# **Anticipatory Governance: Traditions and Trajectories for Strategic Design**

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#### **Abstract**

Over the course of the last half century, a number of practices were developed that connect foresight with governance. From the early development of technological forecasting and anticipatory democracy, to municipal and regional (local) approaches and futures commissions, to the more recent development of transition management, integrated governmental foresight, and to the cutting-edge in networked/crowd sourced approaches, traditions and discourses that link foresight and governance have evolved considerably. The purpose of this article is to review these various traditions and discourses to understand the context within which different approaches can be valuable, and expand the basis by which we can develop Anticipatory Governance strategies. Not all strategies are appropriate in all contexts, however, a major proposition in this paper is that we can design strategy mixes that can combine a number of traditions and discourse in creative ways that allow practitioners to address complex, fuzzy and wicked challenges that singular approaches would have a harder time addressing successfully.

**Keywords:** governance, public policy, foresight, complexity, design

#### Introduction

One of the premises in this article is that societies face complex and wicked challenges, and therefore there is no one approach that will be a silver bullet to address them. And further, there is no one approach to linking foresight and governance that will effectively give a recipe for how to do it in every instance. Indeed, the post-structural turn in futures studies (Inayatullah, 1998; Slaughter, 1999) puts forward the proposition that traditions and discourses structure the very way that we we see a problem; and therefore, to address the challenge of developing strategies and approaches to Anticipatory Governance for specific concerns, we can draw on a number of traditions and discourses as a "strategy mix". In essence this paper puts forward Anticipatory Governance (AG) as a post-structural design challenge.

Instrumental rationality in the 20th century has shown us that one man's miracle creation can create a cascade of complex problems. From the development of the first nuclear bomb, to the automobile, the use of pesticides and the green revolution, and now the throes of the digital revolution, instrumental rationality provides solutions that then generate a new complex set of problems. Or as Ulrich Beck argued, we inhabit a world risk society in which the output of industrial growth is not just wealth and technological innovation, but also uncertainty and risk (Beck, 1999). Bertrand de Jouvenel (1967) made a similar point more than half a century ago, that it is because of "progress" that forecasting is needed. As we accelerate change in our societies (in particular technological change), the future becomes less certain and difficult to forecast, creating the necessity to understand the potential consequences and implications of change, and feed this back into wiser decision making. From the well organized mess of instrumental rationality, more comprehensive or holistic ways of addressing the human and social experience have been developed that are context conscious (Gunderson, 2002). To this extent, futures studies, or the systematic application of foresight to understand and enact social change, fundamentally must incorporate complexity into its approaches. A complexity oriented approach, however, is not just one where dynamic systems are mapped, but also where the wickedness of contemporary challenges can be de-fanged by understanding and analyzing how traditions and discourses frame the world we see around us – an the opportunities and strategies we can follow. De Jouvenel's idea for a "Surmising Forum" was in fact an early example of such an approach to complexity, where various social sciences and knowledge traditions would come together to collaborate on social anticipation that could guide public and governmental decision making (a very early example of Anticipatory Governance). The following discussion of traditions and discourses is offered as a "post-instrumental" design space that is meant to facilitate our engagement and capacity to employ Anticipatory Governance approaches.

# **Traditions and Discourses for Anticipatory Governance**

In this next section I present an overview of seven traditions and discourses for Anticipatory Governance. This provides a starting point within which to understand AG as a broad domain of activity, and to analyze different approaches. This analysis in the following section will provide a basis for a discussion on strategy mixing and design in the context of addressing foresight to social response challenges.

- 1. Science, Technology and Innovation Foresight (STIF)
- 2. Anticipatory Democracy (AD)
- 3. Futures Commissions (FC)
- 4. Foresight Informed Strategic Planning (FISP)
- 5. Transition Management (TM)
- 6. Integrated Governmental Foresight (IGF)
- 7. Network Foresight (NF)

While other categorizations are possible, this list of seven emerged from a broad scan of the literature while designing and implementing a course on Foresight for Public Policy at the Lee Kuan Yee School of Public Policy. Of the seven, three are explicitly self-conscious as traditions, (such as anticipatory democracy, science

technology and innovation foresight and transition management). Integrated governmental foresight is newer, but with some strong similarities across case examples. Futures commissions are a particular organizational strategy. Network foresight is recent, but it is distinctive and there is a consistent and overlapping body of examples. Finally, foresight informed strategic planning is perhaps the most ambiguous category - yet the prevalence of small-scale foresight informed planning exercises for local and state / provincial governments is widespread.

