

NARRATIVE REPORT EVALUATING AND IMPROVING THE USE OF THE FUTURE FOR IDENTIFYING AND CHOOSING DYNAMIC OPPORTUNITIES

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Preface

Towards Anticipatory Leadership: Learning to Use the Future More Effectively

The borders of the mind, dividing economic from social phenomena or one country from another, exist as lived experience. In the present, right now, crossing these borders can be sources of joy, of bloodshed, of understanding. The future is different — future experiences have not yet happened and so borders in the future are easily redrawn, forgotten or even invented. This means that anticipation, the way humans imagine the future, is a powerful tool for seeing today's borders in different ways — ways that could be more sustainable, equitable and peaceful.

Using the future changes the present. It changes what we see and what we do. Anticipatory systems and processes are critical parts of both the *search* for opportunities and making a *choice* when a bet is laid on a particular opportunity. Different ways of using the future enable the *search* for opportunities to capture and make sense of different attributes of complex emergent reality. What we do about these opportunities and threats also rests on how the future is used. If *choice* is premised on a belief that the future is sufficiently knowable to allow "sure bets" then the decision maker is likely to privilege probabilistic extrapolatory methods or perhaps divination. Both provide an expert opinion, based on past experience, of the likelihood or odds that an imagined future will actually come to pass.

In both situations, the *search* for opportunities and the *choice* of a particular investment or action, imaginary futures – the only kind of future that exists – play a key role. The way the future is used changes how human agency is applied to all challenges, from the personal to the institutional, from the local to the global. Organizations like UNESCO, The Rockefeller Foundation and the European Commission all use the future in a myriad of circumstances and ways.

The outcomes of this project, particularly the effectiveness of the KnowLab collective intelligence knowledge creation methodology in giving expression to the richness of specificity, show quite clearly that the future can be used in new and more effective ways to enhance the identification and selection of opportunities. It also shows that there is no way of knowing if the opportunities selected and acted upon will produce the hoped for or expected end results. The future remains open. Nevertheless we can assess if human agency, our ability to use conscious thought and reasoning to shape our actions, puts the future to use in more or less rigorous and effective ways.

This particular project, Evaluating Foresight, makes an important contribution to a body of research and practice being advanced by UNESCO (see

http://unesdoc.unesco.org/images/0023/002303/230316e.pdf) with different forms of involvement by a wide range of partners, that provides evidence that the future can be used more effectively. Anticipatory leadership, founded on a deeper appreciation for the nature and functioning of anticipatory systems and processes, changes the way the future is used to make decisions. Both the KnowLab methods and the insights from the appreciative inquiry action learning case-study approach detailed by this project provide a rich source for understanding why and how to change the way the future is used by organizations hoping to improve the human condition.

Background to the Narrative Report

UNESCO received support from the Rockefeller Foundation to implement the project "Evaluating and Improving the Use of the Future for Identifying and Choosing Dynamic Opportunities" (Evaluating Foresight Project), with a view to assessing and exploring the effectiveness of foresight methods in identifying the most dynamic opportunities for the realization of humanity's aspirations for well-being. The project was also supported by the Joint Research Center of the European Commission.

This narrative report provides an account of the work conducted to bring this project to fruition, the official staring date, (when the contract was signed by UNESCO) was July 11, 2014 and the official closing date was December 31, 2014. This report includes an overview of the project's achievements, challenges encountered and lessons learned.

Over the course of the project, research was conducted on foresight practices used by the organizations (UNESCO, the Rockefeller Foundation and the Joint Research Center of the European Commission) to identify and assess opportunities. A series of activities were planned and successfully executed in the framework of the project.

Overall, the project has fulfilled its key stated objectives:

- a) to compile a series of case studies of foresight practices;
- to benefit from the expertise of a diverse and highly experienced group of experts through their participation in an innovative knowledge laboratory that explored the case studies of foresight practices; and
- c) to refine and make publicly available the research findings and recommendations emerging from the KnowLab with the aim of strengthening the philanthropic and development communities' ability to use foresight methods to improve opportunity identification.

Stakeholders from international organizations, governments, civil society, and the private sector have shown a strong interest in the project's findings, an important signal of the timeliness of the project.

Part I: Narrative Report¹

The three phases of the work undertaken by this project are presented in summary form below:

Phase 1 – Setting the stage

- Planning the project (initial logistics, team set-up and preliminary refinement of project scope)
- ii) Initiate reflective research for case studies (interviews and data gathering)
- iii) Generate case study material (five learning histories of foresight practices in three organizations)
- Design and preparatory logistics for the KnowLab (selection and verification of the venue, preparation of materials, selection of participants and logistics related to participants attendance, facilitation, process design, etc.)

Phase 2 - Running the KnowLab

- v) The KnowLab Convening
- vi) Evaluation and assessment of the KnowLab
- vii) Process for producing the Reflective Report with recommendations

Phase 3 – Release of Findings

viii) The Reflective Report is posted to a number of different web sites (NB a series of activities, outside the Grant Agreement (i.e. not supported by funding from The Rockefeller Foundation), have assisted with the refinement and diffusion of findings during this phase).

Phase 1 – Setting the Stage

This project was inspired by and built upon on-going work of a number of individuals and organizations in the field of foresight². During the period leading up to the signing of the Grant Agreement work was already underway, on a number of different projects (see for instance the UNESCO Africa Future Forums³), that provided inputs into the articulation of the contours of this project and helped to ensure that this initiative served to advance on-going agendas.

¹ Note: considerable further detail is available in the Reflective Report: How Do We Identify Great Opportunities? A Knowledge Lab to Evaluate and Improve the Use of Foresight in Addressing Societal Challenges (see the UNESCO, Rockefeller Foundation and DG JRC web sites) and in the following video: https://vimeo.com/110723009

² For instance UNESCO has been sponsoring UNESCO Chairs in Anticipatory Systems at universities like Trento (http://www.projectanticipation.org/); the European Commission JRC sponsors events like Futures Oriented Technology Analysis https://ec.europa.eu/jrc/en/video-gallery/fta-2014?search; and The Rockefeller Foundation's work on horizon scanning (http://www.rockefellerfoundation.org/uploads/files/21beeddf-6dc7-4a93-9035-43cc78896f65-report.pdf).

³ http://www.unesco.org/new/en/unesco/events/allevents/?tx_browser_pi1[showUid]=28629&cHash=e4d3c2ddf8

Once the project was launched the core team, through a process of networked and face to face deliberations, crafted a detailed methodology for the project that focused on feeding "learning history" case studies into a collective intelligence knowledge creation processes, the KnowLab, as a way to arrive at a more advanced understanding of the effectiveness of foresight methods as part of opportunity identification and assessment processes.

During Phase 1 the consultants hired to produce the case studies and the Reflective Report gathered a range of information and conducted interviews with officials from the three institutions providing the case study material. Rich information was collected and subsequently processed and interpreted in order to produce written learning histories based on the anthropological concept of the "jointly told tale". A reader's pack comprising the five case studies/learning histories was produced prior to the KnowLab for use at the KnowLab.

In parallel with the research undertaken during the Phase 1, UNESCO's team supported by the Rockefeller Foundation and the Joint Research Centre of the European Commission carried out all the preparations for the organization of the KnowLab that was held from 26-28 August 2014 in Ispra and Borghi, Italy. Among many other logistical issues, the list of participants was finalized, a logo created, themed materials designed and printed, invitations sent out, the venue chosen and inspected by UNESCO's team, work started on a pre-event video, and much more. In late July, officials from the three organizations, as well as the researchers and consultants involved in the project, met at UNESCO's Headquarters in Paris to participate in a key preparatory-design meeting for the KnowLab. During this meeting many critical aspects of the event were finalized including the KnowLab's format, agenda, heuristics and facilitation. Communications was integrated into the design, including the decision to produce a video of the event, a blog and development of themed supporting material for the KnowLab and Reflective Report (see the logo on the cover of this report).

At the end of the first phase of the project the Case Studies Pre-Reader Pack on the application of foresight in the three organizations involved was disseminated to the participants of the KnowLab. A number of supportive materials with unifying graphic themes (logos, etc. as part of the communication package) were also produced. A two day on-site preparatory meeting was held just before the KnowLab during which the research team, the facilitators, the communication team and the organizers had the chance to discuss and refine the processes to be used during the KnowLab.

