

Different Cultures, Same Science



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JSPS Online Orientation
15:02-15:25 on June 16, 2022

Welcome to Japan, especially in such a historically difficult epoch

- In addition to the covid-19 situation, you may worry about different cultures, and language problems.
- I am pretty sure that all of them will gradually disappear with time.
- **Take care and enjoy your research!**

**Neither culture
is better nor worse,
just different**

1) Should we hold rice bowls in our hands ?

- Japan: Yes. We are supposed to do so.
- Korea: Absolutely, no. You shouldn't do that.

How to hold rice bowls: two different interpretations

- Japan: Humans should use their hands, so as to emphasize that they are not animals ! (Animals cannot use hands)
- Korea: To hold rice bowls in front of others looks like begging, which you should avoid.



**Neither is better nor worse;
we should respect the difference**



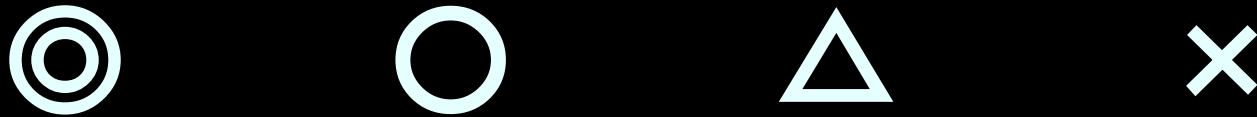
2) How to mark right answers and wrong answers ?

- Japan: $1+2 = 3$ $1+3 = 5$
- US: $1+2 = 3$ $1+3 = 5$

Don't take anything granted

	right	wrong
Japan	○	✓、×
Korea	○	×
US、France、Italy、 China、India、	✓	○、×
Germany	✓、(r)	f、(underline)、 vertical bars
Russia	(nothing)	×、(underline)

3) Very important Japanese symbols:



“Let me know if you can join us for a drink tonight. Are you ◎、○、△、 or × ?”

“Sounds nice ! Surely I am ◎.”

JSPS get-together							
mm/dd(day of the week)	◎	○	△	×	あかね	みどり	やすし
9/8(水)		1	1	1	×	△	○
9/9(木)	2	1			◎	○	◎
9/10(金)	1	1	1		◎	○	△
9/11(土)		1	1	1	○	△	×

a Japanese app. counterpart to doodle

Definite meanings in Japan:



Most Japanese believe (incorrectly) that the following meanings are universal all over the world

◎	wonderful, great
○	good, correct, right
△	uncertain, not so good
×	bad, wrong
✓	wrong (sometimes)

Now you can reserve Shinkansen !

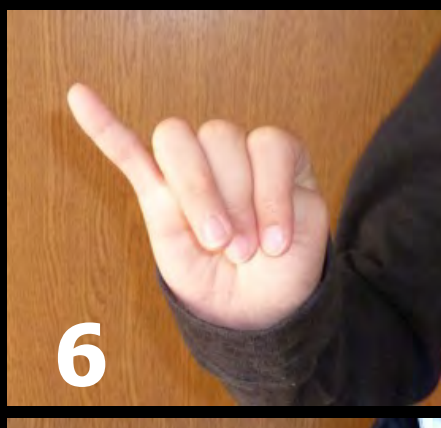
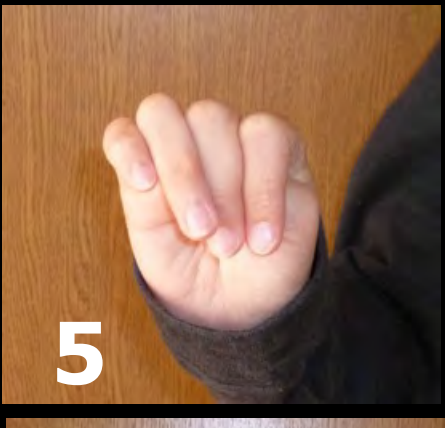
Tohoku, Yamagata, Akita, Hokkaido

As of [15:09]

