

DRAW YOUR FASCINATION

In case of loss, please return to:

Quentin Dupont



Suisse

1'

As a reward: \$ Gratitude

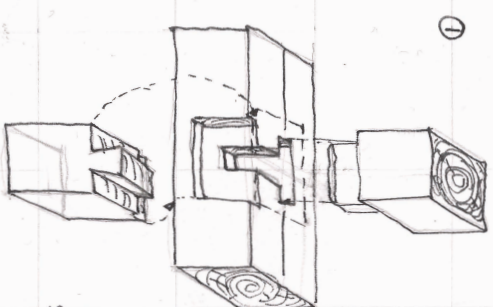
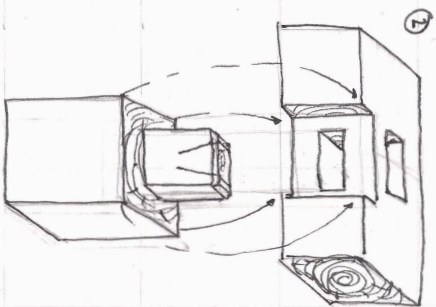
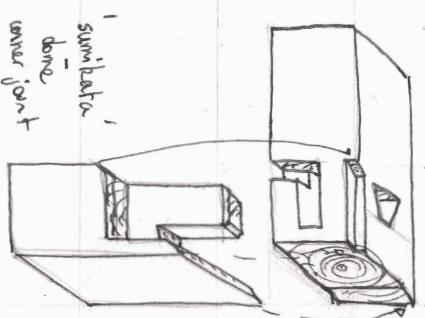
une etude de la modularite et
de la standardisation dans
l'espace domestique
traditionnel japonais.

a study of modularity and
standardisation in Japanese
traditional domestic space.

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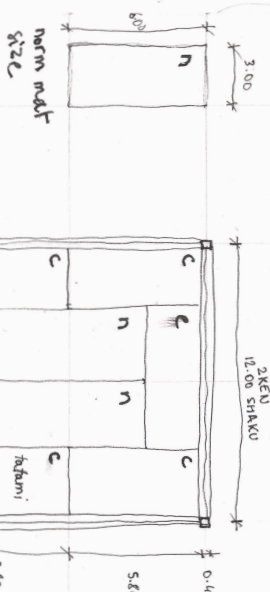
DRAW YOUR FASCINATION



As the dimension between columns is a common one and the repeating of it an array, the structural is the successive addition of it's structural path and doesn't need to be longer or bigger.

A simple hand drawing of the future space is sufficient enough in order to produce the structural question and can be polarized.

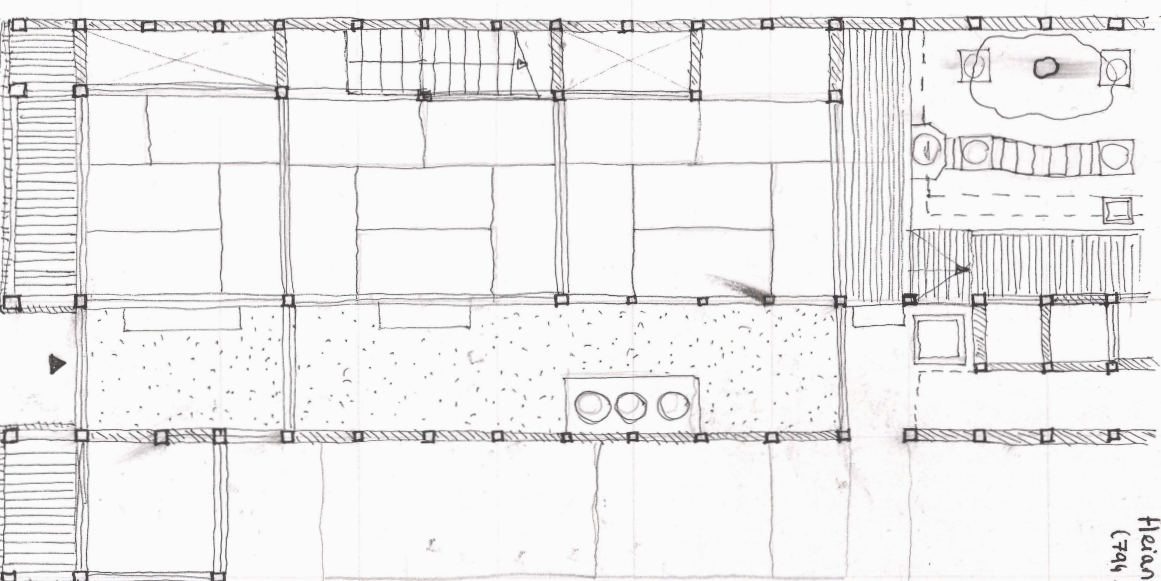
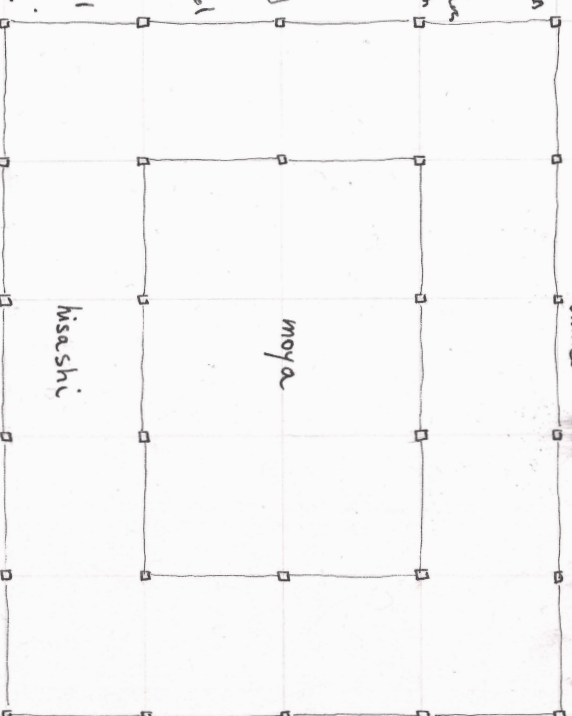
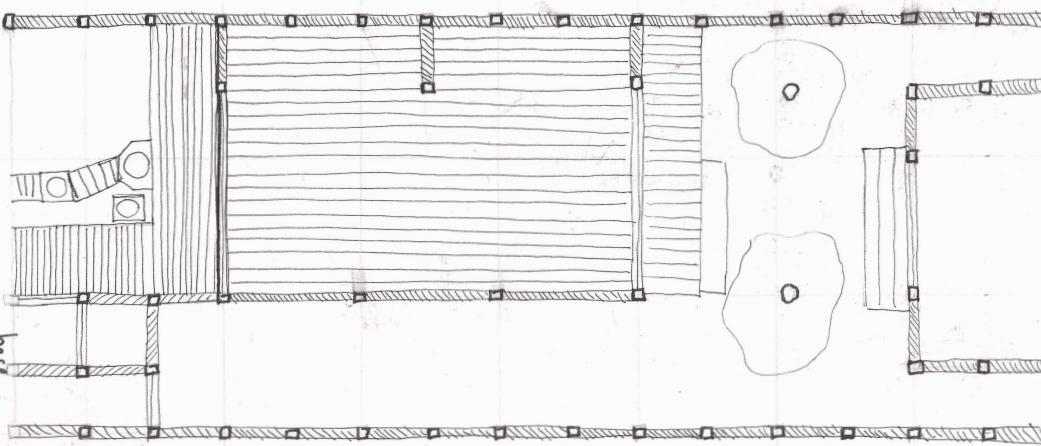
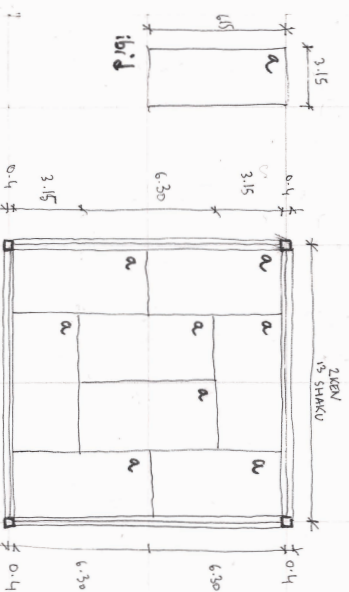
We can see with these drawings basic structural joints which are repeated through one construct.



Mat size depend and determined by building type or locality

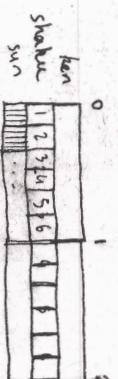
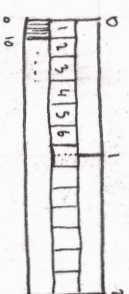
Also determined by the distance between the structural grid (ben)

$\frac{1}{4}$ 0.4 2.0 6.00 2.50 0
 inaka = max size of the taxon
 adapt to ben grid



Nara-machi. Koshi-no-ie town houses which saved both Nachiya are the old urban as a residence and a shop. It is built long narrow mostly because the tax for residence is calculated with the width of the building but also for the inhabitant to look on the street, like the lattice work shutter show on the bottom of the drawing. The men here play a valuable role of both allowing to build for residing and a shop and to loan it together seamlessly.

Hence the depth of building help with the transition of public to private and庭園 gardens give enough light to the spaces.

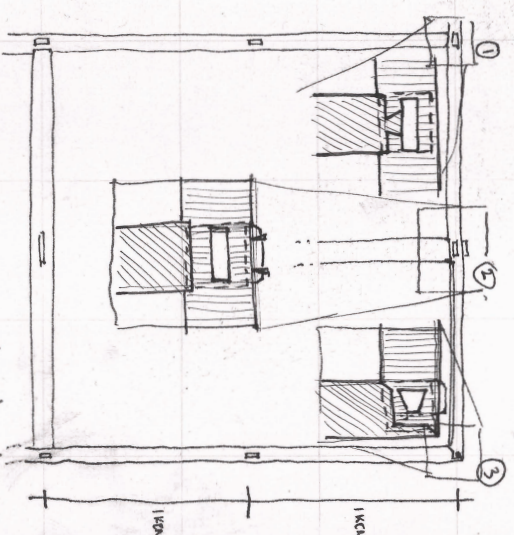


inaba-ma hen

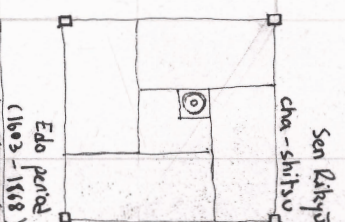
At first, the run was related to the distance between the center of two columns.

Two different systems created and derived for specific conditions and locations.

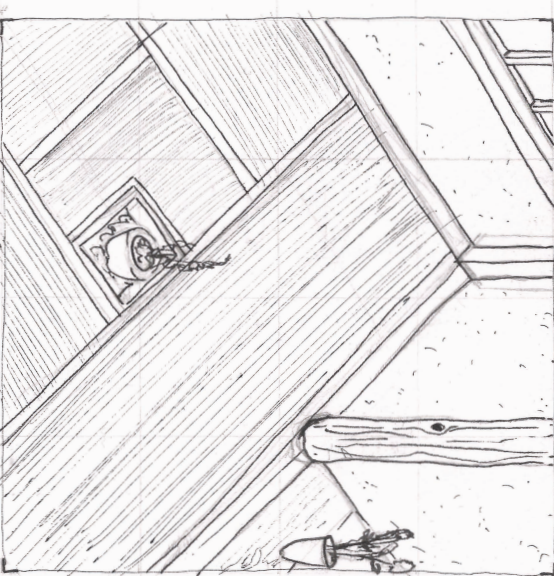
Present time only the
inakana - ma hen of
6 shakha is in the official
"measure" (1,818 mm.)



The construction and the elements of the building is dimensioned according to the basic modules round bihari. Thus the ker module is also determined by the economic division and material disposition for the construction. For example a column section is generally 45 cm. (a 120 mm.)

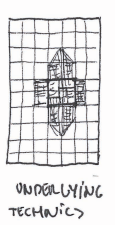
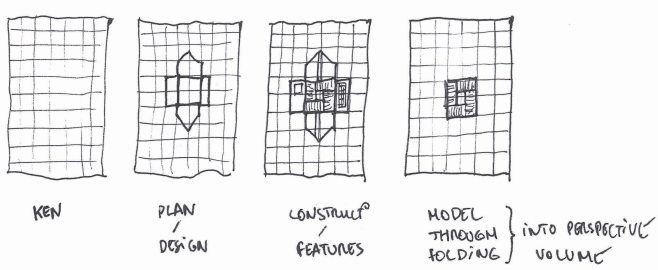
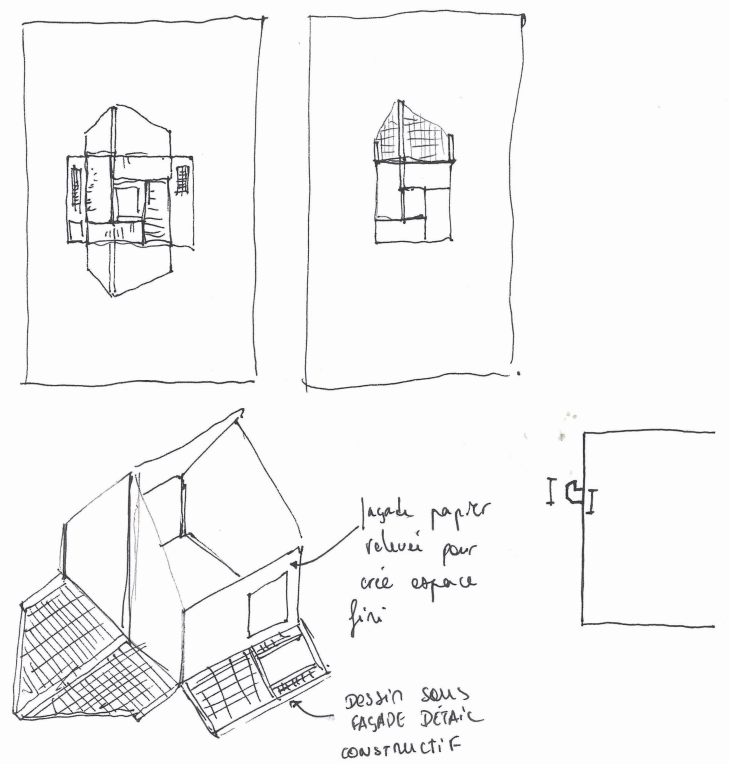


TEA
ambitious
to develop a small space
based on the lifestyle of
a British figure of that
period. An eclectic space
in which the guest can
be captivated and joins on the
tea ceremony only achieving a
lot of relaxation.



STANDARDIZATION IN TRADITIONAL JAPANESE ARCHITECTURE

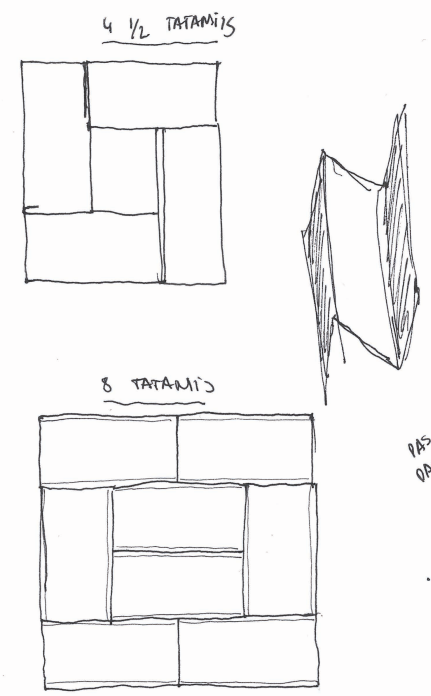
OKOSHI - EZU mappe le papier utilise par les charpentiers à mener sur les chantiers.



WHAT? WHICH PLANS TO SHOW / BUILDING ?

→ THE IDEA IS TO SHOW ARCHITECTURE THAT EXPLAINS HOW STANDARDIZATION IN TRAD. JAPANESE ARCHI. ENABLES A MULTITUDE OF SPACES

→ MOSAIC BUILT AROUND ONE SPACE ?



→ CLASSIC RECEPTION ROOM FOR TOWN HOUSES / FARM HOUSES / NOBLE HOUSES ...

→ COULD HAVE THE PLAN INTEGRATED INTO ITS PLAN ?

DO I REPRESENT AN ENTIRE HOUSE OR A FRACTION OF IT ?

→ THE PROS OF SHOWING IT OFF IN ITS TOTAL IS THE UNDERSTANDING OF THE GENERAL VOLUMES AND UNDERSTANDING THE LINK WITH THE WHOLE.

→ CONS : DON'T UNDERSTAND THE POSSIBILITY AND NUMBERS OF FORM AND APPLICATION. COULD BE SOLVED IN AN OTHER WAY.

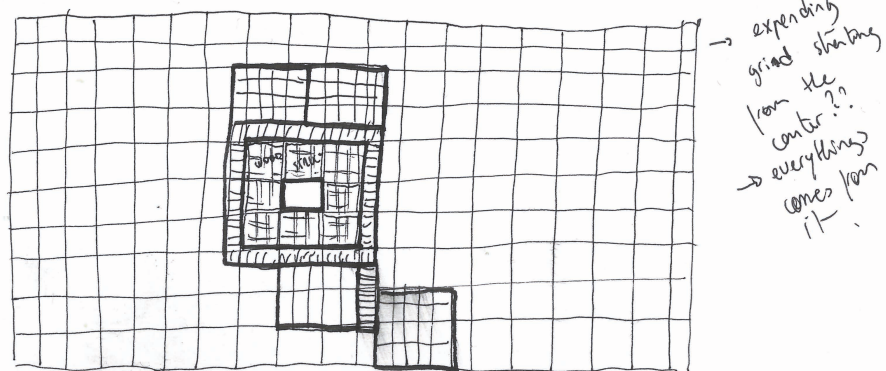
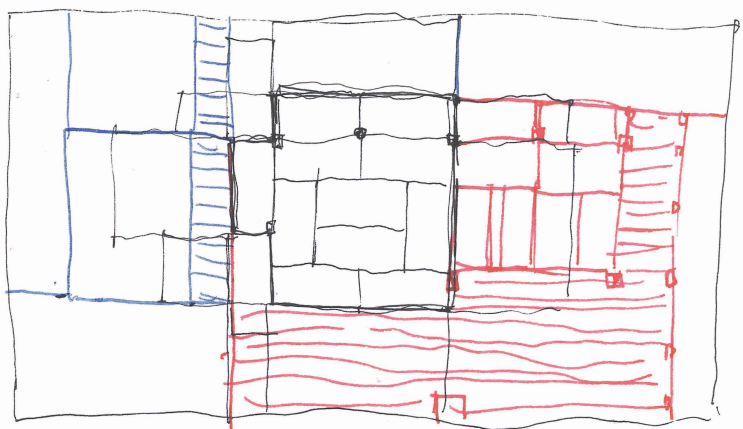
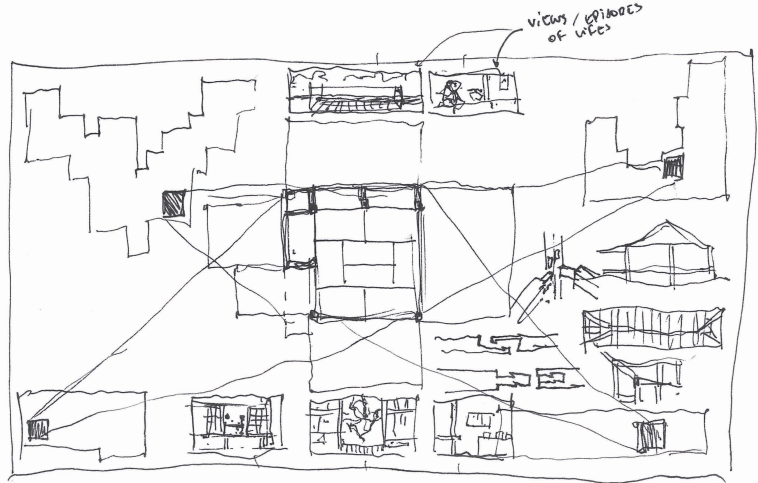
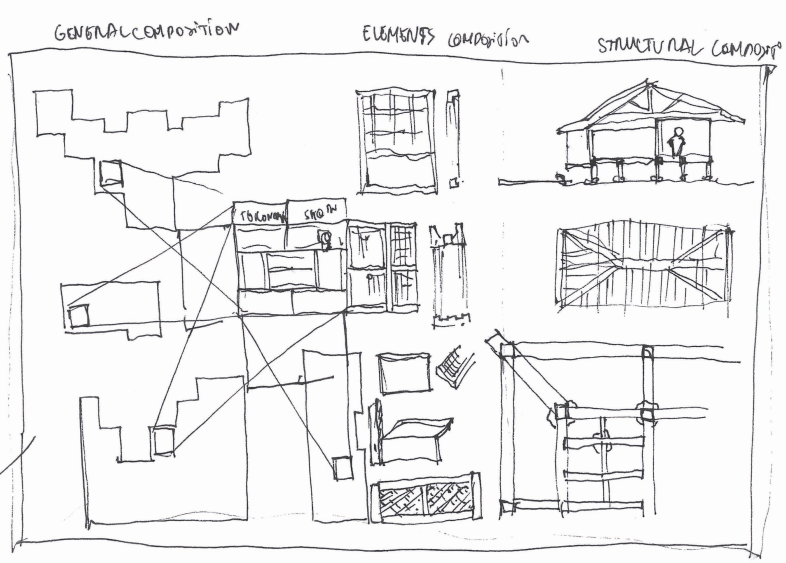
WHAT DO I WANT TO SHOW ?

→ DIFFERENT BUILDING TYPE THROUGH PLANS • SCALE, SIZE, FORMATION, REPETITION, GRID...

→ A ROOM THAT IS COMMON TO ALL OF THEM AS PART OF THE CULTURE.

