Conclusion

Prof. Dr. Hongyang Wang, GR and Congress Team
The Congress Team
The TOPIC this year


CONCLUSIONS BY TRACKS

• What We Learned & Takeaway for Practice
• Challenges for the Future & What’s Needed
TRACK 1: TECHNOLOGY, INFRASTRUCTURE AND BUILDINGS

Kirsten Tilleman
USA, OAPA

Aaron Ray
USA, OAPA

Mairura Omwenga, Kenya
Key Findings in Track 1 include –

- There are no universally applicable solutions to community problems
- Urban design should be responsive to changing technology and community needs
- Street density and diversity leads to more liveable urban space
- New energy and technology solutions bring new opportunities and sustainable development
- Automatic, driverless transport technology is a double edged sword – useful but may harm cities too
Challenges for the Future and What is Needed

- Greater stakeholder participation will be required to achieve effective community development
- New technology solutions will require longer and wider community testing
- Radical measures required in building construction - separate technology and building structure lifecycles
- Impact of the autonomous, driverless transport require more analysis
- Application of Spatial analysis technology in improved delivery of community services
TRACK 2: Governance & Inclusive Communities

Damian Syrnyk
USA, OAPA

Philippe Vaillant
France, ISOCARP

David Krogh
USA, OAPA
Defining « inclusive smart communities »

- IG-UTP from UN (International Guidelines on Urban & Territorial Planning)
- DATA method (Inde)
- Regional level for coordination (USA)
- R 5: Science Planning
- R 4: Gouvernance
- R 6: Belonging to the territory
  - Commun Goods, territorial Goods
  - Public, Collective and Universal Goods
- SD1: Society / Culture
- SD2: Institutions (including economy)
- SD3: Territory
- Ethic: Global Planning Code (Philippines)

Portland Plan
- Not achieved on all topics
  - Solutions?

Population involved in 100 smart Cities (India)

Deliberative Planning (China)

The definitions cover all the spectrum of resilience: how hold them together?
**TRACK 2: Governance & Inclusive Communities**

**DAY 2**

**Inclusiveness, informal settlements, traditional planning / Governance**

- **SD2:** Institutions (including economy)
- **SD3:** Territory
- **SD1:** Society / Culture
- **R 4:** Governance
- **R 5:** Science Planning
- **R 6:** Belonging to the territory
  - Commun Goods, territorial Goods
  - Public, Collective and Universal Goods

- **Public Welfare Orientation**
  - People First (All cases studies)
  - SPLUMA (South-Africa)
  - Devolution (Kenya)
  - Empowerment
  - Gaming
  - « Smarticipation »

- **Data Self-Determination**
- **Open Data?**
- **Importance Little-Middle Cities**
- **Multi-Scale**
- **Energy Policy?**

- **Sense of Place**

**All studies have strong links between them**

**People First**
- **Identity**

**Reel needs of people**
What We Learned & Takeaway for Practice (TRACK 2)

- Public outreach and participation can be more efficient with smart technology. But access for all – inclusion- has to be guaranteed
- Long-term oriented and common goods targeting political decision-making cannot be given to algorithm- even in smart jurisdictions
- Small and middle town in intermediate regions are intended to articulate a top-down and bottom-up planning
- Smart inclusive cities need to cooperate as smart inclusive convivial regions
- We have a lot to learn from aboriginal peoples to conserve nature and resources, and to move towards a happy sobriety
- Devolution and active subsidiarity provides latitude for broadened and deepened citizen participation in Land Use Planning
- An organic mode of thought, new synthesis of science and spirituality, promote dialog amongst people, free and prior consent respect, the co-construction of a more inclusive planning. It leads to the creative transformation of the territories at different interrelated scales.

Source:
1 – NJEKE Siyabonga
2 – Dr MUSOGA Herbert
Organic convivial inclusive smart community concepts have to be designed to support a successful model of local self-governance and development that is ultimately controlled by respective citizenship.

The governance and participation in the age of digitalization is to be discussed in relation to all size’s cities and convivial regions, to ensure inclusive planning.

Connections between natural, rural and urbain environments are required to ensure the balance of Earth’s limited resources and inclusive food security.

The Land is the Source of the Law, First Law!
The development of traditional settlement master plans: A response to undocumented indigenous planning practices in rural KwaZulu-Natal.

Author: Mr Siyabonga Njeke
KZN Department of Co-operative Governance and Traditional Affairs

- **Key findings**
  - The apartheid government advocated institutional racism focussed on separation of settlements, economic exclusion of certain races and structured underdevelopment. Elements of these structures still exist of late.
  - Unaddressed continued spatial fragmentation in rural and peri-urban areas of KwaZulu-Natal can be attributed to various discriminatory practices.