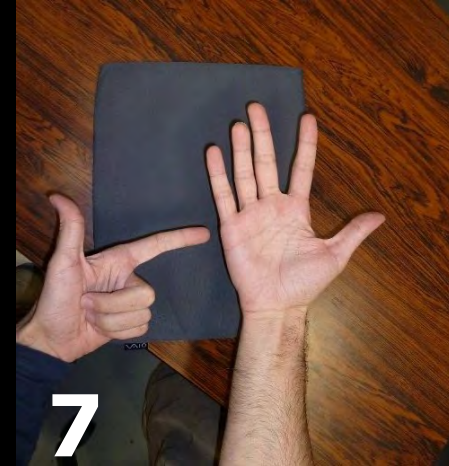
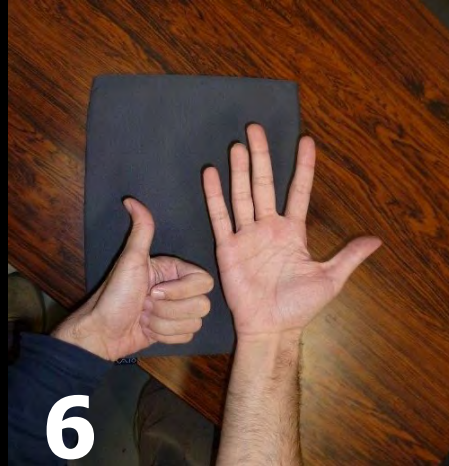
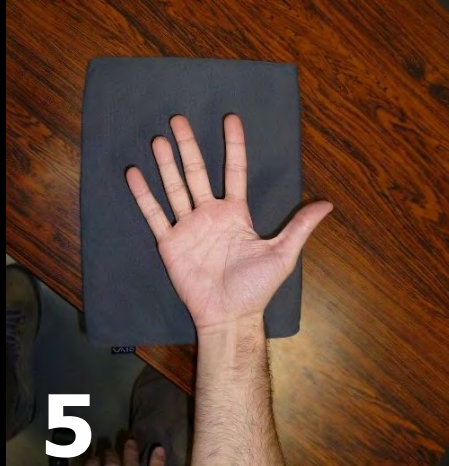
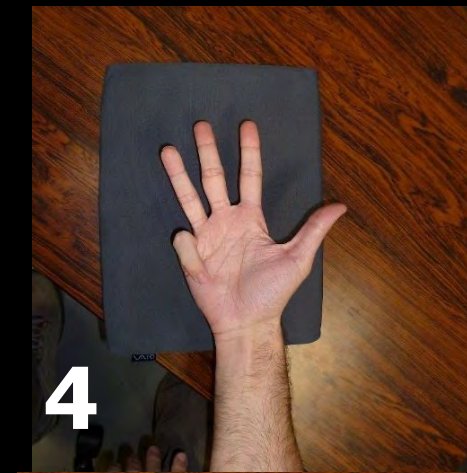
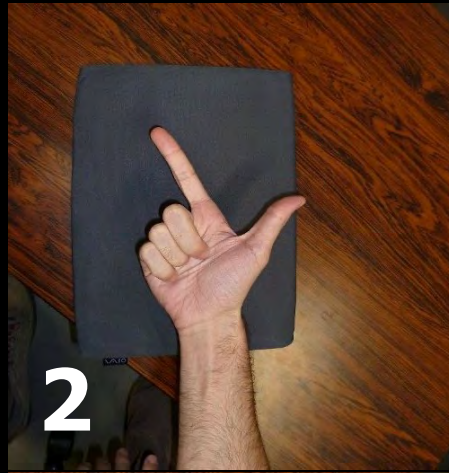
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HAYABUSA	27	SHIN-HAKODATE-HOKUTO	15:20	—	—	—	—	—	—	○	△	○	○	△	○
KOMACHI	27	AKITA	15:20	—	—	—	—	—	—	○	△	—	○	△	—
YAMABIKO	57	MORIOKA	15:36	○	○	○	○	○	○	○	○	○	○	○	○
HAYABUSA	29	SENDAI	15:44	—	—	—	—	—	—	○	○	○	—	—	—
YAMABIKO	145	SENDAI	16:00	○	○	—	○	○	—	○	○	—	—	—	—
TSUBASA	145	SHINJO	16:00	○	×	—	○	×	—	—	—	—	○	×	—
YAMABIKO	213	SENDAI	16:12	○	○	○	○	○	○	○	○	○	—	—	—
HAYABUSA	31	SHIN-AOMORI	16:20	—	—	—	—	—	—	○	○	○	○	○	○
KOMACHI	31	AKITA	16:20	—	—	—	—	—	—	○	○	—	○	○	—
YAMABIKO	147	SENDAI	16:36	○	○	○	○	○	○	○	○	○	—	—	—
HAYABUSA	105	MORIOKA	16:56	—	—	—	—	—	—	○	○	○	○	○	○
YAMABIKO	149	SENDAI	17:00	○	○	—	○	○	—	○	○	—	—	—	—

