P60- Time-sensitive governance and timescapes

Comparing Timeprints and the Foreseeable Future to make governance more time-sensitive

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Abstract

The ways in which people understand and deal with time affect governance processes on the most fundamental level. This paper explores how paying more explicit attention to people's Time Perspectives could improve policy-making and policies. It is a broad theoretical discussion that results in several more specific questions for further research. The main conclusion is that there is great diversity in Time Perspectives and that a better understanding thereof would be useful during every stage of policy-making; from agenda-setting and policy formulation through to implementation and evaluation. As a first step the FutureMap method, in combination with other conceptual tools such as Timeprints, can be used to improve our understanding of the dimensions of time that most influence decision-making.

Keywords: Foreseeable Future; Timeprint; Time Perspective; Motivation; Policy-making

Introduction

The ways in which policy-makers conceptualize and experience time have considerable consequences for the policies that they make yet this fundamental and influential factor is seldom acknowledged, little understood, and rarely considered explicitly in policy-making (Bressers, van Twist, and ten Heuvelhof, 2013). In this paper I discuss several trains of thought as potential pathways towards making governance more time-sensitive. The focus is on the time frames of different groups of people, as defined by the time perspectives of those people. The aim is to consider a range of broad ideas from a theoretical perspective as the basis for posing some more specific questions for further research. One angle concerns the ways in which time perspectives affect governance processes. A second idea involves possible applications for insights into the time perspectives of groups of people, such as defining deadlines and targets based on the temporal extent of their views on the future.

Before starting to develop any ideas on how governance might become more time-sensitive it is important to appreciate the magnitude of this endeavour. Barbara Adam, who dedicated her research career to the study of social time, realized that taking time seriously challenges our understanding and theories at right down to the level of ontology and epistemology (Adam, 2008). My theoretical investigation was undertaken from the perspective of a critical realist; assuming ontological realism and epistemological relativism and using rationality to judge between competing theories.

To begin exploring how policy-makers could be more mindful of the temporal dimension two concepts need to be introduced: Timeprints and Time Perspectives. The first pertains to the actions and the second to the actors. I then zoom in to the aspect of a Time Perspective that is most relevant to motivation for making decisions

and taking action: The Foreseeable Future. A multi-measure method for characterising the Foreseeable Future is introduced before discussing possible uses for policy-makers.

Timeprints

The idea of a timeprint rests on the premise of human agency; that is, that a person has the capability to choose and determine the state of the future to some extent by their actions. Margret Archer's model of morphogenesis, which holds that socio-material change is a product of both deterministic and voluntary forces, accommodates the idea of a timeprint quite neatly. This model shows how structure and action interact to exert temporal and directional forces on change by accelerating or delaying and impelling or inhibiting the process (Archer, 1982). In more finite terms, an action can also start, end, or reset a (cyclic) process of change.

The impact of a given action in the temporal dimension is its timeprint. For example, the act of cutting down a tree that is eighty years old has a timeprint of eighty years because that is theoretically how long it would take to nullify the impact of the act by growing a comparable tree. From a temporal perspective this implies 'borrowing' eighty years from the future for benefits in the present. A forestry policy is likely to have a greater timeprint than the impacts on individual trees because the aggregate and cumulative impacts are larger. Adam and Groves (2007) defined this concept as a tool for environmental decision making and used it to explore the ethics of present generations consuming future potential. The difficulty associated with this application is that claims of responsibility for future impacts depend on the degree to which they could have been reasonably foreseen. In this way it shares some problems with the ground-breaking precautionary principle, which has been notoriously complicated in its application (e.g. Lofstedt, 2014).

In this theoretical study I explore the idea that a policy can be characterized by the timeprint of its consequences both deliberate (in advance) and unintended (in hindsight). Policies concerning particularly slow processes, such as radioactive decay, and phenomena that involve considerable lag between action and impact, such as climate change, can be used to test the limits of this conceptual tool. But while prospective uncertainty and complexity can complicate claims of causality or responsibility, they do not render the underlying principles meaningless (Hulme, 2009; Groves, 2010). To investigate further the role of the policy-maker as an actor it is now necessary to introduce the concept of Time Perspective.

