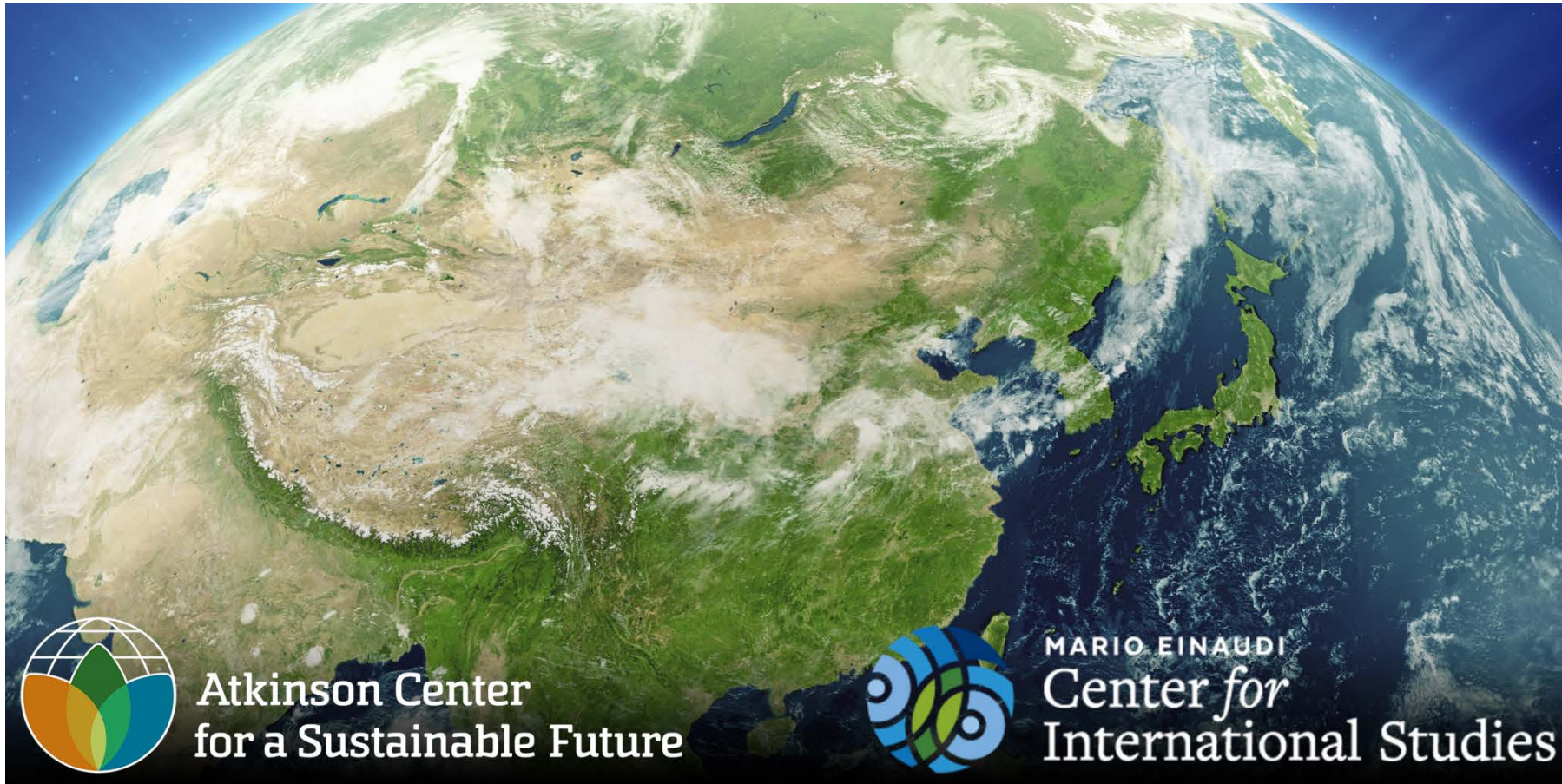# Conference on Sustainability in Asia
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Rural-Urban Transitions to Sustainable Settlement Systems

