22th Anniversary

The Millennium Project
Planning Committee Meeting

8-9 October, 2018

Hosted by Universidad Franz Tamayo UNIFRANZ

Santa Cruz, Bolivia
MPPC Meeting Agenda

Monday October 8

09:00  Review Agenda and Short Self-Introductions
09:30  Recent Accomplishments
10:00  Current and recent work
      • Results of 5 RTDs Work/Technology 2050 draft report
      • Conference Grappling with the Futures
      • State of the Future 19.1 Infographics & Italy & China
      • Collaborations: WAAS, EF, IADG, Awecademy
      • UN GEF Priorities and Environmental Law Institute
      • Google Ad Words and MP Communications Strategy
      • Work/Tech 2050 Workshops part of Node reports
11:00  Break
11:15  MP Long-range vision and Fundraising
12:30  RIBER meeting and updates
12:45  Foresight European Network (FEN) meeting and updates
13:00  Lunch
14:00  Node Chairs Reports
15:30  Break
15:45  Continue Node Chairs Reports
17:30  Adjourn
19:00  Welcome Dinner at Veronica’s home

Tuesday October 9

09:00  Node Chairs’ Reports (continued)
10:30  MPPC Priorities RTD results
11:00  Break
11:15  Succession planning
12:30  Identify Small Discussion Groups
12:45  Lunch
13:30  Group Discussions
15:30  Group Discussion Recommendations
16:30  Fundraising and other administrative matters
17:15  Final comments by all
17:30  MPPC Meeting Adjourn
19:30  Conference at CAINCO
22:00  Dinner at Restaurant Dossier, Velasco street N° 72

Wednesday October 10

08:45 RIBER Meeting - Opening
11:00  UNIFRANZ conference students & professors

Thursday and Friday October 11 and 12

RIBER Meeting
Recent Accomplishments

- 5 RTDs on Actions to address future work-tech dynamics (record?)
- Specific RTDs to relevant Ministers (Educ RTD sent to Min. of Educ.)
- Distillation into draft report for MPPC feedback & distribution strategy
- Google AdWords
- UN Global Environment Fund (GEF) priorities RTD & Workshop
- More workshops (two with the Federal Foresight Community, USA)
- Intel Long-range Strategy feedback, potential corporate sponsor
- UPenn Go To Think Tanks: 23rd new ideas, 48th quality/Integrity of 6,500 think tanks in the world
- Explorations on ANI to AGI Governance and SIMAD deterrence
- World Future Day – Fifth round the world 24-hour conversation
Recent Accomplishments (continued)


• *Interactive Scenarios* chapter by Ted and Jerry in *Innovative Research Methodologies in Management Volumn II: Future, Biometrics and Neuroscience Research*

• RTD Method chapter (only in German) by Dr. Lars Gerhold

• Fast Futures *What should we do over the next five years to address the longer-range technologic unemployment projections?* (top 5 actions in 5 categories)

• Research Gate 10,791 reads, 328 citations

• Millennium Project Newsletters 3.0 and 4.0
Shared Usage of online curricula drawing on the 15 Global Challenges

First create with Challenge 3 on Population and Resources.

You will need a user account to access the modules. You can sign up at: https://www.learn.awecademy.org/join-awecademy/ to explore.
Future Work/Tech 2050 study: 6 Phases:

1. Literature and research review to find what questions were not asked or poorly answered as input to our international Real-Time Delphi survey.

2. Over 300 futurists, AI and other technology professionals, economists, and other related experts from over 45 countries shared what should be considered in the construction of alternative future work/tech scenarios.

3. Three Work/Technology 2050 Global Scenarios drafts were written and reviewed by over 450 futurists and others via three Real-Time Delphi questionnaires: It’s Complicated – A Mixed Bag; Political/Economic Turmoil – Future Despair; and If Humans Were Free – the Self-Actualization Economy.

4. These three scenarios (each about ten pages) were used as inputs to 30 workshops in 20 countries to identify long-range strategies to address the issues raised in these detailed scenarios.

5. The suggestions were distilled and grouped for relevance to education & learning; government & governance; business & labor; culture & arts; and science & technology and assessed by separate international Real-Time Delphi expert panels.