Time Perspectives & Time Frames

From a psychological point of view, Zimbardo and Boyd (2008) assert that attitudes toward time vary significantly across individuals. All the same, reviews of psychological methods for characterizing views on time show a lack of congruity between measures (De Voider and Lens, 1982; Gjesme, 1983; Rappaport et al., 1985; Adams and Nettle, 2009). This fact is in itself not particularly problematic because the various methods were designed to characterise different facets of views on time. What it reveals is that the various dimensions of an individual's views on time are not necessarily interdependent. Someone who prefers to think about the

past rather than the future, for example, need not have a particularly short-term future vision.

Views on time are further convoluted by the fact that they can change along with the various identities that people assume in their different social roles (Goffman, 1959; Schlenker, 1985; Ting-Toomey, 1993). By a process of 'identity negotiation' we establish mutual expectations of each other to form groups (Swann, 2009). To grapple with the concept of Time Perspective, therefore, it is necessary to take into consideration (1) the lack of covariance between dimensions and (2) the concept of identity as a relational phenomenon (Heine, 2001). Time Perspective is thus defined as a situationally dependent, multidimensional construct that includes all of the different views on time held by an individual.

Individuals form groups that have collective views on time, known as Time Frames. The Time Frame of a group can be characterized by the Time Perspectives of the individuals it comprises (Noyes, 1980), but it can also be seen as a cultural characteristic with its own emerging properties (e.g. Levine, 1997). When it comes to public policy-makers groups could be formed along various lines, such as thematic focus, political level, or geographic scale. In previous empirical research I focussed on the individual level, and consequently to make those results useful for this theoretical investigation it is also used here. On the other hand it is important to recognise that this psychological approach does not tie in seamlessly with, for example, an interpretive approach to understanding social constructs.

This theoretical investigation is primarily focused on the dimensions of Time Perspective that concern the future. This does not imply that that I consider the future to be more important for policy making than the present or the past. The question of bias towards time zones in policy-making will be dealt with in other papers for this panel discussion. In addition to highlighting the general neglect of the importance of time for public policy making, Pollitt (2008) appeals to policy-makers to relax their opposition to the past and their frantic and short-term focus on innovation and modernization. This in itself is a familiar tune: There is a lot to be learnt from reviewing and re-interpreting the past. Among other things, Confucius is said to have said "Study the past if you would define the future".

In Europe there seems to prevail a prevalent faith in technological progress and relentless economic growth, which tends to overshadow any reminders that social change has always involved regression and not just progression. Volition is inherently oriented towards the future, which means individual behaviour is strongly influenced by the psychological future. This might also apply to public policy-making; that is, most policies are statements of intent directed at achieving a desired future state by guiding decisions and actions. In relation to the psychology of behaviour Nuttin (1964) defined the future as "the time quality of the goal object; the future is our primary motivational space." That is why I will zoom in on the Foreseeable Future here.

The Foreseeable Future

We humans have autonoetic consciousness, which means there are no hard lines between the time zones in our experience. Husserl (1928) developed a model of the

psychological present is an episode containing various retentions and protentions with temporal duration. More recent research has further shown that retrieving of past episodes, responding to the present episode, and conceiving future episodes are three neuropsychologically distinct processes (Kinsbourne and Hicks, 1990; Kahneman et al., 2004). Katsumata (2007) broadened Husserl's model to include images of the future and memories of the past. The basic difference between pretentions and images is the scale of displacement across time; that is, images lie further into the future. Pretentions are akin to instant anticipation – it is in anticipation of light that we flick the switch. This immediate slice of the future is not particularly relevant to the process of public policy-making because the intended effects of policies tend to be more substantial and more temporally distant.

Generally speaking, images that lie further into the future are more abstract and removed from the present situation and to imagine them is more cognitively challenging. Objects in the present and the near past are easier for our minds to deal with. That is why fear, which is grounded in the experiential present, tends to dominate hope (Jarymowicz and Bar-Tal, 2006). Fear is a more primary and automatic emotion. Although many policies are grounded in present fears or adverse circumstances they are generally directed at realising an envisaged alternative – a more positive situation. The formulation of public policies ideally involves conceiving a desired future state or solution. But policies seldom reach further than a few decennia into the future. There are limits to the span of the future that is considered to be realistically foreseeable.

