

Politicians under Radical Uncertainty: How Uncertain Phenomena Influence Political Elites' Behavior¹

RADIUNCE

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Summary

Political elites—political representatives who can take binding decisions, e.g., ministers, parliamentarians, local politicians—face numerous **radically uncertain phenomena**, from Covid-19 to the long-term effects of Brexit. Radical uncertainty is characterized by manifold unknowns, ambiguity and vagueness, and it differs fundamentally from **resolvable uncertainty**, those situations in which it is possible to assign probabilities to outcomes, like the electoral consequences of welfare retrenchment. RADIUNCE **will explore how these phenomena influence political elites' behavior**. Do they “avoid” uncertainty, as some did with the coronavirus; use rules of thumb, “heuristics”, e.g., comparing Covid-19 to the flu; or display other behavioral responses? Answering this is urgent: different responses have different outcomes that may impact how representative democracies function and how effective they are at solving problems. For example, avoiding a virus may cost lives, while using heuristics may result in faulty courses of action.

RADIUNCE's aim is to **develop a theoretical model of how political elites respond to both radically and resolvably uncertain phenomena**. We will focus on four countries with different institutional opportunities and constraints for responding to uncertainty: Germany, the Netherlands, the United Kingdom and the United States, 1996-2021. The model will be **multidisciplinary**, integrating insights from political science, behavioral economics, decision theory, psychology and public administration. We will collect new, **unique comparative data** from politicians through an innovative combination of automated text analysis and survey experiments. Taking a **multimethods approach**, we will integrate quantitative data with qualitative methods (process tracing, Qualitative Comparative Analysis, interviews). The new model will explain how political elites respond to the challenges and opportunities in our face-pace world from digitalization to Covid-19 to migration.

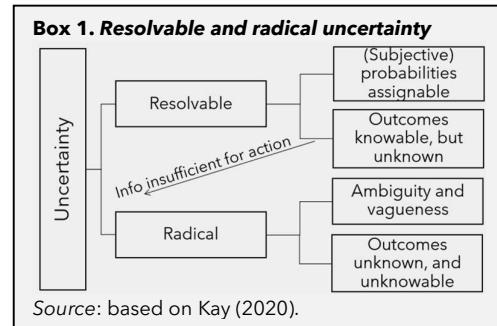
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Extended Synopsis of the RADIUNCE project

Current developments in the field and the need for innovation

The Covid-19 pandemic is a textbook example of a **radically uncertain phenomenon**. Radical uncertainty is characterized by manifold unknowns, ambiguity and vagueness.² It is a key characteristic of the environment of **political elites**—elected and appointed representatives who can take binding decisions, such as ministers, members of parliament (MPs) or politicians at the subnational level. Other examples of radically uncertain phenomena are the long-term effects of Brexit and exponential technological change (Brynjolfsson & McAfee, 2014).

Radically uncertain phenomena differ fundamentally from **resolvably uncertain ones** (see **Box 1**).³ Resolvably uncertain are those situations in which it is possible to assign (subjective) probabilities to outcomes, like the electoral consequences of welfare retrenchment. Or, whether a vaccine will protect against a new, but known variant of the coronavirus (e.g. the UK one) is resolvably uncertain: with more information, the uncertainty will disappear.



Disciplines like behavioral economics, political psychology and foreign policy analysis provide insights on decision making under *resolvable* uncertainty (e.g., Gilovich et al., 2002; Hafner-Burton et al. 2013; 2017). Because radical and resolvable uncertainty fundamentally differ (Kay & King, 2020), findings on resolvable uncertainty cannot simply be extrapolated to radical uncertainty. We know remarkably little about political elites’ behavioral responses to radically uncertain phenomena—despite literature on the behavior of governments across advanced democracies (e.g., Adams, 2012; Fagerholm, 2016)—and about whether and how these differ from responses to resolvably uncertain phenomena. If political elites’ responses to both types of uncertain phenomena are the same, this would be highly problematic because it may lead to decision-making failures and faulty courses of action that negatively affect people’s lives. For instance, obtaining more information may be an effective response to a resolvably uncertain phenomenon but not to a radically uncertain one.

Thus, in a groundbreaking shift from the resolvable to the unknown, the **first problem** that RADIUNCE will address is the lack of attention to radical uncertainty in theories and empirical analyses of political behavior.