## Science, Technology, Innovation Foresight

Science, technology and innovation foresight (STIF) programs are perhaps the oldest form of formal foresight activity for governments. Starting in the 1960s, such programs were developed to guide large scale allocation of research resources and funding toward those research and development areas, often in the interstices between scientific research and industry-based commercialization, that were considered to have the greatest potential or were a matter of national strategic interest. Examples of STIF programs include the US Critical Technologies Program, French Key Technologies Programme, Czech Foresight Exercise, UK Technology Foresight Programme, Technology Foresight Towards 2020 in China and Japan's long-standing MITI Technology Forecasting. They have been fundamentally connected to supporting national innovation systems. They entail a process of high level policy and priority setting which are "designed to inform Science, Technology and Innovation (STI) decision-making around the world" (Miles, 2012). Or in Georghiou and Harper's (2010) characterization:

"The predominant focus of foresight is frequently national research policy and strategy, usually with the broad aim of selecting priorities for research investments." (Georghiou, 2011, p.243)

Because this type of futures research entails understanding the development of science and technology in specialist domains, STIF often uses expert based approaches to futures research such as Delphi forecasting. Yet, STIF focused foresight has in some cases broadened to encompass systemic social concerns (Urashima, 2012) and connecting stakeholders in STIF processes for coordinated exploration and articulation of strategic foresight. Miles (2012) explains how STIF approaches have evolved recently to incorporate more systemically complex, wicked (problem) and participatory approaches to exploring technology forecasting. He characterized more recent approaches as "fully-fledged foresight" which:

"Combined prospective analysis (futures studies' insistence on the importance of relating present choices to awareness of long term future prospects, and of the need to pay due regard to agency, uncertainty, and the associated scope for alternative futures), with a participatory orientation (paying due regard to the dispersion of knowledge and agency across multiple stakeholders, whose insights and engagement need to be mobilised), and a practical relevance (being closely related to actual decision making and strategy formation actions..." (Miles, 2012, p.71)

Miles ranking of priorities and objectives for STIF programs around the world revealed that such approaches have evolved considerably since their beginnings:

- 1. Orienting policy formulation and decisions
- 2. Supporting STI strategy- and priority-setting
- 3. Fostering STI cooperation and networking
- 4. Generating visions and images of the future
- 5. Triggering actions and promoting public debate
- 6. Recognising key barriers and drivers of STI
- 7. Identifying research/investment opportunities
- 8. Encouraging strategic and futures thinking
- 9. Helping to cope with Grand Challenges (Miles, 2012, p.72)

## **Anticipatory Democracy**

The term "Anticipatory Democracy" came from the seminal futurist Alvin Toffler, as his solution to what he considered to be "future shock". Because Toffler considered anticipated changes to be so disruptive, he argued for large-scale citizen engagement in diagnosing change and influencing society. As Bezold (2006) explains:

"The simplest definition of anticipatory democracy ... is that it is a process for combining citizen participation with future consciousness" (Bezold, 1978 in Bezold, 2010). [He] "argued that representative government was the key political technology of the industrial era and that new forms must be invented in the face of the crushing decisional overload, or political future shock, that we faced." (Bezold, 2006, p.39)

Anticipatory democracy (AD) developed in the 1970s in the United States. Bezold (1978) documented dozens of projects across the United States which engaged citizens, community leaders (business owners, religious, networks, community organizations), and policy makers in processes of formulating policy development and political direction in the context of emerging futures. Some of the processes would engage hundreds of citizens (in a few cases thousands) within a state or region, thus enacting a large scale participatory development of alternative futures and visions, which would leads to policy preferences and budget priorities in the style of participatory democracy.

But AD shouldn't simply be seen as having purely US origins. Indeed, the development of the World Future Studies Federation in the late 1960s contained aspirations for democratizing knowledge and capacity in futures thinking. Eminent scholars and WFSF founders, such Robert Jungk with the development of future workshops (Jungk, 1987), Johan Galtung's Transcend Method, and Fred Polak's (1961) work, further developed by Elise Boulding (Boulding, 1978), provided impetus for citizen engagement in understanding and envisioning change and deliberating on new directions. AD can be seen as part of a broader critique of representative democracy in the face of the rising social complexity that could not be absorbed or effectively address by representative systems of governance (Dator, 2007).

One of the key points of dynamism and challenge with the process such as this, is the deep diversity it engenders in the process. People with very different values come together in a public deliberation on futures. Tensions and conflicts are inevitable, or as Bezold argues:

"many individuals live within levels or memes that do not value those at other levels. Becoming conscious of these levels will be important for enhancing effective democracy." (Bezold, 2006, p.49)

Bezold therefore argues that making AD work requires making values explicit through foresight tools and techniques that deal with social complexity, perception, values and worldviews (e.g. using Causal Layered Analysis, Integral Theory, etc.) And in this process to build common ground between participants for a shared vision.