Outcomes Phase 1

- Formalization and agreement regarding the design of the KnowLab convening;
- Identification and agreement of the list of invitees for the KnowLab convening;
- Outline of the main topics to cover during the KnowLab;
- Finalization of the 3-day agenda of the KnowLab;
- Recruitment of facilitators, including lead facilitator;
- Identification of 5 case studies on foresight methodologies (UNESCO, The Rockefeller Foundation, the European Commission);
- Production of annotated agendas for facilitators and lead facilitator;
- Guide books for the participants, including biographies;
- Production of the Case Studies Pre-Reader Pack on foresight methodologies
 - 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 Joint Research Center of the European Commission
- Detecting Dynamic Problems: New Horizons for Scanning at the Rockefeller Foundation
- Assessing Opportunity for Impact: The Urban Food Insecurity Search

Phase 2 – The KnowLab Convening

The KnowLab constituted a major milestone in the implementation of the project: Evaluating and Improving the Use of the Future for Identifying and Choosing Dynamic Opportunities. The KnowLab ran from August 26 to August 28 in Ispra and Borghi Italy. It brought together 41 high level experts, leading theoreticians and foresight practitioners. The objective of the KnowLab was to generate actionable insights into ways in which foresight, concepts of the future, and forward-looking approaches can be used in decision making for the public good.

Drawing on the experience of the participating organizations gained from the case studies on foresight practices (produced during the first phase of the project) the participants were involved in a collective intelligence knowledge creation process in the context of the KnowLab, with a view to coming up with proposals for new, improved ways to use foresight and to pose key questions about its use. The KnowLab format was designed to provide an opportunity to combine action research as shared sense-making with an understanding of how the future is used. Different participants were familiar with different aspects of KnowLab methodology and uses of the future, this provided the diversity of perspectives necessary for moving tacit to explicit through a negotiation of shared meaning.

As extensively detailed in the Reflective Report the KnowLab served its purpose as a an evaluation process, testing the validity and legitimacy of the knowledge claims that arise from use of the future as a means for opportunity identification and assessment. Three critical questions were addressed:

- ➤ How can we identify new ways to tackle old problems, such as poverty, ignorance, food insecurity and the destruction of ecosystems?
- ► How we can better sense and understand change?
- How we can 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 the nature of the future)?

The KnowLab engaged directly with these questions, producing a range of insights, from practical guidelines for engaging local knowledge to a series of questions that point towards the need to re-examine and refine the foresight methods being used to engage in opportunity identification. The KnowLab concluded with the elaboration of concluding strong statements aimed at improving the ways that the institutions involved in the KnowLab and their respective sectors could become more effective at using the future for opportunity identification and choice.

Outcomes from the Phase 2

- Ispra KnowLab convening (26-28 August, 2014)
- Data capture of the discussions and insights from the KnowLab
- Evaluation from the participants
- Evaluation from facilitators
- Raw material for a post event video
- Input for a post-event blog
- Production of a Reflective Report

Evaluation and assessment of the KnowLab

At the end of the KnowLab the participants were asked to fill out an evaluation questionnaire assessing their overall experience. 89% of the participants were satisfied with the organization of the event and the majority of participants offered positive feedback on every aspect of the process/experience⁴. None of the participants opposed the selected format/approach, namely the case study and KnowLab approach over the seminar or conference format, assessing it as an appropriate one (80% of participants) for the topic examined. 73% of the participants stated that they encountered new perspectives on foresight and social change within their group discussions; while 67% thought that the group discussions developed their understanding of foresight and social change. Furthermore, 82% of the participants stated that their group discussions generated new ideas. The same number of participants agreed or strongly agreed that the group they participated in met the objectives of the session. Among the positive comments received, many participants expressed their appreciation for the very interesting mixture of individuals that came together in the KnowLab.

The critical comments received highlight the importance of paying attention to excessive use of "jargon" and the risk of getting lost within the "inner" language of particular organizations. A couple of participants noted that it would have been helpful if clearer conceptual definitions of terms such as foresight and future studies had been provided before or in the early stages of the event.

In addition to the evaluations provided by participants two group facilitators, Richard Sandford and John A. Sweeney, produced assessment reports (see Annex 1 and 2). Richard Sandford's principal critical observation was that the KnowLab could have benefited from a more explicit use of the future in its process design and implementation. John Sweeney also suggests that it might have been helpful to provide more of an introduction to the foresight tools that participants were meant to evaluate. He also underscored a point shared by a number of participants regarding a lack of play as part of the design of the KnowLab. As he put it: "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."

Production of the Reflective Report

Roumiana Gotseva and Irina Todorova of the Center for Strategic Foresight were commissioned to produce a Reflective Report comprising an evaluative summary of the KnowLab as well as a review of innovative opportunity identification methods. The purpose of

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⁴ See Annex 3 for a summary, by Leyla Kajzim.

the Reflective Report was to summarize the process and the findings of the KnowLab and at the same time gather and disseminate recommendations regarding innovative methods for using the future for opportunity identification.

The Reflective Report is organized around four central themes that emerged during the KnowLab, namely "multiplicity", "knowledge", "participation and contextuality", "complexity, uncertainty and openness". The participants in the KnowLab also came up with concluding strong statements that actually constituted an important source of overarching themes in the Reflective Report. Here is a brief excerpt, for more detail see the full Reflective Report⁵:

"The theme of multiplicity reflects the spirit of the KnowLab, encouraging sensitivity toward difference and polyvocality in addressing societal challenges. In the framework of Future Studies and Foresight multiplicity emerged as a core characteristic — an asset to be valued and encouraged. Participants in the KnowLab discussed the topic of creating, locating and disseminating knowledge explicitly, while many of them acknowledged the value of using the future effectively and embraced the idea of disseminating this knowledge to champion futures literacy. The theme of participation in futures and foresight processes focuses on the representation in the sense of whose voices are present and absent. Subsequently the sub-theme of contextuality examines the process of adapting the foresight in local settings and making it accessible to specific actors or stakeholders. It should be noted that the value of contextualisation is not only limited to participation and representation, but it is also depended on the capacity to engage in meaningful dialogue. In this perspective, foresight can break new ground by informing intercultural dialogue, living together policies, intercultural competences -fields that UNESCO and the European Commission have demonstrated a longstanding commitment. The theme of complexity, uncertainty and openness was emerged progressively as the participants engaged in the case studies. Since foresight aims to make sense and embrace the unknown complexity, uncertainty and openness are in the core of futures work. Design questions on widely used foresight methods and processes arose with respect to complexity and uncertainty. The issue of linear thinking was also addressed."

A number of recommendations on innovative methods for opportunity identification emerged from the KnowLab and the project as a whole are included in the Reflective Report. These recommendations, made by the researches, facilitators and participants in the KnowLab, cover a wide range of topics related to how the future is used in organizations throughout the world (see the concluding sub-section of this report).

Phase 3 – Diffusion

The Reflective Report is the key source of the project's findings. The External Relations and Public Information Sector of UNESCO will make the Report available in pdf form for downloading on the UNESCO web site and will undertake to ensure that its availability is diffused via UNESCO's social media.

Numerous activities have been able to leverage the on-going development of the results of the Evaluating Foresight project. See also the blog article produced by one of the participants, Nathaniel James. Many of the participants in the KnowLab have also been involved with follow-up activities aimed at integrating the results of the Evaluating Foresight KnowLab into either UNESCO's evaluation processes, or into the Design of the Africa Future Forum series and the Africa foresight network. Examples of additional related activities (these events were not part

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⁵ http://unesdoc.unesco.org/images/0023/002321/232109e.pdf

of the Grant Agreement with The Rockefeller Foundation and were funded by UNESCO): "Foresight for Evaluation: How Can Evaluators Use Foresight?" 24 November 2014, Paris — UNESCO HQs; "Integrating the Results of the Evaluating Foresight KnowLab into the Design of the Africa Future Forum series and Processes for Advancing the Africa Foresight Network", 25-26 November 2014, Paris – UNESCO HQs; Webinar on Hacking the UNDAF – How to Use the Future to Make a Difference; WorldView Stanford, Environmental Risk and Resilience, Stanford University, Palo Alto, United States, December 8-9, 2015. It is also worth noting, (once again entirely outside the Grant Agreement with The Rockefeller Foundation) that UNESCO's Director General and Assistant Director General for Africa have endorsed a using the future approach for a series of Africa Future Forums for 2015-2016, incorporating lessons from this project. Furthermore an agreement between UNESCO and ALECSO to engage in a Futures Literacy Knowledge Laboratory process aimed at exploring how the future is used in the Arab World will lean heavily on the lessons of the KnowLab. UNESCO has put the findings of this project to work improving the way the future is used to address the fundamental goals of creating a more peaceful, equitable and prosperous world in the context of pursuing the articulation and realization of post-2015 Sustainable Development Goals.