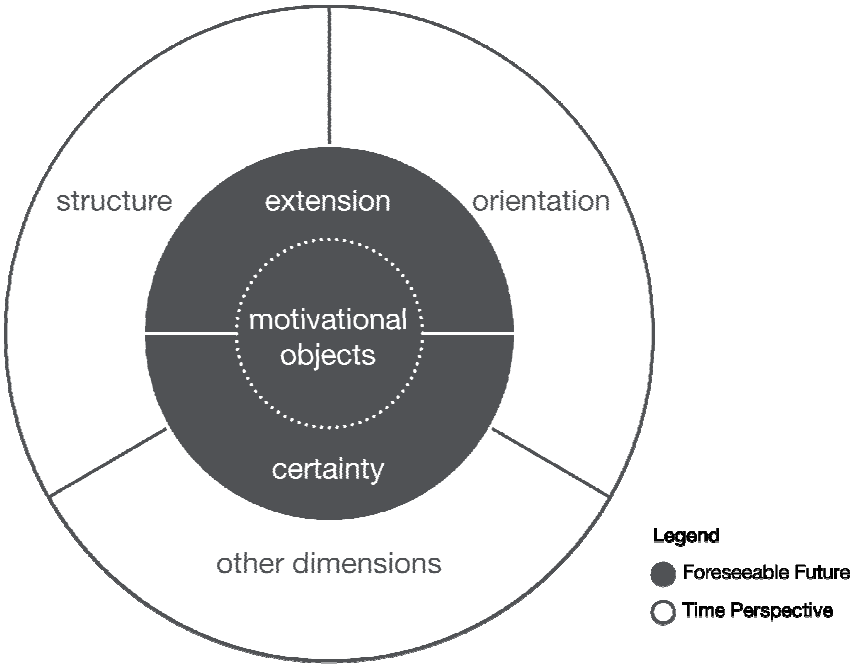
The basic aim of this theoretical investigation is to consider how it might be possible to compare the motives for a policy with its impacts in the temporal dimension. To continue with the example of trees being used as a resource: A policy-maker may devise a forestry policy motivated by maximising financial benefits over the next ten years while the impacts of this policy could extend a century into the future. Lewin (1951) made the distinction between the range and the realism of an individual's views on time. Later research (e.g. Jones, 1994) defined more dimensions of Time Perspective, including Extension, Density, Valence, Accessibility, Content, and Structural Organisation. For the purpose of this investigation it is the dimensions that are most closely related to motivation which are of particular interest. That is why I chose to build on the work of Nuttin (1985) who focussed his studies of future time perspective on the temporal loci of the objects that motivate a person's decisions and actions.

The starting point for defining the Foreseeable Future is the 'what'; that is, the objects that motivate the policy-makers. A motivational object is a causally efficacious goal or event. Once the 'what' has been defined then it is possible to analyse the 'when'. The span of time into the future that is populated by motivational objects is defines the temporal extension of the policy maker's Time Perspective. One of the main factors that limits this extension is prospective uncertainty. To be accepted as defensible foundation for policy the policy-maker must have some degree of certainty about the motivational object. Events that occurred beyond living memory tend to have little influence on the formulation of public policies (Pollitt, 2008). Similarly, events that may occur in the distant future, about which little can be said with certainty, tend to be ignored in policy-making. The Foreseeable Future of a policy-maker is thus

defined as the temporal extent of the objects that motivate their decisions and actions and the level of certainty that they attribute to these objects.

The Foreseeable Future is relative to a context that is characterized by other aspects of Time Perspective (Figure 1). Of this context two dimensions in particular need to be characterized: Structure and Orientation. Mental maps of the structure of time itself, including conception of the time zones, can differ radically between people. Time may be seen to flow in any direction, for example: from left to right for English speakers; from right to left for speakers of Hebrew; from top to bottom for Mandarin speakers, and even from east to west, for Aboriginal Australians (Boroditsky, 2011). The most fundamental variable concerning structure is whether time is seen to be (super)linear or (super)cyclic, and this factor has far-reaching consequences for how the world is viewed (e.g. Raju, 2003). Any measure of temporal extension must take these differences into account.

