Creative Processes in Policy Making:
A Case for Context in Foresight

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" Creative individuals, …, may gain advantage from higher levels of associative thinking, since they are capable of effectively processing these increased inputs without the risk of cognitive overload. Since to create consists essentially of the making of new combinations of associative elements.., any ability which serves to bring together otherwise remote ideas will facilitate a creative solution" [3]

1   Introduction

As with all fields of application, policy-making can frequently fall into the trap of not questioning whether the regular, oft-used solutions are the only way to solve a new problem. Far too frequently, it happens that, not only is a particular policy instrument not the best answer, but it is not even a valid answer to the problem in the first place! Systematic approaches to policy formulation, such as foresight, may appear at the outset as presenting a toolkit of routinised methodologies to be followed religiously by the newly initiated. Yet foresight practice itself shows that not only do foresight experiences generated in one country or region defy close emulation, but that foresight as a phenomenon is undergoing constant change in response to the evolving socio-economic context.

The paper thus contends that creativity implicitly forms an integral part of any foresight *process-in-the-making* and its designers and implementers will at least intuitively, if not (as in a particular case discussed below), proactively develop creative capacities to cope with alternative and fast-changing contexts. Creativity[4] in foresight can occur at multiple levels[5], for example in the design of the foresight process, in terms of the role of creative approaches in the content of foresight and in its application to new contexts (sector, topic, discipline ..).

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[3] Preti, A. and Miotto, P. 1997; Creativity, Evolution and Mental Illnesses., Journal of Memetics – Evolutionary Models of Information Transmission, 1 (http://jom-emit.cfpm.org/1997/vol1)

[4] 'Creativity can be conceived as a complex of qualities that allow some people more easily than others to produce new objects or ideas' see Preti and Miotto 1997.

[5] The authors are grateful to Professor Luke Georghiou for his insights and advice.

Indeed the emerging globalising learning economy is increasing the need for creativity in foresight, in response to a highly dynamic macro and micro-economic environment. The creativity-in-foresight perspective has important implications for the design, orientation and implementation of the foresight exercise which will be explored in this paper. The paper highlights the need to shift the emphasis from processes and tools to the actors in foresight, in particular the role of individual creativity.

The eFORESEE project as implemented in Malta is used as a case study to provide insights into how context interacts in complex ways with the foresight process and tools and how mindset and skills provide the key to optimizing the role of creativity in foresight and the spin-offs which this can generate.

2   Redefining foresight

We start by looking at two commonly used definitions of foresight with a view to emphasizing the need to assign a more central importance to the human (creative) dimension in foresight.

Foresight is traditionally defined as:

- <u>a tool or set of tools</u> used "*to survey as systematically as possible what chances for development and what options for action are open at present, and then follow up analytically to determine to what alternative future outcomes the developments would lead*" [6]

More recently, it has been recognized that foresight is more than just a set of tools, and involves a process whereby the tools are just one element, interacting with human inputs of intellect, expertise and sector-specific knowledge.

- <u>a process</u> - "a *systematic, participatory, future intelligence-gathering and medium-to-long-term vision-building process*"[7]

But foresight is essentially embodied in the actors involved in its design and implementation and may thus also be defined in relation to two key human attributes:

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[6] Martin B.R and Irvine J. (1989) Research Foresight Priority-Setting in Science
[7] EU FOREN - Foresight for regional development—FOREN—A Practical Guide to Regional Futures http://foren.jrc.es/

- <u>foresight as a philosophy or particular mindset/approach to life</u> evident at the individual or group level. It separates the proactive from the reactive, the path-dependent from the path-breakers.

- <u>foresight as a capacity for contemplating, anticipating and coping with the future</u> also evident at the individual or group level. It entails a set of skills which can be taught but presumes a mindset open to creative thinking and proactive exploration of the future.