4) How to count on your fingers ?

- 一 二 三 四 五 六 七 八 九 十
- I II III IV V VI VII VIII IX X
- 1 2 3 4 5 6 7 8 9 10
- One, two and three should imply merely vertical/horizontal bars. Why not in Arabic numerals ?
- Does the difference among the characters originate from different ways of counting on one's fingers ?



How to count in Japan



**How to count
in France**

How to count in Greece

1



2



3



4



5



6



7



8



9

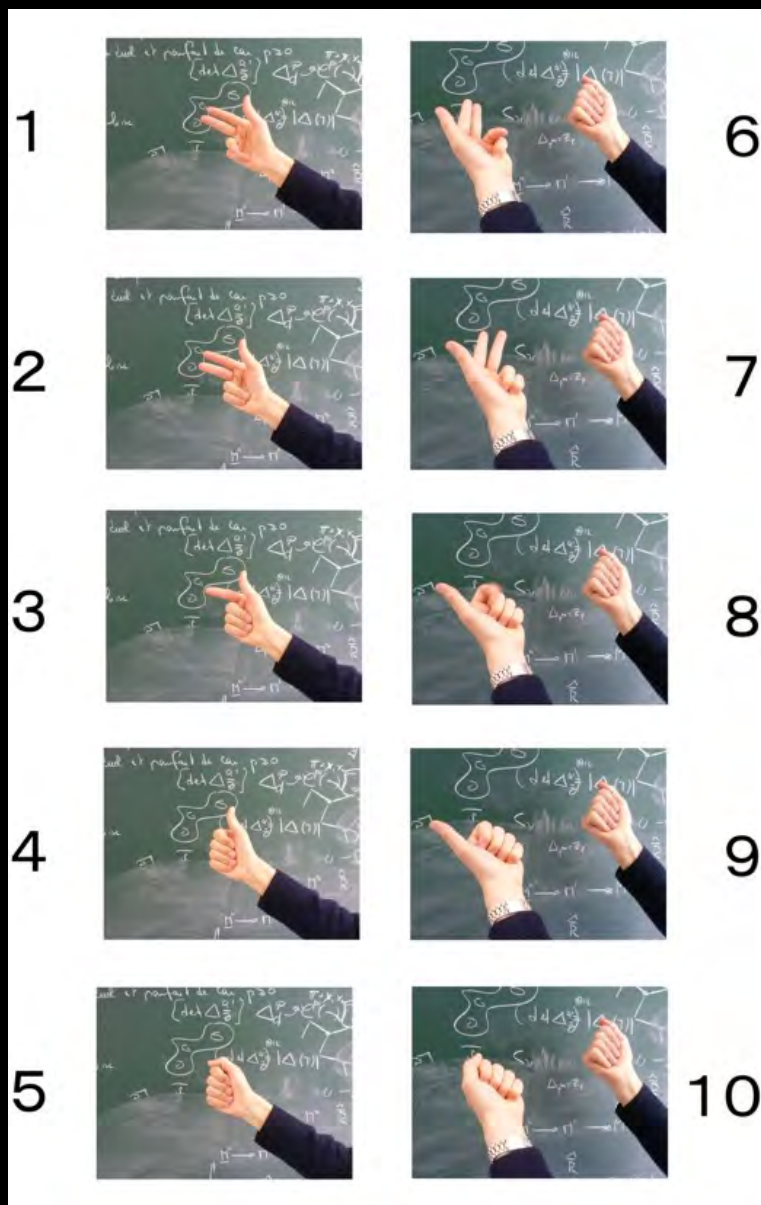


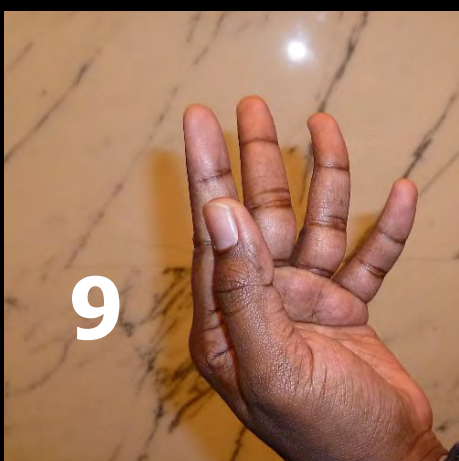
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- Same as in other European countries (I was disappointed...)

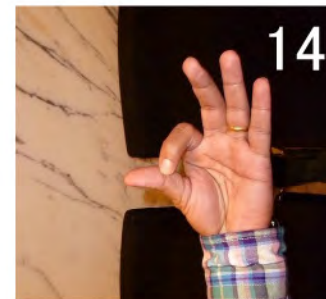
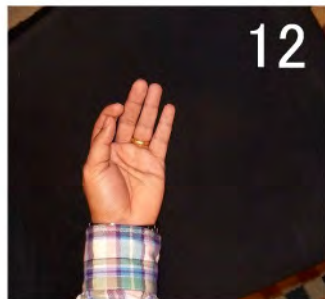
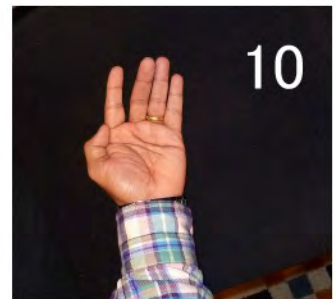
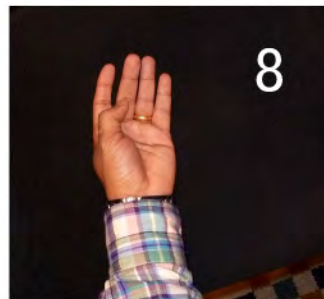
How to count in Tunisia

