

The Asia Pacific Region is the Growing Edge of the System Dynamics Society

David Andersen, Robert Eberlein, and Ignacio Martinez-Moyano

2nd Asia-Pacific Region System Dynamics Conference
of the System Dynamics Society

February 19-22, 2017
National University of Singapore

The “Third Vision”

(Notes from Nacho, Bob, and David’s discussion after the PhD
Colloquium and before dinner yesterday)

The Asia Pacific Region is the Growing Edge of the System Dynamics Society (a.k.a. the “Third Vison”)

David Andersen, Robert Eberlein, and Ignacio Martinez-Moyano

2nd Asia-Pacific Region System Dynamics Conference
of the System Dynamics Society

February 19-22, 2017
National University of Singapore

Our Personal Remarks Come with Greetings
and Best Wishes from Society Officers:

- **Roberta Spencer**, Executive Director (here today)
- **Len Malczynski**, President
- **Etienne Rouwette**, Immediate Past President
- Members of the Policy Council

Early Efforts to Grow Our Field and Create the System Dynamics Society

Remarks by **David Andersen**

University at Albany—State University of New York

Early President of the System Dynamics Society

Current VP Finance

Issues, Challenges, and Barriers to Growth of System Dynamics in the early days (Visions #1 & #2)

- Isolated network of individual scholars needing a network of peers to share ideas and grow projects
- Low recognition of System Dynamics as a field of endeavor implying few senior faculty and practitioners to support promotion and tenure
- Key Centers of Excellence scattered around the region lacking mechanisms to integrate expertise
- Small Centers (less than five practitioners) lacking ability to adequately mentor entrants to practice
- Perceived need to develop and share teaching resources

The Situation Facing the Field in Its Early Years is still a Challenge

"How the System Dynamics Society came to be: A collective memoir." (2007) *System Dynamics Review* pp. 219-227

- Rensselaerville Conference (Expertise dispersed 5 to 8 centers around the world, Jean Lebel called for the creation of an overarching organization)

Two Years Later

- Pine Manor College Conference (Jay Forrester acclaimed First President of the System Dynamics Society)

Thirteen Years Later

- Professionalization of the Society

Nineteen Years Later

- Launch of the First Asia Pacific Conference in Tokyo

Two Years Later

- Second Asia Pacific Conference Takes Place in Singapore

The System Dynamics Society in a Nutshell

- Publishes the *System Dynamics Review*
- Sponsors Annual Research Conferences
- A Community linking thousands of scholars and practitioners
- Resources in support of teaching, scholarship, and best practice
- Annual Awards for Excellence in scholarship and practice
- Sponsors 13 Special Interest Groups and 20 National Chapters
- Visit us online: www.systemdynamics.org/
- Become a Member: <http://www.systemdynamics.org/joining/>

(annual membership varies between \$USD 15 and \$USD 150)

The Society Has Transformed My Career

- I am in touch face-to-face with a powerful community of peers as often as annually, and these have become my best friends
- I have a recognized, peer-reviewed outlet for my scientific publications specific to system dynamics
- I have access to a community of senior scholars for mentoring (and reviewing for tenure and promotion)
- I am able to join blended teams of 5 or more practitioners
- I have access to a clear set of standards for my publication and professional work (and I get informed professional reviews from non-SD journals)

The Future of System Dynamics in the Asia Pacific Region

Remarks by **Robert Eberlein**

isee Systems

Past President of the System Dynamics Society

Current Vice President for Electronic Presence

Why Asia Pacific?

- Geography
 - It is a long way to the United States
 - Hard to get to the conferences there
 - An additional and more accessible conference
- Language
 - Extremely varied
 - Work is being done in all languages
- Culture, Politics and Economy
 - Extremely varied
 - Shorter path to modernity

The system dynamics ecosystem (US-AP)

- Academics
 - Application
 - Business and government enterprise
 - Public policy (government or NGO sponsored)
 - Theory
 - Teaching
- Non academic practitioners
 - Business and government enterprise
 - Public policy (government or NGO sponsored)
- Primary and secondary schools (K-12)
 - Improved learning and system awareness

The system dynamics ecosystem (within AP)

- Academics
 - Application
 - Business and government enterprise
 - Public policy (government or NGO sponsored)
 - Theory
 - Teaching
- Non academic practitioners
 - Business and government enterprise
 - Public policy (government or NGO sponsored)
- Primary and secondary schools (K-12)
 - Improved learning and system awareness

Differences with coherence

- More shared history
- More commonality in some areas
- Recognized differences
 - Not things outside of expectations
- Better chance to build on others experiences
 - With less adaptation to specific conditions
- Better chance to compare approaches
 - Without being drowned out by a standard

The future AP Conference Experience (e.g.)

