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How Do Ideas Matter?

Mental Models and Attention in German Pension Politics

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How do ideas affect political decision making? Despite much evidence that ideas matter, relatively little is known about the specific mechanisms through which they influence actors' beliefs, goals, and preferences. Drawing on psychological findings, the article elaborates a cognitive mechanism through which ideational frameworks shape political elites' preferences among options. It argues that actors' mental models of the domains in which they are operating systematically guide their attention within processes of decision making. By leading them to reason about certain causal possibilities and data and to ignore and discount others, politicians' and policy makers' mental models can powerfully shape their causal belief sets and, in turn, their policy preferences. Furthermore, these attentional effects help explain why ideas persist under some conditions but change under others. The argument is empirically probed through an examination of key episodes in German pension politics over seven decades, drawing on detailed records of high-level policy deliberations.

Keywords: *cognition; ideas; attention; policymaking; pensions; Germany*

The last two decades have witnessed an ideational turn in comparative politics (Blyth, 2003). Scholars studying phenomena as varied as race politics (Bleich, 2003), economic policy making (Derthick & Quirk, 1985; Hall, 1993), and party politics (Berman, 1998) have accorded a central role to ideas in shaping political outcomes. Amid a flourishing of ideational argumentation,

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however, we know much more about *what* ideas do than about *how* they do it. Across diverse domains, we have evidence that conceptual frameworks, once adopted by decision makers, can shape their goals, their causal beliefs, and their preferences among alternatives. Yet most existing arguments are silent on how exactly ideas produce these effects: Analysts have rarely specified the cognitive mechanisms through which politicians' and policy makers' ideational orientations shape their choices.

At the level of cognition, ideational arguments about elite decision making present a knotty—if rarely acknowledged—puzzle. To say that ideas matter is to say that political elites approach new decisions with pre-existing beliefs, ideologies, and worldviews and lean heavily on those generalized frameworks in judging specific situations and making specific choices. It implies that elites reason in a top-down manner, from general precepts to specific choices. At the same time, to study political elites is to study agents who are well equipped and highly motivated to do just the opposite. As cognitively sophisticated and well-resourced actors, political elites have the capacity to engage in a good deal of bottom-up reasoning: to gather new data about the situations they face, to analyze incoming information, and to tailor their responses to particular circumstances. Moreover, politicians, senior bureaucrats, and interest group leaders have strong incentives to get decisions right, rather than to strictly economize on information and analysis. How then do we reconcile these two images of political decision making—as both conditioned by ideas and shaped by data? How do preexisting ideas affect the decisions of motivated analysts and deliberate seekers of information?

I argue that to fully understand the role of ideas in elite decision making, we need to know how ideas operate at the level of individual cognition. Drawing on concepts and findings from experimental psychology, this article elaborates a cognitive mechanism through which ideas can shape political elites' preferences among policy or institutional options. A primary effect of ideas, I argue, is to direct actors' *attention* in the course of decision making. Political elites actively seek and analyze new data to help them make choices, but they often face overwhelming causal and informational complexity in weighing alternatives. They confront too many causal possibilities, sources of information, and potential interpretations of data to engage in comprehensive calculation. In such situations, ideas shape decision making by structuring and constraining actors' causal reasoning and information processing. Elites' mental models of the field in which they are operating guide their attention toward certain causal logics and pieces of information and—just as important—away from others. This biasing of

cognitive effort critically shapes actors' calculations and, in turn, their preferences among options: It leads them to weigh most heavily those data and outcomes implied by their mental model while discounting other potential outcomes of equal logical and empirical plausibility.

To probe this argument empirically, the article examines processes of preference formation in a policy domain in which elites face substantial complexity: public pensions. The article investigates the dynamics of three key episodes in German pension politics from the 1880s to the 1950s. Over this period, policy makers repeatedly confronted a fundamental choice, one faced by pension designers everywhere, about how to finance the state pension scheme: as a "pay as you go" arrangement (PAYGO), with current workers' contributions paying for current benefits, or on a funded basis, with workers accumulating assets to pay for their future retirements. In each episode, the decision had a similar set of potential implications for tax burdens, the health of the economy, and the sustainability of the pension scheme. Despite objectively similar choice situations, however, politicians', senior civil servants', and interest groups' preferences between these two financing methods varied widely over time. Drawing on records of deliberations within state bureaucracies, legislatures, and interest group organizations, the empirical analysis examines the mental models on which decision makers relied in each period. It traces how each conceptual framework directed actors' attention toward a set of causal possibilities and data and away from others, with major implications for decision makers' beliefs and ultimate policy preferences.