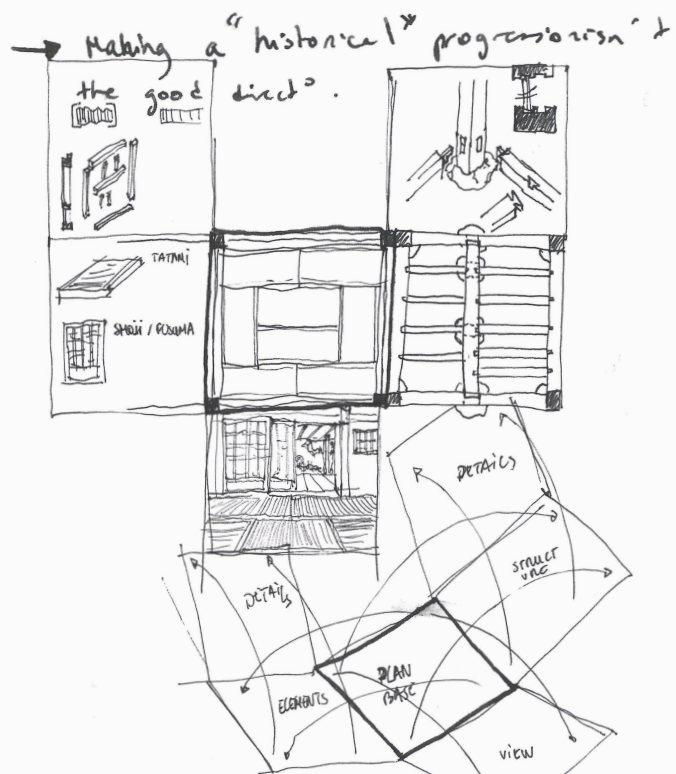
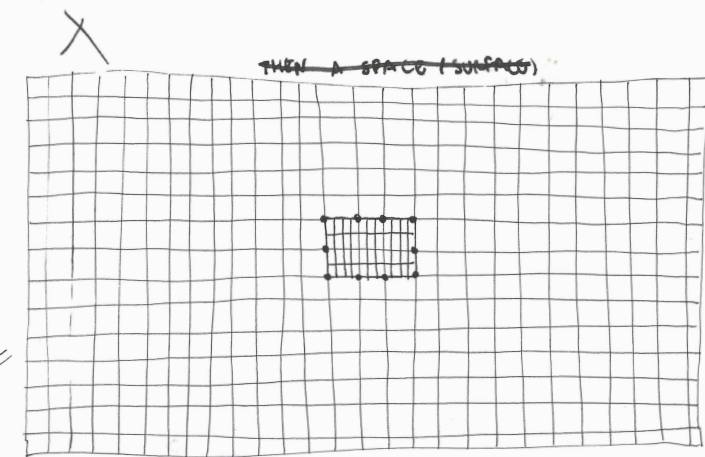
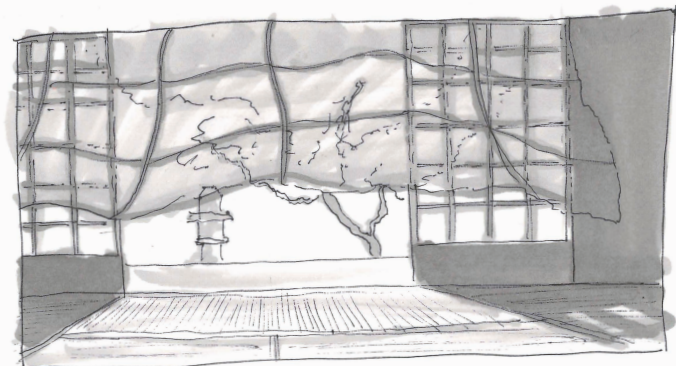
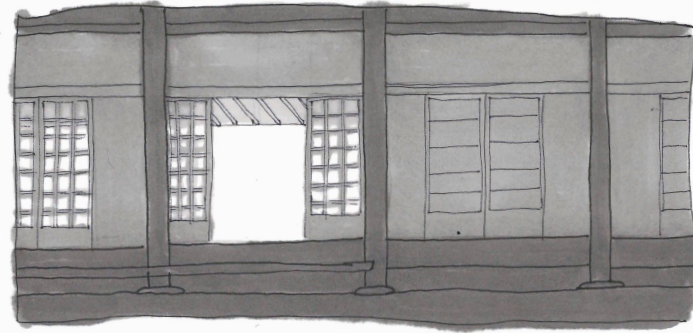
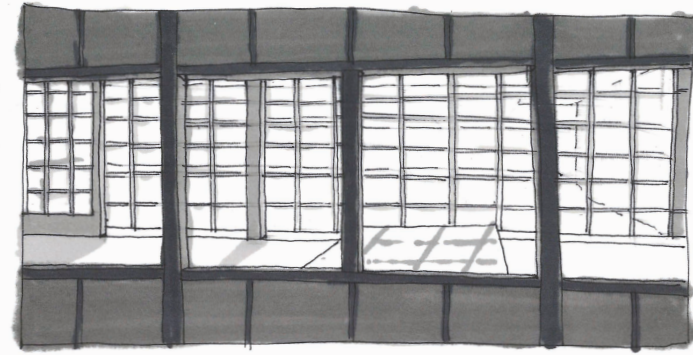
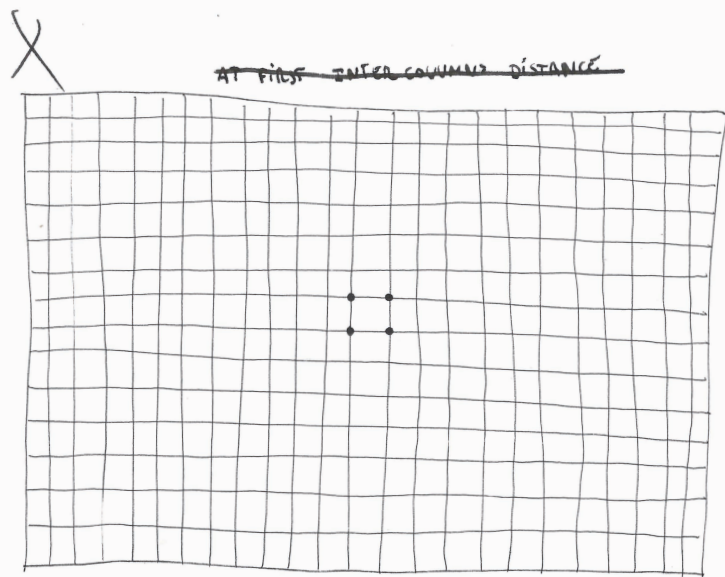
→ HOW IT IS MADE • JOINERY, DIMENSIONS, MATERIALITY, ELEMENTS

→ HOW IT TALKS ABOUT HOW PEOPLE LIVED THE PLACE ? • FURNITURE, TEA CEREMONY, GARDENS, ...

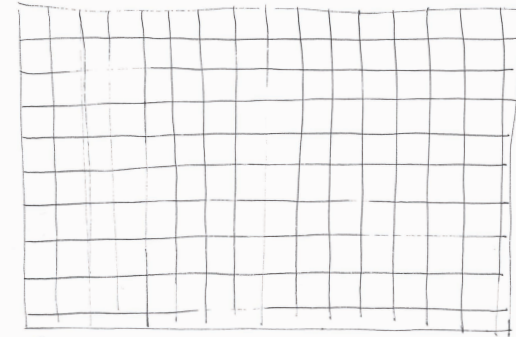


CONCLUSIONS & OBJECTIVES

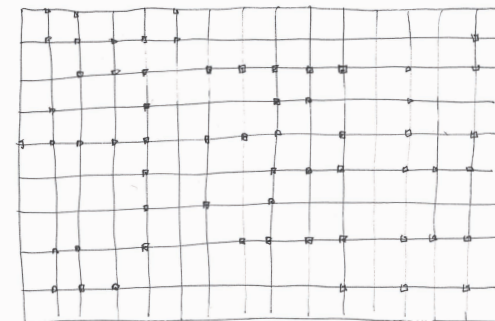
- THE GRID SHOULD BE MORE THE STRUCTURAL SUPPORT AND LINK OF THE DRAWING INSTEAD OF JUST A DRAWING'S GRID.
- INSTEAD OF HAVING "FLYING" PLAN, ELEVATION, SECTION, ETC ... THINGS SHOULD BE MORE INTERCONNECTED.
- ACCEPT THAT YOUR WORK "SHOULD NOT" BE A DISPLAY OF WHAT IS JAPANESE ARCHI ONLY. TELL A STORY / THOUGHTS.
- MAYBE THE PAPER MODEL ISN'T MADE FOR THIS QUESTION. NOTHING SHOULD BE FORCED AS A RENDERING MEDIUM IF IT DOESN'T GO BY THE STORY.
- THE THING THAT I'M THE MOST INTERESTED IN JAP. ARCHI. IS THE ABILITY OF CREATING MOMENTS! THOSE MOMENTS SHOULD APPEAR ON THE DRAWING BECAUSE THEY ARE BEING EITHER ENABLED OR CREATED BY THE GRID.



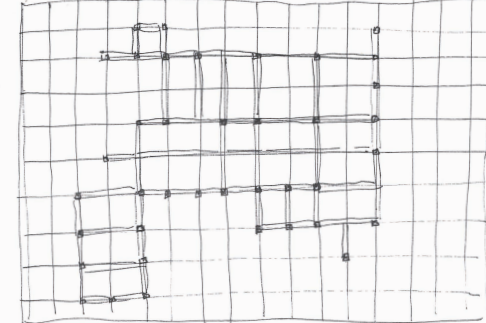
→ SAME STRUCTURE FOR ALL ELEMENTS
PEOPLE KNOW AND HOW TO FIND INFORMATION



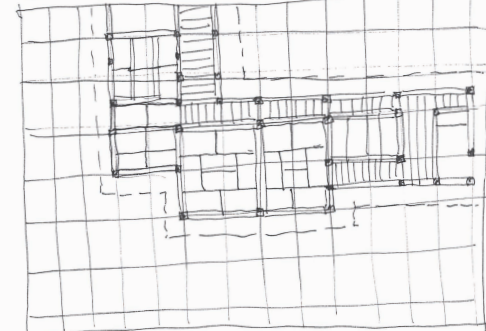
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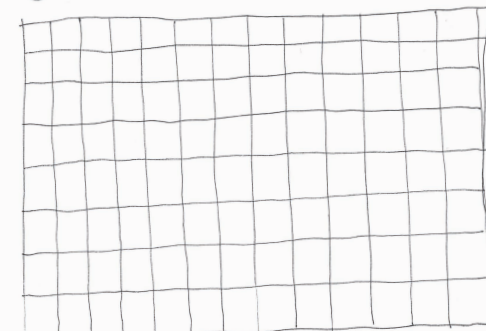
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③



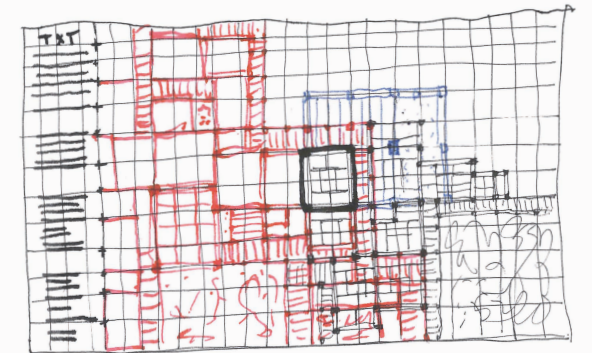
④



⑤

AFTER DISCUSSION:

- 1 - The main point of Discussion is the grid, the key.
→ the plans are not always "respecting" the grid in a sense. showing the underlying complexity.
- 2 - SMALL TEXT to introduce the drawing as if it was me.
→ giving the backstory of the drawing in order to make it understandable by others.
- 3 - the format of the render is yet to fixed in a way but the idea was pretty much AO (depending on the scale wanted for comprehension).
- 4 - MAKE A MORE INTEGRATED ~~PLAN~~ DRAWING THROUGHOUT ALL ELEMENTS.



→ PLANS ARE OVERLAPPING ON A "COMMON" ROOM:

- STARTING WITH A "MUTUAL BASE"
- EACH PLAN DEVELOPPING WITH THEIR OWN GRID
- THE FURTHER FROM THE CENTER THE MORE DIFFERENT IT IS.
- THE GRID IS A BASE FOR SPACE BUT SHOULD NEVER LIMIT POSSIBILITY.

28/11/2024

- parler de KEN en tant qu'objet
- KEN altitat° (comment représenter un lieu sensible)
- 2 planches ?
 - proportion
 - mesure



cartographier le lieu par mesure.
- chronologie à travers le temps / époques / lieux.

2 DESIRS

→ desirs thématiques par slider

Yoshie Tsubukiyon : the living skills of townhouse ~~plans~~.

CHANGEMENTS & CHANGEMENTS DE THÉMATIQUES.

→ grille plane, abstraite → dimensions → espaces et lieux verticaux.

→ de la COLORE ANCE À L'ESPACE ROUX, CARRÉ.

• KEN ABSTRACT, KEN CONCRET, COUPÉ, ATMOSPHERIQUE.

→ LANCEMENT, TOUS CES DESIRS PARTENT DE LA GÉNÉRALITÉ.

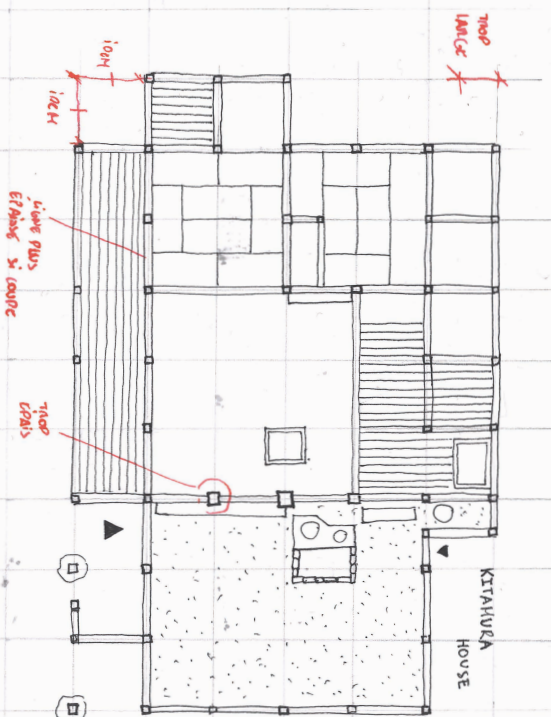
→ surprise comprise PAR LES VUES.
↳ y faire connaître / comprendre l'air parce à un univers spatial.

17/11/2024

KEN ABSTRACT

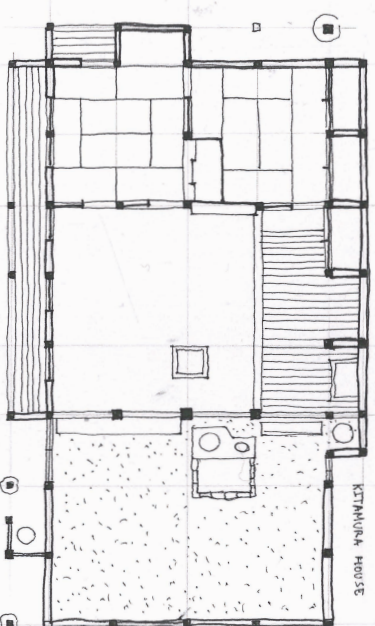


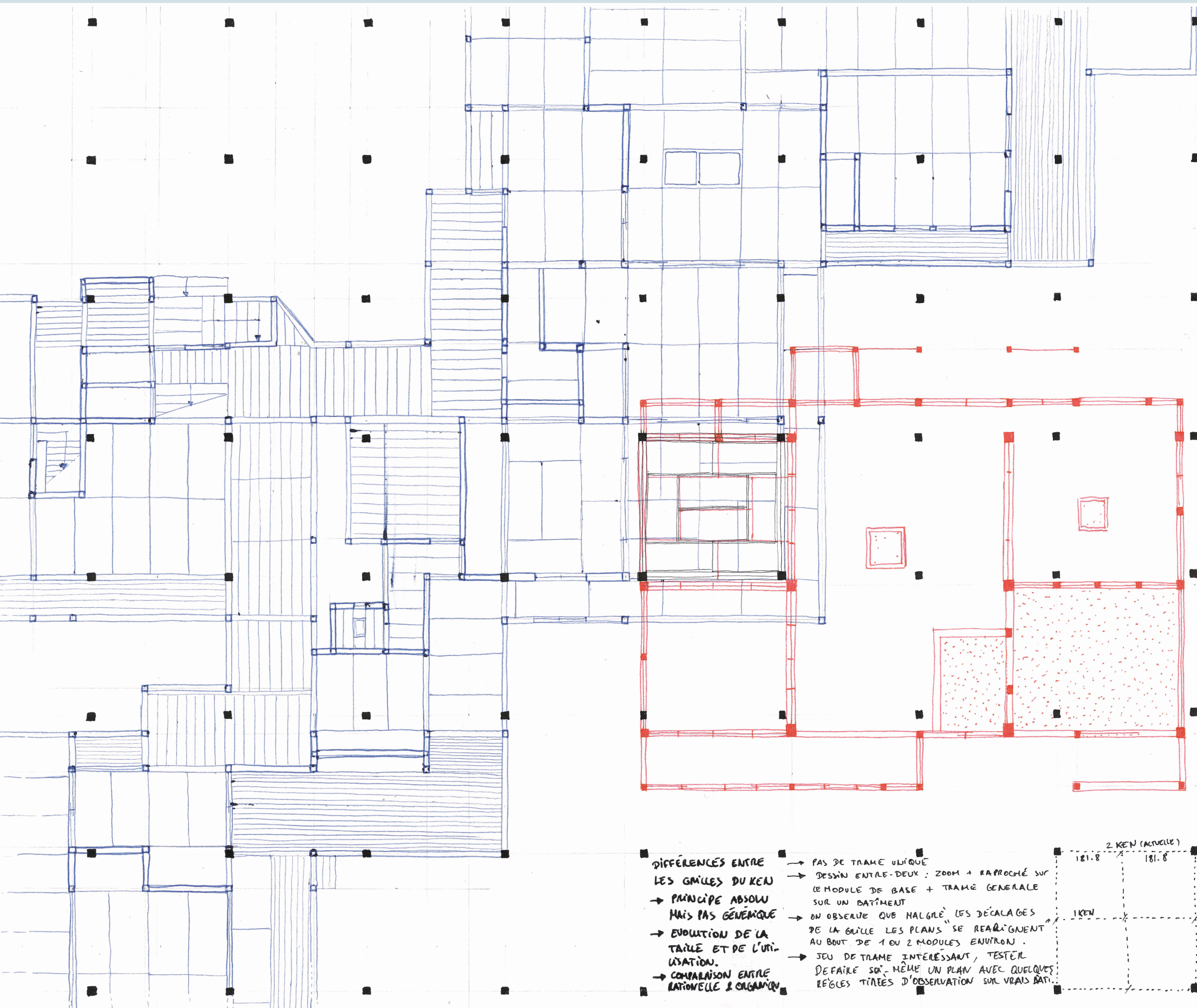
COMMENT & INTRODUIRE ? à la main de la méthodologie
→ initial / intro.



2 KEN 0.5

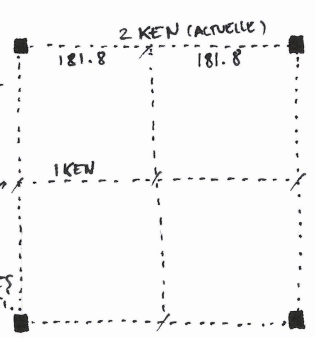
1 KEN





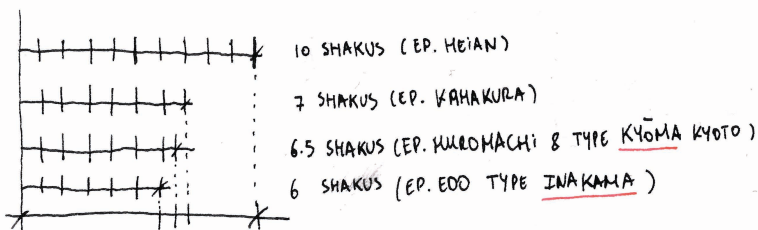
■ DIFFÉRENCES ENTRE
 LES GRILLES DU KEN
 → PRINCIPE ABSOLU
 MAIS PAS GÉNÉRIQUE
 → ÉVOLUTION DE LA
 TAILLE ET DE L'UTI-
 LISATION.
 → COMPARAISON ENTRE
 RATIONNELLE & ORGANIQUE

→ PAS DE TRAME UNIQUE
 → DESSIN ENTRE-DEUX : ZOOM + RAPPROCHÉ SUR
 LE MODULE DE BASE + TRAME GÉNÉRALE
 SUR UN BÂTIMENT
 → ON OBSERVE QUE MALGRÉ LES DÉCALAGES
 DE LA GRILLE LES PLANS SE REARROGENT
 AU BOUT DE 1 OU 2 MODULES ENVIRON.
 → JEU DE TRAME INTÉRESSANT, TESTER
 DÉFAIRE SOI-MÊME UN PLAN AVEC QUELQUES
 RÈGLES TIRÉES D'OBSERVATION SUR VRAIS BÂTI.



Ken, distance pas fixe à travers le temps

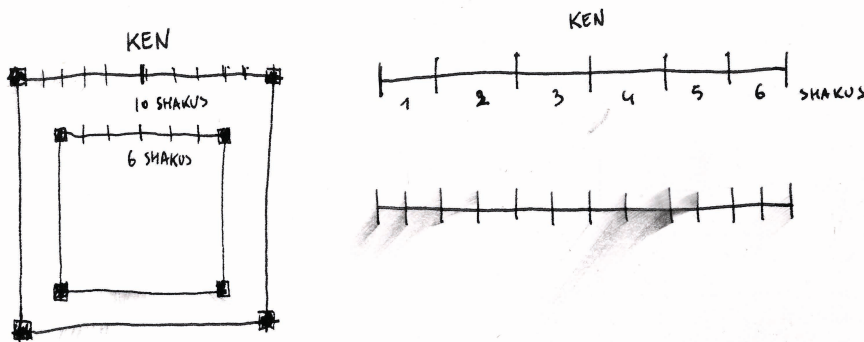
- évolution des typologies et ressources disponibles.
- la dimension utilisée aujourd'hui a été fixée en 1886 par le gouvernement à 1.818 m par KEN.



Evolution du KEN.

L'évolution n'est pas proportionnelle au progressive, cependant la dimension le dénominateur commun est le shaku (~30.303 cm). le shaku vient du système chinois et mesurant 1.17 fois plus grand que maintenant.

- Dans l'autre moitié du moyen-âge (époque HEIAN ~) les japonais introduisaient le ken, remplaçant le jō dans l'utilité domestique car celui-ci était trop grand, le ken étant plus proche et plus en relation avec les dimensions du corps humains. (le jō reste utilisé dans l'urbanisme et même des champs).



