

Explaining Japanese Onomatopoeia in Chinese Using Translated Paraphrases

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Abstract

Japanese comic books have recently gained great popularity in China. However, one of the problems with translating Japanese comic books is translating Japanese onomatopoeia into Chinese. In most cases Japanese onomatopoeia are either not translated at all, or Chinese characters are used to represent similar pronunciation to Japanese, which is often insufficient for Chinese readers to comprehend. This problem is caused by a deep cultural and historical gap between the two languages. Furthermore, meaning and grammar of onomatopoeia has changed reflecting the times, which suggests that updating onomatopoeia dictionaries is an important and challenging task. In this paper, to solve the abovementioned translation problem we propose a method to translate paraphrases of Japanese onomatopoeia to Chinese. In particular, we focus on nouns and verbs as key points to describe the meaning of onomatopoeia.

Introduction

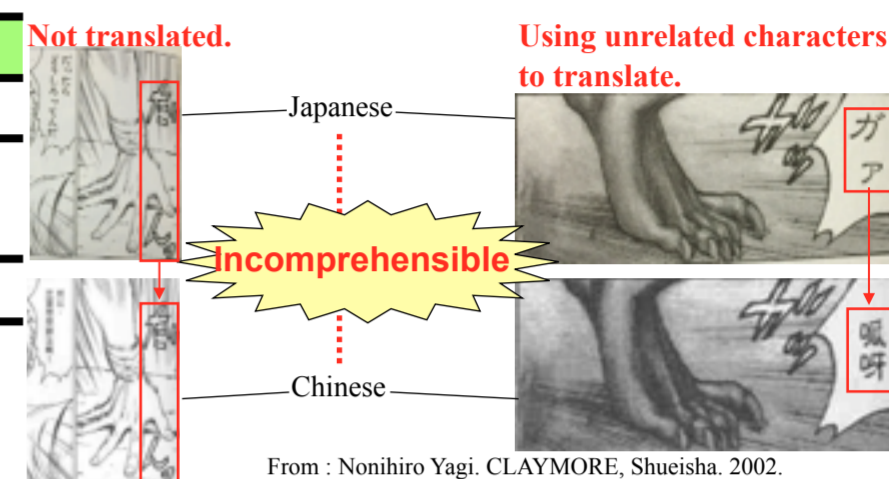
Comparison of Onomatopoeia

	Japanese		Chinese
Classification	sound symbolic	mimetic words	onomatopoeia
Examples	shito-shito (gentle rain is falling)	uru-uru (someone's eyes are wet with tears)	wang wang (a dog barks)
Quantity	about 4500 words ^①		about 174 words ^②