Outcomes from Phase 3

- Dissemination of the reflective report to wider public through UNESCO website and social media channels (as well as other sites, such as DG JRC, etc.)
- Integration of the results of the KnowLab and the Reflective Report into the design and implementation of UNESCO's activities

Part II Challenges and Lessons

Challenges

A number of challenges encountered during the implementation of the project ranging from design issues and methodological concerns to logistics were successfully overcome. Undoubtedly one of the main reasons of those challenges was the highly compressed time-frames and innovative character of the project design, especially KnowLab. The format of the event, the diverse group of people that came together as well as the involvement of three different institutions each one having their own agenda contributed to the challenging nature of the project. However particularly because of its challenging character an important body of knowledge, reflecting the wealth of experience and research evidence has been produced to provide guidance and inform future initiatives. A detailed and analytical account of the challenges encountered can be found in the Reflective Report.

A major challenge encountered was the lack of a common language among the participants on the "use of future" that in some cases caused confusion and misunderstanding. Although most of the start-up difficulties were overcome by the skills of the experienced group of facilitators and highly professional participants, the clear lesson is that when tackling a technical topic such as how foresight is deployed to help identify opportunities it is critical to include a phase where everyone can be brought up to speed regarding terminology and shared frameworks. It is not enough to just depend on general or personal familiarity with "thinking about the future". A real learning-by-doing phase would enable the co-creation of a shared sense making narrative that then serves as a critical input to further deepening the conversation on specific applications, etc. Another challenge encountered was the tendency among many participants in the case study groups to move quickly from the descriptive phase of the process to the critical analysis of the case studies without first engaging in meaningful discussions with the case studies

representatives. This could be indicative of the resistance that people may show towards an "imposed" expert knowledge, especially in the context of a collective intelligence process. For future knowledge laboratories and collective intelligence processes this observation/tendency points towards the utility of designing in a learning-by-doing phase where a common set of reference points can be established.

A different kind of challenge encountered in the implementation of the project was the tight timeframe for the organization of the KnowLab. From a purely logistical point of view, the fact that the event took place at the end of August increased the level of difficulty, since August is vacation time in Europe. More specifically, difficulties were experienced in finding support staff, suppliers, services etc. Subsequent to the KnowLab event another unforeseen obstacle to timely implementation arose when the primary consultant for the production of the Reflective Report fell ill, resulting in significant delays in completing subsequent steps. Compounding the impact of this delay on coordination amongst the participants was the heavy schedule of events immediately following the KnowLab — many participants and key players were not able to engage with the follow-up process as a result.

Lessons Learned

The "Evaluating Foresight" project served as an opportunity to gain valuable insights into the effectiveness of futures thinking for processes that attempt to identify opportunities to address humanity's challenges. Among the many important lessons learnt is the need for a more coherent theoretical framework with respect to anticipatory systems and processes if the future is to be used effectively to identify opportunities and make decisions. Equally critical is an understanding of how to generate rigorous information about opportunities when trying to use the future. Here the lessons of the KnowLab design, as a collective intelligence knowledge creation process, stand out. For instance it is important to design-in evaluation processes that assess the ways in which the future is being used. In this respect the KnowLab shows that building futures literacy, a better appreciation of the theory and practice of futures thinking, can enhance the quality of the information generated. At the practical level of the organization and design of this particular project it is worth noting the importance of able facilitation that can accommodate and improvise on the fly as participants generate knowledge that goes beyond an ex-ante agenda.

Part III Insights from the Project

The project offered a significant opportunity to evaluate and produce actionable insights regarding the application of anticipatory systems and processes to decision-making efforts meant to address humanity's challenges. The case studies and the KnowLab deliberations helped to analyze which approaches/methods for thinking about the future are most effective in particular circumstances (for a detailed analysis please consult the Reflective Report). Four general conclusions emerged:

1. That the future is often put to work for decision making without a solid understanding of what using the future entails. Both the theory and practice of using the future for decision-making are often under-developed in so far as the goals and methods adopted do not take into consideration the accumulated knowledge of the Future Studies field. In this context the KnowLab gave voice to the view that many widely used methods - such as "data driven" foresight based on trends research, often seen as the "faster, cheaper, smarter" way of using the future, should be treated with

caution. On the one hand the futures generated by these methods are typically extrapolations, often rooted in a transient mass perception that something is likely to be significant or to happen in the future. On the other hand focusing narrowly on the search for bets that are safe because the herd agrees can crowd-out or discourage investments in making sense of phenomena that do not fit or cannot even be named, thereby reducing the set of available options.

- 2. An expansion is taking place in the kinds of data and the methods for collecting it to include more time and place specific information without necessarily seeking generalizability or persistence. The power of statistics, common denominators, and scalability sometime runs the risk of obscuring the richness of uniqueness, particularly of learning and capacity building that are valuable relative to where perceptions started. Sense making processes that leverage collective intelligence to shift information from tacit to explicit, to invent new ways of understanding or to give new meaning all open up new ways of putting the future to use for decision making. Using the future more effectively in today's world calls for a greater emphasis on innovations that expand the kinds of information and the tools for creating it.
- 3. Putting the first two conclusions together points to another important observation, a democratization of the use of the future and a use of the future for democratization. The case studies shed light on both the existing diversity of methods and the on-going search for new ways to use the future. The practical application of anticipatory systems and processes develops and diffuses futures literacy and a more open use of the future gives more freedom and depth to search and choice.
- 4. The final general observation is that organizations like the ones involved in this project are now in a position to champion 'anticipatory leadership' or the development and diffusion of futures literacy.

Futures Literacy involves a democratization of foresight with a view to empowering communities all around the world to use the future to better understand the present, harnessing collective intelligence to produce local meaning, identifying opportunities people are willing to bet on. The emergence of futures literacy also calls for the establishment of networks and communities of practice, finding scalable languages for describing cases that enable tools and lessons to be shared. The project as a whole underscored the need to invest in the evaluation of how the future is used in order to enhance humanity's capacity to identify and act on opportunities to improve the human condition.

Annex 1 The Role of a Theory of Anticipation in Understanding Practical Foresight – exploring outcomes from the KnowLab by Richard Sandford

Richard Sandford attended the event described here as foresight consultant with Northover Research. He now works in a government strategy unit. This paper benefitted greatly from reviewers' comments and insight.

Introduction

This short report is an exploration of the contribution of the Borghi event⁶ to our understanding of the 'FL KnowLab' workshop format, and the way events run within this format contribute towards building organisational capacity to use the future meaningfully in strategic decision-making processes. It re-imagines the event as a 'counter-experiment' assessing the hypothesis at the heart of the FL KnowLab series of events: that drawing on the theoretical frame offered by the discipline of anticipation to reveal the anticipatory assumptions underpinning our views of the future builds 'futures literacy', helping us to use the future in a more self-aware and effective manner, leading to a deeper understanding of the present.

It will be useful to distinguish between 'KnowLab' and 'FL KnowLab' events. The 'KnowLab' event format was developed as a collective intelligence knowledge creation process that uses shared sense-making to move from tacit to explicit and to invent new ideas. The 'FL KnowLab', or 'Futures Literacy Knowlab' uses the KnowLab format to address the future of a topic relevant to the sponsoring group, thereby drawing particular attention to anticipatory systems, processes and content. Previous work has indicated that the FL KnowLab format contributes to the development of futures literacy. This essay offers an alternative standpoint from which to address the question, making use of the opportunity to compare two event formats with shared aims, similar programme structures, but different positions on the use of the future to inform their design. This short essay is not intended as a definitive comparative evaluation of the two events but rather should be read as a tentative and exploratory first step towards identifying fruitful areas for further enquiry.

