

# HOW DO WE IDENTIFY GREAT OPPORTUNITIES?

A KNOWLEDGE LAB TO EVALUATE AND IMPROVE THE USE  
OF FORESIGHT IN ADDRESSING SOCIETAL CHALLENGES

A REFLECTIVE REPORT

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This report represents the authors' reflections on and analysis of the KnowLab Event, drawing on participant feedback, observation, pre- and post-KnowLab interviews and applied theory (See Appendix 1: Methodology). The authors have made the choices and the presentation of the facts and opinions contained in this report, which are not necessarily those of UNESCO, The Rockefeller Foundation or the DG Joint Research Centre and do not commit any of these organizations. The designations employed and the presentation of material throughout this narrative report do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries.

# How Do We Identify Great Opportunities?

A Knowledge Lab to Evaluate and Improve the Use of Foresight in Addressing Societal Challenges

## Executive Summary

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“In a time of drastic change [such as the world is currently experiencing], it is the learners who inherit the future. The learned find themselves equipped to live in a world that no longer remains.”

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Eric Hoffer, philosopher

### — Why?

UNESCO, supported by The Rockefeller Foundation and the DG Joint Research Centre of the European Commission (DG JRC), organized a collective intelligence knowledge laboratory (KnowLab) in Ispra, Italy on August 26-28, 2014 as a key step in the project on *Evaluating and Improving the Use of Foresight in Addressing Societal Challenges*. The aim of the KnowLab was to evaluate the role and effectiveness of futures thinking in the processes used to identify opportunities for improving the human condition in the many different contexts

of relevance to UNESCO, The Rockefeller Foundation and the European Commission.

The KnowLab took a case study approach to determine how to strengthen and enrich the relationship between thinking about the future and the identification of opportunities. Real world examples from three institutions – UNESCO, The Rockefeller Foundation and the DG JRC of the European Commission – offered direct experience with the processes for using the future to address societal challenges. This knowledge co-creation process used practical methods to address practical tasks:

- ▶ How can we identify new ways to tackle old problems, such as poverty, oppression, food insecurity and the destruction of ecosystems?
- ▶ How can we better sense and understand change?
- ▶ How can we increase the success

of human efforts to create a better world by becoming more effective at using all kinds of anticipatory systems (different ways of understanding the role and nature of the future)?

### — Who?

The carefully designed three-day KnowLab convened 41 senior leaders from the innovation, foresight, and evaluation communities spanning the public, private, and non-profit sectors.

### — How?

Summaries of the five Case Studies were distributed among KnowLab participants and became concrete examples as well as catalysts for further discussions during the meetings. The five Case Studies are:

- ▶ Exploring Alternative Narratives for Africa: The Africa Future Forums
- ▶ The Practices of the Past as the Solu-

tion to Humanity's Future: Evaluating the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage

▶ The Future as a Safe Space for Exploration and Reflection: Foresight at the DG Joint Research Centre of the European Commission

▶ Detecting Dynamic Problems: New Horizons for Scanning at The Rockefeller Foundation

▶ Assessing Opportunity for Impact: The Urban Food Insecurity Search at The Rockefeller Foundation

The case study research deployed the 'learning history' methodology alongside traditional social science methods<sup>10,11</sup> The methodology took an analytic and interpretive lens that considered a broad range of resources that inform knowing and meaning making, and included interviews with participants and consultants, video and audio recording, group conversations, and others - before, during and after the KnowLab. Analysis was informed by Thematic Analysis<sup>12</sup> and Discourse Analysis<sup>13</sup> and thus key themes were identified. The central themes of the KnowLab emerged through iterative inductive and deductive approaches.

## — What? (Themes)

Four themes were identified: multiplicity; knowledge; participation and contextuality; and complexity.

▶ **Multiplicity** – emerged as a core value in the KnowLab with regard to the application of Futures and Foresight for the social good. Understood as honouring and celebrating difference with respect to unfamiliar ideas, actors, positions, practices and parties, extending “receptive generosity toward elements that perplex or transform social norms”<sup>15</sup> multiplicity is inclusive integration of difference and divergence where every voice and perspective matters. Specifically, multiplicity manifested on several levels during the KnowLab:

- Multiple futures frameworks: opening up the interplay of alternative stories emerging from different futures perspectives, methodologies and techniques. Noticing, questioning and resisting the dominance of fixed, singular images, messages, stories and methods.
- Multiple theories of change: appreciating the utility of a linear, cause-and-effect Theory of Change to organize thinking and action and importantly, its limitations. Recognizing the effect of “logic models” that often obscure all-important novelty while describing and explaining a world there-and-then (past or future), not here-and-now.
- Multiple worldviews and mindsets: the importance of worldview awareness, including one's own, and the skill of navigating between worldviews to enrich one's understanding of complex reality.
- Fundamental tensions and polarities in

multiplicity:

- Tension between multiple truths and the implicit requirement for a single truth (especially in organizational contexts and for decision-making).
  - Tension in language - between academic/technical and everyday/business language. The challenge is also an opportunity.
  - Integration of multiplicity: a recognition arising out of the KnowLab that the move from 'either/or' toward 'both-and' thinking is both practical and non-reductionist.
  - Integration can also occur in collective storytelling which involves a wide range of stakeholders: experts, non-experts, communities, partners and nay-sayers. Appreciating resistance as a source of information which enriches understanding when processed or which may prove perilous if ignored.
- ▶ **Knowledge** – a key theme that was explicitly explored during the KnowLab was locating, creating and disseminating knowledge, and the underlying relationship between knowledge and power.
- Power and resistance/subversion: attentiveness toward the shaping and constraining effects of societal, institutional and organizational structure and culture on imagining futures. This exploration sensitized participants to the need for cultivating reflexivity concerning individual and organizational meaning-making systems and competing claims to knowledge,

as well as the pragmatics of ‘futures by stealth.’

- Who does the knowledge serve? The question exposed an underlying conflict experienced by participants about their role in the KnowLab – were they invited to co-produce knowledge with the purpose of enhancing individual organizations’ foresight capacity or to benefit the social sector in general?

- Empowerment: by loosening the power of ‘expert’ knowledge, some KnowLab participants experienced the emancipatory thrill of recognizing and valuing their own knowledge and experience of using the future. This also resulted in a desire to resist attempts to arrive at conventional instrumental conclusions for ‘norming’ the scaling-up of administrative command-and-control systems. Consequently, many of the powerful messages generated by the KnowLab were meta-reflections defying prescription.

- Different ways of knowing: multiple ways of knowing were recognized and demonstrated during the KnowLab and rendered via metaphors – for example, of an onion and an artichoke, peeling through layers of rational, propositional, emotional, expressive, experiential and intuitive knowledge to get to the heart of understanding.

- ▶ **Participation & Contextuality** – these two complementary subthemes emphasized the importance of both engagement and relevance in futures and foresight activities.

- Participation, diversity and dialogue were seen by KnowLab participants as central dimensions of futures-generating processes and especially the question of whose voices are present and absent.

- Contextuality – making the imaginary future relevant to specific actors in their local environments – builds on such inclusiveness, with its inherent diversity, as an underlying requirement for knowledge creation that is relevant for real people in real circumstances, respecting local experience, culture, traditions and being humble about knowing in advance.

- As the conversation evolved, the understanding of participation shifted from a purely inclusion/exclusion framing (reaching out to new communities, beyond ‘the usual suspects’, and encompassing diverse perspectives) to the more subtle insight that to be transformative, futures-generating efforts require a re-thinking of participation that goes beyond attendance. One that, in addition to inclusion, allows participants to have some control and influence over what is taking place in the moment (what gets talked about / how it is talked about, what gets done / how it is done) and in this way discover and invent shared meaning, both local and global, with respect to the futures they are imagining.

- The metaphor that captured this nuance was that international organizations promoting a futures worldview should be inspiring and connecting “a thousand tents” instead

of acting as “one big tent”. This metaphor also exemplified the complementary shift from a hub-and-spoke paradigm to a networked eco-system worldview with many feedback loops between interdependent, diverse, and unique – but essentially equal – nodes.

- The importance of creating the conditions that allow local networks to emerge as well as to connect up with wider communities drew attention to the key role of local champions in the process beyond the usual focus on engaging multiple stakeholders and diverse audiences.

- Another aspect that caught the KnowLab’s attention was temporal contextualization - the capacity for dynamic adjustment of solutions to changes in the environment over time. Staying open to change and emergence within the systems in real time helps to create the conditions needed for the capacity to continually re-evaluate and update solutions to dynamic problems in a timely fashion.

- ▶ **Complexity** – ideas about uncertainty, non-predictability, and openness permeated the KnowLab discussions leading to a general sense that to be able to integrate these ideas into practical, workable insights one needs to become skilled in the art of paradox - holding opposable ideas and tensions while remaining effective in our professional roles.

- The paradox of exploring the unknowable without reducing it to past knowns, yet

able to recognize emergent novelty when it surfaces and learn from it.

- The paradox of embracing complexity without artificially and arbitrarily simplifying it, yet remaining proactive and avoiding analysis-paralysis.
- The paradox of understanding the indeterminacy of social systems yet satisfying (and being held accountable to) organizational and stakeholder expectations for linear cause-and-effect plans, solutions, interventions and justifications (the “causal chain”).
- The paradox of working with imagined human futures (i.e. conjectures, intentions, assumptions and beliefs) within organizational environments that demand evidence-based policy and strategy formulation, without ignoring the obvious yet profound truth that there are no facts about the future.
- The paradox of dealing with unique, complex, emergent –‘wicked problems’–yet making informed judgment calls that “jump into uncertainties” deemed sufficiently risk- and future-proof.
- The paradox of knowing that our capacity to creatively engage and contribute thrives on flexibility, optimism, experimentation and ‘play’ yet feeling compelled to be in control and able to plan, predict or influence outcomes during processes of human interaction.
- The paradox of dealing with open systems with inherent emergence and surprise that call for spontaneity and improvisation yet

working in structured organizational cultures that streamline working methods for the efficient delivery of pre-conceived outcomes. (How to include “messiness”, “play” and “fun” for making sense of complex emergent reality into our serious, professional and structured work processes “designed by adults for adults”)

- The paradox of needing to reduce anxiety of the unknown by being ‘in control’ (through defence mechanisms such as rules, procedures, plans) and the counterintuitive reality of increased risk and opportunity cost through a diminished capacity to perceive novelty leading to loss of response-ability.

## — What? (Process)

The following insights about collective intelligence knowledge creation processes emerged during the KnowLab, offering new perspectives on the linkages between knowledge creation and futures generation.

- ▶ Collective intelligence knowledge creation processes can be effective when designed and implemented in ways that respect the equality of learning and knowing for shared sense-making (learning starts from where you are individually and as a group). This means that the design and invitation of the learning processes need to:
  - Encourage experts to listen and be influenced while also sharing their expertise;
  - Encourage activists to be transparent

about their vested interests, and allow them to listen and be influenced while also sharing their opinions;

- Enable practitioners to step back from their daily concerns and cultivate a more reflexive stance, becoming curious about the theoretical underpinnings of their particular ways of practicing, their espoused values and values-in-action, while also sharing their insights from practice.
  - ▶ Introducing play as part of the boundary identification/transgression process in ways that fuel the creativity of collective imagining processes, sparking opportunities to break away from current thinking patterns and modalities – a pathway to rich “innovation”.
  - ▶ Moving away from an ‘either/or’ orientation and cultivating ‘both/and’ attitudes – both quantitative AND qualitative; both content AND process; both theory AND practice; both reflection AND action; both future AND present/past; both knowing AND not-knowing.
  - ▶ Identifying and questioning the single and fixed stories and images of the past, present and future by setting in motion processes for inventing alternative futures and expanding the use of the future beyond an instrumental role for planning and preparation. Challenging linear cause-and-effect thinking, extrapolation of trends as futurism, and the instrumentalization of the future as a goal for colonizing tomorrow.
  - ▶ Linear stepwise processes reduce

complexity and streamline thinking and action individually and between stakeholders. In such way, they are useful, as long as they are recognized as artificial human-imposed simplifications of reality – not the way things are. Practicing ‘letting go’ of such logic models can help open up new possibilities – especially if the flexibility needed to engage in iterative re-evaluation of assumptions is built into the process.

▶ Attempting to do away with all ambiguity, frustration and anxiety would be an idealization since meaning-making is negotiated through misunderstandings, subtle power plays, and various other gestures and responses.

▶ Collective intelligence processes rely on the capacity of a diverse group of people to work well together – and while diversity is always desired in terms of representation and for enhanced creativity, the success of such endeavors hinges on the capacity to listen, open to other ways of knowing and able to “hear each other out”. Some tensions in creative intelligence processes as manifested in the KnowLab:

- Tension in language: the still emergent nature of shared sense-making frameworks (common languages) for thinking about the many different ways of using the future means participants have to work together to construct a common language which is neither pre-fabricated nor a pre-existing consensual discourse.

- Tension between contextualization and generalization: on the one hand, the need for immersion and depth of understanding grounded in specificity (e.g., about how the future was used in the specific case studies, about the purposes and objectives of the processes employed, about the organizational context in which these processes were embedded and how they were implemented, etc). On the other hand – the intention to potentially generate insights applicable across domains (and in the case of the KnowLab - across organizations) in the social sector, with a dose of humility about ‘absolute’ truths.

- The tendency to move quickly from description to analysis mirrors the tension about the way expert knowledge is often experienced as didactic and static when it is shared out of context. Taking an attitude of ‘beginners mind’ or ‘bracketing’ one’s expertise is essential when engaging in collective intelligence processes that aspire to create new knowledge of relevance for everyone participating.

- Another tension experienced during the KnowLab and observable in collective intelligence processes and organizational life in general is between a learning-by-doing approach that may not rest on a pre-determined outcome or lesson to be learned and a concern to ensure specific outputs from sessions and exercises.

In summary, collective intelligence processes need to allow room for group dynamics to

unfold naturally to facilitate learning. Skilful group facilitation plays a key role in nurturing the learning process – and good collaborative design of the overall process can take into account the reality of different group facilitation styles, even different views (theories or metaphors) on how change and learning happens in human systems, while still ensuring that the collective intelligence knowledge creation process generates learning for the participants and the project as a whole.

## — So what?

The KnowLab ended with a clear call for innovation in how the future is used in order to better meet humanity’s challenges. One of the insights provided by work on anticipatory systems and processes is that many foresight and evaluation projects are attempting to capture the richness of complex emergent reality and the range of conceptions of agency but so far without sufficiently clear or shared frameworks for distinguishing what works and why. The conclusions stemming from the KnowLab will hopefully contribute to furthering this conversation with richer understandings and initial implications for practice:

▶ The focus throughout the project has been on practicality – what are some actionable insights that organizations can directly implement to improve the way they engage with the future in tackling complex problems



that affect vulnerable populations worldwide? Yet the urge to get to recommendations on how to do foresight better, faster, more efficiently, and smarter was somewhat dampened by the realization that change of a different order is necessary since incremental (first-order) improvements to information-driven foresight which draws upon weak signal, trends and drivers research and analyses, grounded in a scientific view of organizations have been mostly harvested. Information-driven foresight is now subject to diminishing returns – particularly with respect to complexity. This does not mean abandoning conventional methods – but it does mean reallocating some energy and resources to developing a range of new theories and practices.

▶ The changes needed to do social and development foresight better require second- and third-order shifts that could start immediately but will probably take a while to nurture as they involve cultivating new skills and sensibilities for the practice of values-driven foresight grounded in a social view of organizations as dynamic learning eco-systems – implying transformations in personhood and in our group and organizational work that tend to develop over time.

▶ This would represent a major shift in perspective, from the ‘objective observer’ exploring and diagnosing a world ‘out there’ that can then be fixed to processes that foster encounters amongst subjects that share common

futures and are willing to continuously discover and experience emergence, navigating across cultural and idiosyncratic values, beliefs, emotions, visions, experiences, learning styles and knowledge – negotiating and making sense relationally of diverse realities.

▶ Generative futures-creating approaches present an opportunity to reframe many of the tensions observed and acknowledged during the KnowLab.

● One such example is the different interpretations of the term ‘participation’. In the dominant paradigm of scientific management and information-driven foresight, ‘participation’ implies reaching out to many different people, often experts, for a wider set of diverse perspectives on a topic to hone opinions and come up with the best possible take on a problem, ensuring quality of research and stakeholder buy-in. For the emergent paradigm of social organizing and values-driven foresight, ‘participation’ means engaging in co-creation with those who care. It is not a search for a statistically valid sample of a particular population nor is it about getting people to buy into a pre-designed agenda. Rather it is about co-creating the agenda in partnership with everyone who will be impacted as subjects shaping the way forward, or to paraphrase the Action Research principle of collaborative inquiry: doing foresight with people, not on people.

▶ Some of the implications of expanding our understanding of multiple anticipatory sys-

tems and practices may be disruptive:

● For some it will be challenging to broaden their use of the future beyond the scientific/planning/objective observer/information-driven model that implicitly perpetuates what is already known, defending existing practices and structures based on images of the future that are ontologically and culturally preserving and justify continuity.

● For those seeking replicability, scalability and generalizability it may be difficult to embrace a social/emergent/action research/values-driven paradigm that seeks to significantly enhance appreciation of time/place specific meaning – giving greater weight to the contextuality of novel, creative and improvisational change.

● Each has its strengths and weaknesses:

○ The former enhances the robustness of homogeneity and as a consequence, the impact of interventions aimed at preserving existing large-scale structures and systems of power distribution but often leads to unintended consequences on the ground.

○ The latter caters to diversification and differentiation, generating new worlds and new futures, empowering people on the ground which – given current conditions – implies shifting power away from dominant systems and organizations.

○ Both aim to establish confidence in human agency, our ability to think and act, but

one does it by seeking to research uncertainty away, while the other embraces uncertainty as the source of freedom, finding hope in the human capacity to invent and make sense of complex emergence as it happens.

- As the KnowLab participants acknowledged, thinking about the future can be subversive and empowering – the question is: what are the guidelines for practice that enhance people’s capacity to detect and act on opportunities? How to engage the future in ways that privilege empowerment? And importantly, “who is engaging how with whom”?

## — Conclusions: Using the Future More Effectively for Opportunity Identification

The main conclusion of this report and the process that inspired it is that a more effective use of the future depends on simultaneously expanding and refining why and how anticipation is integrated into decision-making. The findings of this report show that many explicit users of the future have benefitted from the better-quality information and intelligence generated by foresight processes. But it has also demonstrated that philanthropies, NGOs and intergovernmental organizations can benefit from rethinking the way the future is used, not only as an intelligence-gathering mechanism but as a future-generating change intervention *par excellence*. Expanding why the future is used, beyond its role in predictive planning,

and refining how the future is imagined, empowers communities to produce local meaning, building their own future. Nourishing the capacity to imagine and understand the manifold purposes of the future collectively liberates critically important energies – of hope, of attention to putting values into practice in the present, of continuity as living change. The opportunities emerging from such processes owe much to the greater ownership and depth of understanding, as community members find practical avenues to collectively co-create the future. This is how to achieve much higher returns on investments in thinking about the future for the social good.

If taken seriously an expansion and refinement of how the future is used calls for important organizational responses. It means ensuring an open and power-sharing approach to partnerships in world-forming and futures-generating processes; with outcomes that can neither be predicted nor claimed by anyone in particular but are widely owned and dispersed. Organizations – philanthropic, developmental and international – may play an important role in this kind of empowering partnership, with expertise, investment, facilitation, networking, etc., but compared to the past the institutional boundaries and power differential soften and blur. In such a scenario, all agents, large and small, take a more humble stance, one where ‘not knowing’ is an invitation to experimentation

and appreciation of novelty.

The paradoxes of complexity, uncertainty and unknowability (or ‘double binds’) are the human equivalent of the abrasive grain of sand that enters the oyster, creating enough irritation to unlock its generative capacity to coat the uninvited visitor with layer upon layer of mother-of-pearl until a gem is formed. Coupled with a well-trained reflexive muscle, we may begin to bring awareness into our habitual and often problematic ways of coping with the anxiety of the unknown, realizing that the more we attempt to ignore uncertainty by buttressing our individual and organizational boundaries, the more vulnerable we actually become. And just as we succeed in comforting ourselves with airtight plans and risk-proof strategies, we are most exposed – our diminished responsiveness cause for legitimate concern.

This line of thinking, grounded in the conversations during the KnowLab, allows for revision of our behaviours (first-order incremental change improving what already is), our strategies and beliefs (second-order fundamental change creating new thinking and previously unobserved behaviours) and most importantly, our learning (third-order continuous change, reflexively questioning and examining our present-moment awareness in resonance with emergent reality).

And the alternative? The alternative is to carry on doing more of the same or doing it better, faster, cheaper, smarter – but as paradoxical change goes, this will only serve to exacerbate polarities and erode trust in global organiza-

tions while vulnerable and underprivileged populations increasingly self-organize and take their futures into their own hands. It's already happening – the choice to extend the boundary of inclusion beyond foresight for self- and

organizational empowerment and to partner in reinventing the future with those who are already doing it is ultimately a choice concerning politics, values, moralities and ideologies.

Image: *24th Contact Improvisation Jam* by David Olivari (Flickr, Creative Commons)



# Introduction

## — An Opening Thought Teaser

Opportunity and the future are two terms that go together quite naturally. An opportunity is a circumstance that allows for something to be done. The future is some time later than now. Putting the two together is the ticket to making things happen, particularly things that do not yet exist in the present but are desired. But what is a great opportunity? <sup>i</sup>

Is it the chance to buy a winning lottery ticket or the hunch that being one of the first employees at Google might pay off? Is it when oil or iron become valued commodities and you happen to discover some of this precious resource under your home, but don't exploit it? Is it the hard work required to get a university degree that opens so many doors, but then changes your lifestyle in unexpected ways? Or can great opportunities also be more general circumstances that arise from seeking serendipity like before the discovery of x-rays or lasers or the emergence of Silicon Valley?

And what is the role of the future in identifying opportunities? Does the future take the form of an instinctive hunch that a non-proprietary pro-

ocol for a network of networks might be useful and so the internet seems like an opportunity? Or is the future something already seen in the present, like clean drinking water, that just needs to be more widely distributed (to adapt William Gibson's famous aphorism <sup>ii</sup>)? Or perhaps the future is what the Wizard of Oz speculated would complete the Tin Man, Lion and Scarecrow as well as getting Dorothy back to Kansas – a belief? The belief that creates opportunity and then becomes the future.

## — The Context

Humans engage in anticipation. We use many different methods to bring the future into the present in meaningful ways. Some of these methods are relatively new and some are very ancient. Forecasting is a 20th Century invention, but planting seeds in anticipation of a harvest dates from before written history. The now ubiquitous organizations of humanity's industrial or bureaucratic era have deployed many different systems to bring the future into deliberative and decision-making processes and choices. Familiar examples can be found in many sectors, from the military and finance to science and technology. These practices, however, have been less carefully honed and

leveraged toward improving societal wellbeing, including in the multilateral, non-profit, and philanthropic sectors. UNESCO, the European Commission, and The Rockefeller Foundation have aimed to be pioneers in developing and deploying new anticipatory methods as they contribute to addressing the changing challenges of the Planet. As both the nature of the problems and the methods for addressing them change, so too are the approaches adopted by these institutions.

## — About the KnowLab

UNESCO, supported by The Rockefeller Foundation (RF) and the DG Joint Research Centre of the European Commission (DG JRC), organized a collective intelligence knowledge laboratory (KnowLab) in Ispra, Italy on August 26-28, 2014. The aim of the KnowLab was to evaluate the role and effectiveness of futures thinking in the processes used to identify opportunities for improving the human condition in the many different contexts of relevance to UNESCO, RF and DG JRC. A KnowLab is a process designed to generate knowledge on a particular topic through conversation amongst a selected group of participants. In this case the design of the KnowLab was crafted to

produce insights based on case studies generously provided by the three organizations as a starting point. In the words of a participant:

“UNESCO, Rockefeller, and the JRC broke new ground in examining the ways in which the future has been, can, and might be used to improve the wellbeing of society. This novel and timely venture required a sizable investment of resources and energy, which speaks to the commitment of furthering futures literacy amongst the three organizers and beyond. They deserve immense credit for putting together this event, which was truly a unique moment in the evolving field of Foresight and Futures Studies.”

(Post KnowLab participant report)

The KnowLab used case studies to advance an analysis of how to enhance the relationship between thinking about the future and the identification of opportunities. Real world examples from three institutions – UNESCO, the European Commission and The Rockefeller Foundation – offered direct experience with the processes for using the future to address societal challenges. This knowledge co-creation process used practical methods to address practical tasks:

▶ How can we identify new ways to tackle old problems, such as poverty, oppression, food

insecurity and the destruction of ecosystems?

▶ How can we better sense and understand change?

▶ How can we increase the success of human efforts to create a better world by becoming more effective at using all kinds of anticipatory systems (different ways of understanding the role and nature of the future)?

The KnowLab participants were able to explore in-depth how practical methods for using the future can be more effectively connected to practical ways of identifying opportunities. Their conversation built on two observed changes occurring in the world today. The first change is that in many different organizations and for a wide variety of reasons, enhanced efforts are being made to use the future more explicitly. At personal as well as professional levels actors are using trends, scenarios, models, polling, innovation labs and a whole host of processes intended to reveal strategic options and address the question of what to do next.

