

# Ideophones, gaze, & facial expression

⊙A preliminary report from Japanese⊙

オノマトベ、視線、表情：日本語からの準備的報告

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## RQ

(検証課題)

- Is ideophone utterance correlated with the speaker's **gaze behavior** & **facial expression**? How? (Irit Meir, p.c.) (オノマトベ発話は話者の**視線**や**表情**と相関するか?)  
↓
- Quantitative analysis using a **multimodal corpus of spoken Japanese** (日本語**視聴覚**コーパスによる量的検証)

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## Ideophones & faces

(オノマトベと顔)

- "... many speakers cannot find exact paraphrases and prefer to repeat the ideophone with a more distinct elocution, accompanied by **facial expressions** and body gestures if appropriate." (Diffloth 1972: 441) (オノマトベの意味を説明させると、同じオノマトベをよりはっきりとした話し方で繰り返して、**表情**や**身振り**をつける)
- "In Kisi the ideophone *kpiini-kpiini* 'stinky' is accompanied by a **crinkling of the nose**, as is the Venda ideophone *thuu* 'smelling horribly'" (Childs 1994: 196) (臭い)を意味するオノマトベを発する際、**鼻に皺を寄せる**)
- "From the sequential context, the gestures, and the **facial expression** of the storyteller it appears that *walayayayaya* depicts the dramatic scene of the boiling water pouring down on the protagonist["]s skin, ..." (Dingemanse 2011: 332) (文脈、身振り、語り手の**表情**からして、*walayayayaya* というシウ語のオノマトベは、沸騰した水を人の皮膚に注ぐ劇的な場面を描写するよう)

(emphasis added)

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## Road map

(目次)

- §1: Previous studies (先行研究)
- §2: Methods (方法)
- §3: Results & discussion (結果・考察)
- §4: Conclusions (結論)

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## 1. PREVIOUS STUDIES

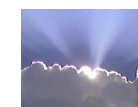
先行研究：パラ言語特徴

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- Demonstration
- Performance
- Mimesis
- (Re)enactment

## Depiction model

(描写モデル)  
(Dingemanse 2011, 2015)



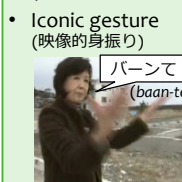
- 2 modes of representation/signification (2つの意味モード)

Depiction (描写)	Description (記述)
<ul style="list-style-type: none"> <li>• Pictures (絵)</li> <li>• Iconic gestures (映像的身振り)</li> <li>• Reported discourse (引用)</li> <li>• Ideophones (オノマトベ)</li> </ul>	<ul style="list-style-type: none"> <li>• Prosaic words (一般語)</li> </ul>
<ul style="list-style-type: none"> <li>✓ Imagistic (イメージ的)</li> <li>✓ Gradient markings (連続的)</li> <li>✓ Basically iconic (類像的)</li> <li>✓ "Imagine" to interpret (想像的)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Propositional (命題的)</li> <li>✓ Discrete symbols (離散的)</li> <li>✓ Basically arbitrary (恣意的)</li> <li>✓ "Decode" to interpret (解読的)</li> </ul>

(cf. Diffloth 1972; Clark & Gerrig 1990; Kita 1997; Güldemann 2008: Ch. 4)

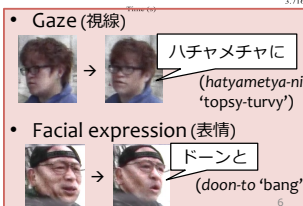
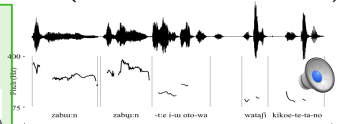
Expressive/depictive features (Dingemanse & Akita 2016)  
(表出・描写特徴)

- Intonational foregrounding (抑揚による前景化)
- Phonational foregrounding [pa:t.o] (発声法による前景化)
- Iconic gesture (映像的身振り)



## Paralinguistic features accompanying ideophones

(オノマトベに伴うパラ言語特徴)



## Expressiveness/depiction × morphosyntactic integration

(表出性・描写性と形態統語的統合性)

