

# Different Cultures, Same Science



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**JSPS Online Orientation 2021**

# Welcome to Japan, especially in such a historically difficult time

- Currently, you may worry about different cultures, language problems, and few friends in Japan, in addition to covid-19.
- Nevertheless, I am sure that all of them will gradually disappear with time.
- **Take it easy. 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: No. Absolutely you shouldn't.

# 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 ?

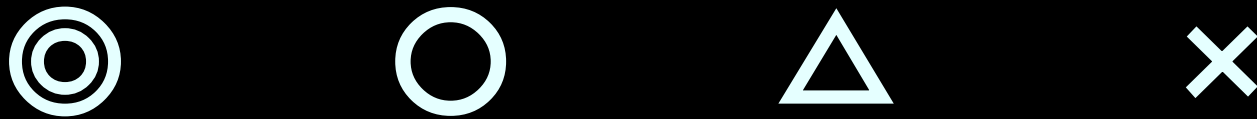
- Japan:  $1+2 = 3$        $1+3 = 5$
- US:  $1+2 = 3$        $1+3 = 5$

# Don't take anything granted

	right	wrong
<b>Japan</b>	○	✓、×
<b>Korea</b>	○	×
<b>US、France、Italy、 China、India、</b>	✓	○、×
<b>Germany</b>	✓、(r)	f、(underline)、 vertical bars
<b>Russia</b>	(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 ◎.”

	◎	○	△	×	やすし 変更 ×	みどり 変更 ×	あかね 変更 ×
2018/2/26(月)	0	1	2	0	○	△	△
2018/2/27(火)	2	1	0	0	◎	○	◎
2018/2/28(水)	0	2	0	1	○	○	×
2018/3/1(木)	0	1	2	0	△	○	△
2018/3/2(金)	1	0	0	2	×	×	◎

a Japanese app. similar to doodle

# Definite meanings in Japan:



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

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

# Now you can reserve Shinkansen !

Tohoku, Yamagata, Akita, Hokkaido

As of [15:09]

Train	No.	Dst.	Dep. Time	UTSUNOMIYA			FUKUSHIMA			SENDAI			Terminal		
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 ?

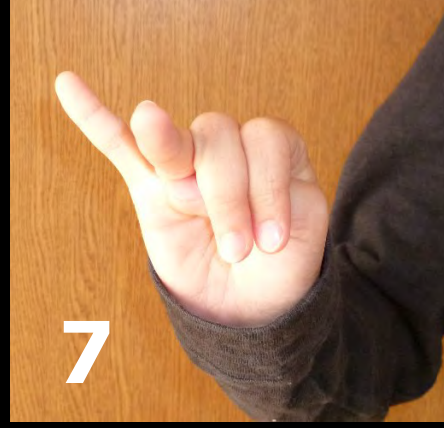
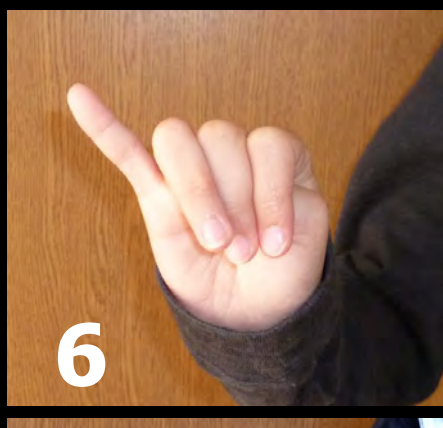
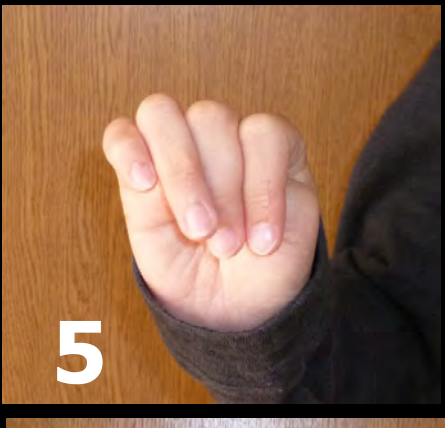
■ 一 二 三 四 五 六 七 八 九 十