The second change is that the people currently attempting to apply professional methods and techniques to thinking about the future are starting to recognize an overarching framework for their activities within the diversity of anticipatory systems and processes. The emergent Discipline of Anticipation is starting to provide a sense making and sense sharing framework that enables more effective collaboration and

deepening. All of which increases the capacity to match tasks and tools, the uses and outcomes of anticipation (for further background see the UNESCO report *Networking to Improve Global/Local Anticipatory Capacities*, produced with support from RF).<sup>2</sup>

The carefully designed three-day KnowLab convened 41 senior leaders from the innovation, foresight, and evaluation communities spanning the public, private, and non-profit sectors. It started with an in-depth examination of the five cases that serve as examples of how UNESCO, The Rockefeller Foundation, and the European Commission have used foresight or other forward-looking strategies for the purpose of improving wellbeing. For example, The Rockefeller Foundation cases focus on strategic processes for identifying pressing global challenges (e.g. urban food insecurity), prioritizing the problems that are showing momentum for change and potential for innovation, and then comparing and assessing possible opportunities for impact if the Foundation were to invest. Drawing on the case studies, participants generated insights and questions about using foresight for positive impact more broadly. The KnowLab concluded with the elaboration of recommendations aimed at improving how these institutions and their respective sectors might effectively deploy a range of foresight methods.

The KnowLab ended with a clear call for innovation in how the future is used in order to better meet humanity's challenges. A critical opportunity is emerging from changes in the imperatives and capabilities for using the future. One of the insights provided by work on anticipatory systems and processes (See Appendix 4) is that many foresight and evaluation projects are attempting to capture the

richness of complex emergent reality and the range of conceptions of agency but so far without sufficiently clear or shared frameworks for distinguishing what works and why. It is time to become Futures Literate – able to respect and make sense of the diversity of futures that shape what we see and do in the present. Our hope is that the findings of this project, disseminated through this reflective report and

by other means, will enable all actors trying to improve societal wellbeing to more effectively and meaningfully use the future to create positive change in the present.

Image: *Flow* by Irina Todorova / © Irina Todorova



# About Foresight and Futures Studies

Human beings have been fascinated and awed by the future since time immemorial, evidenced by the social status of shamans and oracles in many ancient cultures. Forward-looking approaches have proliferated and grown more sophisticated as they evolved from oral to written traditions of pattern recognition of macrohistorical cycles, to the age of enlightenment and the firm belief that science and technology would finally solve the future for everyone and set us free. Paradoxically, it was science – a new science – that had us abandon all hope that the future is knowable and solvable.

Around the middle of the 20<sup>th</sup> century attempts to say anything ‘predictive’ about the future of social systems were increasingly challenged – and radically so – by the sciences of chaos and complexity. In the aftermath of the devastating wars of the 20<sup>th</sup> century and the limits to progress and linear thinking, the fields of Futures Studies and Foresight emerged as centres of gravity for thinkers who grappled with large-scale systemic change across domains. Today, Futures Studies and Foresight can perhaps best be described as a field that attempts to make sense of the many anticipatory assumptions and possible responses to thinking about

the future that arise in the midst of inherent uncertainty, ambiguity and unpredictability, ranging from the unquenchable desire to ‘capture’ something definitive about the future on one extreme (e.g., Big Data would accomplish what humans could not), to others who find value in thinking about the future as a deeper exploration of who we are in the present, and everything in between.

As an illustration, here are some definitions that capture the diversity of opinions about what the field is about:

Foresight is “a process by which one comes to a fuller understanding of the forces shaping the long-term future which should be taken into account in policy formulation, planning and decision making... Foresight includes qualitative and quantitative means for monitoring clues and indicators of evolving trends and developments and is best and most useful when directly linked to the analysis of policy implications. Foresight prepares us to meet the needs and opportunities of the future. Foresight in government cannot define policy, but it can help condition policies to be more appropriate, more flexible, and more robust in their

implementation, as times and circumstances change. It is therefore closely tied to planning. It is not planning – merely a step in planning.”<sup>3</sup>

“Strategic foresight is the ability to create and sustain a variety of high quality forward views and to apply the emerging insights in organizationally useful ways; for example, to detect adverse conditions, guide policy, shape strategy; to explore new markets, products and services.”<sup>4</sup>

“Foresight has emerged as a key instrument for the development and implementation of research and innovation policy. The main focus of activity has been at the national level. Governments have sought to set priorities, to build networks between science and industry and, in some cases, to change their research system and administrative culture. Foresight has been used as a set of technical tools, or as a way to encourage more structured debate, with wider participation, leading to the shared understanding of long-term issues.”<sup>5</sup>

“Foresight is a systematic, participatory, future-intelligence-gathering and medium-to-long-term vision-building process

aimed at present day decisions and mobilizing joint actions. Foresight arises from a convergence of trends underlying recent developments in the fields of ‘policy analysis’, ‘strategic planning’ and ‘future studies’. It brings together key agents of change and various sources of knowledge in order to develop strategic visions and anticipatory intelligence. FOREN working group highlighted the value of the participatory element in foresight by saying, ‘The difference between Foresight and other planning activities relates to the participative dimension of Foresight (.). Common features of Foresight include: a long-term orientation, the examination of a wide range of factors, the drawing on widely-distributed knowledge, the institutionalization and creation of networks and the use of formal techniques/methods. Formal methods provide more operational results, assess the consistency of different aspects of the vision, help to identify where more knowledge is needed and legitimize the exercise (.). Foresight is a very evocative label for the rise to prominence of participative methods and long-term strategic futures techniques, in the wake of more traditional ways of informing policy planning.’<sup>6</sup>

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“Foresight as a practice, when distinguished from forecasting, is formally premised on the unknowability of the future and hence attempts to be more systematic in imagining futures that are not constrained by projecting the past. This does not mean that foresight practitioners do

not use extrapolation and models to imagine the future. Indeed they can use probabilistic statements as spring-boards for imagining the future and can even, in certain circumstances, aim to provide a probabilistic assessment of the future. However foresight processes usually take a different path from that of the forecaster. In general foresight claims both a more creative and participatory mission, aimed at discovering new options and exploiting different forms of knowledge. As a result, foresight

as a practice has experimented, somewhat haphazardly as is wont at the outset of new frameworks, with the challenge of both inventing and making sense of numerous new methods for generating and interpreting anticipatory assumptions and imaginary futures.”<sup>7</sup>

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For a lively account of the history of the field see Wendy Schultz.<sup>8</sup> For a detailed investigation of the different strands in Futures and Foresight and their evolution, see Kuosa<sup>9</sup>.



Image: *I can see the end, but it hasn't happened yet* by Paul Anglada (Flickr, Creative Commons)



# Project Background

From its conception in early 2014, the project on Evaluating and Improving the Use of Foresight in Addressing Societal Challenges had two specific 'knowns':

- ▶ It envisaged a case-study approach to the ways the future and/or strategic foresight methods had been applied in decision-making processes within UNESCO, The Rockefeller Foundation, and the DG Joint Research Centre of the European Commission;
- ▶ It sought to engage a diverse array of experts in a collective intelligence process – or Knowledge Lab – to arrive at actionable insights for improving the applied use of the future in the practices of both the organizing institutions and the philanthropic, development and public sectors in general.

In the course of several weeks, the KnowLab design and 3-day agenda took shape, preliminary logistical arrangements and participant invitations were initiated, volunteer facilitators were recruited amongst the participants, topics for the five case studies were agreed, interviews with the three institutions were conducted, and the case study research was underway. The official project documents related to a grant by The Rockefeller Foundation to UNESCO to implement the project were completed by the signature of UNESCO's Assistant Director General of the Bureau of Strategic Planning, Hans D'Orville, on July 11, 2014.

Summaries of the five Case Studies were distributed among KnowLab participants and became concrete examples as well as

catalysts for further discussions during the meetings.

The five Case Studies are (for more details about the Cases see Appendix 1):

- Exploring Alternative Narratives for Africa: The Africa Future Forums
- The practices of the past as the solution to humanity's future: Evaluating the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage
- The Future as a Safe Space for Exploration and Reflection: Foresight at the DG Joint Research Centre of the European Commission
- Detecting Dynamic Problems: New Horizons for Scanning at The Rockefeller Foundation
- Assessing Opportunity for Impact: The Urban Food Insecurity Search at The Rockefeller Foundation

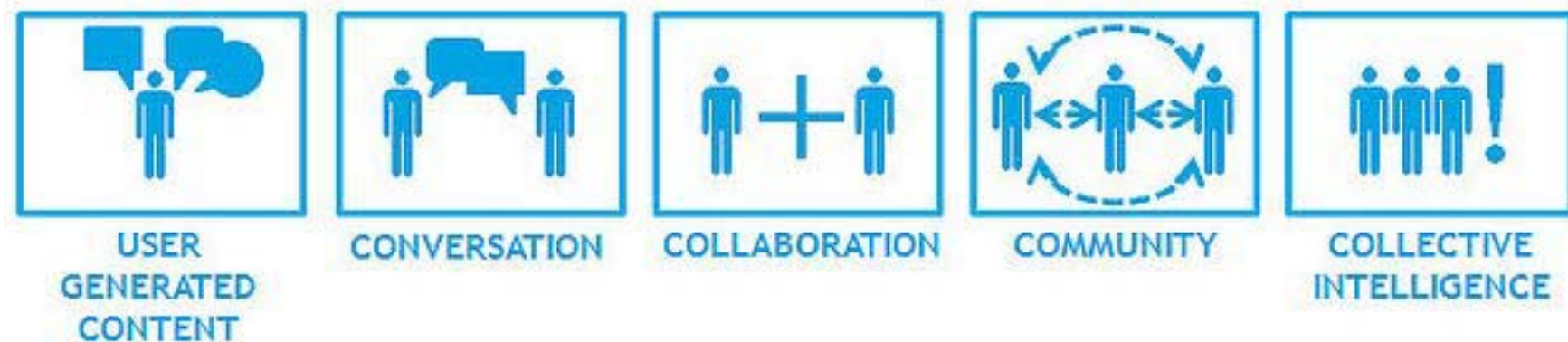


Image: The five underlying dynamics of social technologies by Gaurav Mishra (Flickr, Creative Commons)

# Overview of KnowLab process<sup>iii</sup>

Day 1 of the KnowLab was designed for familiarizing participants with each other and the case studies. In addition to having time to re-read the case write-up, case representatives were available to answer questions as part of the 1.5 hour “grounding” session, which charged the participants with presenting the case—from their perspective—during a plenary session.

Following each group presentation, the corresponding case representative provided an insider’s view. A second group session was created to give participants the opportunity to identify five key takeaways from their assigned case. Additionally, participants were asked to consider the futures’ content of the case. Some guiding questions helped to frame their inquiry:

- ▶ How were foresight methods or concepts of the future used in the case (implicitly or explicitly)?
- ▶ What purpose did the future serve in the case?

## — Day 2: Deepening

Day 2 of the KnowLab was about deepening participants’ understanding of the cases to leverage their specialized knowledge, surface case-specific recommendations, and advance cross-perspective knowledge sharing. It featured a 1.5 hour “World Café” session, which allowed participants to give critical feedback on

up to three case studies. Case group facilitators synthesized the data from this session and gave a short report back in plenary, which was followed by a spirited discussion among the participants. The afternoon was reserved for an “open conference” session where participants could propose and select projects to create on Day 3.





## Day 3: Creating

Day 3 of the KnowLab was about synthesizing and extending the case-specific learning to broader insights or questions of relevance to the philanthropic, development, and public sectors. It featured a 1.5 hour share out session from the open conference group projects. Following the group share out session, the transition was made to consider the relations and connections between all of the cases and how the future is used by all of the organizers. A facilitated discussion brought together the case study work with the charge to reflect on how participants will now “use” the future in their own work with their own organizations. Each participant completed a written feedback form.

# Broadly Relevant Themes

Research for the case studies drew on the 'learning history' methodology alongside traditional social science methods<sup>10,11</sup>. (For a more detailed description of the Methodology see Appendix 1). The methodology takes an analytic and interpretive lens that considers a broad range of resources that inform knowing and meaning making, and included interviews with participants and consultants, video and audio recording, group conversations, and others - before, during and after the KnowLab. Analysis was informed by Thematic Analysis<sup>12</sup> and Discourse Analysis<sup>13</sup> and thus key themes were identified.

The central themes of the KnowLab emerged through iterative inductive and deductive approaches. The concluding 'strong statements' (Appendix 2) from Day 3 were organized into clusters which served as one source of overarching themes. This report analyzes the data (interviews, photos, KnowLab outcomes, KnowLab reflections etc.) in detail through a process of close to the text coding, and then moving to conceptual work and thus theme development. The 'strong statement' clusters also served as a deductive lens on the data.

In such a way, the themes and subthemes evolved over the course of the work on the report as more data was being analyzed. The expansion of the themes took the form of descriptive text, interpretations, quotations, photographs, as well as grounding in the literature. The authors of this report aspire to retain the spirit of 'the jointly-told tale' as described in the methodology section (Appendix 1) by featuring prominently the voices of the participants at the KnowLab event and how many of the themes and issues emerged and were made sense of conversationally. Importantly, to the extent relevant, in each theme the aim was to show the movement of the concepts and understandings from pre-KnowLab to post-KnowLab.

Four major themes were identified through this process and are elaborated in the following sections:

1. Multiplicity
2. Knowledge
3. Participation and Contextuality
4. Complexity, Uncertainty and Openness



Image: *A Reflective Conversation* by dommylive (Flickr, Creative Commons)

# Theme 1: Multiplicity

The theme of **Multiplicity** figured prominently in the KnowLab event, including in the discussions leading up to the convening, during the meetings, and in the reflections thereafter. Multiplicity emerged as a core characteristic of Futures Studies and Foresight – an asset to be valued and encouraged.

The concept of Multiplicity can be traced back to the work of Gilles Deleuze (among others) who, together with Félix Guattari, explored the political implications<sup>14</sup> of multiplicity in *A Thousand Plateaus*<sup>15</sup>. Their method redefines as multiplicities key concepts of Western political theory such as race, class, gender, language, state, society, person, and party, aiming to “render political thinking more nuanced and generous toward difference.” The politics of multiplicity is a politics of difference, which welcomes and respects unfamiliar ideas, actors, positions, practices and parties, extending “receptive generosity toward elements that perplex or transform social norms.”

“‘Multiplicity’, which replaces the one no less than the multiple, is the true substantive, substance itself. ... Even the many is a multiplicity; even the one is a multiplicity. ... Everywhere

the differences between multiplicities and the differences within multiplicities replace schematic and crude oppositions. ... Instead of the enormous opposition between the one and the many, there is only the variety of multiplicity - in other words, difference.”<sup>16</sup>

It is in this sense that the theme of Multiplicity reflected the spirit of the KnowLab, encouraging sensitivity toward difference and polyvocality in addressing society’s challenges. Futures Studies and Foresight as perceived during the KnowLab, place high value on multiplicity, difference and the need to identify and contest pre-given assumptions.

For example, concluding ‘strong statements’ clustered under the Multiplicity theme were the following:

“Use different views of future to introduce diversity in organized institutions in order to disorganize it, keep it alive and more able to achieve its purpose.”

“Populate the development planning literature & process – national development plans, poverty reduction strategies – with alterna-

tive futures underpinned with alternative action-planning-M+E frameworks. This is practical, integrated & divergent.”

“Foresight in evaluation & evaluation of foresight.”

“We stop viewing sustainability as a single, fixed target.”

Multiplicity manifested on different levels in the KnowLab:

- ▶ On the level of Futures Studies and Foresight as a field
- ▶ On the level of Social Change Theories
- ▶ On the level of Mindsets and Worldviews
- ▶ As a source of Tension and Polarization
- ▶ Toward Integration

## — Futures Studies and Foresight – Multiplicity in Frameworks and Perspectives

The three partner organizations in the project brought very different agendas, foresight backgrounds and experience (also reflected in

the case studies) into the KnowLab and while united under a common vision, the multiplicity of expectations needed to be negotiated amongst themselves and with participants. As one organizer put it:

“After the meeting, (I’m) still a fan of the three organizations coming together – the different perspectives and the diversity, not only of the case studies but everything that comes with that. Not only the diversity of the participants but how they dealt with that, and probably also how that was facilitated – I think that worked really well and might have been different from other meetings in many ways. That level of tolerance and hearing each other out. [...] The flip side of the coin of having those three organizations [is that] we all come with different agendas and goals and that was confusing: in the conversations we changed various levels and viewpoints and I don’t know how we could have [done it differently]; we probably should have done more thinking about how to make that explicit and how to facilitate that.”

(Post-KnowLab project team meeting)

A number of professional futurists were KnowLab participants and they brought a range of different perspectives on anticipatory assumptions and processes.

- ▶ Frameworks for thinking about the future and schools of applied foresight included: Alternative Futures; Cultural Futures and Causal Layered Analysis (CLA); *La Prospective*; Scenario Thinking; Discourses/Narratives/Images of the Future, Futures Literacy and the Discipline of Anticipation.
- ▶ Some were present but less in the foreground: e.g., Design and Experiential Futures; Critical Futures.
- ▶ Some were absent but evoked: e.g., Integral Futures was not directly represented but conversations touched upon developmental models (not necessarily Wilberian but Spiral Dynamics, for example).

The idea of Multiplicity was most evidently present in the concept of ‘alternative futures’. This included exploration of multiple probable, plausible, and possible futures, and an organization’s ability to respond creatively to a variety of alternatives. Thus, an emphasis was placed on sensitivity to and encouragement of multiple stories, extending to recasting our understanding of uncertainty to recognize that in a non-deterministic universe it is only by appreciating uncertainty that we can embrace freedom (linking it to notions of complexity, novelty and emergence taken up in another section). In the words of one participant:

“Clearly, cost is always an issue, but I would re-frame the question: Can [an organization] afford not to invest in doing its utmost to encounter probable, plausible, and possible futures as the first step in articulating its preferred future and, perhaps most importantly, how it can be more agile, adaptive, and improvise to not just survive but thrive in a variety of alternative futures. This will require not just tolerating but courting uncertainty and being both futures literate and futures fluent.”

(Post KnowLab participant reflection)

These stories are multiple and constantly changing, not having a clear beginning, middle and end, even though possibly striving for such clarity and coherence - as well as being sensitive and encouraging of alternative (but not necessarily continuous) narratives of the past, present and future.

“I think we were very effective in bringing in multiple perspectives, I think we were really good at getting affirmations, I think it was – I was definitely very, very pleased – the linkages between the people were very powerful. That’s just a feeling I have. I think it’s related to something which is actually quite difficult which is we’re all in motion, right, we’re all doing our own thing, and when you want to connect in a way that’s powerful you’re basically shooting a

*moving target, you're getting on a moving train. And a lot of people managed to get onto each other's trains. That was my impression and that's pretty cool.* ”

(Post-KnowLab project team meeting)

This perspective also underscores the importance of multiplicity and diversity of participants and communities being involved in telling these stories and consciously expanding the network of storytellers.

“ *One of the key takeaways [is] that the “sizzle is just as important as the steak,” so to speak, especially if you're interested in telling stories—exactly what I believe [horizon scanning] ought to do. However, one is not telling stories with clear endings and tidy plot points; rather, [scanning] ought to create spaces where stories can emerge - from both qualitative and quantitative methods. This requires both experts and “untrained” individuals, communities, and partners committed, and compensated, to join a network of horizon scanners given a clear and concise set of criteria about what to look for and why they are looking. Including an element of play in this process is key, and this is something that I have introduced to my own work with successful results.* ”

(Post KnowLab participant reflection)

As noted above, some participants stated that a search for multiple possible futures is not only a recommendation but that one cannot afford not to engage in this multiplicity. Opening up the play of alternative stories and futures involves identifying and questioning the fixed and singular stories and images of the present and thus the future, in order to allow the flourishing of multiplicity.

“ *So you need to first break the current images of African futures. You need to break them down and you need to set up a process to develop alternative futures.* ”

(Post KnowLab participant reflection)

In developing alternatives, a loosening up of the imagination can be helpful in moving beyond its current boundaries and inhibitions in order to access even “extreme spheres” and “thinking the unthinkable” – which inspires the invention and assists with the identification of opportunities.

## — Multiple Theories of Change

In the KnowLab, multiplicity was exemplified also in the idea of using different frameworks to situate foresight work, such as different Theories of Change. This would allow for generating alternatives, as well as an awareness if one

is using a theory and what framework one is using to shape one's perspective on foresight. Multiple theories of social change exist in the literature – and some were present in the room, albeit tacitly. The future is constructed differently under each (see Appendix 3).

And while ‘Theory of Change’ (in the singular) as a concept can be associated with evaluation for the evaluation community, for many outside that community of evaluation practitioners, it didn't bring up such an association. For many professional futurists especially, the idea of a single theory of change rooted in linear causal relationships is precisely what they believe they are ‘paid’ to challenge.

“ *It is unfortunately the case that the futurists who seem to talk loudest often have little to say about ‘real’ foresight, which is to say that extrapolating trends does not make one a futurist. I had numerous conversations about foresight with many of the participants, and while they were all clearly interested to know what foresight is and what futurists do, I can honestly say that many had impressions derived from the ‘pop futures’ crowd, which has little to do with foresight and futures literacy.* ”

(Post KnowLab participant reflection)

Theories of Change were seen by participants as both helpful and problematic. On the one hand theories with a more linear format are seen as helpful for organizing the thinking and action around a project. They give a logical sequence and framework for following the process one is developing or evaluating. Stepwise processes reduce uncertainty and streamline thoughts and activities, as well as the communication between the different stakeholders involved.

The “logic model” offered by a Theory of Change can structure the initial steps in the process, and then it can be “let go”. In some cases, flexibility/multiplicity is built into the logic of the Theory of Change - allowing for evaluating and re-evaluating assumptions and conclusions in an iterative way which opens up previously unconsidered possibilities. Even with an existing theory, it is clear that the complex processes one deals with in foresight and evaluation projects do not fit neatly into its model, they “cannot be squeezed into it”. Nevertheless using the model gives structure to “where one is going” and facilitates communication with others about direction and outcomes.

“ I mean I work with the logic model a lot also because I almost feel that first there needs to be some logic and then you can let go of the logic, but otherwise you’re just in a mess. I think this [reality and how it works] is actually a

*complex thing, you cannot squeeze it into this, this exact Theory of Change which we have in the report. ”*

(Pre KnowLab case study interview)

On the other hand, since a model, i.e. a specific theory of change, sets up a particular mindset, when one lets go of the model, the complexity of the phenomenon can come out more fully – in its non-linear, non-simplified form. By relaxing the constraints created by the assumptions that structure a model of change, new and additional dimensions may become visible. Detecting or inventing phenomena that might have been hidden by the structure offers another set of options for describing and acting in the world, or as one participant stated it “works like karma”. More opportunities for experimentation with multiple alternatives can be utilized.

“ It works more like karma, you know? So, it’s also like cause and effect but it’s not so logical. So, it’s extremely simplifying and also, what if something, that’s the emergent, what if something comes up that is not in this Theory of Change? Will you maybe not even pay attention that something great is happening? Something new, something really outrageously revolutionary you might even not notice because it is not in the Theory of Change and hasn’t been in any integrative thinking. But if

*you did not have the Theory of Change, the same might happen - because of the Theory of Change that they might not notice... I think there are so many factors, you also have to give people the liberty and the freedom to just experiment. Reality doesn’t work like in Theory of Change and then additionally, maybe... there are opportunities you just can’t see because you’re so much in your Theory of Change thinking. ”*

(Pre KnowLab case study interview)

## — Multiple Mindsets and Worldviews

Just as a theory of change can serve to fix and simplify phenomena that are actually complex, so fixed and unexamined mindsets can channel perspectives and conceal multiplicity.

Participants talked about the importance of examining one’s mindset or lens for understanding phenomena, and thus becoming aware of how that is contributing to one’s approach. Further, such awareness helps one to switch from one lens or vantage point to another and find “new ways of looking at it”, as well as be aware of the multiple mindsets of the people with whom one is interacting. This includes mindsets about what the future could be – “what’s their view or their idea about possible futures according to their respective



worldview". The importance of this awareness of multiple worldviews, including one's own, or that of one's organization, was underscored in several of the groups discussing case studies (ex: Evaluation of the Convention for the Safeguarding of the Intangible Cultural Heritage, Scan).

*"I've been trying for a long time to figure out my own mindset. Anyway, this process again is a lifelong process that will continue but I think this discussion is just giving me an angle also to examine my own thinking about the future more. But with regards to looking at mindsets and understanding my mindset within the context of evaluation, first of all, that look is coloured by one's own mindset of course. [...] So this all confirmed to me that [it is] something to pay attention to but what's made it new now is the focus on assumptions about the future. [...]"*

(Post KnowLab participant reflection)

What some participants concluded, for example in the case of Evaluation, is that what is important is to have a foresight mindset integrated into the process of evaluation. Though one has concrete 'tools' and 'methodologies', sustaining a future orientation and lens as a way of thinking, rather than the particular tool one uses in operationalizing the evaluation, is key.