6. Results were analyzed/synthesized, put into separate reports, shared with relevant government departments in over 50 countries, and integrated in to a draft final report.
Some countries conducted several workshops, as indicated in parentheses. These workshops were:

Argentina (two and series)  Bolivia (series)
Brazil  Bulgaria
European Foresight Network  Finland
Germany (series)  Greece
Hungary  Israel (two)
Italy (two)  The Netherland (two)
Mexico (two)  Poland
Spain (two)  South Korea (two)
United States (two)  Uruguay (series)
Venezuela
Some workshops are still in planning
Menu of 93 actions, not just STEM

- Education
- Science and Technology
- Business and Labor
- Culture/Arts
- Governments

Work/Tech 2050
<table>
<thead>
<tr>
<th>Workshop Discussion Group</th>
<th>Actions assessed</th>
<th>Additional Suggested Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and Learning</td>
<td>20</td>
<td>26</td>
</tr>
<tr>
<td>Government and Governance</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>Business and Labor</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Culture, Arts, and Media</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Totals</td>
<td>93</td>
<td>118</td>
</tr>
</tbody>
</table>
Work/Technology 2050 Report (DRAFT)

- Introduction
- Executive Summary
- Three Work/Technology 2050 Global Scenarios
- National Workshops
- Five RTDs on actions for Educ., Gov., Bus/Labor, Culture, S&T with 100 pages of comments on the actions
- Conclusions

Sections sent to relevant Ministers

How to package and promote?
• Example of an application by the German Node of the Work/Tech 2050 initial study funded by a leading German Foundation.

• Any Node is free to do this selecting any one of the several steps of the study
Top 5 Rated Actions in each discussion group category to Address future Work-Tech Dynamics

• We do not have time to discuss all the future work/tech 93 assessed actions and the 118 additional suggestions
• ...but we can silently read each slide with the top 5 most effective strategies and discuss any if you have comments or questions.
Education and Learning (Top 5)

• Increase focus on developing creativity, critical thinking, human relations, philosophy, entrepreneurship (individual and teams), art, self-employment, social harmony, ethics, and values, to know thyself to build and lead a meaningful working life.
• Include potential futures as we include history in the curriculum.
• Make Tele-education free everywhere; ubiquitous, life-long learning.
• Shift toward mastering skills rather than just mastering a profession.
• In parallel to STEM create a hybrid system of self-paced inquiry-based learning for self-actualization; retrain teachers as coaches using new AI tools with students.
Government and Governance (Top 5)

- Establish a national independent (as much as possible) technology forecasting and assessment agency to inform legislative, judicial, and executive functions of government about future technology and their impacts (a government Agency for the Future).
- The government, employers, and the labor unions should cooperate to create lifelong learning models including forecasts of future skills.
- Study how to prevent future conflict between technologically augmented humans (via, AI, genetics, electronics or other means) and non-augmented citizens.
- Training programs for politicians before governing.
- By 2050 introduce a global system for S&T knowledge sharing.
Business and Labor (Top 5 Actions)

- Develop ways for companies and employees to create ethical, aesthetic, and social value in addition to economic and material value.
- Define a new social contract of workers’ rights in a transactional and global economy.
- Create observatory or horizon scanning online platforms that update employment and technology trends along with discussions of future of employment.
- Manage companies like professional networks, rather than as static hierarchies.
Science and Technology

- Directors of national science labs and other leaders in the S&T community should devote more effort to making current science and future technology understandable to general public.
- Create national policies and standards for the Internet of Things (IoT) that stresses future cyber security systems.
- Forecast synergies among the full range of next technologies (NTs)
- National S&T leaders should be part of the national team that creates, regularly updates, and implements their country's national S&T strategy.
- S&T and legal communities should collaborate nationally/internationally to establish legal frameworks and treaties that anticipate future liability requirements that can deter tech hazards and encourage technology.
Culture, Arts, and Media