This emphasis on the role of individual creativity in foresight is not new:

"foresight is an art that requires much practice and where the 'artists' are scarce….How *foresight* capability is developed is a conundrum. Particularly talented people emerge from time to time and quite unexpectedly; their talent can only be appreciated after the event by the nature of *foresight* itself. No one engaged in *foresight* activity is uniquely successful, which is further confirmation, were any needed, of the artistic nature of the activity"[8]

Reviews of successful foresight exercises highlight the critical role of champions who believe in the utility and need for foresight and can stimulate others to engage in the process. The skills and training required to carry out a quality foresight exercise are also recognized but the need for creative thinking is underplayed – yet foresight calls for creativity in working with different and fast-changing contexts.

> **Emphasis on Creativity in futures training in University of Hawai's syllabus**
>
> *"society" is a "human invention," and .. you have some or all of the various kinds of "creativity" necessary to be a "social inventor" yourself.[9]*

Thus, from the creativity-in-foresight perspective, a new definition of foresight incorporating all four elements, emerges:

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[8] Loveridge, D. (1996) Ideas in Progress, Paper No5. Foresight, Technology Assessment and Evaluation-Synergy or disjunction?, ASTPP Meeting, Amsterdam. Available from the author's website at http://les.man.ac.uk/PREST/People/Staff/Denis_Loveridge.html.

[9] http://www.hawaii.edu/polsc171/00-1stUsr/PS-syllabus.html

foresight is a set of <u>tools</u> to encourage, through a <u>process</u> of open reflection, and drive the user into thinking about the problem with a fresh <u>outlook</u>, thereby improving the outcome of the process, by transforming the solver into <u>a creative thinker</u>.

Foresight

Mindset ↔ Skills

↕

Process ↔ Tools

The Black Box
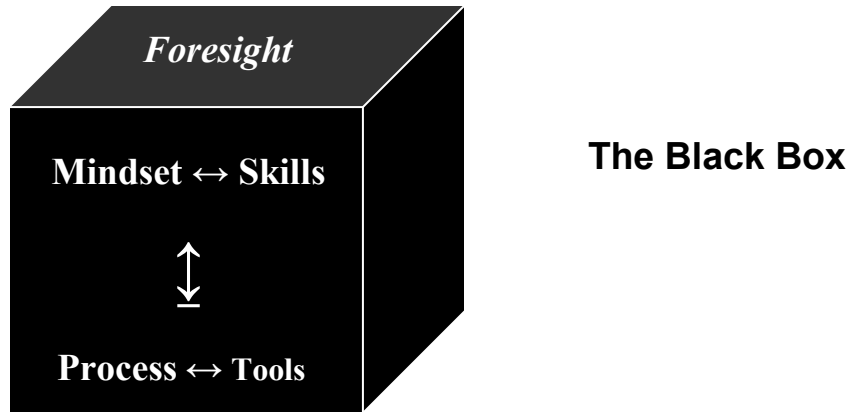
This definition highlights the dynamic link between the four elements and how one element drives the next in an interactive chain.

3   The Question of Context

The use of any thinking tool does not happen in a vacuum. The process takes place within a context – indeed, a number of contexts, which should influence the thinker when solving the problem. In policy making, two distinct contexts should be kept in mind:

The solution context[10]: When trying to identify a solution to a problem, it is important that one keeps in mind where the solution will be applied. In policy making this is not always easy, especially when one considers that the solution context usually lies in the future. The selection of the appropriate foresight <u>process</u> and <u>tools</u> are critical in the solution context and creative thinking plays

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[10] Throughout this paper, we will be using the term *problem* when referring to the question being addressed by the thinking process, and the *solution* to the outcome of the thinking process. The users of the thinking tool or process will be referred to as the *thinkers*, while the *initiators* are the persons who adopt a thinking tool (and who may be the same individuals as the thinkers, but not necessarily). Although we recognize that not all questions being addressed are problems, and not all answers are solutions (or possibly even answers), we will be using these terms to aid the presentation of our argument.

a key role here in aligning process and tools with the current and envisaged context.

The thinking-tool context: When the initiators identify a thinking tool to adopt to solve a problem, it is of utmost importance to keep in mind who the thinkers will be, since, in most cases these thinkers would be chosen before advocating the tools and process in which the solution will be sought[11]. The collective <u>mindset</u> and <u>capacity</u> of the thinkers to be engaged in the foresight process are equally critical and have important impacts on the relevance, quality and speed of the exercise.