*"We concluded that this is more like a question of a lens that an evaluator can have to look through when engaging in an evaluation rather than any specific tool or something. Of course there are tools but it's more a way of thinking and looking at things. That's one of the big insights."*

(Post KnowLab participant reflection)

An awareness of multiplicity of perspectives goes hand in hand with openness to switching between different perspectives. For example, the discussions about the relationship between Evaluation and Foresight led to what several people identified as 'insights' or 'paradigm shifts'. One participant shared that she had experienced a 'paradigm shift' in the group work on evaluation ('Evaluation Therapy Group') since she had been working on evaluation of foresight for some time and realizing that if the focus changes from evaluation of foresight to embedding foresight in evaluation, then most activities would need to have a forward-looking aspect and that would be "very powerful". Another participant shared a similar thought:

*"So this placement of the future, that was a long discussion that we had. We acknowledged the fact that there are two angles to looking at Foresight and Evaluation. So one is to look at how to evaluate Foresight - how to*

*evaluate a Foresight project, for example. And then there is how to integrate Foresight into Evaluation. And so, what we decided for our group, we would focus on the second - how to integrate Foresight into Evaluation. That was what we mostly discussed and then I think, on the second day, we had some discussion on the other side of the coin as well but we didn't find that so interesting, you know?"*

(Post KnowLab participant reflection)

## — Fundamental Tensions and Polarities in Multiplicity

While incredibly rich, the interplay of different perspectives and frameworks in futures and foresight was also reason for some degree of tension or confusion for participants, and some of those tensions of multiplicity were also addressed. These included the above mentioned tension of changing how **uncertainty enters into our mental models**. Another tension that appears in multiplicity is illustrated by the difference between the encouragement of **multiple truths** inherent in such an approach and the preference for a single/ultimate truth – particularly within the organizational contexts in which we find ourselves working.

*"So I don't know exactly how I'm going to do it, maybe it'll end up being something*

*that I'll do for myself and use it in discussions but it will not go into the final product because they're calling for the one truth. They're asking for the One Truth, they want an ultimate truth because people are looking for security.* ”

(Post KnowLab participant reflection)

This illuminates the tension between the dominant discourse of ultimate and singular truth, toward which there is preferably a linear causal path (as exemplified in some Theories of Change referenced above) and the impetus of foresight approaches that integrate emergence and the implication that there are not only multiple pathways seen from the present but also, as time passes, as yet non-existent opportunities may open up entirely new paths. Embracing multiple truths, including that of unknowable emergent novelty, was seen as liberating, empowering and validating by many participants.

In some cases, this tension can be toned down, so that on the surface it is absent and foresight work conforms to the dominant discourse, while silently it is being resisted. On the other hand, explicit expression and owning of alternative truths is seen as courageous.

“*Empowering people – it's what happened with me because of the demystification of the Foresight exercise. It is empowering if people*

*have the liberty to find their own truth and their own way of integrating foresight. I think some truths are truer than others but as to the one ultimate truth – it is not clear if it exists. It requires also some courage.* ”

(Post KnowLab participant reflection)

Another major tension that caused concern and did not find resolution was **language**: academic/technical versus everyday/business language. A perception was shared that participants were “lost” when the vocabulary and topics being addressed by a speaker in plenary “digressed” into an “academic” discussion of foresight. This reality of multiplicity illustrates the difficulty of shared sense making processes. Dealing with this challenge is in part a design issue, how to scaffold the conversation in ways that are mindful of diversity. Finding a shared language for rich descriptions and different perspectives is the opportunity to be seized in a KnowLab where participants each bring diversity in their vocabularies and comprehension of certain phenomena.

“*[We had] major problems in people not able to communicate with each other, and not being able to figure out how to deal with that. We had nine people on smart phones and one person sleeping today when the conversation had clearly migrated to the academic theory of foresight camp, and that's a concern for me*

*for sure. And I think that those were important conversations that happened but this wasn't – and they needed to happen but just this wasn't quite the right space where that could keep up the energy of the whole group. And there may have been, on the flip side, I wasn't counting at that point, conversations that weren't so intriguing for the academic camp as well.* ”

(Post-KnowLab project team meeting)

On the other hand...

“*If you're dealing with a complex issue then there has to be an expectation that you would have to deal with a degree of complexity. If you're talking about a subject that has some [complexity] and people have developed language describing it that has become useful in helping people understand stuff and how do we as academics bring people with us to say - I mean we all made a big effort, we were not technical. No one really talked about ontology and epistemology, we didn't talk about causation. I feel we worked quite hard to make things that are staples in a foresight discussion - we worked hard to use normal kind of everyday language. And I get that the ideas are what's difficult and not necessarily the language but I think to make that effort and then... Like the whole point is: the easy version isn't working; it's inherently challenging, so if you're talking about an inherently challenging thing*

*then expect some challenge. And how to say that in a non-confrontational way that brings people along that sets their expectations so that they're ready to do that rather than saying if you want to talk business I'm with you, if I want to talk business you have to come with me, but if you want to talk about anything conceptual, the future that doesn't exist ...* ”

(Post-KnowLab project team meeting)

Trying to come up with a shared language may be, in some instances, paradigmatically problematic – but holding opposable ideas and frameworks at the same time without privileging any one in particular is perhaps what the challenge requires.

” *Multiple discourses of the future – not only they exist but how they get produced and how they intersect. ... There were shared words but not shared perspectives; there are different understandings about some deep philosophical ideas about agency, that sort of thing. By the end of today we got to shared understanding but certainly not at the beginning.* ”

(Post-KnowLab project team meeting)

And some participants suggested a radical departure from the terminology of futures, foresight and evaluation and finding entirely

new ways of talking about things – abandoning the divisiveness in the languages of existing traditions on one level and moving toward an integrative, higher-order multiplicity.

” *A key learning with respect to foresight is that it's a lot of different things to a lot of different people, and it's not clear how or when it makes sense to even talk about it. Just even the word foresight or futures – maybe those words can get in the way of effective use of tools and processes because you get kind of stuck in what like the tradition, or even words like evaluation – finding ways to talk about what it is you're trying to find out without using words that people associate with very different things, it's a challenge.* ”

(Post-KnowLab project team meeting)

## — Toward Integration

Tensions and polarities experienced by KnowLab participants and facilitators during the event were countered with a strong desire to look for ways of bridging 'either/or' thinking and transcending it to a more integrative, 'both/and' frame of mind.

” *There are some really fundamental tensions, and I don't know what [...] you can do to get around them: but tensions between open and closed; between corporate and ac-*

*ademic; between people who are constrained and people who aren't constrained – there's a line by different approaches over it but I don't know how to cross it yet. I feel today or the last couple of days have really made me want to renew my focus on how to translate or how to speak across or how to frame things so there is no line – so there are no sides.* ”

(Post-KnowLab project team meeting)

A move toward more integrative thinking came out of the KnowLab itself. A small group ('The Manoa Team') convened during the Open Conference on Day 2 to produce a Causal Layered Analysis (CLA) of "Actionability" – a recurring theme during the KnowLab and in many of the case studies. The brief account below comes directly from a participant's post-KnowLab written report:

” *Causal Layered Analysis (CLA)<sup>17</sup> is a futures method that unpacks the narrative and discursive forces underlying a variety of phenomena. In uncovering the deep epistemological roots of institutional mechanics, CLA can be used to provide insights and generate new metaphors from which to organize institutions of various scales.*

*Seeking to understand how this discourse impacts the ways in which the future gets*

used and acted upon in the present, the CLA group first charted the official, or hegemonic, discourse, which is what appears in the far-left column. Moving down through the litany (what is most apparent/visible – top row), systems (institutional focus – second row), worldview (third row), and metaphor (bottom row) layers, the group found that the official/hegemonic discourse is driven by an underlying emphasis on speed, efficiency, and output. The counter-narrative (middle column) offers a reactionary response that wants to slow things down, although it also takes a “single bottom line” approach. One participant provided the Swahili metaphor: *Usiniharakisha*, which literally translates as “Don’t rush me!”

In the right column, the group created a synthesis between the two discourses as a means of transcending the tension between the two (Actionability and Appreciative/Reflective). In the “Action Learning” discourse (right column), there is an emphasis on multiplicity, diversity, and creativity. “Jazz” and “Everything has value!” are key metaphors that drive a more improvisational ethos and approach. However, this discourse also stresses prudent action, which is what the metaphor “Trust in Allah and tie your camel” encapsulates. ”

(Post KnowLab participant report)

The CLA analysis illuminates and puts in perspective many of the tensions observed during the KnowLab. Collective intelligence processes can and often should fully incorporate tools that

provide practical ways of honouring multiple perspectives and ways of knowing, not only giving them space but truly aiming toward dialogue and, if appropriate, dialectical synthesis.

## Causal Layered Analysis of Actionability

official/hegemonic	disowned/counter	integration
<b>Actionability (Single Bottom Line)</b>	<b>Appreciative / Reflection (Single Bottom Line)</b>	<b>Action Learning (Quadruple Bottom Line)</b>
relevance, problem-focused, accountability, urgent, planning	values, meaning, intangible, slow futures	Double-loop learning, emergent processes, networked, timely future,
command-and-control, mechanistic, utilitarian, rational, success, fast future, top down, alpha	human-centric, organic, self, being, cooperative, bottom-up, beta	holarchy, heterarchy, improvisation, co-evolution, multiple ways of knowing/organizing, top-down-bottom-up & contingent, omega
“Value for Money” “Don’t just sit there, do something!” “The trains will run on time!”	“Art for art’s sake” “Don’t just do something, sit there!” “Usiniharakisha”	“Jazz” “Tell me more / Show me more!” “Everything has value!” “Trust in Allah and tie your camel”

Fig. 1: Causal Layered Analysis (CLA) of Actionability, ‘The Manoa Team’ / Ispra KnowLab 2014

Problem Solving	Appreciative Inquiry
<ul style="list-style-type: none"> <li>- Focus on what is wrong, broken or missing</li> <li>- Analyse root causes of these problems to remove them</li> <li>- Brainstorm solutions to overcome weakness</li> <li>- Implement by overcoming resistance and pushing change through</li> </ul>	<ul style="list-style-type: none"> <li>- Focus on what you want to grow more of</li> <li>- Inquire positively into root causes of moments of success</li> <li>- Co-create innovative projects that stretch our strengths more</li> <li>- Work together to 'experiment' and implement</li> </ul>
<b>Change = problem to be solved, deficit to be removed</b>	<b>Change = opportunity to be realized, strength to be grown</b>

Fig 2: Vanstone C., *A Practitioner's Guide to Essential Techniques for Employee Engagement* / © Melcrum Publishing 2007

### Moving between Problem-Solving and Appreciative Emphasis on Inquiry vs Advocacy:



Fig 3: Vanstone, C., *An Introduction to Appreciative Inquiry*, Ashridge Business School, November 2011

To highlight another point of tension that came up during the KnowLab and which could potentially be transcended with more integrative thinking and design was the implicit tension between critique/problem-solving and appreciation/inquiry.

As an intervention style, Appreciative Inquiry<sup>18,19</sup> balances 'problem-solving' with 'appreciative' and 'inquiry' with 'advocacy' and would fall under the far-right Action Learning column in the CLA framework. The structure of quotes and statements from the KnowLab seem to suggest a predominantly 'advocacy' stance, especially on Day 3, with 'inquiry' more prevalent in Day 1 and to some extent Day 2 when getting to understanding was the main priority. On the other hand, Day 1 started out with the language and attitude of 'appreciative' in plenary but quickly moved to a problem-solving mode for much of the remaining sessions – understandably so, with participants being asked to 'critique', redesign and improve processes presented in the case studies. The open invitation is to stay mindful of this balancing act for improved integration of various polarities and modalities.



# Theme 2: Knowledge

Closely connected to the theme of *Multiplicity* is the theme of **Knowledge** – including location of knowledge, ways of knowing, and ways of creating knowledge. Participants in the KnowLab discussed the topic of creating, locating and disseminating knowledge explicitly. It was also evident more implicitly in other topics that were being brought up.

Being futures literate and disseminating this knowledge to increase futures literacy was a value espoused by the KnowLab participants. They addressed it in relation to the role of the KnowLab itself in enhancing futures literacy during and afterwards by staying connected with each other; in relation to increasing futures literacy and thus changing the culture in the organizations involved in the KnowLab; and in relation to broader society.

The significance of futures literacy is captured by several of the concluding ‘strong statements’:

.....  
“Building futures literacy is part of creating the capacity to be free.”

.....  
“We are now living a moment when the capac-

*ity to understand the way the future is used is inadequate to the challenges faced by humanity. Therefore there is an urgent need to advance the development and diffusion of futures literacy.”*

.....  
— **Power and resistance/  
subversion**

The discussions emphasized the impact of societal and organizational structure and culture on foresight and forward-looking activities. Institutions, for example, were seen in multiple ways – both as barriers to experimentation and implementation of a foresight worldview (aiming to “overcome the structural power of the systemic context”), as well as potential partners in foresight activities, precisely because of their power and influence. There was a tension between the institutional layer of knowledge and expectations, and the individual or small group “truths” and search for knowledge.

“Culture, as it is commonly said, eats strategy for breakfast, which is to say that even the best-laid plans cannot overcome the structural power of the systemic context. Thus,

*strategy must aim to transform the cultural context if it truly seeks to initiate substantive and dynamic change.* ”

(Post KnowLab participant reflection)

An interesting barrier that emerged from the conversations was that of the organization and its culture as potentially and unconsciously shaping its foresight lens and what can be known through its foresight processes. Encouraging people to find ways of acquiring and developing a reflective distance from themselves as practitioners – and from the taken-for-granted organizational culture (so that they are not blind to culture, as fish are to water) – is needed for opening up new dimensions of knowledge and insight. Or in the words of Robert Kegan:

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“A way of knowing becomes more complex when it is able to look at what before it could only look through; i.e. when we create a bigger system that incorporates and expands on our previous system. This means, that if we want to increase mental complexity, we need to move aspects of our meaning-making from subject to object, to alter our mindset so that a

way of knowing or meaning making becomes a kind of “tool” that we *have* (and can control and use) rather than something that *has us* (and therefore controls and uses us).”<sup>20</sup>

“Does the project have worldview awareness? Does the organization’s shadow hang over the program? Does the project have too much of the lens of the organization? How can the organization “own” the project? Might the project be an opportunity to implement a foresight culture at the organization? Does the organization allow for instinctive or intuitive approaches to scanning? Does the project have humility about “noise” and finding signals?”

(Post KnowLab participant reflection)

The KnowLab in general, and small group work in particular, were occasions for noticing difference with a quality of curiosity, evidenced by the questions asked in case study groups, as in the example above. Collective intelligence processes, enabled by designs that invite the shift from tacit to explicit through conversations that produce shared meaning, can become spaces for noticing and naming difference so others can notice too, helping people to hear themselves differently.

When the main challenge is reframed as accepting the responsibility of recognizing that

we choose how we think, then the question becomes “Why do we choose to think the way we do?” leading to considerations such as “Is this an appropriate way to think in this context? Might I/we think differently? Do I/we want to think like this?”<sup>21</sup>. These questions are relevant both on an individual and organizational level – but also, importantly, participants need to know whether they are given permission to ask each other such questions, and to what extent. Are they only examining what they are presented with, or could they question the underlying choices and assumptions in the processes they were engaging with? Simply naming what was perceived as within the remit of inquiry – and what remained outside – could potentially be transformative.

“If you look at [one of the case studies] on its own it’s primarily an internal decision-making process and so either we’re unpacking the implicit futures stuff in it or how to manage the outcomes of the explicitly future-facing part – great, you know – that makes sense for you and your constraints and none of us work there so why would we decide stuff for you, you know? [...] I think there were some big assumptions – the issue I had, and again maybe it’s just me – for people that did not know about foresight at all, there was no foresight sort of process to engage with, and the ways that the future makes an appearance in [the case study] are around language like ‘expect-

ed trajectory’, ‘potential opportunities,’ ‘more opportunities’ and suddenly you’re in discourse stylistics, like these are implicit, baked-in versions of the future and for us academics that’s fascinating but in terms of actually coming up with concrete stuff – where’s the future? Well it’s kind of unseen and unquestioned and our job here isn’t to question that and so we were left with kind of ‘OK, so we now just have to assess how well we think the process seemed to work’ and I had people who were interested in innovation and making businesses work and they were really game and were up for that and I can’t speak to how relevant that is to you.”

(Post-KnowLab project team meeting)

The KnowLab participants brought up many other examples of competing claims to knowledge and more or less visible examples of subverting dominant claims. For example, in the case of the Convention for the Safeguarding of the Intangible Cultural Heritage, the foregrounding of intangible heritage as valuable local knowledge – that in itself is a subversive act, as it emphasizes local expertise, rather than distant expert knowledge. In the Evaluation of the convention, subversive threads were also evident. The organizational context prefers to see definitive conclusions of the evaluation – and while experimentation with alternatives can be an element of an Eval-

uation process sensitive to a forward-looking worldview, it happens behind the scenes.

“ I just meant that maybe the final report – which is like the official final document which will then go to the executive board – maybe that one will not have the experiment in there, yes. But, it might have the conclusions that you come to as a consequence of the experiment. You will have to bring the supporting evidence for whatever you’re writing. So, in some sense you need some supporting evidence there. In the final official report you wouldn’t talk so much about experimenting. [...] But in the process itself, there’s a kind of experiment. I have so many meetings with so many people and sometimes in groups, sometimes individually. I mean I can ask different kinds of questions so I can engage them differently. ”

(Post KnowLab participant reflection)

Similarly, in other organizations which expect linear processes of knowledge creation, approaches that emphasize experimentation with multiple alternatives might not be sanctioned – their value however is acknowledged and they are still employed, but in a “clever” way.

“ Interviewer: How do [these new ideas] find the place institutionally within your organization more broadly do you think, would [they] be a support for that kind of shift?

Interviewee: I think the trick is in trying to bring these types of things inside the process in a clever way. Maybe things have to be tested first on a smaller scale and then they can be enlarged. But it is worth to do that because there could be added value. ”

(Post KnowLab participant reflection)

The idea of “futures by stealth” was explored both on an institutional level as above, and also on a broader societal level in the final plenary discussions. For one participant their last ‘strong statement’ was an explicit proclamation of the subversive potential of foresight:

.....  
“Foresight to be used to camouflage subversion of the Present.”

.....  
— Who does the knowledge serve?

In the KnowLab, some participants felt torn between two conflicting expectations about the purposes of the knowledge they were producing and whether they were acting as consultants to the case study organizations or working to develop shared understandings for all the organizations represented and for the public sector in general. Comments had been exchanged and fed back to the organizers that some participants felt like they were being “used” and that they wanted to feel that

they were participating and “getting something back”.

“ The immediate practical aims of each session were very clear. However, there was a general lack of clarity regarding the event aims that had an impact on our conversation. Within the group, some members mentioned being unsure whether our aims were to further the groups’ understanding of how future-facing activities and techniques could work to promote positive social change, or to provide the [case study organization] with constructive feedback on their internal processes. There was a tension between the two for some people, generating an underlying current of uncertainty. It was felt by some that assembling such a wealth of expertise and experience in the room, at some cost to the sponsors and to participants’ respective organizations, was possibly more justifiable if it were the first aim being addressed. ”

(Post KnowLab participant reflection)

The conversation in the concluding session on Day 3 addressed questions of power in society explicitly, highlighting different aspects of the relationship between power, including political power, knowledge, and futures. In one exchange, participants reflected on the lack of awareness of not just the future but also the present and the past, and how the



unacknowledged weight of the past affects the political discourse in the present, both limiting and shaping future possibilities. On the one hand, this realization was experienced as anxiety-provoking and also liberating since it potentially creates openings for engaging with the future.

“Participant 1: *“When facing or helping people engage with the future, and particularly ... helping the politicians to think about the future is how – what’s the correct word? – how unaware they are of even the present. And that to me was frightening and also liberating in a sense that Ok, there is, whether they acknowledge it or not, there is fertile ground here for engaging with the future because their lack of awareness of the present seems to me to be quite significant.”*

Participant 2: *“I think it’s not just lack of awareness of the future but it’s unawareness of the weight of the past which is shaping their lens and how they are crystallizing that expectation of the future, especially when you’re talking about politicians and identities, unconsciously we have that burden of the historical shared past but we don’t necessarily, [we’re not] conscious of it. So it is an unrecognized bias within our internal discourse or therefore how we interact with the outside world.... part of it is that weight that unconsciously affects the political discourse. But it’s so implicit nobody talks about it – but it’s shaping the future.”*

Participant 3: *“The past is explicit, it’s not implicit, it’s not a bias .... it weighs down any thinking of the future because you can’t discount X number of past things. It’s a weight, it’s an unnecessary weight, and it prevents, it limits futures thinking.”*

(KnowLab participants discussion in plenary)

On the other hand, attention was drawn to the political tendency to be in control of the stories told about the future, toward particular ends. In the context of Futures Studies, sensitivity to stories by people in a position of power of no alternatives to current taken-for-granted ways of going on together is seen as an essential attribute of the field, and challenging those stories as a foresight community, and as a civil society more broadly is considered an important intervention for society’s wellbeing.

“To the point about politicians being unaware of the future – coming back to the question I put up on the board, they may not be aware of the future but they’re clearly aware of the stories they want to tell about the future.... what Margaret Thatcher was saying in the 80’s, the acronym TINA: There Is No Alternative. And that’s happening in Europe, the executives and the people the stories they want to tell us. There is no alternative to the current ... And that’s the kind of stories we need to find – we

in the sense of civil society.”

(KnowLab participants discussion in plenary)

The constructed nature of the past and the future and who controls these stories is deeply interlinked with constructions of identity for large groups of people and the degree to which they can freely and authentically express their identities. These are ultimately questions of power.

“One thing that I wanted to stress again is that I think history is also imagined – there is no such thing as the history that is set in stone – we always give interpretations of it, so the future is imagined, the past is also imagined, the only thing that exists is now. But I think it’s extremely important to link all that when we talk about power and authenticity and identity. And my understanding is that both future and past are abused in power relationships so the way I see it is that power determines which social groups can authentically express their identity. So the higher you are in the social hierarchy the more you can be authentic about your identity while vulnerable social groups usually have identity constructed for them. So it’s all the imagined pasts and imagined futures claiming an incredibly important role in that - so we talk about colonized past and colonized future. One role that I see as my ideal role in my desired future is we create authentic identities for us

*and then somehow start pushing that conversation – how can we include people who have their authentic identities constructed for them.* ”

(KnowLab participants discussion in plenary)

The ability to disentangle and remain free from dependencies in order to retain freedom of thought and action was linked to notions of leadership and associated with the capacity to take risks and tolerate anxiety, uncertainty and sacrifice in the name of building and mobilizing social capital for social change.

“ *The thing I wanted to offer is this notion of freedom. I always tell people it's not enough to be free - it's to stay free. [...] And I think even with the point just mentioned that to me is very powerful. I don't think it's even out there. I think that the EC and UNESCO and The Rockefeller Foundation and all the NGOs, everybody is going to have an opportunity, a moment, to really lead. And it may be lonely, it's going to be risky, and [people] might talk about you, you may not get that promotion – you can live very simply and that's something I've done for a long time, with quality but very simply – you can stay free. And that to me is where the opportunity is. Because if we're outside clamouring ... risk something because it's going to take social capital to get it done. And so I think it's the collective risking those moments intelligently to find and*

*build on those moments to really advance the conversation. That to me is the power, so I want to encourage you all to at least get free, and once you get free – stay free.* ”

(KnowLab participants discussion in plenary)

To add another layer of complexity to the theme of power, authenticity, identity and futures is the paradox of forging authentic individual identities, allowing a plurality of identities to co-exist and be celebrated while at the same time working toward a sense of having or belonging to a shared identity, for example – a national identity.

“ *I come from a very practical point of view, from this community helping to carry out future studies. But what is very clear is that irrespective of the motives which are behind the studies there are a number of postulates. One of them is that the future is open to different possibilities, so there are always alternatives to whatever discourses are used and therefore the right to go and search for alternatives is a given. The second postulate is that nobody is free enough to go into the risky business of exploring the future without some desire to have some kind of control over what will be or what will lead to the future. So ultimately you are talking about exploring to make sure that you can be proactive and claim the future that you desire. And therefore you cannot dissociate fu-*

*tures studies from political power. Because you may have the vision – if you don't have the capacity to remove the barriers that prevent you from transforming structurally the situation, you are just into the mode of pipe dreams. Here is the question of identity. Nobody can go into futures studies without defining yourself what is your identity and what are your identities. And we all are struggling with that question. We were talking about South Africa. I'm a South African – what does it mean to be a South African today? What does it mean? Our past, our present and our future are subject and object of discourses and narratives which do not add up necessarily and therefore we are always renegotiating, we are negotiating and raise attention between the projects – the ambition – to have a national identity, one, of being a South African. And the reality of the plurality of identities: how do you navigate between the project of one, the ambition of one - and the reality of a plurality? And therefore this is the kind of question that one has to ask wherever there are any foresight exercises. I think identity and power and the right to dissidence – the right to be dissident and to be more than a guerrilla is something which is at the core of any foresight exercise.* ”

(KnowLab participants discussion in plenary)

## — Empowerment & collective intelligence processes

Another tension identified was between didactically presented expert knowledge and collectively emergent knowledge. Some participants made the following point: expert knowledge can come through as being fixed when it is presented didactically and thus stays static. In collective interactions however, which are dynamic and fluid, new knowledge can emerge. In such settings expert knowledge, if open and not held fixed, if it comes through a “beginner’s mind”, can be input into the collective intelligence process. Otherwise it comes through as teaching. Collective processes are places of creating, where people are “building on one’s knowledge, rather than just sharing it”. In this collective process individual expert knowledge or ‘egos’ can be seen as a barrier to new knowledge.