- Different discussion focus
 - Why application experiences are different
 - More talk about what works with who
- Different presentation format
 - More visuals and fewer words (says the guy using only words)
- Different attendee mix
 - More policy makers
 - Graduate students in groups
- Not like the annual conference
 - Keep what works and is exciting
 - Discard what does not work
 - Add new and interesting things

An Anchoring Vision for Ten Years from Now:

- Three collaborative geographic venues
 - Local or national where commonality is high
 - Regional where understanding differences is important
 - International where finding the lowest common denominator is valuable
- A major conference in Asia Pacific
 - (China), Japan, Singapore, ...
 - Tailored to the region
 - Creating a venue for collaboration and also attracting outsiders

An Anchoring Vision (continued):

- An ongoing Atlantic conference – currently rotating between North America and Europe
 - Looking to highlight good work in all contexts
 - Seeking universal truth
 - Bringing together people from all over the world, including Asia Pacific
 - Not everyone at the Asia Pacific conference attends the Atlantic conference
- Active and continuous cross-fertilization
 - Locally
 - Regionally
 - Internationally

The bottom line

- Global Growth of System Dynamics as a Field
 - Led by Developments here in the Asia Pacific Region

- So how do we do that?

What Countries?

- To date we have been working by Chapter
 - Australasia
 - China
 - India
 - Japan
 - Korea
- But there are other countries in the region with SD activity
 - Singapore
 - Indonesia, Malaysia, Vietnam, Philippines, Thailand
- Most important: Who is active

What is Needed Next?

- A small band of (probably junior) entrepreneurs who can and will seize the moment
- Creation of a new Mega-Regional, Asia Pacific Structure linking existing Chapters+ into a whole bigger than the sum of its parts
 - Energy around an evolving conference format
- Envisioning new ways to bind all System Dynamicists into an actively growing structural network
 - Ways to take capture lessons from all geographic collaboration

Some Small Thoughts to Support a Big Idea

- Define and create a New Mega-Regional Structure
 - Name it
 - Bylaws
 - Governing structure
- Line up the next 3-5 conference sites and dates
- Secure ex-officio membership for regional leaders on the Society's Policy Council
- Get the Society to support travel of key regional leaders to the annual meeting of the Policy Council

Use Global Support to Jumpstart and Leverage Activities

- We don't have another 15 or 20 years to get this done!
- Modest society financial support for Asia Pacific Conferences **DONE**
- Society endorsement and recognition of line-up of future Asia Pacific Conferences and leaders (can this be done by July?)
- Society recognition of an emerging Mega-Structure in the Asia Pacific Region (can this be done by a year from July?)
- And so regional leadership creates growth and progress...

How Can We Start Working on All This Today?

- Be Bold and Volunteer to Lead
- Attend meetings that are being set up to discuss ideas such as these (starting right after lunch today)
- Line up support from existing Chapters
- Solidify and promote a multi-year schedule of meetings and conferences
- Design a plan to bring these ideas back to the full Policy Council
- Send a delegation to the next PC meeting in Cambridge in July

The Vision for the Future of the Asia-Pacific Region Is Already in Progress

Remarks by **Ignacio Martinez-Moyano**

Argonne National Laboratory and The University of Chicago
Program Chair of The 2nd Asia-Pacific Region Conference in Singapore
President-Elect of the System Dynamics Society

Previous Activity in the Asia-Pacific Area

- The 5th International Conference of the System Dynamics Society
June 9-12, **1987** Shanghai, **China**
- The 9th International Conference of the System Dynamics Society
August 27-30, **1991** Bangkok, **Thailand**
- The 13th International Conference of the System Dynamics Society,
July 29 - August 4, **1995** Tokyo, **Japan**
- The 17th International Conference of the System Dynamics Society, and the 5th
Australian & New Zealand Systems Conference
July 20-23, **1999** Wellington, **New Zealand**
- The 28th International Conference of the System Dynamics Society,
July 25-29, **2010** Seoul, **South Korea**

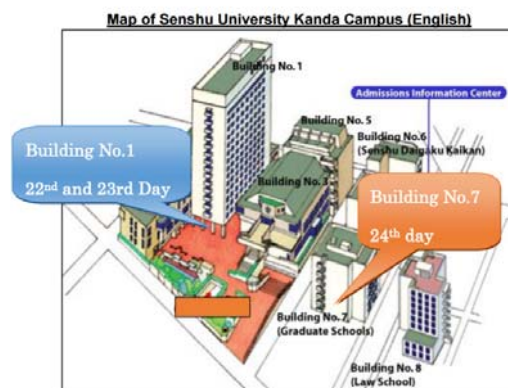
Current Activity in the Asia-Pacific Area