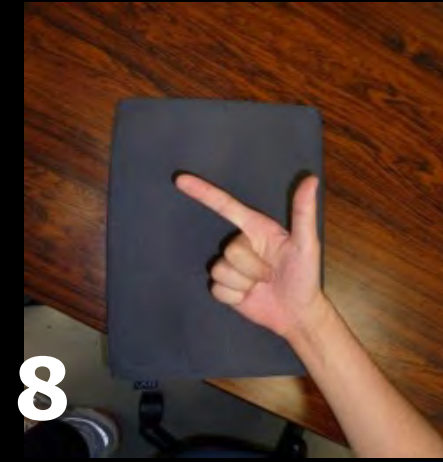
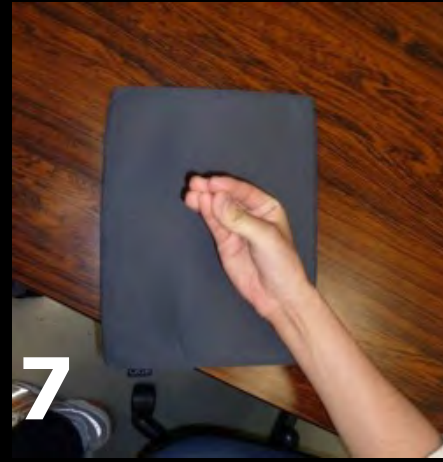
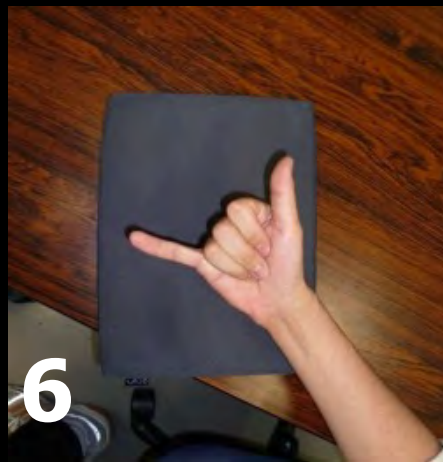
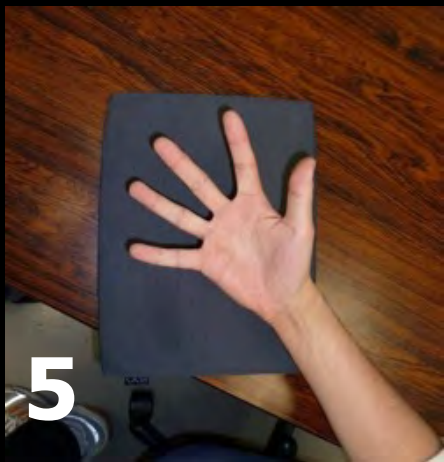
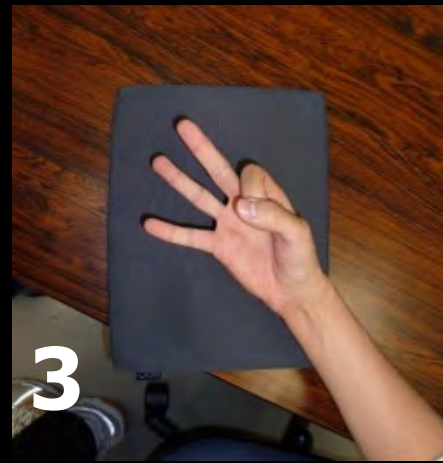
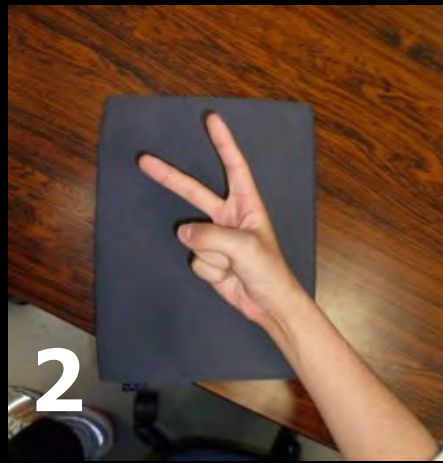
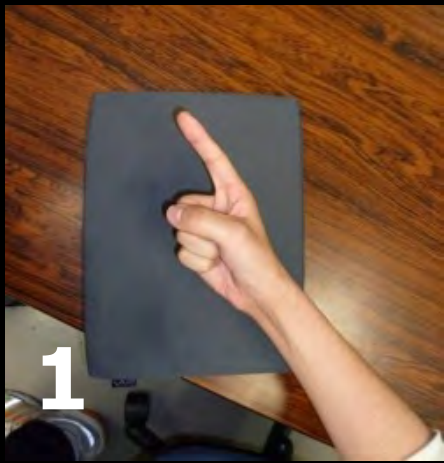