Panelists

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Jeremy Lee Wallace – Government

Topical Outline

1. Features of sustainable settlement systems and challenges of transition

2. Rural-urban transitions in South Asia

3. Examples of urbanization/densification strategies, their motivations and effects

4. The centrality of strong social institutions and policies that promote them

5. The importance of equitable access to infrastructure services and urban amenities

6. How the built environment is being (or can be) reconfigured in urban centers

7. The roles green buildings, green infrastructure, and open/public spaces can play

8. Cornell's role in research and education of the next generation of urban professionals

1. Features of sustainable settlement systems and challenges of transition

Essential features sustainable settlement systems include:

- not stressing the carrying capacity of the natural environment in which they are situated,
- maintaining necessary conditions for economic development to achieve an acceptable level of social wellbeing, and
- providing equitable access to social services and basic amenities.

Challenges of transitioning to such a system include:

- inherited or unplanned new built environments,
- rigid political institutions that do not embody principles of good governance, and
- inadequate or inequitably distributed access to infrastructure services and basic amenities.

Within China, there is one set of challenges facing the increasing urbanization of rural areas, and a host of other issues for the continued urbanization and re-development of urban centers and their peripheral regions.

In both scenarios, questions concerning the natural environment, social services, and economic development are important.

When we consider sustainable settlement systems, we usually focus on creating settlements.

But much of China's present development of urban spaces has less to do with settling humans—in places to live, work, and play—and more to do with creating vehicles for investment and political projects.

2. Rural-urban transitions in South Asia

As rural areas are developed and urbanized, a key issue is how they become integrated into existing regional networks of infrastructure, both built infrastructure (transportation, distribution, energy) and political infrastructure.

Existing infrastructure of both sorts in much of China turns out to be less uniform, less integrated, less systematic than might be expected.

The infrastructure that exists, which tends to over-determine the shape of new infrastructure as rural areas are urbanized, was by and large *not* built with sustainability in mind; so there is a major challenge to find ways to coordinate the building of new, greener, sustainable modes of transportation, etc., with the re-development of existing urban centers.

3. Examples of urbanization/densification strategies, their motivations, and effects

The World Resources Institute's most recent framing paper, *Towards a More Equal City*, identifies densification strategies as being important to making cities more sustainable as an increasing share of the world's population comes to reside in them.

China's urbanization of *land*, however, is far outpacing its urbanization of *people*. This effect is observable almost everywhere in the country but is most prominent in new areas and in projects to move government offices to rural locales. China's urbanization policy is spreading cities out rather than making them more dense through infill.

In Shenyang there are four large, 40 story buildings going up, but the main attractions are not above ground yet. A 328 m tall hotel complex and a 568 m / 114 story supertall building, "the Pearl of the North," will add yet millions more residential and office space to a city with *already high vacancy rates*.

Lanzhou New Area, May 2016. From the Washington Post.

Kangbashi New District, Ordos

Shenyang International Finance Center

Photo by Jeremy Lee Wallace, 2016/06/01

The question of what motivates urbanization in China gets directly at one of the major difficulties in introducing sustainability into the urbanization discourse. That discourse has been dominated by a simplistic development narrative, wherein GDP growth is understood to offer a sufficient measure of progress.

Stated simplistically, *urbanization* in China is the process whereby the state can ensure continued economic growth: keep converting rural lands to urban uses and hit the targets for GDP growth deemed necessary for economic and social stability.

Health concerns, questions about quality-of-life, and environmental concerns clearly need to be a part of the overall definition of progress and development, but any systematic large-scale attempt to factor such issues in to the development narrative would surely mean at least a temporary slow-down of GDP growth, which is understood to be politically risky.