“The overall question of where do we create from, where does one create from? And what’s the difference between having a collective intelligence process happening and the individual ones? And so where does this collective intelligence come from? Because I do agree, of course, that people together create more, it’s more than the sum of the parts. But I think the methodology could go even further, it can go even deeper. If the egos would be

out of the way because you put experts in the room together, [...] they all have their own methodologies and their own approaches and views. [...] Very often, people are already in the knowing. So they bring to the table what they already know which is already a lot because definitely, if you are an expert in something, you know a lot and you have a lot of experience that others might not have. So, in any case, it’s a value added to the group but it’s not necessarily a new creation, you know?”

(Post KnowLab participant reflection)

In addition to the question of the role of the ‘expert’ in generating new knowledge, the question of the role of the activist in creating knowledge and alternative futures was also discussed. The participants were somewhat divided on the place and potential role of the activist in foresight, because of the strong beliefs of activists, potentially clouding analytical rigour or precluding experimentation with multiplicity. In conclusion, this was seen as “an added value”. The consensus was that an activist position could be valuable in developing alternative futures, as long as that position is transparent and explicitly stated.

“And some people, they’re very much in favour of having a more activist [stance] though all that includes already a normative dimension in it. So, it goes beyond the analytical dimen-

sion of foresight. But in the end, it was seen as an added value. As long as it is clear, if there is transparency on the activist approach is fine. But it should be acknowledged and it should be mentioned. [...] So, it’s good that there’s a kind of activist approach in it, but it should be transparent.”

(Post KnowLab participant reflection)

By moving closer to embracing the voices of activism while also to some degree questioning the authority of expert knowledge, KnowLab conversations echoed the social constructionist perspective that no knowledge is neutral and that one of the main differences between an ‘activist’, an ‘expert’ and ‘mere opinion’ is in the use of rhetoric.

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“Objectivity is much more than merely the opposite of subjectivity: It is an instrument of disciplinary power that can distinguish science from art and professional knowledge from pre-professional opinion”<sup>22</sup>

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Rhetorical devices that preserve the metaphor of the ‘mind-as-mirror’, such as distancing devices used to point to an objective world ‘out there’, or dispassionate language used to ‘purify the lens’ and ‘purge the mirror’ of bias, distortion and emotion are some of the techniques employed by experts in establishing legitimacy which distinguishes them from ac-

tivists or non-academics, privileging the former while marginalizing or silencing the latter when making claims to knowledge.

KnowLab participants called attention to these distinctions in their reflections and found themselves empowered by resisting or loosening the authority of expert knowledge and valuing their own experience. They discovered that the collective intelligence process not only allowed new knowledge to emerge (i.e. as the participant above stated, the whole is more than the sum of its parts), but one's existing knowledge could be elicited and valued. One can realize the extent and potential of the knowledge and skills one has, which leads to empowerment and "liberation".

“ I realized I myself also have tools that I can use to integrate foresight. I had been wondering: how am I going to learn all these methodologies? But I mean, I also know some tools so I feel more liberated now in simply using what I have for the new purpose, just applying it to new contexts. ”

(Post KnowLab participant reflection)

This emancipatory shift was also evident in the way conversations evolved during the KnowLab and how participants were increasingly more authentic in their responses and more capable of resisting each other's gestures and claims to knowledge as the days unfolded.

“ So when [we] were talking about the Africa Futures Forum I asked if the people participating be at the scale of 10, or how about 100, or how about 1000 champions – do they need to say the phrase ‘discipline of anticipation’ for you to know that they’re becoming disciplined with anticipation? Do they need to agree that they’re participating in a foresight exercise to do that? I would argue not. I’ve seen examples in the social justice struggle - whereas if you don’t use the language in that circle then the social justice groups won’t admit you. So they’re missing people who would move with them sometimes because they’re not signalling at all times their agreement. And so back to your point - if you discover ways to have the exercises happening, the discipline growing, the capacity for anticipation growing without enforcing the academic norms around it, then it will start to go a little wild, right? It will start to mutate in these local contexts – I think you could learn more by seeing how it mutates with people who are putting it in practice without agreeing to the terminologies. ”

(KnowLab participant reflection in plenary)

The desire to preserve the multiplicity of experiences present in the room and to honour the participants' freedom to arrive at their own conclusions about what they had learned from the KnowLab and how they would translate

and apply the learning in their institutional environments culminated in a final rejection to collapse the multiplicity of perspectives and resistance to articulating a shared discourse or statement or prescription from the KnowLab. On a meta-level, this in itself became a shared discourse or statement or prescription from the KnowLab: revealing the frames that delimit the changing boundaries of multiplicities and making sense of them by understanding various ways of thinking about the future.

“ We would defeat the whole purpose of the meeting if we were going now to make a prescription or directive to ‘do this’ or ‘do that’. My metaphor is of the Spanish Inn - we have brought our concerns, we have brought our hopes, we have brought our fears and we all have expressed ourselves and everyone now is going to carry and translate it into the way he or she sees fit. ”

(KnowLab participant reflection in plenary)

## — Different ways of knowing

In the case study materials and the conversations during the KnowLab, different ways of knowing were referenced. Overall the stated epistemology most relevant to foresight was predominantly a holistic one, exemplified in one group discussion by the metaphor of the

onion. Such multi-layered ways of knowing allow for the emergence of multiple alternative futures, informed by different layers.

“A metaphor that was used is the metaphor of an onion. So you have on the outside what’s very much the rational space and process. They start with that and then they go a layer deeper so you engage also with the desires and the fears and then you have to go even a layer deeper and that layer is about thinking the unthinkable. And in a way [some people] have been applying that, have been using that, codifying, what it is to work with extreme futures. [...] They were trying to have in certain developments more than one possible development and by pushing these developments into extreme spheres they allow people to better understand issues like emergence, anticipation and that different pathways could be possible. So thinking the unthinkable...”

(Post KnowLab participant reflection)

Meta-reflections on rationalistic ways of knowing were sparse, though examples of rationalistic ways of knowing were evident in the discussions. Another interesting example came once again by way of metaphor.

“If the assumption is that the case study is an enabler to understanding, to distil the insights and then arrive to the recommenda-

*tion, it was a winding path, it wasn’t a bridge to it. So the content didn’t allow that exploration to be very direct. [...] So I felt like it was an*

*artichoke that you had to peel a lot before you could actually eat the heart. Actually I think we arrived to the heart – why am I still speaking in metaphors? Anyway – so by the time we got to the heart it was right at the very end of Day 2 morning when we had to go and present. And I wish we had gotten there Day 1 because that’s when the real problems or the real challenges surfaced. So it was kind of like wind-y.”*

(Post-KnowLab project team meeting)

The example illuminates an instrumental rationalist perspective where knowledge resides ‘out there’ in some autonomous and objective form to be acquired and put to use, and that there could be a more or less direct or efficient path in getting to its essence. It was interesting that a metaphor was used to describe the frustrations and unpredictability of group sense-making from a rationalist perspective, since metaphors are integrative, left- and right-brain achievements of human consciousness grounded in community and cultural traditions that often reveal deeper and more intuitive insights, patterns or relationships. It even seemed to surprise the person speaking (“why am I **still** speaking in metaphors?”) which in itself may be an illustration of the kind of shift

that collective, human-centred processes create in people’s thinking. The metaphor of the artichoke is evocative of a more organic view of knowledge as residing in the ‘in-between-ness’ of the encounter in the group, and the process of peeling the artichoke together to get to the heart of it as the natural process of collective sense-making and knowledge as socially constructed<sup>23,24</sup>. The process of co-creation allowed the group to surface ‘the real problems or the real challenges’ eventually - but not predictably. In other words, collective intelligence processes such as the KnowLab display the characteristic features of complex adaptive processes where new order (or knowledge) emerges but in uncertain and unpredictable ways – thus requiring novel responses and skill sets. This theme will be further elaborated under *Complexity*.

On the other hand (to press the metaphor further), the only way to eat artichoke hearts without having to peel an artichoke is in a manufactured world where artichoke hearts come in cans from supermarkets. This is the dominant industrial paradigm of knowledge, also lending its premise for the sender-receiver communication model (with the mind as container) and the modern public education system, modelled in a “production-line mentality”. The metaphor of the artichoke presented an opportunity to explore two opposing paradigms on knowledge and offered an opening for reflexive inquiry into

how each influences thinking and action.

And while the opportunity was not taken up in this particular exchange, by design the KnowLab was intended to encourage participants to challenge the dominant discourse on knowledge creation. Sometimes this occurred without explicit recognition (as the ‘artichoke’ example above attests), and sometimes it was addressed explicitly (as in the CLA exercise).

Reflections on ways of knowing which integrate emotions and intuition were more pronounced, due in part to a concerted effort to design the KnowLab processes to bring forth what are usually considered secondary ways of knowing<sup>25</sup>. Some references were made to the fact that institutional structures can limit such ways of knowing – for example remember the question asked above “Does the organization allow for instinctive or intuitive approaches to foresight?” – a question which contains an implied recommendation. The KnowLab served to bring into relief the potential importance of emotions in foresight studies and activities – and that includes the wide range of emotions that are considered positive and negative. There was a realization that emotions can be “an anchor” for foresight studies since emotions are seen as universal and a base for connection and understanding among people worldwide, and thus a base for shared understanding of the outcomes of foresight studies.

“When you talk about the future you can get into different types of emotion. There could be fear about the future but also hope and if we try to use them in a constructive way, in a creative way they can also help. Because one of the problems is when you discuss the future - how do you make sure that people are really talking about the future and they are not really just speculating or about what they know of the present.”

(Post KnowLab participant reflection)

Experiential ways of knowing and understanding were also valued by participants and organizers, as illustrated by the design of the KnowLab itself.

“I think we did in my experience quite an amazing thing in terms of linking on a rational and emotional level, in my experience not that common, and it can be potentially powerful I think in terms of the experiential – an opportunity to bring this forward I think, to me it was innovative.”

(Post-KnowLab project team meeting)

However, it was also stated that this experiential way of acquiring and creating knowledge – through “taste, scratch and sniff” – needs to be brought out to the wider community as a way

to understand foresight and working with the future, including policymakers.

“And then also a number of practical suggestions for example how we can engage in our foresight work with other type of stakeholders and even the civil society citizens and the youth. It’s basically trying to make it interesting and attractive what we work on in order to be able to reach out to the different stakeholders’ community where we are not really in touch at the moment. For example what we also discussed is that it is important to the policy maker to make them experience what foresight is. Because in this way if they don’t know they can be sceptical or even distant. If then we can create opportunities for the policy makers to understand and to really test even what our activities are and what they can do for them, so then we can get their attention better.”

(Post KnowLab participant reflection)



# Theme 3: Participation & Contextuality

As evident in both the *Multiplicity* and *Knowledge* sections above, who the participants are, their identities, play a key role in appreciating and creating multiplicity and knowledge. In this section we elaborate further on this dimension of **Participation** in futures and foresight processes and the question of whose voices are present and absent. We then move to the related subtheme of **Contextuality** – making foresight relevant to specific actors in their local environments.

## — Participation

The tone of the discussions during the KnowLab and many of the relevant materials was one of excitement about foresight ideas and methods – an excitement that people were impatient to share with “the whole world”. Committed to its values and dedicated to the positive potential of foresight for improving human wellbeing, people were eager to disseminate its ideas. This was often framed in terms of the missions that motivate and justify the existence of the organizations represented at the KnowLab, particularly when discussing approaches for capacity building and expanding futures literacy. In general the impetus was toward engaging, sharing among each other

and with others, or as one participant succinctly summarized, “Foresight is a tool to inspire dialogue”.

“One has to look at conversations because that’s dialogue, and conversation in all its various forms, whether it’s through the media or whether directly, whether in groups or whatever – all forms of communication – that’s where the future is being created, through communication all over the world.”

(Post KnowLab participant reflection)

For some, the issue of participation was one of the most central to working with the future, so that they concluded the KnowLab with the strong statement:

“Use (the) future for inclusion and bring (the) future in our work on equity, participation.”

More broadly, the topic of who are and who should be the partners in futures work was present in most discussions throughout the KnowLab, as well as before and after it.

**First**, it was underscored that foresight exer-

cises need to include diverse participants and that they “reach out to different communities”. To be successful in making foresight activities relevant to a wide range of participants, the point was made that it is important to give further thought to the design of the study/exercise so that it is of interest to diverse participants, as well as that “it shouldn’t be like a burden but more like a space where people can exchange and reflect.” Different approaches within the exercises could make the issues relevant to all participants, such as experiential work, and the acknowledgement of emotions. As was mentioned in the section on *Knowledge* – emotions can be an ‘anchor’ which grounds everyone, and thus can support their engagement.

**Second**, the outreach to organizations as partners in foresight activities was highlighted – and this included references to one’s own organization, other local organizations, public and private, governmental and non-governmental, as well as international organizations. The KnowLab motivated people to keep that in mind and make further efforts to expand the role of relevant organizations in their exercises and studies.

It was recommended that prominent international organizations which promote a foresight worldview and activities such as UNESCO could inspire foresight activities around the world in a collaborative and integrative, yet not dominant spirit. A relevant metaphor was that of an organization as a “tent”, with many feedback loops between the tents:

“ So, one of the metaphors that came out was that UNESCO should be inspiring and connecting a thousand tents instead of [being] one big tent and trying to put down and coordinate everything. The idea was that UNESCO, the best way forward is to engage, set examples, be inspiring, and then connect so that other champions can engage themselves and initiate and activate their network. ”

(Post KnowLab participant reflection)

The effort to dialogue with organizations however faces the challenge of finding resonance between different worldviews and organizational cultures, as addressed in the section on Knowledge. The question is how to adjust the message and philosophy of foresight (particularly that of multiplicity and embracing uncertainty) to many organizations’ expectations of definitive outcomes and recommendations, “where people expect us to come up with a very formal, very traditional report which says the situation is so and so, which is kind of in

contradiction with [the idea of the dynamic nature of everything]”.

Others also underscored how important it is to engage stakeholders, and yet how challenging it is to promote futures thinking which aims to embrace uncertainty and the inherently unknowable nature of the future: “This is something very necessary, this way of thinking. On the other hand, it’s very unwelcome.”

In order to catalyze these kinds of dialogues, different approaches were recommended. For example, in order to engage others, such as policy makers, one idea was to actually include them in exercises, so that they experience what foresight is and “learn by doing” – engage the experiential side of knowing as emphasized in the section on *Knowledge*. And not only engage them in the exercises, but support efforts to put more advanced ways of using the future into practice through coaching and network building.

Another way to engage and collaborate with other organizations is through more structured training in the form of meetings, video-conferencing and others. For example, DG JRC conducts videoconferences with other international organizations such as UNICEF and UNESCO, where they present the on-line futures tool “For-Learn” developed as a key methodological resource, now widely used by foresight prac-

tioners globally. However, budget limitations were noted as serious challenges to expanding training and other types of collaborative events.

**Third**, “continuous engagement” with the wider community was seen as crucial to the success of foresight endeavours. Yet it was acknowledged that there are many stakeholders, organizations and communities that “we are not really in touch with at the moment”.

Building, sustaining and expanding networks with the wider communities is a key feature of foresight processes. For example, The Rockefeller Foundation’s experience with its Searchlight network of local scanning partners is one application of a networked approach to horizon scanning, and while Searchlight activities have recently been suspended, the network principle has not been abandoned at the Foundation. Other examples from the KnowLab include several network initiatives that were explored during the Open Space conference on Day 2. Importantly, for these networks to genuinely allow alternatives to emerge, they need to be built together and expand beyond ‘the usual suspects’, inviting the many and largely unconnected communities that are using the future every day to become more aware and able to learn together.

“ If these tools and these approaches and these gatherings and these convenings can



*serve as an infrastructure that is supported by a lot of different people – an infrastructure supporting the emergence of alternative narratives that are shaped not only by the protagonists that ask those questions for their own internal needs but for those who are struggling to imagine alternative paths to the future then it's justified. Otherwise honestly it's just a waste of space. Really. Because it's not contributing towards alternatives being able to emerge – it's just reproducing the same thing over and over and over again. And there's a certain distrust that I have towards whose interests is that serving – who's future is that perpetuating? ... If you think of it as infrastructure and how you are going to build it together, and contributing towards it being built together for me this would be a big contribution.* ”

(KnowLab participant reflection in plenary)

Thus, networks were more or less taken for granted as fundamental to furthering the capacity to use the future more effectively, but new emphasis was placed on acknowledging the power of “champions” within the local networks. A shift in perspective (may have) happened during the KnowLab, when participants realized that so far in communication and capacity building the focus of the foresight community has been on stakeholders, and not on champions. Champions were seen as key to sustaining continuous engagement with the

communities.

“ We needed people to think about alternative futures, so working with champions helps you to get people away from the on-going thinking and in a way I really hope our champion himself initiated and then he is connecting with other champions. [Organizations] have kind of global responsibility, but it's impossible to engage on a global scale [to have] the strategic dialogues that you want. But what you can do by working with champions and by them hopefully also giving new champions the capacity to start strategic conversations themselves – that's an even stronger way to engage. Therefore we talked quite a lot about using these champions not only with their ideas but also with their network. ”

(Post KnowLab participant reflection)

This conversation connected also to the role of activists and the difference yet complementarity of activism and champions. The discussion went back and forth on whether the fact that activists have more of a singular view of the future gives them a limited role in foresight, as elaborated earlier under Knowledge. The conclusion of the small group discussing these issues in relation to the Africa Future Forums and alternative futures for Africa concluded that:

“ You cannot on one hand engage with strong characters and use them as champions on one side and then ask them to be neutral after that. ”

(Post KnowLab participant reflection)

In the case of The Rockefeller Foundation, engaging internal and external champions, advocates and experts as partners in the processes of problem formulation and opportunity identification by the Strategic Research team is a balancing act – one that has evolved through several iterations to reach its current synergistic state.

“ I would definitely say [our organization] is a place where our belief about change in the world is that innovation is created at the intersection of domains whether that's in terms of academic subject-oriented domains or in terms of types of actors – corporate, NGO, academic, etc. And I think our belief is very much that you need all those different voices to actually have some new combination that creates innovation and so I think there's a great openness to corporate voices among other voices at the table; I think also a belief that those differences are important not only for how we create change in the world but also in how we staff here. [...] What are the models of enabling all the voices to come to the fore and then also having

*a sifting process that's both meaningful and also is done with integrity and what does that mean. Depending on the context that people are coming from, we might all be able to agree about getting some voices on the table but how participatory does the process have to be of sorting and to what extent can democracy help effectively illuminate potentially new innovative dynamic emergent opportunities versus is that process more about the insight of an individual or the spark of an idea of an individual.* ”

(Pre-KnowLab interview)

In summary, it was clear that an implicit value within the discussions was an egalitarian one, aiming toward equal participation and contribution of voices and perspectives, and sensitivity to who is included in the conversation and who might be getting excluded. Such inclusiveness, with its inherent diversity, is an underlying requirement for the exercise of contextualized collective intelligence and the kind of knowledge creation that is humble about knowing in advance.

## — Contextuality

Consistently, the discussion referred to the fact that foresight makes sense when contextualized in specific localities, examples and conditions. Some of the concluding 'strong statements' elicited at the end of the KnowLab

spoke to this:

.....  
“We are only able to do something of value to others when we are able to connect at an individual level to something that is meaningful to each individual context, and this connection is built both upon a rational and an emotional (fear, hope, desire) level. We should then find out through conversation what is this unique value proposition for each stakeholder/ individual (be it a policy maker or individuals in society) and find ways to engage with them in a meaningful way.”

.....  
“Formally build in less-directed, imaginative and diverse foresight exercises into highly structured processes to keep them relevant and adaptive to the context”

.....  
“Let's contextualize and make assumptions explicit.”

.....  
In these succinct statements we also see the way the value of contextualization is essentially entwined with the theme of Participation and dialogue. Conducting foresight projects in and with local communities in ways that are most relevant to their needs and visions came out strongly in the KnowLab. The above metaphor of 'connecting a thousand tents instead of one big tent' links the idea of enhanced engagement through multiple local networks with

relevancy and contextualization for the various nodes, as well as building in mechanisms to capture the feedback loops.

“UNESCO was very much initiating but they didn't have so much capacity yet to stay in touch and to have a process that is able to capture the feedback loops and that has been seen as a crucial element or as a recommendation to not only engage in setting up new initiatives but also to try to keep UNESCO perhaps as a helper that is able to detect what is happening and to capture the feedback loops.”

(Post KnowLab participant reflection)

Another challenge identified during the KnowLab process was finding ways to tailor foresight and evaluation outcomes and recommendations to different contexts and audiences. Many futures and foresight activities addressing society's most pressing problems are large-scale efforts on a regional or global level with multiple stakeholders and diverse audiences.

“And also then of course the challenge to tailor one's message and one's speech so the fact can be understood by whomever one is talking to. And also the recommendations because obviously we make recommendations with our evaluations – so how to speak into

*that mindset in a way that we can land somewhere. And that is of course another challenge that we have with our work, because we're dealing with the global community and there are all sorts of mindsets there especially if you do large-scale work. Anyway, I think even to just be conscious of it can help you also write the text in a way that can resonate with different types of mindsets.* ”

(Post KnowLab participant reflection)

Another aspect that requires careful attention in terms of contextualization is the capacity for dynamic adjustment of solutions to changes in the environment over time. Staying open to change within the systems in real time would create the conditions to continually re-evaluate and update solutions to dynamic problems in a timely fashion. And in the case of the Africa Future Forums, the possibility of reframing and avoiding attempts to colonize the future is in essence a move to contextualize the future, respecting the right and reality of the future being liberated from current, foreign, imported or inherited models.

“ *And emergence, because that's really where the added value is so it's about addressing not only problems but really looking at system failures. Where are current systems hitting their boundaries? Because policies are often developed within a certain context to address*

*certain problems by using certain solutions. However if your external environment is changing and we know that it's changing constantly, the solutions that worked in the past almost by definition are not optimal anymore for the future or even for the present. So you need a new way of how to look and to understand your system failures and to be open for change. To be open for the unknown there's an element of re-framing and engaging in there and inline there was also mentioned to us to de-colonize the future. That was especially relevant for the African futures because most people or most futures for Africa are quite negative.* ”

(Post KnowLab participant reflection)

One of the fascinating tensions that manifested during the KnowLab was between contextualization and generalization in the small group work on the cases. The intention behind the case studies was to anchor different forward-looking approaches and lenses in terms of futures and foresight in the social sector to some specific content and real-world examples of how the future is applied in practice within different organizational contexts. The five case studies depicted on-going forward-looking applications contextualized with one or more examples for detail and specificity. The idea was that the write-ups would serve as catalysts for the conversations between the small groups and the case representatives on Day 1, leading

to immersion and depth of understanding (e.g., about how the future was used in the specific case, about the purposes and objectives of the processes employed, about the organizational context in which these processes were embedded and how they were implemented, etc). From a methodological perspective, this first step was important since the action research approach that had been adopted for the project is grounded in specificity – i.e. that the initial level of evaluation would “stem directly from the sense and meaning that people make of their own experiences and work.”<sup>10</sup> (Appendix 1). In other words, to be able to evaluate anything, one first needs to understand the phenomenon under investigation on its own terms. Day 2 of the KnowLab was intended to generate case-specific recommendations based on the earlier immersions, and Day 3 would venture into cross-fertilization of ideas, potentially generating insights applicable across organizations in the social sector, with a dose of humility about ‘absolute’ truths. This approach was guided in large measure by the desire stated by the organizers that generic recommendations such as ‘be more participatory’ would not be as helpful as insights tied to the actual experience of applying foresight methods and approaches in the real-world situations that these organizations find themselves working in daily.

What we observed, however, was a strong ten-

dency among many in the case study groups to jump quickly to analysis before ‘soaking up’ the cases in dialogue with the case representatives and their experience of the situation.

“Perhaps most importantly, the structure of asking participants to present the case to the larger group illuminated some challenges for the process. While all participants were given a read-ahead, it became clear that many did not take the time to familiarize themselves with the cases. This created a clear imbalance, and some participants were asking questions that the case write-up answered. This consumed valuable time in our first group session, which was designed to allow the participants to explore the depth of the case by asking the case representative for further clarification. As our group very much wanted to move from description to analysis, it became difficult to keep what was a rather high-level group on task, and I think that some groups, particularly those with more foresight outsiders, were better suited to description than analysis.”