The **second problem** is that most extant work does not collect direct data on political elites’ behavior. Apart from some exceptions (Katz & Wessels, 1999; Deschouwer & Depauw, 2014; Sheffer et al., 2018; Baekgaard et al., 2019), direct data on political behavior typically come from the mass public (cf. Kuklinski, 2002). Obtaining such data from political elites is difficult (Druckman & Lupia, 2012; Walgrave & Joly, 2018) but crucial because this behavior impacts peoples’ lives. Extrapolating findings on the mass public to politicians is impossible because research shows that politicians differ from the masses. Politicians’ personality traits, for instance, on average differ from the publics’ (see Florczak et al., 2020) and these traits influence political behavior (Dietrich et al., 2012). To assess how representative democracies function, RADIUNCE will collect direct data on behavior from political elites themselves.

The **third problem** that RADIUNCE will address is the lack of empirical evidence on how individual differences across politicians (e.g., in personality traits, ideology or experience) shape their responses to radically and resolvably uncertain phenomena, as do political institutions (e.g., the electoral system).

Therefore, **RADIUNCE’s overall aim is to develop a theory of how political elites respond to both radically and resolvably uncertain phenomena**. When do they, for instance, “avoid” the uncertain phenomenon—as some political leaders did with the coronavirus—or use rules of thumb, “heuristics”—e.g. comparing Covid-19 to the flu? Answering this question is urgent: different responses have different impacts on decisions and, thus, on how representative democracies function, especially on their effectiveness in solving problems. For instance, “avoidance” of a virus may cost lives, while “heuristics” may result in faulty courses of action.

² For those familiar with the literature, radical uncertainty hereby resembles concepts like true uncertainty (Knight, 1921), ambiguity (see Dhimi, 2019) or deep uncertainty (Marchau et al., 2019).

³ Radical and resolvable uncertain phenomena differ from *risky* ones: situations with known probabilities (Dhimi, 2019).

RADIUNCE has three **key objectives**:

1. **Identify** & map political elites' responses to radically and resolvably uncertain phenomena in four countries with different institutional opportunities and constraints for responding to uncertainty (WPs 1-3 & 5).
2. **Explain** the variation in these responses across countries, political elites and over time (WPs 4-6).
3. **Reveal** what these dynamics teach us about the functioning of representative democracies, especially their capacity to solve problems (all WPs).

A novel conceptual map of behavioral responses to uncertain phenomena

To determine what political elites' behavioral responses are to both radically and resolvably uncertain phenomena, I have developed a novel conceptual map of four possible behavioral responses: **Exploitative, Comprehensive, Heuristics, Avoidance**. This analytical framework results from the integration of insights from multiple disciplines: political science, public administration, decision theory, psychology and behavioral economics. Political elites may try to use the radically or resolvably uncertain phenomenon to their advantage; when they do, they display the first response: “**exploitative**”. An example is when political elites “exploit” the uncertain phenomenon by pushing for their pet solution by framing it as *the* solution to the problem (e.g., Mintrom, 2019). The second response, “**comprehensive**”, applies when politicians use all available means to address the uncertain phenomenon. An example of “comprehensive” is the drafting of AI strategies by the US Department of Defense (2018) and many countries' governments, including the NL, GER and UK ones (Nederlandse Rijksoverheid, 2019; The Federal Government, 2018; HM Government, 2018). The third response, “**heuristics**”, refers to using rules of thumb that facilitate judgment and decision making under uncertainty (Tversky & Kahneman, 1974; Gigerenzer & Selten, 2001; Gilovich et al., 2002), but which may also lead to decision-making biases like scope neglect—the situation that people do not take the size of a problem properly into account. Because political elites often have an incentive not to increase uncertainty, they may opt to simply ignore it; thus, the fourth behavioral response, “**avoidance**”.

Moving beyond the state of the art

The evidence of whether and when the available literature on **judgment and decision making** (see Mellers et al., 1998; Gilovich et al., 2002) applies to politicians is conflicting (see Hafner-Burton et al., 2013; Vis, 2019; Kertzer, 2020). Therefore, it is crucial to collect direct data from the range of political elites (e.g. national vs. subnational; executive vs. legislative) in different countries. Moreover, studies that examine radical uncertainty or its variants (see note 1) typically focus on how to manage this uncertainty practically (Ansell & Boin, 2019; Marchau et al., 2019). RADIUNCE will dig deeper to answer a question that is especially important for assessing representative democracies' capacity to solve problems: What do political elites do in response to both radically and resolvably uncertain phenomena?

