



SDC 2024

Architecture

Workshop

a little bit about me

South Africa

Architectural studies
and where I grew up
and worked as an
Architect

Portugal

Practical internship

Japan

Like you, I am curenly
an ALT





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Introduction to Japanese Architecture

Traditional & Modern Housing
dwellings

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Urban vs. Rural Homes, your context

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Harmony with the natural,
Minimalism & Multi-Functional
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01

The Built Environment

A brief historical point of view



Introduction

What makes Japanese architecture unique?

How has Japanese architecture evolved and influenced modern homes today



Evolution of Japanese Homes

Jomon period - 300BC

Pit dwellings

Oval/rounded shape

Protection from elements

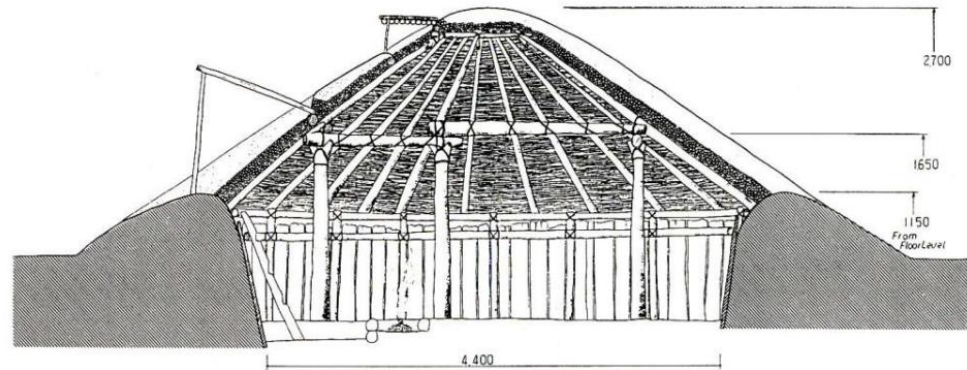



Figure 2. Building P504.C - Section (North-South-East)