Figure 1: The Foreseeable Future as part of an individual's Time Perspective



A second dimension of Time Perspective that influences the Foreseeable Future is Orientation: bias towards or against the future relative to the past and the present. Other dimensions of Time Perspective, such as Content, Density, etc., are assumed to represent more detailed characteristics of Motivational Objects. I have documented a deeper analysis of the ontological, epistemological and methodological starting points for defining the Foreseeable Future elsewhere (Segrave, 2014). Using this definition of the Foreseeable Future, a multi- measure method was developed: FutureMap.

FutureMap: Foreseeable Future Multi-measure Method

FutureMap is a digital, online tool for characterising the Foreseeable Future of an individual using a five-step method. The steps are sequenced to account for socially acceptable responses and for methods triangulation. Various existing methods, such

as Cottle's Circles Test (Cottle, 1967), Rappaport's Time Line (Rappaport, Enrich, and Wilson, 1985), and Zimbardo's Time Perspective Inventory (Zimbardo and Boyd, 2008) were adapted and integrated into FutureMap. This multi-measure method builds on the existing approaches but the adapted parts cannot be considered equivalent to the originals. Both the method and the approach to interpreting the responses is designed around a model of Time Perspective that rests on deeper ontological and epistemological staring points (Segrave, 2014). The five steps generally take 30 to 60 minutes to complete:

Step 1: Define your work-related motivational objects by listing the most important goals and future events in your field of work and attributing to each a percentage certainty to indicate the probability of it occurring.

Step 2: Symbolize your concept of the structure of time and your orientation to the time zones using illustrations explained with textual legends.

Step 3: Measure your temporal extension by placing your motivational objects in chronological order on a timeline and indicating the temporal scale.

Step 4: Answer five direct questions by completion of sentences to check and supplement the results from the indirect methods used in steps 1–3.

Step 5: Score on a Likert scale statements concerning orientation towards the time zones.

Using the original offline, paper-based version of this multi-measure method, in a previous empirical study, the Foreseeable Future was found to differ greatly across individuals from different countries and even more so across people performing different professional roles. In that study, scientists in Brazil, Ghana, Japan, and the Netherlands were found to be motivated by objects that lie further into the future than managers and practical workers in those countries (Segrave, van der Zouwen, and van Vierssen, 2014). Policy-makers were not included in the study for practical reasons, but is interesting to consider how people fulfilling this role might compare to scientists, managers, and practical workers. Furthermore, I will discuss how governance might be made more time-sensitive by making explicit the Foreseeable Future of policy-makers.