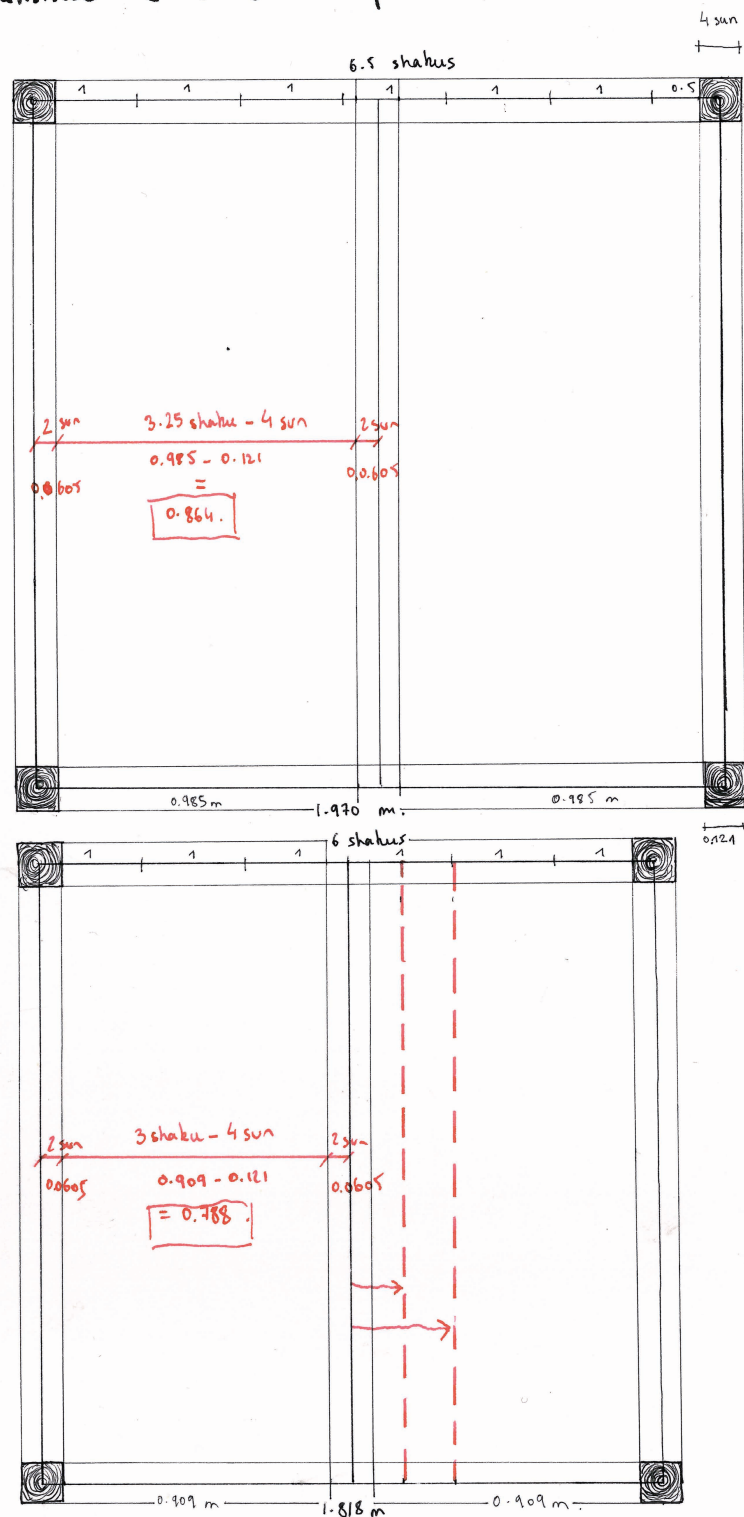
- le KEN désignant une distance mais aussi un espacement entre deux éléments structurels (poteaux), il porte de sa logique constructive et spatiale. Il est majoritairement le fait des charpentiers.

Même aujourd'hui des kens subsistent :

- le KEN des villes, kyō-ma et inakama,
- le KEN des campagnes, kyō-ma.

THE DIFFERENCES BETWEEN THE TWO IS WHERE THEY ARE USED

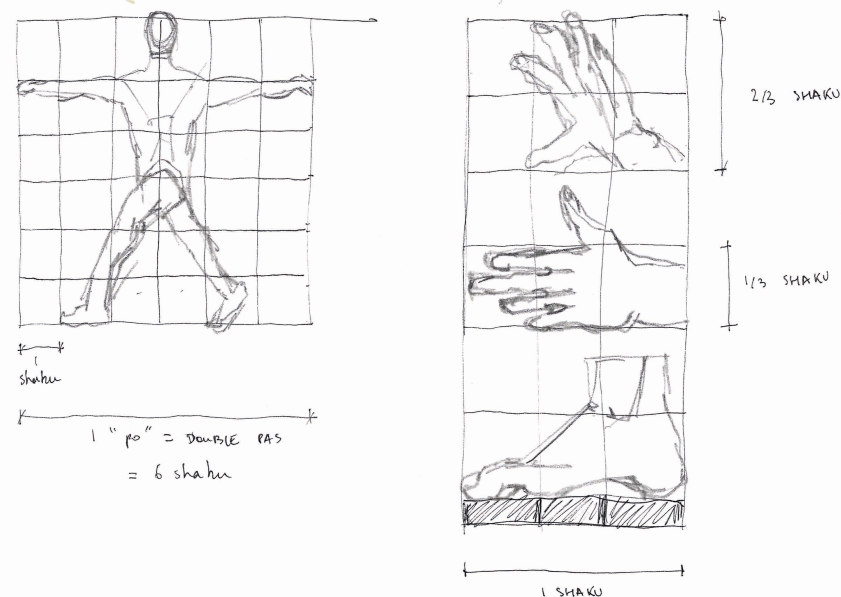
en effet le KEN de 6 shakus est généralement plus utilisé dans les villes car plus facilement subdivisible. Cependant le KEN de 6.5 shakus est le plus approprié et optimisé car il suit sa propre logique constructive et de conception.



Comme on peut le voir sur les dessins ci-contre, lorsqu'on divise en 2 les KEN par réalisation des verandas, corridors, etc... et que l'on soustrait l'épaisseur (minimale) de la structure à ces dimensions le vide de passage n'est pas assez grand avec le KEN de 6 shakus.

- Le KEN à 6 shakus subit alors une modification sur la trame pour s'ajuster et créer un vide de passage suffisant. (→)

On voit ici que la trame et sa logique est partiellement en conflit avec la logique du parcellage des villes → ajustement.



Le ken vient et a évolué pour s'adapter à la rareté/l'absence des ressources naturelles, ainsi qu'un dimensionnement plus juste vis-à-vis du corps (japonais) et de ses habitudes de vie.

Yoshijima House : 1907, Takayama, Michiya

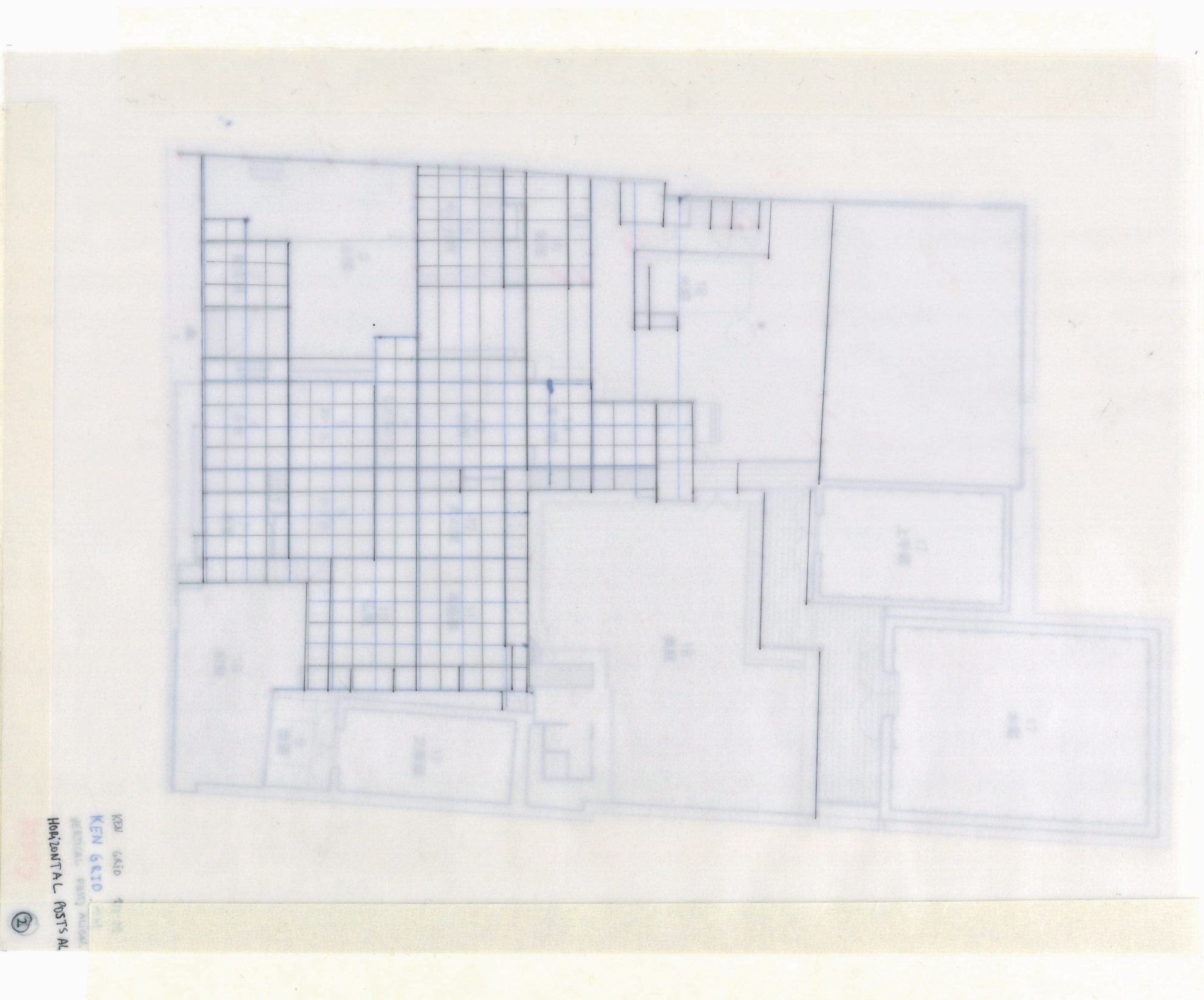
cette tentative suit la pays prudence pour décaler la complexité de la trame.

On voit ici que si, la majorité des espaces suit et se construit au travers de la grille du KEN. Pour comprendre la construction de l'espace, la demi grille du KEN est nécessaire.

En effet que ce soit pour les difficultés sanitaires et placards (pour les allées à l'air mais également Hallways, etc...) ou les engawa (verandas, traduction non complète : plutôt un espace de transition entre l'intérieur et l'extérieur), la trame « principale » à tendue à se décaler pour laisser accueillir ces dispositifs.

→ ici on peut le voir sur à l'aide des deux trames (bleue et noire sur la carte ②).

Après ces décalages programatiques d'une demi trame la plan se recule et poursuit son développement.





DRAW YOUR OWN JAPANESE HOUSE GAME

The goal is to draw your house using the grid system in order to compose the layout. For this first try, I will attend to draw only within the main grid or the sub one (half a module).

This exercise is made in order to better understand the concept of designing through a structural basis, the plan and its freedom lives within the drawer.

Few rules could be added, like the number of people that will live in it, if it's a *nōka* (farmhouse) or a *machiya* (townhouse) so that a certain amount of rooms and types (use) is required.

For this time, I will just try to follow my own desire and aggregate something together.

Perhaps this game could and should be played by someone who didn't make some researches on the subject and with given "base" room types cards could achieve the same. Maybe it is / was the main purpose of this system: everybody could grasp and have an idea of his own house.

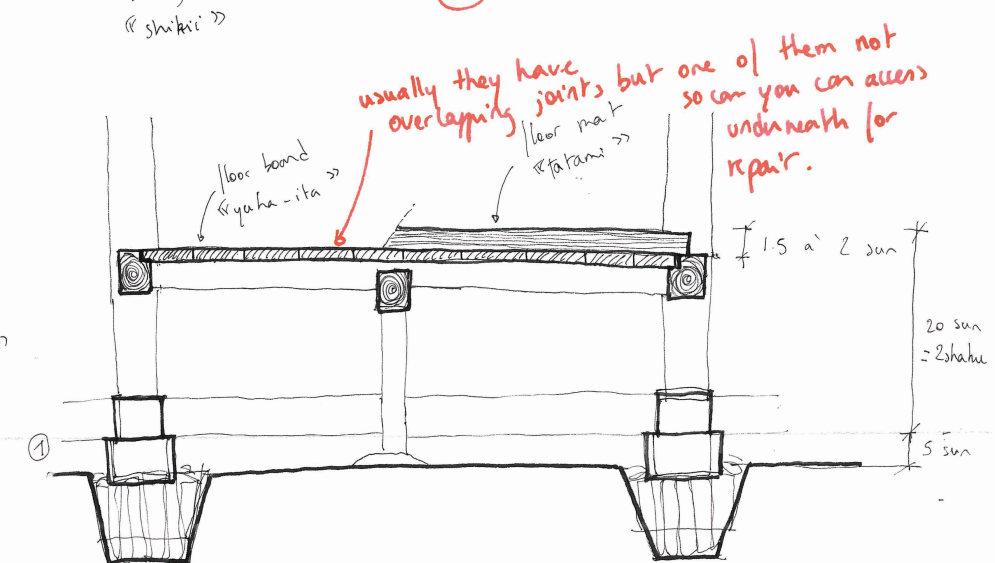
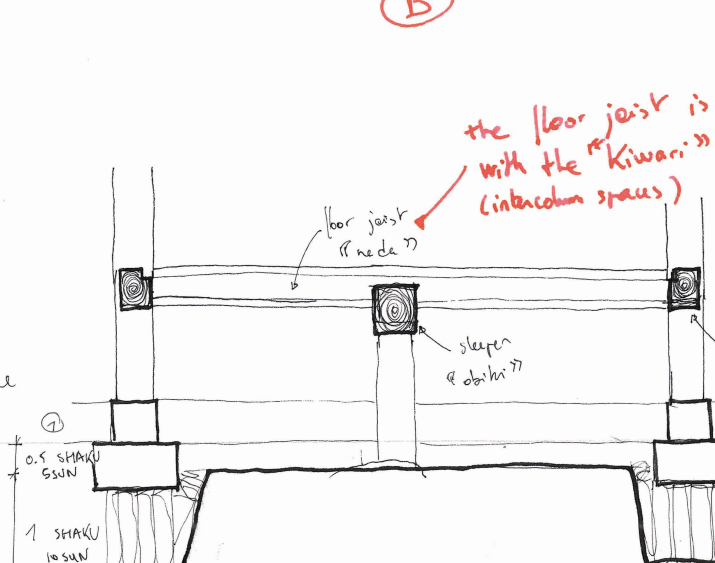
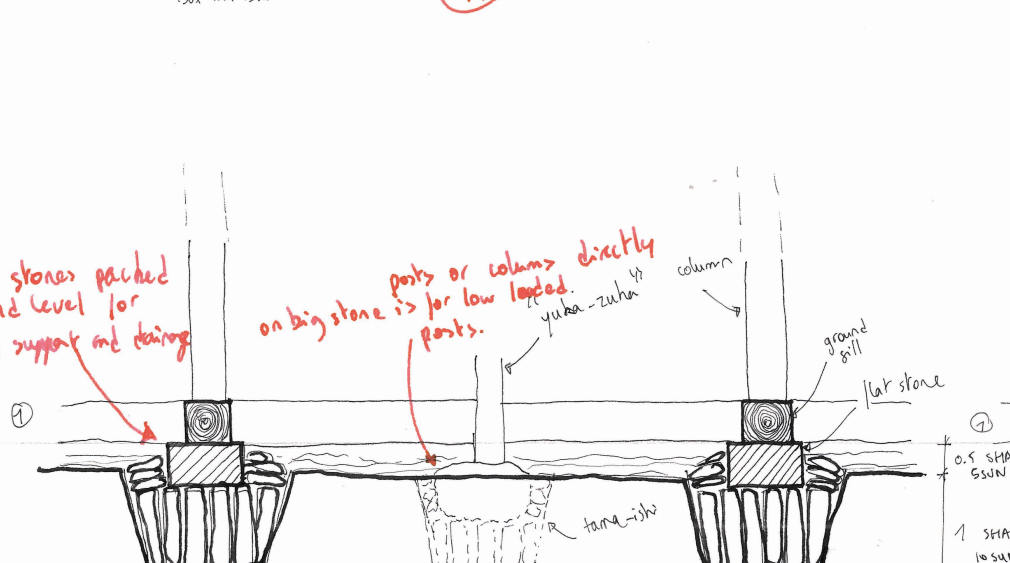
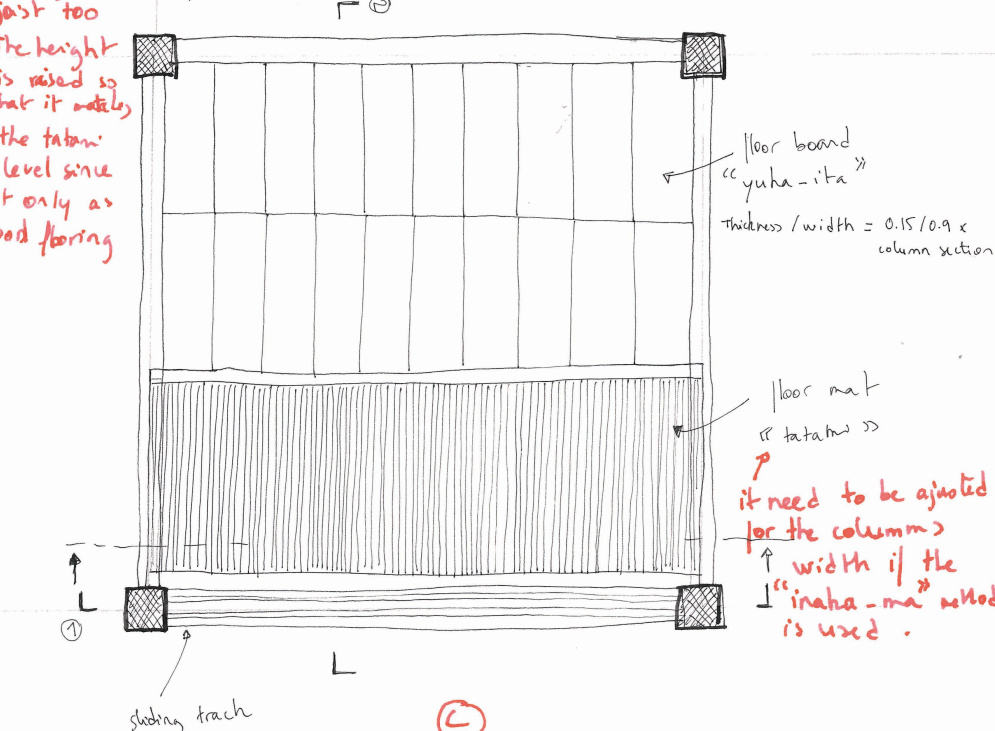
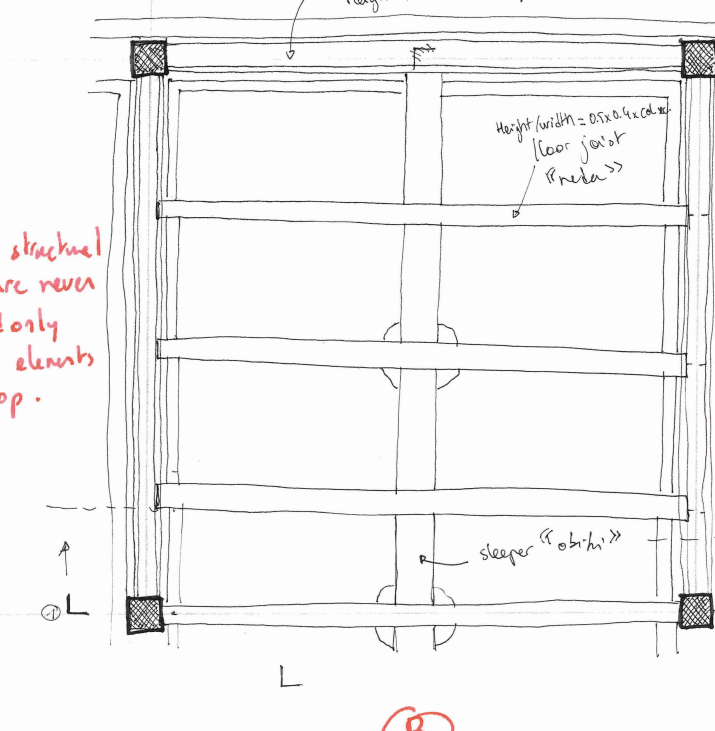
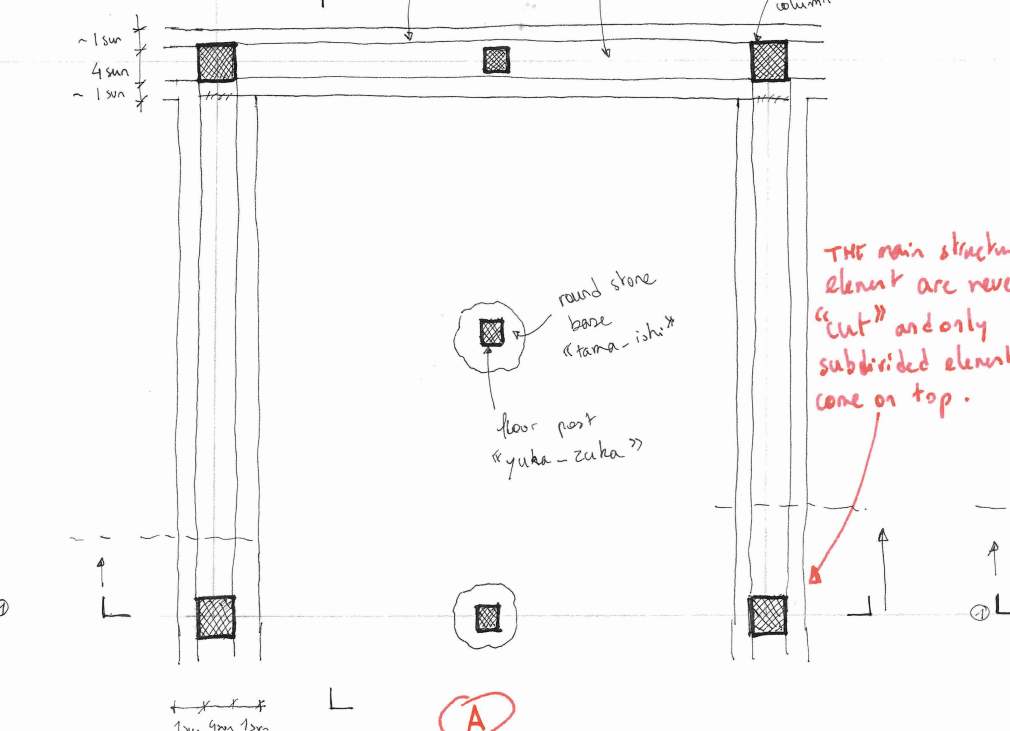
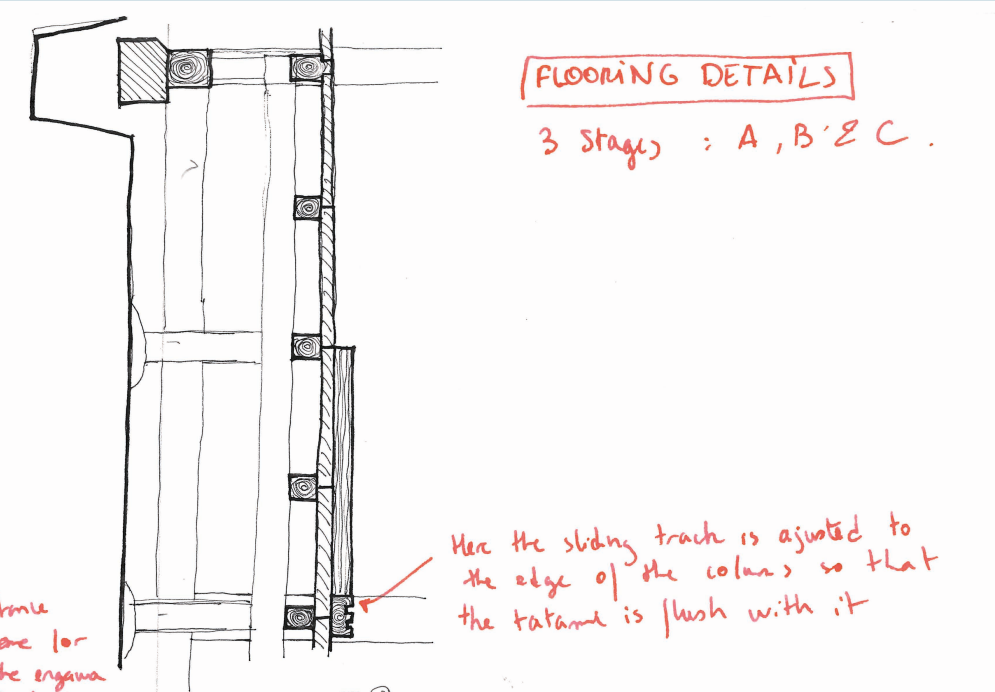
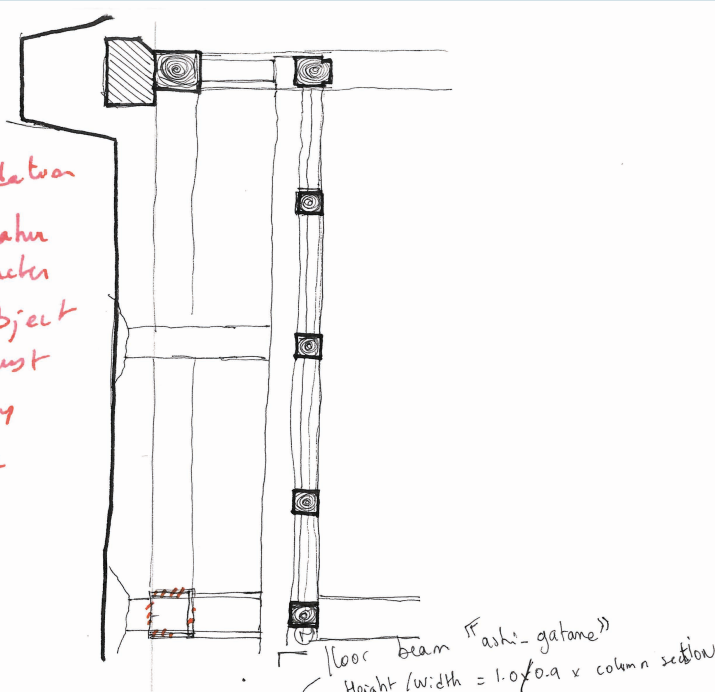
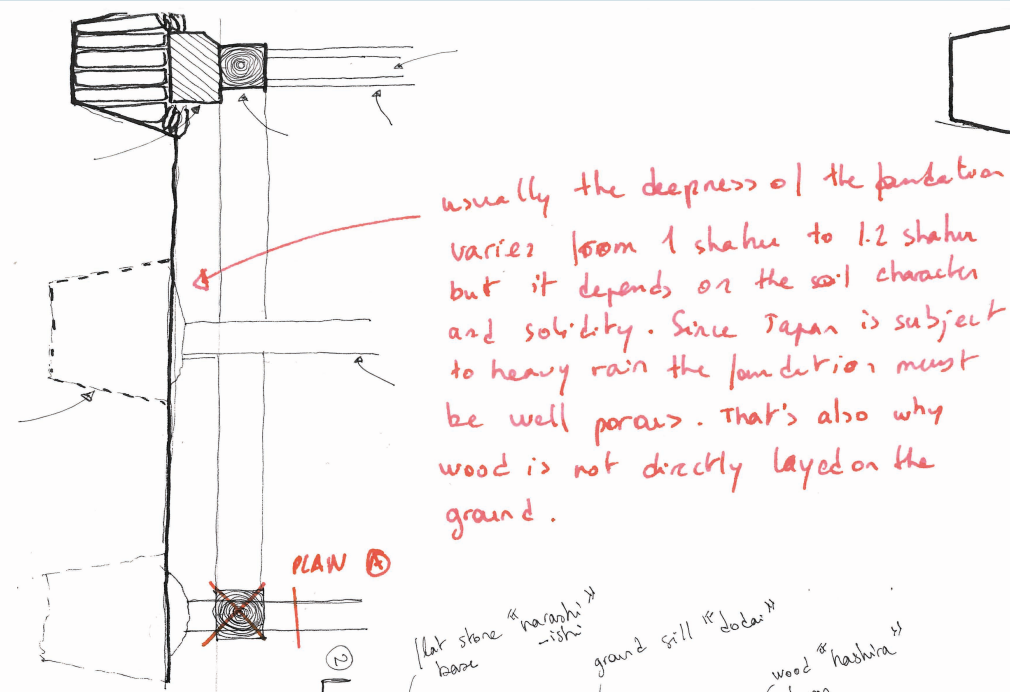
This is done as part of my *enoncé théorique*, so I will only draw with a pen so that I can reflect on my mistakes and show them to make it a process more than a result.

