Field-based Conceptualization, Reexamining Perspectives, and Road Mapping for Exploring IDRiM Research Horizons - Another Integrative Modeling Efforts

Norio Okada
Professor Emeritus of Kyoto University
Adviser, IDiARRG, Kwansei Gakuin University
Visiting Professor, Kumamoto University
IDRiM Lecture #1
24th June, 2022
Do we IDRiM researchers really think and think? Can we get out of our own box?

https://www.bing.com/th?id=OIP.4u_Q2etvQK4SJXmGxzI8zAAAAA&pid=3.1&cb=&w=300&h=300&p=0
Message 1

• For the purpose of advancing IDRiM research and practice, “conceptualization” should also be regarded as a broadened sense of “modeling” or “theorization” at a meta-level or beneath the ground.

• This works for comprehensive, integrative thinking and knowledge sharing.

• My focus is to explain and demonstrate how field-based experiences help us visually condense the notion of a holistic agenda as felt, conceived and derived from the real, living ground.
Message 2

• My 30 decade-long field practices have made me confident that even if these conceptualization outcomes are largely grounded on, and limited to the realities and local specifics, we could strategically revise them to apply more to common cases.

• Careful and repeated examination and transboundary comparative efforts should be conducted together by researchers, experts, administrators, residents, NGOs, etc., all from different disciplines, countries and cultures,
Message 3

• Local, field-based conceptual models have potential to be more generalized to overarch the local specifics.

• This helps us develop a roadmap for discussing what we commonly share and mutually complement.
Here are some of my (our) conceptual and/or process-oriented methodological frameworks

• Implementation Gap
• Octopus Model
• Vitae System
• SMART Governance under Persistent Disruptive Stressors (PDSs)
• Case Station-Field Campus (CASiFiCA) System
• Zero-to-One (1/0) Movement Dynamics
Conceptual models illustrated here

• A. Pagoda Model (applicable for SDGs discussions)
• B. Yonmenkaigi System Method (YSM)
• C. BE-CAUSE Process Model
• D. Communicative Space
This is where everything started from Chizu, Tottori, Japan

• Mid-1980’s I joined the citizen group called CCPT (Chizu Creative Project Team)
  -to advise X ⇒ to support △ ⇒ to learn together adaptively

• t8.pdf (mlit.go.jp)

• 智頭杉の魅力 | 智頭町森林組合 (chizushinrin.com)
Get out of your home community, meet people there differently (creatively) and repeat the meeting over and over.

- In retrospect, this became the prototype of what we may now call “communicative space.”
- The space gets nurtured and activated as we people meet more creatively.
- The space could take the form of a physical one. A symbolic location and a simple, modest structure means a lot.
Let us express our concerns together. Let us think out and deeply.

**Nature Insiders**
- Nothing special except for nature (forest, water, soils and landscape)
- How can we identify its hidden value and let outsiders appreciate the value?

**Nature Outsiders**
- You have such rich nature but not well recognized and ill-taken care of.
- Everything is rebuilt to concrete facilities. Why not make use of cedar tree?
- Even small streams are covered with cements. You look like urban atmosphere.
Let us express our concerns together. Let us think out and deeply.

Social norms and conventions

Insiders

• Very conservative and no motivation to change
• How can we fight with such a high wall!
• Most of our village people are just sleeping and uninterested in any change.

Social norms and conventions

Outsiders

• We cannot see such diffusive, un-shaped things from outside.
• Please express your concerns. We need a common language to communicate together.
• Involve more people who have experience living outside.
• You should take the initiative as you are awaken.
Let us express our concerns together.
Let us think out and deeply.

Civil infrastructure
Insiders
• We can now drive to meet so often here at such a deep upstream place.
• We have now good highways, rivers concreted and will be having a tunnel plan to reach the opposite side of this small deepest valley.
• Yes, we also have good roads to reach deep into forest.
• It looks like not easy to maintain them.

Civil infrastructure
Outsiders
• Yes, I can also drive to this place.
• I’m afraid to see concrete-covered streams damage local landscape. Why not more intact?
• Do we really need the tunnel? When is the project started?
• What about landslides and floods? Too much uncontrolled earthmoving works may add more disaster risks.
Let us express our concerns together. Let us think out and deeply.

**Built environment and land use**

**Insiders**
- We need our basis to meet together. We have built this as a temporary base.
- Let us use cedar tree and build a cottage.
- Let us develop a new village (later named “Cedar Village”) by attracting people outside.
- Can we engage village people nearby?

**Built environment and land use**

**Outsiders**
- I’m afraid the cedar cottage is so shabby and a bad quality. You should build a high-quality cottage by making use of local cedar timber.
- I propose to invite free of charge some log-builders from Canada.
- You should also link to the neighboring communities. The “Mitakien” Restaurant in the forest is a wonderful asset.
- Water mills and river-harvesting will add value to the landscape.
Let us express our concerns together. Let us think out and deeply.

