ABOUT

In partnership with Shinkenchiku-sha, the University of Tokyo, and Miraikan National Museum of Emerging Science and Innovation, xLAB established the three-year xLAB Summer Program sequence.

The xLAB Summer Program is a cross-disciplinary platform for architectural education that brings together students and experts from a diverse set of background including technology, science, fashion, policy, and business. From July 27 - August 10, 2018, 18 students from 15 universities, 10 faculty members, and over 30 industry experts from around the world were invited to Tokyo to participate in a flexible, non-hierarchical laboratory.

The program consists of studios, lectures, discussions, and reviews where participants address contemporary architecture and urban design challenges through experimental exchanges, testing of ideas, and sharing of knowledge. Each year a new programmatic theme offers a research topic surrounding Tokyo as a city with the event of the upcoming 2020 Olympics: Community (2017), Mobility (2018), and Diversity (2019). In addition, the program extends its impact to a larger audience with a public symposium, lecture series, exhibitions, and reviews.

THEME - REIMAGINING TOKYO’S MOBILITY

The 2018 xLAB Summer Program focused on the future Tokyo’s Mobility. Considering “time” as the medium, the theme of “mobility” will address new advancement in technologies that change the way we move, including: self-driving cars, the sharing economy, movement in information space, and mobility without physical movement. Through a range of events, the Summer Program discussed how these advancement have diversified the concept of “mobility” and their impact on cities and design methods. Tokyo, a representative city of the 20th century, is at the forefront of various problems faced by many cities making it an optimal test site to consider the future of mobility.

PARTICIPATING UNIVERSITIES

Angewandte, Vienna
Architectural Association
Confluence School, Lyon
IE School, Madrid
Keio University
National Chiao-Tung University
Singapore Design Tech
Tohoku University
Tokyo Institute of Technology
Tongi University
UCLA
University of Hong Kong
University of Tokyo
Waseda University
Yokohama University
Today, people prefer a “20 min lifestyle” that includes live, work, and play; however, only 4.5% of Tokyo’s citizens enjoy this amenity. Compared to the global average of 35 min, Japan has an average commute of 58 min per day with an average commute distance of 25.8 km. While humans have an affinity for light and air, 85.2% of commuting in Tokyo is by train. Many of these trips are less than 1.5 km. Smaller, smarter vehicles are an alternative.

Existing transportation options range from the person walking at 3km/h to the train traveling railways at 120km/h. In between, exist a range of surface transportation alternatives to improve overall quality of life. To establish a smaller, smarter mobility in regime in Tokyo, mobility can be atomizing using the small-ness of bikes and board with the smart-ness of autonomous technology. Combining autonomous driving intelligence with lightweight vehicles mobilizes people and goods on streets and sidewalks.

Hibiya area is heavily trafficked on a daily basis by both pedestrian and rail travel. Emergent aerial mobility technologies can improve the experience of movement through the city, while enhancing the culture and identity of Hibiya. Currently, Hibiya Park hosts festivals year-round and the adjacent Imperial Palace is one of the most popular running routes in Tokyo. Temporary infrastructure and aerial logistics networks can create new ways to experience Hibiya.

As a future city for leisure mobility, Hibiya would employ a network of different scale drones, pedestrian infrastructure, and the event infrastructure with floating platforms enabled by balloons. These strategies would enhance existing everyday and event leisure experiences, while providing temporary and flexible mobility infrastructure that create new opportunities for mobility entertainment activities.

This 1+1+1 studio format consisted of one shared mobility concept, one mobility technology focus, and one final presentation using student proposals to demonstrate new mobilities possibilities for Tokyo.
SEMINARS

Seven guests gave lectures over the course of three days to students and invited guests.

Seminar speakers are international experts from variety of fields, including management, public policy, technology, and history. Following each lecture, participants engaged in a question-and-answer session to stimulate dialogue on the various themes discussed throughout the program. The seminars are important to add new perspectives to the design studio projects.

ERIC BACZUK  
R&D Designer, Google

GEORGE ABE  
Lecturer, UCLA - Anderson School of Management

FUMIHKO NAKAMURA  
Director, Yokohama National Univ - Transportation and Urban Engineering Lab

TAK UMEZAWA  
Partner, A.T. Kearney Global Consumer Products

EMILY WARREN  
Senior Director of Policy and Public Affairs, Lime

RYOSUKE SHIBASAKI  
Professor, Unv. of Tokyo - Dept. of Socio-Cultural and Socio-Physical Environmental Studies
Today, people prefer a “20 minute lifestyle” that include live, work, and play; however, only 4.5% of Tokyo’s citizens enjoy this amenity. Compared to the global average of 35 min, Japan has an average commute time of 58 min per day with an average commute distance of 25.8 km. Humans are terrestrial and love the light and air. 85.2% of commuting in Tokyo is by train. Many of these trips are less than 1.5 km. Smaller, smarter vehicles are an alternative. Existing transportation options range from the person walking at 3km/h to the train traveling railways at 120km/h. In between, exist a range of surface transportation alternatives to improve overall quality of life.