On a more pragmatic basis, Baker's analysis (Bezold, 2006, p.39) of success criteria for anticipatory democracy projects included the following important points:

- 1. Obtain adequate funding (\$100,000USD per year in the mid 1970s or about \$360,000 USD in 2005 dollars)
- 2. Face political realities;
- 3. Decide on the major research/goals topics early;
- 4. Build ties with the bureaucracy:
- 5. Design and implement a process that involves policy makers from the start;
- 6. And present findings early and throughout the life of the process.

#### **Futures Commissions**

Futures commissions (FC) are another important tradition in the Anticipatory Governance milieu. Futures commissions are semi-independent research and communication institutes or agencies established to provide a foresight function for both government and the public. A key opportunity in FCs is to develop futures research which can influence policy development as well as communicate with the public to enhance the level of debate in the public sphere. Often government-funded, their semi-independent nature (as a commission) allows them more liberty in providing critical commentary within both policy development processes and public discourse. This semi-independence can also become a weakness if political winds change and those in power are at odds with the research and communication flowing from such a futures commission. As Bezold argued, they can be both powerful and precarious, "critical in giving government greater foresight, more conscious direction setting, and greater capacity to create positive change" - or can waste public money (Bezold, 2006, p.46).

Notable examples of such commissions include Australian FC (now defunct), and Swedish FC. Bezold (2006) documented 36 US states that created FCs since the 1990s, often within particular state judiciaries. He characterized their function to:

"stimulate imagination and creativity in considering options; track emerging trends and relate these trends to current policies; develop alternative scenarios; inform and involve the public and key stakeholders; and allow the public to link policy options and trends to priority setting for state policies and the budget." (Bezold, 2006, p.47)

Overall FCs are high impact but require significant resources and political support. Their success factors include having strong leadership support (e.g. a governor, chief justice), involving other key stakeholders, including the legislature and media,

and having public learning and public involvement components (Bezold, 2006).

Usually of a robust scale, built into states or federal funding, FCs can also be instantiated at smaller scales, such as inter-organizational networks.<sup>2</sup> As well they can be used to connect a number of different jurisdictions through intergovernmental commissions. Their frequency and flexibility warrant their inclusion as a critical strategy in developing Anticipatory Governance.

# **Integrated Governmental Foresight**

Over the past decade or so, a new approach to Anticipatory Governance has been developed which integrates intelligence and foresight activities across governmental departments, harnessing synergies and overlaps toward systemic policy insights.

While still broadly focused on national priorities and challenges, "public health, national security, or the environment," [etc] (Habegger, 2010, p.50) this mode of foresight activity cuts across traditional policy areas and departments, and puts a premium on cooperation and collaboration across departments. It typically requires large scale knowledge management systems for scanning databases and subsequent analysis, and can be considered a limited type of organizational "crowd sourcing". Its end purpose is to assists policy makers with strategic thinking and decision-making. Habegger (2010) analyzed three important examples of this mode of foresight activity (UK, Netherlands, Singapore), arguing:

"Only few contemporary challenges can be confined to one policy area anymore, and governments have realized that a single-issue focus is in many instances insufficient. Consequently, they have started to experiment with foresight that cuts across the traditional boundaries of policy areas and government departments." (Habegger, 2010, p.50)

While such an approach to governmental foresight has distinct instrumental advantages, for example the Singapore government's Risk Assessment and Horizon Scanning (RAHS) program's capacity to identify early warning signs of potential risk, Habegger argues that the cultural benefits of this approach are perhaps even deeper, where process-based foresight among inter-organizational learning networks create conditions for cultural change toward adaptive and agile policy development. Such approaches foster cross-departmental sharing and collaboration, building in a culture of learning networks and organizations, breaking down traditional silos among government areas. Or as Habegger articulated IGF is:

"characterized by a long-term, interdisciplinary, participative, and communicative perspective that attempts to build networks across professional communities, enables broad-based social learning, generates scenario-based knowledge, and eventually results in visions of (alternative) policies." (Habegger, 2010, p.50)

A precursor to integrated governmental foresight may also be noted in early experiments with what Bezold (2006) describes as "legislative foresight". Experiments in the US at the federal level in integrating futures studies approaches into legislative processes attempted to build in environmental scanning and forecasts that could have implications for existing legislation, as well as foster coordination across legislative committees to look at intended and unintended future consequences of legislation: to establish more coordinated and coherent

national policies. As such legislative foresight played a kind of oversight function on all legislative activity (Bezold, 1978, p.124 in Bezold, 2006). While this kind of legislative foresight is distinctly different to IGF described by Habegger, it still holds significant potential for those considering a broad strategy mix and designing Anticipatory Governance approaches.