(KnowLab participant report)

This tendency to move quickly from description to analysis was not limited to just one group – and it brings to mind the earlier observations about the way expert knowledge is often experienced as didactic and static when it is shared out of context. As one participant mentioned,

“We had an interesting group dynamics – [an expert] wanted to give a lecture on foresight 101 and he did to our group and I had to honour him; he did it and you have to move on.” Taking an attitude of ‘beginners mind’ or ‘bracketing’ one’s expertise would seem to benefit experts most when engaging in collective intelligence processes that aspire to create new knowledge of relevance for everyone participating. The quick jump to analysis also left some case representatives and participants feeling unheard and/or misunderstood. This possibly contributed to the general sense of ambiguity and frustration experienced by many on Day 1 – and yet attempting to do away with all ambiguity, frustration and anxiety would be an idealization that in itself is dysfunctional from a group dynamics perspective since meaning-making is negotiated through misunderstandings, subtle power plays, and various other gestures and responses. As one participant acknowledged, speaking to the group’s case representative:

“Our group worked really well because [the case representative] was super good at just treading the line between constructive engagement and letting us just get on with misunderstanding stuff so thank you again. But I got that from everyone, so that was good. That might not have worked, and it did work, so it’s definitely number 1 on my list.”

(Post KnowLab project team meeting)  
And if there was difficulty focusing the attention of a group evaluating a specific process in context and keeping at bay the natural tendencies of knowledgeable people to quickly generalize and abstract before spending time to become deeply familiar with the specificity of the issues at hand – what can be said of groups evaluating an evaluation of a process or policy?

The case study on UNESCO’s Evaluation process as depicted through the evaluation of the Convention for the Safeguarding of the Intangible Cultural Heritage is an example of both an exception and a confirmation of the ideas about the value of contextualization and immersion above. If the KnowLab itself was an evaluation process where most case study groups worked to evaluate forward-looking activities or processes within an organization, the UNESCO Evaluation case was an evaluation of an evaluation of an international convention where neither the evaluation, nor the convention, were strictly speaking forward-looking activities. However, UNESCO’s Internal Oversight Service aspired to find ways to formally embed futures-oriented approaches in its evaluation process and so the case on evaluating the CICH was offered to the KnowLab as a starting point for thinking about how to achieve this. In addition, the theme of Evaluating Foresight / Foresight in Evaluation was one of the central inquiries in the KnowLab and so

the meta-evaluation character deserves special attention. And while this report is not the place to look at every aspect of its uniqueness, we would like to draw attention to the second-order contextualization that unfolded (or not) and its implications.

One participant wished to focus the group discussion on the actual evaluation process, immersing the group in the specific situation of evaluating a convention.

“ I wanted it to be really about the evaluation of the convention. So that took quite a while, to get to that, I think [...] what the convention was and how it all works and so on. So, it took a while to actually start thinking about the actual topic. But I think once we were there, yeah, it took off. And it went a little bit in all directions partly but thanks to the facilitator, he was doing a good job, he was really bringing the discussion back on to the topic. ”

(Post KnowLab participant reflection)

As in the other cases, here too, the importance of what was really going on in the case was highlighted, and the case representative was there as a resource to answer questions, provide additional detail and clarify anything that needed clarification so that participants could arrive at a good understanding of the topic, first on its own terms. It confirmed the need to form



Image: Curiosity by Krissy Venosdale (Flickr, Creative Commons)

“ The case ultimately worked for my group and it was really good to have something to anchor the work to (in the evaluation case). The flipside of that is that the case itself in terms of how it was prepared distracted from evaluation, it was focused on - it felt like the wrong content - it was around intangible cultural heritage, and I wasn't able to get people to anchor themselves in the case as it was intended. When we finally got there, we ended up with the types of outcomes that we were looking for so that was exciting. ”

(Post-KnowLab project team meeting)

In the second-order nature of this particular

case and within the principles of relationality and contextuality participants would reflect on how the evaluation was contextualized and the extent to which it resonated with the way the future manifested in the values of the Convention on Safeguarding of the Intangible Cultural Heritage. Then they could move on to how to evaluate the evaluation process on the convention. Delineating boundaries between the object of the evaluation and the evaluation itself resulted in a quick move from contextualization to universal principles of evaluation designed with the future in mind, just as we saw earlier in some of the other case examples tending to get on with the work of analyzing and generalizing about how things 'should' be before getting really curious about how things are.



# Theme 4: Complexity, Uncertainty & Openness

Reality is complex to begin with, and in foresight and futures work complexity becomes even more imposing, since it aims to make sense of the unknown. As Wendy Schultz<sup>8</sup> observes:

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“In the late twentieth century, systems thinking developments in the form of chaos and complexity theories enhanced understanding of the dynamics of intertwined human and planetary systems. These theories provided a paradigm of change as an emergent property of complex, adaptive living systems, explorable but rarely predictable.”

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The inherent unpredictability, uncertainty and non-determinism of social systems has given rise to a ‘Fifth Wave’ in Futures Studies, comprising novel frameworks and models in thinking about the future. Integral Futures, Causal Layered Analysis, Verge, Experiential Futures are some of the newer developments in the field, many of which permeated the conversations at the KnowLab, some more explicitly than others.

“Lots of different groups arrived at pretty core ideas about the future and what to think

*about so we saw ideas about complexity and uncertainty and openness come out of all the different groups. And we didn’t structure that, we didn’t steer them on towards it, so these are clearly things [that they are] engaged with.”*

(Post KnowLab project team meeting)

That is not to say, however, that these ideas were integrated smoothly. One point of tension was the still emergent nature of shared sense making frameworks (common languages) for thinking about the many different ways of using the future. This is the challenge of having a common language for the diversity of participants in the KnowLab and the discipline in general, as discussed in the section on *Multiplicity*.

Another point of tension is that of how to hold on to complexity on the one hand, and at the same time simplify phenomena so as to be able to work with them. Or as the quote attributed to Einstein states, “Everything should be made as simple as possible, but not simpler.” Foresight has the task of both preserving the complexity, while creating some order – certainly multiple versions of order – so as to have a positive (practical) impact, in our case

for human wellbeing. The following exchange exemplifies this tension:

“Participant 1: The reality is much more complicated, much more complex but how do you engage clients, and you have clients as well as we do and it doesn’t matter whether they’re public clients or private clients, it’s the same thing. This is something very necessary, this way of thinking seems necessary. On the other hand, it’s very unwelcome. Because people prefer to simplify it, people prefer to research for certain things [...] We’re trying not to simplify reality but at the same time, trying to be able to work with it.

Interviewer: To go ahead...

Participant 2: To go ahead and not be paralyzed by the complexity.”

(Post KnowLab participant reflections)

A similar tension was evident in the section on *Multiplicity* in our discussion of theories of change. Awareness of complexity and non-linearity of phenomena relevant to foresight and evaluation collided in some examples with the preference for causal linear models of change, and a general discomfort with uncertainty.

“ I had a meeting today [...] because we are planning a new evaluation [...]. And I'm trying to define the scope. And so we asked them with this topic what would be interesting for you? So they both said we want to know about the causal chain so basically they want to know: UNESCO does this and what comes out of it and really the causal chain. So what leads to what. So this is very linear thinking.”

(Post KnowLab participant reflection)

This tendency toward linear thinking and working were attributed to clients – however, upon reflection in the small groups participants became aware of it in themselves as well as in examples from the case studies.

This brought up the question of design: whether processes intentionally designed to work with the future, when limited to manageable causal diagrams, deform phenomena, obscure novel emergence and also forget the importance of circular flow of information and feedback from the field.

“ There were questions the group had regarding the degree to which it was possible for the organization to be confident that the organizational need for a linear process hadn't led to their misrepresenting the different areas. In

particular, the group noted that there seemed to be little opportunity for teams to check back in on their assessments of a field, and so be alert to changes that might demand a different assessment.”

(Post KnowLab participant reflection)

As a consequence, the small group on the Africa Future Forums for example ended with one key question for further reflection: “How do we strengthen thinking about non-linear processes?” The complexity of reality and phenomena calls for new ways of working with the fundamental condition of uncertainty. Thus, working in this area requires developing an ability to distinguish different kinds of uncertainty that pertain to different kinds of anticipatory assumptions and processes.

As a result it is quite uncomfortable at personal, group and organizational levels to embrace complexity and its inherent unknowability of novelty in complex emergence. Such discomfort is familiar for philanthropies, large NGOs and intergovernmental organizations that grapple daily with ‘wicked problems’ that are unique, complex and emergent. Furthermore the pressure to ignore fundamental indeterminacy is only compounded by the lack of an alternative approach.

“ But then the other thing that I realized at

a more macro level was that people were thinking of Search, Development and Execution in an overly linear way and they borrowed that model from basic stage-gate processes that exist in product development, they exist in drug research, they exist in venture capital funding decisions and the real difference in those environments is you have something where the uncertainty, risk and questions get reduced over time. So if you're developing a pill you can reduce the uncertainties and questions around it. In our work we work on what we call ‘wicked’ problems, very complex problems, so it's not a question of reducing all of the uncertainties or getting to real clarity in these stages, we needed to rethink that and realize that we're just going to have to make some commitments to jump into uncertainties, but at least we can be aware of and know what they are. We're always going to have to make a judgment call, we're always going to have to have a learning strategy built in through the whole thing, so what we do in Search we would need to reconfigure what the problem statement is at the end of Search because we would have learned a lot. [...] So how do we manage those reconfigurations and reformulations while not going all over the place, this became sort of a challenge. That's what we worked on and wrestled with over the years.”

(Pre-KnowLab interview)

Ultimately, the KnowLab concluded that it is not just about ‘tolerating’ uncertainty, but also about thriving in it and benefiting from it. This is captured also by some of the ‘strong statements’ at the end of the workshop, which both underscore the value of uncertainty, and connect the present and the future.



“Uncertainty about the future lets more of us have power over it than over the present”.



“Uncertainty is cool and requires living more in the ‘now’.



The KnowLab itself created conditions for the phenomenon of emergence to be both discussed and actually observed. The groups discussed emergence as it relates to futures work generally – the appearance of new patterns that are not reducible to those of their components: “that people together create more, it’s more than the sum of the parts”.

The topic of new knowledge and ideas emerging through the collective intelligence of the KnowLab was reviewed in the section on Knowledge. The space created by the Know Lab was valued and was seen predominantly as a safe space, as liberating, as catalyzing exchanges, supporting new ideas – even extreme ideas: “it was actually great to have such a space where people can exchange about these kinds of things”. Yet there were differing opin-

ions as to whether there was enough “play” during the KnowLab.

“The agenda lacked play, which is to say that it felt designed by adults for adults. [...] It seems that one of the intended outcomes was to engender creative insights. While I think this aim was achieved, I also think that this extraordinary group of people could have been put to play (rather than put to work) as a means of reaching some of the intended outcomes and outputs.”

(Post KnowLab participant reflection)

On the other hand, it was acknowledged that the participants themselves were very open to invitations for play and experimentation.

“We had a really interesting and good mix of participants who were optimistic, had a sense of humour, flexible, tried just about everything we asked - those are people who do what we do - and they let us play with it.”

(Post KnowLab project team meeting)

The inherent human capacity to be creative and generative depends on enabling conditions: what participants’ reflections are saying is that the KnowLab design didn’t allow for enough ‘play’, while the participants themselves would have welcomed more of it. It

raises the following challenge: when we are in the role of designing or facilitating a workshop or meeting or KnowLab, we feel compelled to be in control of the process and to be able to predict or influence the outcomes to some extent (as the artichoke example from the Knowledge section attests). But when we are on the receiving end of designed human-centred processes, our capacity to engage and contribute thrives on flexibility, creativity, optimism, humour and playfulness.

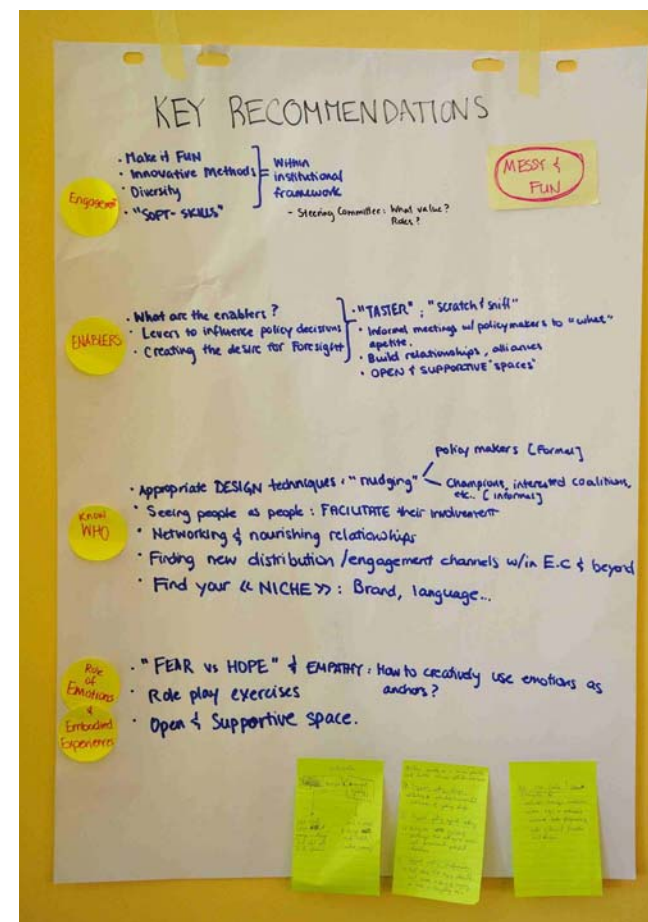


Image: Ispra KnowLab 2014/ © UNESCO



In other words, the complexity and non-linearity of the social systems being analyzed and impacted by foresight activities necessitates the use of methods that are in resonance with the characteristics of the phenomena. Yet the question keeps coming up – how do you actually do that?

“We are working with open systems and emergence and surprise are essential elements but how can you do that? How can you be more open for emergence? And from the discussion we came out with issues like spontaneity, improvisation.”

(Post KnowLab participant reflection)

A noteworthy insight from the KnowLab was “that through foresight you can have fun”. This reflects, in part, the design of foresight exercises so that “they are enjoyable experience for people”. But it also reflects an important attribute of the future – it is open. The future does not actually exist in the present and when engaged in conscious anticipation there is no choice but to imagine the future. This can make it easier and more fun when rethinking one’s models and processes in tune with a non-linear, emergent and complexity world-view. Several participants pointed out that foresight processes can be designed to include very open, creative activities.

“The small group had the feeling, which is the right feeling, that our process is quite structured. [...] I think they were suggesting that we put a bit of messiness in the process and this could help us in engaging with other stakeholders.”

(Post KnowLab participant reflection)

The Africa Futures Forums group also came to a recommendation that ‘learning to play => empower/permission to explore’.



Image: Ispra KnowLab 2014/ © UNESCO

These experiences and observations are consistent with the literature grounded in practice and theorizing about appropriate responses to complexity in general and in social systems in particular. Improvisation and spontaneity are some of those responses that are in tune with complexity, taking on a ‘yes, and’ attitude to emergent novelty. Importantly, however, they always go hand in hand with experiences of risk and the ensuing anxiety associated with it. The ability to cope with – and ultimately embrace – ambiguity and uncertainty as well as the anxiety they generate requires new skills and capacities – particularly to make sense of emergence, like learning how to listen for the cues in jazz improvisation<sup>26,27</sup>.

The conventionally known methods of reducing risk by increasing disciplinary control, and reducing anxiety by implementing rules, regulations and procedures that serve as defence mechanisms may have worked in a world that could afford to wall off some aspects of reality without significant side-effects or trade-offs and manage it as if it were a closed system. But the desire to recognize and even enable the freedom that is inherent to the open nature of reality and the social systems around us requires transformations in capabilities at all levels. For individuals and organizations the insights produced by the KnowLab point towards developing more futures literacy as the basis for effective interaction with our complex

realities, one of the ways of taking advantage of novelty as it emerges. As one participant in the KnowLab noted, “You can’t trick an open system into believing it is closed.”

In addition to spontaneity (which is closely linked to the capacity for authenticity) and improvisation (which suggests experimenting with new responses under novel circumstances which may feel anything but authentic), another important muscle that begs to be exercised is the reflexive muscle that brings into awareness the many ways we defend against anxiety

when facing the unknown. Once we recognize it for what it is – simply as anxiety to cope with uncertainty and ambiguity – we can learn to transform it into excitement (similar energies wrapped into very different narratives). Reflectively inquiring into our individual and organizational anticipatory assumptions offers a way to welcome the indeterminacy of reality. And when the unknowability of what will repeat and what will be different becomes a welcome source of inspiration then the capacities for spontaneity and improvisation can become sources of confidence despite the fear.

Yet the pressure of wanting to be in control and needing to be spontaneous at the same time is trying and paradoxical. Gregory Bateson discovered that novel responses often emerge in living organisms when they deal with, and transcend, such ‘double binds’<sup>28</sup>. Mary Catherine Bateson retells a story told by her father:

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“Double binds do create psychopathologies but they can also be used to provoke resolution or to stimulate creativity. There is an illuminating story that [Bateson] told of a dolphin used to demonstrate reinforcement learning in an aquarium show. In order to provide new examples in each show, the trainer rejects the performance that was rewarded the previous day, which frustrates and distresses the dolphin. Eventually, the dolphin transcends the process by a step to a higher logical type. Suddenly, with great excitement, the dolphin produces a long series of previously unobserved behaviours, having grasped the abstract notion that what is rewarded is novelty, a class of behaviours rather than any particular behaviour.”<sup>29</sup>

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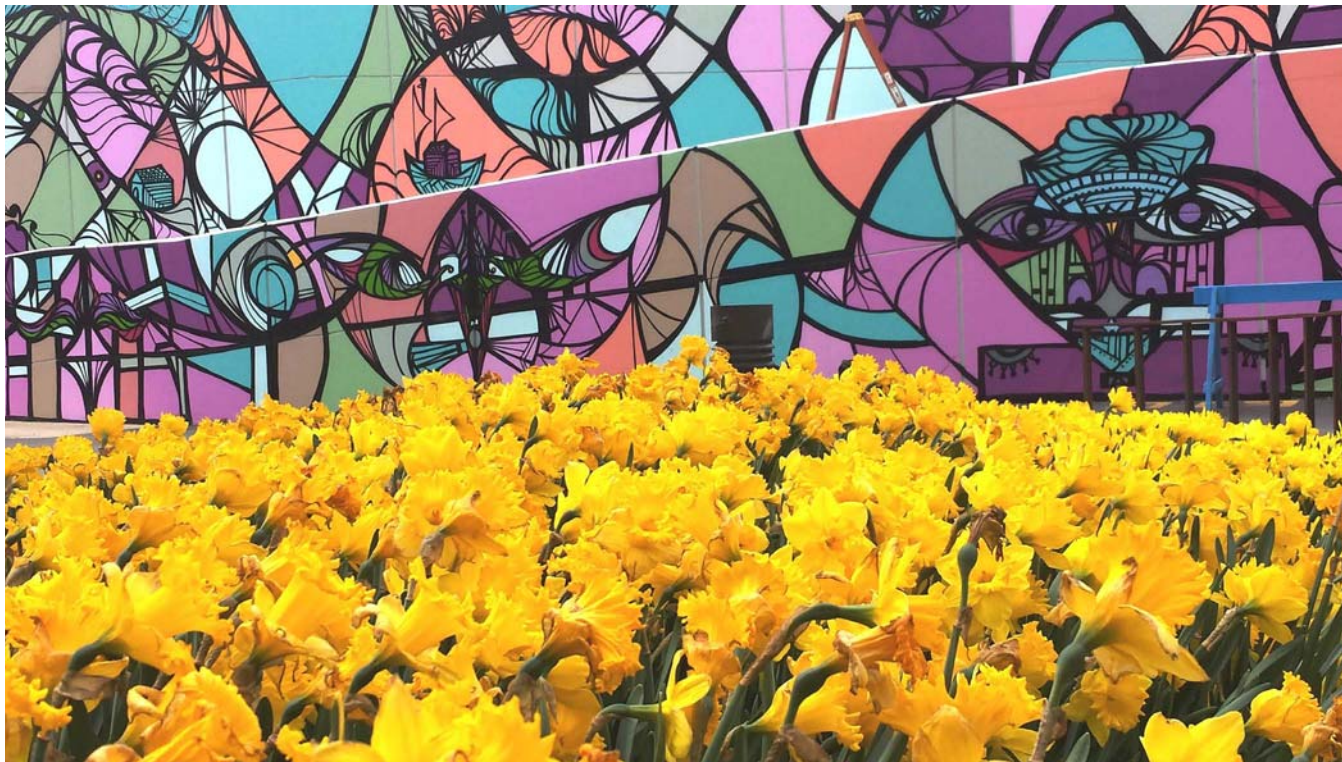


Image: *Playing with nature's paintbox* by Irina Todorova / © Irina Todorova



# KnowLab Reflections

The overall perception of organizers, facilitators and participants alike was that – despite its challenges – the KnowLab was a success.

“Given that the greatest strength and most glaring weakness of Futures Studies as a field/discipline is its lack of a theoretical and methodological canon, if not core, the Know Lab’s plastic, yet elastic, structure can and might contribute to the further development of thinking critically about how the future gets used, and abused, by a plethora of agencies, organizations, and governments. With this in mind, I am truly thankful for UNESCO, Rockefeller, and the JRC’s efforts to create this KnowLab, which might prove to be a landmark gathering, especially for those seeking to understand how foresight can be used to help improve the wellbeing of society. I am not aware of any other event in the field to bring together such a dynamic mix of researchers, practitioners, and interested parties from various sectors to engage with the way the future is used at this moment.”

(Post KnowLab participant report)

There was also a sense that something im-

portant is about to take off – that foresight and forward-looking approaches are close to becoming mainstream in the social sector.

“It seems to me that use of the future is on the verge - which is curious watching this because I’m not clear if it’s ready for show time, for big time. I think the next phase of trying things out and who tries them out, and how that gets documented, distributed, or whatever, is going to be pretty critical. Net/net, I think this is a pretty cool event.”

(Post-KnowLab project team meeting)

And for participants who came from fields other than foresight, the wide range of possible applications of Futures Studies and Foresight was experienced as a revelation.

“This was an intro to foresight for me and I got crazy excited about how it can apply. The first two days I felt it belonged to someone else but after we got to the evaluation exercise I could see 50 places where we could use it in our work and personally and just all over the place – it’s almost like a gateway drug.”

(KnowLab participant reflection)

## — People: diversity & tolerance

For many, the greatest strength of the Know Lab was its people. The diverse and interesting mix of participants inspired each other and contributed to an atmosphere of fruitful collaboration and disagreement – with optimism, flexibility, and a sense of humour.

“An impressive array of individuals representing an extraordinary mix of international organizations brought a truly global feel to the event, and the cosmopolitan ethos of the gathering did much to temper the European-ness (meant here in the best way possible) of our surroundings.”

(Post KnowLab participant report)

It was acknowledged that while diversity is always desired in terms of representation and for enhanced creativity, the capacity of a diverse group of participants to work really well hinges on the level of tolerance and hearing each other out. This was especially true with ‘stars’ coming together. At the KnowLab, it was felt that participants had enough common language to get on even when they came from

different backgrounds (e.g., innovation/corporate on the one hand and academic on the other), and that how these conversations were facilitated also made a huge difference. And yet, there was also a sense that some people may have felt “like they couldn’t channel their energy or their skill or their competence...no avenue for them to really contribute at their best, somehow.”

(Post-KnowLab project team meeting)

It may have been that the KnowLab implementation got caught up in the tension between a learning-by-doing approach and the concern to ensure specific outputs from the sessions. As a result the design, conceived with an eye to the important emotional and psychological dynamics of a creative collective intelligence process, did not always get put into practice.

“*I wished for our group there was time to build some group rapport before we dove into an analysis of the case. It didn’t feel fully like a safe space yet and we were already diving into ‘what did you mean here?’, ‘what did you mean there?’ in the understanding/grounding phase. And that had a lot to do with the personalities in our group as well but it made very difficult for rapport building.*”

(Post-KnowLab project team meeting)

Nevertheless, by most accounts, the small groups were thought to have worked very well and “catalyzed the creativity and freedom-loving crowd that we had.” The plenary, on the other hand, got mixed results, “better for some, less good for others.”

## — KnowLab Design & Agenda

One of the most commonly shared comments about the KnowLab’s design was its ambitious and aspirational quality. Participants reflected that they got a sense there was significant thought and care that had gone into crafting the agenda but also that “too much was packed into the design” and that “too much was attempted in the time allotted.” The general sense was that some aspects had been overdesigned for and micromanaged, leaving little room for transition time and reflection.

“*I thought it was too much rushing through things and not enough time for people, you know, with that capacity and experience to just get deep, deep, deep into the case studies with each other and have enough time to reflect and think because from the morning to the evening to the dinner and not enough time to just – whew – to just reflect.*”

(Post-KnowLab project team meeting)

Another consequence of the ambitious design was that it hindered people’s natural flow of energy and creativity by asking them to participate in a pre-designed task when they were already ‘voting with their feet’ on other preferred modes of engagement.