First Asia-Pacific System Dynamics Conference of the System Dynamics Society Conference

February 22-24, **2014**

Kanda Campus, Senshu University
Tokyo, **Japan**

Attracted
95 people from more than
20 countries



Conference Organizers

Akira Uchino	Senshu University, Japan	Organizing Chair
Atsushi Fukuda	Nihon University, Japan	Program Co-Chair
Robert Y. Cavana	Victoria University of Wellington, New Zealand	Program Co-Chair
Ignacio J Martinez-Moyano	Argonne National Laboratory, <u>USA</u>	Program Co-Chair
Robert L. Eberlein	isee systems, <u>USA</u>	Workshop Co-Chair
Kaoru Yamaguchi	Japan Futures Research Center, Japan	Workshop Co-Chair

Program

- 7 plenary presentations
- 31 parallel session papers
- 8 workshops

Current Activity in the Asia-Pacific Area

2nd Asia-Pacific Region System Dynamics Conference of the System Dynamics Society

February 19-22, 2017

Ngee Ann Kongsi Auditorium, Education Resource Centre, UTown, National University of Singapore

Conference Theme: Charting a Path to a Humane and Sustainable Future: Asia's Leadership Role

Hosted by: Residential College 4 | Supported by: System Dynamics Society

**Attracted
186 people from more than
15 countries**

Country	No.
Australia	14
China	6
India	3
Indonesia	9
Italy	2
Japan	23
Republic of Korea	4
Malaysia	1
New Zealand	1
Philippines	2
Saudi Arabia	1
Singapore	106
Thailand	5
United Kingdom	3
United States	6
Grand Total	186

Conference Organizers

John Richardson	RC4, Singapore	Organizing Chair
Len Malczynski	Sandia National Lab, USA	Organizing Co-Chair
Ignacio J Martinez-Moyano	Argonne National Lab, USA	Program Chair
John Pastor Ansah	Duke-NUS, Singapore	Workshop Chair
Huong Nguyen		Student Colloquium Chair
Jenson Goh	RC4, Singapore	Organizing Committee
Naviyn Prabhu	RC4, Singapore	Organizing Committee
Foong Jing Fang	RC4, Singapore	Organizing Committee
Loi Hwee Fang	RC4, Singapore	Organizing Committee
Tan You Cheng	RC4, Singapore	Organizing Committee
Yong Bee Choon	RC4, Singapore	Conference Secretariat

Program Committee

- Dr. David **Andersen**, University at Albany, [USA](#)
- Dr. John Pastor **Ansah**, Duke-NUS Graduate Medical School, [Singapore](#)
- Dr. Robert **Cavana**, Victoria University of Wellington, [New Zealand](#)
- Dr. Robert **Eberlein**, isee Systems, [USA](#)
- Dr. Shayne **Gary**, The University of New South Wales, [Australia](#)
- Len **Malczynski**, Sandia National Laboratories , [USA](#)
- Dr. Camilo **Olaya**, Universidad de los Andes, [Colombia](#)
- Dr. John **Richardson**, National University of Singapore, [Singapore](#)
- Dr. Martin **Schaffernicht**, Universidad de Talca, [Chile](#)
- Dr. Yutaka **Takahashi**, School of Commerce, Senshu University, [Japan](#)
- Dr. Jim **Thompson**, WPI, [USA](#)
- Dr. Kaoru **Yamaguchi**, Japan Futures Research Center, [Japan](#)

Research Threads

Business Economics Environment Health Human Behavior Information and Knowledge Learning and Teaching Methodology Operations Public Policy Resources Security Stakeholder engagement Strategy

Program

- **4** Plenary Keynote presentations (invited)
- **33** Oral presentations
 - Organized in **11** sessions (9 parallel and 2 plenary)
- **12** Poster presentations
- **7** Workshops

Program

- Parallel Sessions
 - Methodology (2)
 - Economics
 - Strategy
 - Health (3)
 - Performance and Cost in Health
 - Screening and Prevention in Health
 - Health in Singapore
 - Resources and the Environment
 - Business Operations and Public Policy
- Plenary Sessions: **Special Topics in System Dynamics (1 and 2)**

Current Activity in the Asia-Pacific Area

3rd Asia-Pacific Region System Dynamics Conference
of the System Dynamics Society

What is next for this presentation?

- This conversation continues at the next session Noon to 1 PM today
- Discussions about the vision can emerge over lunch, dinner, and breakfast tonight and tomorrow
- We will report out on these discussions at the Closing Ceremony on Tuesday
- These conversations, this vision, will be carried back to the July meetings of the System Dynamics Society in Cambridge this summer

What is next for the Society?