Whereas the first context is almost universally identified and taken into consideration (usually by addressing it as part of the problem itself) in policy making, we believe that the latter is all too frequently left aside and not addressed. This paper will be mainly focusing on this latter context. One may encourage the adoption of particular tools which are particularly suited for the thinkers who will be using them, however, we may be considering a different approach – that of adapting the right tools for the selected thinkers. These issues are considered further within the context of the recently completed EU Fifth Framework Programme STRATA[12] project, eFORESEE, aimed at the Exchange of Foresight Relevant Experiences among Small Enlargement Economies (Cyprus, Estonia and Malta).

4   Foresight in Malta

eFORESEE was a two-year European project (2002-03) addressing the challenges faced by policy makers implementing foresight activities for smaller economies and regions. In particular it examined the potential role of foresight in dealing with the structural changes to the economy that accompany the Accession process, as well as the integration of accession states into a European Research

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[11] This is not strictly true – not all thinkers (as individuals) need be identified before identifying a thinking process to adopt. However, one would usually have already identified groups from which the thinkers will be selected. In Policy Making, for instance, one would always include the various stakeholders in the thinkers.

[12] The FP5 STRATA program promoted dialogue between researchers, policy-makers and other societal actors on general science, technology and innovation (STI) policy issues of European relevance. It supported the establishment of networks and expert groups to improve the European STI policy development process at regional, national and international level, as well as interactions with other policy fields. An important part of this work was support for a series of foresight related actions including - FOREN, FOMOFO, FORETECH, eForesee and a project entitled 'Integrating Technology and Social Aspects of Foresight in Europe'. These and other STRATA project can be found at http://www.cordis.lu/improving/strata/selected.htm.

Area. It explored the decision-making processes involved in setting up foresight activities, as well as the challenge of managing and implementing specific foresight actions and creating a community of foresight practice.

The rationale and remit of the EFORESEE Project was:

- to address the challenges faced by policy makers implementing foresight activities for **smaller economies** and **regions**.
- To examine the potential role of foresight in dealing with the structural changes to the economy that accompany the **Accession** process, as well as the integration of accession states into a **European Research Area**.
- To explore the decision-making processes involved in setting up foresight activities, as well as the challenge of managing and implementing specific foresight actions.

Foresight teams in Cyprus, Estonia and Malta executed a series of pilot projects focused on themes of current interest in their regions. The themes for the Malta Pilots were:

- Exploring Knowledge Futures in ICT and Education in 2020
- Realizing a Thriving Biotechnology Industry by 2015
- Towards Enhancing the Marine's Sector Contribution to the Economy in 2020

The Malta eFORESEE project involved a complex interplay between three key factors, namely **context, process and content**. The project explored the potential role of foresight in innovation policy-development within a small country context. The foresight process which unfolded, reflected a *creative fusion* of innovation and socio-cultural foresight – highlighting the potential for harnessing the impact of context for optimum effect. The emphasis on re-thinking and developing a more creative process in the first pilot initially handicapped the focus on content. However, the emphasis on context and process were critical to the success of the eFORESEE Malta project. Foresight's rationale, tools and approaches have evolved in response to *an advanced large country context* with an existing tradition for rational approaches to innovation and technology policy. In Malta, foresight meets an altogether different context: *a small country in transition* with very limited resources and no rational approaches to policy. Here policy is not just shaped by context – *it is* actually *context-driven*.

Foresight has a *critical role* to play here in breaking path-dependency in policy by liberating mind-sets and encouraging virtuous circles.

The eFORESEE Malta project highlights the fact that ideally foresight is not merely adapted to the new context – but is rather completely re-thought! Hence the case for creativity-in-foresight. Taking the re-definition outlined above, the creative thinking process needs to be present at all four levels in terms of process, tools, mindsets and skills and in relating them to the particular context. In the next section, we explore the context within which the Malta eFORESEE project unfolded.

