

~ ADAM ~

Acoustic Data for Animal Monitoring
or
Sense of Air Waves for Nature and Us

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the University of Tokyo

3 June, 2016

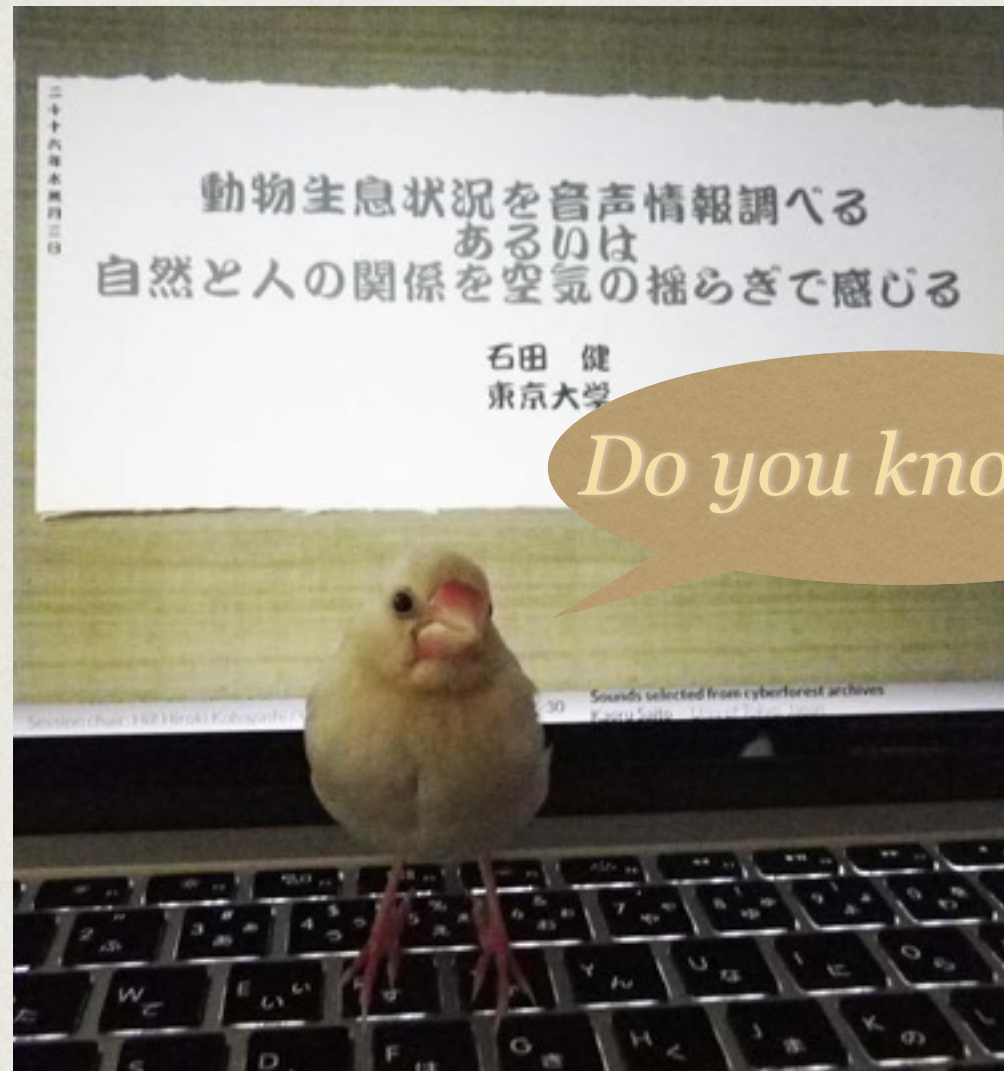
二十六年水無月三日

動物生息状況を音声情報にて調べる
自然と人の関係を音るいは空気の揺らぎで感ずる

石田 健
東京大学



鳥の囀



動物生息状況を音声情報調べる
あるいは
自然と人の関係を空気の揺らぎで感じる

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Do you know ... ?