**Vision/Goal**

**Insiders**
- We need a slogan and symbolic master-column to build up our new community structure.
- Our slogan is to let us build up together the Cedar Village Tower” for betterment of our life.

**Outsiders**
- Please discuss this openly.
- We call it a vision or goal.
- Let us explore on the idea of the new community structure.
- Excellent. I propose a five storied pagoda model.
If we intend to reinterpret the whole ideas into the most updated notion of SDGs, we were then building up the modest pagoda as follows:
(Living) Community as Pagoda Model

- S = Small and Solid
- M = Modest and Mixed
- A = Adaptive and Anticipatory
- R = Responsive
- T = Transformative

- SMART Governance
SMART Governance (proposed by Okada) as a strategic framework for enhancing coping capacity of the community

- **Small** and **Solid**
- **Modest** and **Multiple**
- **Anticipatory** and **Adaptive**
- **Responsive** and **Risk-concerned**
- **Transform** (change)
Spiral dynamics of transformation
I. Natural environment

II. Social environment

III. Civil infrastructure

IV. Land-use and built environment

V. Living activities
In Chizu, zero-to-one communicative spaces have been strategically nurtured and fermented. Pagodas have adaptively grown. Community’s coping capacity has been enhanced.

- Stage 0: Pre-Zero-to-One Movement period (Mid-1980’s to Mid-1990’s)
- Stage 1: First Pre-Zero-to-One Movement period (Mid-1990’s to Mid-2000’s) (certified village points with a modest subsidy from the town Condition: launching a community association for the project)
- Stage 2: Second Zero-to-One Movement period (Mid-2000’s to Mid-2010’s) (certified valley-long villages with a modest subsidy from the town Condition: launching a valley community association for the project)
- Stage 4: Post-Zero-to-One Movement period (later than Mid-2010’s) (without subsidies, without public projects)
Yonmenkaigi System Method has been continuously implemented and improved

- It works well to set up a dynamic common ground (communicative space.)
- Originally developed in pre-Zero-to-One period.
- Improved to promote more open and free discussions and dialogue.
- Even to start from an almost zero-basis which Okada calls the process of “Be there” and “Excite, Enjoy and Empathize”

BE-CAUSE Process Model
Chizu’s challenges to build up common platform by use of YSM
(Hayase village community, Zero-to-One Stage 1)

The Yonmenkaigi system (YSM), originally designed and used for collaborative action development for small groups in community-citizen vitalization initiatives (Machizukuri) in a mountainous area of Chizu Town, Tottori, Japan
Zero-to-One Stage 2:
Yamasato Area, Chizu by use of Participatory Methods based on Yonmenkaigi System Method

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008.11.02</td>
<td>Group Studying</td>
<td></td>
</tr>
<tr>
<td>2008.1.11</td>
<td>YSM (Yonmenkaigi System Method)</td>
<td>SWOT, Yonmen Chart, Debating, Collaborative Action Plan</td>
</tr>
<tr>
<td>2008.1.12</td>
<td>Square Table Conference</td>
<td>System</td>
</tr>
<tr>
<td>2008.1.17</td>
<td>System</td>
<td>Presentation, Open Ceremony</td>
</tr>
<tr>
<td>2008.1.27</td>
<td>System</td>
<td>The start general meeting of the meeting</td>
</tr>
<tr>
<td>2008.2.17</td>
<td>Action Plan</td>
<td></td>
</tr>
</tbody>
</table>

---

**Diagram:**

1. Investigation
2. Interview
3. Square Table Conference
4. System
5. Presentation
6. Open Ceremony
7. Discussion
8. Sandankai Workshop

---

**Time Table:**

- 2008.1.11: YSM
- 2008.1.12: System
- 2008.1.17: System
- 2008.1.27: System
- 2008.2.17: Action Plan
- 2008.6.21: Open Ceremony
- 2008.7.13: Discussion
- 2008.12.23: Sandankai Workshop
The action components for each role are compartmentalized in a time frame. Participants share information and knowledge among them, then make action plan to achieve a goal by using Yonmenkaigi system.
BECAUSE Model for YSM version 2

- 1. Be there
- 2. Enjoy and Excite
- 3. Credible ⇒ Communicative
- 4. Awareness
- 5. Understanding
- 6. Solution
- 7. Execution