## **Transition Management**

Transition management (TM) is a long term/multi-generational and systemic strategy for reaching sustainable development goals and visions. It engages and empowers diverse stakeholders in a wicked problem area, or what is termed in TM discourse as an 'Arena', focused on targeting and engaging key domains or wicked issues. As an approach employed by governments to enact sustainable development goals, a key strategy entails creating a pioneer social innovator group that has political sanction to formulate change initiatives. In this way it draws on a synergy between governmental champions and pioneer social innovator groups or networks (it uses outsiders and insiders as an emerging alliance of change agents). The TM change strategy entails initiating "seeds of change" at a local level that can be scaled up (which serves the dual purpose of mitigating the risks of over generatized policy doctrine and developing experiments that provide long term resilience). It is quintessentially a strategic foresight approach where global scanning is conducted but applied to local sustainability challenges, and thus it takes advantage of the emerging global knowledge commons for localized applications. It links a long term understanding of alternative futures with shorter term policy and development priorities.

"By building up a broadening network of diverse actors that share the debate, thinking and experimenting, conditions are created for up-scaling of innovation and breakthrough of innovations. We will argue that this is at the heart of transition management: by actually implementing transition management in a structured co-production process, new insights emerge, are implemented and reflected upon in a continuing way". (Loorbach, 2010, p.238)

Transition management makes a distinction between different temporal levels of social change and opportunities for action. At the strategic level, long-term sustainability challenges and alternative futures are explored, connected to complex and wicked social problems - futures studies as an approach for generating new strategic visions, preferred futures and pathways is the methodology *par excellence*. At the tactical level, TM applies itself toward rethinking key system structures "institutions, regulation, physical infrastructures, financial infrastructures" within the context of broader sustainability challenges. At the operational level, TM attempts to generate new activities, decisions and innovations that individuals and groups can generate on a day-to-day basis in order to influence tactical change, but in the context of broader strategic foresight (Loorbach, 2010, p.238). As can be seen from this explanation, TM is unique in its strategy and methodology in terms of linking the very long-term sustainability challenges we face with specific and focused "operational" scale interventions and actions.

The transition management cycle is reminiscent of action learning and action

research cycles, but where localized action recurs in the context of the movement toward long-term sustainability goals and visions. Is highly synthetic and its incorporation of elements of the action research cycle works across diverse stakeholder and participant configurations looking for leverage points of change and insight. The formulation of a problem context or "transition arena" may be followed by generating images of sustainability and transition paths, which then flows into transition experiments in the mobilization of transition networks, which is then evaluated and reflected upon, the recursion of which provides the basis for a new cycle (Loorbach, 2010, p.238).

"The very idea behind transition management is to create a societal movement through new coalitions, partnerships and networks around arenas that allow for building up continuous pressure on the political and market arena to safeguard the long-term orientation and goals of the transition process." (Loorbach, 2010, p.239)

## Foresight-informed strategic planning

At different levels of government, from local to states and federal, a large body of practice and literature relates to planning processes that are informed by strategic foresight approaches. If a government is considering a planning process that will have implications for 5, 10, or 20 years, often they will apply some type of foresight approach to informing the planning process. Such foresight informed planning processes are most often participatory – which engage key stakeholders in a locale that might represent the broader system) in order to discuss the long-term issues being mutually experienced. It employs workshop based approaches to foresight and requires expert facilitators and facilitation. There are a wide variety of approaches to foresight informed planning, including search conference methods (Ludema, 2002; Weisbord, 1992), scenario planning (Mahmud, 2011) and others.

Gould and Daffara (Gould, 2007, p.2) articulate the value of foresight for planning and engaging a community in decision-making, providing participants with a deepened understanding of social change trajectories, providing an opportunity for participants to articulate and imagine their preferred futures, and to foster action plans and processes that can get integrated into achieving the futures that participants prefer. Further they argue that such approaches allow for greater transparency through open communication and involvement, where existing assumptions about the future can be made more explicit, challenged and evaluated, as well as creating opportunities for collaboration across government and citizen boundaries. Such processes bring forth new talents among people, surface existing issues and conflicts for resolution, develop the community's capacity to question assumptions and builds hope among people. For government such processes allow policies to be informed by a deeper understanding of long-term change, deepen the rigor of existing planning schemes, help develop collaborations across sectors and provide opportunities to integrate policy (Gould and Daffara, 2007, p.3).