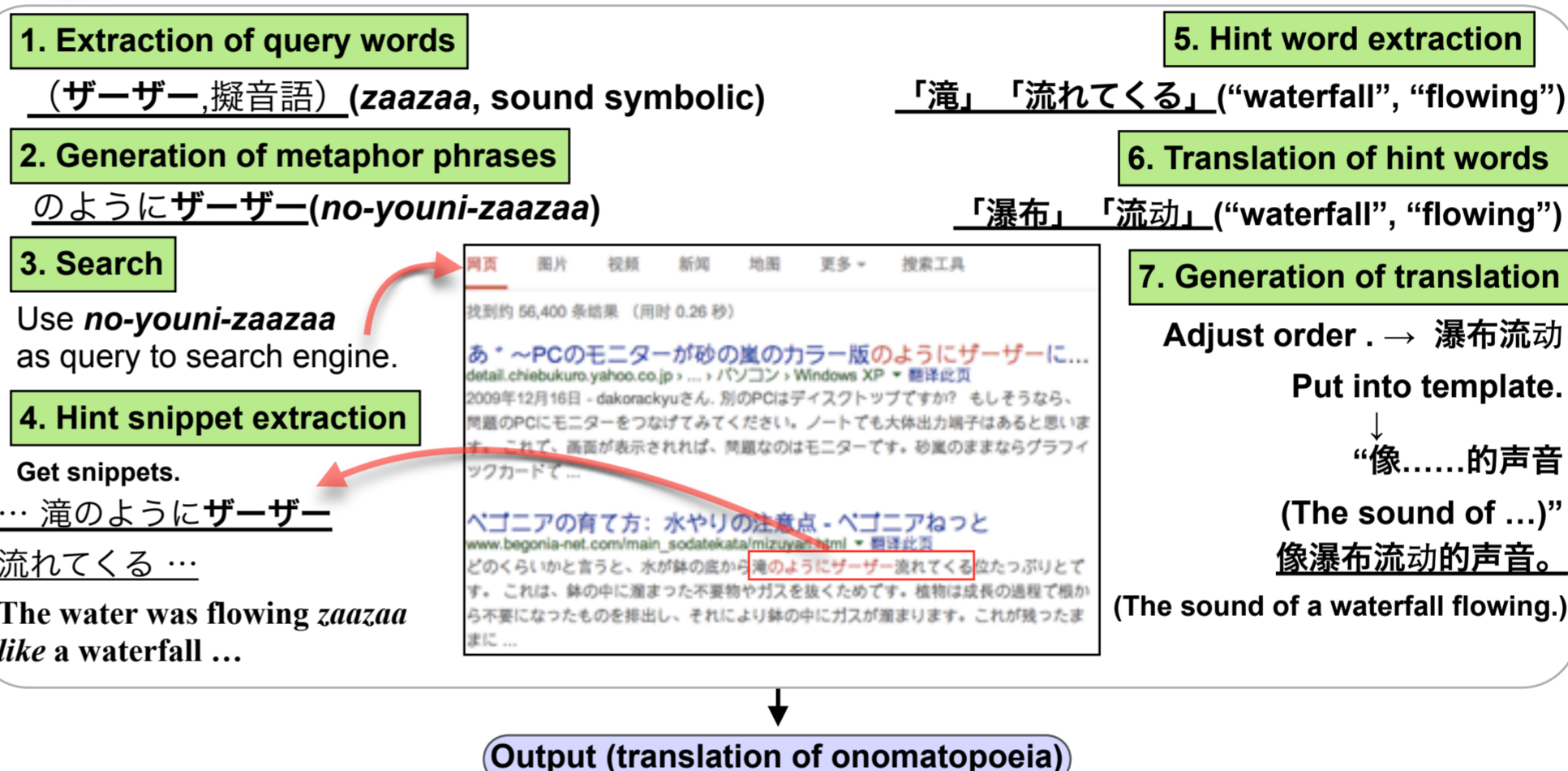
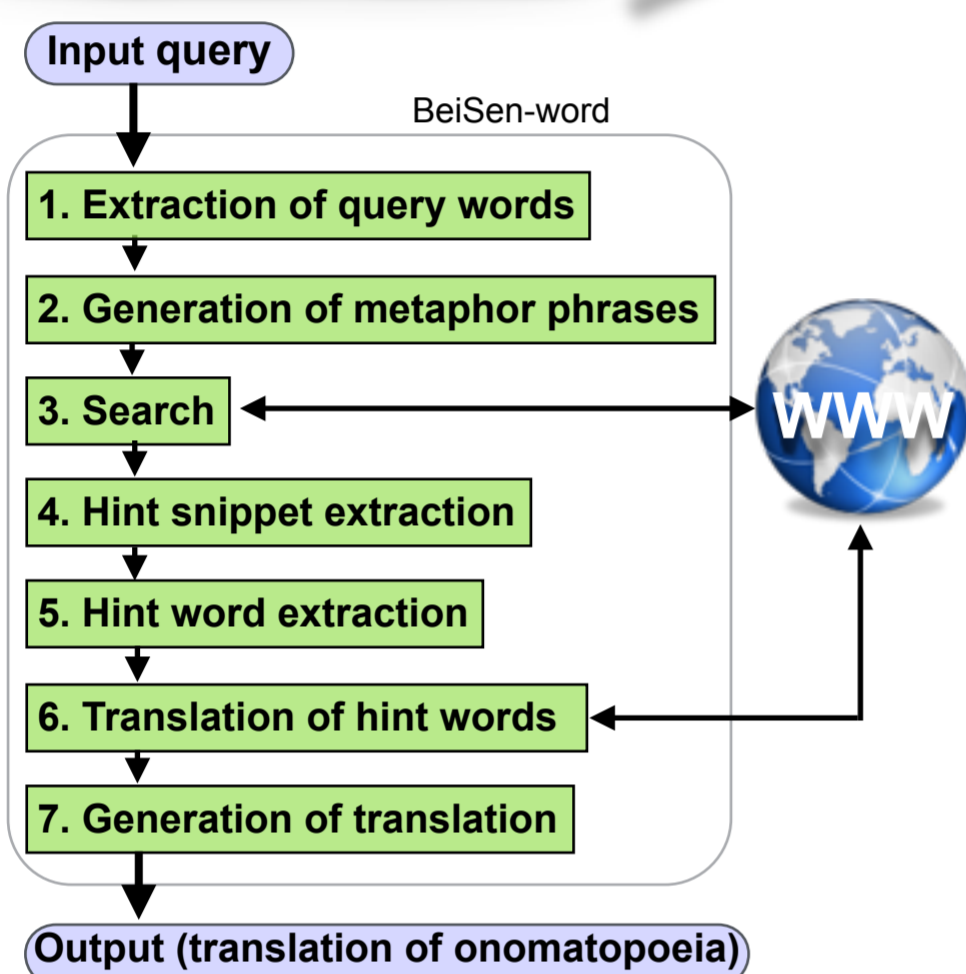
① Masahiro Ono, (2007). Giongo, gitaigo 4500 nihongo onomatopoe jiten [Dictionary of Japanese onomatopoeia](in Japanese). Shogakukan.