To develop its theory, RADIUNCE will integrate theories, findings and methods from multiple disciplines, such as political science, behavioral economics and psychology. Within **political science**, including foreign policy analysis, researchers usually acknowledge that most political decision making takes place under conditions of uncertainty. However, most empirical analyses and theorizing focuses on decision making under *resolvable uncertainty* (see Hafner-Burton et al., 2013; 2017; for exceptions, see Kingdon, 1995; Zahariadis, 2003). Such studies have applied, among other theories, a core theory from behavioral economics: prospect theory (Kahneman & Tversky, 1979; see Vieider & Vis, 2020), but many questions remain. For example, are political elites generally uncertainty averse, in line with most people (Kocher et al., 2018)? Or does their attitude toward (resolvable) uncertainty vary depending on whether they face gains or losses, in line with a minority of people, as **behavioral economics** shows (Di Mauro & Maffioletti, 2004; Kocher et al., 2018)?

We will use case studies from **public administration** and **political science** to obtain insights into specific radically and resolvably uncertain phenomena. These include research on the Covid-19 pandemic (e.g., Maor & Howlett, 2020; Migone, 2020; Plümpfer & Neumayer, 2020), the financial crisis (Van Kersbergen et al., 2014; Ólafsson et al., 2019), and crisis management (see Boin et al., 2016). RADIUNCE will add an examination of political elites' behavioral responses to the phenomenon's radical or resolvable uncertainty.

A final strand of relevant literature is rooted in **psychology** and studies how people process information. The dual-process theory of the mind (Kahneman, 2011; Evans & Stanovich, 2013) forms a useful starting point and argues that cognition works through two systems: System 1 is fast, instinctive and emotional, while System 2 is slow, deliberative and logical. This theory predicts that under high uncertainty—possibly both resolvable and radical—people display System 1 responses. An example hereof is using heuristics (e.g., Gigerenzer et al., 2001; Gilovich et al., 2002). However, if salience is high, this importance may “override” System 1 so that people resort to System 2. RADIUNCE will collect and analyze systematic evidence on political elites' behavior

to assess how they employ System 1 vs. System 2 in response to uncertain phenomena.

Comparative design

RADIUNCE will compare political elites’ responses to *two types of uncertain phenomena*—radical, resolvable—in *four countries* that differ in: (a) *size*; (b) *security*, i.e., the degree to which welfare programs provide security over the life course (Van Kersbergen & Vis, 2014); and (c) *clarity of responsibility*, i.e., the degree which political institutions influence voters’ ability to hold governments accountable (Hobolt et al., 2013).⁴ These differences are theorized to influence how political elites respond to radically and resolvably uncertain phenomena: The smaller the *size* is, the higher the influence of factors abroad is expected to be (Katzenstein, 1985), and the more likely that political elites will display the response “heuristics”. The higher *security* is, the more political elites can afford leeway in their responses to uncertainty (Kay & King, 2020). And greater *clarity of responsibility* increases the likelihood that political elites will take electoral considerations into account in their responses. Institutions may also influence political elites’ *perceived uncertainty* of an uncertain phenomenon (of either type): perceived uncertainty is theorized to be higher for UK political elites given the (very) high clarity of responsibility (Hobolt et al., 2013), and lower for NL and GER ones. Selecting these diverse countries contributes to the project’s external validity, yet, they are similar enough to develop a good theory. Conversely, including a Southern or Eastern European country would result in too many confounding factors (e.g., in state capacity, Hanson & Sigman, 2019). Future research can test the theory that RADIUNCE will develop in such contexts. RADIUNCE will also conduct *within-country comparisons* of politicians at the subnational level (a most similar systems design, Landman & Edzia, 2017). The *time period* will be 1996-2021, which ensures data availability and is long enough to include over-time variation in both types of uncertain phenomena. See **fig. 1** for RADIUNCE’s structure.