COMMUNICATIVE SPACE & PROCESS

Cyclic and Spiral Processes to balance the two conflicting dynamics

YSM version

ROWAN’S Model
Taro-cho, Miyako City, Iwate, Japan

Case of Entering through “Be There and Emphasize” BE” - Preliminary Process

Courtesy by Prof. Masaaki Minami, Iwate University
(He had been working with local people in Taro even before the huge earthquake and tsunami March 2011)
YSM tried by students of Iwate Univ. Minami at Outlet laboratory 2011
First YSM Chart made 2011
Local residents joined this YSM workshop.
We need this newsletter. We made it! June, 2011
YSM Chart of the Taro First Recovery Action
Modest Bon-fire festival realized  July, 2011
Modest Bon-fire festival realized July, 2011
Some trans-disciplinary approach needs “communicative spaces” for enhancing coping capacity for all involved – case of Merapi, Indonesia

Norio Okada

SRI2022

23 June, 2022
Design of Communicative Spaces
場のデザイン(Ba-no-design)

STAGE 0: Knowing and sharing concerns
• Let some initiative-takers
• Get out of one’s home (community) or one’s normal mode
• Start to meet differently (creatively) and repeatedly do so on a small modest scale
• Welcome others from inside and outside
• Think and talk about concerns and exchange dialogues
• Enjoy and become enthusiastic
• Nurture trust-relationships
Design of Communicative Spaces
場のデザイン(Ba-no-design)

STAGE 1 (working together)
• Switch to the mode of working together
• to agree on a goal/vision
• to develop a collaborative action plan (which needs to be workable)
• to actually do it
• to monitor and revise the actions
• to archive the whole Plan-Do-Check-Action process
Design of Communicative Spaces
場のデザイン(Ba-no-design)

STAGE 3 (officialize the whole process and space)
- Switch to the mode of getting committed to outside of the space and legitimate it
- Keep extending the space and network with other communicative spaces
Adaptive, spiral processes of nurturing communicative spaces

Academic 1
(from Kyoto)
early 2007

Academic 2
(engineering x sociology)
early 2008

community 1
late 2008

community 2

community 3

Urgent Disaster Reduction Project for Mt. Merapi, Progo River Basin (JICA Loan No.: IP-524) executed by Directorate General of Water Resources, Ministry of Public Works, Indonesia
YSM applied to get mountainous communities prepared for the then imminent risk of Mt. Merapi’s eruption.

Case of Kemiran village of Merapi volcano, Indonesia
Mt. Merapi erupted!

In late October 2010, Mount Merapi in Central Java, Indonesia, began an increasingly violent series of eruptions that continued into November.

353 people were killed during the eruptions, many as a result of pyroclastic flows.

https://e3.365dm.com/20/02/1600x900/skynews-merapi-indonesia_4919919.jpg?20200214125815
“Communicative spaces” have worked for transformative and trans-disciplinary research.
Transdisciplinary Outcomes

- The communities that implemented the whole process (including self-evacuations) immediately evacuated and successfully saved their lives.
- Research paper (trans-disciplinary knowledge product) published.
- Doctoral thesis achieved.
- YSM guidance manual in Indonesian language produced by researches in Indonesia.
- The United Nations University introduced a course which included the YSM guidance book in English (lectured by myself and others).

A Challenge of Mutual Knowledge Development in Implementation of the Yonmenkaigi System for Sand Mining Management in Local Community of Merapi Volcano (jsnds.org)
References


How much generalizable?
Do they work for other areas/cultures?

• Pagoda Model
  Road-mapping in urban diagnosis, build back better even before, and comprehensive policy development, etc.
  1995 Hanshin-Awaji Earthquake Disaster
  2004 Niigata Chuetsu Earthquake Disaster
  2011 Eastern Japan Earthquake and Tsunami Disaster
How much generalizable?
Do they work for other areas/cultures?

• YSM Model (with BECAUSE Process Model)
  - Shuhachi, Nakagyo, Kyoto for extended community-led disaster management
    - Korea, Nepal, India, …

• Communicative space
  - Natech industrial park BCM in Japan needs communicative spaces (work with Robert Goble, Guoyi Han and Kami Seo)
We IDRiM researchers should think more creatively. We should get out of our own box, from time to time. Conceptual models help the process, together with a good idream.
Time to receive questions, suggestions, clarifications from you all there.
We probably miss another knowledge to visualize hands-on experience.

- Story telling?
- IDRiM design narratives?
Climate change dynamics

Mega disaster

Demographic change

Community

Persistent (Catastrophes) Disruptive Stressors (PDS)

Social change

CONFLICTS (External and Internal)

Globalization
References (1)


References (2)


• Okada, N. and Goble R. (2021): Communicative spaces will be critical to effective NaTech risk management in industrial parks, Part II: Looking back and looking forward, The 5th International Symposium on Natural and Technological Accident Risk Reduction at Large Industrial Parks March 11, 2021