The foresight challenge of addressing multiple contexts
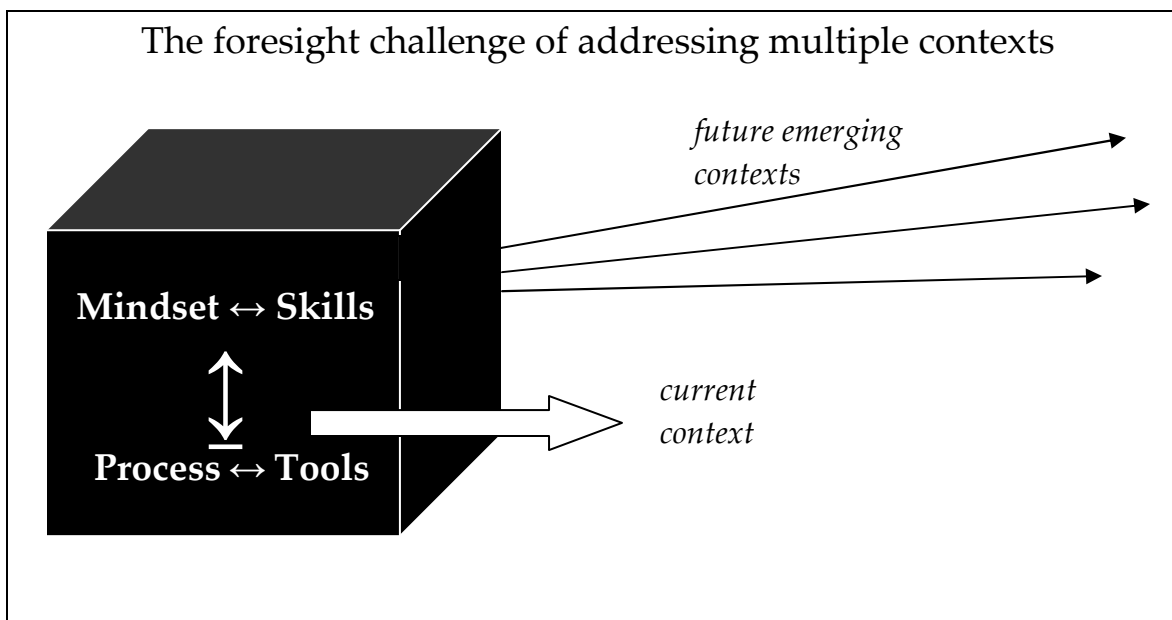
5   Creativity and Foresight for Policy Making in Malta

At the time of implementing the Malta eFORESEE project early in 2002, Malta was faced with a number of opportunities and threats. Among the opportunities was the economic, political and military security afforded through membership of the European Union. This in itself was providing a unique opportunity for the country to escape from the constraints of context and path-dependency and to embark on a faster transition path to the knowledge society. Yet EU membership with the heavy burden of compliance with the Acquis Communautaire was also being viewed as representing a potential loss of national socio-cultural identity and values, resulting in a negative impact on marginalised groups. These

perceptions were accompanied by the realization that Malta's small size could prove both a threat and an opportunity in this context.

Malta's culture, belief system and way of life have evolved through history as different colonizers imposed different rules and different beliefs. Much has been written on the complex nature of the Maltese identity, however here we are mainly interested in the current cultural make-up to enable us to observe its interaction with the Foresight process[13].

At the very core of the Maltese identity lies a complex interaction of traits derived from a number of different, sometimes contradictory, sources. The Mediterranean context obviously plays an important role in this identity: the climate, and the way of life induced through this climate. Two hundred years of recent colonization by the British provided the Maltese identity with a superimposed layer of Northern European attitudes. Finally, a rather long-standing strong Catholic tradition contrasts and combines with the previous two influences to create a unique cultural *mélange*, and schizophrenic national identity. Despite the fact that this has obviously been somewhat subdued by the adoption of a contrasting global culture, one would still find Maltese culture firmly anchored in Mediterranean traditions.