Beyond a theory of ideational effects, the analysis suggests at least two broader implications for how we understand and study elite decision making. First, the argument points in a distinctive way to the central importance of attention in political life. Whereas the literature on agenda setting has examined the allocation of attention across policy problems (Baumgartner & Jones, 1993; Jones & Baumgartner, 2005; Kingdon, 1984), the following analysis indicates that the dynamics of attention matter well beyond the selection of issues for decision. The allocation of attention also powerfully constrains reasoning *within* processes of decision making and so shapes their final outcomes. This argument suggests that the most important question to ask about a complex choice may not be what actors want or believe but which causal possibilities they even think about and which they ignore. Second, as explained later, conceptualizing the role of ideas in terms of attention can help us make sense of not only the effects of ideas but also their causes. An attentional mechanism can both explain the relative stability of knowledge structures over time and identify the conditions under which ideational change is most likely to occur.

Existing Arguments: Effects Without Mechanisms

Existing studies of the role of ideas in politics have documented a range of effects of conceptual frameworks on elite actors' causal beliefs, goals, preferences among options, and policy and institutional choices. Beyond identifying such effects, scholars have also identified conditions under which ideas are likely to matter (e.g., Blyth, 2002) and explored their paths through the political system—how they emerge, diffuse, become institutionalized, and change over time (e.g., Hall, 1993; Sikink, 1991). To date, however, most ideational arguments have left weakly specified exactly how ideas, once adopted by actors, shape the parameters of decision making.

Most arguments about ideational effects seem to leap directly from the content of an idea to the content of actors' beliefs, goals, and policy preferences. Ideational frameworks seem to supply sets of causal or normative propositions that leaders accept and then import into calculi of choice—often filling gaps left by causal or normative uncertainty. As Hall (1993) argues in his study of British economic policy, policy paradigms specify “not only the goals of policy and the kind of instruments that can be used to attain them, but also the very nature of the problems they are meant to be addressing” (p. 279). Similarly, Blyth (2002) holds that economic ideas act as “interpretive frameworks that describe and systematically account for the workings of the economy” and “provide agents with both a scientific and a normative critique of the existing economy and polity, and a blueprint that specifies how these elements *should* be constructed” (p. 37). Ideas in these accounts seem in some way to tell actors what to believe, value, or choose in specific situations. As Goldstein (1993) puts it, “causal ideas are tantamount to strategies: they are road maps showing actors how to maximize their interests” (p. 11).

What is usually missing from ideational arguments is a clear specification of how, at the level of cognition, adherence to a general ideational framework shapes elites' beliefs or preferences in specific choice situations. Cognitive approaches have been increasingly applied to other influences on elite decision making, such as heuristics for judging risk (e.g., Weyland, 2005), especially in the field of international relations (e.g., Johnston, 2001), and cognitive arguments are, of course, common in studies of mass opinion (e.g., Sniderman, Brody, & Tetlock, 1991). Scholars making arguments about ideas at the elite level, however, have been slow to explicitly ground their arguments in what we know about patterns of human reasoning and information processing.

Moreover, a purely top-down account of ideational effects—in which ideas simply fill in the blanks in calculi of choice—would be at odds with what we know about processes of elite deliberation and decision making. Even in the case narratives of ideational analysts, elite decision makers seem to do far more than apply general ideational templates to specific situations. They gather new information, assess its meaning and importance, and critically grapple with lines of causal reasoning (e.g., Bleich, 2003; Sikkink, 1991). How do these two processes—the top-down use of ideas and the bottom-up search for new arguments and data—fit with each other? How do ideas matter for sophisticated and motivated decision makers?