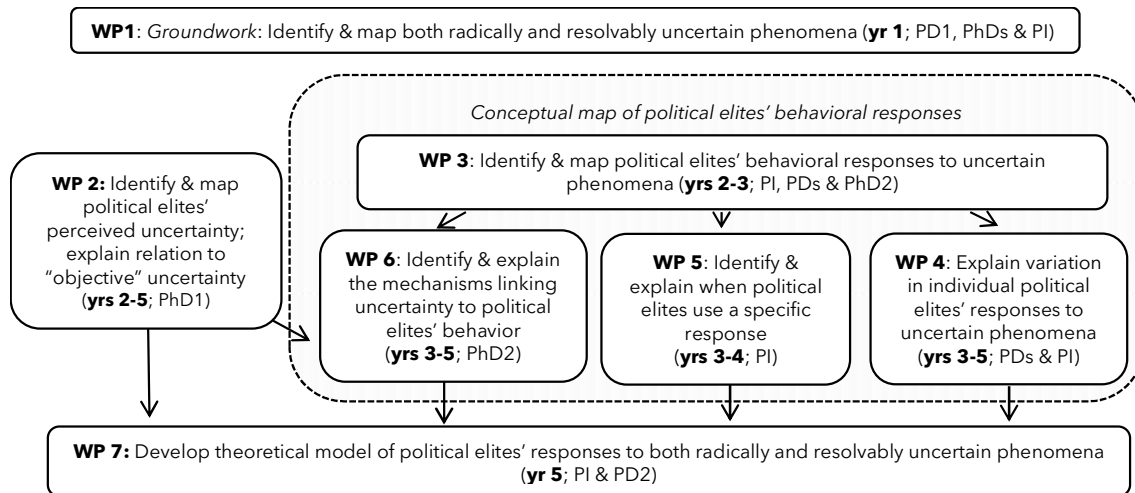


Figure 1. RADIUNCE’s structure, incl. researchers per WP (PI=Principal investigator; PD=postdoc; yr(s)=year(s)).

WP1 will lay the groundwork. WPs 2&3 will comparatively identify political elites’ (a) perceived uncertainty (WP2) and (b) behavioral responses (WP3) based on their communication using **automated text analysis** (e.g., Grimmer & Stewart, 2013; Wilkerson & Casas, 2017). Language provides data through which to understand humans (Tausczik & Pennebaker, 2010): what we say and how can be an indicator of deeper cognitive processes. Relevant text corpora include Tweets (Steinert-Threlkeld, 2018), parliamentary debates (Proksch & Slapin, 2015) and speeches (Breeman et al., 2009; Schumacher et al., 2016; 2019). These data are readily available or obtainable, although time will be needed to turn the data into a machine-readable format.

WP1: Identify & map both radically and resolvably uncertain phenomena. WP1 will lay the project’s groundwork by identifying and mapping radically and resolvably uncertain phenomena. We will start from the Comparative Agendas Project (CAP) (2019, see Jones & Baumgartner, 2005), which includes data from archived sources on policies across countries and has been used in hundreds of publications. Its master codebook (Bevan, 2019) includes 21 major topics, from environment to technology, and >200 sub-topics, from air pollution to computers. This will be the first time the CAP codebook will be used to identify radically and resolvably uncertain phenomena. We will also make use of the World Uncertainty Index (Ahir et al., 2018) to identify the phenomena that are most relevant for the empirical analysis and consult secondary literature, which we will use to draft brief case descriptions, resulting in a dataset. We will select pairs of temporally close

⁴ The countries also differ in the type of democracy (Lijphart, 2012).

radically and resolvably uncertain phenomena, while holding constant possible confounders that are temporal in nature (e.g., state of the economy).

WP2: Identify & map political elites' perceived uncertainty. WP2 will conduct **automated text analysis** to identify and map politicians' perceived uncertainty, and its relation to 'objective' uncertainty. An option would be to apply a dictionary-based approach using the Linguistic Inquiry and Word Count (LIWC) program (Pennebaker et al., 2015).⁵ LIWC can extract a measure from text corpora that can serve as a proxy for perceived uncertainty: *clout* (Kacewicz et al., 2014; Jordan et al., 2019). Clout captures the degree to which political elites are certain and confident vs. hesitant and doubtful in what they say or write. The lower is clout, the higher is perceived uncertainty. Analyzing numerous speeches from political leaders (e.g., party leaders and MPs) from different countries, Jordan et al. (2019) showed that clout varies across leaders, speech acts and over time. The measure clout would need to be validated for the four countries and specific thematic purposes (see Van Atteveldt et al., 2021). Given the rapid developments in automated text analysis, the final decision on the approach(es) used will be made at a later stage.

WP3: Identify & map politicians' responses to uncertain phenomena. WP3 will extract from the text corpora how a politician responds to a radically or resolvably uncertain phenomenon by means of automated text analysis. Like in WP2, the final decision on the approach(es) used will be made at a later stage. One option would be **supervised machine learning** (Hillard et al., 2008; Quinn et al., 2010; Burscher et al., 2015). A dictionary-based approach or variant thereof (like Muddiman et al.'s 2019 manually validated organic dictionaries) would be less appropriate for this WP's purpose; the responses to uncertain phenomena cannot be grasped by one or a few concepts that can be identified in text data. Instead, we will first code part of the text corpora manually on responses to radically and resolvably uncertain phenomena. The resulting training set will be used to train the computer to replicate the human coding decisions on a much larger amount of data. WP3's results will enable us to identify the behavioral responses of politicians when facing radically or resolvably uncertain phenomena.