- a. 船が [G↑**グルグル**↑] と回って...  
Hune-ga ↑guruguru↑ -to mawat-te  
ship-NOM IDPH -QUOT spin-CONJ  
'The ship spun [**G around and around**]...'  
(non-predicative; Doo07010180)
- b. ...家の周りを**グルグル**してたら...  
... le-no mawari-o **guruguru-si-te-tara**...  
house-GEN around-ACC IDPH-do-CONJ-when  
'... when [I] was **walking around** the house...'  
(predicative; Doo07010150)

(Dingemanse & Akita 2016; Dingemanse 2011, 2017; see also Kunene 1965; Samarin 1971; Childs 1994; Nuckolls 1996; Kita 1997; Son 2010; Dingemanse 2013)

## Facial expression

(表情)

- Indexical (指標機能)
  - "The face is the key to understanding emotion, and emotion is the key to understanding the face." (Russell & Fernández-Dols 1997: 3; < Darwin 1872; Ekman 1977, etc.) (顔は感情を解く鍵、感情は顔を解く鍵)
- Demonstrative (実演機能) = **depictive (描写性)**
  - Facial displays in dialogue demonstrate/mimic the emotional experience at issue. (Bavelas & Chovil 1997: 337; see Clark & Gerrig 1990; cf. Sidnell 2006 for a related discussion of gaze) (対話における表情は感情経験の実演・模写)
- Interactional (相互行為機能)
  - Preserving mutual affiliation (Wilkinson & Kitzinger 2006; Ruusuvoori & Peräkylä 2009) (連帯感を保持)

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## Speaker gaze

(語り手の視線の機能)

- To the recipient (eye contact) (アイコンタクト)
  - Terminating a turn (Kendon 1967) (ターンの終結) → No (Torres et al. 1997 cited in Rossano 2013)
  - Showing aggression or intimacy/affiliation (Argyle & Dean 1965; Eibl-Eibesfeldt 1989) (攻撃性・親密性の表明)
  - Signaling the intended recipient of the utterance (Sacks et al. 1974) (発話の受け手の指定)
  - Soliciting a response (Bavelas et al. 2002); mobilizing recipient response (Stivers & Rossano 2010) (返答の要求)
- Away from the recipient (eye release) (アイリリース)
  - Signaling re-enactments (Sidnell 2006; cf. Stec et al. 2016) (再現であることの合図) = **depictive mode (描写モード)**

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## Summary of previous studies

(先行研究のまとめ)

- The speaker's **facial expression & gaze (語り手の表情と視線)**
  - Primarily characterized by their **interactional functions** (主として**相互行為**上の機能から特徴付けられているよう)
  - Also associated w/ some **depictive properties (描写的特性)**も指摘されている)
  - May shed a new light on the pragmatics of ideophones (オノマトベの語用論に新たな光?)

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## 2. METHODS

方法

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## Earthquake Corpus

(震災コーパス)

- 214 edited interviews (5-15 min) w/ victims & rescuers in East Japan Great Earthquake in 2011 (Dingemanse & Akita 2016) (東日本大震災被災者・救助者への編集済みインタビュー214本)
- Transcripts & **videos** (書き起こし + **動画**)
- 10,413 sentences (10,413文)
- 500 ideophones & 179 quasi-ideophonic words (オノマトベ500語、準オノマトベ179語)
- Full of **emotional** speech (感情的な発話が豊富)

<http://www9.nhk.or.jp/31shogon/new/>

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## Quasi-ideophonic words

(準オノマトベ)

- “**Deideophonized**” words, often adverbial, that morphologically look like ideophones but are distinctly frequent due to their prosaic-like, event-general meaning (see Tamori 1980) (オノマトベと同様の形態を持ちつつも、特定事象と結びつかない一般副詞的な意味のために高頻度な「**脱オノマトベ化**」した語)
- e.g., *dondon* ‘one after another’, *sukkari* ‘completely’, *zut-to* ‘all the time’

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## Coding

(コーディング)

- Coded for ideophones & quasi-ideophones (オノマトベと準オノマトベの発話との共起)
  - Obvious facial change (明らかな表情の変化)



(doon-to 'bang')

- Speaker gaze (語り手の視線の変化)



(hatyametya-ni 'topsy-turvy')

- Reliability check for 10% of the data (thanks to Nahyun Kwon) (データの10%を信頼性チェック)
  - Facial change: 85.71%,  $\kappa = .742, p < .001$
  - Eye contact: 72.86%,  $\kappa = .571, p < .001$

