The impact of national traditions and cultures on national foresight processes

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A R T I C L E   I N F O

A B S T R A C T

This paper addresses the influence of national traditions, styles or culture on the use of foresight in decision-making processes. Inspired by sociologists' contributions on national culture, the paper demonstrates that two dimensions of national culture, power distance and uncertainty avoidance, are useful in the characterisation of the context in which national foresight exercises are carried out. The paper is based on two Danish cases: The Danish Government's Globalisation Strategy, from 2005, and the Danish Research 2015 process, from 2008, which focus on priority settings for strategic research.

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1. Introduction

This paper originates from two issues that are being discussed in the current academic literature on foresight and in the international foresight community. The first issue concerns the integration of foresight into national policy-making processes. Foresight projects have often been carried out as stand-alone activities and have been partly decoupled from the processes into which the results of the foresight must feed. Many foresight exercises have had no impact on policy-making. This lack of impact has led policy-makers to require that the content of foresight exercises relate to current political agendas and that their processes relate to policy making processes [1]. Academic research has also explored this issue, focusing on different characterisations and typologies of foresight projects [2] [3]. The literature has suggested that foresight must be an integral part of policy-making processes [4], and concepts such as adaptive foresight [5] and systemic foresight [6] have been suggested for the development of more tailored foresight processes. Among the contributions to this discussion, the key conclusion is that there is no 'one-size-fits-all' approach to foresight. Context matters.

The fact that context matters leads to the other issue that this paper originates from, namely, the context to which foresight processes are to be adapted. In a discussion of the use of the concept of systems thinking in foresight, Saritas distinguishes between external and internal context [6]. The external context is the set of STEEPV factors (Social, Technological, Economical, Environment, Political and Values) that affect the content of a foresight exercise. The internal context relates to the structures and behaviours of the organisation or system in which a foresight exercise is organised and carried out. This organisation or system includes all parties and institutions (e.g. administrative system and political system) that are involved in the performance of a foresight process and implementation of the results. This paper focuses on internal context.

There is no doubt that each foresight exercise must be narrowly adapted to its actual context. Nevertheless, both practitioners who are carrying out foresight processes and academics who are studying foresight processes need to simplify

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the real world through different characterisations and typologies of both foresight projects and their contexts. The literature has suggested several simplified contexts for foresight.

Some of the literature has suggested that a decisive context for national foresight exercises relates to the size of the country. The seminal book Foresight in Science by Irvine and Martin analysed processes in France, West Germany, the United States and Japan, which were, in effect, the world's four largest economies at that time [7]. In opposition to this focus, several papers have analysed foresight processes in small countries. In a paper titled 'Foresight in Smaller Countries', Crehan and Harper analysed foresight in Malta, Cyprus and Estonia [8]. In another example, Glod, Duprel and Keenan recently published a paper entitled 'Foresight for science and technology priority setting in a small country: the case of Luxembourg' [9].

Other literature suggests that geographical regions are a useful form of contextual categorisation. The Handbook of Technology Foresight, has chapters on four of such regions: the Nordic countries, industrialising Asia, Latin America, and Central and Eastern Europe [10]. The chapters in the handbook explicitly consider the variety of approaches and contexts within each region, but apparently, the authors still find the clustering of such regions useful. We recognise, of course, that for some authors, the selection of geographical regions might be used, primarily, for simple structuring of a text or a book and not as a deliberate analytical approach.

In line with this regional approach to contextual categorisation, Keenan and Popper have discussed regional styles of foresight for six regions [11]. The decisive context in Keenan and Popper's work is differences in political tradition: established democracies (as found in Northwest Europe and North America), third wave democracies (as found in Southern and Eastern Europe and South America), and Asian democracies. In Section 2.3, we will further examine this approach. Countries' or regions' political culture might be closely related to national governance culture. Havas et al. use governance culture to distinguish between the innovation policies in Western European countries, on the one hand, and Central and Eastern European countries (CEE) and newly independent states (NIS), on the other hand [3]. However, Havas et al. do not proceed further into any systematic characterisation of the two traditions.

This paper starts with the somewhat ambiguous concepts of national political tradition and national governance culture as decisive contexts for analysing and using foresight in policy-making. The paper argues that this concept provides a more useful approach to the decisive context of foresight than the size or regional affiliation of a country. Hence, the aim of this paper is to contribute, in general, to the discussion of national (or political, governing, and industrial) culture's effect on national foresight exercises, and more narrowly, on priority setting in science, technology and innovation policies.

In the paper, we broadly adopt the European Foresight Platform's definition of foresight as 'a systematic, participatory, future-intelligence-gathering and medium-to-long-term vision-building process aimed at present-day decisions and mobilising joint actions'. In parallel with the term 'foresight', the term 'future-oriented technology analysis (FTA)' is used by the European Commission's Joint Research Centre Institute for Prospective Technological Studies (JRC-IPTS), for example. JRC-IPTS has defined FTA as 'a common umbrella term for technology foresight, technology forecasting and technology assessment' [12]. As, in practice, both foresight and FTA draw on, by and large, the same methodological foundation, this paper draws on the literature for both terms.

The structure of the paper is as follows. Following this introduction, Section 2 briefly resumes the discussions on national culture and introduces a conceptual framework for analysing cultural differences in foresight and planning. Section 3 contains background information on the Danish economy and culture, including (a) the Danish position between liberal and coordinated market economies, (b) Danish traditions and styles for governmental long range planning and policy making, and (c) Danish experiences with technology foresight. Empirically, this section is based on publicly available reports and internet information from relevant governmental bodies (ministries and agencies). Section 4 presents two cases: The Danish Government's Globalisation Strategy, from 2005, and the Research2015 process, from 2008. In both cases, the impacts have been significant and largely measurable in new legislation and budget allocations. The Globalisation Strategy and the Research2015 process are two attempts to combine the strong Danish tradition for political compromises, negotiations and stakeholder inclusion with evidence- and expertise-based prospective elements. Empirically, the section is based on publicly available reports, in particular, the Research2015 project web page and evaluation report. Section 4 concludes with a discussion of the findings in the two cases. In Section 5, the major conclusions are reviewed and discussed.

2. National traditions and governance culture as context for foresight

In this section, we introduce a conceptual framework of national traditions and governance culture for analysing foresight and priority setting in science, technology and innovation policies.

2.1. Sociologists' and anthropologists' perception of culture

Cultural differences and styles are very hard to quantify, and whether such items can be quantified at all is debated. The understanding and definition of culture differ depending on the intended use and the academic discipline. Sociologists who focus on community and organisation levels view culture as something that somebody "has" [13–16]. However, anthropologists view culture as the fundamentals of existence. Anthropologists view cultures as something that an entity "is" [17,18]. Organisational culture is the shared perception of daily practices within a specific organisational context [13,15]. In contrast, national culture relates to people who are within a certain national context.