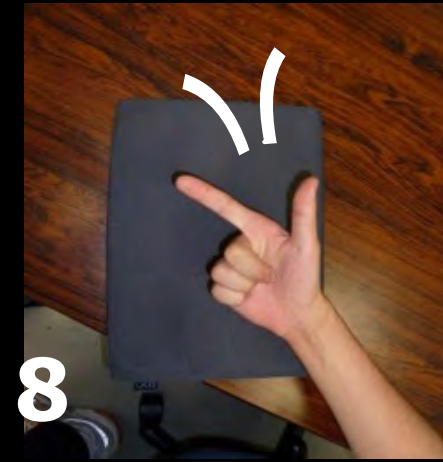
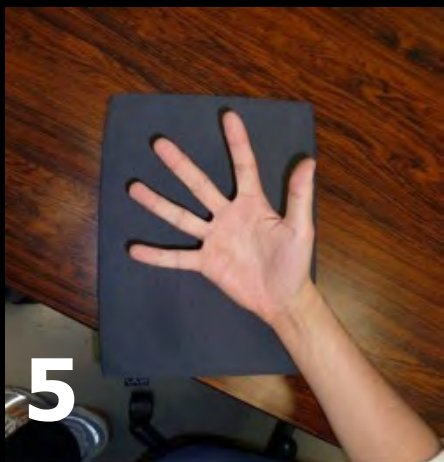
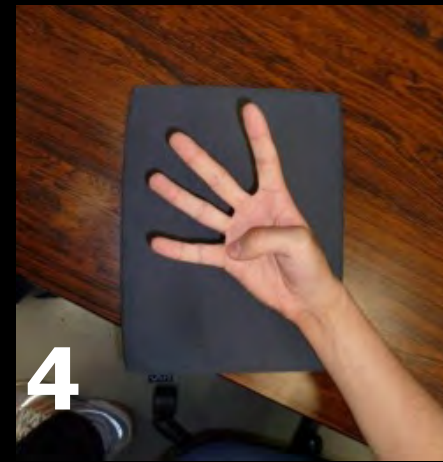
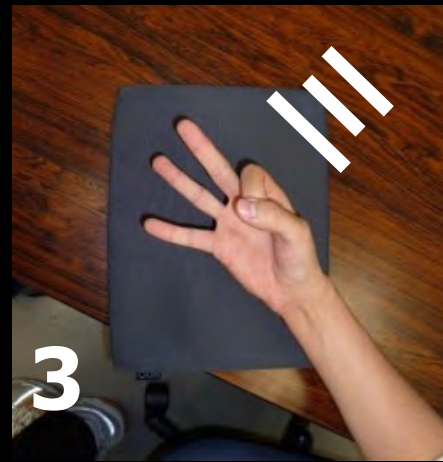
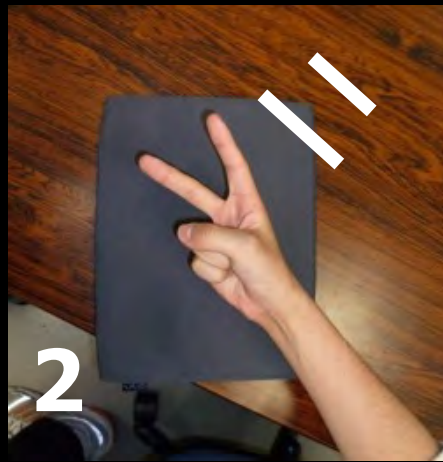
**How to count
in India (1)**

How to count in India (2)





**How to count
in China**



Here is my theory why!

Implicit rules/understandings



- All cultures (especially in Japan) depend on many common implicit assumptions, rules, and understandings
 - Instead of clear written agreements
 - This is very convenient and comfortable if you know how to behave, but can be embarrassing if you do not

**Despite differences in
culture, science is the
same all over the
“world”**

Science=exploring something beyond our horizon

- My horizon when I was a child (more than a half century ago)



@ Aki City
Kochi Prefecture
Japan

Endless question: What exists beyond the horizon ?