Discussion of possible uses for policy makers

Making ambiguity about the Foreseeable Future explicit

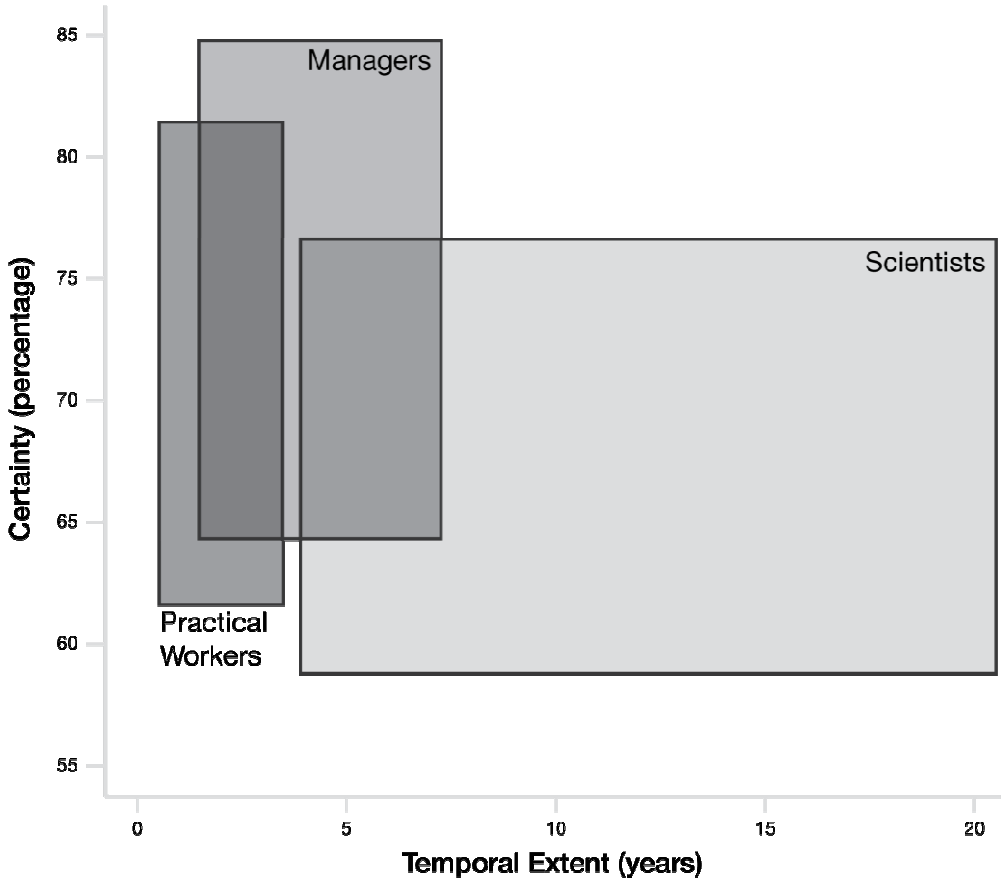
A policy-maker who motivates their decisions and designs policies based on objects that lie fifty years into the future is likely to perceive quite different problems, and seek other types of solutions, than one who is primarily concerned with the next few months. Temporal extension critically influences which polices are prioritized. For example, Hulme (2009) found that two studies which aimed to rank global policy measures according to economic costs and benefits reached contradictory conclusions because they made different value judgments about social costs and the rate of discounting the future. In addition to the direct effects an individual's Time Perspective has on their behaviour, ambiguity in the views of actors is amplified by differences in their Time Perspectives; meaning that multiple (temporal) frames of

reference are used to understand a given issue. This ambiguity could impede (inclusive) policy making processes.

Inclusion of stakeholders in policy-making is meant to build legitimacy, mandate, and support for the policy. Collective framing of issues is considered to be a first step towards formulating appropriate responses (Barber, 1984; Korthals, 1994). But it has proven to be particularly problematic to implement inclusive approaches (Bruns, 2003; Currie-Alder, 2007). Part of the failure of inclusive practices can be traced back to how we (don't) deal with ambiguity (Brugnach et al., 2012). Problems can be framed, and solutions sought, from various conflicting but equally valid viewpoints (Dewulf et al., 2005). And while heterogeneity in viewpoints can make for a valuable source of ideas (Boschma, 2005), is can also hamper policy-making processes – especially if fundamental differences go unrecognized. The difficulties surrounding international policies on climate change are clear evidence of this (Hulme, 2009). One of the most fundamental sources of heterogeneity in perception and behaviour, which is seldom addressed explicitly in policy-making, is Time Perspective.

In a previous study significant differences were found in how people performing different define the Foreseeable Future (Segrave, van der Zouwen, and van Vierssen, 2014). The areas of the three rectangles shown in Figure 2 are defined by the interquartile ranges of the temporal extent and certainty of the Foreseeable Future for Scientists, Practical Workers, and Managers. For this figure people from Brazil, Ghana, Japan, and the Netherlands are lumped. The upper and lower quartiles have been trimmed, which means that this figure applies to the middle 50% of all of the individuals in each of these groups. One of the main messages communicated by this figure is that the decisions and actions of scientists are motivated by objects that lie further in the future than those of Practical Workers and Managers. In addition, managers require a higher level of certainty about future goals and events before they consider them in making decisions. But above all, there is clearly ambiguity about what actually constitutes the Foreseeable Future.