An insight emerged that to better utilize the potential of a high-performing and talented group the design needs to allow for lower points of energy for people to quiet down and restore themselves before coming back fully engaged.

“*From my perspective, we could have utilized this amazing group more, I think we underutilized the group, but I think you need lower points, lower points of energy in a meeting to come back from it.*”

(Post-KnowLab project team meeting)

However, for some sessions the impression was reversed – while there was general agreement that too much design was a barrier to creative participation, some activities (such as the planned prototyping session) perhaps lacked enough clarity or guidance.

“*I liked very much the idea of prototyping and that didn’t fly either. Some things you don’t need to give too much structure to people, but perhaps on the prototyping an example or a*

*little bit more guidance would have been helpful.* ”

(Post-KnowLab project team meeting)

We already talked about the importance that participants placed on ‘play’ (or the lack of it) in collective intelligence processes under Complexity. Another – related – observation was that some of the designed sessions were perhaps out-dated compared to newer forms of facilitated dynamic co-creation models.

## — The Price of Adaptability

In spite of these obstacles and the agenda’s ambitious original version, the organizing and facilitation teams were credited for their agility and adaptive approach which “brought a sense of calm to the gathering” and allowed for creative, on-the-fly adjustments by taking regular ‘pulse checks’ and realigning the design to fit the emerging needs of participants.

“*What worked: I think this group, the organizers and facilitation team, the attitude about adapting and then adapting – pretty phenomenal. Not many high-performing teams can adapt that fast constantly, and it was pretty much constantly. That was pretty amazing I thought.*”

(Post-KnowLab project team meeting)

Some of the positive effects of adaptation came through in Day 2 and 3 when the agenda was updated to incorporate an ‘Open Space’ conference approach which appealed to both participants and organizers alike - although it felt at first “a little bit of a challenge to try out but it worked.”



Image: Ispra KnowLab 2014 / © UNESCO

However, the way adaptation and agility were accomplished demanded exceptional stamina from the organizers, and especially from the facilitators. Debrief meetings were held every evening, often till late after dinner; new facilitator notes were printed out for the start of each day; lunches were carried out as working sessions, taking time away from interaction with the other participants.

“*The regrouping every day and being*

*agile – that was great, but I think what it meant for a lot of people in the room is that from the minute we woke up to the minute we would go to bed we were never given the room to step out of the roles and that was shattering. It ended up working really well because we needed to be agile and in that sense really good but for me personally just not having three minutes to not be in a debrief or rebrief or in a bus [...] I could have done with a 10 minute break and a coffee before our facilitator chats, I would have contributed more if I had more time to play and to rest.*”

(Post-KnowLab project team meeting)

This brings back the image of the dolphin from Bateson’s story and the need to develop a new set of behaviours of “a higher logical type”. With flexibility and adaptability becoming crucial to the success of complex human-centred activities such as Knowledge Labs and participatory foresight processes, aiming to achieve agility by ‘doing more of the same’<sup>30</sup> - i.e. more debriefs, more instruction, more micromanagement – quickly becomes counter-productive because it spirals into distress and fatigue. And so while the flexible schedule was an enabler to some innovative and creative solutions such as introducing the Open Space conference on the fly or simply helping to foster an atmosphere of authenticity and trust in the small groups, the flip side of that in practice

was a trade-off and a cost to the organizing and facilitation teams who felt they had to keep abreast of developments constantly and in a coordinated fashion.

“*The meetings for facilitators were useful in providing a space for refinement and reflection, and I found them valuable for the commitment they showed to our getting each day right, and for being able to respond to events in the room rather than ploughing on regardless with a fixed schedule. However, having sponsors in the room made raw reflection difficult, and the fact of the meetings’ existence encouraged, to my mind, an attitude that everything on the schedule was provisional. It’s an unsatisfying sensation to feel that despite three hours discussion an agreed-upon change may still later be revised or discarded. More recognition should have been given to the fatigue of ears and brains: more focused meetings after some time for facilitators to refresh their minds with a break from exchange and interaction might have led to more productive and positive discussions.*”

(Post KnowLab participant report)

An alternative approach might be in cultivating skills in improvisation and presence – being alert to the changing moment-by-moment experience and needs of the group and being empowered to act responsively (and responsibly) without an agreed plan. This also means

developing higher levels of trust within project teams to respond spontaneously and creatively to changing circumstances and emerging needs.

## — KnowLab Organization

A recommendation for improvement in future KnowLab iterations was to pay special attention to the way information is captured during the event. One participant noted that “some kind of written synthesis, to be able to remember even what was said the day before, that I could build on” would have been helpful. Not just the balance between verbal, written and visual content was emphasized in relation to better understanding but also the growing expectations for high-quality data capture was noted as a success factor for human-centred collective intelligence processes.

“*The visual harvesting: we had it as an idea in the program and we had a potential but in my experience perhaps we need professionals, visual harvesters, I think that would have improved the case study presentations. So we had the potential and the material but we didn’t have the people with the time or the skills to do it properly. And the idea of the storyboards and the cases moving through the days, I think it was a very strong idea but it didn’t appear. That’s a learning point for me, that next time we should invest in visual harvesters – they are*

*not so many, it’s not easy.*”

(Post-KnowLab project team meeting)

The administrative support, logistics and organization of the event were seen as competent and “extremely high-calibre” while also observing that the support team was under duress much of the time as described above. From an organizational perspective people were guided well, they knew “where to go and what to do, more or less, which from a rather complex proceeding is pretty good.” Some level of ambiguity or lack of clarity about roles and responsibilities and how things were going to get done may have taken away from time or energy that could have been spent on content or adaptation and moving things forward. But generally the logistical support was considered “outstanding”.

“*I’ve seen conferences get botched by bad logistics and we moved 40 people up and down and around, fed them, got them on and off buses and through security actually remarkably well.*”

(Post-KnowLab project team meeting)

The conference venues got mixed reviews: mostly worked but at times had some constraints. The choice to locate the first day of the KnowLab at the JRC facility in Ispra, Italy,

and the second and third days at Villa Borghi in Valanno Borghi, Italy raised some doubts at first but in reality for many

“it was useful in the sense that it avoided boredom. Human beings are creatures that like to experience new things. The change of location was really good, and the feel from the first day and the second day was accentuated because of that.”

(Post-KnowLab project team meeting)

Individual preferences were divided and some of the constraints of the facilities acknowledged.

“I mention this as I firmly believe that space has a dramatic effect on thought, and while I am quite smitten with Italy in general, I think the venue, and in particular the underground conference rooms, felt a bit antiseptic. Clearly, the venue was exquisite and situating the opening day at the JRC was a great move, but the space used for the second and third days was less than ideal. With that said, I think the organizing and facilitation team made the most of it, although common challenges, from acoustics to break areas, did throw a bit of a wrench in the overall flow of things.”

(Post KnowLab participant report)

## — Case Study Reflections

The design choice to introduce futures and foresight through a case study approach versus other means (such as an expert panel discussion, for example) raised multiple questions.

“The open question for me is around the design: I think that we felt that in terms of forward-looking approaches / use of the future and foresight and how it relates to the social sector there was a lot of fuzziness and questions there so I think that the decision to anchor this design around the five case studies was to anchor very different people who are talking about how to move forward with very differently defined set of practices and understandings and lens in terms of foresight. The idea was to take all this difference and fuzziness and anchor it to some content – I think that was some of the thinking and the theory behind the case approach, so I’m really trying to understand was it off at that level, or did it actually work, or were there implementation challenges or tweaks that we could have made, so that’s the question for me: was it approach or implementation?”

(Post KnowLab project team meeting)

Overall, the case studies were seen as po-

tentially an appropriate mechanism to demonstrate different uses of the future and as catalysts for those discussions, had time allowed to go deeper into them or had they been better aligned.

“In a room full of really smart people, the basics to guide a conversation on foresight and evaluation – not actually that complicated for this crowd, so I don’t think we needed actually as much coaching and hand-holding in terminology and evaluation. I think the case studies actually would have worked really, really well if they were aligned with each other a little bit better and written to a slightly different purpose in a way.”

(Post KnowLab project team meeting)

Alignment between the case studies, however, was not easily accomplished because they represented different approaches of how institutions were applying foresight and also because these forward-looking organizational practices were at different levels of maturity.

“So there are three things: there’s one element of grounding foundations for these theoretical concepts; the other thing as a tool and method but very applied side of that; and then you have real live applications – so I think all three elements were present in the case studies and in the end my feeling was that by

*the prototyping we'd align them and that didn't work fully." [The evaluation case] was asking very practical and simple things on the tools; the Africa case was a little bit more advanced because that was the next step – how could we even be better, cleverer? And also Rockefeller already established a lot of things so there was difference in maturity. ”*

(Post KnowLab project team meeting)

Many small-group participants reflected that the cases ultimately worked for their groups and that “it was really good to have something to anchor the work to.”

*“ I think one example of a case study that worked very well was the one on evaluation and to me it came out quite clearly in the presentation as well because that's where one very emergent thing came out, and I may be biased because this is my area of expertise. ”*

(Post KnowLab project team meeting)

The consensus on the case studies seems to be that they were not the most efficient way to get to the core of the learning because they “made people work really hard just to understand, and then we asked them to deliver more around the cases and I think they had too much climbing to kind of figure out what our core thing was.” On the other hand, they were

a good mechanism to surface novel, emergent insights.

*“ The dilemma – which was both practical and content dilemma – was how to deal with specialized knowledge that we couldn't brief people on and couldn't develop a shared language about evaluation and foresight prior to addressing the case studies. So the case studies were a mechanism for providing a lightning rod for people to think about evaluation and to think about foresight – sharp people who could quickly make the link because the case study evoked the link in a practical way. I think that led to some insights that are not going to be necessarily relevant to either the participants or the facilitators or the observers but are relevant for me for instance that would be very difficult to arrive at in another way. ”*

(Post KnowLab project team meeting)

## **— Group Dynamics** **Forming, Storming, Norming, Performing – and Adjourning**

From the perspective of group dynamics, Day 1 was interesting in that it seemed to move the small teams and the large group quickly through the first two stages of Tuckman's model<sup>31</sup> of group development, namely through the Forming and Storming stages, before

continuing with the Norming, Performing and Adjourning phases. Organizational development experts more or less agree that such stages are necessary and inevitable in order for a team to grow, to face up to challenges, to tackle problems, to find solutions, to plan work, and to deliver results.

It has been observed that groups tend to evolve during the life of their work together, generally beginning with conforming behaviours that seek acceptance and fitting in, moving through a challenging period of establishing individuality often through confrontation or provocation, followed by a phase of collective norm-setting that implicitly or explicitly establishes the rules of the game and how decisions are to be made in that particular context, which finally allows the group to get down to business and focus on the task at hand with a sense of motivation and autonomy (if it ever gets to that stage – and even then, never flawlessly). When the group outlives its mission, it naturally disbands, potentially dealing with feelings of separation and ‘mourning’. Temporary groups, such as a 3-day convening or KnowLab, go through similar dynamics in compressed form – the phases may be experienced as brief and intense if the group is mature enough to handle the pressure and move toward performing effectively and authentically, or they may ‘glide’ through the process more superficially, seemingly untouched by the



emotional hues of inter-subjective experience (Teflon-like) and never quite move beyond the initial forming period of high conformity and low authenticity. In some cases groups may get stuck in the storming phase (Velcro-like) when confrontation becomes ever more contentious and escalates to animosity. The KnowLab group of participants quickly and adeptly dealt with emotionally-charged issues without suppressing conflict and divergence or succumbing to pressures to conform while at the same time doing so in ways that were skilful and good-natured. By noon on Day 1, the 'forming' stage had occurred in plenary and in the small groups and by close of business, 'storming' was well underway.

▶ The 'Speak to Me About' exercise was more than an ice-breaker – it allowed participants to reflect on the identities they were bringing into the room and introduce themselves in ways that truly mattered to them. There was a shift in the room from a collection of professional 'others' to a subtle sense of a shared 'we'. In that early phase, the simplicity of a 'Talk to Me About' sticker helped the group bond; it also obscured a lot of the complexity behind people's allegiances and multiple roles that were about to play out during the three days.

▶ The organizing institutions presented their work and concerns sincerely and embodied a spirit of authenticity – they expressed genuine interest in the views and opinions of partici-

pants on their processes and how to improve them.

▶ The facilitated dialogue in plenary framed the KnowLab in a language that was both about 'critique' / 'improvement' and also of honouring the three organizations for opening up their real-life practices for review by participants in the spirit of appreciative inquiry. It could be said that the language itself modelled and mirrored the behaviour in the groups: participants were given license to rationally analyze, critique, dissect and deconstruct the work offered by the institutions through the case studies, while at the same time appreciating their experience and accomplishments as pioneers in social foresight and their courage to seek further advancement in their own work and in the field in general through publicly sharing and exposing their current efforts.

▶ However, it almost felt like the design had erected a wall between organizing institutions and participants, albeit unintentionally, and it largely remained intact throughout the event, although its contours softened in subsequent days. Case representatives (and facilitators) were positioned as different from the other participants: on the one hand, they were proactively inviting scrutiny by this "all-star group" from a place of authenticity and vulnerability, and on the other – they were perceived as the ones with the power in the event (holders of the agenda, design, resources and arguably, the messages) – as well as the ultimate bene-

ficiaries of the learning but also of critique-like input. One facilitator remarked:

“ I feel today or the last couple of days have really made me want to renew my focus on how to translate or how to speak across or how to frame things so there is no line – so there are no sides. I don't know if that's a product of the 'case study/not case study' grouping, if that sets up a 'them and us' kind of thing I don't know. ”

(Post KnowLab project team meeting)

In other words, it would not be an exaggeration to say that all participants experienced tensions and anxieties in one form or another during the KnowLab process. One participant noted the following day that people had observed that Day 1 had felt unusually confrontational, "as if there was something in the air or something". A number of factors and their interactions could have contributed to the sense of conflict, frustration, anxiety and defensiveness that characterized the afternoon of Day 1, from mundane things like jet lag to more dramatic concerns such as organizational and personal reputations on the line.

In hindsight, what may have helped during the initial immersion sessions (without pretending it would iron out all the wrinkles on the human face of group processes) would have been to

more closely follow the initial design that called for more in-depth ‘inquiry’ and ‘appreciation’



Image: *Listen* by Britt Reints (Flickr, Creative Commons)

at first, before moving to ‘advocacy’ and ‘problem-solving’. In other words, initially giving the cases and the case representatives ‘a good listening to’ before being tempted to offer ‘a good talking to’ so that participants would deeply understand the uniqueness of the cases under scrutiny in order to contribute to their improvement with some relevance, while case representatives would feel less scrutinized in order to stay open to the insights generated by the groups. Equally important was the opportunity to share some specialist language, building up a common vocabulary, and in particular

ensuring that the conversation starts from where people are at – not putting anyone in the position of being “less of an expert”. This meant, given the focus on foresight, that the initial stages of the conversation needed to provide an opportunity for people who do not usually think about the future in an explicit way to gain some familiarity and comfort with this specialized terminology.

Gestaltists would say that people picked up on what was ‘in the field’; neuroscientists might add that mirror neurons, evolved to enable us to learn by imitation and experience empathy as social beings highly dependent on social context for survival were being activated through ‘mirroring’ in generating this overall sense of tension that fell over the group in the afternoon of Day 1. From a psychodynamic perspective, existential anxieties and the anxieties of work and power dynamics triggered defence mechanisms manifesting in projections, introjections, splitting, transferences and counter-transferences, evoking childhood responses of rebellion, sibling rivalry, blaming and shaming, etc.

▶ For example, at one point toward the end of Day 1 when the teams were to get together and reflect on the case-specific feedback a comment was made ‘Now go back to your rooms’. This instruction visibly triggered childhood associations and reactions ranging from

quiet disobedience to outright indignation.

It seems important to hold in awareness how deep some common hurts go, and yet we could also learn to disentangle ourselves from their spell when the situation clearly does not threaten us quite in the same way as the original one that triggered our impulsive reactions and defences.

Finally, from a social constructionist perspective, we verbally and non-verbally ‘language’ our experience and continually co-construct and re-construct our identities and ways of going on together<sup>24</sup>. Specifically in the Know-Lab, framing the gathering as an ‘all-star’ group that would ‘critique’ important organizational processes in three leading international institutions, asking participants to contribute with their experience and specialized knowledge, while also staying open to divergent opinions – people who held multiple roles and overlapping affiliations in the context of the larger group, with diverse backgrounds and degrees of familiarity with the concepts of foresight: all this placed very high emotional demands on everyone involved and at this level of complexity, it could have gone in any direction. The Know-Lab group however proved highly resilient and by Day 2 it was ready to get down to real business (i.e. ‘norming’ and ‘performing’).

“ *One thing that worked really well and I don’t think it was intentional I think it just hap-*

*pened that way: there will always be, in my experience of group dynamics, tensions will come up and it's important when they come up and I think what worked very well is that they came up on the first day mostly. And the next two days to some extent we managed to finish off on a – not so much on a high note but on consolidation – and a lot of these things, 'we're from different backgrounds', even the stardom issue, they all came out on the first day. And by moving the venue, they somehow stayed there (laughter) – it was coincidental but that just somehow worked out.* ”

(Post-KnowLab project team meeting)

The closing ritual at the end of Day 3 – a modern-day libation ceremony – performed by one KnowLab participant and renowned storyteller provided the space and context for linking past, present and future and for expression of emotion associated with loss, separation and mourning. It signalled closure, and the group was ready to say its goodbyes and embark on their journeys home.

In summary: collective intelligence processes need to allow room for group dynamics to unfold naturally for new learning to happen. Skilful group facilitation can play a key role – however, different group facilitation styles, just as different approaches to foresight, inherently represent different views (theories or meta-

phors) on how change and learning happens in human systems, leading to different outcomes. Purists might look for congruence between the purpose of the collective intelligence exercise and a particular theory of change (and respectively, facilitation, and evaluation approaches). Practitioners working from a perspective of complexity and emergence might play with alternative theories of change (and hence, metaphors and approaches for organizing, futuring, facilitating and evaluating) - knowing that each reveals some aspects of reality while obscuring others.



Image: *Gestalt of Denver* by Brandon Sanchez (Flickr, Creative Commons)

# Conclusions and initial implications for practice

The KnowLab “sought to engage a diverse array of experts in a collective intelligence process to evaluate, improve and generate actionable insights for both the organizing institutions and the philanthropic, development and public sectors in general” on questions such as the following:

- ▶ How can we identify new ways to tackle old problems, such as poverty, oppression, food insecurity and the destruction of ecosystems?
- ▶ How can we better sense and understand change?
- ▶ How can we increase the success of human efforts to create a better world by becoming more effective at using all kinds of anticipatory systems (different ways of understanding the role and nature of the future)?

The focus throughout this project has been on practicality – what are some actionable insights that organizations can directly implement to improve the way they engage the future in tackling ‘wicked problems’ that affect vulnerable populations worldwide? The findings from the KnowLab may be immensely actionable for some and less so for others - it depends on how one defines actionability.

Some insights and recommendations are very concrete and specific: for example, introduce play, improvisation, gaming and experimentation into foresight work. However, perhaps the most impressive insights were on a meta-level: still actionable, but of a different nature to what we are ordinarily accustomed to hearing. They are not of the ‘what to do differently on Monday morning’ type – although they could be. The urge to get to recommendations on how to do things better, faster, more efficiently, and smarter was somewhat dampened by the realization that change of a different order is necessary as these kinds of improvements (incremental, first-order changes) have been mostly harvested. The changes necessary to do foresight better for the social good require second- and third-order shifts that could start on Monday morning but will probably take some time to nurture as they involve cultivating new skills and sensibilities – i.e. transformations in personhood and in our group and organizational work that tend to develop over time. We’ve mostly reached the limits of better, faster, cheaper, smarter; incremental changes to our existing strategies, tactics and processes have yielded valuable results in the past but are now bringing diminishing returns.

Or to use a different analogy, information-driven foresight which draws upon weak signal-, drivers- and trends research and analyses (as opposed to sense-making and values-driven foresight) can be likened to financial markets – the more symmetrical (i.e. open, transparent, of a certain scale, etc.), the more the information is absorbed by the market immediately as it is made available. In other words, information-driven foresight will increasingly fail to create competitive or comparative advantage since everyone knows what everyone else knows, and the added value is already absorbed in the system. Therefore adaptive and reactive approaches (as in ‘I’ll be the first to know something that’s happening out there and act on it quickly’ – which is the logic behind weak signal detection) are running their course. So what’s next?



Image: *What's Next* by Crystal (Flickr, Creative Commons)

The new frontiers lie in adding different kinds of learning – learning to create new futures together, not become better mirrors, describers and predictors of future developments in the outside world. This requires a radical shift in our thinking and behaviour. It focuses attention on a different set of challenges – how to navigate a world of values which are diverse and still work together. This is about a major shift in perspective, moving from the ‘objective observer’ point-of-view that believes it is possible to know the world ‘out there’ enough to make a bet on the future to a perspective that invites everyone who shares in common futures to engage in continuously shaping emergence with their values and emotions intact (not left hanging in the cloakroom).

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“We replace the captivating gaze on the world as it is with value based explorations into what it could be.”<sup>32</sup>

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Generative and pro-active approaches creating future worlds also require a new language. On the surface the tension between academic/technical and everyday/business language during the KnowLab appeared to be a problem of semantics – easily overcome by taking care to create a common vocabulary. However, a more in-depth understanding reveals that language is more than mere words – everyday/business language is grounded in the dominant discourse of control and prediction and any-

thing that challenges this perception is easily dismissed as ‘abstract’ and a ‘digression’ from the task at hand. Language that problematises the mainstream notions of how work gets done or how change happens can be considered obscure or philosophical. On the other hand, people who have spent time thinking about and practicing complexity are unwilling to succumb to the illusion of best-laid plans that are hard wired with the metrics and expectations of prediction. The two paradigms appear irreconcilable and open the gate for dynamics of inclusion and exclusion.

For example, although the KnowLab showed that ‘participation and diversity’ are shared core values, it also demonstrated a critical divergence in understanding what this means in practice. In the dominant paradigm, ‘participation and diversity’ implies reaching out to many different people, often experts, for a wider set of diverse opinions on a topic or including a wide range of people, often experts, in a so called Delphi process to hone opinions and come up with the best possible take on a problem, ensuring quality of research and stakeholder buy-in. For the emergent paradigm, participation and diversity means including everyone who will be impacted by a certain change initiative (e.g., intervention or convention) as subjects shaping the way forward – not to get them to buy into a certain predesigned agenda but to actually co-create the agenda as

partners and participate in its implementation.<sup>33</sup> Or to paraphrase the Action Research principle of collaborative inquiry: doing foresight with people, not on people. And while this difference is often recognized in our ways of talking, it is seldom practiced.

The KnowLab itself comprised participants of a wide range of geographies, backgrounds and expertise but none were people who grapple with poverty daily, none were children (i.e. the future) from underprivileged social systems or marginalized classes, none were people whose rituals or crafts or cultural practices were threatened by globalization – i.e. no one represented vulnerable populations although many work in those contexts. In other words, we seldom notice our blind spots and inclinations to privilege some form of knowledge or participation at the expense of others. And as we continue doing so, we reinforce and perpetuate the status quo, not just because we may be insulating ourselves from those people and perspectives we say we value and really want to hear but by failing to detect and when possible, nurture the experiential learning that empowerment embodies. Even if we recognize that we surround ourselves with like-minded people who may come from different geographies and backgrounds but often come from the same universities it is not enough to simply enlarge the sample size. That is the old ‘objective observer’ stance of scientific management

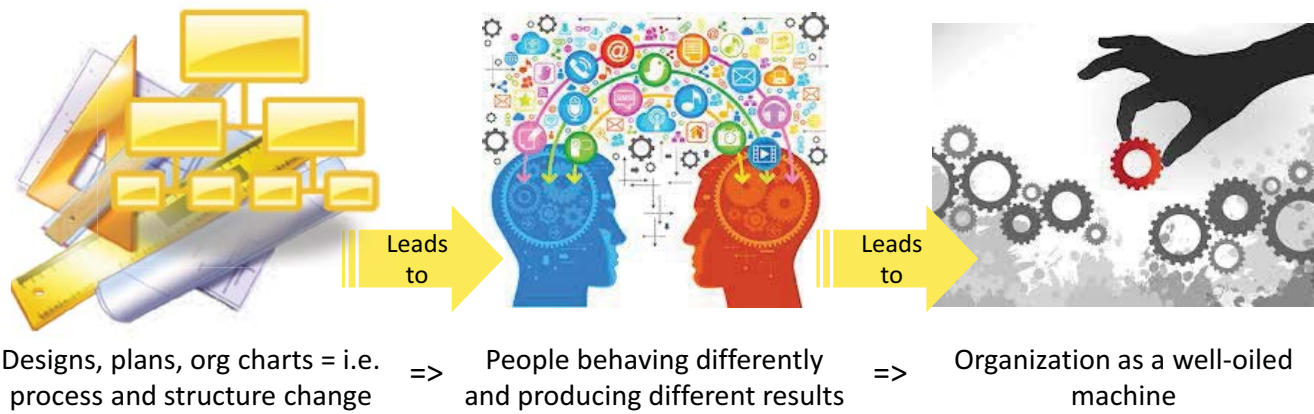


Fig. 4: Scientific View of Organizations. Adapted from *Integrating Theories of Social Organizing*, Ashridge Business School Webinar, 2012.

which presupposes that leadership and decision-making are objective and separate, where good plans and designs lead to good outcomes and orderly organizations.