- Repurpose libraries, old post offices, movie theaters, life-long learning, cultural exchange, and Next Tech/digital connection places.
- Produce movies, TV, computer games, etc. to show how augmented and non humans could evolve without prejudice and conflict.
- Support joint cultural activities with other countries that re-enforce new values that help the transition to the rapidly changing future.
- Establish arts/media alliances with themes: self-employment as new norm; technology to augment human capacity rather than replace humans; self-actualization economy; invest in what replaces you;
- Expand the purpose of work to self-actualization.
GRAPPLING WITH THE FUTURES

Insights from Philosophy, History, and Science, Technology and Society

Sunday, April 29 - Monday, April 30, 2018
A symposium held at Harvard University and Boston University

Millennium Project: Main co-sponsor

The Millennium Project
global futures research capacity
Features:
- Organized at Harvard and Boston University
- 44 presentations (near gender parity)
- 18 countries
- 110 attendees (full)
- Unique gathering of futurists, historians, philosophers and STS scholars

Millennium Project’s contributions:
- Co-organizer (Yashar Saghai)
- Co-sponsor
- Logistics
- Video recordings
- Interviews
- Committee members
- Presenters
- Chairs
- Participants from around the world
• **Outcomes:**
  • In preparation:
    • Special issues of multiple academic journals based on the symposium
    • Recordings of presentations and interviews (to be posted in 2018)
  • Creation of a *permanent platform* in 2019
Thank You Veronica
The Chinese government used to publish it, but did not promote it; the private sector will promote it now, but took three years to publish it.

SoF 19.1 coming out soon in Italian, Greek, and Bulgarian.
Collaborations

• World Academy of Art and Science: Governance Roundtable
• Eisenhower Fellows: Potential Workshops
• IADG: Executive 3-Day trainings: Future Work/Technology
• Awecademy: shared usage creating units 15 GC’s but first on pop/res, women empowerment, emerging health issues. based out of Toronto that is disrupting traditional high school curricula and inspiring students to bring about civilization-level change.
• Instituto Atlántico de Gobierno (IADG),
• Harvard Future Society on ANI to AGI
Environmental Law Institute and the UN Global Environmental Facility

- Two-Round RTD
  - collect input on important environmental entities
  - rate them
- Input to the UN GEF Workshop

I will not read the following top rated items, but you look at them and we can discuss any that you want
GEF RTD Ratings: Bio Entities

• Cellular agriculture (plant and/or meat based) to provide protein with reduced environmental impacts (3.73)
• 3-D printed organisms, replacement body parts, artificial blood, or other bio-materials (3.68)
• New genetically modified crops designed for disease/insect resistance, to withstand higher temperatures and greater drought conditions, increase yields, and/or provide greater nutritional benefits (3.64)
• Gene drives or other methods used to successfully control invasive species or vector-bourne diseases (3.54)
• Gene edits on humans for disease prevention or enhancement (3.5)
• New man-made virus or pathogen created, possibly through mistake from biological hobbyist/DIYer, or intentionally as bio-weapon (3.48)
GOF RTD Ratings: Nanotech Entities

• Nanotechnologies dramatically improve the efficiency of batteries, solar cells, catalysts by 5-10 times (3.88)
• Increased bioaccumulation of nanoparticles in consumer goods and industrial products pose health problems (3.72)
• Nanobots that can break down plastics or other pollutants (3.46)
• Nano-scale monitoring of human and other biological organisms at the molecular level (3.43)
• Nano-scale agricultural applications such as crop nutrients, growth stimulants, pesticide delivery systems (3.34)
• Fukushima-like accidents (3.86)
• Black market diversions of existing radioactive materials result in contamination (3.67)
• Nuclear exchange contaminates significant part of the Earth’s surface (3.39)
• Dirty bomb (3.37)
Break
MP Long-range vision and Fundraising

**Purpose:** Improve humanity’s prospects for building a better future.

**Mission:** Improve thinking about the future and make that thinking available through a variety of media for feedback to accumulate wisdom about the future for better decisions today.