# **Network Foresight**

The most recent development, Network Foresight (NF), involves approaches that use networked ICT systems on web based, open, "web 2.0" style interactive

platforms. Some of these engage in crowdsourcing and collective intelligence (principle of the wisdom of crowds). Others employ large scale scanning systems and interactive processes for idea generation and visioning. TechCast, developed by William Halal, was one of the first forms of collaborative virtual expert based forecasting. Shaping Tomorrow has become the biggest user group for crowdsourced trends, iknow is the European Union's collective scanning and analysis system. Finpro is one of the best examples of organizational crowdsourcing of foresight data, where employees form an important part of the scanning capacity that leads to business / industry intelligence. The Institute for the Future also run a variety of Massively Multi-player Online Games (MMOGs) which engage thousands of people in creatively engaging with scenarios and situations. The Open Foresight Project, created by Venessa Miemis, was an open source project, relying on off the shelf social media platforms, to conduct social foresight inquiry. FutureScaper, created by Noah Raford, is a scenario planning platform that uses crowdsourcing and collaborative interaction. Each of these, and other notable examples unmentioned here, have experienced different levels of success in engaging online audiences in foresight processes. Because this form of engagement is still young, it is expected to develop significantly in the years to come (Ramos, 2012). Network Foresight approaches are part of a broader shift into a network intensive era, typified by a number of key changes. Eight of these key changes are highlighted here:

- 1. Funding NT can draw on public / distributed crowd-funding opportunities
- 2. Audience NT can engage a global public citizen sphere of interest
- 3. Legitimacy peer publics become moderators of the validity of anticipatory truths
- 4. Instantiation activity can be highly localized, swarms or flash mobs, using mobile networking for instantaneous or improvisational self organization
- 5. Replication NT platforms can be copied or franchised from one locale to many
- 6. Participation NT can engage a broad public
- 7. Ownership as citizens become key contributors there is an emerging expectation for a global knowledge commons (e.g. "it belongs to all")
- 8. Transparency contributors want foresight approaches to be 'naked', that is, the process should be open for people to understand, critique, replicate, etc. (Ramos, 2012)

There are some similarities to Integrated Governmental Foresight (IGF), as IGF strategies usually employ large scale and robust ICT system to coordinate knowledge sharing and management. IGF approaches usually differ, however, because they are 'in-house' systems that are closed off from wider internet participation. Network Foresight is generally open to anyone who has the capabilities to contribute. For example the Singapore government's RAHS system uses a sophisticated crowdsourced data development strategy. However, it remains closed to all except a select few organizations outside of government, with little intention to engage a global audience in participatory sensing and analysis.

# Analysis across 5 design factors

This next section provides a brief analysis of each of the traditions/practices for AG. The choice for analytic categories was made on the basis of the key considerations that foresight practitioners may have when designing an AG approach

for a specific context – e.g. a government, community or agency. The analytic approach here is designed to help facilitate field practitioners' capacity to consult and design AG strategies for a wide variety of potential needs. The categories listed, however, are only a starting point, and a number of other design factors could be added to this list.

**Purpose/Rationale** - this factor concerns the over arching rationale for using a particular approach.

**People/Participation** - this factor concerns the types of people, levels of diversity and institutional culture that may pervade a particular approach.

**Scale/Geography** - this factor concerns the geographic scope and scale of the approach.

**Complexity/Wickedness** - this factor concerns the level of complexity or wickedness that a particular approach is able to grapple and achieve success with.

**Viable System Model** - this factor concerns the dynamics between subsystems within the Viable System Model.

In order for a community or organization to respond to the wicked nature of change and complexity in the modern world, a requisite capacity to cognize and respond to the nature of such change is required. Within an organization or community there must be a capacity for developing foresight. Drawing on the work of Stafford Beer, Hayward (2003) applied the Viable System Model (VSM) in considering organizational foresight capacity. The requisite cognition for foresight and adaptive change is a "meta-system" composed of 3 primary parts: the first holds the identity (intention/purpose) of an organization or community, the second provides the awareness of the contextual environments and how it is changing (intelligence), the third (control) translates both of these into effective strategies for action.

