The EU-US International House
Innovation and Re-Generative Design
University of Oregon Portland – Urban Architecture
Fall 2020 - Winter 2021 - Spring 2021
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- A New European Union EU + US United States Initiative

- Study of World Problems - 3 From the US and 3 From Europe


- Building Type: Hybrid of Academy, Embassy, Think Tank, Research Center, and Innovative Housing (W21 Arch 4-558 Type and Typology)
Triple Disaster Japan 2011:
Earthquake
Tsunami
Nuclear Disaster
+
Social

Triple Disaster US 2020:
Covid 19
Social-Economic Crisis
Systemic Racism
+
Climate Change
Refugees crises exist since humans exists. People are forced to leave their home because of severe and life-threatening problems. Forced migrants are created by human failures such as war, armed conflict, terrorism, genocide as well as by natural disasters such as climate change, drought, infectious diseases, epidemics and pandemics... Since 2015, I am working on the global refugee crisis research and design teaching, and since 2020 I am connecting the refugee crisis with the Covid19 crisis.  

https://refugee.uoregon.edu/
Repairing the Earth

Life
Beauty
Earth
Battle

ReGenerative
Process+Design
The 10 Biggest Problems in the World according to the EU

10. Don’t know - 2%
9. Proliferation of Nuclear Weapons - 3%
8. Armed Conflict - 4%
7. Spread of infectious Diseases - 4%
6. The Increasing Global Population - 5%
5. Availability of Energy - 5%
4. International Terrorism - 11%
3. The Economic Situation - 16%
2. Climate Change - 20%
1. Poverty, Hunger, and Lack of Drinking Water - 28%

What would the List look today when we ask People?
Climate Change - Warming

Official doomsday clock, representing an ominous oscillating countdown to possible technology-related global catastrophe, moves one minute closer to the end of the World.
Climate Change - Rise in Sea level

If all of Alaska's glaciers melted, sea level would rise ~ 0.05 meters (about 0.16 feet).

If all of Earth's temperate glaciers melted, sea level would rise ~ 0.3 meters (about one foot).

If all of Greenland's glaciers melted, sea level would rise ~ 6 meters (about 19.7 feet).

If all of Antarctica's glaciers melted, sea level would rise ~ 73 meters (about 240 feet).
Overpopulation

- Disaster looms as humans exceed the earth’s natural carrying capacity
- Increase in poverty

Paul Ehrlich: The Population Bomb
Urbanization good and bad !?!!

CITIES WITH INHABITANTS OF AT LEAST ONE MILLION PEOPLE

### Urbanization

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of Urban Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>2 out of every 10 people</td>
</tr>
<tr>
<td></td>
<td>lived in an urban area</td>
</tr>
<tr>
<td>1990</td>
<td>4 out of every 10 people</td>
</tr>
<tr>
<td></td>
<td>lived in an urban area</td>
</tr>
<tr>
<td>2010</td>
<td>5 out of every 10 people</td>
</tr>
<tr>
<td></td>
<td>lived in an urban area</td>
</tr>
<tr>
<td>2030</td>
<td>6 out of every 10 people</td>
</tr>
<tr>
<td></td>
<td>will live in an urban area</td>
</tr>
<tr>
<td>2050</td>
<td>7 out of every 10 people</td>
</tr>
<tr>
<td></td>
<td>will live in an urban area</td>
</tr>
</tbody>
</table>

Defined by UN HABITAT as a city with a population of more than 10 million
Corona Virus Encounter

How long will it take to eradicate Covid19, and how long will it affect our lives? Or will it stay with us from now on? How will it affect our environment, our cities, buildings, streets, parks and gardens. And how can we get out of this crisis?
Shared Streets
The New EU Building in Brussels by Samyn and Partners 2020
Medialabs at MIT by Fukihimo Maki

SECTION A-A

1. Lower atrium
2. West Lobby
3. Gallery
4. Research laboratory
5. Loading dock
6. Machine shop
7. East lobby/gallery
8. Upper atrium
9. Void
10. Conference room
11. Kitchen
12. Multipurpose space
13. Lecture hall
14. Terrace
15. Reception space
16. Administration
17. Lounge
18. Café