At the Nilgiris Field Learning Center (NFLC) in India, the focus is largely on the needs of communities and on basic urban services for those who are often marginalized within urban situations or in the rural-urban transition.

Cornell faculty members work with the *adivasi* (indigenous communities) in forested, rural and fast-growing dense peri-urban areas, and increasingly with mixed communities who live in those parts of the city that lack amenities and basic services. The focus of programs is on small towns and cities where the bulk of urban residents in Asia live, and will live in decades to come.

4. The centrality of strong social institutions and policies that promote them

The question of how to create, or revive, or nurture *"strong social institutions that embody sustainability principles"* is one of the single most pressing questions facing scholars and progressive policy makers in China.

Case studies and experimentation are needed on subjects ranging from food safety, water quality, and educational reform to the training of low-level cadres. The social institutions that work best in the west may not be the ones that succeed in China.

Perhaps the single most important change in China would be the *introduction of sustainability principles into the rules of political promotion*: if local officials were judged on their record of creating sustainable development rather than just GDP growth, this political incentive would create the social and economic space for change.

At the NFLC, it has been observed that indigeneity and poverty throw up a range of issues on *when* and *how* social institutions embody sustainability as well as the conditions under which this embodiment is threatened.

Specific examples include the implementation of the Forest Rights Act, for instance, that is expected to keep adivasi communities on lands that will now belong to them, or the manner by which poor and very dense peri-urban communities project a sustainable urbanism, or the ways in which residents of hamlets move to larger hamlets but not the larger towns in search of access to amenities like education while remaining in touch with traditional habitats.

5. The importance of equitable access to infrastructure systems and urban amenities

Understanding challenges and obstacles to equitable access is central to the work of the NFLC. Examples of efforts in this area come from work in water, sanitation and waste in communities in the small city/large town of Coonoor in the Nilgiris and in the larger city of Coimbatore in the plains.

The NFLC is following communities along the Coonoor River—from the town all the way into the plains to Coimbatore—and finds that access to services of infrastructure systems and amenities is important not just within a habitation but also across settlements within a region created by being in the same rivershed.
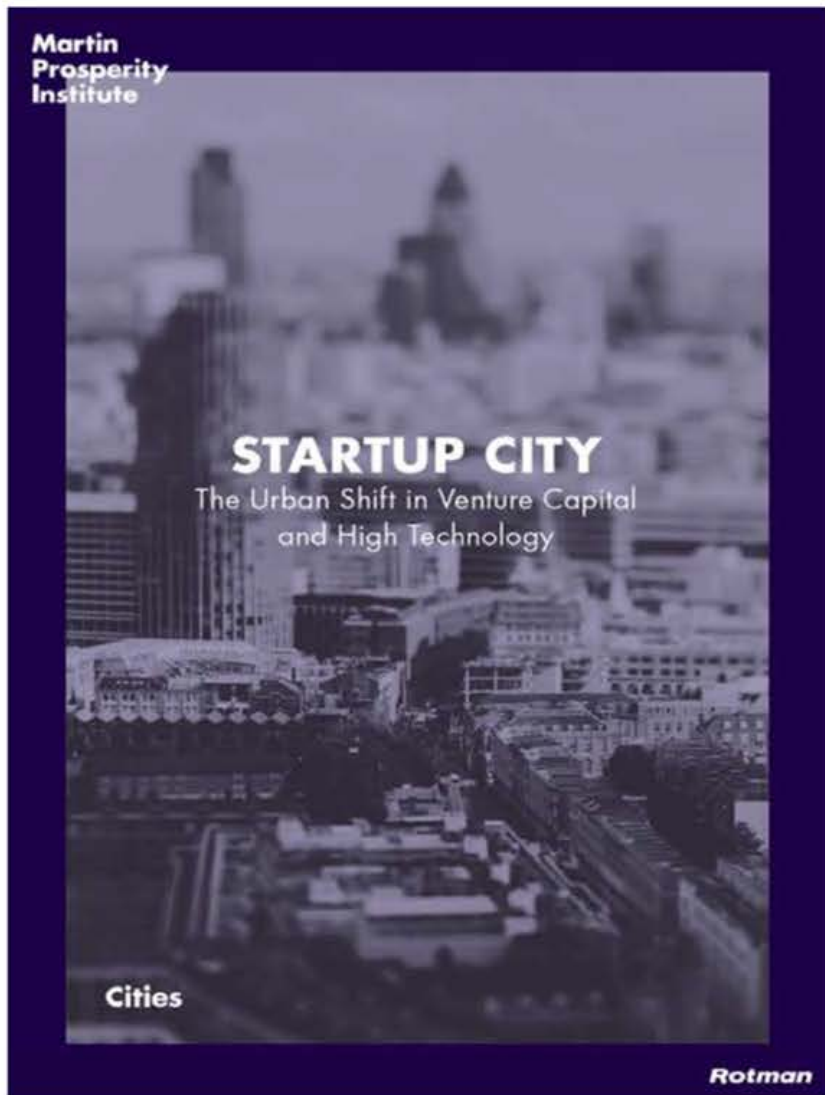
6. How the built environment is being (or can be) reconfigured in urban centers