Mental Models and Attention: A Theoretical Framework

In a standard rationalist framework, decision makers facing uncertainty will seek to maximize their subjective expected utility. To do so, they must assign probabilities and utilities to all possible outcomes of the available options, choosing the option with the greatest probability-weighted utility (Savage, 1954). This procedure assumes that individuals will reason through all potential consequences of the alternatives, using all relevant information to judge probabilities and payoffs (or at least choose as if they had done so). In relatively simple choice situations, with clear information and well-understood causal relationships, actors may well decide in ways resembling this procedure. As decades of research on cognition and decision making indicate, however, humans' computational capacities are limited: There are tight bounds on both the degree of theoretical complexity that individuals can manage and the volume of data that they can process (e.g., Cavanagh, 2004; Jones, 2001; Miller, 1956; Simon, 1971). As causal relationships and informational environments become murkier and more complex, the demands of comprehensive rational calculation become far less cognitively feasible.

As I argue, a primary effect of ideas is to make complex decisions manageable by guiding and constraining processes of reasoning, data gathering, and interpretation. When making decisions, political elites usually have strong incentives to understand the consequences of their actions and thus actively seek information and analysis about problems and solutions. Yet policy and institutional choices often confront actors with greater causal and informational complexity than they can comprehensively assess. Decision makers must therefore invest cognitive resources unevenly across possible lines of causal reasoning and data, paying more attention to some

potential causal sequences and pieces of information than to others. In such situations, a crucial influence on actors' policy or institutional preferences will be which causal possibilities and data they attend to and which they ignore. Drawing on findings in social and cognitive psychology, I contend a major driver of this allocation of attention is the preexisting "mental model" with which decision makers approach a complex choice. In part, this argument builds on general suggestions by Berman (1998) and Bleich (2003) that ideas can act as filters for new information. This section specifies the types of mental constructs that are likely to guide attention in the face of causal complexity, the cognitive mechanisms through which they shape reasoning and information processing, the implications for ideational stability and change, and the way in which these processes shape preferences.

Mental Representation

Many of the intellectual constructs that political analysts term *ideas* resemble what cognitive and social psychologists broadly refer to as *mental representations*. Mental representations are knowledge structures stored in long-term memory that usually abstract from specific instances or experiences (Smith, 1998). One of the more prominent models of abstract mental representation is a schema: "a cognitive structure that represents knowledge about a concept or type of stimulus, including its attributes and the relations among those attributes" (Fiske & Taylor, 1991, p. 98). Consider, for instance, a schematic representation of a common object, a chair. A *chair* schema, as stored in memory, would contain generalized attributes of the object—four legs, a flat seat, a vertical back—abstracted from the memory or experience of any specific chair. Schematic abstraction can take social forms as well, such as group stereotypes or scripts of events typical of a social situation. Simplified mental representations are thought to form the building blocks of individuals' working knowledge of their environments (Smith, 1998).¹

Of interest for the present purposes, a schematic representation may contain causal as well as descriptive content, linking concepts or attributes with "if-then" propositions. Where the relations among concepts or attributes is sufficiently dense, such causal knowledge may take the form of a mental model: a simplified representation of a domain or situation with moving parts that allow reasoning about cause and effect, sometimes by analogy (Gentner, 2002; Gentner & Collins, 1987; Johnson-Laird, 1983). For instance, an individual's mental model of electrical current may take the form of analogy—namely, to the flow of water, allowing her to mentally simulate the current's movement. Many of the conceptual frameworks employed by political actors

take the form of mental models: Consider, for instance, the understanding of public budgeting as analogous to the divvying up of a pie (Lodge & McGraw, 1991), conceptualizations of antidrug efforts as a form of war, and (nonanalogical) models of the economy as driven by the intersection of supply-and-demand curves. Like any model, a mental model represents a simplification of the full causal dynamics governing the phenomenon in question. For instance, the model of electricity as water captures certain causal properties of an electrical current (e.g., its response to resistance) but omits others (e.g., its production of a magnetic field).

Mental Models and Attention

Knowledge structures embedded in memory are in turn known to shape how individuals process information about new situations, objects, or people. In several ways, existing knowledge structures channel actors' attention toward some pieces of available information and away from others. First, studies suggest that people tend to ignore features of a new instance of a phenomenon that are irrelevant to their existing schema—that is, dimensions on which their abstracted knowledge structure is silent (Fiske & Taylor, 1991). Consider again the pie-cutting model of public budgeting. This model captures trade-offs across spending categories—for example, that spending more on defense may result in spending less on welfare. At the same time, the pie-cutting model does not capture possible consequences of public spending for economic growth. Because the model does not prime expectations about the growth effects of spending decisions, an individual employing the model will be less likely to attend to information or arguments relating to this causal possibility.