Figure 2: Simplified map of ambiguity in Motivational Space across Professional Roles (Space defined by interquartile range: 25% trimmed)



The ways in which policy makers experience and conceptualize time basically shapes the policies they make. This begins with the framing of problems, questions, and goals. The Foreseeable Future of public policy makers has not been mapped on this graph but since this would indicate the part of the future that policy-makers base their policies on then it could be useful to do this with future research, both for others and for the policy-makers themselves. For example, opportunities exist for improving knowledge exchange between scientists and policy-makers by explicitly accounting for the Foreseeable Future of the different actors when framing messages. Reflexivity concerning biases is generally advantageous, but there are also examples of practical applications that I discuss in the following sections concerning how governance could become more time-sensitive.

Comparing the Foreseeable Future of policy-makers with Timeprints of policies

One of the main reasons that Adam and Groves (2007) defined the concept of a Timeprint was to explore the ethics of environmental decision-making whereby the capacity of the decision-maker to impact future circumstances is far greater than their capacity to foresee these circumstances. They framed this problem as ‘institutional irresponsibility’. In this paper I bring the Timeprint, being a measure of the temporal extent of an act, together with the Foreseeable Future, being a measure of the temporal extent of the actor’s Time Perspective. By comparing the two it could be possible for policy-makers to take greater responsibility for their policies by designing measures to deal with potential disparities. Since public policy-makers are working with wicked problems in complex adaptive systems it is seldom possible to predict (all of) the effects of a policy. And without knowing the ‘what’ it is difficult to estimate the ‘when’. But since an important provision for public policy-making is to lessen the

potential for unintended, negative impacts a large disparity between the Foreseeable Future of the policy-maker and the potential Timeprints of the policy could be seen as a warning sign. The question of whether policy-makers can take responsibility for interventions that have Timeprints which reach beyond the extent of their Foreseeable Future has by no means been answered by this superficial theoretical exercise. It is just an attempt further operationalize and relate both concepts in the hope that policy makers might be able to use them to make governance more timer-sensitive.

Making policies sensitive to the terms of government

The Foreseeable Future of most government members is likely to be influenced by the turnover rate. The principle of turnover is fundamental to theories about democracy and can be traced back to ancient times (Struble, 1979). Annual turnover was most prevalent in the ancient systems in Italy and Greece, while the current mode in Europe is to follow 4 or 5 year cycles. Even so, if re-elections are called this term can be considerably shorter in practice. When proposing policies to government, policies that are more time-sensitive, in that they allow for this Foreseeable Future, could be more likely to gain support. Experienced policy-makers are likely to be aware of this already, albeit implicitly. So one option is to pander the policies to the temporal prejudices of government members. A more structural alternative would be to reinvestigate the rationale behind these turnover rates. It is conceivable that the Foreseeable Future of many actors who are reliant on public policies are influenced by the chosen term. On the other hand, the Foreseeable Future of the actors might have already been (instinctively) used in determining the 4-year horizon. One important question for an assessment of whether existing turnover rates are appropriate is whether or not the government is able to deal with the massive yet slow systemic changes that societies are facing today, such as climate change. Research into this subject has the potential to make governance more time-sensitive by making transparent why the chosen turnover rate is most suitable or highlighting why an alternative might be better.

Comparing Timeprints of policies with Foreseeable Future of target groups

Time Perspectives have practical implications for the implementation of policies; that is, once they have been formulated. When communicating the goals of a policy, for example, more support is likely to be elicited by referring to milestones on a temporal horizon that matches the Foreseeable Future of the target group. Since public policy is often directed at achieving a goal for the ‘greater good’, on a scale that may be beyond the problem perceptions of individual actors, then this is particularly important. A public policy is generally built around an envisaged alternative – a purpose statement describing a future situation that is more positive than the present one. This future situation could be framed in various ways to represent objects on a temporal scale that matches the Foreseeable Future of each target group. The vision that is presented to people working at planning departments or agencies could differ significantly from that shown to the business sector or inhabitants of a given district due to the ‘what’ depending on the ‘when’. The final objective need not always be the best one to communicate. This way of reasoning is fitting as long as the Foreseeable Future of the policy-makers extends further into the future than that of the target groups. If the converse is true then at least explicit treatment of Time Perspectives would reveal this issue. In addition, there are public policies that rely on self-determination, which means that the target group is also implementer of the policy.