Shibuya Hikarie

Shibuya Station South District

Shibuya Station District

Shibuya Station Sakuragaoka Exit District

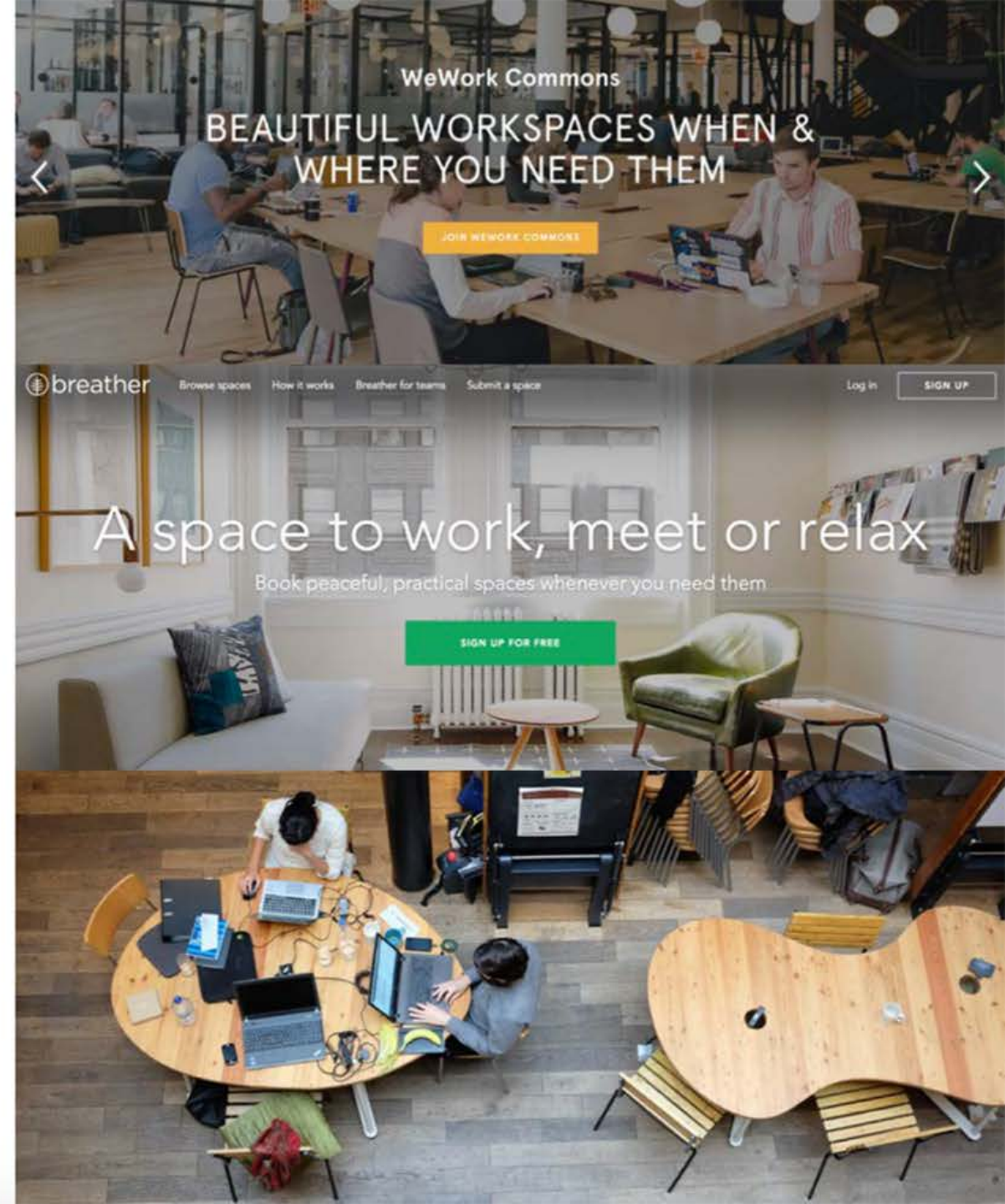Dogenzaka 1-chome Station Front District

JTCII & Cornell Tech NYC

o Collaborative effort for a sustainable campus (2035)

o Testing new education and work environments

> "High tech development, startup activity, and venture investment have recently begun to shift to urban centers and also to close-in, mixed-use, transit-oriented walkable suburbs."
>
> Martin Prosperity Institute (2014)

The China's Cities project aims to improve understanding of the urban spaces that already house 1 in 10 humans on the planet and are expected to house over one billion people by 2030.

The project's subtitle—Divisions and Plans—emphasizes the significance of internal divisions based on local/outsider status (hukou) for access to social services as well as the massive planning apparatus that is behind the continued development of these cities.

A current project at the NFLC focuses on understanding and developing planning solutions for increasing human-Gaur (wild bison) interactions and conflict in the town of Kotagiri (pop 35,000) where the NFLC is based.

This is an issue across all urban areas in the Biosphere and plains cities like Coimbatore and is crucial to both human and wildlife well-being and sustainability of other species and forests.

7. Green buildings, green infrastructure, and open/public spaces

8. Cornell's role in research and education of the next generation of urban professionals