- **Questions for discussion**
  - How did the apartheid regime achieve the above?
  - What role can traditional authorities and communities play in shaping settlements?
TRACK 3: CULTURE, COMMUNITY EXPERIENCE AND THE SHARING ECONOMY

Serah Breakstone
USA, OAPA

Olusola Olufemi
CANADA, ISOCARP
What We Learned

The concept or terminology 'Smart' is fuzzy, it is a marketing term.
- When it comes to Smart Communities, no one definition fits all: Communities are complex, each community has its own identity and uniqueness.
- Communities are smart with or without ICT
- Quality of life is paramount in achieving Smart Communities
- Smartness and Sustainability goes together
- Digital Transformation changes all, changes everything, everyday life
- Sharing economies has its pros and cons; Sharing economy came so fast and learning as we embrace it
- Holistic approach in dealing with DT and Sharing economy within Smart Communities
• Takeaway for Practice
  – Smart Community is not smart unless it has meaning and purpose; leverages the hidden potential of human capital
  – Smart communities are people-based or citizen-centred
  – Real smart communities are based on the premise of local culture and place making
  – Characteristics of smart communities include: liveability, resiliency, connectivity, scalability, wise-wisdom, fun, respect, transparency, efficiency, equitable, policy driven not technology driven, interdisciplinary, authenticity, community empowerment, identity and memory
  – Smart communities must become learning systems, living systems (actualization of place)
  – Smart Communities have to be inclusive of both people and their companion animals
• Takeaway for Practice

– Protection of natural resources; Heritage conservation; culture no ecology
– Protection of Digital Transformation infrastructures and utilities in Smart communities
– Appropriate technology matters, utilizing smart devices
– Avoid digital divide in the planning and designing of smart communities
– Understanding and analyzing Behavioural patterns in public spaces require smart use of appropriate technology
– Behavioural patterns also differ from the utilization of different spaces
– Smart planning education focuses on Learning by Doing: Incorporation of Experiential Learning in planning curriculum; Students are leaders of learning
• Challenges for the Future
  – Anticipating and Coping with Disruption
  – Uncontrolled growth
  – Oversharing
  – Anticipatory planning- dealing with negative externalities that arise from overproduction in the sharing economy (avoid creating new problems like bicycle cemetery, lack of space to park bicycles etc)
  – Avoiding overdose of energy consumption
TRACK 3: CULTURE, COMMUNITY EXPERIENCE AND THE SHARING ECONOMY

What’s Needed
- Innovation + Entrepreneurship for the next generation
- Turn words into action, Turn actions into results
- Collaborative governance
- Low cost adaptive reuse; Regenerative planning and design; Retrofitting spaces
- Zone with care
- Embrace nested spheres of engagement
- Value and Viability very important in the planning and design of Smart Communities
- Planning process adaptable to the Living System (actualization of place)
- Developing new apps, web map, GIS, web tools like map craft that are interactive and can be used collaboratively
- Embracing Smart grid, smart energy
- Being SMART TOGETHER
21st Century is Disaster era

Hidehiko Kanegae
JAPAN, ISOCARP

Amanda Ferguson
USA, OAPA

Drew DeVitis
USA, OAPA

World Trend of Natural Disasters

EM-DAT: The OFDA/CRED International Disaster Database - www.em-dat.net - Université Catholique de Louvain, B
Session 1: Strategic planning for climate change (Hidehiko Kanegae & Drew DeVitis)
Session 2: Hydrological vulnerabilities (Hidehiko Kanegae & Amanda Ferguson)
Session 3: -
Session 4: Natural disaster mitigation – Resilience theory, problems and practices (Hidehiko Kanegae & Amanda Ferguson)
Session 5: SS: Central City scenic resources protection plan (Session Proposal Moderator: Brooks, Speakers: Brooks; Loehlein)
Session 6: Sustainable and resilient communities. (Hidehiko Kanegae & Drew DeVitis)
Session 7: SS: Strengthening the Disaster Resilience of the Academic Biomedical Research Community: Protecting the Nation's Investment (Session Proposal Moderator: Pawlowski, Speakers: Brown; Leduc)
Session 1: Strategic planning for climate change
Moderators: Hidehiko Kanegae & Drew DeVitis

1. “Spatial modeling for landscape vulnerability assessment with climate change through TACA and GIS in Heilongjiang, China”, Tingting YU;
2. “Effects of Climate Change on Lagos Coastal Communities – Case Study of Selected Lagos Coastal Communities in Eti-Osa LGA of Lagos State, Nigeria”, Aliu Ogunfowora;
3. ADAPTATION SUPPORT TOOL for implementing the New Urban Agenda in cities”, Lena Niel;

