BA [HONS] ARCHITECTURE Level 5

Tutors: Professor Jim Low, Hannah Vowles

ARC5001: STUDIO DESIGN 1 9 TSUBO HOUSE [01]









PROJECT AIMS

This design exercise, the first in ARC5001 Studio Design 1, aims to test skills and knowledge developed during Level 4. It is diagnostic, enabling skills, knowledge and understanding to be assessed. It will identify strengths and weaknesses.

The *tatami* is a mat made from rushes with a fine upper layer woven of a grass called *Igusa*. The *tatami* serves as a kind of floor-plan module when made in one standard size. There are six *tatami* mat sizes ranging from the *Momoyama-period Inakama tatami* 1.66x0.83 m. to the *Kyoto tatami* 1.91x0.95 m. The *tatami* planning systems are used only in western Japan.

In 1952, Makoto Masuzawa set out to design 'the absolute minimum house', based on a floor area of 36sq.ms. A *tsubo* is a traditional unit of measurement, a square formed by placing two *tatami* mats side by side. Nine of these form a larger square, but still is only 6ms. along one side. Masuzawa used these measurements to create a cube which enabled him to achieve a floor area of 59sq.ms. This even allowed for the *fukinuke*, a vertical space in Japanese construction that connects levels, as in a stairwell or atrium.

BRIEF

The aim is to design the MINIMUM house within Masuzawa's 6x6x6m.envelope. This design project is about designing and making.

ASSESSMENT REQUIREMENTS

- Choose a site near to your home giving reasons for your choice.
 Establish a brief for a young couple with one child what do they need?
- Build a 1:20 model of the 9-tsubo house as an envelope to use it to explore the design options. Record [in your sketchbook] the development of the design – the design process. Take photographs of the development.
- Presentation is to be one A2 sheet showing plans, a section, elevations/axonometric all in the context of the site, and interiors, include photographs of the models and site as part of the presentation.
- 4. It is essential that you inhabit the plans and the model show how the house is used.
- Make a digital record of the submission as the first element of your digital portfolio using 300dpi jpegs individually labelled with your name, the title of the project and numbered

Submission to be pinned-up by 09.45 am. on Friday 27 September 2013 [FT] 2.00 pm on Tuesday 24 September 2013 [PT]



REFERENCES

www.Boo-Hoo-Woo.com

www.9tubohouse.com

http://www.100khouse.com/2010/01/23/duplex-inspiration-japanese-

9-tsubo-house/

http://www.spoon-tamago.com/2010/06/02/9-tsubo-house/

http://www.littlediggs.com/littlediggs/2008/07/the-minimum-

house.html

http://daddytypes.com/2005/10/03/the_9tsubo_house_with_kids_that s_320_sf_btw.php

http://www.michaelfreemanphoto.com/media/5fe98a9a-a00e-11e1-

bcc4-1152fe75a2d0-9-tsubo-house

http://www.koizumi-studio.jp/works_3.html

see House in Higashi-Osaka in Ryan, Raymund [2001] *Cool Construction* pp.54-59 Thames & Hudson, London