## Gender Differences in Hand Gestures in Disagreement: A Contrastive Analysis of Chinese, Korean, and Japanese

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## Objectives

1) to observe hand gestures conversations in Chinese, Korean, and Japanese as non-verbal behavior in a corresponding disagreement situation;
2) to analyze how and what types of hand gestures often occur when stating disagreement in each language; and
3) to compare the occurrence of hand gestures in the three languages, especially with respect to gender differences.

## $\square$ Plan for the Presentation

1. Description of the Problem
2. Research Questions
3. Method
4. Results
5. Discussion
6. Concluding Remarks \& Future Tasks

## ■ Description of the Problem

- Communication: verbal and non-verbal
both aspects $\Rightarrow$ styles of communication
Our study addresses this theme
- Differences in Communication Styles
based on:
- Culture (Language) $\Rightarrow$ CHN KRN JPN
- Age (Generation) $\Rightarrow$ Younger or Elder
- Gender $\Rightarrow$ females and males
- Communication styles (conversation) has been studied
- linguistically
- from a multimodal point of view $\Rightarrow$ hand gestures


## ■Focus on Hand gestures

In conversation analysis recently:
Focus $\Rightarrow$ multimodal aspects:
prosody, hand gestures, posing,
eye-contact, etc. Cf. Kataoka (2017)

As for hand gestures, almost exclusively on pointing with fingers

McNeil (1992), Jo \& Hosoma (2008), Takanashi \& Sugiura (2018)
Few studies on other hand gestures
e.g. Hosoma (2009), Zhao (2018b)

## ■Research Questions

Universals in gender differences:
e.g. smiling and eye-contact in communication

1) Can differences in verbal communication between
languages also be observed in non-verbal communication?
2) If so, how does the usage of hand gestures differ among languages?
3) Do hand gestures also vary between males and females?
4) Which factors are relevant to the differences in hand gestures, languages or gender?

## ■Method

In order to answer the research questions, the following research was conducted in China, Korea, and Japan.
Method: open role playing survey video-recorded are:
hand gestures in the conversations of two people as non-verbal behavior in a corresponding disagreement situation


## ■Method(task)

In order to answer the research questions, the research was conducted in China, Korea, and Japan.

Task: Selection of three types of relief goods for children in a disaster-stricken area

- To let each conversation participant select three out of 10 types of relief goods (drinks, food, tents, blankets, clothes, sanitary goods, medical supplies, books, stationery, toys);
- To discuss in order to come to an agreement on what goods should be sent to children in a disaster-stricken area


## ■Method (participants)

- Role-playing: 10 male pairs and 10 female pairs in each language
- Informants and time of the survey:
a) China 20- to 24-year- old university students at a university in the northeast area.
In March 2018
b) Korea 19 - to 29 -year- old university students at universities in the metropolitan area and in the southern part. In March 2019
c) Japan 20-to 22-year- old university students at two universities in the Hokuriku area.
In November 2018


## - Results (Selection Patterns)

Selection combinations of each of the participants:
$\Rightarrow 4$ possible cases

1) All the three of the selected items are matched
$\Rightarrow$ agreed, no discussion needed
2) Two of the selected items are matched
$\Rightarrow$ one must be agreed on through a discussion
3) One of the selected items is matched
$\Rightarrow$ two must be agreed on through a discussion
4) None of the selected items is matched
$\Rightarrow$ three must be agreed on through a discussion
For the descriptive purposes in this presentation:
$\Rightarrow$ restricted to 3)

## Results (Agreed discussion)

- 2 types of agreed discussion can be observed:

1) Win-Win type
one of the two selected items of each participant is accepted
$\Rightarrow$ mutual benefit type
2) Win-Lose type

Both of the selected item of either one of the participants is accepted
$\Rightarrow$ selfish type

## ■esults (Classification)

3 groups are classified
by the two types of agreed discussion
a) Win-Win type (mutual benefit):

Japanese females
Korean males and females
b) Win-Lose type (selfish):

Chinese males
c) Win-Win \& Win-Lose type (mutual benefit \& selfish):

Japanese males
Chinese females

## ■ Results (utterance types)

Types of dissatisfaction utterances:


4 types of dissatisfaction utterances on the spectrum

## $\square$ Results (Hand gesture types)

- 7 types of hand gestures are distinguished:

1) Pointing: to point to an object with a finger/hand in the air
2) Putting: to put a finger/hand on an object or around in silence
3) Touching: to put a finger/hand on and off an object or around quickly in silence
4) Tapping: to hit a finger/hand on an object quickly, lightly, and audibly
5) Moving: to change the position of an object with a finger/hand
6) Holding: to keep an object in hand / with fingers
7) Shaking: to move a hand shortly and quickly, or repeatedly