I'm Bun-chan

Bird Song

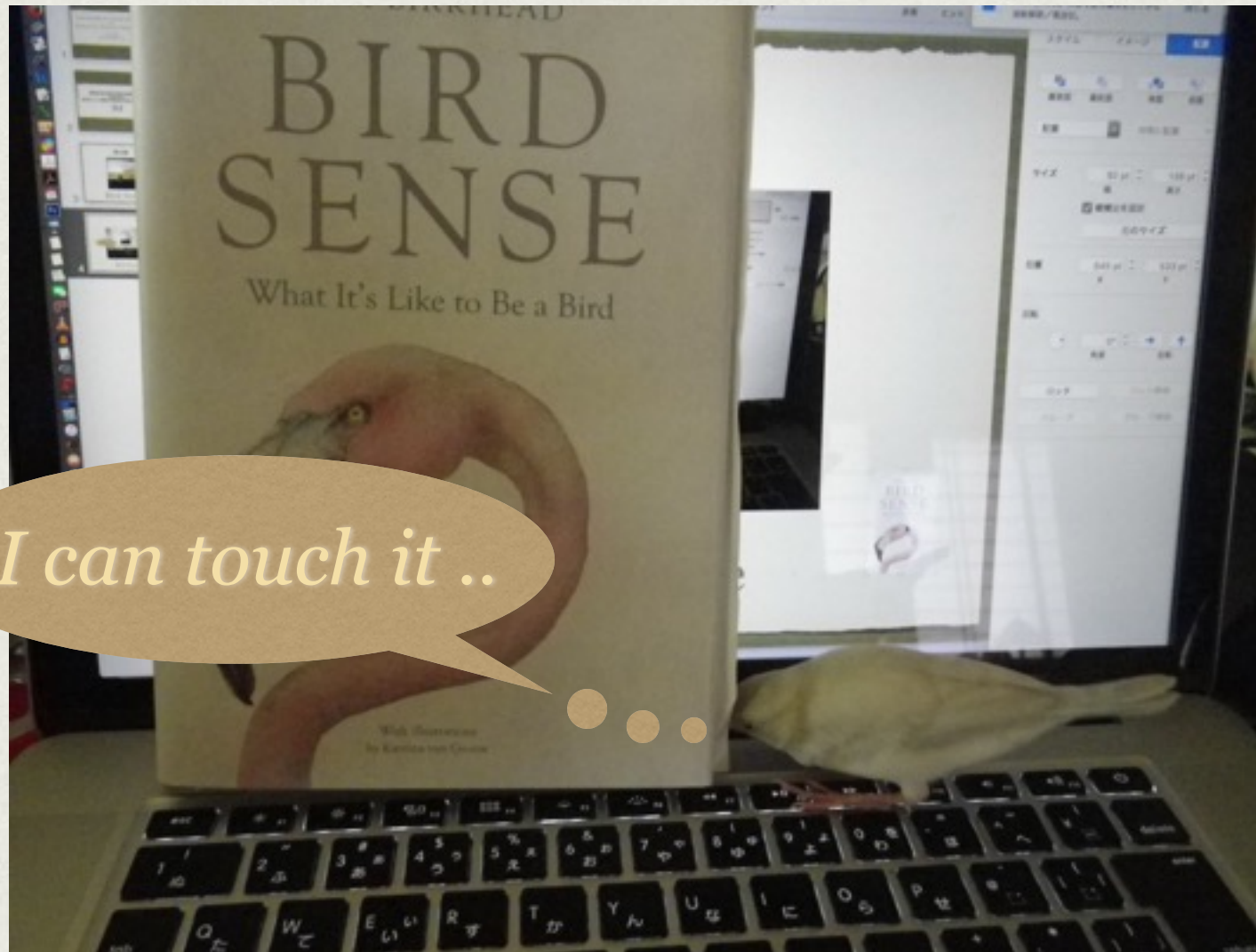


Sure, I can feel ..

*She is my assistant
and
always occupies the
keyboard.*

Bird Sense





I can touch it ..

Good Job !

as air waves

Temperate Zone Culture

Four Seasons

春 夏 秋 冬

四季

Japanese Culture

日本文化

sense of nature

Twenty-four Winds

春分・立夏・夏至・秋分・冬至

廿四節氣



<https://ja.wikipedia.org/wiki/二十四節氣>

Japanese Culture

月曆

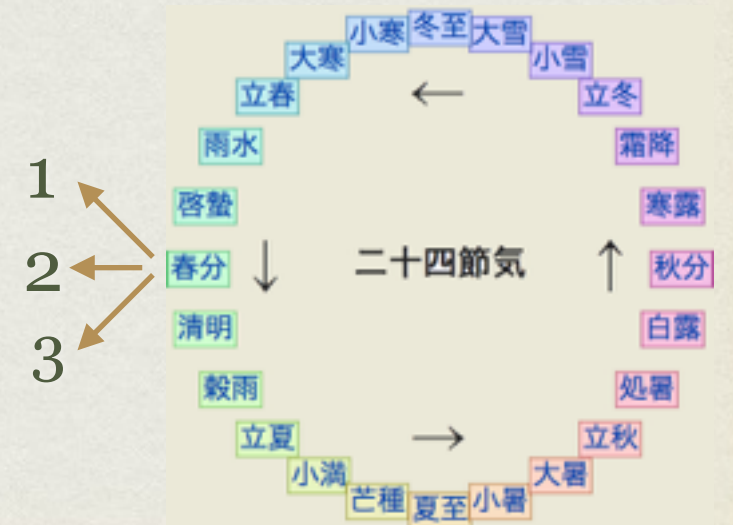
sense of nature

Seventy-two Winds

3 sections (5 days) each
in "24 winds"