Jomon ruins and reconstructions you can visit

- Matsurokan Museum- Fukuoka
 - Fukui cave -Northern Sasebo
- 



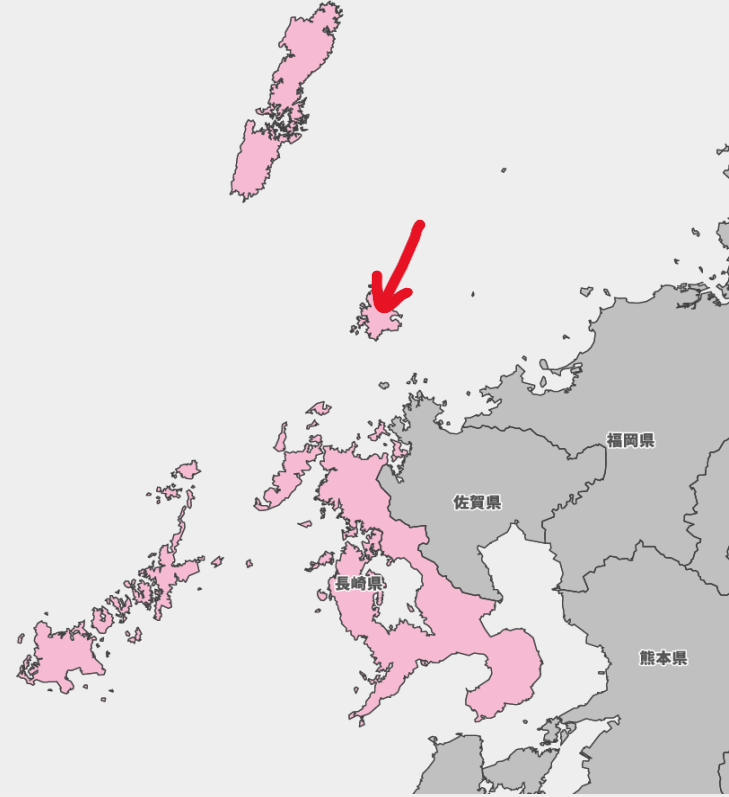
Yayoi Period 300BC – 300AD

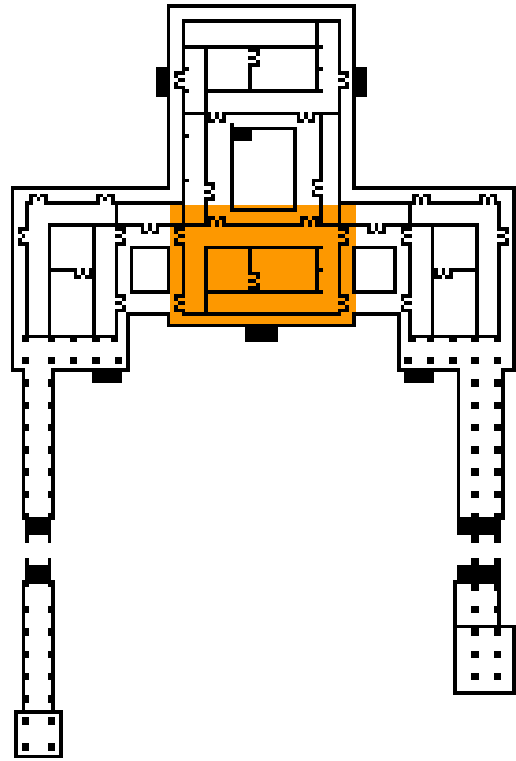
Raised-floor houses made of wood and thatch, designed to protect food storage and people from flooding



Yayoi Period ruins and reconstructions you can visit

- Harunotsuji Ruins – Iki island





Heian Period



- Nara is the capital, Horyuji temple is constructed
- Use of **wooden pillars**
- **Tatami**

EDO

Raised-floor houses made of wood and thatch, designed to protect food storage and people from flooding



The Kura Storehouse



Meiji

Focus on “western” architectural tradition

Use of brick and large scale mass production of building parts

Cheaper metals are now more common in construction of homes





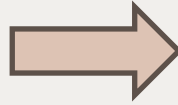
The blend of the old and New



Timber framing



Timber joints



Timber joints



Interior timber maintenance

Filling on painted timber

Teacher-housing and timber framing

Can you pins things into your walls?



A Look at tatami



- Tatami as a traditional unit of measurement (1 tatami mat \approx 0.9m x 1.8m).
- Major influence on room size