Moreover, well-entrenched schematic representations tend to direct attention toward attributes of a situation consistent with those constructs and away from features that are inconsistent. Furthermore, when recalling information from memory about past situations or events, individuals are more likely to retrieve data compatible with their belief structures than data that are incompatible (Fiske & Taylor, 1991; Higgins & Bargh, 1987; March & Olsen, 1989; Smith, 1998). More broadly, one of the most robust findings in all of cognitive psychology is that individuals display powerful tendencies both to seek and to take into account information confirming prior beliefs, and to avoid and to discount information contradicting them. Even when individuals notice disconfirmatory information, they often reinterpret or recategorize it in ways that make it more consistent with prior expectations (Nickerson, 1998), and this “confirmation bias” persists even among experts (Einhorn & Hogarth, 1988; Lodge & Hamill, 1986).

Ideational Change

These attentional effects of mental models will usually lead to self-reinforcement and ideational stability as prior models generate the selective collection, processing, and recall of corroborating data. However, the dynamics of attention can also make sense of exceptional instances of learning and ideational change. Cognitive and social psychological research suggests that the confirmation bias is not absolute. Disconfirmatory experience is more likely to attract extra processing and weaken preexisting expectations when the experience takes a particular form: when the discrepancy between beliefs and data is transparent (Anderson & Kellam, 1992), when the divergence from expectations is large (Fiske & Taylor, 1991), and when the unexpected outcomes are repeated across multiple contexts, making them less susceptible to discounting as exceptional (Hewstone, Hassebrauck, Wirth, & Waenke, 2000). Preexisting ideas should thus be most resilient when any disconfirming data or outcomes are isolated or when divergence is incremental or ambiguous. However, multiple large and clear divergences from a preexisting model will draw extra attention and provoke data-driven processing. Moreover, substantial attention to discrepant information will make the old model vulnerable to replacement by alternative ideas more consistent with the newly salient data.²

Effect on Preferences

Actors' mental models do not mechanically determine their policy and institutional preferences, but they can have a profound effect on them. Consider again the standard expected utility model of decision making. The comprehensively rational decision maker must first reason through and process information about the probability and utility of each potential outcome of the available options. The weighting that a cost or benefit receives then strictly depends on its probability of occurring and its magnitude.

In sharp contrast, the attentional theory holds that the range of consequences and data informing an actor's calculations is substantially narrowed before, rather than after, most analytical effort. Decision makers still actively reason through and seek information about the consequences of the options before them. However, their preexisting mental model constrains this analytic process, skewing their attention across potential causal sequences independent of those outcomes' objective probabilities or magnitudes. Actors devote disproportionate attention to those lines of causal

reasoning that happen to be captured by the mental model they are employing and those pieces of information that are relevant to and support those causal logics. They will, in turn, invest fewer cognitive resources in processing arguments and data that are inconsistent with or orthogonal to the model.

An entrenched mental model will thus generate a systematically biased set of causal beliefs that will then influence preferences. To the extent that a dominant model captures causal sequences that lead to benefits of a given option or excludes its potential risks, actors' preferences will become oriented in favor of that option. The same alternative will be much less likely to win advocates when the dominant model includes a causal chain leading to the option's dangers, even when actors' objective interests are identical. Only after repeated, dramatic, and clear empirical divergences from the model will actors devote intense attention to the discrepant data and will the model become vulnerable to replacement by ideational alternatives.

Empirical Analysis: Pension Financing in Germany

Cases and Method

The remainder of this article probes the plausibility of this argument against empirical patterns of decision making. To be clear, the primary aim of the theory and the analysis that follows is not to explain final outcomes—which are also shaped by nonideational factors, such as institutional rules and power distributions—but to explain the *policy preferences* of influential policy-making actors. The data are drawn from a policy field that should provide a hard test of a cognitive model of decision making: public pensions. Pension policy involves large social and political stakes and, with most of the costs and benefits taking material form, should thus be a favorable site for rational calculation. The analysis traces processes of deliberation and reasoning over a substantial stretch time to test for the effects of sequence as predicted by the theory—the influence of preexisting ideas on the processing of new information and, in turn, the effect of new data on prior ideational commitments.