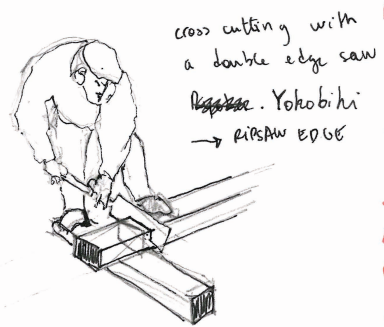
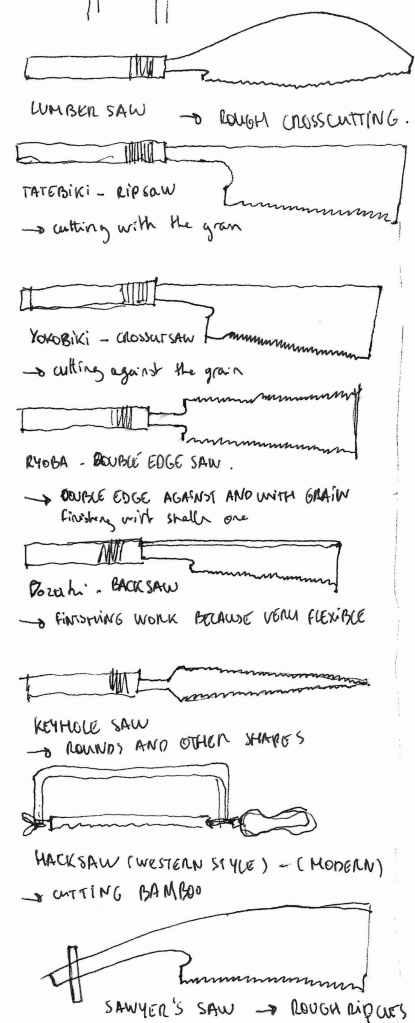
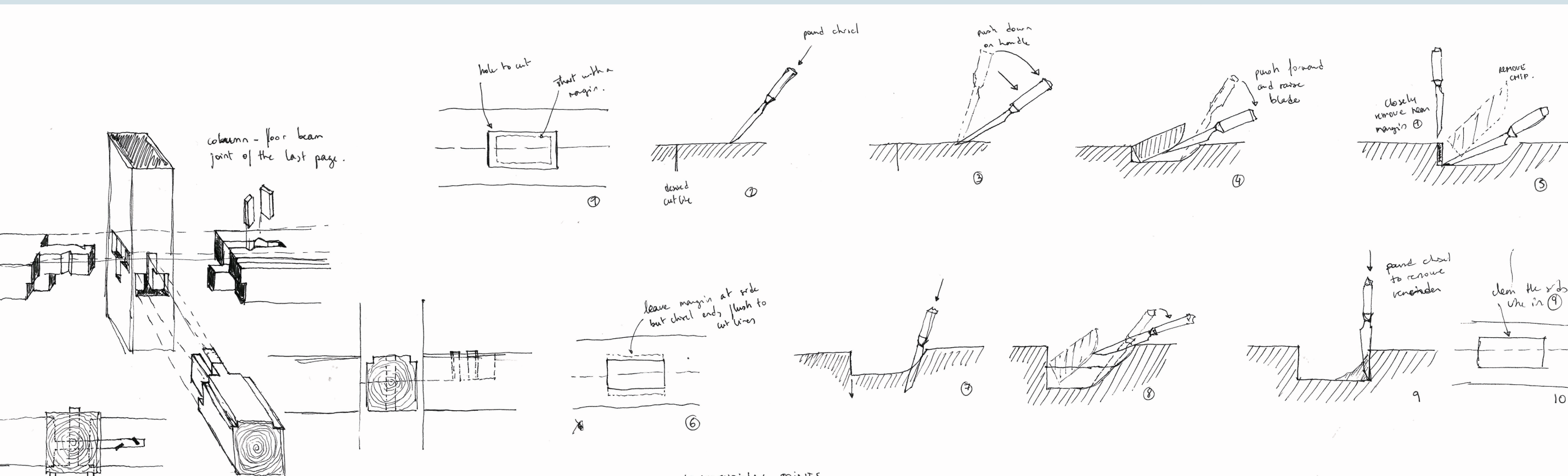
POST GAME REFLECT

After playing this game I can ^{naïve} ~~few~~ things:

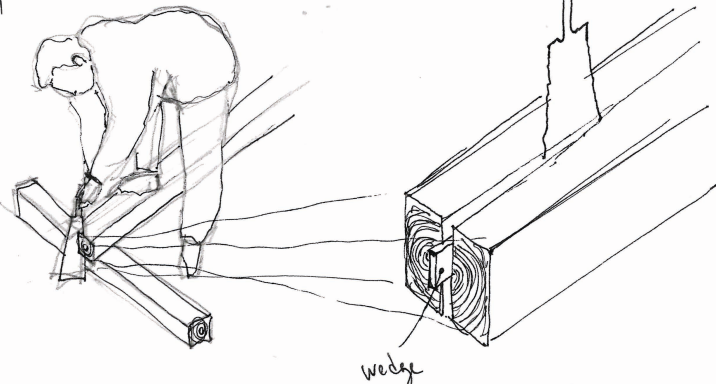
- I am at the same time biased and naive on the subject. In the sense that, unlike someone who doesn't know anything about traditional Japanese domestic space I tend to reproduce layouts that I've seen. But in contradiction, when I try to correct those pieces I make rooms that don't make sense f.e. having tatami's arrangement that you won't see in real life.
- Trying to make an "infinite" addition base on the grid lead to a blur in the plan reading. Japanese traditional domestic space is regulated by numbers of rules f.e. *Daijokubashira* (biggest post) of the house generally separate public and private in *Minka*, I've put few here which reduce its importance as the central point of a house both in meaning and spatially.
- It's ~~more~~ easier for me to make *Nōka* and *Machiya* (non-aristocratic houses) because it's more difficult to really grasp the habits and customs of the aristocratic class of this time f.e. the number of room for servants' work, preparation for food, ... It's less rational than popular housing.
- The Plan is rather a maze than a clear well organized multiple relationships connecting spaces, a fluid and calm layout which atmosphere I love.

→ Most importantly, I hope nobody will be offended by this try / game, as it could be seen as someone playing with cultural heritage / on which people are proud. 先に謝っておく (Désoler d'avance)



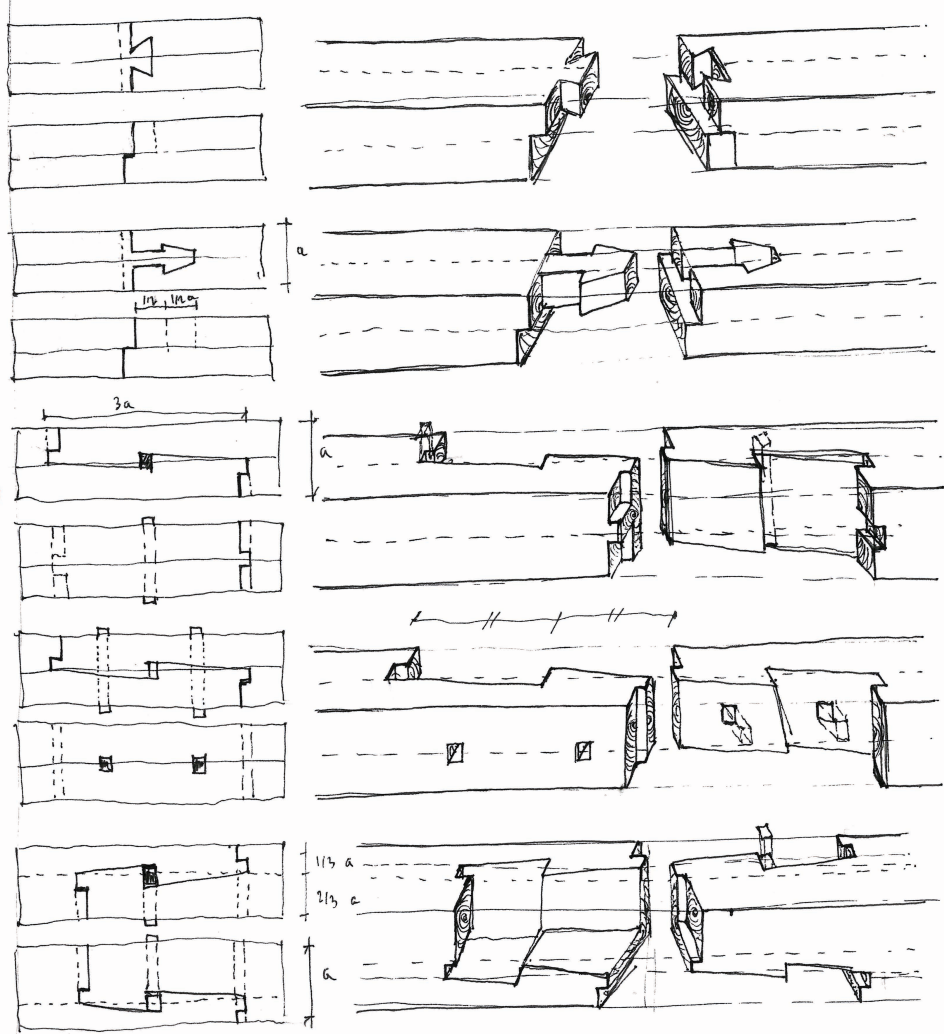


→ correct position for cross cutting
→ correct position for rip cutting



STANDARDIZE PLANS AND ELEMENTS THROUGH THE GRID SYSTEM IS ALSO FREEING TIME FOR THIS INTUATIVE WOODWORKING (ONLY SCRATCHING THE SURFACE). HAVING ELEMENTS THAT ARE REPEATED IN DIFFERENT HOUSES ALSO WOODWORKERS TO PRODUCE IN BIGGER QUANTITY AND AHEAD OF TIME IN THEIR WORKSHOP. → THEN ONLY ADJUSTING AND FITTING WORK ARE NEEDED ON SITE, THAT'S WHY THE MAIN FRAME COULD BE ASSEMBLE ONLY IN A FEW DAYS.

LONGITUDINAL JOINTS



"ARI-TSUGI" joint
connect eaves beam, purlin and ridge beam.

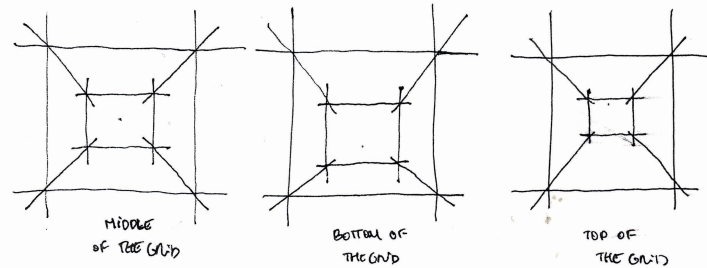
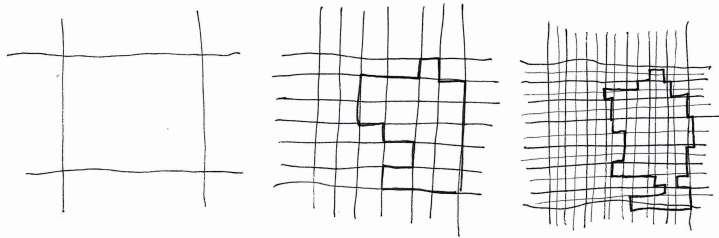
"KAMA-TSUGI" joint

"KANAWA-TSUGI" joint
also for column as replacement of here

"NAKASEN-TSUGI" joint
mainly for exposed beams

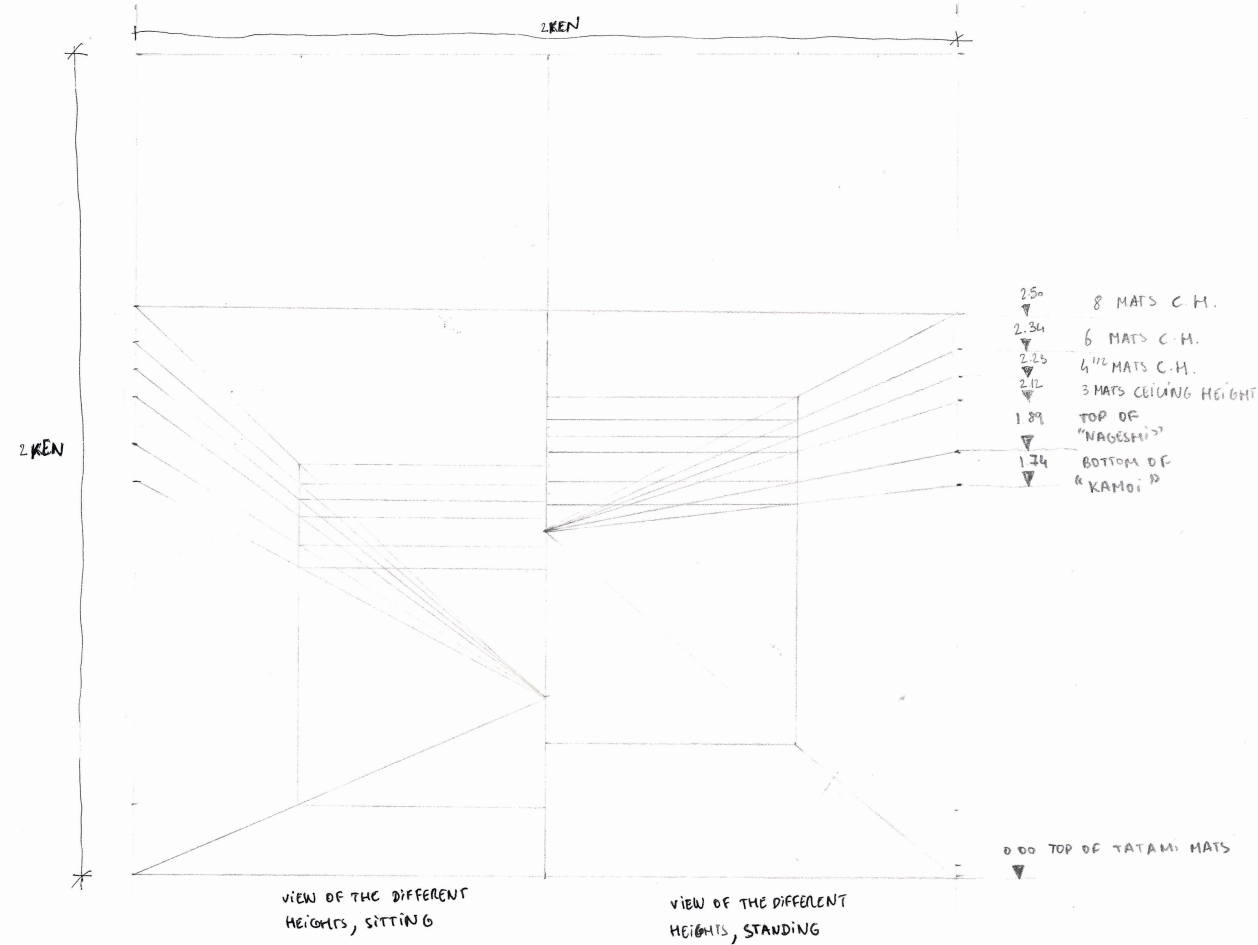
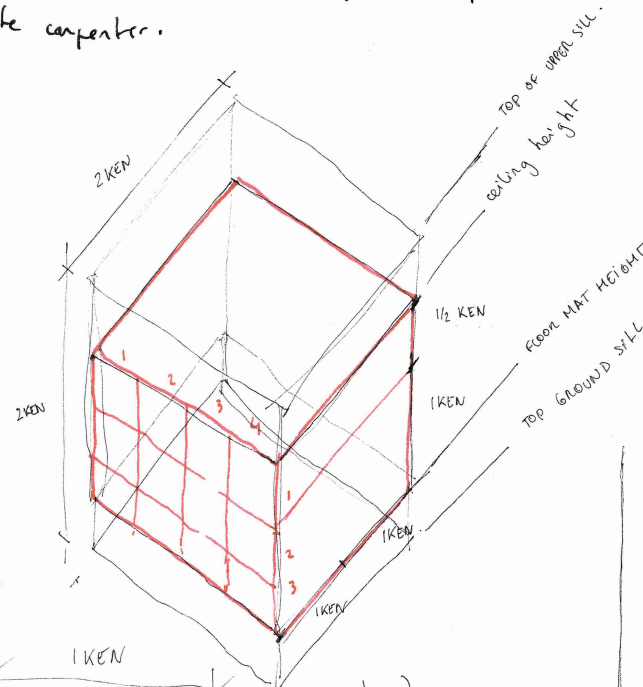
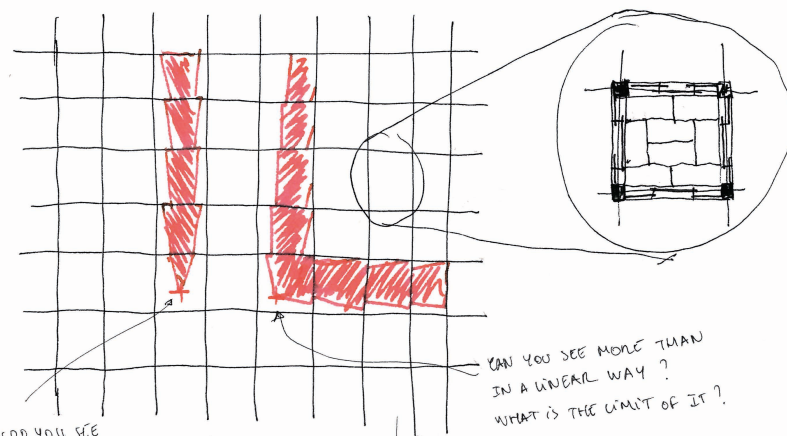
"ATSUTAKE-TSUGI" joint

How do you PERCEIVE THE GRID?