七十二候

moon calendar, menology



<https://ja.wikipedia.org/wiki/二十四節氣>

feeling the world with senses of nature

次候

2nd in “Risshun 立春” Bush-warbler sings

初候

1st in “Shunbun 春分” Sparrow nests

1st in “Seimei 清明” Swallow comes

末候

3rd in “Hakuro 白露” Swallow departs

3rd in “Shoukan 小寒” Pheasant calls

birds, flowers, insects, leaf colors ... etc.

for examples...

sound of nature 自然の音 “ne”

From

Bush-warbler songs

First songs, 初音

Cricket sound, 鈴虫の音 (ね)

Wind sound, 風の音



(初音ミク) Hatsune Miku

<http://www.crypton.co.jp/mp/pages/prod/vocaloid/mikuv3.jsp>

In Japanese culture, with a sound ~ “ne”

we sense the season, time, atmosphere, environment etc.

for examples...

Japanese Bush Warbler

- every where with bushes, from Okinawa - Hokkaido, coast - mountain tops, city park - forest ... etc.
- every one knows the name and the song (sound)
- many pictures, descriptions, dolls, flutes,
- Meteorological Agency officially announces & records the 1st song.
- We feel “spring has come” when we here its song.
-
- Few people have seen them, I think.

Oriental Cuckoo

- summer visitor in Japan
- parasite of Japanese bush warblers
-
- appears in literatures, drama, pictures etc.
- We feel “summer is coming”
-
- There should be the host, breeding bush warblers, bird watchers think.

Dawn Sound @ Amami

3 March, 2015

6:26 ~ a.m.



Dawn Sound @ Chichibu

8 May, 2015

4:40 ~ a.m.



Dawn Sound @ Omaru

7 April, 2016

6:30 ~ a.m.



six senses

our five senses (5S)
sight, audition, smell, touch, taste



sixth sense = integral 5S + personal experience
memory

:

our innate senses = human memory or DNA

+

extended phenotypes via internet

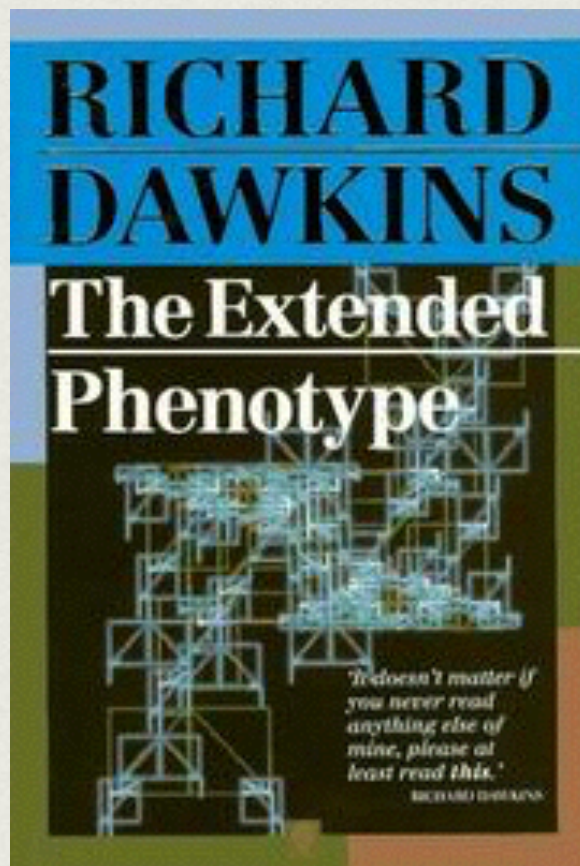
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Sense of Globe