**Vision:** A global foresight network of Nodes, information, and software, building a global collective intelligence system recognized for its ability to improve prospects for humanity. A think tank on behalf of humanity, not on behalf of a government, or an issue, or an ideology, but on behalf of building a better future for all of us.
Sponsors Past and Present

- AGAHI Pakistan (2016-17)
- Amana Institute, São Paulo, Brazil (2004)
- Applied Materials, Santa Clara, California (2002–09)
- Argentina Ministry of Agriculture (2012)
- Army Environmental Policy Institute, Arlington, Virginia (1996–2011)
- Azerbaijan State Economic University (2009-2016)
- City of Gimcheon (via UN Future Forum, South Korea) (2009–10)
- Deloitte & Touche LLP, Cleveland, Ohio (1998–09)
- The Diwan of His Highness the Amir of Kuwait (2010–11)
- Environmental Law Institute (2017)
- The Hershey Company (2008–09)
- Kuwait Oil Company (via Dar Almashora for Consulting) (2003–04)
- Kuwait Petroleum Corporation (via Dar Almashora for Consulting) (2005–06)
- Monsanto Company, St. Louis, Missouri (1996–98)
- Montenegro Ministry of Science and Technology (2012)
- Motorola Corporation, Schaumburg, Illinois (1997)
- NATO, Brussels, Belgium (2016)
- Pioneer Hi-Bred International, West Des Moines, Iowa (1997)
- Rockefeller Foundation (2008–11; 2013)
- Shell International (Royal Dutch Shell Petroleum Company), London, United Kingdom (1997)
- Universiti Sains Malaysia (2011)
- U.S. Department of Defense, Off of the Secretary
- World Bank (via World Perspectives, Inc. 2008 and GEF Evaluation Office 2012)
Growth of Millennium Project Complexity

### Paired relationships
- **45** Easy
- **1953** Not Easy
- **4950** Needs new approaches

### Triad relationships
- **120** Easy
- **39711** Not Easy
- **161700** Needs new approaches

### Complexity of The Millennium Project
<table>
<thead>
<tr>
<th>Complexity</th>
<th>MP with 10 Nodes</th>
<th>MP with 63 Nodes</th>
<th>MP with 100 Nodes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paired relationships</td>
<td>45</td>
<td>1,953</td>
<td>4950</td>
</tr>
<tr>
<td>Triad relationships</td>
<td>120</td>
<td>39,711</td>
<td>161,700</td>
</tr>
<tr>
<td>Management</td>
<td>Easy</td>
<td>Not easy</td>
<td>Needs new approaches</td>
</tr>
</tbody>
</table>
Future Management

1. Hierarchy

2. Networks

3. Intersection of Networks: Nodes

4. Connecting Nodes into Fields of Play

5. Connecting Fields of Play
Communications Strategy

Purpose of MP Communications Strategy

- Improve thinking about the future
- Engage decisionmaking to become more anticipatory towards building a better world.
- Improve a framework and coherence to understanding global change and strategies to build a better world
- Acknowledge MP as an global participatory think tank focused on the global future
- Sell products (State of the Future 19.0; GFIS, and FRM 3.0) to improve thinking about the future and earn income

Current situation

- MP is well known in the futures fields, but low traffic to websites and sales relative to it international reputation
- Voluntary staff, low funds, organizational debt
- 12 communications channels
- 63 Node have their own websites, social media, etc. each with their own page in GFIS
- The breadth and depth of all MP actives is difficult to grasp

Internal objectives

- Node Chairs and Members to promote and write articles about MP products and concepts to help upgrade the futures capacity to improve decisionmaking
- Increase Node collaboration such as RIBER (Latin American 2030 scenarios, Spanish translation of MP products)
- Update GFIS content on your national future situation

External objectives: Clarify need for a global participatory think tank; Increase sales; Improve national foresight
Communications Strategy (continued)

• Communications Methods
  • Products such State of the Future, GFIS, FRM, website
  • Google AdWords
  • Speeches, press interviews (Cordeiro, Glenn, others)
  • Communications Channels: 3 Listservs; 2 Websites; Facebook; LinkedIn; YouTube MailChimp; NewsWire; Google+

• Highest to lowest focus: University prof/students; Thought leaders; Entertainers; General public; Futurists; Political advisors; News Media; Business planners/consultants

• Messages
  • We need a global think tank for a global future
  • We are winning more than we are losing, but where we are losing is very serious.
  • There are many good strategies to address our Global Challenges, but decisionmaking is insufficient
  • 15 Global Challenges provides a framework for understanding global change and developing strategies

• Work plan
  • Improve linkage of URL with social media, and other MP communication channels
  • Write and distribute Press Releases Work/Tech 2050 other sections
  • Each Node writes an article about the State of the Future 19.1 and Work/Tech 2050
  • Commutations Officer for regions/languages
  • Up-grade MP brochures and flyers
Millennium Project Planning Committee
Real-Time Delphi 2018

Tuesday October 9th
1. Develop and implement a promotion plan for the Future Work/Technology 2050 report (draft given to MPPC) (4.06).