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## Predictions

(予測)

- Frequency of facial change, eye contact, & eye release (表情変化、アイコンタクト、アイリリースとの共起頻度)
  - A. Ideophoncity (オノマトベ性)**
    - Idph (オノマトベ) > Quasi-idph (準オノマトベ)
  - B. Integration (形態統語的統合性)**
    - Non-predicative (非述語用法) > Predicative (述語用法)

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## 3. RESULTS & DISCUSSION

結果・考察

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## Iconic gesture & eye contact

(映像的身振り+アイコンタクト)

- チラッと庭を見たら、要するに黒い水がドツと入ってきたんです。「おまえ逃げろ」って言ったんです。私は「もう駄目だから、お前は逃げろ」って言ったんです。そしてその「逃げろ」と言ったときに、上が【**ドーンと**】落ちてきたんですね。

Tirat-to niwa-o mi-tara, yoosuruni kuro-i mizu-ga dot-to Hait-te ki-ta-n-des-u. "Omae nige-ro"-tte it-ta-n-des-u. Watasi-wa "Moo dame-dakara, omae-wa nige-ro"-tte it-ta-n-des-u. Sosite sono "Nige-ro"-to it-ta-toki-ni, ue-ga 【**doon-to**】oti-te ki-ta-n-des-u-ne.

'When I took a glance at the yard, black water poured in. I said to my wife, "I can't make it. Run away without me!" And when I said, "Run away," the roof fell on us **with a bang.**'

(non-predicative; D0007010005)

## Facial change (1)

(表情の変化)

- そのうち私の体に引っ掛かって。その引っ掛かって動かないのね。痛くて。**キチーツ**と挟まれて。うんと挟まれ、何と言っていいんだか分からないぐらい苦しくて。苦しくて苦しくて。いるうち今度、流れていったの。波が引けていったのな。

Sonouti watasi-no karada-ni hik-kakat-te. Sono hik-kakat-te ugok-are-nai-ne. Itaku-te. **Kitiit-to** hasam-are-te. Unto hasam-are, nan-to it-te i-i-n-da-ka wakar-ana-i-gurai kurusiku-te. Kurusiku-te kurusiku-te. I-ru-uti kondo, nagare-te it-ta-no. Nami-ga hike-te it-ta-no-na.

'Before long the debris got caught on my body, and I couldn't move due to the pain. I was sandwiched **tightly** between the debris. I was terribly sandwiched and it was too painful for words. So painful. Then, the debris flowed away. The tsunami wave ebbed away, I guess.'

(non-predicative; painful → extremely painful; D0007010036)

## Facial change (2)

(表情の変化)

- 大きかったですよ。うん。**ドーンと**。

Ooki-kat-ta-des-u-yo. Un. **Doon-to.**

'[It] was a loud [noise]. [It] was like, **baang.**'

(non-predicative; neutral/serious → smiling; D0007010040)

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## Facial change & eye contact

(表情の変化+アイコンタクト)

- ジープ待ちで患者さんと職員と、外で。ですから、外に大体12~13名ぐらいと患者さんが、布団ごとということで、3名、4名ぐらいというふうな形で外にいましたね。で、**びっくり**ですね、ほんと。

Ziipu-mati-de kanzya-san-to syokuin-to, soto-de. Desukara, soto-ni daitai zyuuni-san-mei-gurai-to kanzya-san-ga, huton-goto-to-i-u-koto-de, san-mei-yon-mei-gurai-tte-i-u-huu-na katati-de soto-ni i-masita-ne. De, **bikkuri-des-u-ne**, honto.

'[We] were waiting for the rescue jeeps with our patients and colleagues outside. So, there were about 12 or 13 people and 3 or 4 patients with their bedding. And... **surprising**, it was.'