イグサ

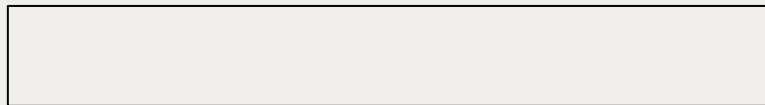
Woven layer outer layer of tatami

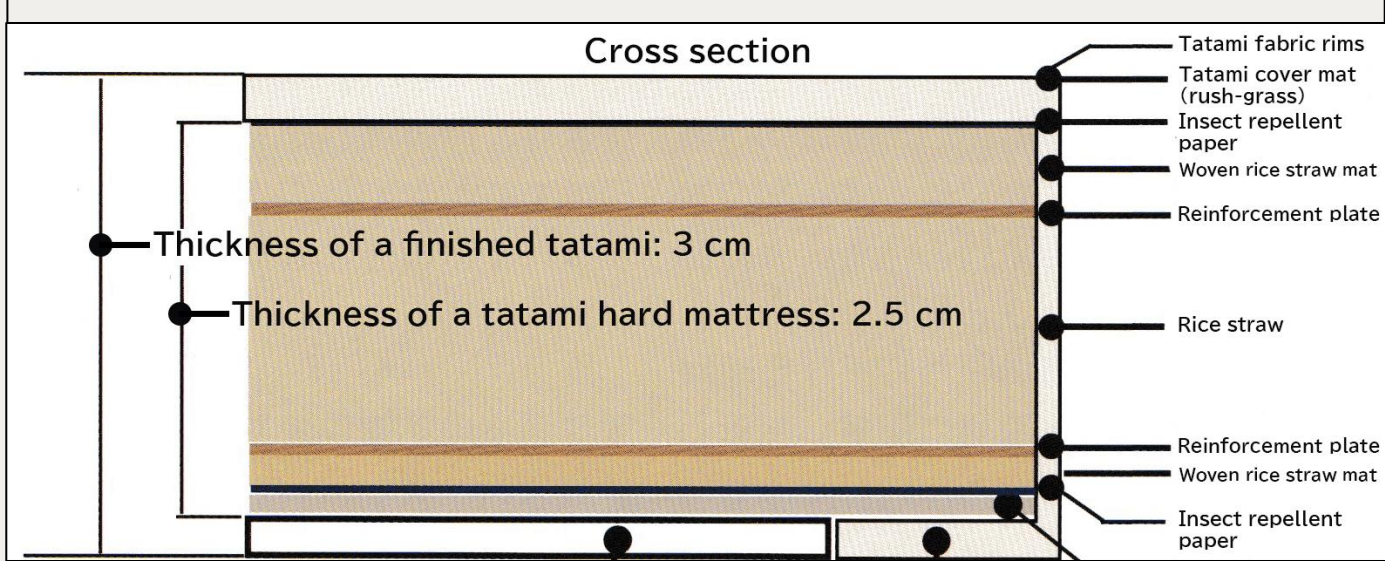
85% is produced in Kumamoto





Woven rice straw





Toko Omote heri

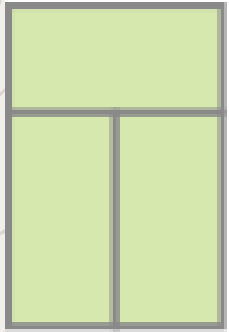
Tatami maintenance

- Traditional tatami needs to be aired out
- How to lift your tatami
- Keep dry
- Pest control