For such policies it is even more crucial to deal with the Foreseeable Future explicitly, since not only the acceptance but also the realisation of the policy depends on the this group acting towards the projected image of the future.

Tailoring targets within policies to the Foreseeable Future of implementers

When phasing the implementation of a public policy the duration of each phase ideally matches the foreseeable future of those responsible for its realization. It is important that actors are responsible for achieving future goals that actually influence their decisions and actions in the present. This may appear simple and logical but it in fact implies quite a different approach, since most policy plans are divided into phases depending on the amount of time that is anticipated to be needed for achieving a particular goal or to align with other processes and events. Deadlines and temporal cut-off points can be used in various ways. The idea I am considering here is to first determine the deadlines or targets, based on the Foreseeable Future of the implementers, and then estimate what is achievable within each period of time. For the example of building a house this would mean determining the Foreseeable Future of the builder, let's say one month, and then dividing the construction process into one-month phases. This is quite different to dividing the construction into practical phases, let's say completing the foundations before the walls and lastly the roof, and then estimating the time needed to complete each phase to define the temporal targets. The idea is to define the 'what' based on the 'when' rather than the opposite. Phasing the implementation of a policy in this way could, theoretically, increase the probability of it being implemented. This may be especially relevant for public policies that are to be implemented by the target group and for which there are no laws or other ways of compelling or prohibiting them to act in a certain ways, meaning that the implementation depends largely on motivating them. Whether this is a practical approach or not is yet to be seen.

Conclusions toward making governance more time-sensitive

The Foreseeable Future has far-reaching consequences for the daily practice of public policy-making. More time-sensitive governance approaches could be designed by making the Foreseeable Future of policy-makers explicit and by comparing it to that of other stakeholders and to the potential Timeprints of the policies.

For the agenda setting phase it is important to realise that people who perceive the Foreseeable Future differently are also likely to frame problems differently and prioritise quite different subjects as requiring further government attention. Long-term patterns can differ considerably from those that emerge on the short-term. Similarly, during the policy formulation phase, differences in how the Foreseeable Future is perceived will most likely result in alternative views on what constitutes an appropriate solution. It is also important to realise that interventions taken in response to short-term problems can generate new long-term problems.

The 4-5 year turnover rates for government mean that policies could be made more time-sensitive by targeting certain benefits to fall within this time horizon. This could be a key consideration for the decision-making phase of policy-making, when it is necessary to gain government approval. On the other hand, on a more fundamental level, the governance system could be made more time-sensitive by readjusting the political turnover rates to correspond with the Foreseeable Future of the actors or to

better enable them to deal with the scale of the problems currently facing societies. This is an idea that is interesting for further research.

Further (empirical) research is also needed to develop the theoretical idea of phasing the implementation of policies based on the Foreseeable Future of the implementers. It would also be interesting to apply in a case study the idea of comparing the Timeprints of policies with the Foreseeable Future of the policy-makers. This idea has both practical potential and weighty ethical dimensions, which makes it an especially interesting subject for further research.

One of the main problems associated with future-biased Time Perspectives is that we fail to learn from the past (Pollitt, 2008). Adaptive learning involves iterative evaluation of the progress on a policy during and after any course of action. The Time Perspectives of the actors involved also influences how they approach this evaluation phase: People who have a relatively short Foreseeable Future are likely to want to determine whether a policy has succeeded or not at an earlier stage than people who look further into the future when motivating their decisions and actions.

In this paper I focussed the discussion on the Foreseeable Future, which is just one aspect of how individuals and societies conceptualise and deal with time. Adam (2008) reflected on the importance of the temporal standpoint for the perspective on a policy choice. Looking at the future from the perspective of the present results in it being seen as a resource to be exploited for present demands and to be shaped and created. In contrast, viewing the future as being the present of successor generations helps actors to recognize that they are responsible for the temporally distant impacts of their actions. The main message I would like to leave you with is that there is great diversity in our perceptions of time and great potential for improving policy-making by dealing with this diversity explicitly. The first step is to map and understand the similarities and differences. The FutureMap method, in combination with other conceptual tools such as Timeprints, can be used to improve our understanding of the dimensions of time that most influence decision-making.

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