THE PERCEIVED 3D GRID

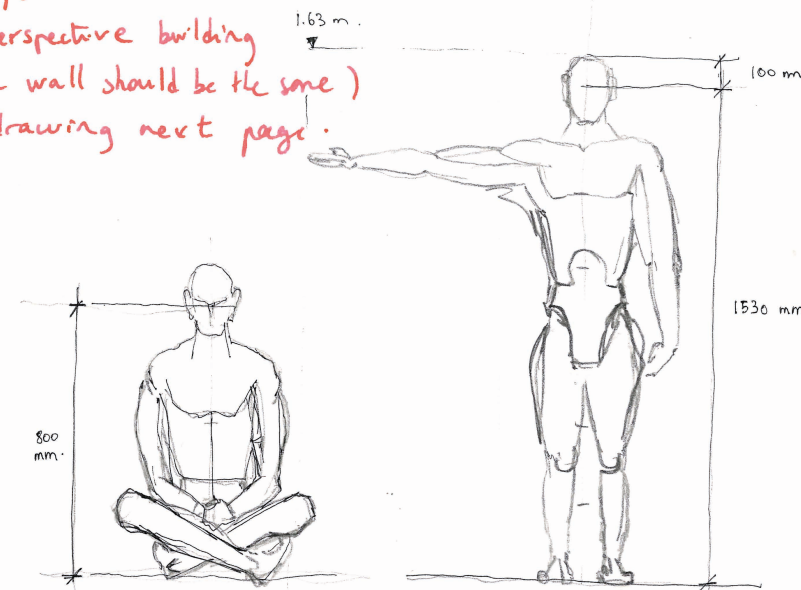
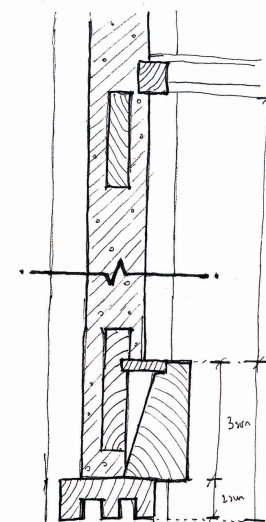
Contrary to the plan grid the one in 3D dimension is not a cube, the height is smaller than the width or length depending on the room size. For example in the drawing below you can see that a 'normal' 2 KEN by 2 KEN MODULE (1 tatami's room) in plan has a $1\frac{1}{2}$ KEN height (floor to ceiling). Thus having a 1:2, 1:3 ratio, which denotes about the aesthetics care of the carpenter.



→ Interesting exercise but incomplete, because the higher the ceiling the wider the room (sort of), more the other way around).

Also has error of perspective building (The height of back wall should be the same)

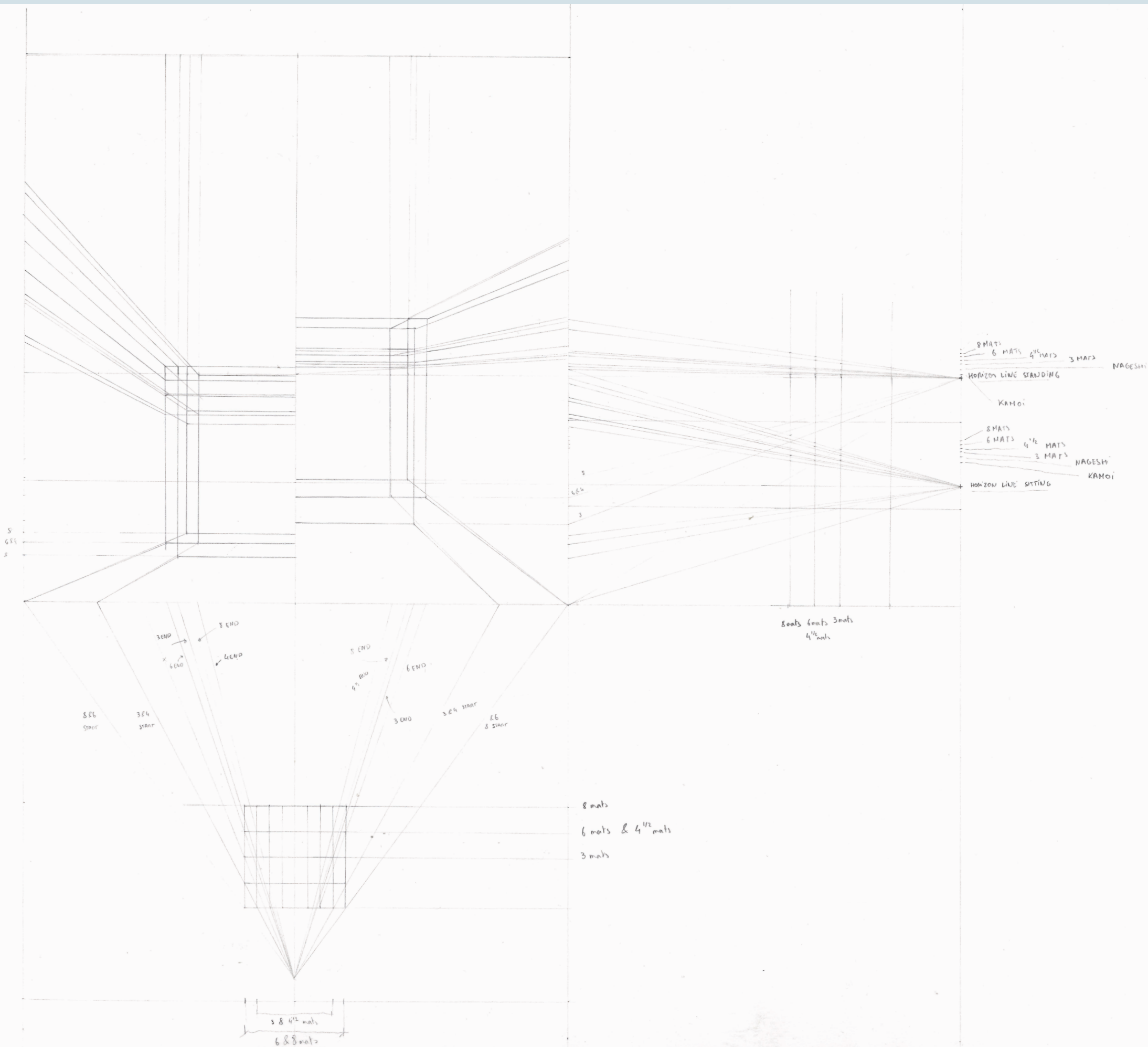
Completing the drawing next page.



Height for ... tatami mat room:

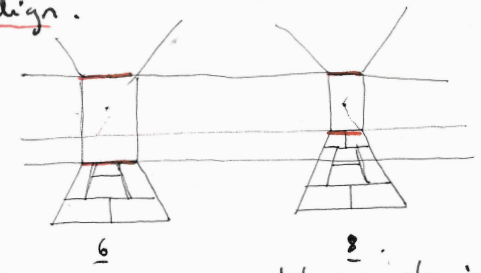
- 3 mats : $58 \text{ sun} + 5 \text{ sun} + \text{NB} \times 0.25 \times 10 = 70.5 \text{ shaku} \cdot \text{sun}$
- $4\frac{1}{2}$ mats : $58 \text{ sun} + 5 \text{ sun} + 11.25 \text{ sun} = 74.25 \text{ shaku} \cdot \text{sun}$
- 6 mats : $58 \text{ sun} + 5 \text{ sun} + 15 \text{ sun} = 78 \text{ shaku} \cdot \text{sun}$
- 8 mats : $58 \text{ sun} + 5 \text{ sun} + 20 \text{ sun} = 83 \text{ shaku} \cdot \text{sun}$

Height of sight should also be considered when talking about perception. Japanese were shorter than Caucasian therefore the expected view and experience is different than for us now.

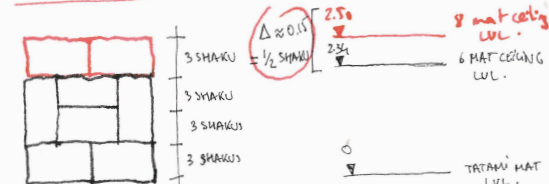


PERCEIVING THE GRID

This one vanishing point perspective is a collection of few tatami mats rooms and their respective view. On the left you have the point of view of someone seated and on the top right someone standing (Japanese heights measurements has been taken in order to match with the design process). Something really interesting is that even if you add a new tatami row (from 6 to 8 i.e.) and that ceiling height change, with even with the additional depth and ceiling height the top line align.

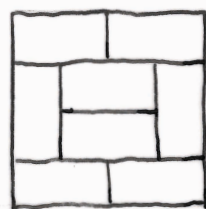
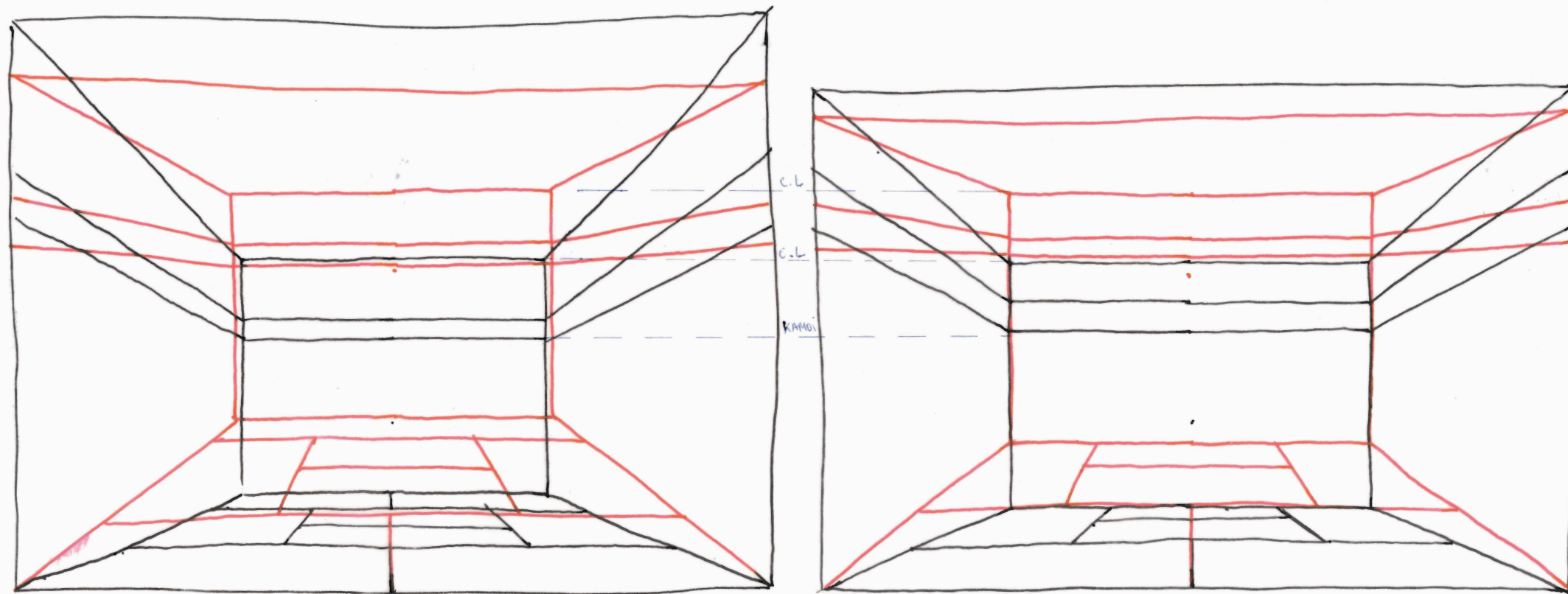


You can see a exaggerated example just above. Since the ceiling height is determined by the number of mats in a room, $= \text{Nb of mats} \times 0.25$ (results in shaku) and the size of a mat is always the same (almost but won't differ in that case), therefore this relationship has been thought through perspective comparison (at least how you see the interior).



→ When you had a 3 shaku depth to the room (which here mean 2 additional tatami) you only go up for $1/2$ SHAKU due to the formula of ceiling height.

This explain how and why tatami layout is not ~~left to chance~~ left to chance, which a lot of it is due to superstition in the first place (or is it). This also make sense with the will for the space to look uniform and landscaper even with the size of the room changing.

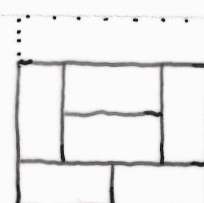


8 mat room.



view sitting

view standing



8 MAT COMPARISON

6 mat room.

We can see in those 2 perspectives that even if the room are not the same depth and have not the same ceiling height the line matches creating a kind of absolute level.

This attention to such level alignment talks about the construction of space and "frames" that we can relate with traditional Japanese gardens which are known to be designed around certain points of view.

Having such rule allow for enfilade rooms of different size to frame in the same manner gardens or landscape creating an unity and also highlight it even more.

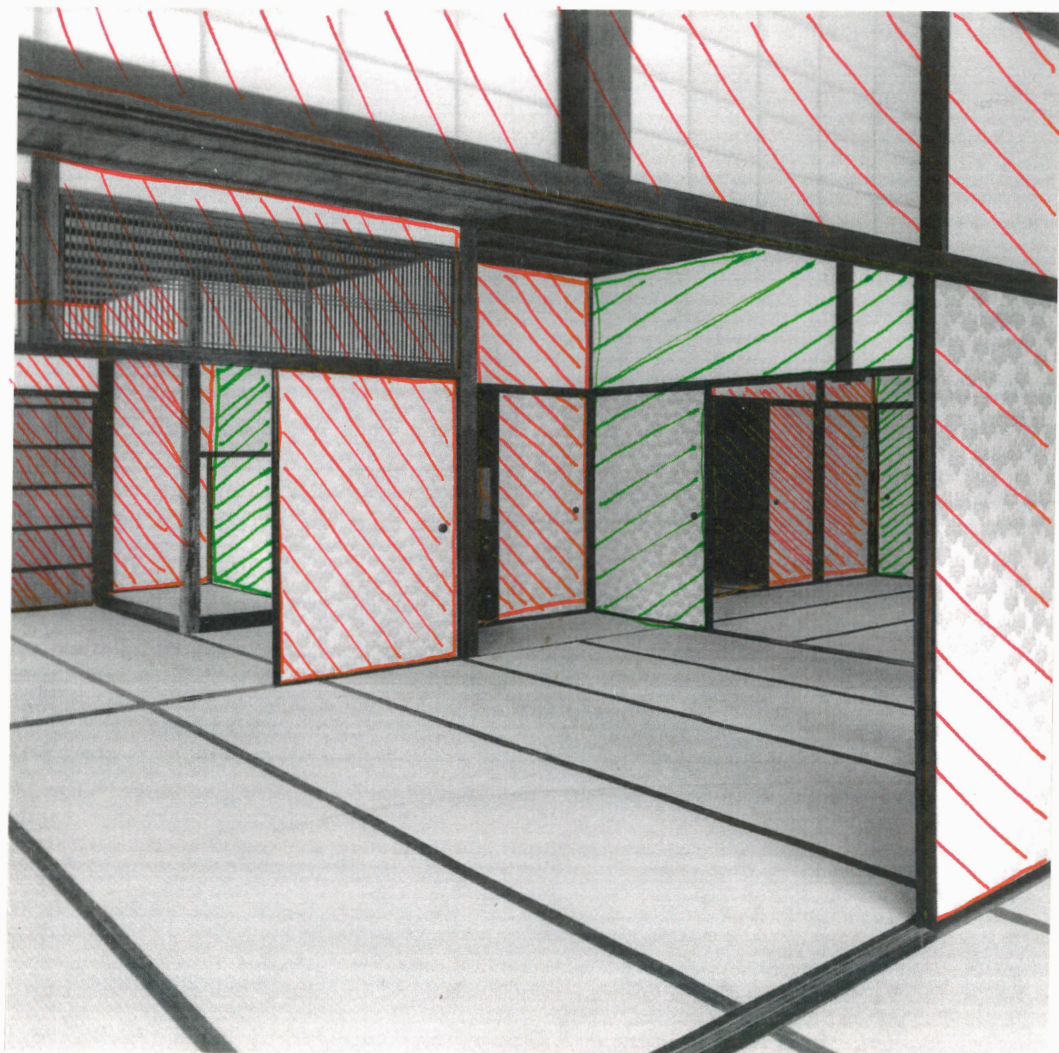
→ This deep relationship of Japanese architecture with nature / exterior can also be seen through arts: i.e. woodblock prints which often includes natural elements even if the scene is in the cityscape (see Edo prints of Hokusai where Mt. Fuji is represented, or in the illustrated version of Genji Monogatari) or even in Haiku poems.

Here the grid is perceived through the representation of it on the actual size of room and how we see it but the actual "structural & conceptual" grid is not really visible in those drawings.

This last exercise helped me on understanding even more the way tatami mats are disposed in relationship with the way we live.

I understand also why ~~we are~~ we are so fascinated by them, and why we tend to give them such importance in the way they change/build space (literally and conceptually) even if they are not what originated it.

The grid is used as a mean of building spaces & atmospheres but not as a result. Here the ~~2D~~ "square" 2D grid doesn't project as a cube module in 3D which talks about the delicacy sensibility and rationality of their use of the grid.



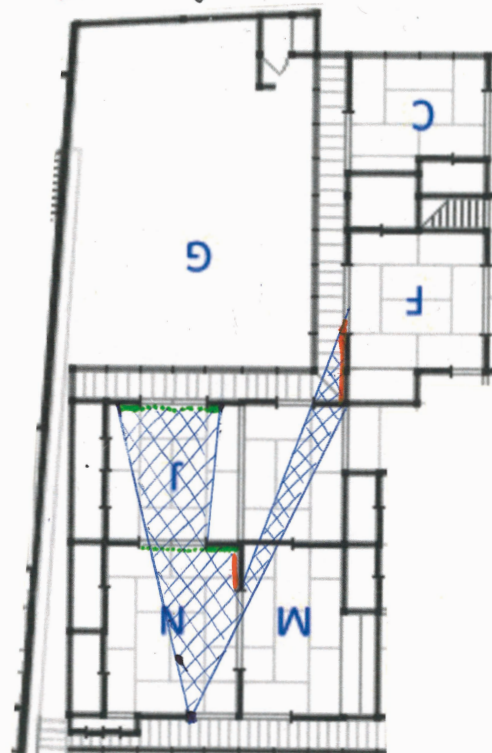
VIEW INSIDE THE VILLA KATSURA



RANGE OF INTERIOR VIEW

- N-S seen plane
- E-W seen plane
- THE DENSER THE further away E-W
- " " N-S
- Field of view (point of view)

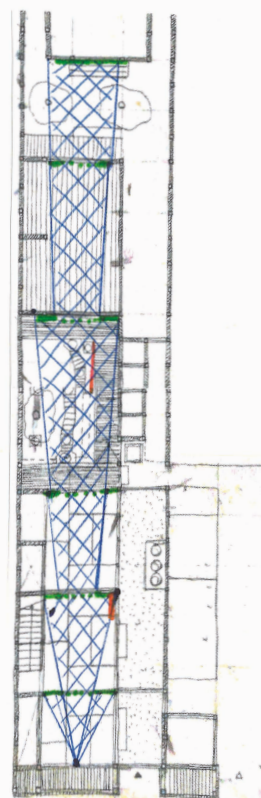
The grid is something you can see when you try to look through multiple rooms. To a point where is difficult (sometimes) to understand fully the plan and its nooks. It can even be something quite disturbing and have a feeling of being lost in something too complex and big. These observations aim to start understanding the complexity of the grid in relation with spatial rooms / spaces.



