# The Linguistics of Language Revitalization

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'The world is full of languages [that have] fewer and fewer users every generation.'

Joshua Fishman (1991:1)



The prediction that changed linguistics:

'The [21st] century will see either the death or the doom of 90% of mankind's languages.'

-Michael Krauss (1992:7)

see also UNESCO (2003:4)



# Endangered languages in Asia and North America

(map from the University of Hawaii Endangered Languages Project)



## Endangered languages in East Asia

- Japan: ●6 Ryukyuan languages, plus Hachijo & Ainu
- •Korea: 💨 💆 Jejueo, Hamgyeong (?)
- Taiwan: 26 Formosan languages (only 14 still spoken)
- People's Republic of China:
   around 130 endangered languages

# Birth of the language revitalization movement











2001 2001 2006 2013 2018

What is the role of linguistics in language revitalization?



Not everyone wants linguists to be involved...

'Don't hire linguists ... I have nothing against linguists [but] they are not us; they are recorders.'



Even some linguists don't think linguists should be involved...

'I don't believe that language revitalization efforts need linguists.' 'Asking a linguist to help you develop a language program is a bit like asking a mechanic to teach you how to drive ...'



### My view:

Asking a linguist to help with a language revitalization program is like asking a mechanic to help fix your car.



### Some comments on language revitalization efforts:

'harmful undertakings'
'indifferently successful, at best'
'outright failures'



'most language revitalization efforts have failed.'

'not creating new communities of speakers'

'The only case where it has succeeded is Hebrew.'

### Plan for the talk

- 1. A quick review of the field as it has developed to this point
- 2. Finding a place for linguistics in language revitalization
- 3. Learning a first language in a monolingual setting
- 4. Learning two languages in a bilingual setting
- 5. The need for strict assessment for revitalization programs
- 6. Concluding remarks

# Section 1

A Quick Review of the Field

# Two Strategies for Language Revitalization:



### 1. The job of saving a language belongs to the family.



'A threatened language must first be acquired at home, before children arrive at school.' (Fishman 2001:14)

# 2. The job of saving a language belongs to the schools.



Schools have experience teaching languages.

### A 2017 survey of 30 revitalization initiatives on five continents

(Smithsonian Institution & Department of Linguistics at the University of Hawai'i):









Number of programs committed to parental transmission: 1

The gold standard for school-based revitalization: language immersion



Language Immersion = all teaching is in the endangered language

"the basic formula: a room, a teacher, and some children"





- The room is not enough.
- The presence of adults in the room is not enough either.
- Even the presence of children is not enough.

### Section 2

A Place for Linguistics in Language Revitalization

What are the signs that a language is endangered?



A low rate of inter-generational transmission.



What is 'intergenerational transmission'?

It's language acquisition!



What factors promote language acquisition?



A first place where linguistics is relevant to language revitalization

# **Section 3**

# Learning a First Language in a Monolingual Setting



### The importance of 'input'

- There are significant differences in the input that children receive.
- Those differences have important long-term effects.



### a. Quantity

Table 1. Mean number of utterances per day and per year for children in more talkative families

Sentences/day	Sentences/year
7000±	2.5 million+

Table 2. Mean number of utterances per day and per year for children in the least talkative families

Sentences/day	Sentences/year
2170	800,000

# The effects of quantity

Table 3. Children linguistic attainment as it relates to language exposure

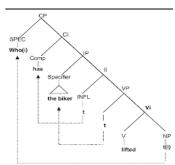
	Vocabulary size at 30 months	No. of words learned in next 6 months
Talkative families	766	350
Non-talkative families	357	168

# b. Quality

# **Lexical Diversity**



### **Syntactic Complexity**



### c. Opportunities to engage in conversations





The number of conversational turns is the best predictor of

- Verbal skills, such as vocabulary size and sentence comprehension
- Degree of activation in Broca's area

This is good news for language learning at home ...





... but not-so-good news for school-based programs



## Summary

Success in language learning correlates with:

- the quantity of the input
- the quality of the input (lexical diversity, syntactic complexity)
- opportunities for one-on-one conversations

# **SECTION 4**

# Learning Two Languages in a Bilingual Setting



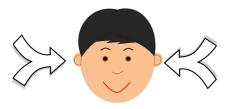


# Language revitalization requires a commitment to bilingualism



### 1. Input

Input from two different languages

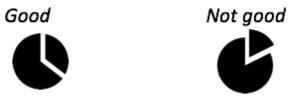


= slower development in each.

#### **Input Ratios**

- Children who receive less than 20% of their input in a particular language are reluctant to use it.
- Recommendation:

Ratio of exposure to the two languages should not exceed 70-30.



### The 'math' for school-based immersion programs:

- 14-hour day (x 7 = 100-hour week)
- 5-hour school day (x 5 = 25-hour school week)
- Ratio of non-school time to school time: 75-25



# 2. The danger of attrition

Children acquire language quickly—and lose it just as quickly

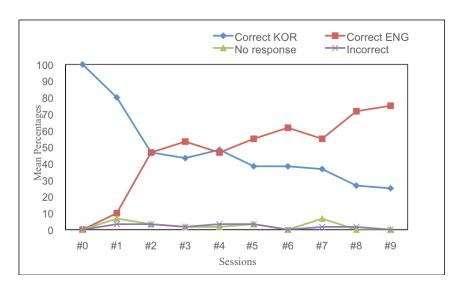


#### A concrete example

- A monolingual Korean child comes to America at age 6;10.
- She is enrolled in an American school.
- Her mother starts speaking to her only in English.
- Her knowledge of *Korean* is tested every month



# Vocabulary loss:



# Language Revitalization = Acquisition + Maintenance



### **Overall summary—things that matter:**

- the quantity of the input
- the quality of the input (lexical diversity, syntactic complexity)
- opportunities for one-on-one conversations
- Input needs to be well-balanced (the '70-30 rule').
- Maintenance requires long-term use on a regular basis.

### Section 5

The Need for Assessment

• Assessment and measurement are a key part of cognitive science.



## An example: Subject-verb agreement in Cherokee

ga- tliha ani-aditasga
3A.Sg-sleep 3A.Pl-drink
'S/he is sleeping.' 'They are drinking.'



Mean percentage correct after 2-3 years in the community's pre-school immersion program

Mean correct singular prefixes: 19.23%

Mean correct plural prefixes: 9.62%



### The explanation

The teachers produced too many commands!

'Sit down.'

'Write on your paper.'

'Read page 5.'

'Close the door.'









### The remedy:

- Revisions to the curriculum and new teaching strategies
- Opportunities to employ inflected verbs in meaningful activities
- The result: a quick and dramatic improvement



### Recommendation:





Test the program first!

## **Section 6**

**Concluding Remarks** 

# The steep and narrow path





Thank you.