2. Encourage all Node Chairs and their Members to take on at least one project per year, and encourage inter-Node partnerships on such ideas to intensify effects (3.86).

3. Anticipatory Governance Applied to the transition from artificial narrow intelligence (ANI) to artificial general intelligence (AGI) (3.6).

4. Re-assess the variables included in the Global SOFI, their weight, best and worst values (3.56).

5. What is the public’s role (families and communities) in reducing the threat of a single individual creating and deploying a weapon of mass destruction (SIMAD)? (3.24)
Past MP Lessons to improve future of MP

- More focus on communicating results, plus crystal-clear vision shared by all key players.
- When we seek funding, we are told we don't fit their categories, nearly all our funding has come from those who find us, so the lesson is to do brilliant work, and attract sponsors. On crystal-clear vision: over the past 20 years, we have gone over this a number of times and come up with essentially the same thing every time, see: http://www.millennium-project.org/about-us/.
- It would be nice to hear about the ways of empowerment of Nodes: how to Node Chairs try to activate people and widen the range of people involved.
- Regional groupings work well for knowledge sharing and collaborations.
- The Future of Work project in itself is a very strong project/project set-up. Looking forward to being able to use this further. And to start a new project like this (longer term, longer planning, potential sponsor).
- Embrace a more global orientation towards the world we want and engage with the SDGs too.
Past MP Lessons to improve future of MP

• Social Innovation that transforms is a very important topic that is raising funds.
• The MP should have it's own ecosystem for transforming and think who will be the beneficiaries; take the example of the Mexican Ecosystem for Social Innovation.
• Flexibility can be an added value for keeping the Node alive through the years but it also brings less responsibility. Funds are important for project but synergy can be more.
• The Millennium Project has been a global futures success, creating unique futures tools for better decision-making (GFIS, SOF, SOFI...). We should improve the overall management, fundraising, and marketing.
• RTDs were the best product in the past period.
• We need to provide incentive funds for participants in MP projects.
• The world needs the MP more than ever; explore more involvement of MP in education to form a foresight educational foundation in governments, businesses, NGOs, etc. MP could create a kind of education franchising around the world systematized by the Nodes. Each Node would establish educational clusters in its countries and regions having a scientific matrix based on the MP.
Past MP Lessons to improve future of MP

- Big, dispersed projects such as Work/Tech 2050 have the potential to showcase value and synergies of TMP
- I think the Millennium did a great and necessary job.
- Support the development of the next version of Futures Research Methodology
- What were the outcomes from previous MPPC recommendations?
- Think about organizing a global news agency of the future with a network that includes media such as Facebook, YouTube, Instagram and others.
- More interest in specific the topic, like Lone Wolf Terrorists, rather than broad general topics, like the future of AI. Many people are less interested in the global challenges, even though the MP covers them well, than they are in finding actionable solutions to address each challenge.
- The synergies we have built working together is our strength and represents the whole humanity, we have Nodes in the 5 continents and we are able to discuss on the future of the world in spite of the different beliefs and political opinions we own.
MPPC RTD: Improve MP Overall Capital

• Improved dissemination of work product results.
• Strengthen connection with decision/policy makers.
• Clarity what is expected of Nodes
• Nodes continue implementing workshops as realized for Future Work/tech 2050, and develop business cases for this
• Each Node prepares a list of the most important people in their countries that they are linked with, then ask them their main needs and a global think tank can help.
• Nodes’ collaboration for transnational innovative solution projects.
• Unilever backs SDS’ get a curation to back MP or regional high-level advisory group.
• Have monthly online video meetings of Node chairs and let the conversations evolve and training needs be identified. MP also has a permanent video link available 24 hours, seven days a week at https://hangouts.google.com/call/act3g5fh6vd7deoxq3xvb7zylue Jerry could leave this on from 10 AM to 5 PM Monday-Friday for anyone to click on and video conference.
• Having outputs is great for keeping discussions over the network, but I think that our strength is methodology and we should focus on such projects.
MPPC RTD: Improve MP Overall Capital