The cases are drawn from three periods of pension policy making in Germany: the creation of the pension scheme under Otto von Bismarck in the mid-1880s, Weimar-era deliberations, and the design of Germany's postwar pension system under Konrad Adenauer in the 1950s. At the time of the scheme's establishment in the 1880s, actors throughout core

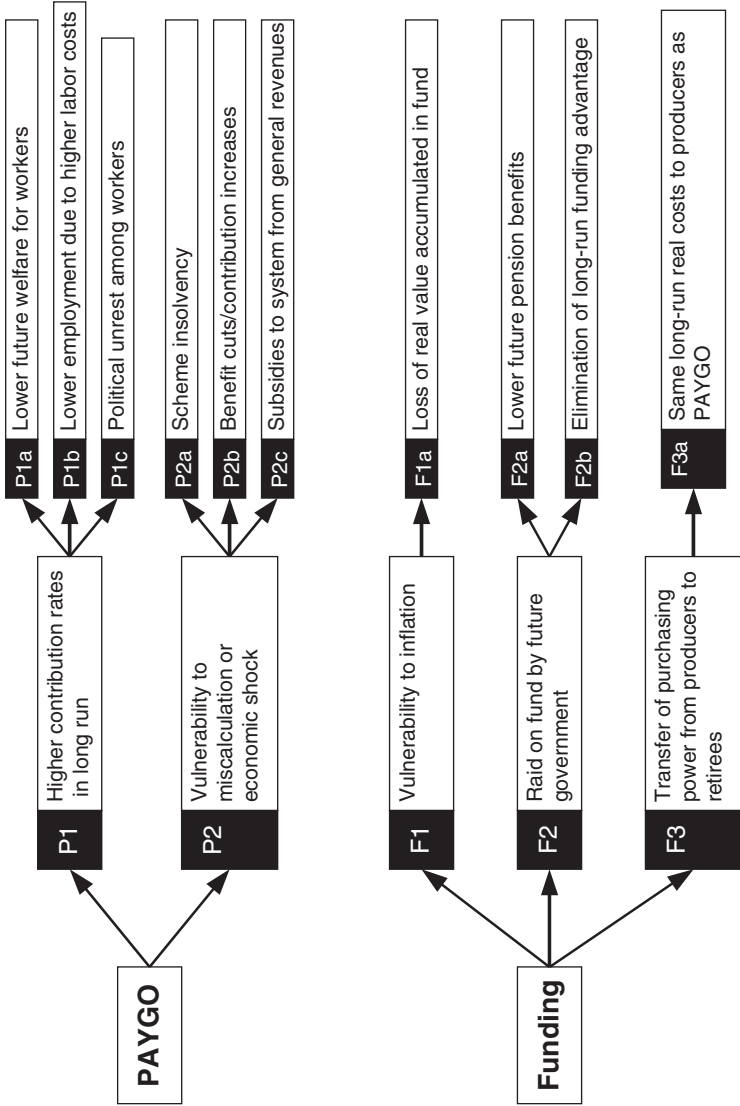
policy-making institutions widely employed a mental model of public pensions as a form of *insurance*.³ By the mid-1950s, when Adenauer's government set about rebuilding the program, a new mental model had taken hold: Most participants in key decision making venues now conceived of the public pension system as a mechanism of *redistribution* from young to old. The primary question is how the dominant mental model of the policy domain in each period shaped actors' patterns of reasoning and information processing and, in turn, the policy preferences at which they arrived.

In each period, the analysis focuses on how actors grappled with a crucial decision: whether to finance the scheme on a PAYGO basis or a funded basis. The German pension system, like most in the developed world today, was a contributory arrangement: Workers accumulated pension rights by paying premiums matched by their employers. A critical question confronting policy makers was how to set contribution rates relative to benefit payments. In its pure form, PAYGO financing means collecting roughly enough in contributions each year to cover the cost of that year's pension outlays. Because the expenditures of a contributory scheme usually rise over time (as successive cohorts accumulate larger entitlements), PAYGO means low contribution rates in the early years, which then grow substantially over decades. Funding, however, means taxing ahead: imposing much higher contribution rates right away to accumulate vast reserves, which are then invested and dedicated to paying future pensions. Although premiums start higher, they can stabilize at a much lower level over the long term as they are supplemented by earnings on the fund.