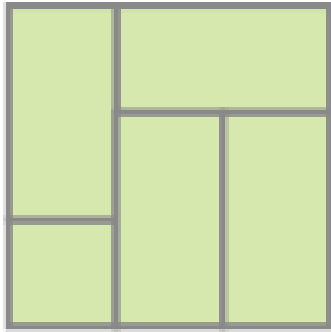


畳の敷き方

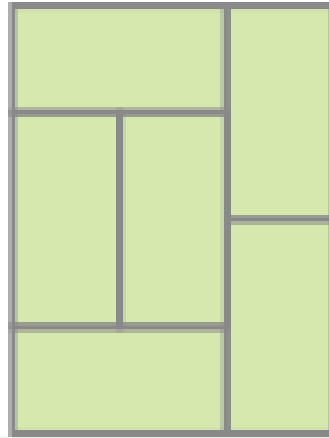
3畳



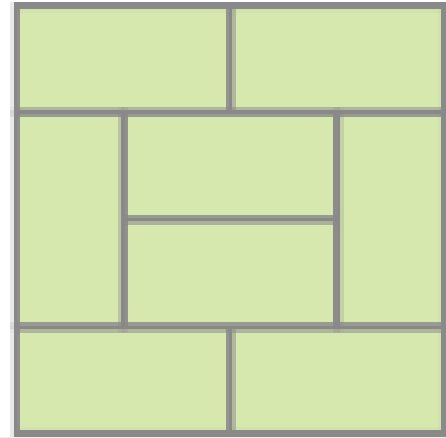
4.5畳



6畳



8畳



Tatami Counter

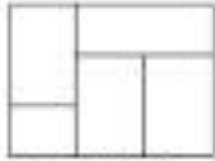
Tatami joints



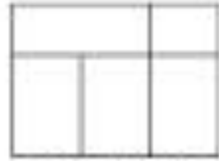
3段祝儀敷き



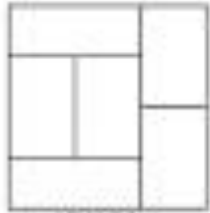
3段不祝儀敷き



4.5段祝儀敷き



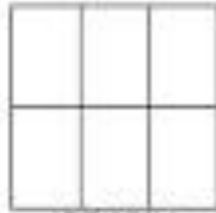
4.5段不祝儀敷き



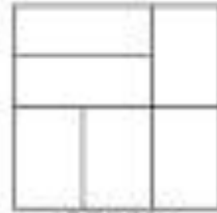
6段祝儀敷き



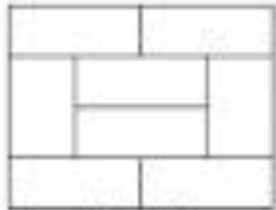
6段不祝儀敷き



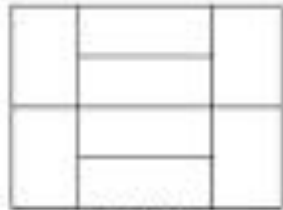
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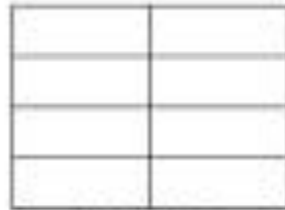
6段不祝儀敷き