■ I II III IV V VI VII VIII IX X

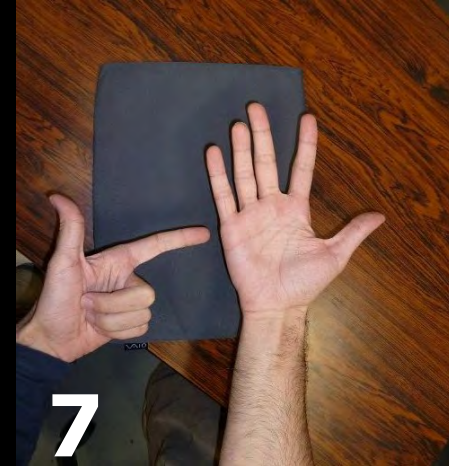
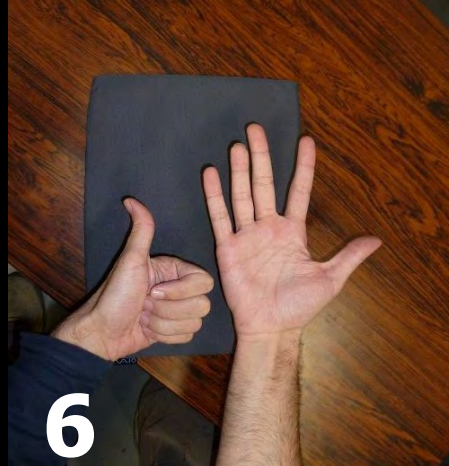
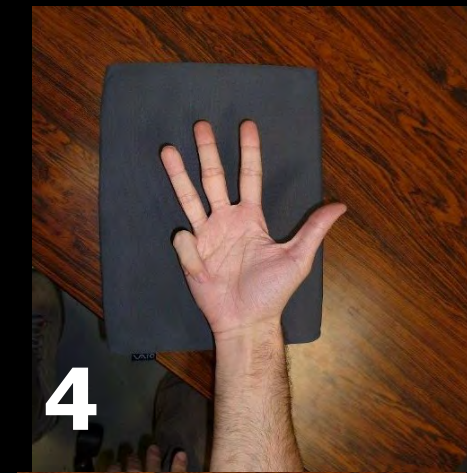
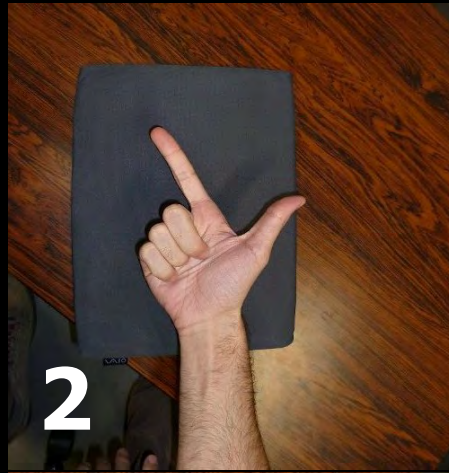
■ 1 2 3 4 5 6 7 8 9 10

■ 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

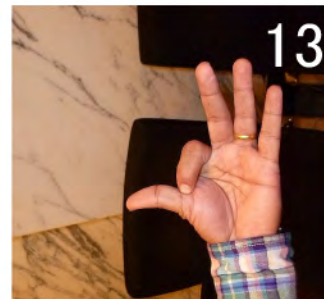
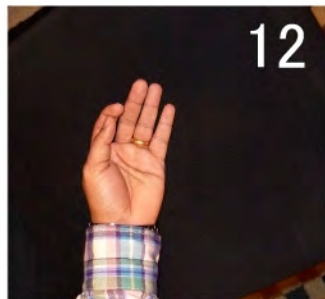
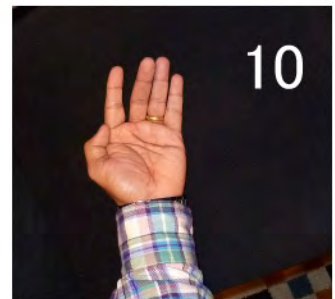
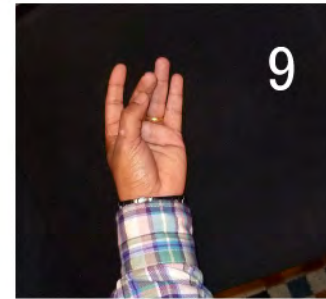
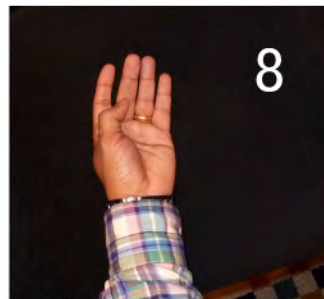
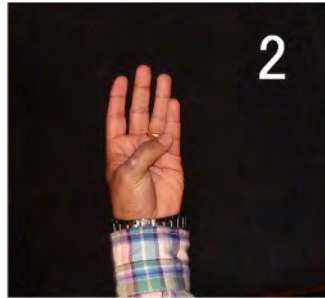


