example, all mark questions by changing the intonation contour of the sentence.

Questions in Armenian

Here is a [link to a video](#) demonstrating question formation in Armenian.

Note: Armenian is written with ° over the last vowel to visually represent the intonation.

Transcript of video:

Hello, my name is Crow Chloupek, and I use they/them or it/it pronouns, and today, I just wanted to provide a short video on how questions are formed in Armenian. Before we get started, I just want to provide a quick acknowledgement that I am not a native speaker of Armenian; however, I am currently learning the language with my tutor, Armine Petrosyan, who is a native speaker and lives in Armenia.

So, questions in Armenian are formed via intonation, and that intonation goes on the final vowel of the main verb of the sentence. So, I will be providing three examples of questions - question formations - in Armenian, and I will first provide the non-question intonation pattern first so that way you can hear the difference.

So, the first example that I have for you is "Doo haskanoom es." And, that means "You understand." As I've mentioned, to create a question in Armenian, you put the intonation - you do a rising intonation - on the last vowel of the main verb. So, in this case, that would be "haskanoom." So, the question intonation pattern for this sentence would be "Doo haskanoo°m es?" And, so you can hear that I put the rising intonation on "-noom," so "Doo haskanoo°m es?"

The second example is "Srank girker en," and that means "Those are books." Now, it's important to recognize that the main verb of this sentence is not "girker;" that means "books." It would be "en" in this case. So, "Srank girker e°n?" would be the question version of that sentence.

And, the final sentence that I have for you is a little bit longer. I wanted to show a variety of sentences to give you a good overview. And, so the final sentence that I have for you is "Dook khosoom ek hayeren," and that means "Y'all speak Armenian." And so, to make this a question,

in this case “khosoom” is the main verb of the sentence. So, the question intonation pattern would be “Dook khosoo^om ek hayeren?” - “Do y’all speak Armenian?”

Yeah, so that is a brief overview of how questions are formed in Armenian. Thank you!
/End transcription

Examine the data:

The ^o over the last vowel is used in Armenian to visually mark the intonation.

1. a. Doo haskanoom es.
b. Doo haskanoo^om es?
2. a. Srank girker en. ‘Those are books’
b. Srank girker e^on? ‘Are those books?’
3. a. Dook khosoom ek hayeren ‘Y’all speak Armenian’
b. Dook khosoo^om ek hayeren?” ‘Do y’all speak Armenian?’

Other notes:

Arabic would be an example of a language that can use particles but can also use intonation only.