KUSAKABE'S INTERIOR VIEW



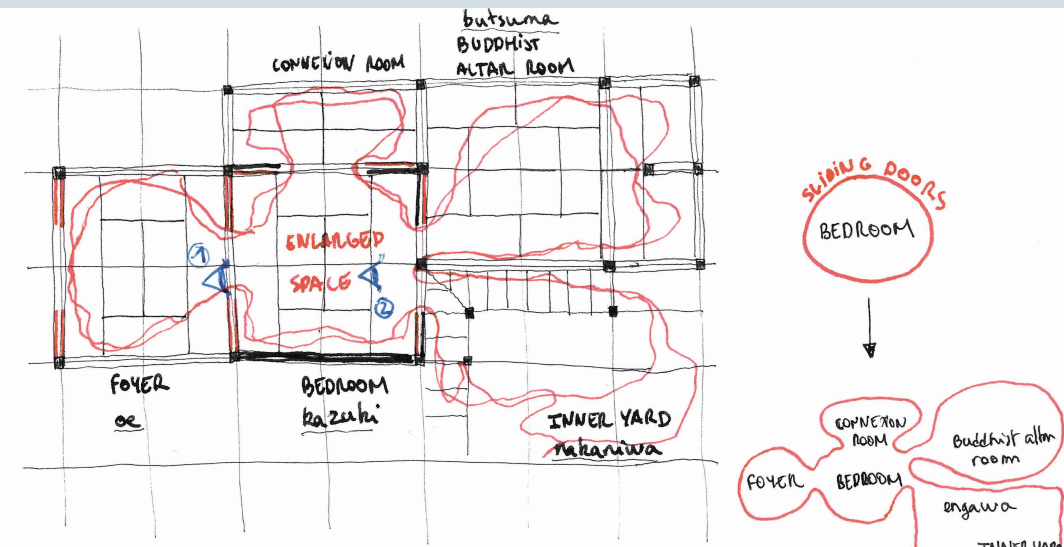
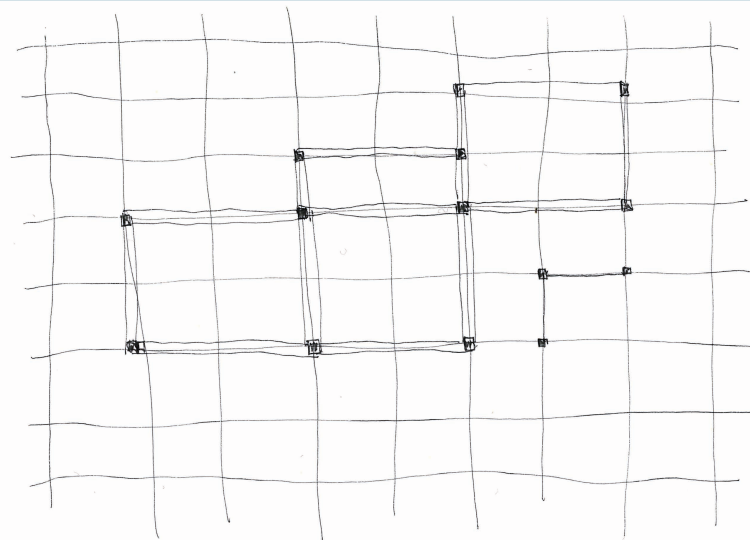
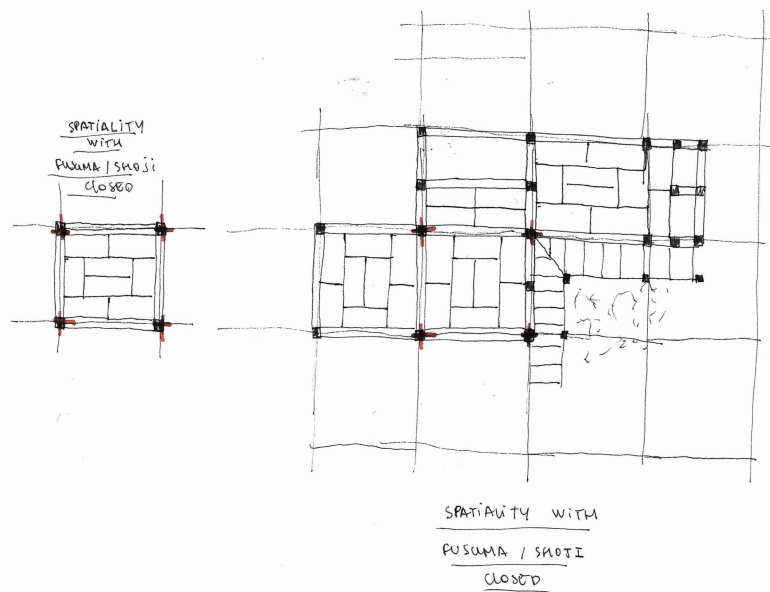
KUSAKABE HOUSE



NARAMACHI RANGE OF VIEW



NARAMACHI HOUSE



SLIDING DOORS ENABLES NOT ONLY A HIGH FLEXIBILITY BY CONNECTING (POSSIBLY) MORE THAN TWO OR THREE ROOMS TOGETHER, IT NOT ONLY REDUCE SPACE NEEDED FOR CORRIDOR BUT ALSO TO OPEN THE DOOR. HOWEVER, THE ELEMENTS LACK PRIVACY, WINDBLOCKING, DUST PROTECTION AND SIMILAR THINGS SINCE THEY ARE REALLY FINE. THIS IS EVEN MORE IMPORTANT WHEN YOU CONSIDERED THAT SOME OF THE MOST "CONNECTED" ROOMS ARE BEDROOM, QUESTIONING THE WAY WE SEE THEM IN EUROPE.



Quick definition and explanation of fusuma & shoji:

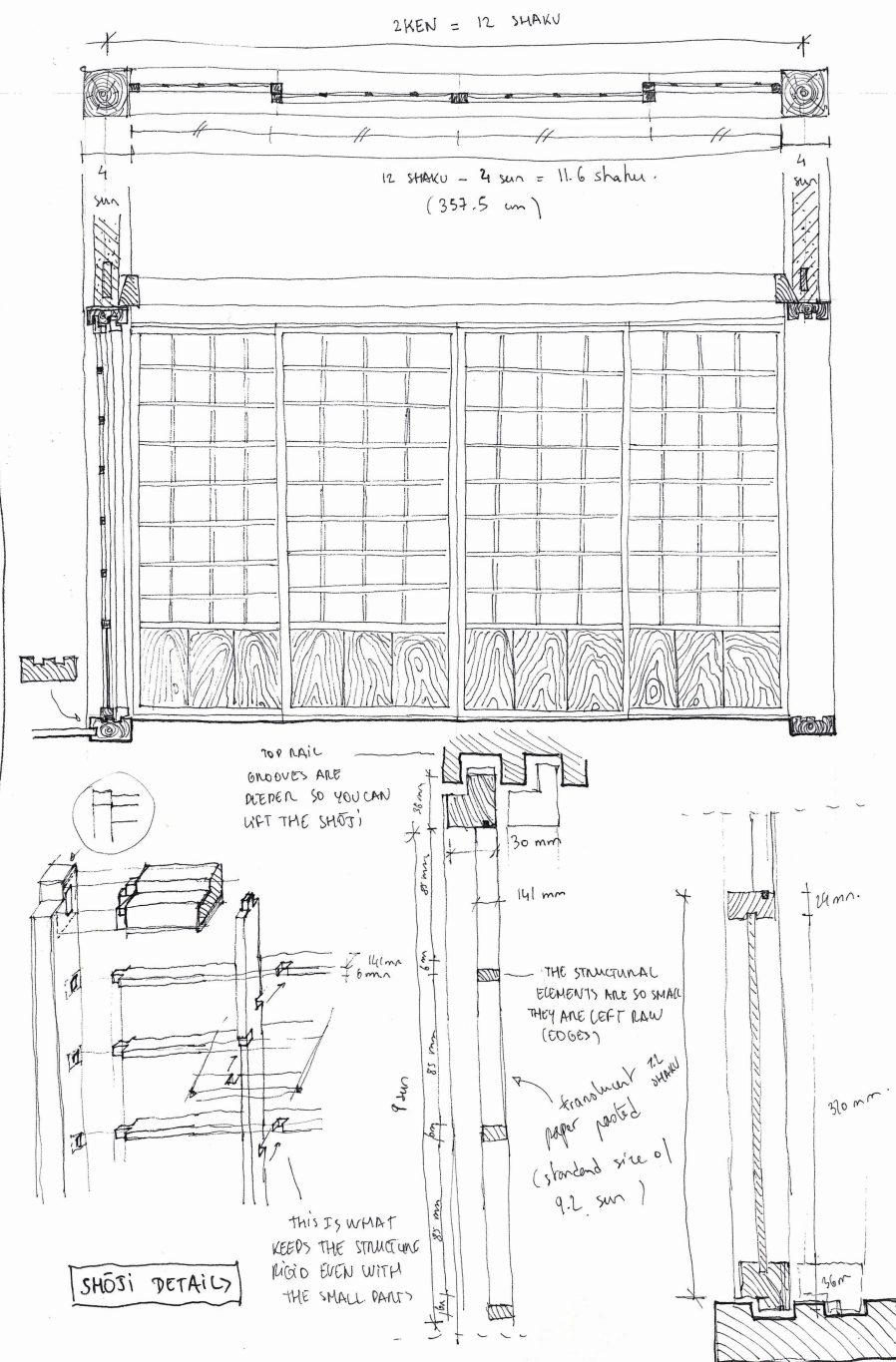
They are lightweight wooden skeleton sliding doors covered with paper, fusuma with thick opaque paper and shoji a translucent one.

They are likely to derived from old folding screens and silk curtains which were contained present in old Shinden - tsuburi (epoch Heian 794-1195) aristocratic residential palaces. ~~The~~ Before the structural posts were round columns so closing space was a mean of movable and adaptable elements. After this period, rectangular posts began to appear and with them sliding doors. More practical and more economic, they were then used in most domestic spaces from rich warriors to peasants and merchants.

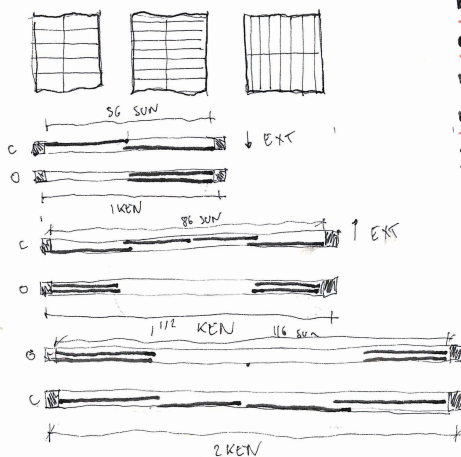
They are one of the few elements / fittings that remain a constant in the construct^o because they stay in the inter-column distance of the grid system.

They serve as partitions as well as doors and don't take more space than the column width.

"Shoji" literally translate to 'interceptor' which relate directly to the historical role of the folding screens to create and divide space. Before it was name akari-shoji talking about the translucent paper and its capacity to catch light, fusuma was also called with spelled with shoji (fusuma-shoji, fusuma meaning bedquilt due to the resemblance of the two structures). shoji are usually used to separate interior and exterior while fusuma rooms.

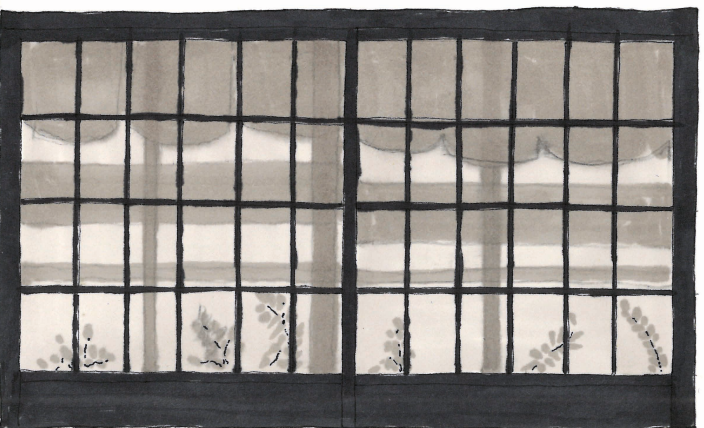
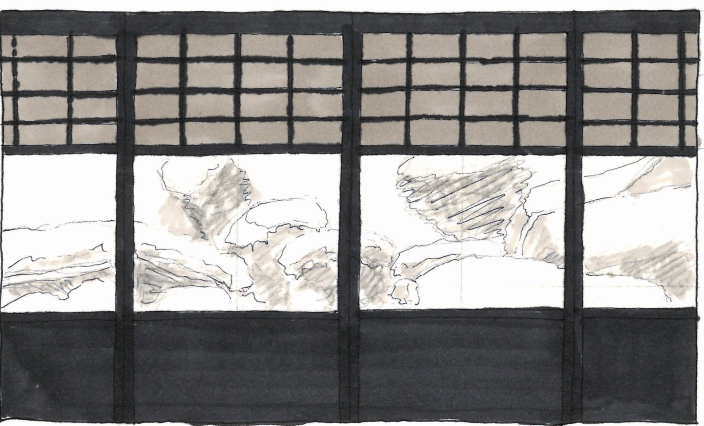
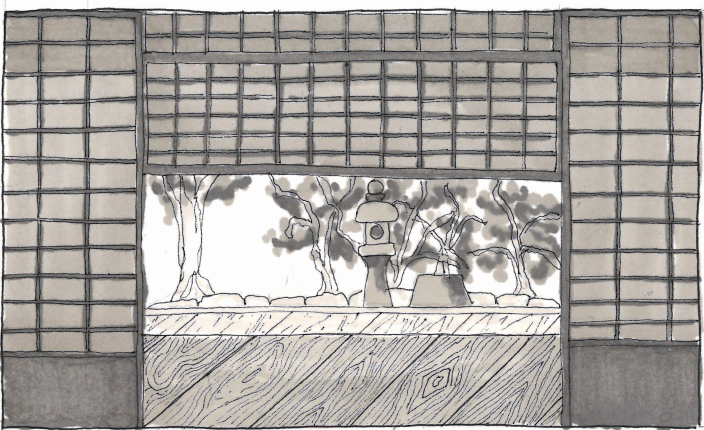


THE PATTERN OF THE WOOD STRIPS ARE USUALLY HORIZONTAL, DENSE HORIZONTAL OR DENSE VERTICAL. (NOT SQUARE LIKE ~~THE~~ DRAWING ABOVE)



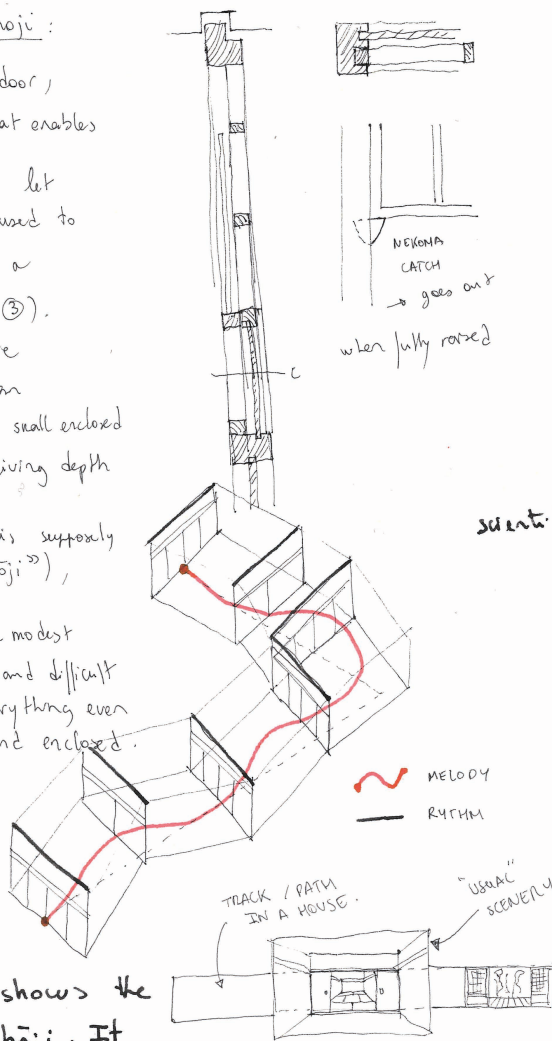
Fusuma & Shoji are fundamental elements of Japanese classical architecture, significantly and physically. It also talks a lot about habits and customs because they are both a partition and an opening broadening the use of space or shrinking it to match with the needs, activities, seasons, etc... Something that I will look next is its capacity to bring / connect exterior spaces into the interior (especially shoji and its derivatives) through light, framing, etc...

For me, sliding doors and their management of light, sight, space is what amaze me the most.

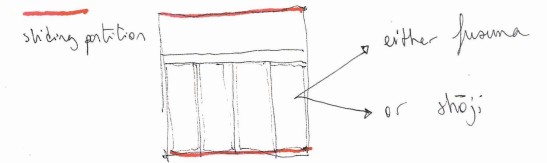
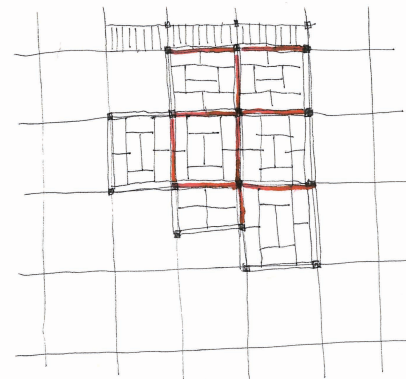


YUKIMI SHŌJI or the "snow-viewing" shōji:

It is a shōji, translucent paper sliding door, that has a smaller "shōji" in it that enables it to be open vertically. You can lift up the movable part to let more light in, it is usually used also to frame and accentuate the innergarden or a landscape from the domestic space (3). The size of the opening allow to remove superficial elements that your eyes can catch on and emphasize the small enclosed garden (tsuboniwa, courtyard garden) giving depth and enlarging rooms and spaces. This shōji came quite late compared to his supposedly predecessor of the nekomashōji ("cat-flap shōji"), which its opening is horizontal. I really love this element because it shows a modest and humble approach yet really technical and difficult to try and make the best out of everything even more when spaces can be really small and enclosed.



The different views on the left shows the ~~the~~ translucent capabilities of shōji. It catches light as well as ~~light~~ letting it pass through it. When closed, with heavy glare you can see shadows of outside elements onto the paper, connecting yourself with the exterior. always A great quality but also a major con, lack of intimacy. However its light mediator quality is really necessary. In summer, bright sun light is attuned to dark interior with the dimming quality/capability of the thick rice paper. In winter, either with the yukimi-shōji or just the sliding shōji itself by removing it, you can maximize the amount of light coming in as well as heat (because the houses are barely isolated). Shōji is for me ~~inherent~~ to traditional Japanese architecture, it is a partition capable of creating atmosphere as well as changing and redefining spaces in homes.



Something that I really like about Japanese sliding doors is its ability to give rhythm to interior spaces. I really wanted to find

an other example but it's the one I'm gonna talk about for analogy. I listen to a lot of lofi (especially while working), it's a genre of music very calming, atmospheric and repetitive. There is no evidence of it actually helping for your concentration but one of the argument is: when you are listening to music your brain is trying to guess/predict the next sound and one characteristic of lofi is its ~~repeating~~ repeatability. Thus your brain is never surprised and his predictions are always ~~right~~, which for some people is the reason why it helps you concentrate.

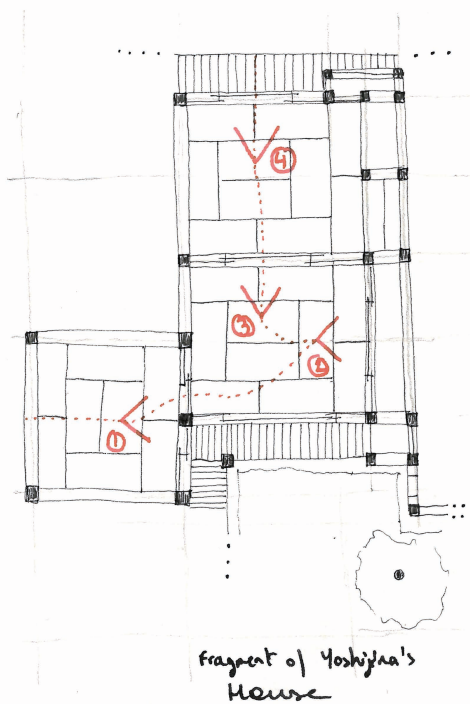
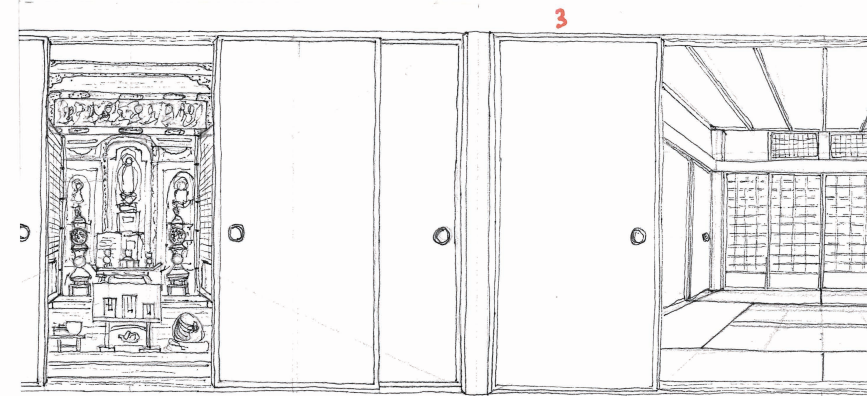
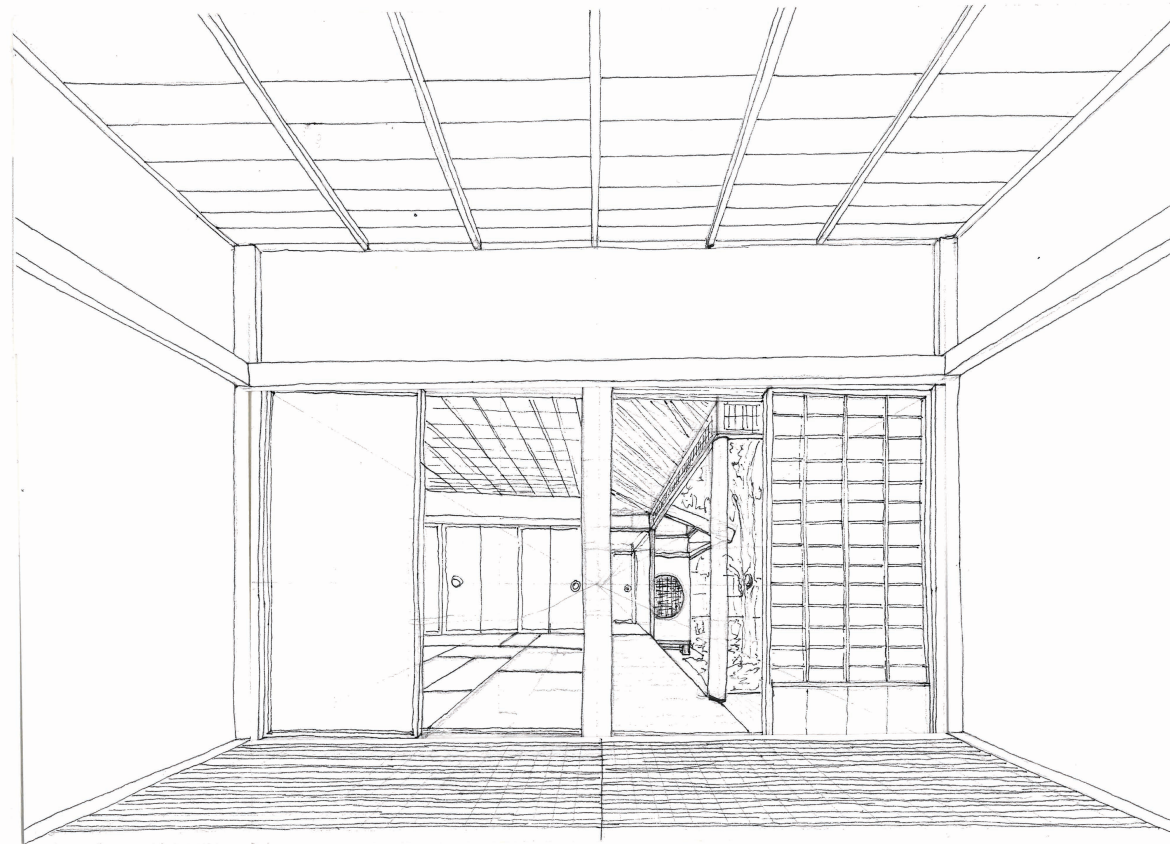
Now back to traditional Japanese architecture, you walk through space via and across the grid: using sliding doors. The overall space is a melody which rhythm and tempo is dictate by sliding doors. The melody is not repetitive, because of the number of different rooms, and the sliding doors by its origin of partitioning is always where a "room" could be identified. Both are inseparable by nature and yet one gives the tone and the texture and the other its rhythm.