Scholars at Cornell are conducting research on urban transportation systems that are compatible with healthy people and natural environments, green architecture and design, smart and connected cities, and critical resilient infrastructure systems.

Cornell has well developed undergraduate and graduate programs in urban planning, urban design, design and environmental analysis, civil and environmental engineering, as well as government and public policy.

Its educational programs are situated in Ithaca, New York City, Rome, and numerous other international locations.

The NFLC seeks to educate Cornell students alongside youth from adivasi communities. The Keystone Foundation works with and through an engaged learning and research model.

It provides an education for civic engagement and responsible citizenship that acknowledges knowledge as equally rooted across disciplines, texts, practice and lived-experience, as well as the importance of a perceptive leadership in addressing the 'wicked problem' that building sustainable communities presents.

What is Cornell's East Asia Program Doing?

Cornell Contemporary China Initiative

~ Interdisciplinary research working groups

~ Focus on urbanization and rural transformation

~ Annual conference held with partners in China

Robin McNeal
Director
East Asia Program

Cornell Contemporary China Initiative
Annual Conference in China

Bringing together scholars from different disciplines and regions

Encourage cross-discipline research and collaboration

Cornell Contemporary China Initiative Collaborative Research Groups

~ Smart Sustainable Cities

~ Environmental Choices in City Planning

~ Making Urban Space Livable

Robin McNeal
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