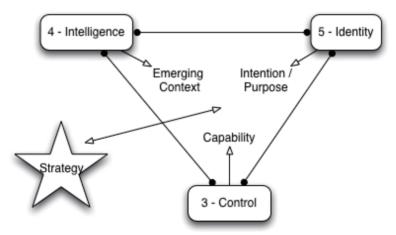


Figure 1. VSM Meta-system

Foresight functions differ across these 3 subsystems in the meta system. The System 5 function of purpose and identity requires developing visions of preferred futures that resonate strongly with people's values and aspirations. The System 4 function of intelligence requires research and environmental scanning that identifies

critical emerging issues that could impact on people and the organization. The System 3 function of control requires the development of strategies that will allow the overall system to translate aspirations into realities within a landscape of socioecological change.

The proposition here is that for an organization, or indeed a social system, to be viable long term, it needs to develop these 3 subsystems, and engender some coherence across them toward meta-systemic alignment. Anticipatory Governance can thus be seen through these distinctions – where there is a need to develop 3 anticipatory capabilities (vision, intelligence and strategy) with coherence and alignment.

Table 1. Analysis of seven Anticipatory Governance practices using five design factors

	Scale / Geography	Purpose / Rationale	People / Participation	Complexity / Wickedness	VSM
STIF	National	Competitiveness, Growth, Industrial Development	Gov. Research and Commerce	Medium – while change is complex, specialization is used as wedge	Research community provides system 4 in unchallenged system 5 priorities (economic growth, etc.)
AD	State / Province	Inclusion, Democracy, Response, Innovation	Diverse Civil Society	High – diversity can lead to synergy or problems	Engaged Citizens do system 4 and challenge system 5
FC	Varied National to Departmental	Advisory, Communication, and Advocacy	Research, Media, Policy Circles	Modest – specialized away from other systems	System 4 outsourced to FC – disrupts existing system 5 and 3 in gov
IGF	National	Learning and Policy Design for Wickedness	Policy and Research Communities	High – issue complexity across policy areas – opportunity for wicked policy design	System 4 shared across gov. dept., accepts existing system 5 with some capacity to challenge
ТМ	Hyper-local Alliance with State	Prefigurative Social / Tech Innovation for Sustainability	Local Pioneers with Gov. Champions	High – complex innovation but uses locality to create possibility of scalability	New mini system 5-4-3 "spiked" through gov-citizen alliance
FISP	Local or State	Strategically Robust City and State Planning	Planners with People	Medium – depends on approach	Locals support development of system 4 and 5
NF	Local-Global	Virality, Scale, Disruption Potential, Diversity?	Design Geeks, Facilitators and Netizens	Unsure – depends on shared meaning	System 4 dispersed across netizens, advise system 5

# **Synthesis Proposals**

some of their fundamental differences and other similarities. What is clear is that the best strategy to use depends greatly on context, needs and aims. Given the diverse traditions and trajectories for Anticipatory Governance, how do these become a resource for designing innovative Anticipatory Governance approaches and strategies for clients?

In order to demonstrate a strategy mixing and design approach, I detail four hypothetical synthetic proposals for Anticipatory Governance. While these will be in sketch form, I hope to demonstrate how these traditions and discourses can be utilized in complementary ways to address unique contextual needs.

The four synthetic proposals for AG include strategies for:

- 1. A Foresight Enabled Nimble Community
- 2. A User-led State Government System
- 3. A National Liquid Foresight System
- 4. A Global Foresight Commons

## Strategy for a Foresight Enabled Nimble Community

Nimble community addresses the needs of a small regional town of approximately 80,000 people. The town is facing a number of emerging issues and sustainability challenges: the impact of climate change, immigration and ethnic diversity, deindustrialization, and shifting cultural values. The clients want an approach that will allow their townsfolk to adapt nimbly to change, rather than be overwhelmed by it. Using a hybrid approach, the following elements are designed in. The city government comes together with an alliance of local community groups and businesses concerned about their futures. Several project officers are funded to build in a foresight meta-system for the community. An anticipatory democracy (AD) style public event is held to engage as many community members as possible in both considering social change in articulating preferred futures. Participants, businesses and groups as well as government employees are invited onto a social networking platform (NF) that allows them to interact and provide ongoing input into the foresight meta-system, and asks them to provide their scans and intelligence in terms of what is an emerging issue for their community. Using lowcost videoconferencing technology, a modified Delphi approach is employed where experts in particular relevant domains of change are invited to provide ideas and do Q&As on a month-to-month basis (STIF). The project officers help sustain the public engagement on the one hand (events etc.), and on the other hand write short foresight reports that can inform local planning (FISP). Finally, project officers play the role of facilitators in connecting people who want to act as social innovators and change agents in particular areas of concern, who may cut across business, government and community groups (TM).