**How to count  
in France**

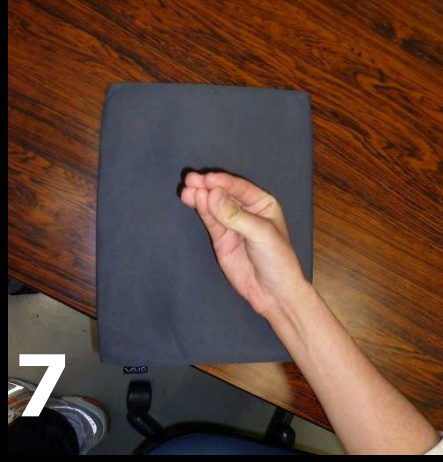
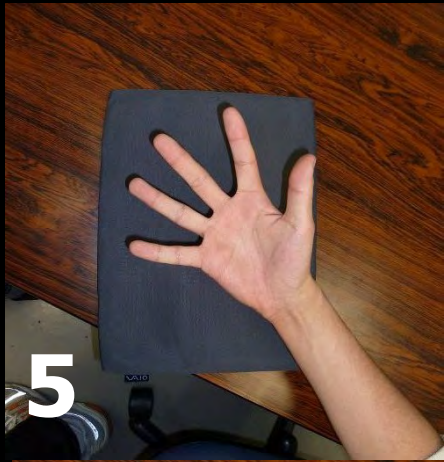
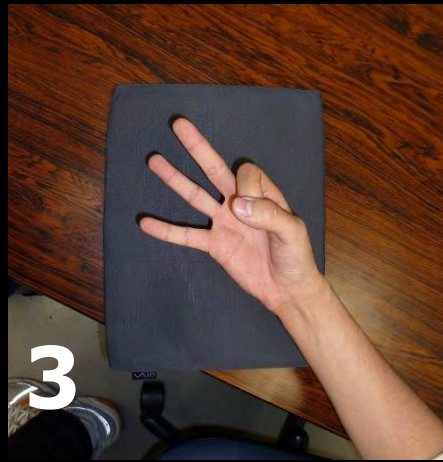
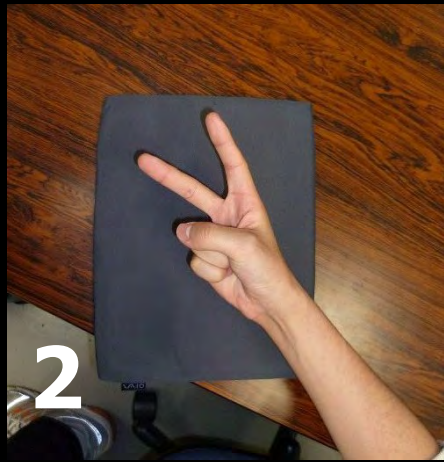
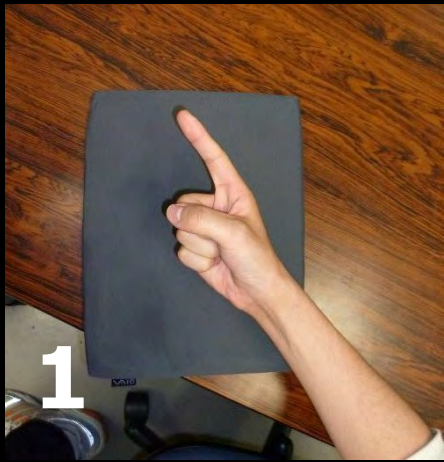