(predicative; neutral → smiling; D0007010039)

## Iconic gesture & eye release

(映像的身振り+アイリリース)

- ただ本当に、あのー、川から上がってきた津波だから。...ここまで【**ブーンと**】持ってこられたけれども、はーこの辺で力が弱まったから良かったって感じ。

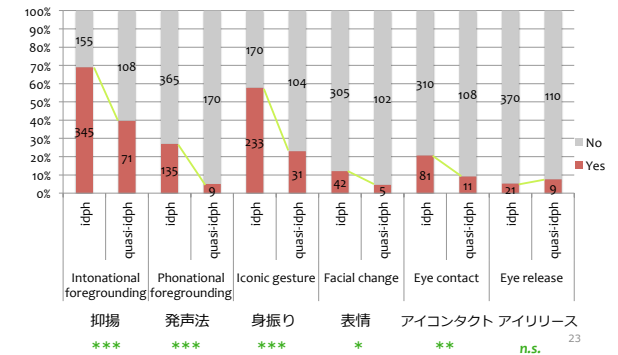
Tada honto-ni, anoo, kawa-kara agat-te ki-ta tunami-dakara... Koko-made 【**boon-to**】 motteko-rare-ta-keredomo, haa kono-hen-de tikara-ga yowamat-ta-kara yokat-ta-tte-i-u kanzi.

'Because the tsunami rose from the river, [it] took me up here **with a bang** but weakened around here, and [I] got relieved.'

(non-predicative; D0007010041)

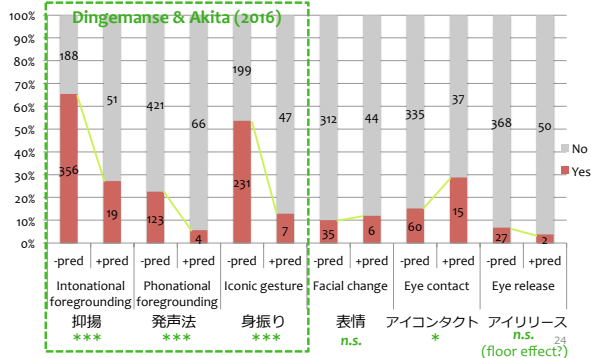
## Ideophonicity × paralinguage

(オノマトベ性 × パラ言語)



## Integration × paralinguage

(オノマトベの統合性 × パラ言語)



## Summary of the results

(結果のまとめ)

	Prediction A (ideophonicity)	Prediction B (integration)
Intonational foregrounding	✓ idph > quasi-idph	✓ -pred > +pred
Phonational foregrounding	✓ idph > quasi-idph	✓ -pred > +pred
Iconic gesture	✓ idph > quasi-idph	✓ -pred > +pred
Facial change	✓ idph > quasi-idph	X -pred = +pred
Eye contact	✓ idph > quasi-idph	X -pred < +pred
Eye release	X idph = quasi-idph	? -pred ≥ +pred

Multimodal nature of ideophones+

Depictive nature of ideophones

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## 4. CONCLUSIONS

結論

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## Summary

(まとめ)

- Ideophone utterance **is** correlated w/ the speaker's facial expression & gaze behavior. (オノマトベ発話は語り手の表情や視線と相関する)
- The correlations are somewhat different from what we've observed for expressive/depictive features (i.e., prosodic foregrounding, iconic gesture). (表出・描写特徴 [= 韻律的前景化、映像的身振り] に見られるのとはやや異なる相関)  
→ Why?

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## Future direction

(未来)

- Qualitative analysis of **interactional** data (O'Reilly 2005; Dingemanse 2011: Ch. 11; Szatrowski 2015; Burch & Kasper 2016) (会話データの質的分析)
- Comparison w/ reported discourse (Clark & Gerrig 1990; Holt 2000; Sidnell 2006; Akita 2015; Stec et al. 2016) (引用との比較)
- Classification of facial expressions (e.g., telling-final smile) (Ruusuuvuori & Peräkylä 2009) (表情の分類: 語り末の笑顔など)

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# Thank you!

Special thanks: KLC & Nahyun Kwon



akita dot kimi atsign nagoya hyphen u dot jp  
<https://sites.google.com/site/akitambo/>

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See also:

Bibliographies of sound symbolic phenomena (オノマトベ文献目録):  
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## APPENDICES

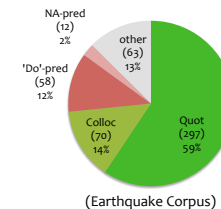
付録

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## 4 major ideophone constructions in Jpn

(Dingemanse & Akita 2016; Akita 2017a, b)