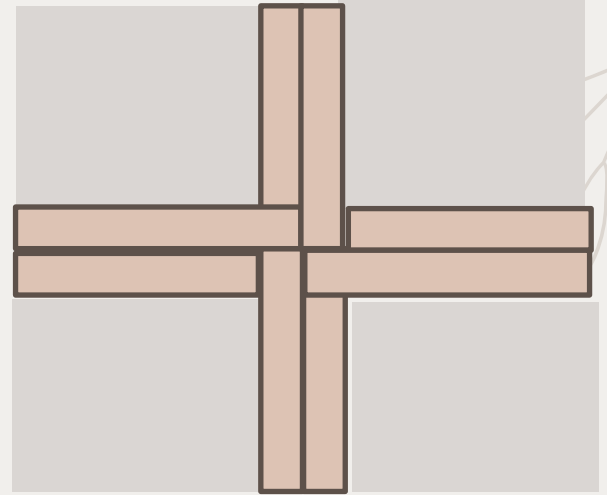
6段祝儀敷き



6段不祝儀敷き



6段不祝儀敷き



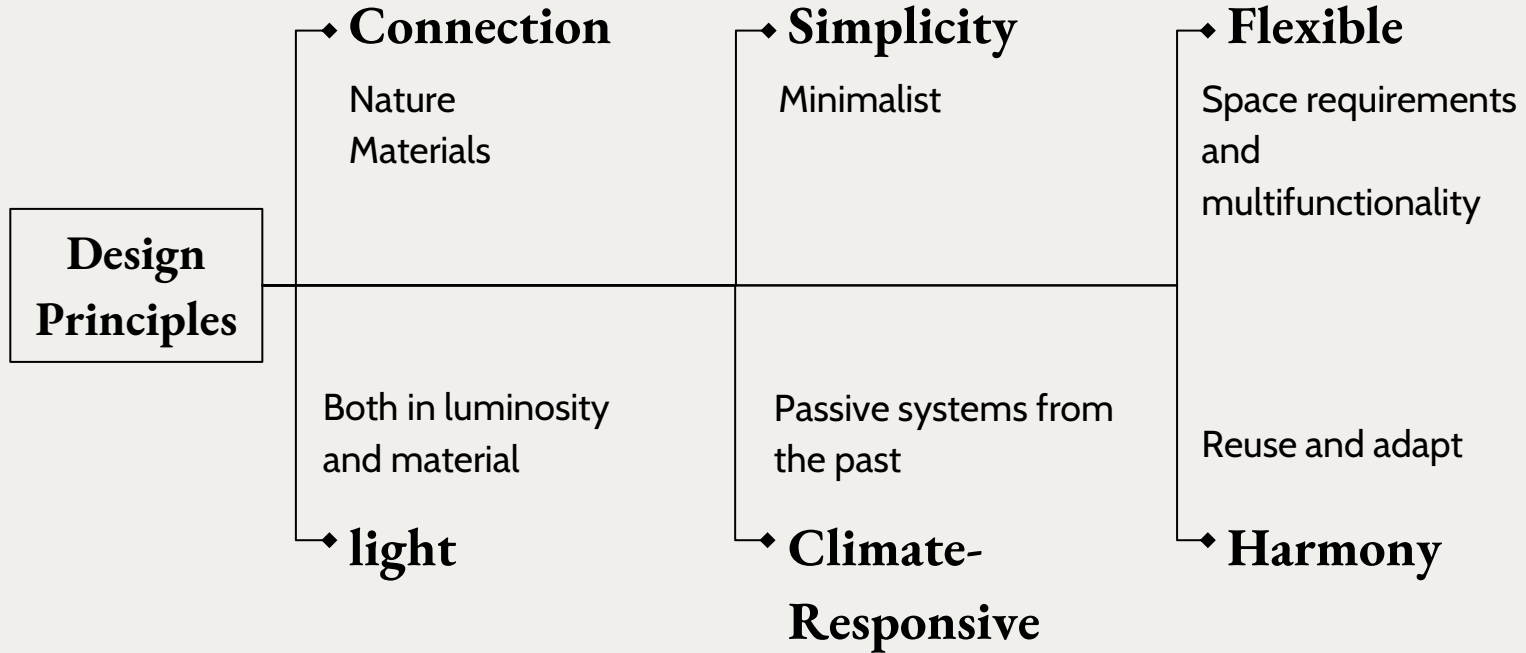


Okinawa tatami

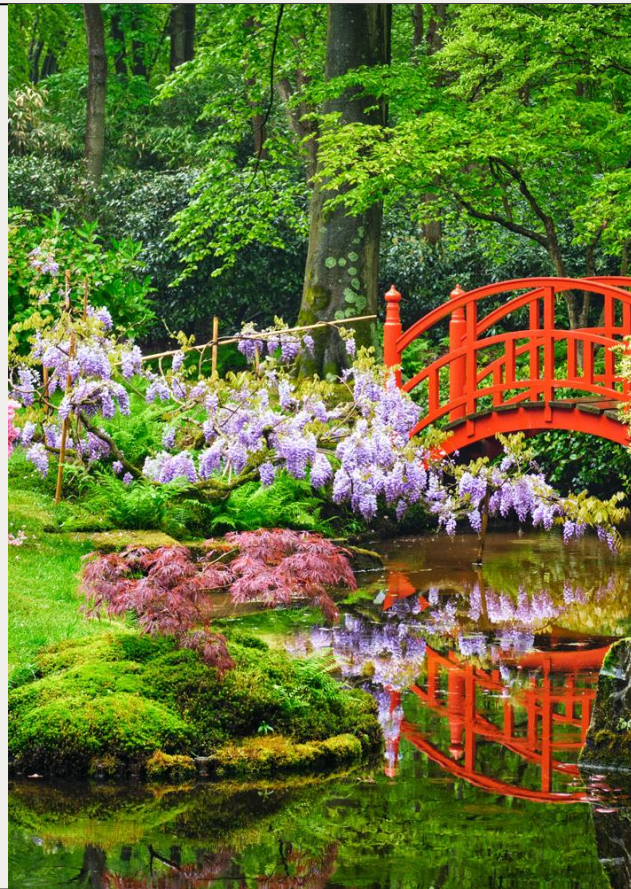
What's underneath your tatami?