Medialabs at MIT by Fukihimo Maki
State Embassy to Federal Government in Berlin
Competition 1995  3rd prize
HNA H Neis M Kao K Hellman L Meyer
HOUSING ON TOP OF EMBASSY
Regenerative design is a process oriented systems theory based approach to design. The term “regenerative” describes processes that restore, renew or revitalize their own sources of energy and materials, creating sustainable systems that integrate the needs of society with the integrity of nature. The basis is derived from systems ecology. It is based on a process of wholeness seeking steps that build on each other.

(Re)Generative Design

Generative or (re)generative design is an applied form of generative science that tries to understand and conceptualize the world and its complex structure as a generative or (re)generative process. Generative design attempts to formulate limited parameters, principles, and rules that interact with each other to create richness of life and behavior, and endless variation of form, shape and place. Here generative and (re)generative design are closely related in terms of rules and principles.

Sources
2. Christopher Alexander: The Nature of Order. (Wholeness Extending Transformations)
Tohoku Spaceport for Earth Evacuation
by Boyce Postma
Hajo Neis Thesis Studio, 2012-13

REGENERATIVE SPACE
Ishinomaki, Japan | Boyce Postma

The final human catastrophic disaster is the failure of earth's ability to support life. Due to ill-conceived human industry, natural planetary processes, or some extra-planetary intervention, this planet will not last forever. However, for the first time in the known history of this solar system, this predictable end does not necessarily mean the conclusion of human life. Facilities for such an evacuation have been proposed as early as the late years of the 19th century by thinkers such as Jules Verne and Konstantin Tsiolkovsky. I propose no less than ten locations in the world dedicated to the evacuation of humans and other life to extra-earth colonies within the next fifty years. This is the dissection of an architectural design process for a contemporary spaceport and the implications of such a typology on both local and global catastrophic disaster.

Urban Diagrams

New industries will develop along an existing central corridor that connects the existing downtown to the Spaceport. Hotels, research facilities, test facilities, and entertainment will fill in the gaps in the city and reinvigorate the damaged economy of Ishinomaki. The entire area surrounding the spaceport will be dedicated to wetland redevelopment, parkland and other tsunami mitigation devices. The spaceport can be accessed from the harbor, by vehicle, on foot, or on the underground shinkansen line. Runways are oriented south and east to take advantage of rotation of the earth on takeoff. Buildings on the site include the spaceport, spaceplane storage, fuel storage, and a communications tower. Water surrounds most of the site, which allines for a natural security barrier.

New Space Industries

The Tohoku Spaceport would reinvigorate the city of Ishinomaki through research and development of technologies such as mining, future habitation, and satellite development.

Images from Ishinomaki

Wave height map

An inverse relationship exists between the height of the wave and the depth of penetration into the land. The intensity of the red relates to the size of the wave.

End of the World Traveler

Visitors

Air Travelers

Space Business Travelers

Space Tourists

The end of the world traveler would arrive by train from the colony in Tokyo. From here, changing and any last personal moments on earth can take place.
Fall 2020 SEMINAR
Specific Exercises, Tasks, and Assignments
During fall we will continue the summer ideas and concepts with specific tasks and assignments including the following:

1. Group building, individual Interviews, online Learning
2. Literature, ReGenerative Design, Site visits
3. Contact particular local agencies, study large problems and connection between large problems (i.e. triple problems).
4. Focusing the Program, set of guidelines or patterns with regard to the Covid19 pandemic. Urbanism: Design for Distancing Ideas Guidebook Architecture: Cross Ventilation, Separate Entrances,…
5. Precedents of this kind of hybrid buildings, including the new EU Building, Medialab at MIT, and Statehouse in Berlin and others, International House in Berkeley.
6. Initial test design exercises in urban and building design to get ready for winter quarter.
7. Preparing an initial thesis report as a foundation for the design process in winter quarter 2021
Humanity is facing a crisis that goes far beyond any other crisis that we have experienced, and it reveals old and new problems of all kinds that affect life on earth. There are two main questions that we want to address in this symposium:

- How does the pandemic and related problems affect life on earth, society and people? What is its impact on daily life? How can we adjust our work and life in a way to keep safe and stay effective in our effort to improve life and beauty on earth? How can patterns and pattern languages help in these efforts?
- How does Covid-19 and connected large problems affect architecture, urban planning, and urban design? How do we redesign and adjust public and private buildings, parks, streets, neighborhoods, and transportation infrastructure to get ready for a new normal and new challenges? What patterns and pattern languages are needed to support these endeavors?