# Strategy for a User-led State Foresight System

A state government facing a number of long-term challenges, rapid population growth, the environmental impacts of primary industry (forestry and mining), infrastructure challenges due to the large size of the state, high exposure to global economic conditions, and dramatic changes to the way in which younger generations want to engage with government. Policies crafted in one department are often at odds with priorities in other departments, leading to inter-departmental wrangling.

Young people seem to be more engaged with social change than the government. The client wants a new way of generating cross-departmental intelligence, as well as including and engaging citizens in issue identification and local problem-solving.

First, an integrated governmental foresight (IGF) approach is applied to all departments. An extensive training and education program is conducted to build in scanning and analysis capabilities in each department. Civil servants are expected to make regular contributions to environmental scanning or analysis in particular issue areas. Analysis is done in small teams within particular departments, which is channeled upward to create a broader whole of government analytic capability that informs planning (FISP). Learning days are developed to facilitate crossdepartmental sharing of knowledge and resources. Internal foresight capability teams are allowed to roam across a number of departments to improve capacity. The web platform used for inter departmental scanning and analysis also doubles as a platform by which citizens can comments and contribute to issue areas (IGF+NF). The foresight process is "naked" and can be viewed by citizens who want to learn about the issues and test their relevance to their lives and localities. Anticipatory democracy (AD) style events are held to bring the most motivated members of the community together. The AD events help to educate citizens about how they can support government intelligence capabilities, but also as a way of organizing into citizen-government teams for anticipatory policy development, visioning and social innovation (TM).

# Strategy for a National Liquid Foresight System

A national government is facing a variety of challenges in both understanding the complex nature of emerging internal challenges, as well as facilitating a national conversation on the policies that can effectively address these. Many people want deeper involvement in specific areas of national policy, that go far beyond voting in a representative system. In addition online engagement and activism has become a norm.

Drawing on peer to peer technology and drawing lessons from the Liquid Democracy experiments currently underway in Germany and elsewhere, where a person can either vote for a policy themselves (direct democracy) or can allocate their vote to a third person (a transitive delegation), a robust interactive system is designed to facilitate inter-activity, collective intelligence making and collaborative problem solving.<sup>3</sup>

A national platform provides a place where citizens can contribute their understanding of challenges, weak signals and emerging issues. Moderators play the role of connecting the details of people's contributions to point toward emerging thematic concerns. Using an action research practice, these thematic concerns are fed back to people to find out if the interpretation was useful, and how it should be changed. Once an issue has been effectively diagnosed as requiring some conversation, the system allows and facilitates localized face to face conversations to take place nationally on those diagnosed topics. Like a meetup.com system, the platform allows citizens to establish pop up town hall style meetings to discuss the issue areas. Using AD style processes, people interested in an issue area can meet in person, and form teams of people that will work on deepening their understanding of the issue. While these are localized conversations, the national web platform provides a space to develop collective intelligence on the issue by allowing the

localized groups and people to debate and dialog the issue across geographic regions.

After the collective intelligence process establishes a variety of action items, which are either policy alternatives or social/technical innovations, a liquid democracy process proceeds where all citizens are able to engage in the liquid system to vote on their preferred responses to those items. Those items that win, the top 20% or so, are slated for more formal deliberation or adoption. Even if items are not selected through the liquid democracy system, they can be taken up by citizens connected by the national platform and acted upon. The system thus facilitates diverse localized and meta-localized responses within agreed upon issue areas of national concern, enabling social adaptation and resilience through experimentation.

## **Strategy for a Global Foresight Commons**

This is perhaps the most important design challenge of our era. Humanity faces a litany of serious challenges – biospheric ecological degradation, wealth and power stratification, 21<sup>st</sup> century technologies, and many other issues – some of which represent existential threats, others opportunities. So far a planetary scale sensing and analytic foresight function has been undertaken by pockets of enlightened activity, some community based work, among elements in academia, independent research institutions, and other locales. The UN and especially UNESCO have played an important role in this regard. More recently prominent voices have begun to voice a much more ambitious vision for a planetary foresight function. Dumain proposed the idea of a Global Foresight Commons (GFC), a transnational cooperative system between governments, businesses, community and research organizations around the world. Clearly it is an idea whose time has come, yet it is a serious design challenge. Here I use the seven approaches to AG described in this article as design elements that can be used in developing a global foresight *commoning* system:

With governments and philanthropic groups contributing monies to a central coordinating and implementation body, a robust inter-governmental organization is created to facilitate the development of an integrated trans-governmental foresight (ITGF) program. The system is opened to a variety of organizations who do foresight related work, and who can contribute to the data and analysis across a variety of issues, as well as use the data for their own analysis and policy needs. The general rule is, to use the commons, build the commons. All participating organizations are required to build the common pool of usable foresight knowledge and capacity to grow the pie. The program is directed to create a culture and capacity for knowledge sharing, collaborative analysis and join formulation of transnational policy options. The challenge is formidable: it must overcome language barriers, entrenched national interests, cultural differences and the like. Yet the potential benefits are tangible – more effective policies yielding results on issues (like climate change) that are currently overwhelming isolated and *ad hoc* policy efforts.