As with most Mediterranean cultures, Malta follows a strong oral tradition and a love of strongly opinionated discussions. Airing of divergent opinions is typical initial exchange in casual conversations. The purpose and the beauty of the discussion is the discussion itself, and no attempt at consensus building and synthesis of ideas forms part of the standard social rules governing these discussions. This is contrasted with a strong value system, with family values playing an important role. The family-value system goes beyond the genetic one to other communities, primarily religion and politics. Airing of different opinions on such issues, unlike everything else, is socially frowned upon. These characteristics and traits have an important bearing on the extent of our compatibility with and receptivity to foresight as an approach.

The asymmetry between the typical features of the foresight process and the Maltese context are summarized in the table below.

Table 1: Asymmetry of Features

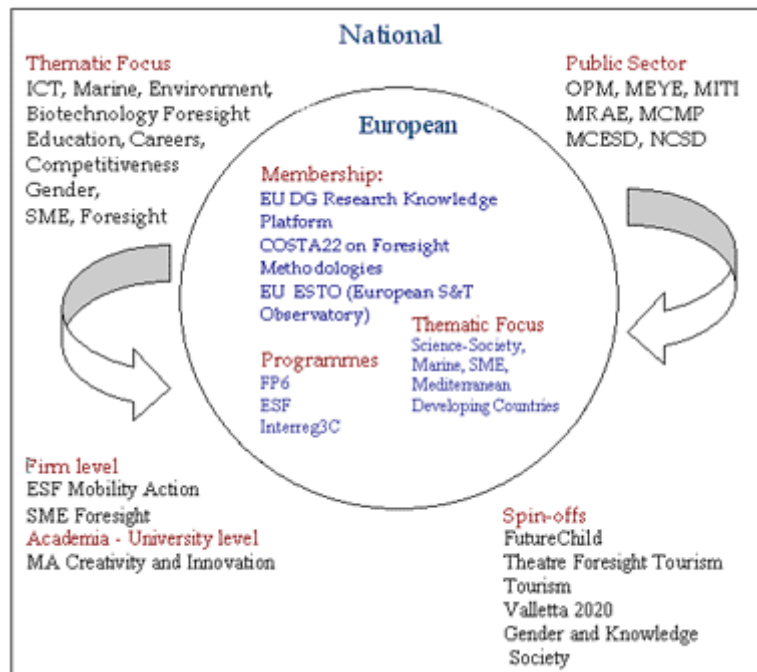[13] Naturally, it is impossible to summarise relevant cultural traits to enable us to look at this process. Our overview is not meant to be construed to be presenting a full, or unbiased view. It is to be taken to be more of a caricature of the Maltese cultural and social identity, exaggerating features to enable us to discuss the interaction between the Foresight process and the local context more easily.

Features of the *Foresight* process	Features of the Maltese Context
Consensus building	Divergence of opinions
Recording of the process	Oral tradition
Processes for organising expert and non-expert inputs	Blurring of expert/non-expert divide
Systematic approaches to policy (Rational)	Weak tradition of systematic approaches (Chaos)
Consensus-building	Divisive and individualistic
Long-term vision	Short-term, reactive
Open processes of governance	Closed systems, clientelism
Virtuous Circle	**Vicious circle**

This highlights the challenge of transferring the foresight approach, process and tools to the Maltese context – a context completely alien to foresight. The challenge in implementing the eFORESEE Malta project lay primarily in determining to what extent the Maltese mindset could be freed from this context - essentially characterized by a vicious circle of unstructured arguments and short-term reactive decisions over key policy issues - through the creative embedding of foresight thinking, skills and methods. This entailed a re-thinking of process and tools in alignment with the mindset and emerging capacity for foresight activity. The project worked within a context and mindset which underwent change even as the foresight process was underway. With the introduction of basic foresight skills, the mindset was freed up and the foresight process generated a momentum and dynamic of its own. The foresight participants expressed a general feeling of finding new space to communicate and explore ideas in an open environment. The spin-offs generated reflect this new energy and the level of creativity in applying foresight to completely new contexts: Futurefest and Futurechild, theatre and the arts, tourism, gender and the knowledge society… The extent of activity generated is mapped below but keeps evolving.