# How to count in India (1)

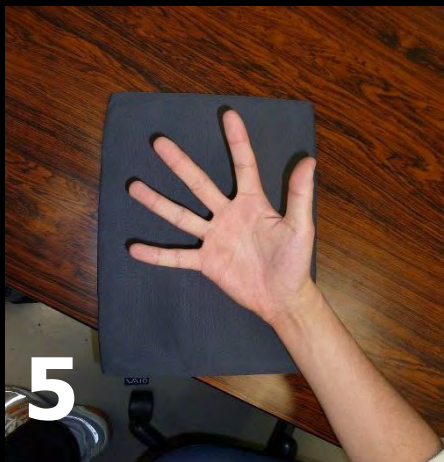
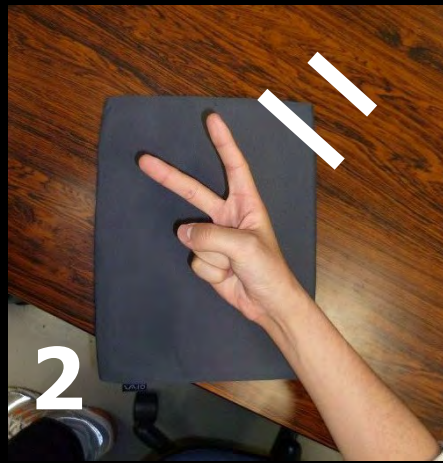
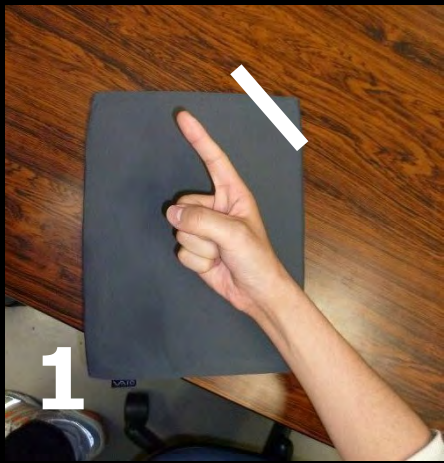
# How to count in India (2)







**How to count  
in China**



Here is my theory why!

# Implicit rules/understandings



- The Japanese 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 eight years old