The first section of the paper briefly recaps the descriptions of the KnowLab format and the theoretical characterisations of anticipation and futures literacy that have been articulated in previous work, and sets out the methodological approach adopted. The second section gives an overview of the Borghi event and the main outcomes captured through facilitator observations and post-event evaluation. In the third section, these outcomes are examined through the perspective of a KnowLab, noting the extent to which participation developed new sensibilities towards the future among participants, and the differences between the two formats. Finally, a short conclusion speculates on possible tendencies and mechanics lying behind these differences, and what the implications might be for designing events intended to foster futures literacy.

⁶ See for example the report on the UNESCO 'Local Scoping Exercises' programme at http://unesdoc.unesco.org/images/0023/002303/230316e.pdf and the video exploring key underpinning ideas at https://vimeo.com/110723009

Context and approach

In recent years a group of foresight theorists and practitioners have developed and undertaken a series of events intended to make apparent to participants their anticipatory practice and the assumptions about the nature of the world that underpin it'. The motivation behind this work has been the conviction, born of experience working with public and private organisations to support their strategic conversations, that while organisations and individuals regularly make use of the future in sophisticated and diverse ways, their capacity for doing so can be greatly expanded if their assumptions and beliefs towards the future are made visible and available for critical reflection. Doing this can greatly improve organisational decision-making, increasing the information available to contribute to decisions through giving consideration to nonpredictive and non-linear futures, in addition to those futures more usually included in the process. In particular, groups working with a conception of the future as something that can be managed with sufficiently rigorous planning can, through this process, include in their thinking additional non-probabilistic approaches, enabling the recognition of uncertainty and emergent novelty through temporarily suspending predictive and planning futures, by reframing the assumptions underlying ready-to-hand narratives of the future to create snapshots of alternative futures, and being able to go 'beyond' what can be imagined using predictive assumptions and predictive goals. The events were conceived of as opportunities to test and explore these ideas, and as venues for experimenting with forms of knowledge creation that came to be described as Futures Literacy 'knowledge laboratories', or 'FL KnowLabs'.

These FL KnowLabs, in building the capacity to think more reflectively about the future, evolved to embody three central principles. First, that considering the ways we engage with the future is more meaningful in the context of a real concern or practice: rather than discuss 'foresight' in the abstract, participants would be considering the future of regional higher education, or sports funding, or passages into adulthood, or cities, or any other complex social area of importance to the groups attending. (This principle is derived from the KnowLab approach towards collective intelligence—it is easier for people to produce knowledge about a subject they have significant knowledge of). Second, that different vocational and disciplinary communities have developed their own sets of understandings regarding the future, and that promoting exchange between these 'communities of practice's would make these different anticipatory assumptions visible: the events therefore aimed to make use of the collective intelligence of a diverse set of participants, drawing on their combined expertise and heterogeneous perspectives to surface alternative stances towards the future. Third, that revealing existing anticipatory assumptions and engaging with alternatives is hard work, effort that is supported by the collective nature of the process but that also requires the introduction of a new and qualitatively different context with which to reframe the group's understanding of the future and the processes through which it comes into being.

The FL KnowLab format, then, aims to develop the 'futures literacy' of the participants, helping them to express and become aware of multiple ways of approaching the future, appreciate its open and unknowable nature, and begin to understand the nature and role of anticipatory assumptions. The general, KnowLab format follows a three-phase learning curve process. In the first phase, participants work in facilitated groups to share current beliefs regarding the future, through a consideration of what they consider likely to occur and what

⁷ See, for example, the FuMee series of meetings (http://www.fumee.org/) and the UNESCO Futures Literacy Knowledge Laboratories noted in the report in the previous footnote.

⁸ Lave, J. and Wenger, E. (1991). Situated Learning: Legitimate Peripheral Participation. Cambridge: CUP

they hope will come to pass. This process of shared meaning-making reveals existing assumptions regarding the future. In the second phase, participants project themselves into an alternative setting or scenario, one in which their existing notions of identity, agency and structure are radically challenged: the aim is not to evaluate this new setting for plausibility or likelihood but to 'think oneself into it', accepting it on its own terms and exploring the new vocabulary or palette it offers for understanding the world. This is a crucial step in becoming aware of how central anticipatory assumptions are to imagining different futures and the role of such futures in perceptions of the present. In the third phase, participants make use of the differences in the futures imagined on the basis of different anticipatory assumptions to develop new questions to ask about the present, reinforcing the importance of futures literacy for understanding how different ways of anticipating tomorrow shape the way the present is perceived.

KnowLab design criteria always require a process of collaborative customization to the needs and concerns of local sponsoring groups. The FL KnowLab adds the future as a central ingredient for conducting the shared sense-making. As a result FL KnowLabs offer insights into both the theory and practice of the emerging 'discipline of anticipation'. The carefully structured engagement with the future that occurs in an FL KnowLab exposes the ways in which people and organisations shape and respond to the future. This paper is not the place for an exhaustive account of the field⁹. But it is worth taking a moment to borrow a couple of key ideas to support the informal analysis that follows.

'Futures literacy' is a fuzzy term, understood in different ways by different authors and at risk of becoming as vague or all-encompassing a term as 'computer literacy' or 'emotional literacy'. For the present purpose, however, it is not necessary to bring the concept into a higher resolution: a simplified sense will be sufficient. One aspect of futures literacy might be considered the capacity to distinguish between different ways of thinking about the future. Previous work 10 has offered three such ways: 'optimisation', 'contingency' and 'novelty'. The 'optimisation' perspective projects existing practices and structures forwards towards a single future point, continually adjusting present-day activity in the service of reaching a particular goal. The 'contingency' perspective recognises the unpredictable nature of the future, seeking to prepare for any one of a set of possible futures generated through the interaction of external driving forces. These two are commonly represented in professional contexts, in the form of project management, risk management, and planning practices. In both the future is imagined to be remote from the present, reached either through our own actions or through the action of external forces. The third perspective, 'novelty', focuses on the role of the future in the present, where novel and unpredictable events emerge. This third point- of-view stresses how looking at the future as a means to prepare for or colonize tomorrow can reduce the capacity to make sense of emergent novelty, aspects of reality that were unknowable in advance.

These three points-of-view co-exist in reality, but are rarely distinguished. The practical utility of distinguishing these different points-of-view regarding the future comes to the forefront in FL KnowLabs, enabling participants to clarify the nature of the anticipatory assumptions that shape their descriptions of the imaginary future.

¹⁰ Miller, R. (2007). Futures literacy: A hybrid strategic scenario method. *Futures* 39(4), 341-362. doi: http://dx.doi.org/10.1016/j.futures.2006.12.001

⁹ For an introduction see: Miller, R., Poli, R., and Rossel, P. (2013). *The Discipline of Anticipation: Exploring Key Issues*. Working Paper 1, Local/Global Capabilities Scoping Project, Paris: UNESCO/Rockefeller. "Poli, R. (2010). The many aspects of anticipation. *Foresight*, 12(3), 7–17

This report, then, makes use of this notion of futures literacy to examine the outcomes of the Borghi event, exploring the extent to which it might be thought to have developed futures literacy amongst participants, and noting moments of relevance to the more theoretical concerns of the discipline of anticipation. It is an opportunistic exercise, conducted post hoc, so should not be viewed as anything more than an informal investigation, working with the data available, raising questions which might appear sufficiently acute to warrant a more substantive analysis. It considers two sources: first, the recollections, supported by observational notes and products of the group, of the author during the first exercise, in which he played the role of facilitator. Second, the material generated in the final session summarising the ideas participants felt were indicative of their new sense of the relationship between foresight and social change. This material is examined in the light of the aims of the Borghi event and the KnowLabs more generally: the question being posed is: were the aims achieved?

Background

The three-day residential workshop in Borghi, titled "How Do We Identify Great Opportunities? A Knowledge Lab to Evaluate and Improve the Use of Foresight in Addressing Societal Challenges", was convened by UNESCO, hosted by the EC Joint Research Centre (JRC) and supported by the Rockefeller Foundation (RF). It brought together 40 participants from philanthropic institutions, non-governmental agencies, private investment firms, independent consultancies, and social enterprises from every continent bar Antarctica, some with extensive experience in foresight, others with no direct experience but backgrounds in leading at a senior level and providing strategic direction for international organisations that expect their work to have a global impact. Grounding the discussion in a thorough exploration of five foresight-related case studies from the three convening organisations, the event aimed to generate new insights and ideas regarding the use of foresight to promote wellbeing across all society.

