INFORMATION ARCHITECTURE OF CITIES
Information Architecture of Future Cities: Livable Cities
Today: Urban Climate
Content

• Report from MOOC Working Group 2
• Prof. Jan Carmeliet: Urban Climate and Liveability
• Questions and answers
The story so far

- Today: Urban Climate
- Criteria of liveability are quantifiable
- Liveability differentiates cities, and liveability means different things in different climates and cultures
Summary of the Discussion Week 3

The first group presented this past Monday (29/02/2016) their findings about the discussions related with the compulsory exercise “Livability Criteria” from Week 3. The results which are provided in the video are mainly based on the posted last week’s exercise answers from MOOC users all around the world. We have recorded for you the presentation part from the class.
Question: 4. Is UHI effect concerning policy-making in your area?

Answer Julie Davenport: not that I am aware of, however, many policies may affect the UHI
URBAN CLIMATE AND LIVABILITY

HEAT ISLAND EFFECT

GIANLUCA GENOVA, VIVIANA GONZALEZ, JULIE DAVENPORT
Where do participants live?
1. Which are the main UHI effects that you can identify in your area?
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2. Which are the measures you would propose?

Most Common Suggestions
Plant trees and add green space to the city

Make more transportation available

Also Common
Sustainable buildings

Ventilation
2. Which are the measures you would propose?

- Suggested Once or Twice
  Reducing waste and reusing materials

- Fewer vehicles or only electric/hybrids

- Reducing global warming

- Study wind patterns and building orientations
3. Is UHI effect concerning policy making in your area?

- Planting trees
- Transportation systems
- Alternative transportation: cycling
- Green and water spaces
- Preservation of green areas
- Green Roof

Not aware
On a morning in February 2015, a nuclear powerplant in Switzerland from above
On another morning in February 2015, a nuclear powerplant in Switzerland from below
Power generation and side effects – do they impact livability?
Information Architecture and Future Cities: Livable Cities

With the city becoming the predominant living and working environment of humanity, livability or quality of life in the city becomes crucial. In this course, we explore the impact of information and information architecture on the livability of cities. After the introduction to affordable livability and its measurable criteria, we explore possibilities of participatory urban design by future citizens, leading towards the development of a citizen design science. By week four, we give special attention to 4 crucial urban stocks and flows for urban design: water, energy, the local climate, and mobility. During the following lectures, we bring together the previous topics to explore how these stocks and flows affect the livability of the city. By the end of the course, students will be able to recognize the different measurable criteria for the assessment of livability, and how to influence the design of livable cities. The edX MOOC on Quality of Life: Livability in Future Cities is a good overview and starting point for this course.

- 22.02.2016 Die lebenswerte Stadt
  Introduction to livable cities
- 29.02.2016 Messbare Kriterien der Lebensqualität
  Measurable criteria of livability
- 07.03.2016 Stadtklima und Lebensqualität
  Urban Climate and livability (Prof. Jan Carmellet)
- 14.03.2016 Seminar week (No lecture)
- 21.03.2016 Energie und Lebensqualität
  Energy and livability (with Dr. Matthias Berger)
- 04.04.2016 Wasser, Ökologie und Lebensqualität
  Water, ecology and livability (with Prof. Adriebe Grêt-Regamey)
- 11.04.2016 Mobilität und Lebensqualität
  Mobility and livability (with Dr. Alexander Erath)
- 25.04.2016 Partizipativer Stadtentwurf
  Towards citizen design science
- 02.05.2016 The livable city
- 09.05.2016 Feedback lecture
  Final IA critique
  Combined critique with the other IA courses (14:00 - 16:00)
Since June 2008, Jan Carmeliet has been full professor at the Chair of Building Physics at ETH Zurich and head of the Laboratory of Building Technology of Empa, Dübendorf (Swiss Federal Lab for Materials Science and Technology).


His research interests concern mainly physical processes in multiscale (porous) materials, poromechanics, particle flow, flow at urban scale, materials for energy technology, computational modelling.