Summary: Assessment, 2 of Adaptation,
- carrying capacity indicator is needed for monitoring CC
- Urban Nature-based solutions can be used in urban planning and design to improve the level of resiliency of cities using the Adaptation Support Tool
- Planning changing of landuse, SDG’s & New Urban Agenda, Governance & Socio-economic Climate Proof
Session 2: Hydrological vulnerabilities
Moderators: Hidehiko Kanegae & Amanda Ferguson

2. “Research on green infrastructure construction in mountainous watershed cities- with Guangyuan city as an example”, MAO Feng;
4. “Urban Waterfront”, Pedro GARCIA.

Summary:
- Geopotential & planning
- Green Infrastructure
- three-level flood control and storm drainage strategy
- urban waterfronts solutions by long term strategies in symbiosis with nature.
Session 4: Natural disaster mitigation – Resilience theory, problems and practices  
Moderators: Hidehiko Kanegae & Amanda Ferguson

1. “From fragile to resilient territories: the reconstruction after earthquakes in Central Italy”, Paola RIZZI;  
2. “Mining Collaborative Planning for Disaster Preparedness and Response”, Connie OZAWA;  
3. “Special Purpose District Woes, State Land Use Goals, and Land Behind Levees in Oregon”, Rowan, Colin;  
4. “Strategy of improving urban resilience in urban comprehensive disaster mitigation”, Ma Chao.

Summary:  
- Resilience covers recovery process  
- Multidisciplinary approach and cross-sectional collaboration that allow successful reconstruction process.  
- Lack of ripeness & Divergent views among stakeholders  
- Who is the boss? No clear authority for land use decisions behind levees in Oregon  
- Combination disaster
Session 6: Sustainable and resilient communities.

Moderators: Hidehiko Kanegae

1. “Mis-Romanticism of intermediary cities and participation: The case of Moroni”, KALMAKOFF Jacob;
2. Canceled;

Summary:
- Participatory Resiliency Planning
- Traditional complete circulation system is effective

The distribution map of China’s water resources
Stimulating Questions: Viewpoints for Resiliency & Disaster Risk Reduction

- How do we transform our cities resilient with Smart Communities?
- Not yet connected between planning and Technological Singularity.
- How can we survive under huge impacts of natural disasters in this era of rapid mega-urbanization?
- Participatory Resiliency Planning is needed including recovery decision consensus in advance in Multi-level.
- What can we do mitigation or adaptation under such a high natural disaster risk in 21st Century?
- Experts and Professionals in planning already started Adaptation rather than Mitigation in climate change around the world.

It needs more scientific and technologies to integrate disclosure including 3D vertical landuse covering underground seismological and watershed flows/streams.
- SDG’s, New Urban Agenda, Sendai Framework in municipal/community level assessment are not enough.
In a networked informational era, what is/are/will be Smart Community(-ies) and how could PLANNING contribute to its/their building? Can we identify some coherent focus/pivot/framework from the seemingly infinite scope of Smart Community and demanded actions, so as to solve the antinomy “if planning is everything, maybe it is nothing”?
GENERAL CONCLUSION

The “CLOUD” of our congress
GENERAL CONCLUSION

The COMPLEXITY we have to accept?

Smart Built Environment
- Smart street
  - Walkability
  - User preference data
- Smart transit
  - Street vitality
- Smart buildings
  - Pedestrian-friendly
  - Ecology sustainability
  - Public space
  - Infrastructure
  - Housing
- Vertical farm
  - Presentation
- Doha
- South Africa
- Kenya
- India
- Portland

Smart Community
- Practical solution
- Smart Planning
  - Big Data
  - Social media
  - Mobility
- Resilient Cities
  - Community resilience
  - Risk management
  - Flood risk
  - Tidal river
  - Earthquake
- Smart Nature
  - Green infrastructure
  - Haerbin
  - Ningbo

Smart Economy
- Sharing economy
  - Jobless society
  - Smart retail
  - Market oriented
  - Policies
- Futuristic imagination
  - Neo liberal city
  - Institutional change
  - Land use policies
  - Top-down
  - Bottom-up
  - Vehicles Mobility Tax
  - Public participation
- Community partnership
- Urban groups
- Housing
- Land tenure

Smart People
- Social identity
- Cultural obstacles
- Bicycles
- Private cars
- Place making
- Regeneration

Smart Culture
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GENERAL CONCLUSION

The COMPLEXITY we have to accept?
GENERAL CONCLUSION ■ The “COMPLEXITY” we have to accept?
BUT solutions of the such spirit did *NOT* solve problems!