& information

Now an age of Natural Science

We have much Extended Phenotype



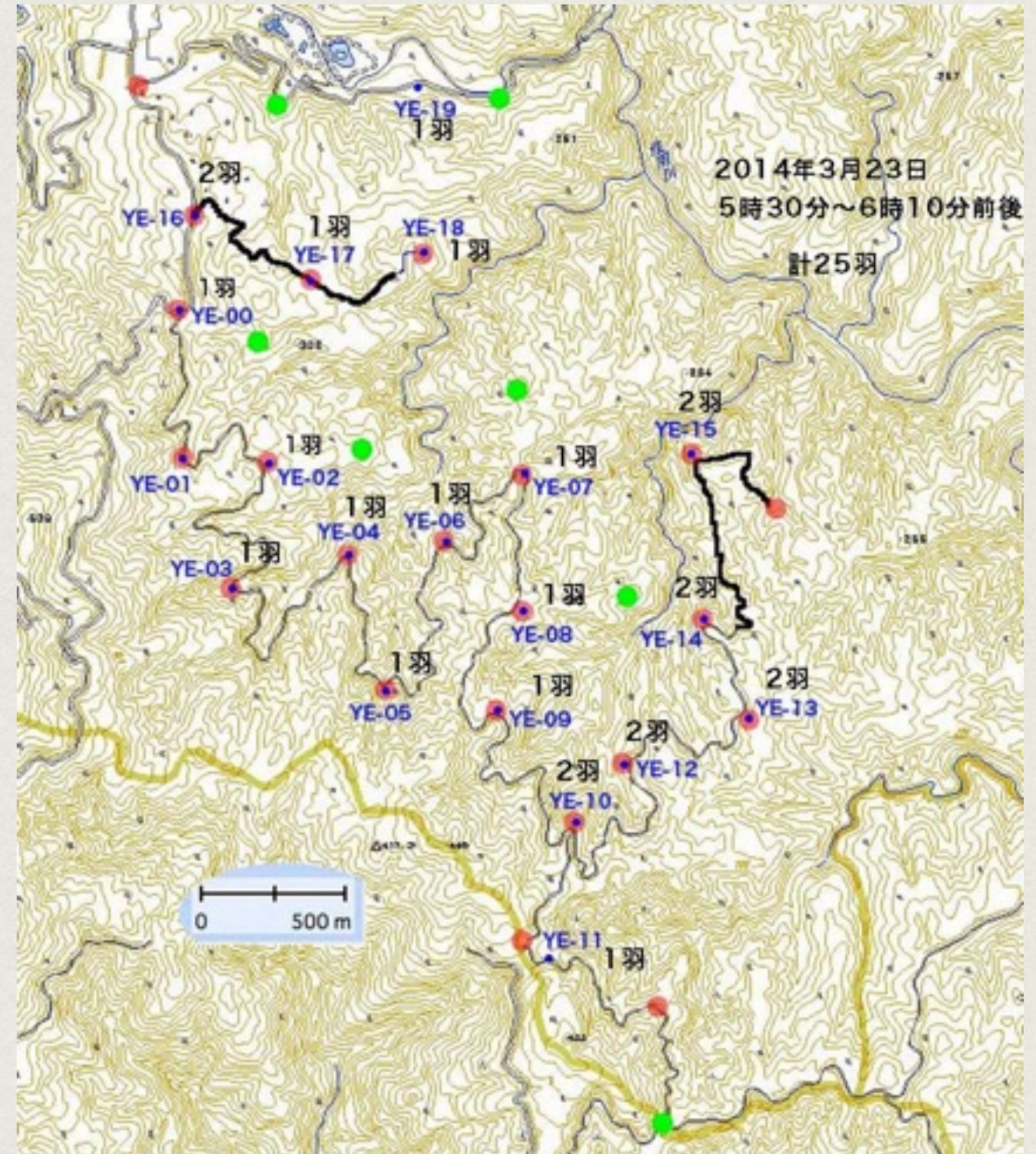
Examples of Extended Phenotypes

- binocular, telescopes, microscopes,
- camera & video recorder
- ultraviolet, infrared sensors
- microphone & sound recorder
- sound mixer, converters (ex. bat detector)
- personal computer & sound analyzing software
- inter-net
- artificial intelligence (AI)
deep machine learning . . . etc.

ADAM



multi-sensing



Amami Thrush
Song monitor

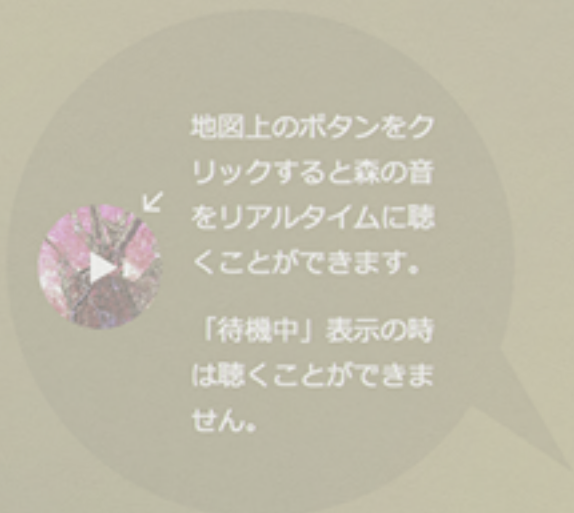
Sense of Nation

Cyberforest

How can we feel ?

