Course Syllabus

Towards a People-Centered Housing Recovery after Disaster:
The 3.11 Earthquake and Tsunami in a Japanese and International Recovery Context

Course Description:
The goal of this course is to consider the housing recovery process after the 3.11 disaster within the historic context of disaster recovery in Japan as well as in comparison of international disaster recovery context. This course sets out to build a basic understanding of definitions of disaster phases and a focus on recovery as an important and understudied phase of disaster. The focus of this course is on housing reconstruction with the understanding that housing recovery is intrinsically linked to planning, economic, and legal aspects, as well as holistic livelihood recovery, within a broader socio-cultural context.

The goal of post-disaster recovery is for the victims of disaster to regain stability in their lives, and housing is a critical aspect for achieving this goal. Housing is a physical object within the built environment, and can be considered primarily as a design problem within a social context. More broadly however, housing is interconnected with other issues of disaster recovery (urban planning, economic initiatives, legal regulations, social welfare, governmental policies, livelihood recovery, and local culture, etc). The lens of housing offers one way of thinking about disaster impacts and is one path for international comparison of disaster recovery.

The earthquake and tsunami that struck the northeast part of Japan on March 11, 2011, exceeded disaster predictions and caused unprecedented devastation. Beyond the vast scale of the disaster, the character of this multi-locational disaster adds to a complex situation involving multiple prefectures and many different municipalities. On top of the earthquake and tsunami, the nuclear accident adds another layer of complexity to all aspects of disaster recovery, including housing. The 3.11 disaster is taken as a starting point to consider reconstruction and recovery, within the framework of international disaster recovery processes and case studies. In order to understand the unique context of Japanese disaster reconstruction, experiences after the 1995 Kobe earthquake will receive special attention. We will also specifically discuss Hurricane Katrina as another recent disaster in another wealthy country. Students will come away from this course with a deeper understanding of disaster recovery in international, Japanese, and contemporary contexts.
Assignments:
Students will be responsible for 2 case studies that will be presented in class, and 1 final term paper.

- The 1st international case study is of a natural disaster and recovery, including basic damage data, local characteristics, recovery policies and innovations, and a list of sources.

- The 2nd Tohoku case study is introducing 1 town or area (can by a larger area, i.e. prefecture, or small area such as a community) in the area affected by the 3.11 disaster in the Tohoku, including basic information, history, current situation and reconstruction process and innovations, and a list of sources.

The case study presentations will also be uploaded to the class website, and serve as additional source materials for class members.

- The final term paper (10-12 pages) can be on a theme of student’s choice related to housing recovery, which can focus on one or more of the following aspects: housing design; urban planning/policy, community-building, social issues in disaster recovery, laws and policies. The following topics are listed as suggestions:
  - Select one theme (i.e., community planning, relocation, etc.) and compare through case studies of the reconstruction process of 2 disasters.
  - Based on one international case study, propose lessons that could be applied in Tohoku.
  - Explain the historical development of disaster recovery policies in one country, through examples.
  - Compare and contrast different design solutions used in temporary or permanent housing reconstruction.

*Students are highly encouraged to consider the 2 case study assignments as building blocks for the final term paper. After picking a theme you are interested in, choose case studies that are related to this theme, which can then be incorporated into your final paper.*
Course Schedule

Week 1. Day 1. Course Introduction

Resources for understanding Tohoku and 3.11

- Tasukeai Japan website: [http://tasukeaijapan.jp/](http://tasukeaijapan.jp/)

Recovery Plans—Prefecture, town

Japan Reconstruction Design Council

Iwate reconstruction Plan
- Recovery News from Iwate prefecture:

Miyagi Prefecture Recovery plan

- Documentary footage (TBA)
- Additional resources (TBA)

Definitions of disaster and recovery—the disaster cycle

Week 1. Day 2

- Haas, Kates and Bowden (1977) *Reconstruction following Disaster*. Cambridge, Massachusetts: MIT Press. (pp TBA)


Additional Sources


International housing recovery

Week 2 Day 3


✧ The Shelter Centre online Library http://sheltercentre.org/library

Additional sources:

Week 2 Day 4


Hurricane Katrina-Planning

Week 3 Day 5


Additional Source:


✧

Temporary housing/transitional housing/permanent housing

Week 3 Day 6


Housing Recovery Case studies

Week 3 day 6


Additional sources:


Week 4 Day 7

Student presentations: International Case Studies
Week 4 day 8
Student presentations: International Case Studies

Post-Disaster Housing Reconstruction in Japan: What happened in Kobe?
Week 5 Day 9

Japanese Housing Policy: What happened after Kobe?
Week 5. Day 10

Week 6 Day 11


**Planning and Machizukuri**

**Week 6 Day 12**

- Supporters Network for Community Development (Machizukuri). (1999). *Key Terminology in Restoration from Hanshin Earthquake Disaster*. Kobe: Supporters Network for Community Development

**Tohoku: a multi-locational disaster,**

**Week 7 Day 13**


**Week 7 Day 14**

Student presentations: Tohoku case studies

**Week 8 day 15**

Student presentations: Tohoku case studies
Recovery Initiatives in Tohoku

Week 8 day 16

- Archi Aid: http://archiaid.org
- Lost houses project: http://www.teehouse.com/losthomes/en/about/

- Ishinomaki 2.0: (Japanese only) http://ishinomaki2.com/
- Temporary housing improvement manual (Japanese only) http://kasetsukaizou.jimdo.com/

People-centered housing in Japan and Housing Innovations in Tohoku

Week 9 day 17


Wooden temporary housing

Sumida cho/Rikuzentaka
- http://sugawaradaisuke.com/4-works-smt01-00.html

Fukushima
- 五十嵐太郎、 阿部 直人. (2011). 木造仮設住宅群: 3.11からはじまったある建築の記録 はりゅうウッドスタジオ、日本大学工学部建築学科浦部研究室、

Disaster Mitigation-Physical Infrastructure vs. Social Measures

Week 9 day 18

http://ajw.asahi.com/article/0311disaster/quake_tsunami/AJ201103213218

- Maps showing historic relocation after Showa tsunami, (source TBA)

**Beyond housing—livelihood recovery initiatives**

**Week 10 day 19**

- Wa wa Project: [http://wawa.or.jp/en/](http://wawa.or.jp/en/)
- Misanga project: [http://www.sanriku-shigoto-project.com/about/index.html](http://www.sanriku-shigoto-project.com/about/index.html)

**Conclusions**

**Week 10 Day 20**

**Additional References**

*Disasters*

*Journal of Disaster Research*

*Journal of Mass Emergencies and Disasters*