Key Events

Finding a Way Forward in a World of Conflicting Narratives – James H. Kunstler in conversation with Kate Ledogar

The Importance of Homeostasis as Design Criteria in the Time of Covid-19 – Donald Ruggles

New Bank for Community Ideas and Solutions – Wolfgang Stark

“And the alley she whitewashed in light blue” – Free viewing of the film during the symposium, and Q&A with the filmmaker and architect Nili Portugali

Culture and Cities in Post-Covid-19 Times – Kurt Andersen in conversation with Duo Dickinson

Student Session: UO Design Studio – Regina Coeli Inclusive Neighborhood, Rome Summer 2019; Building Beauty

Student work

Symposium Program

September 18, 2020

Session 1: Morning 8:00–12:00
8:00 – 8:30  Welcome and introducing the topics
8:30 – 9:20  1.1: Finding a Way Forward in a World of Conflicting Narratives, James H. Kunstler
9:30 – 10:40  1.2: Patterns, Refugees and the New Reality
10:00 – 12:00  1.3: Wholeness, Beauty, Being and the Ground
12:00 – 12:15  Announcements

Session 2: Afternoon 16:00–20:00
16:00 – 16:15  Announcements
16:15 – 18:00  2.1: Pattern Languages for Covid-19 Adaptation
17:30 – 18:20  2.2: Pattern Language Approach Case Studies
18:30 – 19:20  2.3: Extending the Reach of the Pattern Language Approach
19:30 – 20:00  2.4: The Importance of Homeostasis as Design Criteria in the Time of Covid-19, Donald Ruggles
20:00 – 20:15  Announcements

September 19, 2020

Session 3: Morning 8:00–12:00
8:00 – 8:30  Announcements
8:30 – 9:40  3.1: New Bank for Community Ideas, Wolfgang Stark
8:50 – 10:00  3.2: Cities and Architecture in Post-Covid-19 Times
10:20 – 11:20  3.3: Student Session: UO Design Studio – Regina Coeli Inclusive Neighborhood, Rome Summer 2019; Building Beauty
11:30 – 12:00  3.4: Q&A with Nili Portugali about her film “And the alley she whitewashed in light blue” [Free access for watching the film will be provided after registration between September 15–19]
12:00 – 12:15  Announcements

Session 4: Afternoon 16:00–20:00
16:00 – 16:15  Announcements
16:15 – 17:00  4.1: Culture and Cities in Post-Covid-19 Times, Kurt Andersen in conversation with Duo Dickinson
17:30 – 18:00  4.2: Case Studies of Living Process 1
18:00 – 19:00  4.3: Case Studies of Living Process 2
19:30 – 20:00  4.4: Closing Roundtable, Final Comments and Announcements
20:00  Farewell

All times are Pacific Daylight Savings Time

Registration

- Registration fee is $50 for the full program. If you wish to register for one day only, or for time difference reasons can attend only the morning or afternoon sessions you can pay $30 for registration. We would however appreciate a payment of the full fee nevertheless, to help contribute to pay the expenses of organizing the symposium.
- Please use the following link to pay the registration fee: https://www.buildingbeauty.org/achb
- Only registered members will receive the Zoom code for the sessions, and will be able to watch the film for free.
- Students of Building Beauty, University of Oregon and any other Academic Institution will be able to attend for free. Please write with proof of academic status to puarl@uoregon.edu

PUARL+BB Virtual Symposium September 18–19, 2020
SUMMER-INVITATION
September 18-19 SYMPOSIUM

Students are invited to participate for free in the PUARL+BB Online Symposium ‘PATTERNS, BEAUTY, REALITY.’ Here students can present their own project ideas and discuss them with professionals, faculty and other students. Originally planned for Sorrento, Italy, now an on-line conference workshop, September 18 and 19, 2020. Website: https://blogs.uoregon.edu/puarlbb2020/ Please send your interest to participate to puarl@uoregon.edu Mr. Tomo Furukawazono. You will need an invitation by zoom to have a place on zoom.