**REVIEWERS**

<table>
<thead>
<tr>
<th>Hitoshi Abe</th>
<th>Ryosuke Shibasaki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atsushi Deguchi</td>
<td>Yuichiro Takeuchi</td>
</tr>
</tbody>
</table>

Today, people prefer a “20 minute lifestyle” that include live, work, and play; however, only 4.5% of Tokyo’s citizens enjoy this amenity. Compared to the global average of 35 min, Japan has an average commute time of 58 min per day with an average commute distance of 25.8 km. Humans are terrestrial and love the light and air. 85.2% of commuting in Tokyo is by train. Many of these trips are less than 1.5 km. Smaller, smarter vehicles are an alternative.

**REVIEWERS**

<table>
<thead>
<tr>
<th>Hitoshi Abe</th>
<th>Kengo Kuma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manabu Chiba</td>
<td>Tatsuya Matsui</td>
</tr>
<tr>
<td>Takuya Fuji</td>
<td>Hiroto Miyake</td>
</tr>
<tr>
<td>Sohei Imamura</td>
<td>Shinobu Nakanishi</td>
</tr>
<tr>
<td>Hiroto Kobayashi</td>
<td>Ryosuke Shibasaki</td>
</tr>
<tr>
<td>Brett Steele</td>
<td>Yuichiro Takeuchi</td>
</tr>
<tr>
<td>C. David Tseng</td>
<td>Tak Umezawa</td>
</tr>
</tbody>
</table>
The symposium and exhibitions were collaboration between the Miraikan National Museum of Emerging Science and Innovation and xLAB Summer Program. The symposium acted as a temporary platform for exchanging international opinions on the future of mobility in cities. 30 international experts from various fields gathered to exchange ideas. The event started with a participant walk-through of Miraikan’s permanent exhibition and research facilities. Via three prepared panels, the “Reimagining Tokyo’s Mobility Symposium: Big Table” created a place where many experts could gather together to form a more informal exchange of ideas within the formal occasion of a symposium.

**ALTERNATIVE MOBILITY PANEL:**
GREG LYNN, Piaggio Fast Forward
ERIC BACZUK, Google
FUMIHIKO NAKAMURA, Yokohama Univ.
KOJI TOYOSHIMA, Toyota

**COMPUTATIONAL MOBILITY PANEL:**
RYOSUKE SHIBASAKI, Univ. of Tokyo
MASAAMI MOCHIMARU, Human Info Research Institute
EMILY WARREN, Lime
ANDREW WITT, Certain Measures

**NON-PHYSICAL MOBILITY PANEL:**
KOUTA MINAMIZAWA, Keio Univ. - Media Design
MASASHI KAWASHIMA, Niantic, Inc.
OLGA KISSELEVA, Artist
KUNIHIKO MORINAGA, Anrealage Fashion

**BIG TABLE PARTICIPANTS**
Kengo Kuma
Atsushi Deguchi
Hitoshi AbeToshi
Hirano
Kaz Yoneda
Tak Umezawa
George Abe
Michael Osman
Manabu Chiba
Tatsuya Matsui
Yasuaki Onoda
Keisuke Toyoda
Yuichiro Takeuchi
Jorg Noennig
Cihangir Istek
Brendan Barrett
Yukiko Shikata
Mahoro Uchida

*Reimagining Tokyo’s Mobility Symposium: Big Table*
xLAB TEAM

DIRECTORS

HITOSHI ABE
Professor, UCLA - Dept. of Architecture and Urban
Principal, Atelier Hitoshi Abe

KENGO KUMA
Professor, Univ. of Tokyo - Dept. of Architecture
Principal, Kengo Kuma & Associates

ATSUSHI DEGUCHI
Professor, Univ. of Tokyo - Dept. of Socio-cultural Environmental Studies
President, Urban Design Center Kashiwa-no-ha

ADVISORY BOARD

GREG LYNN
CEO, Piaggio Fast Forward
Principal, Greg Lynn FORM

MARTHA THORNE
Executive Director, The Prizker Architecture Prize
Dean, IE School of Architecture & Design - Madrid

JEFFREY INABA
Principal, Inaba Williams
Associate Adjunct Professor, UCLA - Dept. of Architecture and Urban

SHINOBU NAKANISHI
Executive Director, Miraikan National Museum
of Emerging Science and Innovation

PAUL NAKAZAWA
Principal, Nakazawa Consultants
Associate Professor, Harvard Unv - Graduate School of Design

STAFF

YUICHI HIRAI
Editorial Staff, Shinkenchiku-sha

SOYOKA TSUJI
Editorial Staff, Shinkenchiku-sha

JEANNETTE MUNDY
Program Coordinator, xLAB - UCLA

SPECIAL THANKS TO

YUTAKA SHIKATA
MAYUKO MAEDA
KAORI NISHIBAYASHI
MASARU MURAI
NORIKO SHIMOKAWA
ARIEL LISOGORSKY

xLAB is an international think tank initiative that examines architecture's elastic boundaries and considers new possibilities through interdisciplinary collaboration in the study of the future built environment.

xlab.aud.ucla.edu
xlab @ aud.ucla.edu
IG: x_l_a_b