And this is perhaps the most important and difficult of the KnowLab's practical take-aways: focusing attention on new ways of enhancing, respecting, reinforcing and learning from local collective intelligence and future-creating processes or KnowLabs. The point is that the collaborative process that was carefully co-designed into the Ispra/Borghesi KnowLab to allow for authenticity, novelty and contextual relevance can also be incorporated and practiced at a local, everyday level.

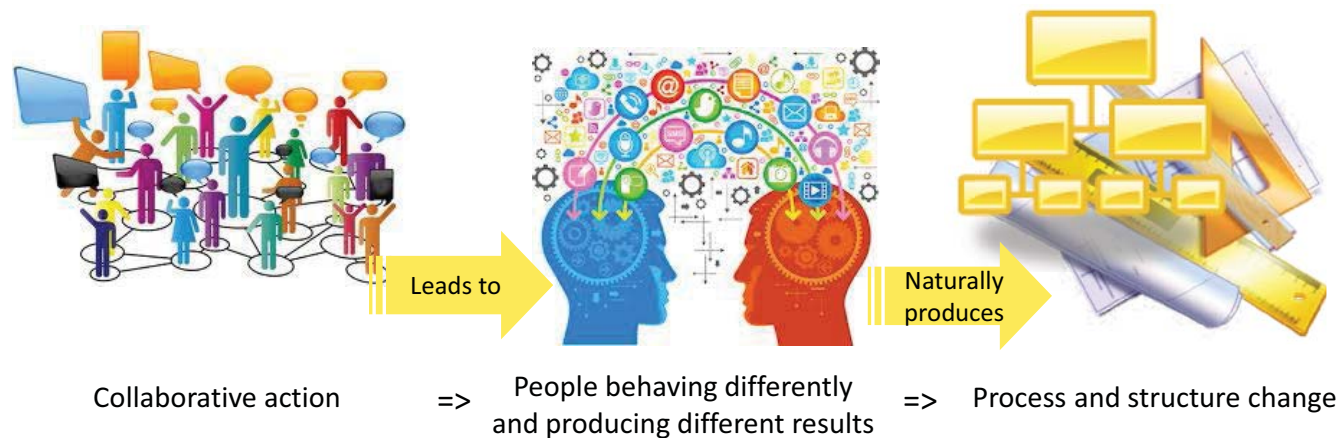


Fig. 5: Social View of Organizations. Adapted from *Integrating Theories of Social Organizing*, Ashridge Business School Webinar, 2012.

This approach is informed by a social view of organizations<sup>viii</sup> and the belief that when people think and behave differently, they produce different results which lead to new opportunities, processes and structure change (i.e. process-as-product). In this view, leadership and decision-making are inherently relational and changes in the conversations we carry on together, coupled with a heightened self-reflexivity as a particular kind of action, are change interventions *per se*.

Changing how we do things is a very practical challenge. It is also the reason why we have devoted equal attention to the KnowLab process in this report as to the insights and recom-

mendations generated during the event. Or to use one of the KnowLab metaphors elaborated above, the heart of this specific artichoke could only be tasted by peeling it the way we did, with the participants that were present and the conversations that took place, in context. Process and content are not divorced from one another – they are intimately intertwined.

As for the ‘the future’, there is no doubt that it is used in multiple ways in organizations throughout the world. A crucial distinction can be made on the basis of what we learned from the KnowLab conversations – one that parallels the distinction noted above between the planning and the complex/emergent/doing perspectives. One way of using the future is as a means to perpetuate what we already know by seeking to defend existing practices and structures based on images of the future that are ontologically and culturally preserving and justify continuity. Another, partially incompatible approach, embraces a paradigm that seeks to appreciate time/place specific meaning – giving greater weight to the novel, creative and improvisational nature of change. Each has its strengths - the former possibly enhances the quality of research and as a consequence, the impact of interventions, while at the same time preserving the existing structures and power distribution (which inevitably leads to unintended consequences on the ground). The latter creates new worlds and new futures, empow-

ering the people on the ground, while at the same time shifting power away from the people and organizations who facilitate these processes (at least in the ways that we know them). As the KnowLab participants acknowledged, foresight can be subversive and empowering – the question is: what are the guidelines for practice that enhance people’s capacity to detect and act on opportunities? How to engage the future in ways that privilege empowerment? And importantly, “who is engaging how with whom”? ix



Image: *Empowerment* by Brian (Flickr, Creative Commons)

Conventionally, foresight has been used to further empower those already holding considerable power: governments, corporations, the military, and international organisations. Many of these systematic and explicit users of the future seem to have benefitted from

the better-quality information and intelligence generated by foresight processes (think Royal Dutch Shell, RAND, SRI, etc). What would happen if – instead of investing in more sophisticated foresight systems – philanthropies, NGOs and intergovernmental organizations rethought foresight not as an intelligence-gathering mechanism but as a future-generating change intervention *par excellence*, seeking to co-create ways of appreciating and inspiring the future, emerging from humanity’s universal anticipatory activities, that empower communities to produce their own meaning? Foresight can certainly be used to better inform decision-making and will continue to do so, but nourishing the capacity to imagine and understand the purposes of the future collectively could liberate other energies – of hope, of attention to putting values into practice in the present, of continuity as living change – might not such an approach bring a much higher return on investment and many-fold increase in impact? Strikingly the bigger opportunities emerging from such processes would stem from greater ownership by the people who collectively co-create futures to better understand and act today.

If taken seriously, this shift poses important organizational questions. It means rethinking an organization’s *raison d’etre* (and not devising new ways to justify its current existence); it also means reimagining oneself as a partner in

world-forming and futures-generating processes whose outcomes can neither be predicted nor claimed by anyone in particular but are widely owned and dispersed. The organizations – philanthropic, developmental and international – will continue to play an important role in this partnership, with expertise, investment, facilitation, networking, etc., but their boundaries, and power differential, will soften and blur. In such a scenario, they will need to relinquish their control on outcomes as defined and measured by them and lean into the ‘not knowing’. They will also need to learn to live without taking all the credit for success as well as all the responsibility for failure. The role of partner is no less demanding or important – but it challenges a key Western value: the hero’s journey<sup>34</sup>. Or as Harry Truman famously noted, “It is amazing what you can accomplish if you do not care who gets the credit.”

And the alternative? The alternative is to carry on doing more of the same<sup>30</sup> or doing it better, faster, cheaper, smarter – but as paradoxical change goes, this will only serve to exacerbate polarities and erode trust in global organizations while vulnerable and underprivileged populations increasingly self-organize and take their futures into their own hands. It’s already happening – the choice to extend the boundary of inclusion beyond foresight for self- and organizational empowerment and to partner in reinventing the future with those who are al-

ready doing it is ultimately a choice concerning politics, values, moralities and ideologies.

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“To responsibly address the question of ‘to what kind of future can I contribute,’ is to face complex questions of the good. ‘For whom would such an achievement be valuable; for whom would it be oppressive; what are we to do with multiple traditions of the good?’ The traditional claim that science is concerned with what is, rather than what ought to be, is now reversed. [...] Inherent in this view is an understanding of human action as issuing from shared intelligibilities. By and large, we go about our lives in ways that ‘make sense’ within the relations in which we participate—simultaneously reflecting and potentially transforming tradition. From this standpoint, activities become valuable, worthwhile, or moral from within relational activity. [...] Choices concerning the future building outcomes of research should not, then, be matters of personal integrity but of relational responsibility—responsibility to the social process out of which morality emerges. As proposed elsewhere<sup>23</sup> given multiple traditions of the good, moral decision-making might ideally rest on dialogic process—a deliberation among relevant parties. We approach a social pragmatics of morality.”<sup>32</sup>

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Image: *Diversity in Harmony\_NY 12* by Dasic Fernandez (Flickr, Creative Commons)





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# Appendix 1: Methodology

Foresight is an evolving field, and so the KnowLab aimed to take advantage of recent developments from a range of perspectives – evaluation, tech investing, innovation, and more. In order to anchor the analysis in actual practices the KnowLab started by assessing the work of three pioneers in the application of foresight to enhance societal wellbeing: UNESCO, The Rockefeller Foundation and the Joint Research Centre of the European Commission. The objective was to generate proposals for new, improved ways to use foresight and to pose key questions about its use. The five case studies aimed to ground participants in the ways that these institutions use foresight and provide the KnowLab with a common knowledge base from which recommendations could be made.

Research for the case studies drew on the ‘learning history’ methodology alongside traditional social science methods. The learning history methodology<sup>11</sup> was developed by social scientists, business managers and journalists at MIT’s Center for Organizational Learning in the late 1990s (later to become the Society for Organizational Learning). This approach allowed for the building of relationships between researcher and practitioner, enabling the

research to uphold the Action Research principle of collaborative inquiry: doing research with people, not on people. It included interviews, observations, discussions and review of literature and other printed and online materials.

“Learning History is a process of recording the lived experience of those in an action research or learning situation in which researchers work

collaboratively with those involved to agree the scope and focus of the history, identify key questions, gather information through an iterative reflective interview process, distil this information into a form which the organization or community can ‘hear’ and facilitate dialogue with organization members to explore the accuracy, implications and practical outcomes that the work suggests.”<sup>35</sup>

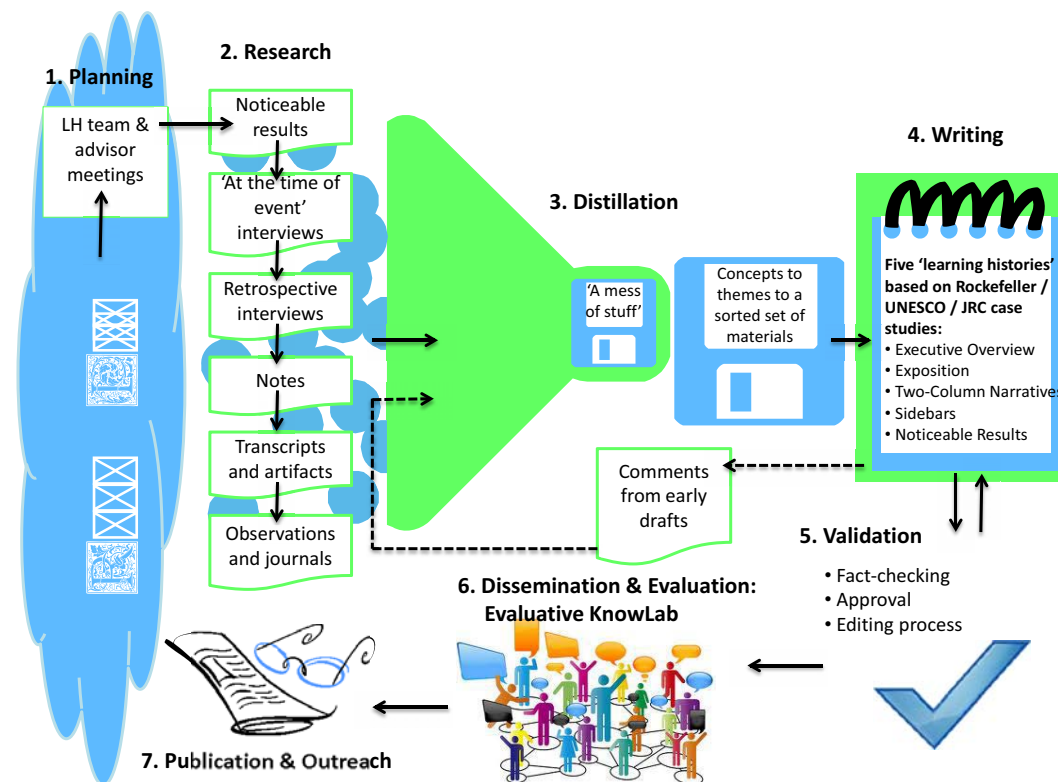


Fig. 6: KnowLab Learning History process, adapted from Roth G, Kleiner A. Field Manual for the Learning Historian: Center for Organizational Learning, MIT;1996.

## — Research

The methodology takes an analytic and interpretive lens that considers a broad range of resources that inform knowing and meaning making. Because of the nature of this initiative – focusing largely on retrospective accounts of the practice of integrating the future in decision-making systems within the three organizations as a starting point for the KnowLab collective intelligence process – the learning history methodology<sup>10,11</sup> seemed particularly relevant.

Analysis was further informed by Thematic Analysis<sup>12</sup> and Discourse Analysis<sup>13</sup> with the support of software for qualitative data analysis Atlas.ti. It included the following sources:

- ▶ Case study interviews (pre-KnowLab) and follow up interviews (post-KnowLab) – over 35 hours of audio recording.
- ▶ Transcripts and document review
- ▶ Project team meeting attendance
- ▶ KnowLab audio – approximately 29 hours of plenary and small group discussions recorded over a 3-day period
- ▶ KnowLab visuals
- ▶ KnowLab observation through participation
- ▶ Notes, journals, facilitator reports
- ▶ Evaluation surveys

Research questions guiding the pre-KnowLab research phase were the following:

1. What are the diverse understandings and meaning of the future and the role of the future in specific case study examples from UNESCO, The Rockefeller Foundation and the EC?
  - a. What are the different ways in which the future is conceptualized?
  - b. What are the stories about the use of the future that the different organizations tell?
  - c. What is taken into consideration when making specific recommendations and decisions?
2. What specific tools and methods have been used to integrate the future into the work of these organizations and specific case study examples?
  - a. What different tools and specific methods have been used?
  - b. What are the key actors and how do they coordinate?
  - c. How can the effectiveness of these methods be assessed? What are the perceptions of the effectiveness and utility of the methods?
3. What recommendations can be made on how to improve the role of and use of the future and specific tools in the work of development and philanthropic communities?

Research questions guiding the post-KnowLab research phase were:

1. What are the diverse understandings and meaning of the future and the role of the future in specific case study examples from UNESCO, The Rockefeller Foundation and the EC?
  - a. What are the different ways in which the future is conceptualized?
  - b. What are the stories about the use of the future that the different organizations tell?
  - c. What is taken into consideration when making specific recommendations and decisions?
2. What specific tools and methods have been used to integrate the future into the work of these organizations and specific case study examples?
  - a. What different tools and specific methods have been used?
  - b. What are the key actors and how do they coordinate?
  - c. How can the effectiveness of these methods be assessed? What are the perceptions of the effectiveness and utility of the methods?
3. How do understandings and meaning of the future and the role of the future evolve in processes of collective intelligence?
  - a. In specific case study examples:

- i. What are changes in the ways in which the future is conceptualized?
  - ii. How have the stories about the use of the future shifted?
4. What overarching theoretical, conceptual and methodological insights have resulted from collective intelligence processes?
  5. What recommendations can be made on expanding/enriching the role of and use of the future and specific tools in the work of development, philanthropic and public sector communities broadly?

## — Overview of Cases

Participants were presented with a pre-read packet containing initial, brief overviews of each case – not full learning histories – yet aiming to retain the spirit of a ‘jointly told tale’. Fully-fledged learning histories for the three institutions will be produced as internal reports and they will include insights from the Know Lab case study groups as an additional layer of information.

The case studies were developed according to the following template as a guide:

1. Evocative introduction to set the scene – illustrating an incident, a brief example, and/or character – use of visual and sensory imag-

ery, emotional context, brief quotes.

2. Description and history of the project and/or organization
  - a. Main ‘characters’ – presented through their roles and coded for anonymity.
3. Main points/themes that characterize the case – regarding the way the future is constructed and applied:
  - a. Methodology for applying foresight – implicit, explicit (if relevant);
  - b. Overarching philosophy of the role of the future – implicit, explicit (if relevant);
  - c. Main principles and aims in applying foresight;
  - d. Include quotes from participants (could be written in a classic style in which the quotes are interpreted in the text following them, or in a Learning History format in 2 columns).
  - e. Could include, if relevant: core organizational narrative; organizing metaphors, perceptions and visions for success, opportunities, sites of tension, contrasts, doubts, & debates.
4. Conclusions and Summary
  - a. Return to some of the examples in the text and summarize
  - b. Questions for the KnowLab?
5. References (if applicable / i.e. internal documents provided by the organizations)

## Case Study 1: Exploring Alternative Narratives for Africa: The Africa Future Forums



Image: *Now is the Future* by South African Artist Mr Thabang Machaba; painted during the three days of the All Africa Future Forum / © UNESCO

The development and application of explicit foresight methodologies has a long history at UNESCO. In 2013-2014 specialized foresight activities at UNESCO were primarily initiated by the Foresight Section of the Bureau of Strategic Planning. This Section was subsequently disbanded and its functions distributed throughout the organization. Different activities continue to deploy explicit foresight methodologies, in particular in the areas of education, science, and social sciences. Activities include organizing different events which serve as “laboratories for ideas” regarding ways of envisioning the future and informing relevant action as well as publishing relevant analyses.

Examples of such events are the UNESCO Future Forums which began in 2009, during which interdisciplinary discussions and explorations of the future take place among diverse groups of participants including artists, scientists, policy makers and others. As stated in its documents “The point of a Future Forum is not to predict the future but to use the future to better understand and motivate choice and

action today.”

Among these Future Forums is the series of Africa Future Forums. The events that make up this case study were designed and implemented in the context of an effort to renew foresight work at UNESCO with the aim of advancing the theory and practice of using the future for the organization as a whole and for Member States.

▶ Interviewees for Case study 1 were program specialists and external consultants.



Question that this Case had for the KnowLab: [What are new ideas for the format and content of the next Africa Future Forums?](#)

# The UNESCO Internal Oversight Service (IOS):

## Case Study 2: The practices of the past as the solution to humanity's future: Evaluating the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage

IOS provides independent oversight including internal audit, evaluation, and investigation to support the Organization's functioning. The Evaluation section of the IOS has the purpose of providing evidence-based information on the effectiveness of UNESCO legislation, policies and standards. Recent Evaluation reports of this section address the standard-setting work related to four of UNESCO's standard-setting instruments in the Culture sector including The Convention for the Safeguarding of the Intangible Cultural Heritage (CIHC).

In the year of the tenth anniversary of its adoption, an evaluation of the implementation of the Convention was conducted by IOS. The purpose of the evaluation<sup>36</sup> was to generate findings and recommendations regarding the relevance and effectiveness of the standard-setting work of the culture sector with a focus on its impact on legislation, policies, and strategies of Parties to the CIHC, i.e. to see "if the Convention matters, and how it works in practice"<sup>37</sup>. It aimed to identify the results of

ratification, integration and implementation of the CIHC in different Member States.

▶ Interviewees for Case study 2 were evaluation specialists, chiefs of sections and external consultants.



Question that this Case had for the KnowLab: **How to engage with the 'future' more explicitly in UNESCO Evaluations of the implementation of standard-setting legislation?**

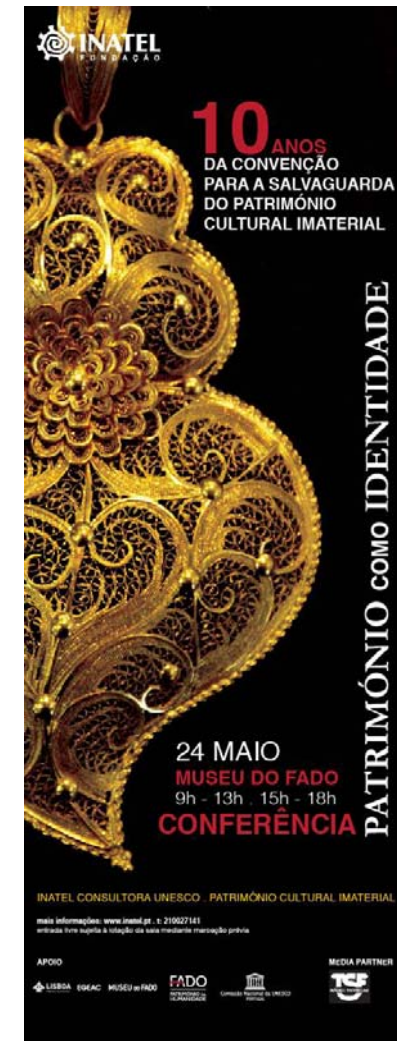


Image: Conference "HERITAGE AS IDENTITY - 10 Years of the Convention for the Safeguarding of the Intangible Cultural Heritage", Lisbon, Portugal, May 24th, 2014 / © UNESCO

# Foresight at the Joint Research Centre of the European Commission:

## Case Study 3: The Future as a Safe Space for Exploration and Reflection: Foresight at the Joint Research Centre of the European Commission

DG JRC conducts research to provide independent scientific advice and support to EU policy development. It has headquarters in Brussels and several sites including Ispra in Italy, Geel in Belgium, Petten in the Netherlands, Karlsruhe in Germany, Seville in Spain. With the first activities in technological foresight starting in 1989 in the Institute for Prospective Technological Studies (IPTS), DG JRC is a long-standing provider of foresight intelligence, performing many studies over the past decades. DG JRC has also been active in developing methodological guides, such as the on-line foresight guide “For-Learn” (2008), as well as trainings and networks on foresight.

Recently the scope of forward looking activities has been expanded with the establishment of a new unit based at the DG JRC headquarters in Brussels, focusing on innovation in public policy through foresight, horizon scanning, and behavioural sciences. The new unit is also exploring the possibility to integrate and complement these disciplines into a Policy lab for innovation in public policies aimed at better

engaging stakeholders and citizens and at improving the effectiveness of EU policies.



Image: Global Food Security, Time Horizon 2030 / © DG JRC

Some of the projects on which the unit is working on are:

- Eco-industries: Four potential paths towards a sustainable economy
- Tomorrow's healthy society: Research priorities for foods and diets
- Global food security
- The future of standards and standardisation

▶ Case study participants were policy analysts, unit managers, heads of unit, and external consultants.



Question that this Case had for the KnowLab: [What are possible places for improvement of the JRC Foresight processes?](#)



# The Rockefeller Foundation

The Rockefeller Foundation's Strategic Research Department is a strategy function that aims to identify pressing and dynamic problems across the Foundation's four thematic priority areas (Advance Health, Secure Livelihoods, Revalue Ecosystems and Transform Cities) and assess the potential for impact in addressing the identified problems. The Rockefeller Foundation cases that follow are examinations of two different but interrelated phases in the Foundation's process of identifying new opportunities to improve the wellbeing of humanity.

## Case Study 4: Detecting Dynamic Problems: New Horizons for Scanning at The Rockefeller Foundation

**Detecting Dynamic Problems** is an account of the "Scan" phase and the still emerging processes employed by the Foundation to surface pressing problems with momentum for change.

Each year, the Strategic Research Department produces a set of dynamic problem spaces (typically 10-12 per Issue Area from an initially even larger list that it generates) and facilitates executive and senior leadership in selecting 3-7 problems to pursue for further analysis ("Search"). For each problem space, early evidence is provided on why the problem is both pressing and potentially dynamic. Questions asked of each problem may include:

- What's driving the problem? What are the implications for poor or vulnerable

populations?

- What is the urgency and forward-looking trajectory of the problem, its scale and geographic scope?

▶ Case study participants were senior, executive, mid-level, junior staff, and administrative staff and external consultants.



Question that this Case had for the KnowLab: *What could be new ways and approaches for the Strategic Research team to detect dynamic problems? How could they go about building a scanning network fit for purpose and at an affordable price that also ensures diversity of perspectives and yields sufficient novelty?*

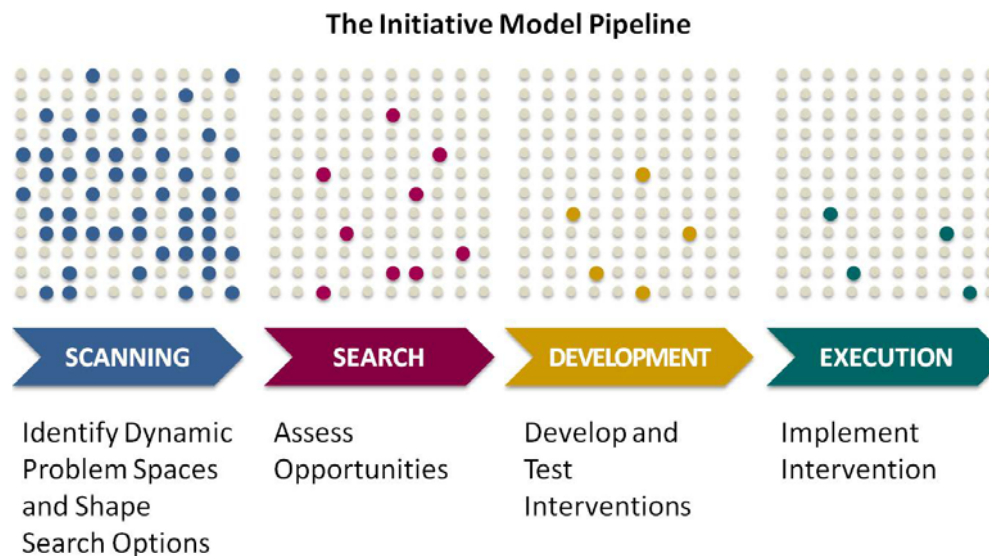


Fig. 7: The Initiative Model Pipeline / © The Rockefeller Foundation

# Case Study 5: Assessing Opportunity for Impact: The Urban Food Insecurity Search

**Assessing Opportunity for Impact** describes the “Search” process for assessing opportunity potential around the identified problems, illustrated with an example of the Search on Urban Food Insecurity in Developing Countries.