WP4: Explain variation in individual political elites' responses to uncertain phenomena. WP4 will collect original data from politicians at the subnational level in GER, NL, UK and US, and at the national level in NL and UK by means of **survey experiments**. The subnational level is increasingly important for policy making (e.g., Nielsen & Baekgaard, 2013), making it relevant to include. The number of subnational politicians is also relatively large, enabling well-powered samples. The population of national-level politicians is hard to reach and, by definition, small.⁶ We will therefore adopt a promising route for obtaining good response rates by administering the survey in-person during a **semi-structured interview** (cf. Walgrave & Joly, 2018; see Vis & Stolwijk, 2020). An additional advantage of the interview-setting is that it will allow asking follow-up questions. The interviews will be transcribed and analyzed qualitatively (e.g., using NVivo). The surveys with the political elites at the subnational level will be online. The exact survey experiments will be designed based on the final list of WP3's behavioral responses. To ensure the experimental design's validity, the vignettes will be based on often-replicated experiments (see e.g., Gilovich et al., 2002), adjusted to this research context. They will be piloted first, include manipulation checks (Kane & Barabas, 2019) and report reaction time (Hauser et al., 2018). The surveys will also include questions measuring **individual characteristics** related to (1) the type of political elite (e.g., junior vs. veteran; government vs. opposition) and (2) their dispositional traits (e.g., personality, Florczak et al., 2020). The PI has experience with research with the (voluntary) participation of political elites at the national and subnational level (Linde & Vis, 2017; Stolwijk & Vis, 2020). To gain access to the politicians at both levels, we will make use of RADIUNCE's extensive network.

WP5: Identify & explain when political elites use a specific behavioral response. WP5 will identify the necessary and/or sufficient (combinations of) conditions under which political elites use a specific response. To identify these conditions, we will use **Qualitative Comparative Analysis (QCA)**. QCA is a configurational comparative approach that is specifically designed to identify such so-called set-relationships (Schneider & Wagemann, 2012; Mello, 2021).⁷ This set-up will enable testing whether, for instance, the absence of the topic on the political agenda is necessary for "avoidance" (Green-Pedersen & Mortensen, 2015), or whether high issue salience is a necessary condition for "comprehensive" (Janis, 1989).

⁵ In addition to English, LIWC dictionaries are available in Dutch and German.

⁶ In the NL, there are 150 members of parliament; in the UK, there are 650 members of parliament.

⁷ QCA has received some criticism (e.g., Lucas & Szatrowski, 2014), but this criticism has also been debunked (e.g., Fiss et al., 2014; Ragin, 2014).

WP6: Identify & explain the mechanisms linking uncertainty to political elites' behavior.

WP6 will examine what politicians do when displaying a specific response. We will select one proto-typical case (Seawright & Gerring, 2008) per type of response per country to conduct comparative case studies (i.e., $n =$ at least 16). A possible approach for the analyses is process tracing (George & Bennett, 2005; Beach & Brun Pedersen, 2013)—a qualitative method particularly apt for identifying (causal) mechanisms. This would enable uncovering the mechanisms through which radical or resolvable uncertainty influences political elites' behavior. By means of (a) relevant interview-data from WP4; (b) documents, (c) secondary literature and (d) semi-structured interviews with relevant actors, we will answer questions like: When and how does a politician use rhetoric to exploit the uncertain phenomenon (e.g., the Dutch party leader Wilders exploiting the 2015-migration crisis by speaking of an “asylum tsunami”)? What is the effect of the politician's behavior on the uncertain phenomenon itself?

WP7: Develop a theory of political elites' behavioral responses to uncertain phenomena.

WP7 will integrate the findings from WPs 2-6 into a new model of how political elites respond to both radically and resolvable uncertain phenomena.

All in all, RADIUNCE will **break new ground** by:

- Its unique data on political elites' responses to both radically and resolvable uncertain phenomena from four countries with different institutional opportunities and constraints for decision making under uncertainty between 1996 and 2021. These data will enable a new understanding of political elites' behavior and will be of relevance to other fields in political science, like party behavior and welfare state research.
- Its ambitious multi-method approach, including a state-of-the-art methodological approach to extract responses to different types of uncertain phenomena among political elites in established democracies with automated text analyses (dictionary-based approach, supervised machine learning).
- Its employment of a multidisciplinary approach that integrates insights from political science, behavioral economics, decision theory, psychology and public administration.

The integrated findings will lead to a novel theoretical model of how both radically and resolvable uncertain phenomena influence political elites' behavior, explaining how they respond to the challenges and opportunities in our face-pace world from digitalization to Covid-19 to migration.

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