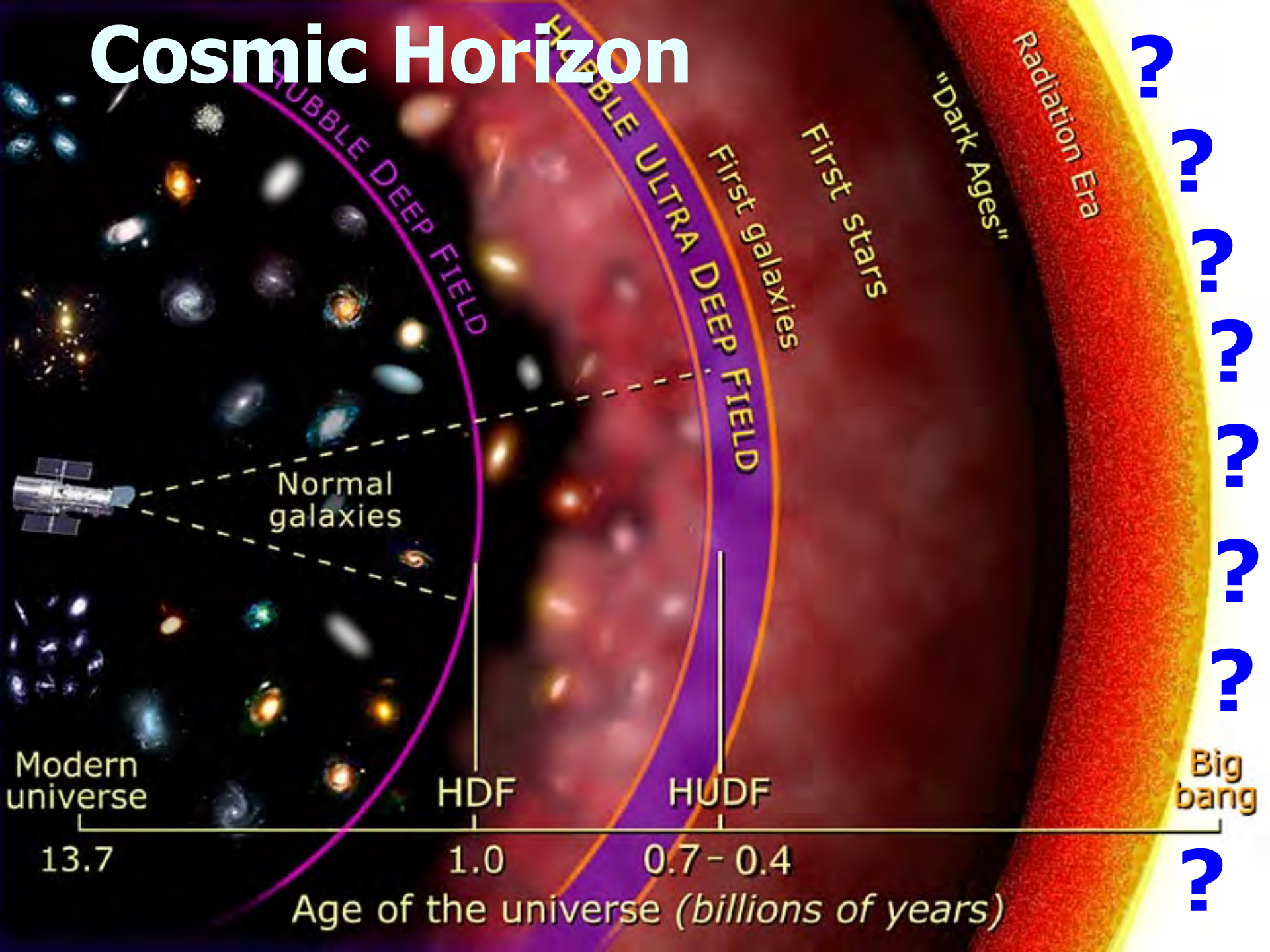
@ Honolulu, Hawaii USA

**Surprisingly, horizons
look very similar
everywhere on the
globe. *Why?***



@ Monaco

Cosmic Horizon



Issac Asimov (1941): Nightfall



(Illustration: Alisa Haba)

- Planet "Lagash" with 6 Suns has no "night" except the total eclipse due to another object every 2049 years
- People understood the true world for the first time

Nightfall: We didn't know anything

A Fawcett Crest Book

M1486
95c

Thrilling, Terrifying
Tales from the
Master of Science Fiction

isaac asimov

NIGHTFALL

AND OTHER STORIES

- "Light !" he screamed. Aton, somewhere, was crying, whimpering horribly like a terribly frightened child.

"Stars -- all the Stars -- we didn't know at all. We didn't know anything."



A goal of science

- Goal of science ≠ to publish well-cited papers
 - To answer the (known) fundamental questions ?
 - It is equally, or even more, important *to discover unknown fundamental questions, or to recognize that we didn't know anything (Asimov 1941)*
- 学問 (Gaku Mon)
 - No good counterpart in English (academia ? Learning ?)
 - 学 (Gaku) is to learn, and 問 (Mon) is to ask
 - Indeed you can ask questions only after you learn something seriously. Learning without asking later does not bring any future progress.

Take-home message

- **After all, science is universal**
 - Your primary goal of doing good science is not affected by the difference in cultures
 - A novel environment leads to a good scientific outcome, which is one of the advantages of being a post-doc in Japan !
- Once again, welcome to Japan, and we will try our best so that you will give JSPS a big ☺ when you complete your two-year term