Search is a focused and analytical assessment of the most promising opportunities surfaced through Scan. It follows a defined methodology that is rigorous, structured, and sequential, enabling an evidence-based comparison of diverse opportunities and, ultimately, decision-making. Search is also bounded in time and grant-making to support a predictable flow of expenditure and opportunities moving from the early stages of the pipeline toward the more time- and resource-intensive work of Development and Execution. “The primary objective of the Search phase is to test the validity of potential opportunities for Initiatives in Development and ultimately Execution phases”.

Searches are performed in up to two cycles per year with four months for research. This rhythm not only allows ideas to move through the pipeline quickly and regularly, but at least as importantly it enables relative (as opposed to absolute) decision-making. The Strategic Research

Department conducts three to seven Searches per cycle and facilitates executive and senior leadership in selecting the opportunities with the greatest potential for transformative impact to be further studied and developed.

▶ Case study participants were senior, executive, mid-level, junior staff, and administrative staff and external consultants.

**?** Question that this Case had for the Know-Lab: How could a quick Search surface the most promising areas of innovation and emerging solution approaches? How can The Rockefeller Foundation more efficiently and deeply assess dynamism around potential areas of opportunity within its four month, resource limited Search process?

## Key Decision Criteria at Each Phase

As we move through each phase, we expect to assess potential work against decision criteria; those criteria we are likely to learn most about at each phase are highlighted below

Overarching Criteria Going Into Each Phase:	Scan Prioritization	Shaping Into Search	Search Into Development	Dev Into Execution
1. Pressing Problem	✗	✗	✗	Continue to monitor and test assumptions →
2. Dynamic Space	✗	✗	✗	Continue to monitor and test assumptions →
3. Opportunity for Significant Impact at Scale		✗	✗	✗
4. Fit with RF		✗	✗	✗
5. Ability to Implement				✗
6. Fit with Portfolio	←—————→			
✗ High-level view (where possible)	✗ Early intelligence		✗ Significant intelligence	

Fig. 8: Key Decision Criteria at Each Phase of the Initiative Model Pipeline | © The Rockefeller Foundation

# Appendix 2: Concluding 'strong statements' from Day 3 of KnowLab

## Using the Future to More Positively Impact Society's Wellbeing

1. It is OK to be uncertain.
2. Uncertainty is cool and requires living more in the 'now'.
3. Foundations should use the future to make choices.
4. Foundations should use the future to co-create with communities.
5. Foundations should accept the provisionality of decisions.
6. Help understanding: people, desires & hopes and make decision makers aware when they take decisions.
7. Formally build in less-directed, imaginative and diverse foresight exercises into highly structured processes to keep them relevant and adaptive to the context. i.e.
  - a. Evaluation
  - b. Program/solution/implementation
  - c. Decision-making processes
8. Use the future to DISRUPT the present (narrative, system, etc). It is through disruption + 'crisis' that change happens.
9. What use is the future when it is being taken away by climate change?
10. Focus: do less with more. Don't try to do more with less.
11. Building futures literacy is part of creating the capacity to be free.
12. We stop viewing sustainability as a single, fixed target.
13. Institutions have views and biases that act as filters in how they understand and make decisions: make this explicit and build in other filters.
14. With the future as a frame: I want to impact people's lives today as I help them secure their lives for tomorrow – whatever tomorrow will bring.
15. Understand your own mindset first before studying those of others.
16. Foresight in evaluation & evaluation of foresight.
17. "Any useful idea about the future should appear to be ridiculous" (Dator's 2nd Law) \*Not all ridiculous ideas are useful.
18. One Percent Rule: Foundations can benefit from advance teams / vanguard.
19. I want to found the futures/foresight of philanthropy practice, if it doesn't exist already.
20. We are only able to do something of value to others when we are able to connect at an individual level to something that is meaningful to each individual context, and this connection is built both upon a rational and an emotional (ex: fear, hope, desire, etc.) level. -> We should then find out through conversation what is this unique value proposition for each stakeholder/ individual (be it a policy maker or individuals in society) and ways to engage with them in a meaningful way.
21. Help Africans leverage our culture and global best practices to (re)invent new futures from which we directly benefit.
22. 'Tools' or 'methodologies' won't be useful without reflecting on:
  - a. How you think about 'the future'
  - b. How other people think about 'the future'
23. Democratic institutions (government – federal, local) are not the other. They have power & should be used. It's important to talk about how they can use foresight & how they

can be included in foresight processes.

24. Who is influencing our futures?
25. If culture eats strategy for breakfast, then 1. Skip breakfast, 2. Eat lunch or 3. Know “my” culture and its capacity to be an asset to stifle or transform.
26. AUDACITY
27. Solutions don’t exist in the real world.
28. Engaging with Futures Stars [youth unemployment poses negative claims on future].
29. There is no such thing as ‘failed foresight’ (only failure to act based on our insights).
30. Reflect on the value of tools and processes for practitioners vs. others involved in using them – jargon can lead to alienation; only sometimes a framework is enabling for all.
31. Use future for inclusion and bring future in our work on equity, participation.
32. Using foresight methods to accelerate the building of new social capital for the future.
33. In foresight we all belong. Foresight makes time & space; Foresight faces challenges; Foresight opens possibilities; Foresight sees opportunities; Foresight heals; Foresight all.
34. We are now living a moment when the capacity to understand the way the future is used is inadequate to the challenges faced by humanity. Therefore there is an urgent need to advance the development and diffusion of futures literacy.
35. Use the FS to camouflage subversion of the Present.

36. Use the FS to serve the FS.
37. Beware the informational share cropping and pay attention to fairness for those you engage.
38. Let’s contextualize and make assumptions explicit.
39. Let’s not take ourselves too seriously.
40. Populate the development planning literature & process – national development plans, poverty reduction strategies – with alternative futures underpinned with alternative action-planning-M+E frameworks. This is practical, integrated & divergent.

41. Like the future, foresight belongs to everyone. Make accessible through application with social change organizations.
42. Uncertainty about the future lets more of us have power over it than over the present.
43. Our Futures and theirs are the same. Know thy neighbour’s FS.
44. Use different views of future to introduce diversity in organized institutions in order to disorganize it, keep it alive and more able to achieve its purpose.



Images: Ispra KnowLab 2014 / © UNESCO

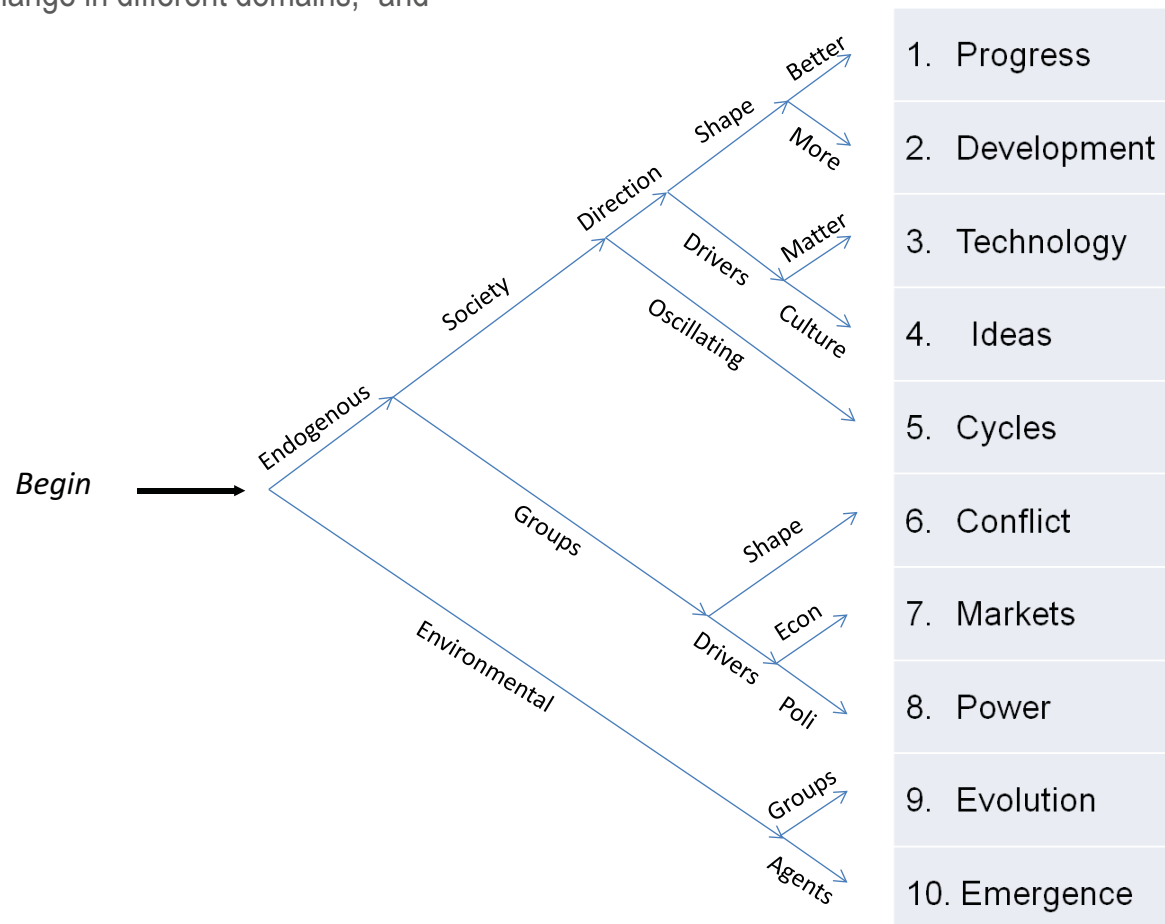


# Appendix 3: Theories of Social Change

In the words of Peter Bishop, “Social change can only be explained by different theories that are distinguished by critical assumptions”<sup>38</sup>. And while a theory is “an explanation for a pattern of change in different domains,” and

an assumption is “a belief about the world and its people that is difficult to support or refute,” a critical assumption is “an assumption that distinguishes two or more theories.”

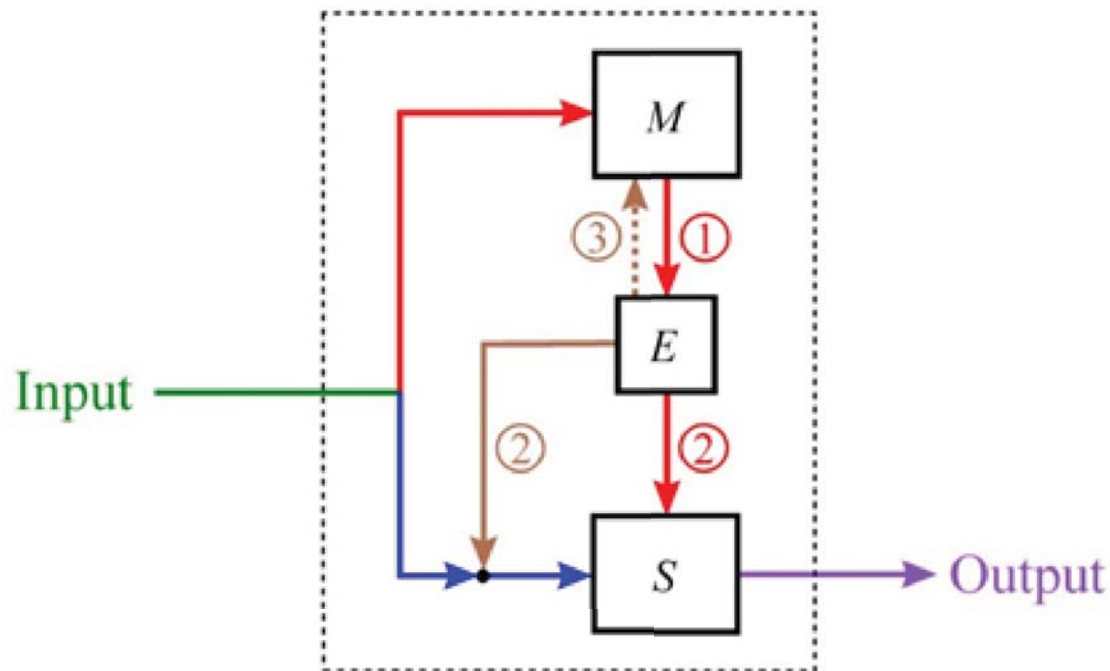
The critical assumptions under the Social Change Theories mapped above are:



- ▶ **Progress** – assumes universal standard of value and worth
- ▶ **Development** – assumes consistent direction
- ▶ **Technology** – assumes materialism and the means to manipulate it
- ▶ **Ideas** – assume culture, goals, intentions
- ▶ **Cycles** – assume recurrence of macro states
- ▶ **Conflict** – assumes struggle among interest groups
- ▶ **Markets** – assume competition among producers and consumers
- ▶ **Power** – assumes direction by a specific group
- ▶ **Evolution** – assumes successive interactions with the environment
- ▶ **Emergence** – assumes bottom-up independent agents

Fig. 9: Social Change Theories - Critical Assumptions by Peter Bishop. In *Social change and futures practice*. American Behavioral Scientist. Nov-Dec 1998

# Appendix 4: Anticipatory Systems



S : object system  
M: model of S  
E : effector system

This diagram attempts to capture Robert Rosen's Anticipatory Systems approach to describing how the future can enter into biological systems, both conscious and unconscious. Thinking about the cases under consideration here that relate to the use of the future for decision-making one of the ways that the terms of this model can be specified is to see S as the subject of interest for a decision-making system, for instance clean water, M as the model or set of anticipatory assumptions that allow the imaginary future to be described (note there are many different models or methods for inventing descriptions of the imaginary future(s)), and E as the potential actions that are suggested by the working of the model M to generate anticipated outcomes. Obviously, in the representation of Rosen's approach there is a direct role for the inputs, what is happening or understood to be happening (emergent) now, and the modality or instrumentality of E, as an effector can impact directly or indirectly on the causes (of water availability or quality). Similarly there are feedback loops between effectors and models for imagining the future. (Riel Miller)

Fig. 10: The Anticipatory Systems Diagram by Robert Rosen. In *Anticipatory Systems: Philosophical, Mathematical, & Methodological Foundations*. Oxford, UK: Pergamon Press; 1985.

# Appendix 5: People

**Judith Aidoo** – Chief Executive of Caswell Capital Partners Limited (“Caswell”), an Accra based merchant bank. (KnowLab participant)

**Mario Bazán** – Executive Director of FORO Nacional Internacional, a Peruvian Think-Link-Act Tank. (KnowLab participant)

**Rachel Bergenfield** – Senior Associate with the Strategic Research Department at The Rockefeller Foundation. (KnowLab participant, project team member and case representative).

**Jessica Bland** leads Technology Futures research at the UK’s innovation foundation, Nesta. (KnowLab participant)

**Cristiano Cagnin** – Advisor at the Center for Strategic Studies and Management Science, Technology and Innovation (CGEE). (KnowLab participant)

**Fred Carden** – Lead Technical Advisor at the Knowledge Sector Initiative in Indonesia. (KnowLab participant)

**Young-jin Choi** – Director Social Invest-

ments at Impact in Motion, Munich. Formerly with 3M as New Ventures Manager. (KnowLab participant)

**Emanuele Cuccillato** – Policy Analyst at the Foresight and Behavioural Insights Unit, DG Joint Research Centre (JRC) of the European Commission. (KnowLab participant and project team member)

**Peter De Smedt** – Foresight Analyst at DG Joint Research Centre (JRC) of the European Commission. (KnowLab participant and case study facilitator)

**Vincent Defourny** – Director of the Division of Cooperation with Extrabudgetary Funding sources, the responsible division for mobilizing voluntary contributions for UNESCO. (KnowLab participant)

**Fred Dust** – Partner at IDEO, working with leaders and change agents to unlock the potential of innovation networks in business, government, and society. (KnowLab participant)

**Nadia El-Imam** – Founding Director and CEO of Edgeryders, a network of 2300 citizen

experts in 40+ countries and social enterprise with the same name. (KnowLab participant, media and outreach consultant)

**Ekkehard Ernst** – Chief of the Macro-economic Policy Unit at the International Labour Organization, where he is responsible for producing the new World Employment and Social Outlook. (KnowLab participant)

**Aidan Eyakuze** – Founding Director of Serengeti Advisers Limited, a Tanzania-based regional advisory firm in economic and public policy, corporate finance and media analysis. (KnowLab participant)

**Sara Farley** – Co-Founder and Chief Operating Officer of the Global Knowledge Initiative (GKI). (KnowLab participant)

**Susannah Fisher** – Senior Researcher in the Climate Change Group at the International Institute for Environment and Development, a UK-based research and policy institute. (KnowLab participant)

**Lydia Garrido Luzardo** – Social Anthropologist specialized in Social Change,

Sustainable Development and Resilience and Research Professor in FLACSO Uy (Facultad Latinoamericana de Ciencias Sociales). She is currently associate director of the Laboratorio de Futuros in FLACSO. (KnowLab participant)

**C.D. Glin** – Associate Director at The Rockefeller Foundation based in the Africa Regional Office in Nairobi, Kenya. (KnowLab participant)

**Roumiana Gotseva** – Founder and Managing Director at the Center for Strategic Foresight in Sofia, Bulgaria. (KnowLab participant, project team member and lead action researcher)

**Tanja Hichert** – a South African futurist with specialised skills in scenario planning, facilitating strategic conversations and horizon scanning. Supplies strategy futures services to South African and international clients in a wide range of industries, and public sector work in association with the SA Institute for International Affairs. (KnowLab participant)

**Sohail Inayatullah** – Political Scientist at the Graduate Institute of Futures Studies, Tamkang University, Taiwan and adjunct professor at the Faculty of Arts and Business, the University of the Sunshine Coast. (KnowLab participant)

**Claudia Juech** – Associate Vice President and Managing Director for Strategic Research at The Rockefeller Foundation. (KnowLab participant, project team member and case representative)

**Kewulay Kamara** – internationally renowned poet/ storyteller, multi-media artist, development pioneer and lecturer, founder and Executive Director of Badenya Inc., a non-profit cultural/educational organization that established Dankawalie Secondary School in Sierra Leone. (KnowLab participant)

**Faizal Karmali** – Associate Director of Innovation and Networks at The Rockefeller Foundation. (KnowLab participant and case study facilitator)

**Leyla Kjazim** – Project Assistant at UNESCO in the Social and Human Sciences department. (KnowLab participant and support team member)

**Trudi Lang** – Director of the Strategic Foresight Team at World Economic Forum. (KnowLab participant)

**Katell Le Goulven** – Chief of Policy Planning at UNICEF where she was previously in charge of Multilateral Affairs. Her preceding assignment was with the United Nations Secretary General's High Level Panel on Global

Sustainability. (KnowLab participant)

**Michael Lesnick** – Founder and Senior Partner of Meridian Institute. He has more than 25 years of experience designing and facilitating collaborative processes and strategy assessment and planning activities. (KnowLab participant and plenary facilitator)

**John H. Matthews** – Co-Chair for the Alliance for Global Water Adaptation (AGWA), which is hosted by the World Bank and the Stockholm International Water Institute (SIWI) and supported by the US Army Corps of Engineers, SIWI, and Conservation International. (KnowLab participant)

**Riel Miller** – former Head of Foresight at UNESCO in Paris. He has championed the development of the Discipline of Anticipation as a way to advance the capacity to use the future. (KnowLab participant, project team member and case representative)

**Ivana Milojevic** – Adjunct Professor (University of the Sunshine Coast, Australia, Faculty of Arts and Business) and Visiting Professor at the Association of Centres for Interdisciplinary and Multidisciplinary Studies and Research, Novi Sad, Serbia. She is also co-director of Metafuture.org, educational think tank that explores alternative and preferred futures. (KnowLab participant)



**Natalie Phaholyothin** – Associate Director at The Rockefeller Foundation’s Asia Office, manages the Transforming Health Systems (THS) Initiative in Asia. (KnowLab participant and case study facilitator)

**Jacques Plouin** – Strategic Foresight Specialist at UNESCO for the Africa Department. (KnowLab participant)

**Anumita Raj** – Senior Program Manager at Strategic Foresight Group, a think tank based in Mumbai. She is responsible for SFG’s projects in the Asian region. (KnowLab participant)

**Jennifer Rudkin** – Independent Designer and Researcher currently developing a PhD thesis in the Design Department of the Politecnico di Milano, Italy, working on the convergences between Anticipation and Design disciplines. (KnowLab participant and project team member)

**Alioune Sall** – Founder and Executive Director of the African Futures Institute, a Pan-African think-tank specialized in foresight exercises, research and capacity development headquartered in Pretoria. (KnowLab participant)

**Richard Sandford** – Futures Researcher, UK Government Office for Science, Department for Business Innovation & Skills. Richard

is a PhD candidate in the University of Bristol’s Graduate School of Education, where he is researching the relationships between discourses of the future in schools and in education policy. (KnowLab participant and case study facilitator)

**Fabiana Scapolo** – Head of Sector Foresight at the European Commission Directorate General Joint Research Centre (JRC) in Brussels in the Unit on Science Advice to Policy, where she is team-leader on Foresight and Horizon scanning activities of the JRC. (KnowLab participant, project team member and case representative)

**John A. Sweeney** – Deputy Director of the Center for Postnormal Policy and Futures Studies at East-West University in Chicago, IL and a Researcher at the Hawaii Research Center for Futures Studies. He is also a PhD Candidate in the Department of Political Science at the University of Hawai’i at Manoa (UHM). (KnowLab participant and case study facilitator)

**Irina Todorova** – founding Director of the Health Psychology Research Center in Sofia, Bulgaria. Director of Research at the Institute of Coaching affiliated with Harvard Medical School and Adjunct Associate Professor at Northeastern University. (Research and methodological consultant for the project *Evaluating*

*and Improving the Use of Foresight in Addressing Societal Challenges* and KnowLab Event)

**Barbara Torggler** – Principal Evaluation Specialist in the Evaluation Section of UNESCO’s Internal Oversight Service, where she is in charge of managing and conducting evaluations of UNESCO’s policies and programmes and of related activities. (KnowLab participant and case representative)

**Maya Van Leemput** – Professional Futurist combining research and consultancy with a creative multi-media practice in a broad range of commissioned work: for the King Baudouin Foundation, for the Flemish parliament’s Society and Technology Institute and European Parliamentary Technology Assessment (EPTA), for the European Commission (DG CONNECT) and the European Cooperation in Science and Technology (COST), to name a few. Currently Maya is completing the three-year project Maono looking at North-South relations and development futures in an intercultural exchange. (KnowLab participant)



Image: Ispra KnowLab 2014/ © UNESCO

## Endnotes:

<sup>i</sup> Inspired by a Rockefeller Foundation internal paper: “What is “Dynamism”? From “knowing when we see it” to “knowing what to look for”.

<sup>ii</sup> The aphorism “The future is already here – it’s just not evenly distributed” is attributed to William Gibson <http://quoteinvestigator.com/2012/01/24/future-has-arrived/>

<sup>iii</sup> As reflected in a Post KnowLab participant report

<sup>iv</sup> <http://www.thersa.org/events/rसानimate/animate/rसानimate-changing-paradigms>

<sup>v</sup> [http://forlearn.jrc.ec.europa.eu/guide/0\\_home/index.htm](http://forlearn.jrc.ec.europa.eu/guide/0_home/index.htm)

<sup>vi</sup> Based on the participant Evaluations of the KnowLab. For example, for the statements: Facilitators and presenters spoke clearly; Facilitators were well-briefed; My expertise was appropriate to allow me to contribute; I felt that my voice was heard; more than 90% of the participants answered “Agree” or “Strongly agree”

<sup>vii</sup> See for example neuroscientist Vilayanur Ramachandran’s 2009 TEDIndia talk “The neurons that shaped civilization” [http://www.ted.com/talks/vs\\_ramachandran\\_the\\_neurons\\_that\\_shaped\\_civilization#](http://www.ted.com/talks/vs_ramachandran_the_neurons_that_shaped_civilization#)

<sup>viii</sup> Based on Stacey, R.D. (2003). Organizations as complex responsive processes of relating, *Journal of innovative management*, 8(2), 27-39.

<sup>ix</sup> Keynote by Andrew Sterling, Professor at the University of Sussex, From Knowledge Economy to Innovation Democracy: collective action

in the shaping of progressive futures, 5th FTA Conference, Nov 28, 2014

<sup>x</sup> [http://forlearn.jrc.ec.europa.eu/guide/0\\_home/index.htm](http://forlearn.jrc.ec.europa.eu/guide/0_home/index.htm)

# HOW DO WE IDENTIFY GREAT OPPORTUNITIES?

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<http://www.unesco.org/new/en/social-and-human-sciences/themes/anticipation-and-fore-sight/>



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