There seem to be otherwise, but essentially it is not.
GENERAL CONCLUSION

The SOLUTION

Holistic  Synergy  System  Contextual  Complexity

[Diagram with various labeled sections and arrows indicating connections between different elements like Energy, Water, Materials, and other urban systems.]
GENERAL CONCLUSION

Comprehensive
Holistic       Synergy       System       Contextual       Complexity
Everything    Nothing
GENERAL CONCLUSION

The SOLUTION

Something
Complexity
Contextual
System
Synergy
Everything
Nothing
Comprehensive
GENERAL CONCLUSION  ■ The SOLUTION

Comprehensive

Holistic  Synergy  System  Contextual  Complexity

Everything  Nothing  Something  of everything
GENERAL CONCLUSION  ■ The SOLUTION

Comprehensive
Holistic    Synergy    System    Contextual    Complexity

Everything    Nothing    Something of everything

1. To a certain sense, something is everything, but not in the determinism sense. Things are relations & relational. So sth affects everything. But it’s the whole relation that determines, though change starts from sth.
GENERAL CONCLUSION

Comprehensive

Holistic Synergy System Contextual Complexity

Everything Nothing Something of everything

2. Things are relations & relational. So

(1) values, goals or whatever are all relational conformities. All conflicts are relational conflicts.

(2) To search solution is to search relational conformity, and hence holistic optimum (optimal holisticity).

(3) Proper action is to search partial intervention with optimal holisticity.
GENERAL CONCLUSION

Comprehensive

Holistic    Synergy    System    Contextual    Complexity

Everything    Nothing    Something of everything

3. Why fail to find optimal intervention? Things are relations & relational, so
• Things (everything, from attributes to things themselves; such a discourse is following usual non-relational understanding) are changeable……
• But people trapped in “scientific”/objective/determinism way of thinking: objective parts, EXACT attributes, linear logic, holisticity=all parts….
• Should be relational/holistic, changeable, relation hence holisticity (≠ parts together but all parts structured in certain way), DIVERSIFIED ATTRIBUTES of conformities, CONJECTURE, synchronical logic, holistic thinking (holistic conjectures, verifications till the most conformed conjecture) …..
GENERAL CONCLUSION

The SOLUTION

Comprehensive
Holistic    Synergy    System    Contextual    Complexity

Everything    Nothing    Something of everything

Current awareness & rectification of the weakness of linear/deductive logic (Atomism)

APPLICATION OF THE MODEL – PLANNING PROCESS/WORKING PROCEDURES

LOOP 1
ORGANISATIONAL SET-UP & PRELIMINARY DIAGNOSIS, etc.

LOOP 2
KEY ISSUES, OBJECTIVES & ALTERNATIVE SCENARIOS, etc.

LOOP 3
IMPACT ANALYSIS & IMPLEMENTATION STRATEGIES, etc.

1.3
Cal working procedure and its to the conceptual model
GENERAL CONCLUSION

Comprehensive
Holistic    Synergy    System    Contextual    Complexity

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The SOLUTION

Theory    Lessons    Macro context    Higher policy

Status Quo

Goals

Implementation
Paths
GENERAL CONCLUSION

Comprehensive

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Everything    Nothing

Something of everything

4. Knowledge development: expansion/accumulation of relations and attributes (conformities) of relations (CONJECTURES)

DON’T exclude any of them. NOR transcendentalize any of them. They are sources to build/create new optimal holistiocity. Such a not simple but lawful way is the only way to live with the complexity of our world, and human beings are born with such a SMART capability.
GENERAL CONCLUSION

The SOLUTION

Smart Built Environment
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- Smart buildings

Smart Culture
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- Social identity

Smart People
- Bicycles
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Smart Society
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Smart Economy
- Sharing economy
- Welfare system

Smart Governance
- Market oriented
- Policies

Resilient Cities
- Community resilience
- Flood risk

Smart Nature
- Green infrastructure

Approximately: Spatial Synergy

KEYWORDS
- User preference data
- Public space
- Housing
- Public participation
- Land tenure
- Vehicles Mobility Tax
- Policies
- Public participation

CITIES & INFRASTRUCTURES
- Portland
- South Africa
- Sweden
- Kenya
- India
- South Africa

FUTURISTIC IMAGINATION
- Smart Age?

THEORETICAL APPROACH
- Observation & analysis of status quo
- Presentation

PRACTICAL SOLUTION
- Smart Planning
- Smart Community

MORE ENGAGING LEARNING PROCESS
- Workshops
- Posters

JOBLESS SOCIETY
- Smart retail
- Neo liberal city
Thank you!

Prof. Dr. Hongyang Wang, GR, and Congress Team