The programme followed a three-phase structure, represented as 'grounding', 'deepening' and 'creating'. The first day concentrated on building a shared understanding of each case study within a dedicated team, through an intensive initial analysis and subsequent presentation to the whole group. This was followed by a day intended to draw on the range and diversity of experience in the room to offer case-specific responses and suggestions that might increase the impact of similar future exercises, making use of the 'World Cafe' format to communicate each group's ideas to the wider group and capture additional insight. The final day aimed to create more general observations and insights on the productive and meaningful use of foresight in activities concerned with improving social well-being. In this way the programme moved from the specific to the general, from particular cases representing instances of future-facing activity to more universal recommendations for using the future for social benefit. It brought together a huge amount of intellectual and social capital, indicative of the commitment of the three organising bodies to developing the use of foresight and the future.

Although described as a 'KnowLab', there was no explicit connection made to a previous series of events conducted by UNESCO with support from the Rockefeller Foundation that aimed to test and gather evidence using FL KnowLabs. There were some similarities between this event and the FL KnowLabs described earlier, particularly the collective intelligence knowledge creation design premise. Drawing attention to parallels must not be understood as being any kind of evaluation of the degree to which Borghi might be considered a FL KnowLab: there was no attempt in the Borghi KnowLab to emulate the explicit role of the future as a catalyst. So any observed similarities or differences are offered as observations rather than judgments.

Leaving aside an assessment of the organisation and execution of the event (both faultless), the primary similarities seem to be:

- a broad concern with the effective use of the future (albeit expressed in different ways),
- the value placed on the collective intelligence of the group in generating new understandings
- the importance of hearing perspectives from members of a diverse and well- informed group
- the effort made to ground the discussion in real-world examples
- the recognition given to the importance of creativity in achieving the desired outcome
- the effort to still use a three phase learning curve to structure the programme as it moved from specific to general.

In broad terms, then, both the Borghi KnowLab event and previous FL KnowLabs were concerned with developing a more sophisticated use of the future through the involvement of collective intelligence processes, grounded in real-world examples and aiming to impact real-world decision-making. The core difference, I would like to suggest, is that the Borghi workshop made no reference to any theoretical or methodological resources associated with the formal use of the future.

Outcomes and observations

I'm going to consider the process of the case study group discussion I was invited to facilitate. Our group, comprising participants with overlapping backgrounds in entrepreneurship, design, evaluation, engineering, strategy and investment, was asked to consider the case of the RF's 'Search' function, part of a four-step strategic process within the organisation that aimed to identify areas in which their investment would have optimal positive social impact. This 'search' function was the next step after a 'scan' process (examined elsewhere in the event by another group), and was followed by two subsequent stages intended to assess the feasibility and ultimate desirability of action in the areas identified. The scan process had identified twenty candidate problems for the attention of the RF, selecting three for more detailed consideration under the 'search' activity: the choice offered for this case study group's attention was 'urban food insecurity', and the case described the factors and processes that ultimately led to RF deciding not to focus on addressing it. The two key criteria for assessing these candidate issues are the degree to which they are 'pressing' and the degree of 'dynamism' associated with each, with further attention given to the perceived scope for innovation in developing solutions within the problem space. These criteria together are used to inform a consideration of the potential for RF investment to make a significant impact, something given more weight in the final two stages of the process.

Groups were asked, in this first session, to familiarise themselves with the description of the case presented to them, and consider the questions below:

- 1. What was the objective of this case?
- 2. What was the outcome of the case? Direct and indirect?
- 3. What was the process for achieving that outcome? How were future or foresight methods

used in this case?

4. What surprised you about this case?

Key points from the discussion were captured on a whiteboard, generating a set of organising concepts and questions to return to. Paying attention to the 3rd question, where there is most overlap with the aims of the FL KnowLab, these notes indicate that a number of future-facing aspects of the process were identified. The central notion of 'dynamism' is temporal, describing the quality of a system over time. Attempting to describe the 'expected trajectory' of a constituent trend within the candidate problem area is a future-facing exercise, as is imagining the 'scale of potential impact'. It is possible that describing a problem as 'pressing', despite being on the face of it a transient, present-day quality, might contain an implicit assessment of the likelihood of it remaining so into the future. Thinking about the wider strategic context, we learnt from one representative of RF in attendance that the driving force behind establishing such a process was to allow the organisation to make better use of its comparatively limited funds by fostering a 'greater appetite for risk': the process allows leaders with RF to be confident they are managing this risk effectively.

These instances of future-facing language and activity were left largely unexamined by the group. With the focus of this session on reaching an understanding of the facts represented in the case study text, more philosophical enquiry was postponed for another occasion—though it is hard to see when in the programme that would be. In any case, the group was more focussed on creating the case summary, the task indicated by the agenda, than on examining their anticipatory assumptions around risk, planning and the extrapolation of present circumstance. The group chose not to explore any of the avenues offered regarding these aspects of the future in the case study. In the end, the way the discussion unfolded seems to suggest that the aims of the session were in tension—a practical descriptive analysis and synthesis task on the one hand, and a more open ended enquiry into different dimensions of the future on the other—perhaps illustrating the degree to which thinking about anticipatory assumptions cannot be assumed to just naturally happen when the opportunity to do so presents itself, but needs instead to be explicitly designed into the structure of the conversations.

The case study did offer the group the chance to discuss systems thinking approaches to understanding the world, with some challenging the apparent belief within RF that no relationship between the organisation and the systems in which it hoped to intervene exists until the moment of intervention (when in fact the information that an organisation like RF is interested in, say, urban food security, may influence other groups' strategic decisions). The 'theories of change' underlying the judgments within the process were also of interest to the group, though our case study representative was not in a position to discuss them. The central concept of 'dynamism', though not articulated clearly (something acknowledged by all with knowledge of the RF process) at least indicates a degree of sensitivity towards complexity and unpredictability.

In the 'futures literacy' terms described earlier, the process as represented within the case study might be thought of as being managed with a contingency perspective ("there are many alternatives and we must consider all of them") while working to support a goal defined within an optimisation mindset ("we will make an investment that will produce the social future we want to see"). Both of these are of course appropriate for an organisation with an obligation to invest transparently and to make the best use of limited assets. An awareness of the 'novelty' stance towards the future might, however, have enabled the group to explore the tensions and inconsistencies within the RF process more productively: as it was, the impression was that the

group had identified important features of the process, but lacked a language with which to describe them.

This impression is not contradicted by the texts produced in the last activity. Participants were asked to contribute a closing thought or two to the whole group in the final session of the workshop, adding a post-it note to the wall and taking a moment to explain their thinking to the group. The session provided a celebratory close to an intense three-day period, cementing a sense of community formed though a shared endeavour. Given this setting, the contributions tended to generate slogans rather than critique, as might be expected given the tenor of a closing session. All are inspirational and represent fine and worthy aspirations — the only aspect I want to note here is the way the future, foresight, and futures literacy appear in some contributions as ciphers, black boxes that achieve participants' wider aspirations through hidden mechanisms, as in these examples:

- "Using the future to more positively impact society's wellbeing."
- "I want to impact people's lives today as I help them secure their lives for tomorrow whatever tomorrow may bring."
- · "Building futures literacy is part of creating the capacity to be free."
- · "Using foresight processes to accelerate the building of new social capital for the future."
- "Use future for inclusion and bring future in our work on equity, participation."
- "Like the future, foresight belongs to everyone. Make it accessible through application with social change organisations."

Formally engaging with the future is represented here simply as a means to achieve other aspirations of equity, wellbeing and freedom. There are other contributions that offer a more nuanced view of how foresight might support organisations working for social change (as would be expected from a group containing highly experienced foresight practitioners), and some that make no mention of the future at all. It is noticeable, however, that throughout the 45 contributions there is no representation of multiple or alternative notions of the future mention of 'alternatives', certainly, but no examples of them. 'The future' or 'foresight' are presented as single entities, with no sense that there might different stances to adopt within them. There are two mentions of 'uncertainty' and none of 'complexity' or 'emergence'. It is hard to say that any degree of 'futures literacy' is represented here, along the lines developed in FL KnowLabs. This is not to say that there is no enthusiasm for thinking about the future represented here, or good advice—there is a wealth of that—or that the exercise did not serve a purpose. It is certainly not to suggest that this is any reflection on the capabilities of the participants, who were working to fulfill the design of the event. However, it is still the case that explicit consideration of the nature and role of the future in description and action is largely absent.