- Hold public conferences, scientific foresight educational programs, MBA certifications in business schools, MP should become a reference as a Foresight educational as well as an information system.
- Improve marketing activities to attract the best futures talent to join the MP. Improve fundraising to reinforce marketing. Improve networking and relational capital to strengthen fundraising.
- Expand to the new younger generations.
- Get new people included without loosing the feeling of a "MP tribe" or "MP village", which is also nice, having it´s privilege of feeling cozy.
- Maybe we shall include a section at the website to present research outputs of the Nodes around the world [Nodes’ pages in GFIS can be expanded at any time].
- "Networks of joint action with business, state officials, and academia. Openness to consultation and citizen participation;" as proposed by Cairo Node with Cairo University, ASRT, and the Cabinet.
- Organize an annual international event about the World Future, focusing in different fields: technology, economy, society, environment and politics.
- Strengthen Nodes, clarify value proposition.
- Transform the TMP to make it easier to adapt to the best practices with good cultural correspondence, to develop techniques for transforming the future.
MPPC RTD: How do we improve GFIS?

- Add component on wisdom not just information: a synthesis that has not appeared elsewhere.
- Produce regular reports (ideally automated) of "highlights" in attractive format.
- Train all Node Chairs and Vice-Chairs and share promotional material with all the Node Chairs.
- Make user interfaces more contemporary, maybe in cooperation with one of the US universities.
- Hire a full-time Web Master for GFIS. If the 2000 major universities in the world subscribed to GFIS, then MP would get $800,000/year income. Wes is excellent, but got hired away, he volunteers now.
- There should be experiments in every country. A good way would be helping to fund it.
- Publish survey among MP community what they would like to have on GFS, this means more content targeted for interest of the majority, and connect to sources having such an knowledge, documents, studies, etc.
- Add infographics from personalized data collection.
- Create separate scenario database [we have that in GFIS under “Research” on left column].
- We could think of an evaluation system that takes into account regional and cultural differences for the participation and use of the system.
- Consider layers of information, short term and long term impacts.
- Reframe the world as a global commons and utilize more of the empirics of the planetary boundaries.
Global Futures Intelligence System

• Going on a trip? Send a message to those in that city using “Manage Users” under “Participate” top front page
• Search news and scanning for specific items you are working on
• Update your Node Page – informal advertisement publically available
• Build the brain with the Bookmarklet
MPPC RTD: Other Comments:

- Take a bit more time to analyze and reflect on past MP products. Since MP now has a relatively long track record, what worked and what didn't? How accurate were forecasts and trend projections? What recommendations have been adopted? Which were not adopted and should have been in retrospect? Etc.
- Suggest a follow-up study to the future work/tech 2050: Education 2050. It could build strongly on the Future Work tech study and would raise a lot of interest.
- I have learned so much since I joined the network and I'm very happy to be of help. It's not easy, considering that many of us have other jobs, but it gives satisfaction.
- Publish paperback series FRM and GCH via lulu.com or create space
- Analyze the feasibility of creating an information agency of the future, to disseminate articles, papers, news, in the social network, and in the media
- Continue work among Nodes Chairs during each year and before the annual planning committee meeting.
- Great work, truly admire Jerry's vision, dedication, you are an example to all of us!
What is expected of the Node Chairs/Members?

• Respond to RTD requests and find relevant experts
• Update GFIS content on your national future situation
• Seek publication/translation for Work/Tech 2050 & other MP products
• Seek university libraries to subscribe to GFIS Create your own projects drawing on the whole of The Millennium Project
• Something we have not thought about yet.

What should Nodes expect to receive?

• Intersection of Node’s national futures with global futures research
• International peer collaboration with other Nodes
• Access to the Global Future Intelligence System, and other MP research and methods
• Sales income from MP products in Node’s countries
• Prestige of association with a unique international think tank