National

Thematic Focus
ICT, Marine, Environment,
Biotechnology Foresight
Education, Careers,
Competitiveness
Gender,
SME, Foresight

Public Sector
OPM, MEYE, MITI
MRAE, MCMP
MCESD, NCSD

European

Membership:
EU DG Research Knowledge
Platform
COSTA22 on Foresight
Methodologies
EU ESTO (European S&T
Observatory)

Programmes
FP6
ESF
Interreg3C

Thematic Focus
Science-Society,
Marine, SME,
Mediterranean
Developing Countries

Firm level
ESF Mobility Action
SME Foresight
Academia - University level
MA Creativity and Innovation

Spin-offs
FutureChild
Theatre Foresight Tourism
Tourism
Valletta 2020
Gender and Knowledge
Society

Creativity and iteration in coping with the foresight challenge of multiple contexts

Mindset ↔ Skills

Tools ↔ Process

future emerging contexts

current context
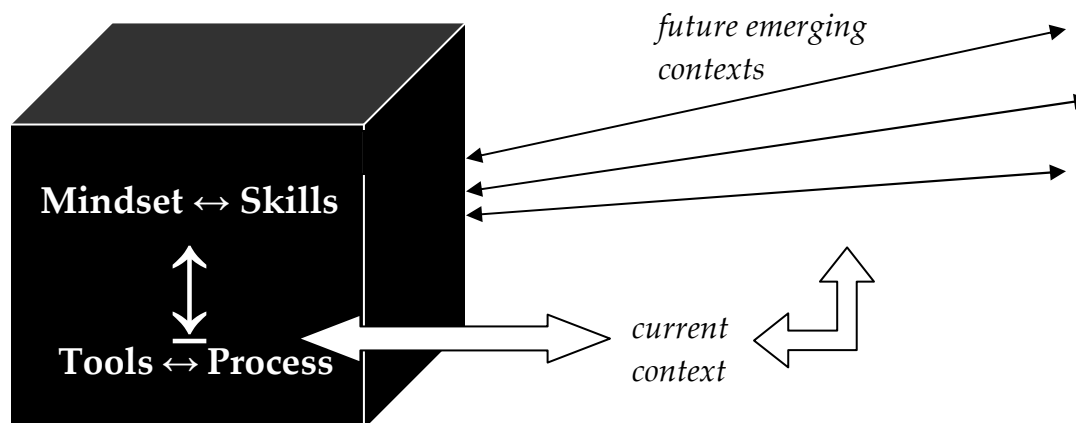
6   Conclusions

This paper has sought to introduce new insights and emphasis on the role of creativity in foresight, thereby bringing to the fore the human dimension in foresight. The need to assign higher importance to this dimension, in particular an open creative mindset and skills, above the process and tools within the hierarchy of the foresight 'black box' has been highlighted.

As with all thinking processes and tools, it is important that not only is the user aware of the context in which the conclusions arising from the tool will be applied, but also that she is aware of the context in which the tool itself is being used. This is where the designers and implementers of the foresight activity play a critical role in terms of introducing creativity and new approaches to the process. Whereas the first is usually explicitly packaged as part of the question being addressed, the latter is usually left hidden as an implicit factor in the process. We have argued that to maximize the output of Foresight, the thinkers' context should influence how the Foresight exercise takes place.

This raises a fundamental question, possibly even a paradox – one of the basic rationalizations of Foresight, possibly even of most other thinking processes, is that of encouraging the thinkers to rise above the accepted norm, and not to limit themselves by the context within which they lie. This may seem to be in direct conflict with our advocating the use of the thinkers' context to strengthen the thinking process. The overall conclusion from these statements would thus read that:

> *One way of rising above the restraining context is by adapting thinking tools to that same context.*

We leave it up to the reader to judge whether our arguments and observations from applying *Foresight* in Malta constitute evidence for this.

Websites:
  eForesee: http://www.eforesee.info   *Malta Council for Science &* *Technology:* http://www.mcst.org.mt