Conclusion

The event achieved a number of valuable outcomes with respect to evaluating the extent to which specific examples of futures oriented work by organisations like UNESCO, RF and JRC effectively introduce the future into such activity. It established the beginning of a community

with a shared experience of considering these issues, and created a space in which an interest in the future was entirely legitimate and welcome. It made clear at least that multiple ways of knowing and using the future exist. It introduced terms such as 'futures literacy' and 'anticipation' to many people previously unfamiliar with them. Many participants expressed a new enthusiasm for exploring foresight as a tool to support their work. At least two groups convened discussions outside the formal structure of the event to develop new futures processes for use within their home organisations. On the terms under which the event was organised it must be counted a success.

In this essay, however, I am interested in the extent to which participants might be imagined to have developed new sensibilities towards the future that would enable them to make better use of the future: to engage in foresight to generate new ways of understanding the present in more depth. From this perspective there were a number of differences or omissions. The event didn't explicitly make visible the anticipatory assumptions in use by participants. It might have drawn more on the vast experience of foresight and futures in the room. It didn't offer participants an opportunity to engage in anything that might be thought of as foresight work, or share examples of actual foresight processes (the case studies were at one remove, sharing the results but not the practice of foresight). In discussions, the potential to generate distinctive insights by adopting different stances towards the future was obscured by the tendency to discuss the use of different tools and methodologies. There were no opportunities for participants to reframe their understanding of the future or to be faced with different orientations towards the use of the future. There was little indication that futures literacy, in the sense established within the discipline of anticipation, had been given the opportunity to develop, leading to a sense that, while the 'use of the future' and 'foresight' were celebrated, an underlying sense of the practices these words represent was lacking. At times the programme, however, demanded that participants claim a knowledge of them, putting them in the difficult position of not contributing or offering an inauthentic response, doing them a disservice. It is hard to be sure that participants didn't leave the event with their fundamental assumptions regarding the future unchanged.

It was noted above that the key difference between this event and the FL KnowLabs was the extent to which each drew upon the substantial body of theoretical work that discusses the future and the uses to which it might be put in decision making. While the caveats regarding the unscientific nature of this essay remain, it is tempting to suggest that, had the Borghi event found more room for offering access to this conceptual resource, participants might have been afforded access to some kind of meta-language with which to make sense of the diverse material presented to them, making it easier to look beyond tools and methods to the stances and dispositions that lie behind their use, or to recognise the anticipatory assumptions that inform their view of the world for what they are, making it easier to entertain alternatives. They might have been able to name the optimisation and contingency mindsets that informed some of the case studies shared, and to discuss concrete ways of working with uncertainty and complexity, rather than being limited to simply affirming the importance of doing so. It might have been easier to see the commonalities between disciplinary approaches to working with the future.

This is not to say of course that it was not possible for participants to have reached this level of futures literacy with their own resources. But it seems worth considering the possibility that Borghi was less effective in developing futures literacy than previous events, and that this may have been in part due to the role a consideration of the theory of anticipation played in their design. The recommendation would be, therefore, for designers of events intended to develop decision-makers' capacity to use the future meaningfully, to make use of some theoretical framework regarding the future, be it the discipline of anticipation and FL KnowLab designs or

other approaches, in conceiving and developing materials and activities, and to include in the design an evaluation process to assess the ways in which this theoretical context contributes to participants' building their future literacy.

September 2014

Annex 2 Observations from the Facilitator of the Detecting Dynamic Problems Case Group by John A. Sweeney

John A, Sweeney participated in the event described here as a group facilitator. He is Deputy Director of the Center for Postnormal Policy and Futures Studies at the East-West University in Chicago, and Researcher at the Hawaii Research Center for Futures Studies.

Introduction

The KnowLab was organized by UNESCO, supported by the Rockefeller Foundation (hereafter Rockefeller), and sponsored by the Joint Research Centre of the European Commission (hereafter JRC). Bringing together a diverse array of participants to analyze and generate new insights on actual case studies of applied foresight, 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 well-being 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.

This report provides an overview of the KnowLab from a facilitator's perspective as well as some feedback on the event from a foresight researcher and practitioner's perspective. During this event, I facilitated one of five case study breakout groups on the topic of "Detecting Dynamic Problems" (hereafter DDP). The DDP group was composed of 5 people from a diverse array of organizations and locations: Jessica Bland, NESTA, U.K.; Emanuele Cuccilloto, JRC, Belgium; Tanja Hichert, University of Stellenbosch's Institute for Futures Research, South Africa; Katell Le Goulven, UNICEF, U.S.A.; Anumita Raj, Strategic Foresight Group, India; and Alioune Sal, African Futures Institute, South Africa. Claudia Juech, Associate Vice President and Managing Director for Strategic Research at The Rockefeller Foundation, served as the case representative for our group. The KnowLab ran on Chatham House rules in order to encourage engaging and critical dialogue.

KnowLab Overview

Day 1 of the KnowLab was designed for "grounding" the participants within each case study. 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 purview. 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 of the KnowLab was designed for "deepening" and 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 of the KnowLab was designed for "creating" and 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.

KnowLab feedback

People and Place

Without question, the greatest strength of the KnowLab was the people. 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. 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. In spite of these obstacles, the organizing and facilitation team's agility and adaptive approach brought a sense of calm to the gathering, although the agenda, especially the original version, was ambitious.

Process and Protocol

Clearly, a significant amount of thought and care went into crafting the agenda, which, as has already been established, was quite ambitious. As I did not participate in the entire process of forming the agenda, I can only remark on my experience at the first meeting and subsequent facilitator follow-up meetings over the course of the three-day KnowLab. First and foremost, I believe that participants could have benefitted from some type of primer or introductory presentation on futures literacy and foresight. Obviously, everyone in the room "uses" the future in their work, but the lack of a common language, or at least some shared semantics, felt like a source for misunderstandings rather than a driver of creative tension. 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 a 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.

Second, I believe too much was attempted in the time allotted and, 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, especially in the group I facilitated, 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. Additionally, two of our group members were participants in the case project, and both were vocal throughout our first session, which left diminished time for other participants to contribute. 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.

Third, the process/agenda lacked play, which is to say that it felt designed by adults for adults. Now, I realize that a sizable and serious investment of resources was made in bringing everyone there, including myself, to provide critical and analytical feedback on the cases, but it also 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. I've seen world café consultations in action before, and I guess I'm a bit uncertain about the efficacy of this model of engagement, which is to say that I think other, perhaps more contemporary, methods—from gaming to design thinking—might facilitate a more dynamic and engaging space for collaboration and creation. With that said, I do think that the gathering was successful in "infecting" the participants with a more futures literate ethos, and I believe credit is due to the organizers for being agile and adaptive, especially in their metrics for success. With that said, I have the sense that Rockefeller did not receive the outputs they expected from this exercise. I think this might relate to how the organization "uses" the future, which is more focused on strategy rather than culture. I plan to unpack this assessment along with my reflections on the case in the feedback that follows.

DDP Case Study Feedback

The case study write-up gave participants only a taste of the depth and complexity of Rockefellers Scan project, and with the support of the case representative, my group was charged with unpacking this complex endeavor. As previously noted, the composition of our group was excellent, and having two group members who were key participants in the actual project was an immense asset. Participants in this group surfaced some excellent insights comments on dynamism, which is one of the core concerns articulated in the case study write-up. According to the participants, dynamism...

- was not tangible or defined in the case.
- is something that "you know it when you see it."
- refers to a confluence of forces.
- refers to an agent within a/the system.
- must be contextualized.
- must have some criteria to be used as a metric.
- clearly suggests an explicit but also an implicit agenda.
- might be a problematic term within varying linguistic and cultural contexts.

As the primary output of the grounding session, I guided participants through three focus areas: process, outcomes, and objectives. Overall, the group felt that the entire scan case, or at least how it was presented, was too centered on problems, or challenges, rather than opportunities. Our case representative did clarify that the organization was interested in both, although the

link between the two was not clear in the case write-up. Participants spent a significant amount of time making sense of the process, which was only partially explained in the case—ostensibly to provide a space for the case representative to fill in the details. During the grounding session, however, the conversation quickly turned from description to analysis, and I struggled to keep the group focused on the task at hand. The group did produce the required outputs, which have been captured in the following images.