The program moves on to deepen the GFC platform by building an extensive Network Foresight (NT) platform that allows for layers of participatory global engagement. Drawing on the groundbreaking work of the Institute for the Future, a series of online foresight games of various types engage, at first, hundreds of thousands of people a year, and later millions of players. The engagements support

key strategic areas developed by the ITGF program, providing valuable and diverse data and community building. Of the millions of players that engage with the gaming system, some choose to be part of more ambitious global scanning teams that contribute and analyze weak signals and provide grounded and translocalized sensing capacity. Drawing on the big ideas from the games and analysis teams, others form institutionally supported transition-innovation teams, drawing on transition management (TM) methodology, to create solutions for chronically entrenched situations, such as: discriminatory poverty in India, the high carbon footprint of Australians, the imperial dynamics of US foreign policy, demand side dynamics in the Mexican drug war, and many other issues and areas slated as strategic locales for experimentation and innovation.

But how to transcend the entrenched legacy of economic growth and interstate rivalry within and between states, and develop a collaborative policy development approach?

An anticipatory democracy platform is developed to allow people within the GFC eco-system to interact and self-organize through virtual as well as regional and global meetings. These congresses contain democratic processes for both choosing policy priorities and innovations, and electing representatives accountable for instrumentalizing change through a Global Foresight Commission (FC). This Global Foresight Commission is situated between the GFC system and participating states, and plays the role of a strong advocate for coordinated policy and innovation in areas identified by members as strategic levers of change.

#### Conclusion

While it may be visionaries, macro-historians and artists that glimpse our futures before others (Inayatullah, 2008; Molitor, 2010), if the insights and wisdom of these few cannot support a broader engagement in social adaptation and transformation in the face of the challenges we collectively face, then their strange and marginal lives are further diminished. Lying underneath the "how to" of futures studies, with its many methodologies and epistemological debates, is the question of "for what", and deeper still, the "why". One of the critical "whys" can be simply stated as, the capacity and ability for social groups to respond to change in effective and meaningful ways.

Without a "foresight function" (Hayward, 2003), how can any group at any scale have any chance of survival and success through the millennia? We would have to assume a completely static reality, a steady-state social system and environment. A review of history reveals this expectation to be misguided. For, without some foresight that enables social adaptation, societies are at best relegated to the pages of history, and at worse, an enigma posed to future anthropologists.

And yet, for all the self-congratulatory sophistication of the modern era, when it comes to linking foresight with governance, humanity as a whole is still growing up. Decades of climate science has yet to translate into any meaningful transnational agreement that would effectively address the problem. The long-term effects of industrialization will have detrimental effects and consequences on the future livability of our planetary ecosystems, and yet it is a business as usual industrial growth agenda for almost every government on the planet (Slaughter, 2010). The question in this paper is specifically concerned with the link between social foresight and public decision-making. How can the exploration and understanding of our

emerging futures and challenges be effectively coupled with public deliberation and decision-making, which facilitates and allows for societal adaptation and transformation?

Anticipatory Governance, when viewed from the vantage point of traditions, discourses and experiments that have taken place for more than 50 year around the world, provides a broad palette for designing Anticipatory Governance strategies that can be adapted to a variety of needs and contexts. Of course, a service design approach should be taken in these situations, to collaboratively develop service systems that fulfill the deepest needs of the people we, as foresight practitioners, are serving. Likewise, however, we should try not to re-invent the wheel nor ignoring the rich legacy of work in the futures field. We can draw from this legacy and adapt it to serve people's deepest needs to create the futures they dream for.

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#### **Notes**

- 1 Some would consider foresight informed strategic planning to belong to the domain of anticipatory democracy, yet AD is a self-conscious tradition with a number of explicit normative commitments which planning exercises may not necessarily share
- 2 http://ucfuture.universityofcalifornia.edu/
- 3 For an overview of Liquid Democracy see: http://www.shareable.net/blog/liquid-democracy-the-app-that-turns-everyone-into-a-politician
- 4 The Club of Rome and Tellus Inst. are two examples of the types of organizations I refer to.
- 5 http://seedmagazine.com/content/article/on a global foresight commons/

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