- Quotative-adverbial:  
鯉がヌルヌルと滑った  
Unagi-ga **nurunuru-to** subet-ta.  
eel-NOM IDPH-QUOT slip-PST  
'An eel slipped *slipperily*.'
- Collocational:  
鯉がヌルヌル滑った  
Unagi-ga **nurunuru** subet-ta.  
eel-NOM IDPH-QUOT slip-PST  
'An eel slipped *slipperily*.'
- 'Do'-verbal (pred):  
この鯉はヌルヌルする  
Kono unagi-wa **nurunuru-su-ru**.  
this eel-TOP IDPH-DO-NPST  
'This eel *feels slipperily*.'
- Nominal-adjectival (pred):  
この鯉はヌルヌルだ  
Kono unagi-wa **nurunuru-da**.  
this eel-TOP IDPH-COP-NPST  
'This eel *is slipperily*.'



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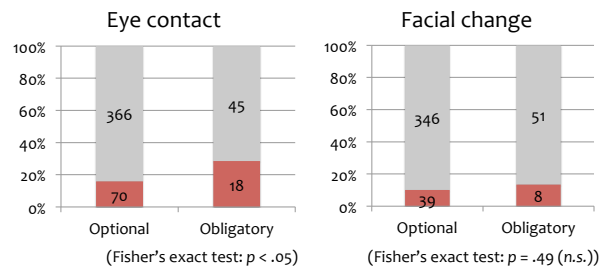
## Previously proposed pragmatic functions of ideophones

(オノマトペの機能に関する過去の提案)

- "Sound-symbolic involvement" (Nuckolls 1992, 1996; Tannen 1983) (関与) ⇔ independence? (独立)
- "Emotive intensity" (Baba 2003) (感情の強さ)
- "Epistemic authority" (cf. reported speech; Dingemanse 2011; O'Reilly 2005; Burch & Kasper 2016) (認識的権威)
- "Expressiveness" (Childs 1994; Dingemanse & Akita 2016, etc.) (表出性)
- "Dramatizing the climax" (O'Reilly 2005; Sztatowski 2015; Burch & Kasper 2016) (会話のクライマックスの劇化)

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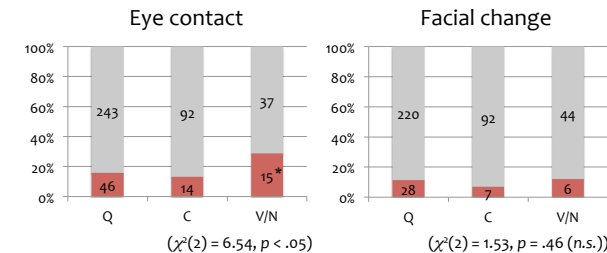
## Detailed results: obligatoriness



(cf. Dingemanse & Akita 2016)

40

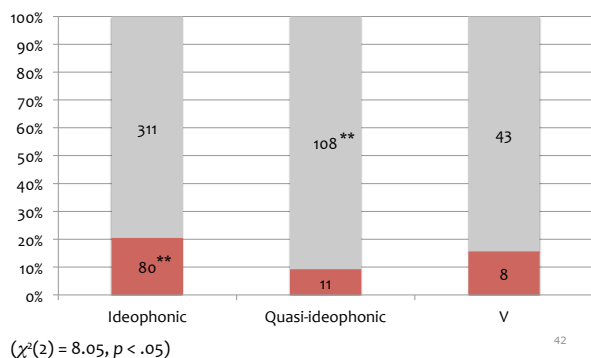
## Detailed results: predicate integration



(cf. Dingemanse & Akita 2016)

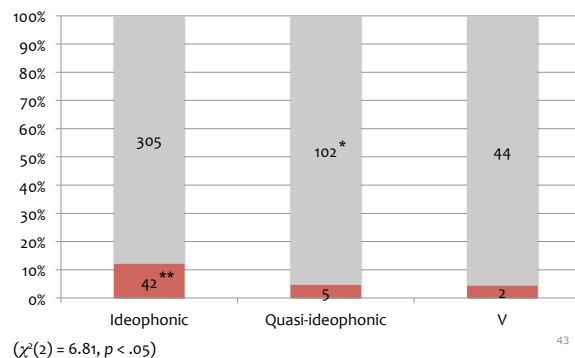
41

## cf. 70 prosaic verbs (eye contact)



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## cf. 70 prosaic verbs (facial change)



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