Maybe it's why I feel so comfortable in traditional Japanese domestic space. Also, the music is never the same, either by the layouts (gardens, rooms, arrangement, ...) either by the details (type of sliding door, wood essence, tatami arrangement, fixtures, ...) and yet when you visit a machiya you kind of know the genre and what you expect to see/feel. It's really reassuring and cosy, it feels like a home even though I've never lived there.

A house could also be called an album, each path a track, which tones change through seasons and customs (removing sliding doors in summer, putting reed blind, yoshizun at the end o/ July i.e., etc ...).

Sequence Plan

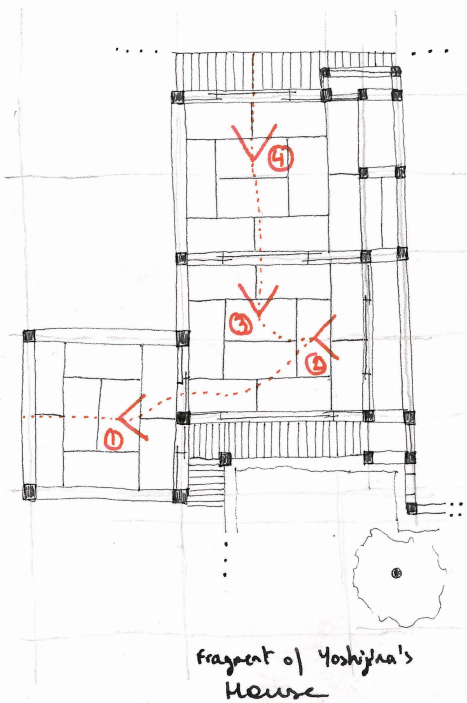
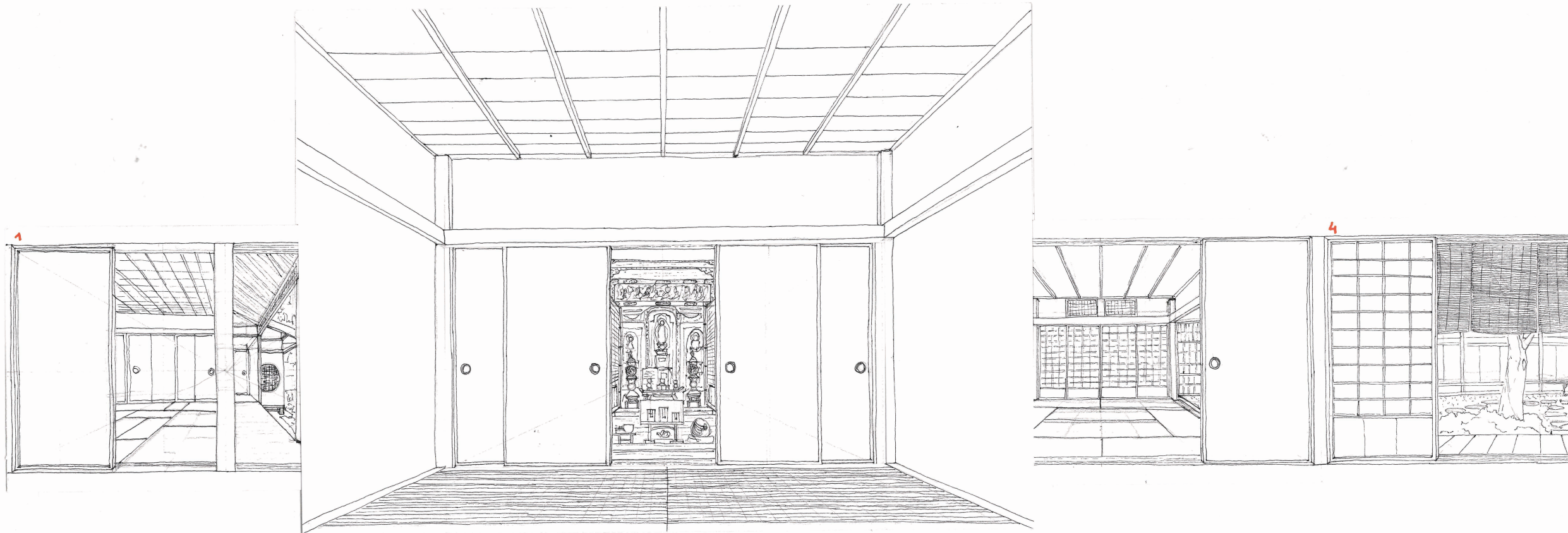
The goal of this contraption is to materialize the main role of sliding door which is to rhythm the flow of spaces. This 'trach' is taking place in the Yoshijima House, featuring in order: a view from the bedroom, a view from the butsuma (buddhist altar room), a view from the butsuma to the zashiki (main room for guests & ceremonies) and finally a view from the zashiki to the uraniwa (rear garden).



Fragment of Yoshijima's House

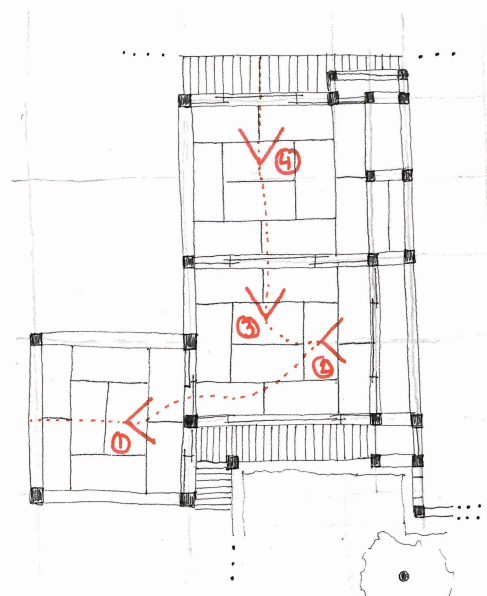
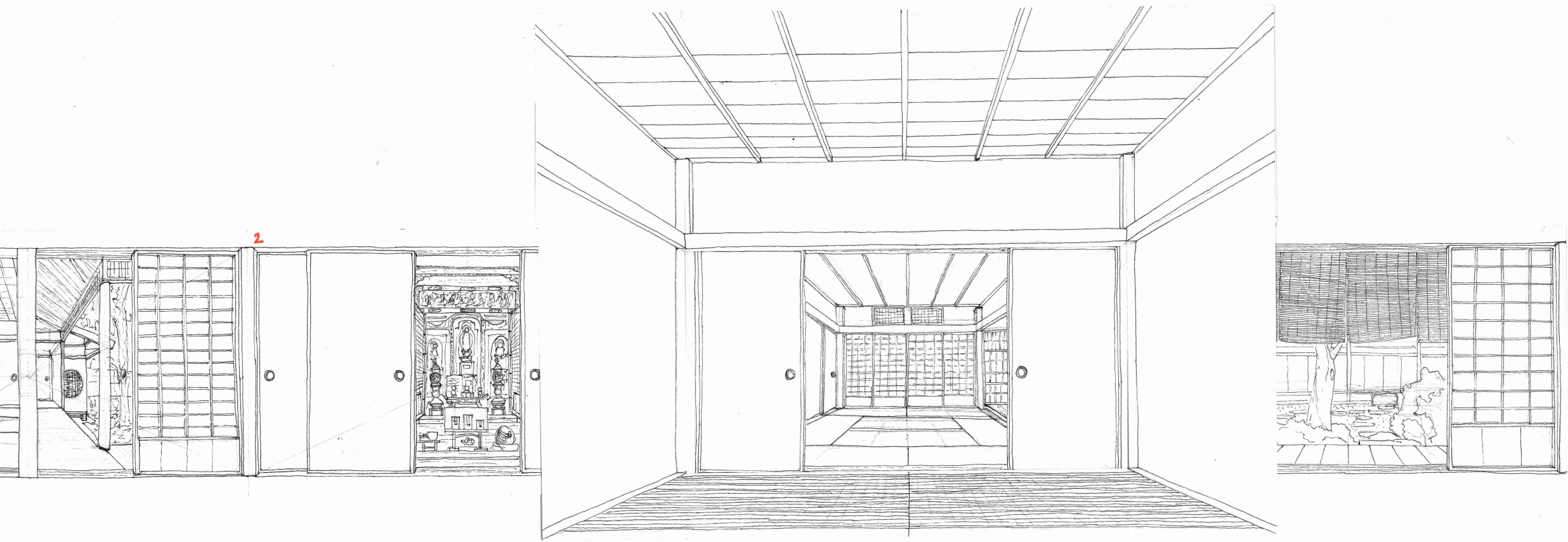
Sequence Plan

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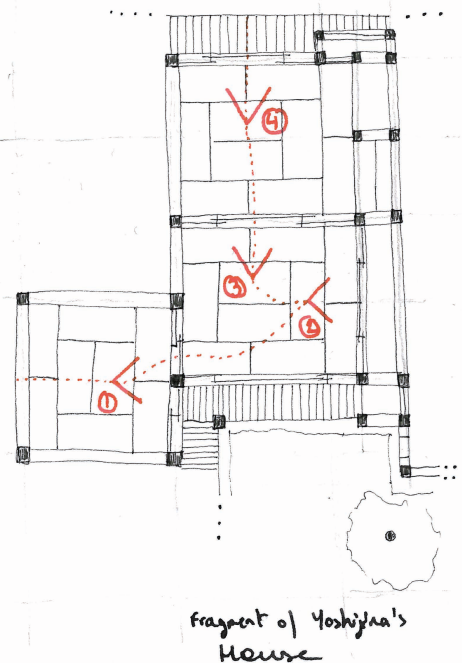
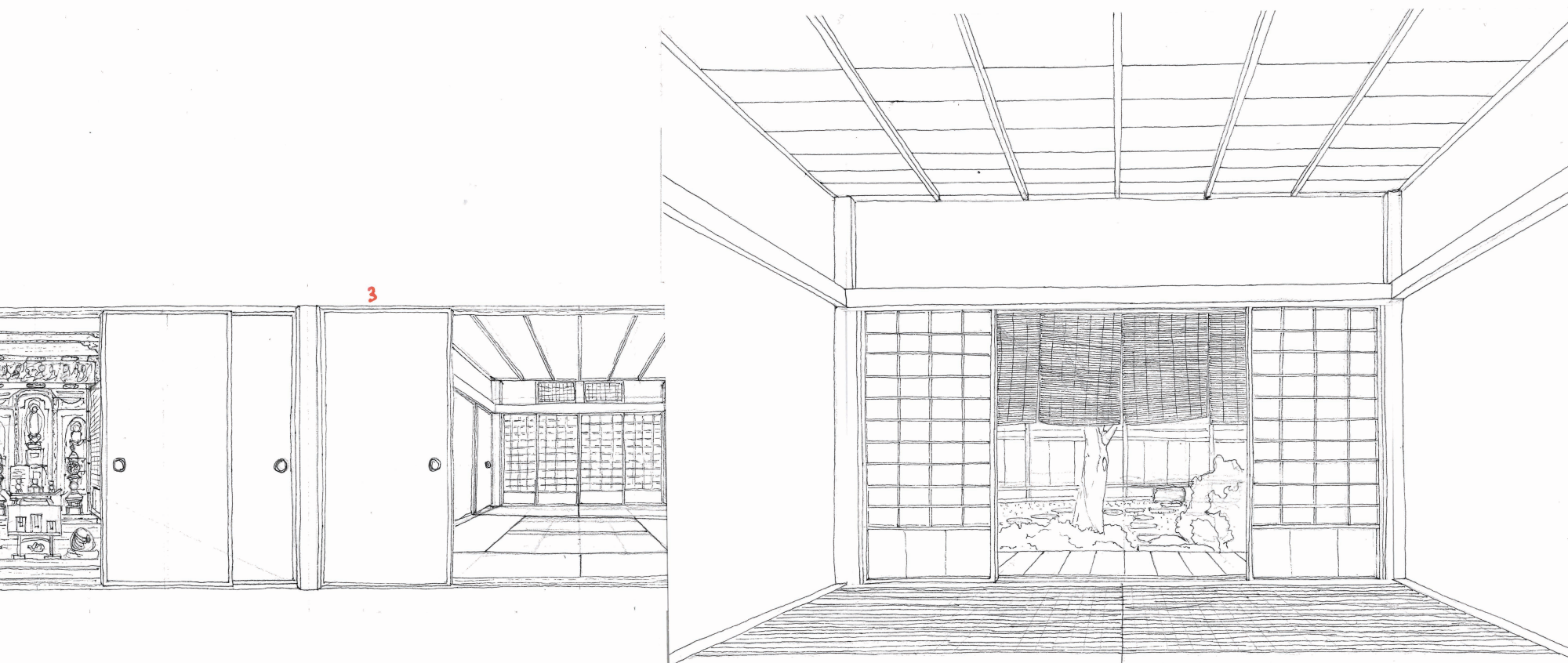
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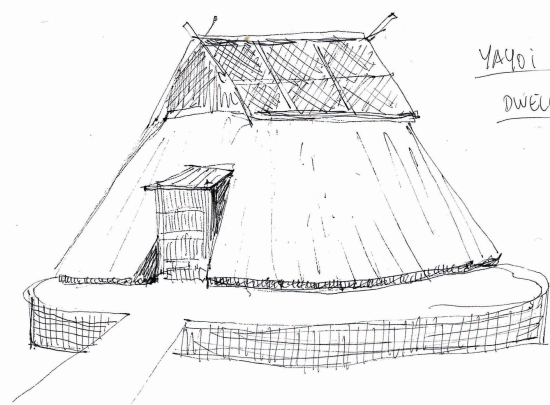
fragment of Yoshijima's House

Sequence Plan

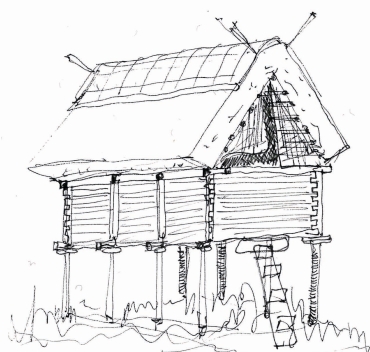
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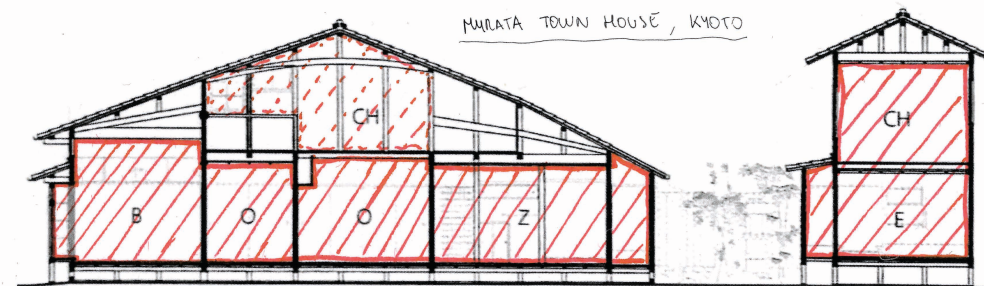
ROOF DEVELOPMENT AND INFLUENCES



YAYOI PERIOD
DWELLING



YAYOI PERIOD
STONE HOUSE



MURATA TOWN HOUSE, KYOTO

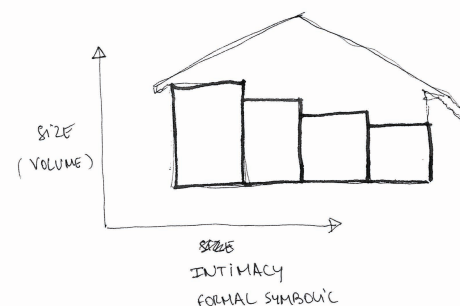
VOLUME
OF USED
SPACE



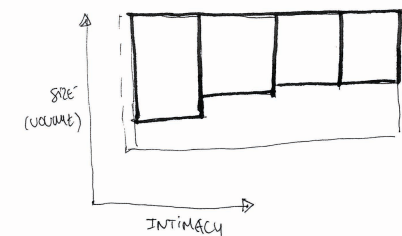
GRADIENT OF
INTIMACY
MACHIYA 'DOMA'
(SERVICE & OUTSIDE
CORRIDOR)

B = BOUTIQUE
O = OKUNUMA
(PIECE PARLÉ)
Z = ZASHIKI
N = NAKA NIWA
E = EXTENSION
THE PAVILLION

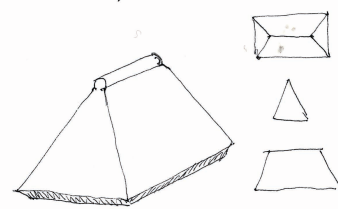
LINK BETWEEN SIZE OF ROOM, INTIMACY AND FORMAL USE ?



The deeper you go in the house the more private it gets. However, zashiki, main guest room (where you supposed to invite important guest) is quite deep in the dwelling. → Formal receiving is as important as privacy. → Hierarchy between common daily rooms and exceptional ones. In size, layout, elements, orientation, connection with other rooms.

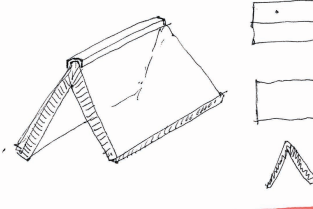


SIMILAR IRIMoya
THAN THE TEMPLE
ONE BUT
APPEARED FOR THE
NEED OF A WINDOW



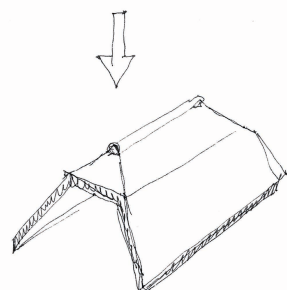
HIPPED ROOF
(YOSEMUNE)

FARMER'S
HOUSE

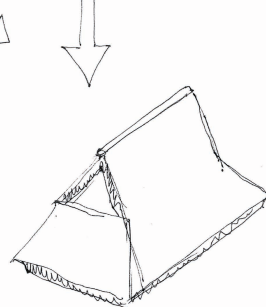


GABLED ROOF
(KIRIZUMA)

OFTEN USED IN
TEMPLES AND TOWN
HOUSES



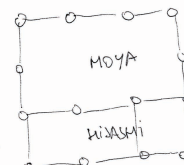
(KABUTO ZUKURI)
HIPPED - GABLED



(IRIMOYA ZUKURI)
GABLED AND HIPPED



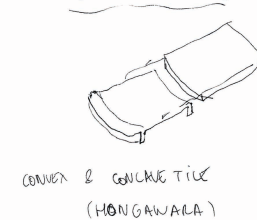
THE REASON THAT IT
APPEARED IS THE
HISASHI GOING ALL AROUND
THE MOYA.



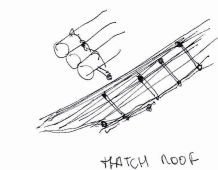
(EXAGGERATED)

TEMPLES AND UPPER-CLASS
HOUSES

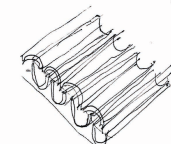
ROOF COVERING:



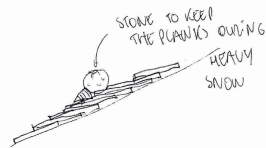
CONCRETE & CONCRETE TILE
(HONGANWARA)



THATCH ROOF

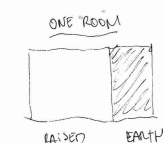


BAMBOO "TILE"



PLANKS / SHINGLE ROOF

EVOLUTION OF THE PLAN OF THE MINKA:



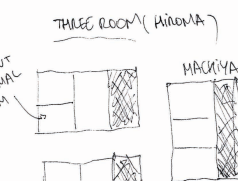
ONE ROOM

PAVED EARTH



TWO ROOM

NEEDING AREA



THREE ROOM (HIRUMA)

FRONT FORMAL ROOM

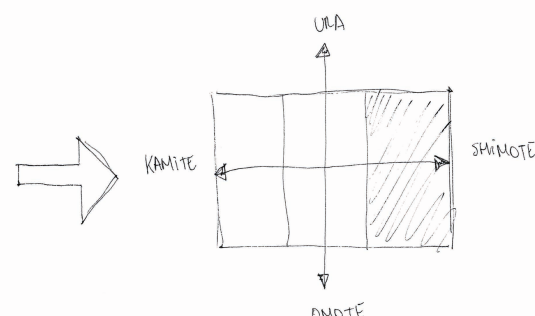
OLD MINKA



FOUR ROOM

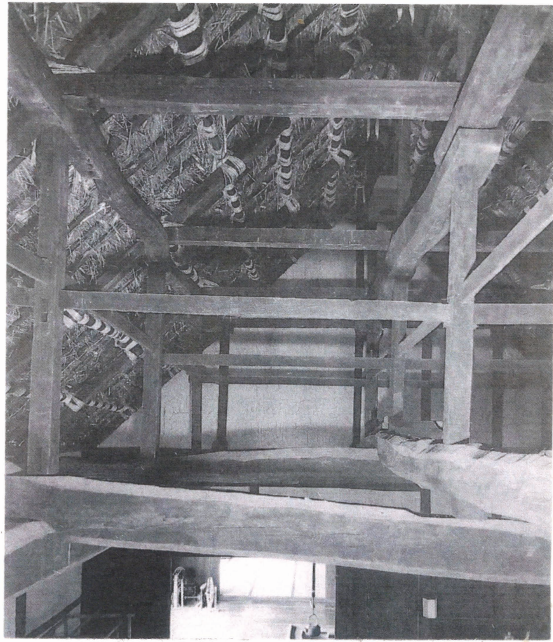
FORMAL ROOM AND VESTIBULE

GENERIC MINKA HOUSE PLAN FOR NŌKA



TWO AXIAL DEVELOPMENT
FRONT & BACK (URA & OMOTE)
FORMAL & HUMBLE (KAMITE & SHIMOTE)

SHIMOTE
AT FIRST THE ZASHIKI FORMAL ROOM WAS NOT ALLOWED IN COMMONER'S HOUSE. → GRADUALLY BECAME AN OUTSIDE ROOM TO INSIDE THE HOUSE (FOR COMMONERS). IT'S BARELY USED, USUALLY NOT ALLOWED TO USE, ONLY TO RECEIVE SPECIAL GUESTS. THIS ROOM WAS A SIGN OF HIGH SOCIAL STATUS, THEREFORE IT WAS HIGHLY RESTRICTED BY THE SHOOGUNATE, PEOPLE COULD ACCESS PERMISSION F.E. BY 'LENDING MONEY' TO THE SHOOGUNATE → THEY COULD BUILD SPECIAL ROOMS OR WEAR SWORD, ...