## $\square$ Results

(Relationship of discourse and gesture in Chinese)

## The spectrum of the discourse structure\&its correspondece



The level of the appearance of gestures and behaviors in Chinese

## $\square$ Results

## (Relationship of discourse and gesture in Korean)

## The spectrum of the discourse structure\&its correspondece

[Agreement][Empathy]
[Implicit][Indirect contrastive][Direct contrastive] [Explicit]


The level of the appearance of gestures and behaviors in Korean

## $\square$ Results

(Relationship of discourse and gesture in Japanese)

## The spectrum of the discourse structure\&its correspondece

[Agreement][Empathy]
[Implicit][Indirect contrastive][Direct contrastive] [Explicit]


The level of the appearance of gestures and behaviors in Japanese

## ■Research Questions

1) Can differences in verbal communication between languages also be observed in non-verbal communication? YES
2) If so, how does the usage of hand gestures differ among languages? Frequency \& Variation
3) Do hand gestures also vary between males and females? YES
4) Which factors are relevant to the differences in hand gestures, languages or gender ?

Hand gestures depend on Languages

■The Contrastive Analysis in CHN, KRN, and JPN with regard to the Gender Differences in Gestures $\quad{ }^{+++} \quad{ }_{11 \sim 19}$

FEMALE
: smile and eye contact-based Empathy-based

>Males indicate more aggressive disagreement than females in JP.

## Concluding Remarks

The results of the study show that the differences in hand gestures between the three languages also often correspond to differences in disagreement utterances.

Furthermore, similarities and differences in the strength, frequency, and placement of hand gestures can be also found in the three languages with respect to gender differences.

These results are expected to make a contribution to intercultural communication studies both theoretically and practically.

## Future tasks

- To refine the classification of hand gestures:
"shaking" occurs very frequently $\Rightarrow$ various functions
- How do hand gestures occur in a dyadic conversation between unacquainted people of the same sex?
$\Rightarrow$ different usage of hand gestures, such as:
- aggressiveness in Chinese $\Rightarrow$ more moderate
- intimacy in Korean $\Rightarrow$ decreasing
- It is also interesting to observe how hand gestures occur in a dyadic conversation between unacquainted intersexual people.


## References

Hosoma, H. (2009). Washa kōtai-okoeru jesuchā-no jikankōzō - rinsetsu pea-no baai [time structure of gestures over turn-taking: A case of adjacency pairs]. Ninchikagaku [cognitive science] 16(1), pp. 91-102.

Jo, A. \& Hosoma, H. (2008). Dōkisuru sōgo yubisahi-wa nani-o shimesu-noka [What does the synchronized mutual pointings express]. Proceedings for the $22^{\text {nd }}$ Meeting of the Japanese Association of Sociolinguistic Sciences, pp. 62-65.
Kataoka, K. (2017). Multimodal-no shakaigengogaku -nichiei taishō-niyoru kūkan jesuchā bunseki-no kokoromi [multimodal sociolinguistics: An attempt of contrastive analysis of spatial gestures between Japanese and English]. Inoue, I. (ed.) Sociolinguistics, pp. 82-106. Tokyo: Asakurashoten.
McNeill, D. (1992). Hand and mind: What gestures reveal about thought. Chicago: Chicago University Press.

## References continued

Takanashi, K., Sugiura, H., \& Yasui, E. (2018). Sōgokōi-ni okeru yubisashi-no tayōsei - kaiwabunseki-no shiten-kara [Diversity of pointing in interaction: From a point of view of conversation analysis]. Proceedings for the $42^{\text {nd }}$ Meeting of the Japanese Association of Sociolinguistic Sciences, pp. 246-255.
Yoon, S. (2014). A Contrastive Study of Responsibility for Understanding Utterances between Japanese and Korean. Tokyo: Hituzi Syobo Publishing.
Zhao, D. (2018a). Nicchūkaiwa-no fudōihyōmei-ni mirareru "hairyo"-no tsutaekata-no bunseki ["Consideration" shown by conversational expressions of disagreement: A contrastive analysis of Japanese and Chinese]. Ningen Shakai Kankyō Kenkyū [Human and Socio-Environmental Studies], vol. 35, pp. 33-48.
Zhao, D. (2018b). Miburi-ni danjosa-wa aru-noka?: chūgokugo bogowasha-no fudōi-hyōmei-o rei-nishite [Are there gender differences in "gestures"? - A case of disagreement expressions by Chinese native speakers]. Proceedings for the $42^{\text {nd }}$ Meeting of the Japanese Association of Sociolinguistic Sciences, pp. 121-124.

## Thank you for your attention!