The image below shows the group's description of the case using the process, outcomes, and objectives structure following the grounding session.

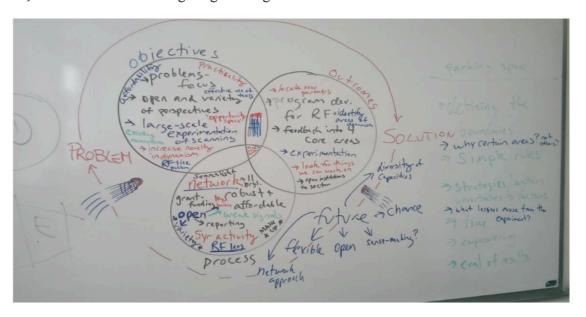


Image: Ispra KnowLab 2014/©UNESCO

Aside from looking at process, objectives, and outcomes, the group also spent some time looking at how Rockefeller "used" the future in this project. They ultimately felt that the future was:

- driven by a network approach
- open, flexible, and undergirded by chance
- requires a diversity of capacities
- a place of and for sense-making

As a means of keep more critical and analytical feedback and insights, we created a parking lot for questions, concerns, and/or comments during the grounding session.

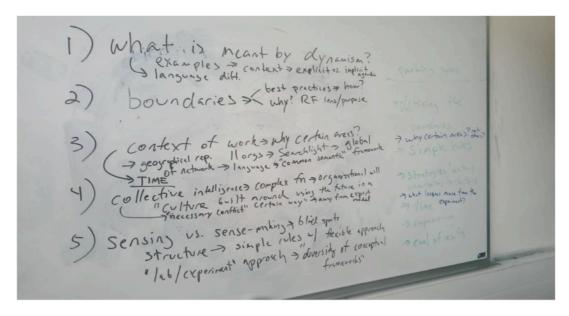


Image: Ispra KnowLab 2014/©UNESCO

Ultimately, these points and inquiries translated directly into the key learning points, takeaways, and queries for the next day's world café session.



Image: Ispra KnowLab 2014/@UNESCO

Following the world café sessions, I collected all of the responses and synthesized them into three headings: Approach, Process, and Dynamism. Using these lenses for further analysis, the many and varied participants in the world café session added a great deal of depth to the case study and, perhaps most importantly, started to respond to the KnowLab questions:

- 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 a reasonable price that also ensures a diversity of perspectives and yields sufficient novelty?

The results from the world café sessions were presented during a plenary session. They were as follows:

- Approach What is Scan's core story? Does the project have worldview awareness? Does Rockefeller's shadow hang over the program? Does Scan have too much of a Rockefeller lens? How can Rockefeller "own" Scan? Can Scan be a way of "experimenting" with doing? Might Scan be an opportunity to implement a foresight culture at Rockefeller? Does Rockefeller allow for instinctive or intuitive approaches to scanning? Does the project have humility about "noise" and finding signals?
- Process Scan is not merely a product. Scan ought to create safe and supportive spaces for taking risks. What is Scan's theory of change? Does Scan have diverse, open, and transparent metrics? Does Scan have multiple horizons? Does Scan adequately address the ethical and political context of its work? How can Scan get better at "spotting good waves" and not just problems? Can Scan be a place to explore sensing as a form of sense-making? Should Scan have a "failure handbook" to articulate what not to do? How can Scan leverage new and alternative forms of media?
- Dynamism What does it mean? What are its boundaries? Is it too problem focused? Can it develop or should it have a common semantic? Does it need a robust conceptual framework? Is it up front about its implicit and explicit agenda?



Image: Ispra KnowLab 2014/©UNESCO

In addition to this synthesized report, I have also collected photos of all the contributions made by participants in the world café sessions here: https://www.dropbox.com/sh/4q0uya6ocbkigor/AACUFVIuKFQJNILgAhI8-ryqa?dl=0

DDP Reflections

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. This seemingly trite aphorism encapsulates my take on the DDP case study. From my perspective, Rockefeller focused too much on strategic outcomes of Scan rather than attempting to build an internal culture of futures literacy, which is something that I believe a Scan project scaled for an organization with the aims and outputs of Rockefeller can actually accomplish. Horizon scanning is as much an art as a science, and the outcomes and outputs are not always readily apparent, especially if one is working across time scales—looking for short-term impacts as well as long-term insights.

One of the key takeaways for me as case facilitator was re-affirming my sense 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 Scan ought to do. However, one is not telling stories with clear endings and tidy plot points; rather, Scan 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. Finally, I would like to address the "affordability" dimension, which came up repeatedly in the group discussions and figures prominently in the case study write-up. Clearly, cost is always an issue, but I would re-frame the question: Can Rockefeller 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.

A Foresight Researcher and Practitioner's Take on the KnowLab

I have been extremely fortunate to study at one of the few PhD programs in Futures Studies—the University of Hawaii at Manoa. Additionally, I have had the good fortune to make connections with many faculty members and students from strategic foresight and Futures Studies programs around the world. I know that representatives from many of these institutions, as well as an array of practitioners, have made substantive contributions to the KnowLab approach and structure. 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 KnowLab'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.

Despite its lack of disciplinary coherence, foresight and Futures Studies has a truly global history, and there is currently a frenzy of interest in using anticipatory approaches to planning, policy, and strategy development. Recently, there has been a proliferation of methods for exploring uncertainty, challenging biases and assumptions, and crafting scenarios; however, few, if any, include spaces for meta-reflection. Indeed, many "new" methods emerging at the moment lack a clear and sound theoretical foundation. As this concern was integrated into the very fabric of the KnowLab from its inception, I feel confident in this gathering's "outputs" and "outcomes," which might not at all be measureable or explicit, especially as the KnowLab takes a truly mutative approach to change. Participants were empowered to consider not only the case studies but also how the insights generated over three days of conversation can and might impact their own work, and many participants committed to following up with the organizers on collaborative projects.

The KnowLab, then, aims to do what the field needs most right now: build community, drive collaborative action, and critically reflect on how the future gets used by those seeking to enhance their anticipatory capacity. While there are a number of professional organizations for foresight and Futures Studies researchers and practitioners, I think that open spaces for numerous groups, organizations, and agencies that "use" the future on their own terms are slight, and one of the most interesting outputs of the KnowLab was the proposal for a UNagency wide community focused on how to better use the future to understand the challenges and opportunities of tomorrow and what anticipatory actions and policies might be developed today. As the KnowLab continues to develop, I am both confident and hopeful that open spaces of critical, yet playful, engagement on how the future gets used, and abused, can not only enhance capacity for anticipatory approaches but also drive cultural shifts to embrace uncertainty and change at a variety of scales.

Appendix – Actionability CLA

During the open conference session on Day 2, a small group convened to produce a Causal Layered Analysis (hereafter CLA) of "Actionability," which was a recurring thematic in many of the case studies. CLA 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 counternarrative (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: Usiniharakishe, which literally translates as "Don't rush me!"

official/hegemonic	disowned/counter	integration
Actionability (Single Bottom Line)	Appreciative / Reflection (Single Bottom Line)	Action Learning (Quadruple Bottom Line)
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!" "Usiniharakishe"	"Jazz" "Tell me more / Show me more!" "Everything has value!" "Trust in Allah and tie your came!"

Fig: Causal Layered Analysis (CLA) of Actionability, "The Manoa Team"/Ispra KnowLab 2014

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.

Annex 3 The Results of the Evaluation Form

34 participants filled in the evaluation form.