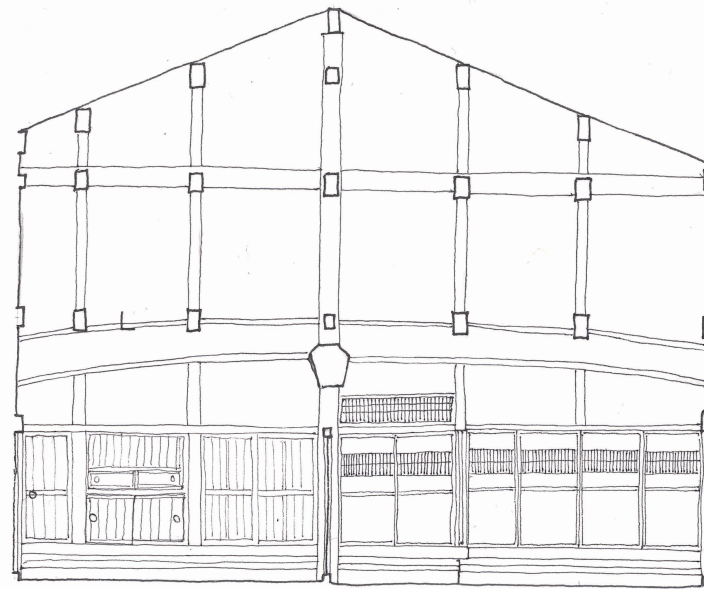
Nihon Minka-en's Doma
Looking to the Hiroba

→ NOKA

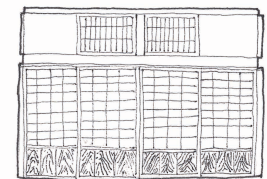


Yoshinuma's Doma
Looking to (left to right) Daidokoro (family room),
Nakao (inner foyer), DC (foyer).

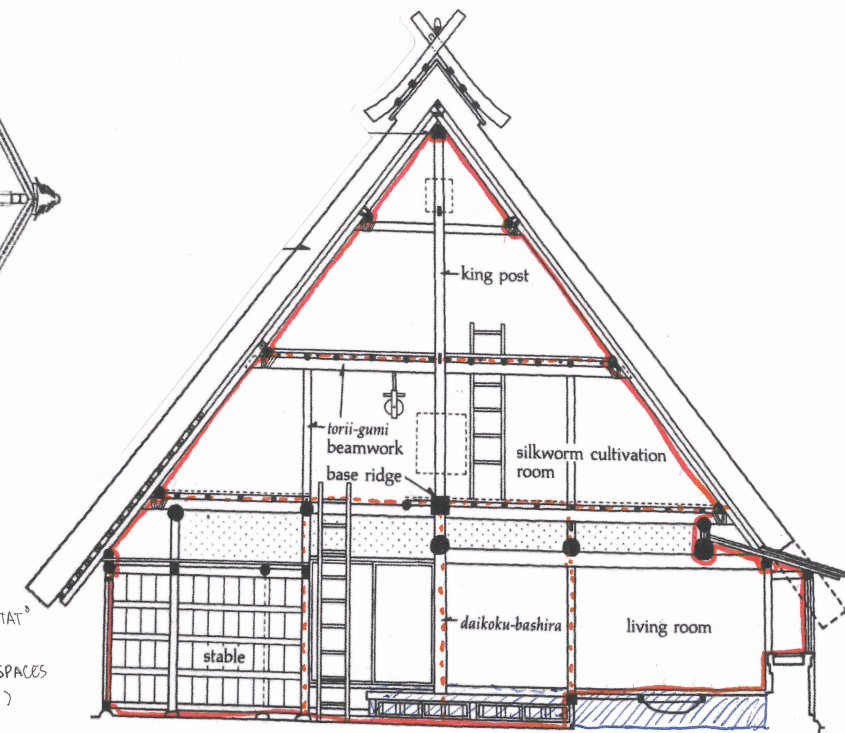
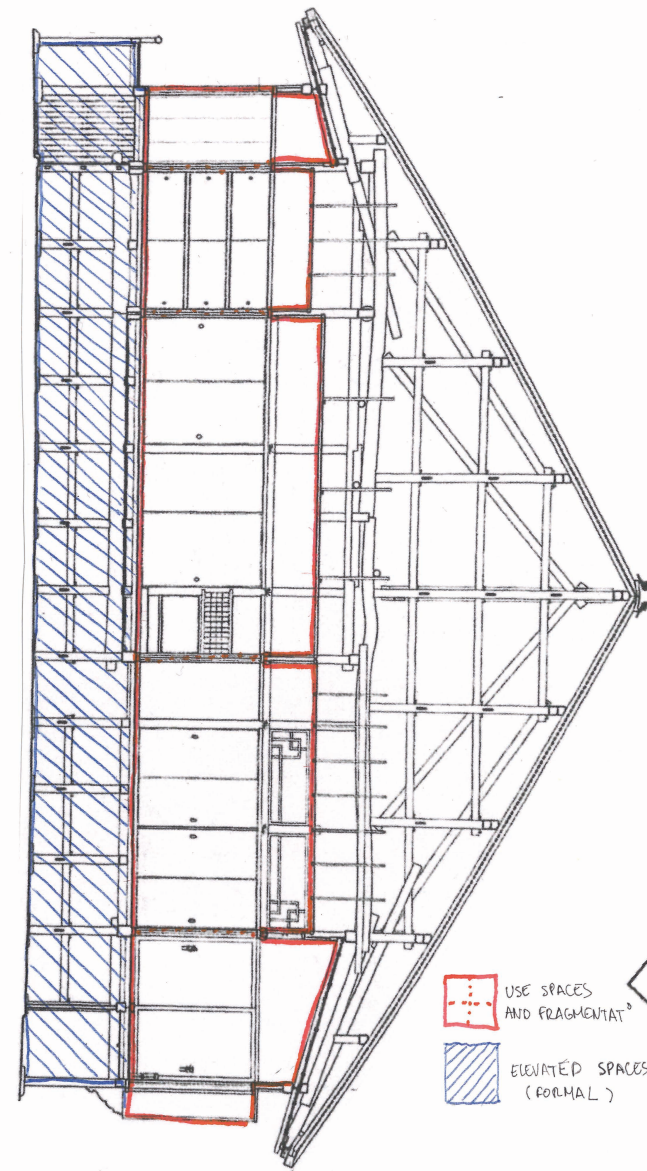
→ Machiya



DOMA'S CROSS SECTION
1/100



ZASHIKI'S SECTION
1/100



WE CAN SEE IN THE TWO SECTIONS ABOVE, THE DIFFERENCE OF VOLUME BETWEEN AN INFORMAL / DAILY ROOM AND A FORMAL / OCCASIONAL ROOM. I FOUND IT QUITE STRIKING, EVEN MORE IN THE DETAILS: ONE IS A AGGREGATION OF FIXTURES AND FURNITURE THAT YOU NEED FOR RECEIVING AND WELCOMING AND THE OTHER A WELL-ADJUSTED AND PROPORTIONED SPACE. THE MATERIALITY SHOWS A LOT ABOUT THE USES AND FEELING OF EACH ROOM, FROM HARD AND DURABLE FLOOR OF THE DOMA (EARTH AND WINE COMPACTED) TO THE FRAGILE AND SOFT WASHI PAPER ON THE SHOI.

THOSE SPACES ON THE PHOTOS ARE WHERE THE ONES WHO HOST A MATONY OF RECEIVING AND WELCOMING. THEY HAVE USUALLY AN EARTHEN FLOOR (DOMA), FOR SHELTER DURING FARM WORKS IN THE NOKA'S CASE AND FOR THE PASSAGEWAY OF GUESTS IN THE MACHIYA (THIS ONE WAS A SAKU BREWERY). IN BOTH OF THEM THE CEILING STAYS "RAW" (YOU SEE THE UNDERSIDE OF THE COVERING) AND WITH IT THE STRUCTURE THAT SUPPORT IT. BOTH ARE CONSIDERED INFORMAL ROOMS (OR HUMBLE, SHIMOTE END) AND YET, FOR ME AS AN EUROPEAN, FIND THEM QUITE EXQUISITE. IN THE STRONG GEOMETRY THAT COMPOSE THEM OR EVEN WITH THE HIGH CONTRAST OF BOTH, THE DENSITY / COMPLEXITY AND SIMPLICITY / CLARITY OF THE FLOORS, AND THE DARK / SHADOW OF THE STRUCTURE AND THE WARMTH OF THE TATAMI MATS (FLOORS IN GENERAL). IT'S LIKE THE GRAND EFFECT OF THE STRUCTURE IS AMPLIFIED IN ORDER TO EMPHASIZE THE SACRALITY OF ENTERING INTO SOMEONE'S HOUSE, CONSEQUENTLY MARKING THE LIMIT BETWEEN PUBLIC AND PRIVATE (THE DAIKOKU BASHIRA BEING A MARKER OF THAT). IT'S ALMOST AS THE DISTINCTION BETWEEN PUBLIC AND PRIVATE OF THE CITY IS DONE IN THE HOUSE ITSELF, A REALLY CULTURAL TRADITIONAL CUSTOM THAT I'M NOT FAMILIAR WITH. THE ENCOUNTERS ARE ARCHITECTURALIZED, IT'S MORE COMPLEX IN THE CASE OF THE YOSHINUMA HOUSE, BUT THE NUMEROUS SHOI-TATEBU PANELS (MOVABLE FIXTURES MADE WITH BOARD, SHOI GUMI COVERED WITH PAPER, LATTICES AND COMBINATIONS OF ALL THREE) ENABLES THIS SPACE TO CONTRACT AND EXPAND THEREFORE CHANGING THE INTERACTIONS OPERATING. IT CAN BE FULLY OPENED AND HOMOGENIZED OR FULLY CLOSED AND SEGMENTED. THE VARIETY OF LAYOUTS TALKS ABOUT THE NECESSITY FOR DIFFERENT SOCIAL ENCOUNTERS.

ALSO HAVING THE ROOF LEFT VISIBLE (COULD (NOT SURE IT'S AN HYPOTHESIS) BE A WAY TO INFORM ON YOUR SOCIAL STATUS, FOR EXAMPLE INSIDE ZASHIKI (BE MAIN GUEST ROOM) THE DIFFERENCE BETWEEN A PEASANT OR AN ARISTOCRAT IS NOT THAT EVIDENT FOR SOMEONE NOT FAMILIAR (PAINTING ON FUSUMA, TRANSLUCENT DECORATION, TATAMI BORDER, ETC...) BECAUSE OF THE OVERALL UNIFORMITY HOWEVER THE UNDER ROOF AND ITS STRUCTURE DOESN'T LIE, THE FINISHES, THE COVERING, THE ESSENCES OF WOOD, THE SLIDING DOORS, ETC... MAYBE THAT'S SOMETHING TOO OBVIOUS FOR JAPANESE PEOPLE BUT NECESSARILY FOR ANYONE OUTSIDE JAPAN LIKE ME.

EVEN WITH ALL THAT I LOVE ALL THOSE ENTRY / INTERIOR / ENCOUNTER SPACES WHICH ALWAYS LEFT ME AMASED HOW BEAUTIFUL THEY ARE. THE INTERPLAY BETWEEN CEILING HEIGHTS AND FLOORING FROM THE DOMA AND "RAISED ROOMS" ADDS UP DEPTH AND DIFFERENT EXPERIENCE WIDENING THE LIVED LIFE INSIDE THOSE HOUSES.

Kiwari

A SYSTEM OF PROPORTIONS AND DIMENSIONS IN TRADITIONAL JAPANESE ARCHITECTURE. THESE PROPORTIONS AND DIMENSIONS ARE FIXED, SUPPOSEDLY IMPORTED FROM CHINA, THEY WERE ~~USED~~ USED TO DETERMINE SMALLER ELEMENTS DIMENSION WITH THE SIZE OF THE ENTIRE BUILDING (FIRST USES WERE IN BUDDHIST TEMPLES).

JAPANESE THEN STARTED MODIFYING THOSE CANONS, WHILE BEFORE KEN WAS A FIXED DISTANCE, RATIO OF COLUMN AND SMALLER ELEMENTS WAS NOT AN ABSOLUTE ONE. EVERY ELEMENTS WAS PROPORTIONED FROM THE WHOLE.

THE SHOMEI SCRIPT WRITTEN IN 1608, AS PAPER SCROLLS, WAS THE FIRST TIME CARPENTERS WROTE THEIR KNOWLEDGE AND TECHNIQUES ON PAPER BEFORE IT WAS TRANSMITTED ORALLY. HERE APPEARED THE JAPONICIZATION OF THIS BORROWED

CANONS, AFTER THIS SCROLL WOOD ELEMENTS WERE PROPORTIONED/MODELED AFTER COLUMN SECTIONS WHICH WAS ITSELF DEPENDENT ON COLUMN DISTANCE IN 1:10 RATIO. SO EVERYTIME THE COLUMN INTERVAL CHANGED EVERY ELEMENTS WERE TWO, BASICALLY EVERY SLIGHT CHANGE IN THE GRID INDUCED NEW ELEMENTS DIMENSIONS.

DURING THE END OF THE 17TH CENTURY, WHERE BEFORE WAS PRIMARILY USED FOR WARRIOR CLASS, BEGAN TO APPEAR IN HOMES OF WEALTHY MERCHANTS/ARTISANS, PEASANTS, ~~ETC~~ ETC.

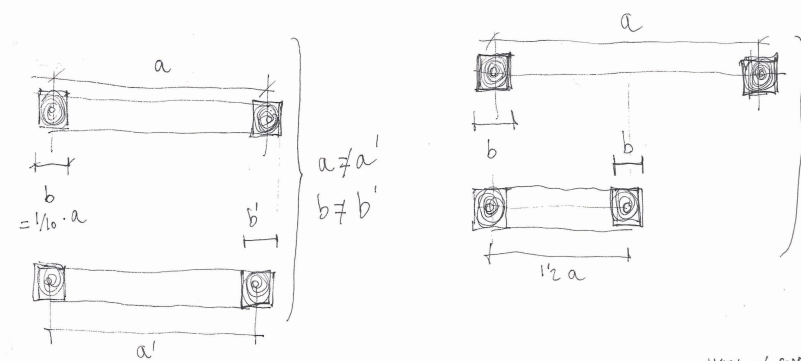
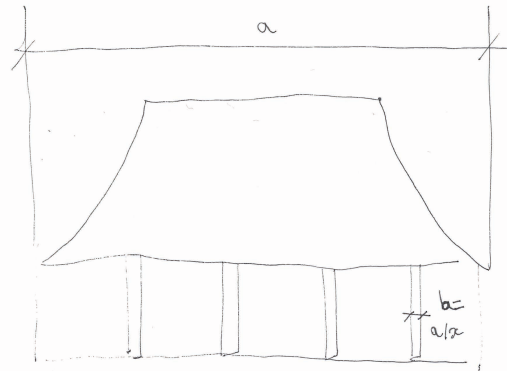
IT CHANGED A LOT DURING THIS IMPLEMENTATION, THE SIZE OF COLUMN AND ELEMENTS BECAME DEPENDENT ON THE KEN, WHICH WAS NO LONGER DEPENDENT ON THE SIZE OF THE ENTIRE BUILDING. THEREFORE ELEMENTS WERE STANDARDIZED ON HUMAN DIMENSIONS (KEN) RESPONDING TO A MORE SOLID-CONSTRUCTIONAL-AND ECONOMIC NEED. THEY WERE ~~NO MORE~~ NOT DESIGN ANYMORE ON THE CHANGE OF BUILDING SIZE AND BECAME "ABSOLUTE". THE GRID AND ITS PHYSICAL CONSTRUCTION WERE "SELF-BUILDING", ALLOWING THE PLAN TO FREELY BE CHANGED AND USE $1/2$, $1^{1/2}$, $2^{1/2}$ KEN DISTANCE WITHOUT ~~CHANGING~~ CHANGING ALL OTHER ELEMENTS.

ALONG WITH IT, ELEMENTS COULD BE PREFABRICATED AND STANDARDIZED REDUCING COSTS FOR THE CLIENT PUSHING NEW DESIGNS, COMPOSITIONS, ETC.

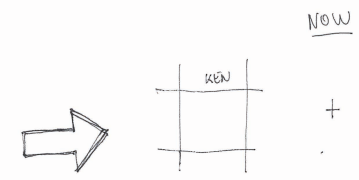
HOWEVER AT SOME POINT THIS MODEL CAME TO A DEAD END WHERE THE CANON TURNED INTO HANNEWMAN, AND ARCHITECTURAL INNOVATION STAGNATED.

~~THE~~ THE ONLY INNOVATIONS WERE IN CHASHITSU (LITERALLY TEA PAVILION)

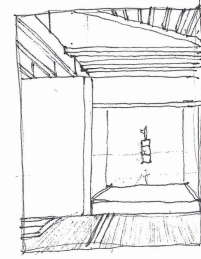
LIKE IN THE SOAN STYLE TEA PAVILIONS OF SEN NO RIKYU, MYSTIQUE AND SIMPLY ESTHETIC WERE DESIGNED TO CENTER ON THE CEREMONY. THE SIZE OF THE LATTER BEING TO SMALL TO WORK WITH THE CANONS OF THE HOUSE, ART CARPENTERS HAD TO ABANDON KIWARU TO BUILD MORE IN RELATIONSHIP WITH HUMAN SIZED STRUCTURES (THE TEA PAVILION COULD BARELY FIT 3 PEOPLE).



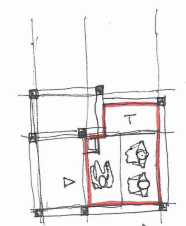
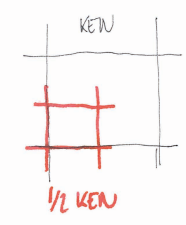
$b = 1/10 a$: as a a fixed value connected to human dimensions and b economically and constructively reasonable.



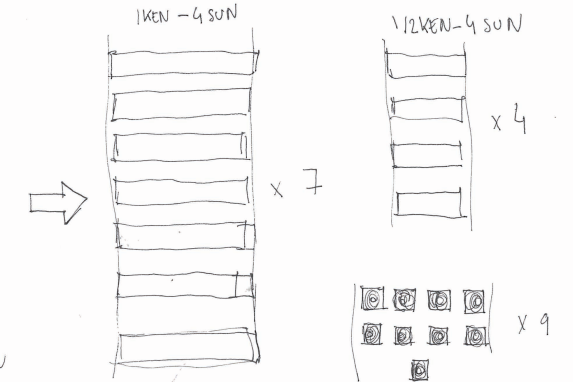
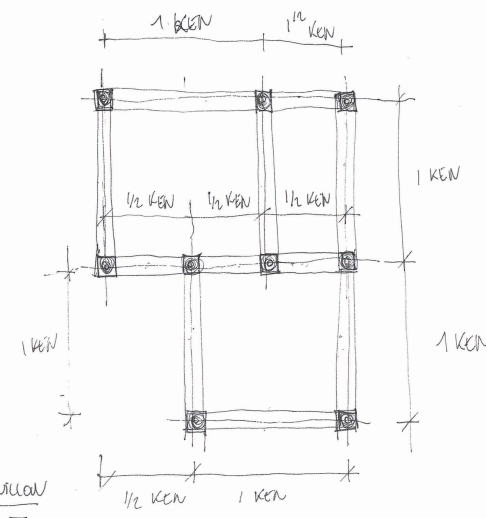
with one KEN = 6 or 6.5 shaku
= 4 sun
= $1/15$ KEN / $1/10.5$ KEN
(1 KEN = 60 or 65 SUN)



BEFORE

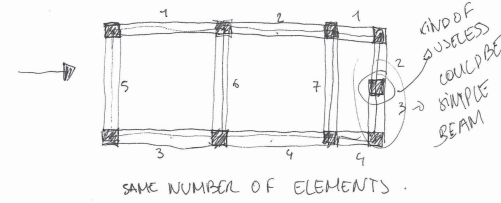


TAIWAN TEA PAVILION
SEN NO RIKYU



(ONLY IN PLAN)

THESE PARTS ARE ALREADY COUNTED AND THEIR DIMENSIONS STANDARDIZED → IMPACT ON ALL OTHER ELEMENTS THAT COMPOSE WITHIN THE GRID.



IT'S DIFFICULT TO DRAW EXACTLY WHICH PIECE SHOULD BE SMALLER OR NOT AS YOU WOULD HAVE TO KNOW WHICH DIRECTION YOU TAKE INTO ACCOUNT AS THE DIVIDER.

YOU HAVE A RARE SIMILITUDE BETWEEN LOWER CLASSES DOMESTIC HOUSES AND THE HIGHEST OF THEM. STANDARDIZATION DRIVEN BY AESTHETICS, ECONOMICS, SYMBOLICS AND NECESSITY AS BROUGHT PEOPLE FROM DIFFERENT STATUS TO LIVE ALIKE. THEREFORE THE NEED TO DIVERSIFY QUALITY OF ELEMENTS AND THEIR MAKING.

IT'S INTERESTING TO THINK THAT A COUNTRY THAT HAS CLOSED ITS BORDERS CAME TO A FORM OF UNIVERSAL DWELLINGS (AT LEAST SPATIALLY, EVEN IF ARISTOCRATIC HOUSES STAYED WAY BIGGER).

BUT THE ARCHITECTURE KIND OF LACK CREATIVITY AND INNOVATION, WHAT'S EVEN MORE FUNNIER IS THAT THE CONCEPT THAT BROKE THIS STAGNATED STATE WAS A RUSTIC AND HUMBLE TEA PAVILION CENTERING ON HUMAN DIMENSIONS.

HOWEVER THERE IS NOT AN INFINITY OF POSSIBILITY WITH THE SAME NUMBER OF ELEMENTS.
→ ONE OF REASON PLAN DEVELOPP ORGANIZATION AND THE COMPOSITION IS THE DIFFERENCE, AS THIS MODULE IS USED BOTH FOR PEASANT AND ARISTOCRATIC HOUSES COULD EXPLAIN PLANS LIKE KATSURA VILLA OR QUALITY OF FINITIONS. ONLY WAY TO TRULY DIFFERENTIATE THEM.