ライブマイクを通して、リアルタイムに森の時間を共有
森の今と音でつながる

Sound **Lab.** × **Cyberforest**



地図上のボタンをクリックすると森の音をリアルタイムに聴くことができます。
「待機中」表示の時は聴くことができません。



twitter #tetto #otanomo #otohama

i Sense of Globe ?

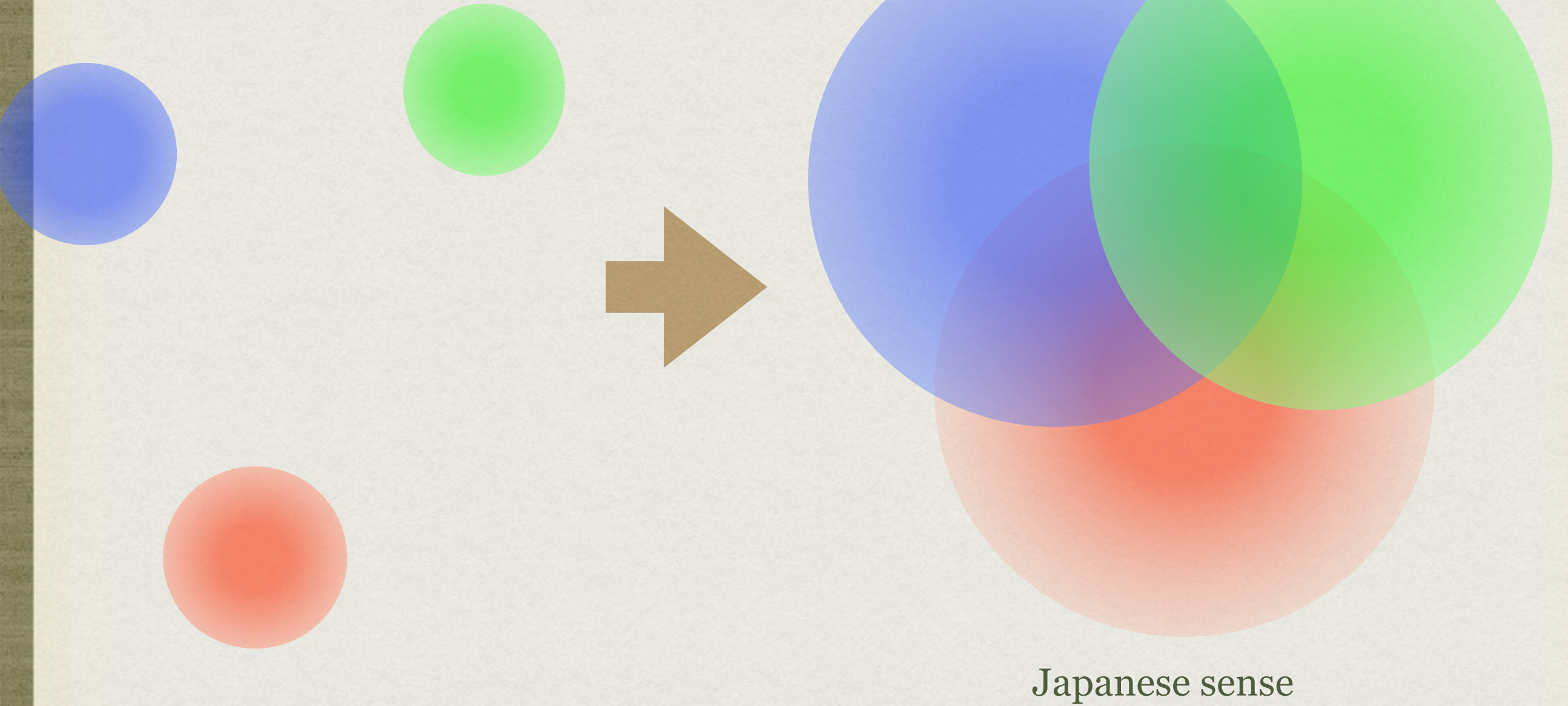
Sense of Globe

How can we feel ?

Sense of Nation

Scottish sense

• • • • sense



Thanks to René-san ,

~ FIN ~



ウグイス *Japanese Bush-warbler*