

# Verbs of oscillation in Japanese

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## Introduction

This study presents a part of a broad lexicotypological research of oscillation verbs.

### English

rock  
swing  
sway  
float  
dangle  
wave  
stagger  
totter

What parameters determine the choice of a particular lexeme?

- (1) Зуб качается / шатается.
- (2) Подсолнух качался / \*шатался на высокой ножке.
- (3) A drunken man tottered/\*swung down the road.
- (4) The curtain floated/ \*swung in the wind.

## Methods

- Frame approach: a questionnaire containing descriptions of typical situations of oscillation; used during fieldwork (with help of language experts)
- Analysis of lexical combinatory of the verbs in question
- Reveal the key oppositions between lexemes
- Create a reliable semantic map (Haspelmath 2003): a configuration reflecting the cognitive organization of senses. Each node represents a microframe of oscillation established on the basis of both the topological feature and the functional one

## The case of Japanese

The semantic field is considerably reach: seven lexemes

- The goal is to figure out the parameters relevant to oscillation in Japanese
- Apply the system of Japanese verbs to the semantic map

The data has been collected during fieldwork by A. Panina

1. **Yureru**: dominant verb, almost no restrictions on its usage. The only odd frame is animate Trajector unable to control his/her motion (a person staggering)

(1) 3 kai o arukuto 2 kainoshanderia ya saidobōdo no garasu to ga **yureru** .  
*When someone walks on the 3d floor, on the second the lamp rocks and so do the glass cupboard doors.*

(2) Mado no kāten ga **yureteru** yōni mieru.  
*The window curtain seems to be swaying.*

(3) Ha ga **yureta** karatoitte shishūbyō to wa kagiranaidesu.  
*When a tooth is moving, it's not necessarily periodontitis.*

(4) Mama no ohiza no ue de buranko ni **notte** yureru no ga daisuki.  
*He likes a lot to rock himself sitting in his mum's lap.*

## The case of Japanese

2. **nabiku**, **soyogu**, **hatameku**: soft objects and surfaces

*Nabiku* is the only one that combines with horizontal surfaces:

(5) Kaze ga aru to suimen ga **nabiiteshimatte**  
*When there's wind, the water surface waves.*

(6) Jamaika no hata ga kaze ni **soyogu**  
*The flag of Jamaica is floating in the wind.*

*Soyogu*, as well as *nabiku*, applies to flexible stalks, while *hatameku* does not:

(7) Atsusa no naka de kiku no hanaga kaze ni **soyoideiru**.  
*Chrysanthemum flowers are swaying in the heat.*

(8) Kata ni haotta jaketto no fūdo to suso ga **hatameku** sama mo mata shizen.  
*The way the hood and the hem of his coat float looks natural as well.*

3. **guratsuku**, **buratsuku** and **furatsuku**: '-function' frames, the situations that might be inconvenient or even dangerous for a human.

*Guratsuku*: anything with parts not properly attached to one another, furniture or instruments likely to fall apart.

(9) **Guratsukihajimeta** isu o barashi, sai-setchaku itashimasu.  
*We take apart unsteady chairs and glue them back together.*

(10) Tatoeba jitensha no handoru ga **guratsuitetara** dōnarimasu?  
*What happens if, for example, the steering wheel on a bike goes loose?*

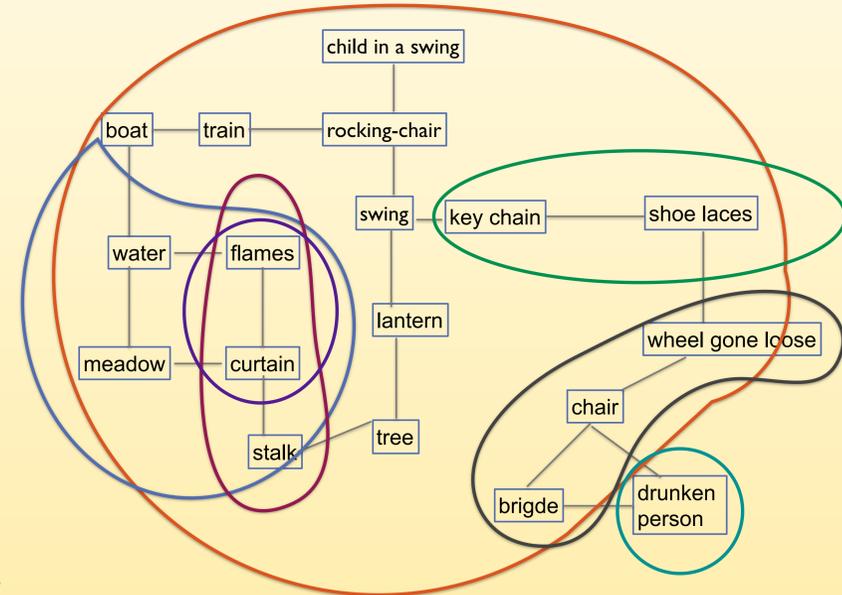
*Buratsuku*: something that dangles, like a rope or a wire, and causes inconvenience.

(11) Heddohon no shiyō-ji nikōdo ga **buratsuite** jama ni naru.  
*When I use the headphones, the wire dangles and bothers me.*

*Furatsuku*: a human being lost control over his/her body.

(12) Jitensha de kitaku suru tochū zempō yori dansei ga **furatsuite** aruitekite...  
*When he was going home on bike, a man, staggering, came up to him...*

## Semantic map



## Conclusions

- On the one hand, the system of Japanese corresponds to the semantic map designed previously; the parameters observed on the basis of other languages are attested here as well, which proves their typological relevance.
- The configuration is unusual: at the same time, there's a verb with an extremely wide area of usage and a lot of very specific lexemes.
- Japanese demonstrates a more detailed system compared to most languages studied, especially in the 'soft' domain, but also in the domain of loss of functionality. The new oppositions observed allow to extend the questionnaire for further research.

## References

1. Haspelmath M. The geometry of grammatical meaning: semantic maps and cross-linguistic comparison // Tomasello, M, (ed.) The new psychology of language, vol. 2.– Mahwah, NJ, 2003, p. 211-242
2. Minsky M.A Framework for Representing Knowledge // Winston P.H. The Psychology of Computer Vision. N.Y., 1975

## Verbs of oscillation: typology

Observation based on data from ten languages:  
crucial oppositions between lexemes inside the field are formed by two sets of parameters of different nature.

- **functionality** (whether the situation described corresponds to humans' expectations and needs)

+function	neutral	- function
pendulum, swing, cradle	tree, flag, curtain, lantern, skirt, laundry on a rope	old chair, bridge, a loosened tooth, a sick or drunken person

- **physical and topological features of the situation**: e.g., softness/firmness of the Trajector.

Physical and topological characteristics provide more detailed distinctions among situations and form more classes