@Aki City  
Kochi Prefecture  
Japan

# Endless question: What exists beyond the horizon ?

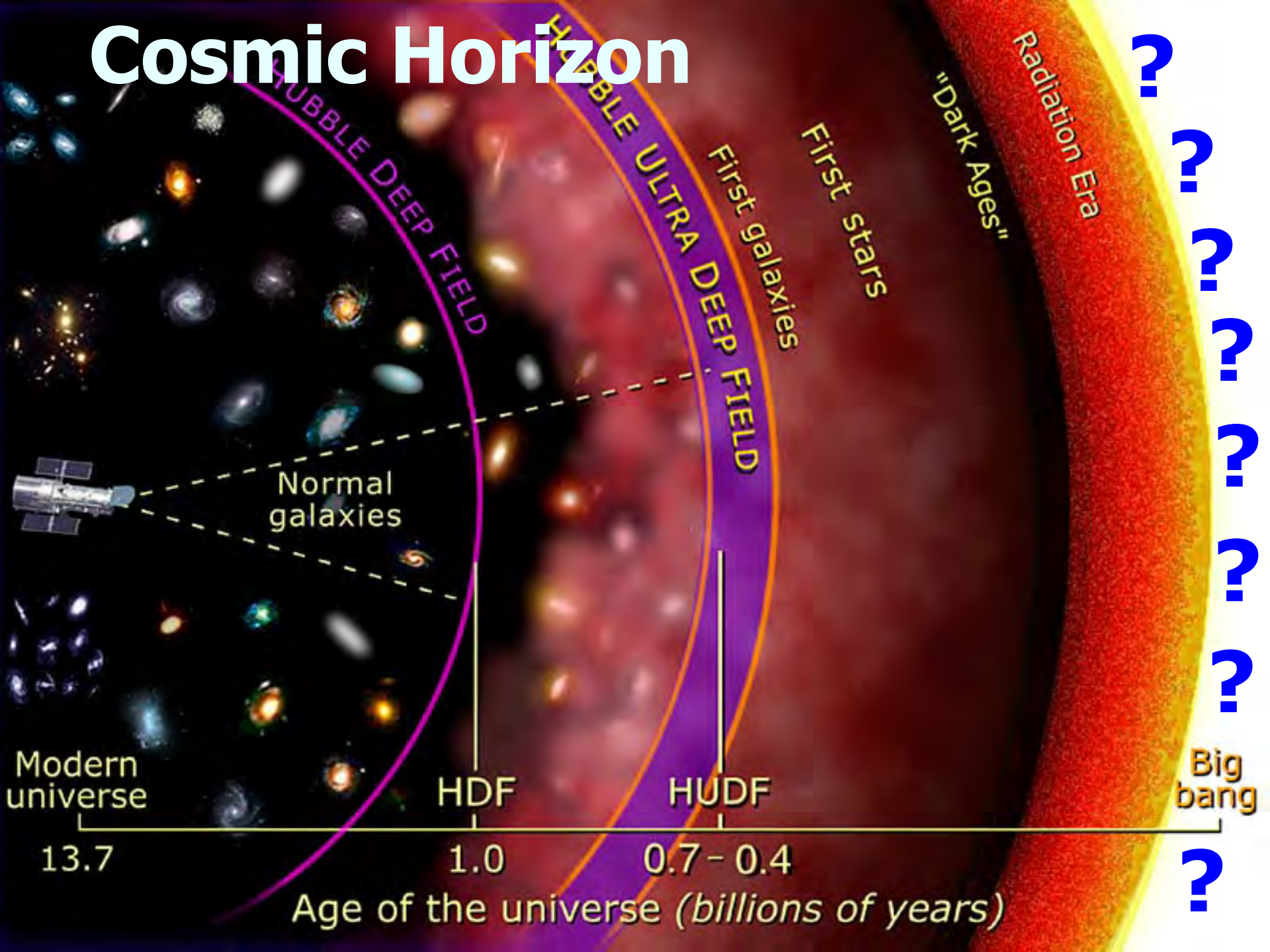


@ Honolulu, Hawaii USA

@ Nice, France



# Cosmic Horizon



# Issac Asimov (1941): Nightfall

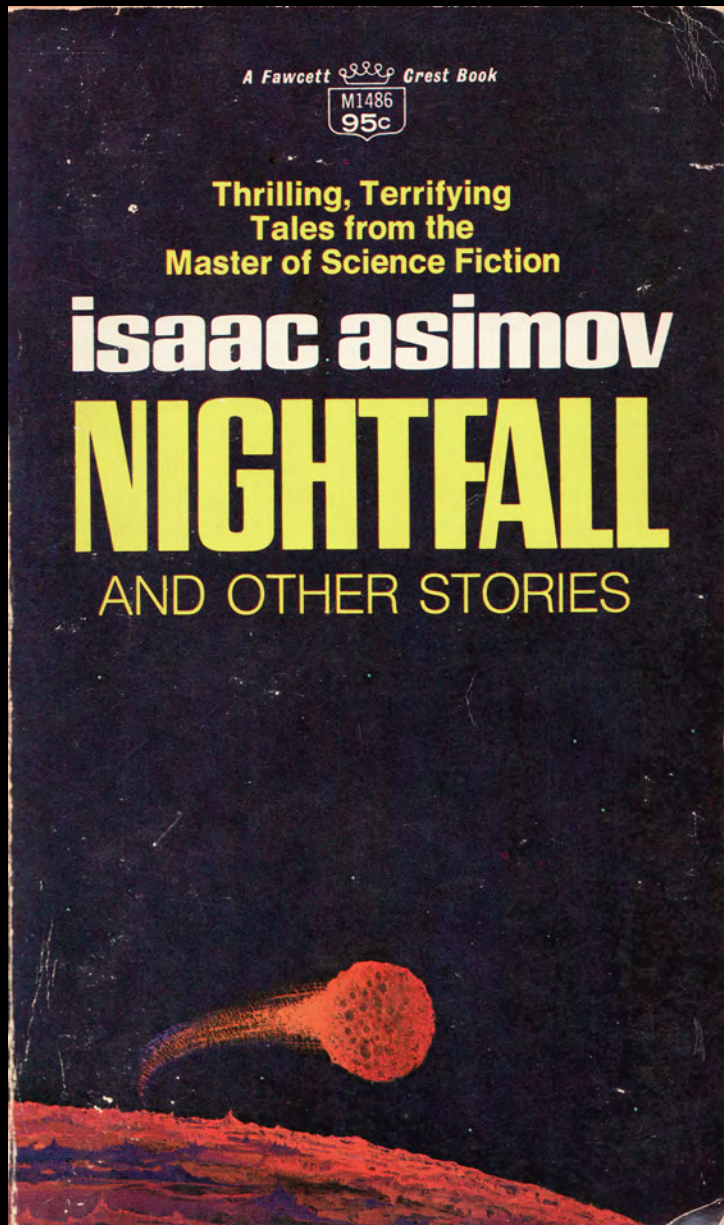


(Illustration: Alisa Haba)

- 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



- "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
  - In general, a novel environment naturally 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 congratulations for your successful career as a JSPS post-doc fellow
  - We will try our best so that you will give JSPS a big ☺ when you complete your two-year term

**Thanks!**