Thank You
https://blogs.uoregon.edu/puarlbb2020/
hajoneis@uoregon.edu
Initial Program
These are first program points. In the fall the program will be finalized by students

• Laboratories for working on the 6 world problems and 3 supportive areas of architecture, art and Photography.

• Building 5-6 stories high

• Lobby, Reception and Lecture Hall, Street Coffee Shop

• 9 Innovative apartments for the researchers and their families

• Roof Garden and Teahouse

• Basement

• Seminar Rooms, Library, Computer Lab
Two Buildings for the Study of Problems that threaten our Life on Earth and what Architecture can do to help this situation

The Committee has selected the following Areas of Study and Research for the New EU-US International House, one in Portland US, the other in Bonn EU:

For the US:
- **US: Covid19 Pandemic** - Task: Continuing Life under Corona Virus
- **US: Socio-Economic** - Task: Surviving in a Difficult Environment
- **US: Racism** - Task: Correcting an Original Sin

For the EU:
- **EU: Climate Change** - Task: Protecting Life on Earth – Finding Solutions
- **EU: Refugee Problem** - Task: Helping People in Need and Integration
- **EU: Digitalization** - Task: Creating Efficient Networks - People Protection

Additional appointments include:
- **Human Architecture** - Task: Develop Innovative Buildings
- **Critical Art** - Task: Create Critical Awareness of Problems in the World
- **Photography** - Documentation of Problems and Successes

**Note:** Students can select one or two problems and work with local agencies and organizations to make these problems more tangible for their building and urban design.
Regenerative Design

1. Regenerative as daily part of life (repair, recovery)

2. R… after disaster major repair needs to be done to get back to the previous stage (structure preserving approach)

3. R… after major disaster improve the structure to more than what it was before (structure improving approach)

4. R… after major disaster considerably enhance the structure (structure enhancing approach)
PROJECT AND STUDIO WORK ON DISASTER PROBLEMS: by UO, PUARL, CIU, CES and HNA

• Urban Design Workshop in Fukushima Summer 2012

• First Regenerative Design Studio at UO Portland

• UP and OUT Tsunami Pattern Language for State of Oregon 2014

• UP and OUT 2 Tsunami Project Language for Two Coastal Towns in Oregon, State of Oregon 2015

• 2016 Studio Projects on Refugee Problem in Essen, Germany, and Portland, US since 2016, UO

• Summer Refuge Research in Germany - Article Publication

• Refugee Pattern Language Research Project RPL (since 2017)

• 2019 Urban Neighborhood for Refugees in Rome, Summer Program Rome
Fall 2020 – Specific Tasks and Assignments

During fall we will continue the summer ideas and concepts with specific tasks and assignments including the following main tasks:

1. Start reading the Literature and discuss large problems, and design methods, i.e. Regenerative Design and approaches to site, program, local connection, and people.
2. Start to contact particular agencies, non-profit or private organization that handles one of these problems on a local-regional level. And study the connection between large crises.
3. Focusing the Program, developing a set of guidelines or patterns with regard to the Covid19 pandemic and other points.

Urbanism: Design for Distancing Ideas Guidebook

4. We will study precedents of this kind of hybrid buildings, including the new EU Building, Medialabs, and Statehouse in Berlin and more.
5. We will also study the 3 sites that have been proposed by the EU-US Committee and select a particular site that fits one’s personalized program best.
6. Initial test design exercises in urban and building design to get ready for winter quarter.
7. Preparing an initial thesis report as a foundation for the design process in winter.