- Timber joists/
- Concrete





Connection



Simplicity





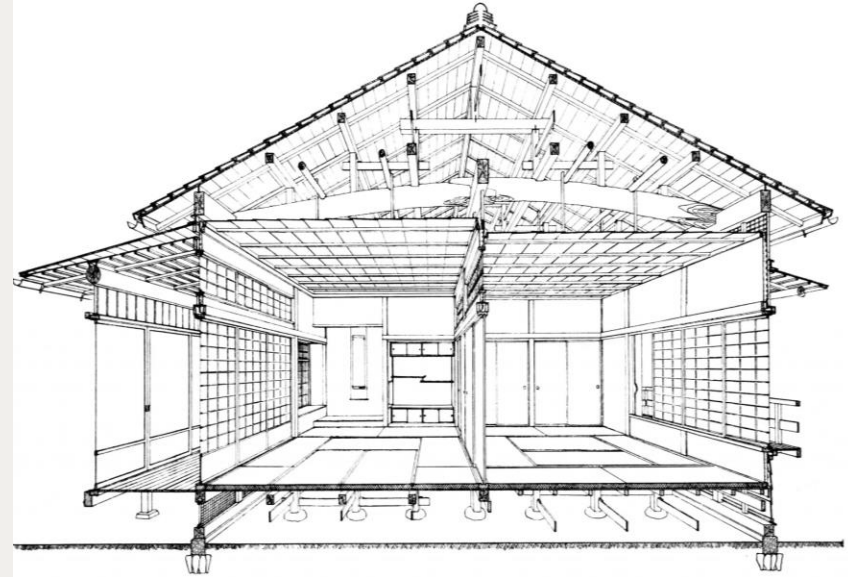
When you look at Japanese traditional architecture, you have to look at Japanese culture and its relationship with nature. You can actually live in a harmonious, close contact with nature - this very unique to Japan.

—安藤忠雄, Tadao Ando

Flexibility



Light



Climate response



Workshop portion!

Lets design our own Apartment

Analysing Your Space

Objective:

Explore your chosen apartment layout and identify unique features and challenges.

Discussion Points:

- Consider how you currently use similar spaces in your home.
- Identify challenges in the example floor plan and at home such as:
 - Limited space, room shapes, access to light and ventilation
- Reflect on how design principles can address these challenges:
 - **Multi-purpose rooms:** Transform spaces using features like futons or sliding doors.
 - **Natural light:** Strategically place furniture to maximize light or shade.
 - **Minimalism:** Create serene, clutter-free spaces that feel functional and inviting.

Designing Your Space

Activity Using modular furniture cut-outs, design your apartment/home layout.

Consider:

- **Space-saving techniques:** Use compact or foldable furniture or movable pieces.
- **Multi-functional furniture:** Think of items like storage beds or tables that double as desks.
- **Japanese elements:** Include tatami mats in logical arrangements, shoji screens between rooms, or genkan (entryway) features.
- **Personal style:** Blend this apartments aesthetics with your favourite furniture pieces or elements from your home or dream home.

Storage Maximize space with features like deep closets, modular shelving, or hidden compartments.

Additional Challenge (Optional):

Incorporate outdoor features, such as balconies or gardens. Think about adding plants or seating to connect the indoors with nature you are welcome to draw in balconies on the base pan and outdoor elements on the sticker paper provided.

Area

Genkan
(Entrance Hall)