1. Experience

1.1 How was your experience of the event?

Statements	Missing	Strongly disagree	Dis- agree	Not sure	Agree	Strongly agree
Facilitators and presenters spoke clearly				1	22	11
The event was well-organized	1	2	2	2	17	10
Facilitators were well-briefed			1	2	21	10

The case study and knowlab approach was more appropriate for the topic than a seminar or conference	2			7	14	11
Our group discussions generated new ideas	1	1		4	21	7
I encountered new perspectives on foresight and social change within our group discussions			4	5	16	9
Our group discussions developed my understanding of foresight and social change	2		2	7	15	8
Our group met the goals of the session				6	19	9
My expertise was appropriate to allow me to contribute				3	21	10
Recommendations from this event will be relevant to organisations working for positive social change			1	9	18	6
I felt that my voice was heard				2	20	12
The case studies provided useful and engaging context	1	1	2	6	15	9
The value of the event is clear to me	3			5	19	7
There was sufficient time allowed for discussion		1	2	6	18	8
There were sufficient breaks		2	1	3	21	7
There was a good balance between structured and unstructured activities	1	1	4	3	19	6
Materials provided were useful	2		1	6	22	3

1.2 Analysis of Experience matrix:

■ The majority of the participants (strongly) agreed with every statement. The lowest percentage for (strong) agreement is 68% and the highest is 97%. The average percentage of (strong) agreement is 85%.

- On every question the option "Agree" was chosen the most, 41% being the lowest share of participants agreeing and 65% being the highest.
- On following questions more than 90% of the participants answered "Agree" or "Strongly agree":
 - 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.
- Topics on which a small number of participants disagreed:
 - The event was well organized (4)
 - I encountered new perspectives on foresight and social change within our group discussions (4)
 - There was a good balance between structured and unstructured activities (5)
- A fifth of the participants were "not sure" if:
 - The case study and knowlab approach was more appropriate for the topic than a seminar or conference.
 - Our group discussions developed my understanding of foresight and social change.
 - Recommendations from this event will be relevant to organisations working for positive social change.

1.3 Extra comments from participants on the section Experience:

- I felt that many of the case studies were not actually about using the future but more about strategic issues + it would be useful to also ask a higher order question on the core studies to relate them back to foresight + generate more cross-cutting learning on the topic. (I think this did happen in the UNESCO ICH example.)
- On the organisation: Organizers were flexible! So that's great.
 On the case studies: They were looking for validating at time. More personal stories instead of just data.

1.4 Do you have any other comments on the event?

- Positive comments:
 - A lot of people were very happy with the mixture of participants. They appreciated the diverse background and their insights.
 - 10% of the participants mentioned that they really liked day two and three of the
 event.
- Negative comments:
 - 10% of the participants pointed out that there was too much structure
 - 10% of the participants were not happy about the jargon used. It was too complicated since there were three organizations present.
 - Three participants wanted to have more clarity when the terms as foresight, future studies... were being used. They wanted to have more theoretical background.

1.5 How would you like to build on the event? How would you prefer to stay connected with this group?

Most participants want an information building network. A lot of them pointed out that social media would be a good option, especially LinkedIn. A fifth of the participants answered that they will use email to contact (some) of the other participants. A tenth of the participants would like to have a follow-up (annually) event.

2. About you

2.1 Which of these best describes the organisation you work for?

More than a fourth of the participants work for research organizations or higher education institutions.

More than 25% of the participants work for non-governmental organizations.

Around 10% of the participants work for non-profit organisations.

2.2 What academic training have you had? (e.g., 'undergraduate degree in engineering' or 'masters in political science')

- More than half of the participants have a master's degree as highest degree. There is a big variation in the topics of their degrees.
- Around 40% of the participants have a PhD. Again, there is a big diversity: going from
 engineering to philosophy. Only two of them have a PhD in Foresight though.

2.3 What professional training have you had? (e.g., accreditation or certification from a professional organisation)

Very few answers and those that answered were tangential to the topic, related to their CV more than anything else. Next time the question needs to be reformulated.

2.4 In your primary role, how do you contribute to your organisation's forward-looking conversations or strategy? (e.g., providing expert knowledge, enabling access to groups, offering political support, facilitating workshops...)

- A tenth of the participants answered that they will use their foresight knowledge in their company.
- More than 10% noted that they will use scenario planning and scanning in their organisation.
- A tenth answered that they would like to organize conversations with foresight experts and their colleagues.

2.5 What motivated you to participate in the event?

- The majority of the participants answered that they attended the event because they wanted to learn (more) about foresight.
- 10% of the participants replied that they received the invitation from a high esteemed colleague/organisation so they could not refuse the invitation.

2.6 Which groups or individuals not represented in the event do you think it would have been useful to invite?

A third of the participants did not answer this question.

- A couple of participants pointed out that they would like to have more participants present from the technical sector.
- 10% mentioned that the private sector was not that well represented.
- Some participants would like to have more foresight practitioners (from governmental agencies) present.

2.7 Did you know any of the workshop participants before attending?

- Around 90% of the participants knew some of the other participants.
- Two participants did not know anybody at all.

3. Foresight and positive social change

3.1 How, if at all, has your understanding of the role of foresight in contributing to the wellbeing of humanity changed as a result of the workshop?

- More than 25% of the participants are more aware of the importance of foresight.
- A quart of the participants still need time to digest the event in order to form an answer.

3.2 What new questions do you have regarding the role foresight can play as a result of attending the workshop?

What contribution do you think your organisation can make to the use of foresight for positive change?

Most people answered that foresight can help them to see new solutions to current problems. It can help to see the problem differently.

3.3 How, if at all, has the way you think about uncertainty and the future changed?

- Around a third of the participants did not fill in this question or need more time to process the event
- 25% of the participants said that their view has not changed. The event for some only enforced what they were thinking.
- 10% of the participants said that the event enhanced their capacity to live with uncertainty.

Annex 4 Participants List

List of Participants in the KnowLab

Judith Aidoo	Chief Executive, Caswell Capital Partners	Accra
	Limited	
Mario Bazan	Executive Director, FORO Nacional	Lima
	Internacional	
Rachel Bergenfield	Senior Associate, Strategic Research Department	New York
	of The Rockefeller Foundation	
Jessica Bland	Principal Researcher, Policy and Research Team,	London
	Nesta	
Cristiano Cagnin	Advisor, Center for Strategic Studies and	Brasilia
	Management Science, Technology and Innovation	
	(CGEE)	
Fred Carden	Lead Technical Advisor, The Knowledge Sector	Jakarta
	Initiative	
Young-Jin Choi	Director Social Investments, Impact in Motion	Munich
Emanuele Cuccillato	Policy Analyst, Foresight and Behavioural Insights	Brussels

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The Rockefeller	
Foundation.	
1	Paris
Project Assistant, UNESCO	Faris
Project Assistant, UNESCO Director, Strategic ForesightTeam, World	Geneva
Project Assistant, UNESCO Director, Strategic ForesightTeam, World Economic Forum	
Director, Strategic ForesightTeam, World Economic Forum	
Director, Strategic ForesightTeam, World Economic Forum Chief of Policy	Geneva
Director, Strategic ForesightTeam, World Economic Forum	Geneva
	Foundation.

John H. Matthews	Co-Chair for the	Corvallis
	Alliance for Global Water Adaptation	
Riel Miller	Former Head of Foresight,	Paris
	UNESCO	
Ivana Milojevic –	Adjunct Professor, University of the Sunshine	Queensland
	Coast, Australia and Visiting Professor,	
	Association of Centres for Interdisciplinary and	
	Multidisciplinary Studies and Research, Novi Sad,	
	Serbia.	
Natalie Phaholyothin	Associate Director, Asia Office, The Rockefeller	Bangkok
,	Foundation	
Jacques Plouin	Strategic Foresight	Paris
•	Specialist, Africa Department, UNESCO	
Anumita Raj	Senior Program Manager,	Mumbai
	Strategic Foresight Group	
Jennifer Rudkin	Independent Designer	Paris
	and Researcher and Consultant, Social and	
	Human Sciences, UNESCO	
Alioune Sall	Founder and Executive	Pretoria
	Director, African Futures Institute	
Richard Sandford	Futures Researcher,	London
	UK Government Office for Science, Department	
	for Business Innovation & Skills	
Fabiana Scapolo	Head of Sector Foresight,	Brussels
	Joint Research Centre of the European	
	Commission	
John A. Sweeney	Deputy Director, Center for Postnormal Policy	Honolulu
	and Futures Studies, East-West University in	
	Chicago,	
	and Researcher, Hawaii Research Center for	
	Futures Studies	
Barbara Torggler	Principal Evaluation	Paris
	Specialist, Evaluation Section, UNESCO	
Maya Van Leemput	Professional Futurist, ReelFutures	Antwerp
	Specialist, Evaluation Section, UNESCO	