② Remying Daya, (2006). Dangdai hanrinichengci duibi yanjiu [A comparative Study of Onomatopoeia in Chinese and Japanese](in Chinese), Fudan University.

Problem



Proposed Method



Experiment

How Chinese readers understand Japanese onomatopoeia.

Goal

Resources

1. Information about the video

Title	Sotugyou seisaku onomatopoe no aru seikatsu (graduate work: Onomatopoeia in life)
URL	https://www.youtube.com/watch?v=Xi7Qx8VkBYY

2. Information about the participants

Participant	1	2	3	4
Residence	Guandong Province	Yunnan Province	Sichuan Province	Henan Province
Language proficiency	Chinese and Japanese	Chinese and Japanese	Chinese and English	Chinese

Details

Related Onomatopoeia

POS pattern of onomatopoeia	occ.	Comprehensible
onomatopoeia	12	x
onomatopoeia + v	3	✓

POS patterns that appeared in comprehensible explanations

POS pattern	occ.
n	20
v	4
adv	1
v + past form(了)	4
adj + n	1
onomatopoeia + v	3
n + v + n	3
Sum	43

Method

- Show video to Chinese students.
- Chinese students describe the onomatopoeia explanation scene in the video in Chinese.
- Analyze whether they used Chinese onomatopoeia in the response.
- Analyze POS patterns in the response.

- Translating Japanese onomatopoeia with Chinese words of similar pronunciation is not understandable.
- Focusing on the noun and verb patterns is sufficient.

「n + deshengyin」 → ok → 「n + v + deshengyin」

	Chinese	English
onomatopoeia	呼呼	—
explanation	风声	sound of wind
explanation with added verb	风吹的声音	sound of wind blowing

- The meaning of onomatopoeia can also be briefly explained in Chinese with *noun + verb + deshengyin*.

Investigation

How to explain Onomatopoeia in Chinese Dictionary.

Goal

Resources

Use the dictionary of Chinese.
Wanhui Feng. (2011). Xinhua Zidian. The Commercial Press.

Methods

- Extract 40 groups of onomatopoeias with their explanations.
- Add POS to explanations.
- Extract POS patterns.

Results

Details

Morphological patterns of onomatopoeia explanations in Chinese

POS pattern	occ.
n + deshengyin (noun + 的声音, the sound of + noun)	12
n + v + deshengyin	13
adj + deshengyin	1
v + deshengyin	1
v + n + deshengyin	2
adv + v + deshengyin	1
adj + v + deshengyin	1
Exceptions	9
Sum	40

Conclusions

- We investigated morphological patterns of onomatopoeia explanations in Chinese.
- We investigated morphological patterns of Japanese mimetic words explanations in Chinese.
- Based on those investigations we developed BeiSen-word a system for automatic translation of onomatopoeia.