Closet

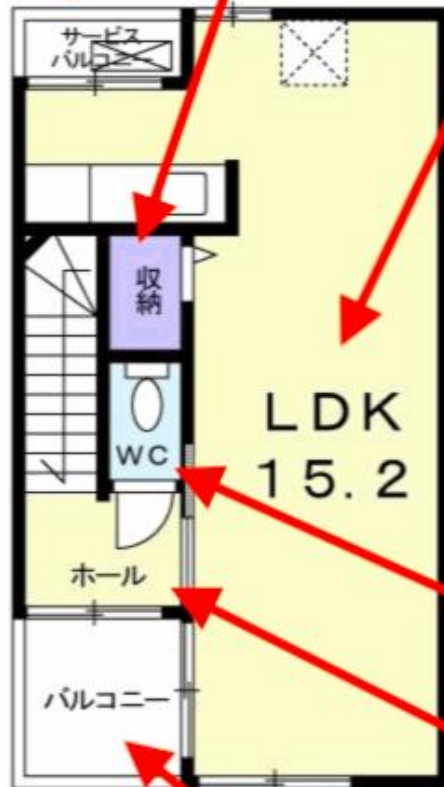
Hallway

Walk-in-closet

Powder Room

Western-style
Room

Bath/Shower

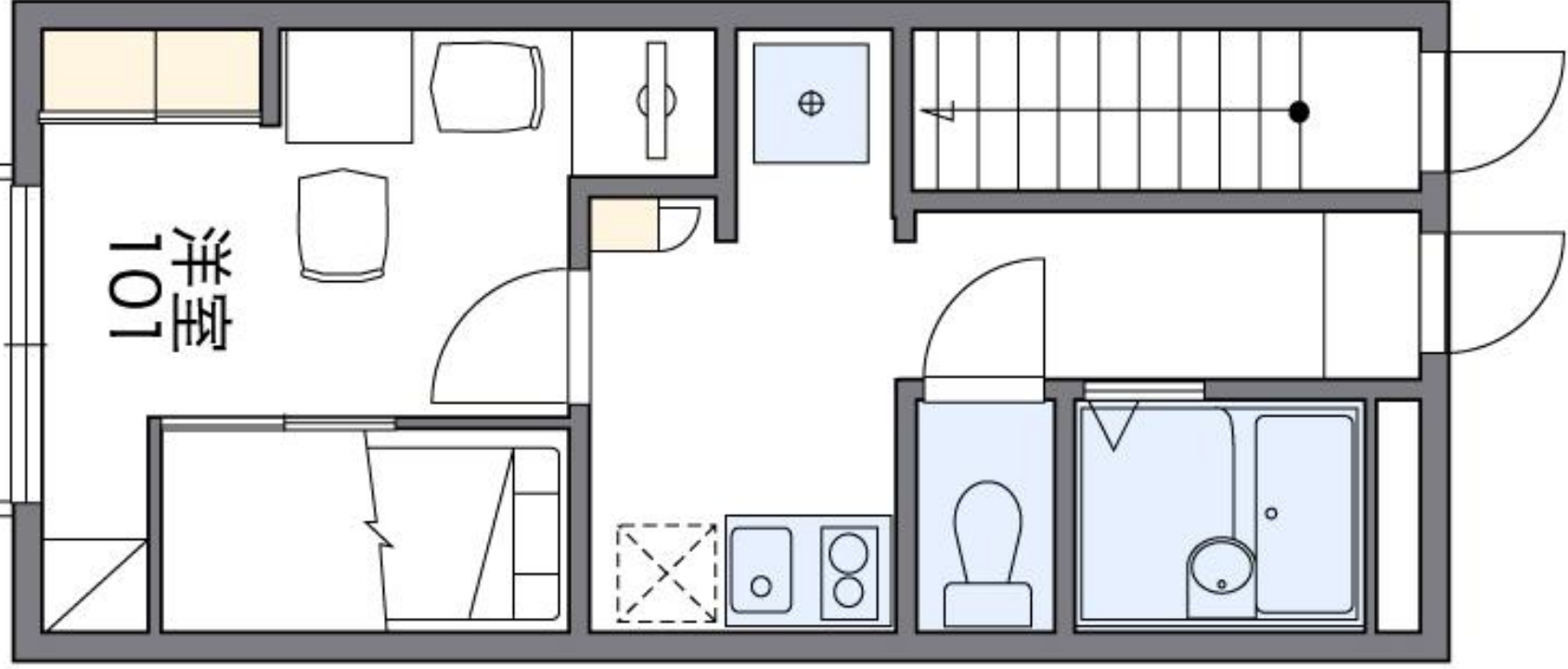


Toilet

Hallway

1F

洋室
101





Thanks!

Four Facets of Contemporary Japanese Architecture. (n.d.).
In MOOC edX コース「現代日本建築の四相」Xシリーズ
スタート. [https://learning.edx.org/course/course-
v1:UTokyoX+UTokyo005x+2T2023/home](https://learning.edx.org/course/course-v1:UTokyoX+UTokyo005x+2T2023/home)

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