How should we expect policy makers to choose between these two financing methods? Figure 1 illustrates many of the most important and likely causal sequences that could potentially arise from each of the two options (for simplicity, framing them only in negative terms). Because each sequence was a plausible possibility in all periods under analysis, the figure provides a kind of yardstick against which to test the article's argument. If policy makers were fully rational, with their calculations being driven solely by the dictates of expected utility theory, then a thorough search of the deliberative record should uncover evidence that they at least *considered* all major and plausible potential consequences, even if they ultimately discounted some as being unlikely or unimportant. Moreover, substantial shifts in relevant objective conditions or available information—such as institutional change or the failure of past choices—should generate a corresponding shift in actors' attention to consequences and in their beliefs and preferences.

The attentional theory makes an alternative set of predictions. If this argument is right, then we should, first, observe actors making explicit,

Figure 1
Possible Negative Consequences of PAYGO (Pay As You Go) Financing and Funding



consistent reference to a particular causal model of pension policy. Second, we should observe politicians, bureaucrats, and interest group leaders attending only partially to the causal logics in Figure 1. In each period, they should reason through and process information about those sequences and outcomes that are captured by the period's dominant mental model while—even more important—making little or no reference to those sequences not implied by the model and ignoring or heavily discounting information relating to them. Third, many actors' final preferences should in turn be influenced by their allocation of attention across each option's costs and benefits. Fourth, though we need not observe unanimity of preferences across all elite actors—a mental model does not simply tell actors which option to prefer—we should observe those on *both* sides of the issue, allocating their attention to causal possibilities in ways consistent with the dominant model. Fifth, when confronted with multiple clear and dramatic outcomes that depart from the model, actors' attention should be drawn to such discrepant information, and the model should be more likely to face challenge and replacement.

In testing the argument, this section draws heavily on records of deliberation over pension financing among German politicians, senior civil servants, policy experts, and interest group leaders. In order to capture sincere reasoning rather than statements intended purely for public consumption, the bulk of this evidence is taken from minutes and correspondence that record the considerations that these actors raised in private settings.

Program Establishment

In the mid-1880s, Chancellor Otto von Bismarck ordered his ministers to design a broad system of social protection for workers, a central pillar of which was a program of old-age and disability insurance. As the first contributory state pension scheme in the world, the project confronted enormous causal uncertainty, and senior officials commonly referred to the venture as “a leap in the dark” (Rudloff, 2000, pp. 98-99). Multiplying this causal complexity was the fact that the aims that motivated the project were mostly long-term. Its chief goal was to head off a growing socialist movement by forging a long-run alliance between the working class and the state (Ritter, 1983). Ministers were thus focused on generating durable policy benefits and avoiding policy failure over a substantial stretch of time.

In reasoning through the system's design, Reich policy makers leaned heavily on a mental model borrowed from a structurally similar domain: the flourishing industry of private life insurance. Officials explicitly and

repeatedly defined their goal as a system of “insurance.” Records of internal deliberations reveal that Reich officials did not interpret the insurance analogy loosely, as a convenient label, but saw the “insurance principle” as being deeply embedded in the structure of their project.⁴ In their minds, insurance was distinct from public welfare in that its benefits were paid for by the beneficiaries themselves (Geyer, 1987). Moreover, they argued that pension benefits constituted a form of insurance because the payment of contributions and the receipt of benefits were separated by a long stretch of time, as with private life insurance.⁵

This analogy pervaded the design process and deliberations. The entire repertoire of concepts and analytical tools used to describe and model alternative designs was borrowed directly from the actuarial practices of the private insurance industry. Among its effects, the mental model of public pensions as insurance had direct implications for how actors reasoned through the choice of financing methods. Those implications stemmed from the way in which the model simplified the causal dynamics of pension policy. Specifically, the insurance analogy modeled a pension program as a closed self-supporting arrangement, much like a private insurance firm. In the world of private insurance, all benefits are paid for via a combination of premium revenues and the returns on the scheme’s accumulated assets. Should the plan fall out of actuarial balance, an insurance scheme faces the risk of insolvency (the causal sequence leading to P2a in Figure 1). The key design challenge for such a plan is thus to choose contribution and benefit schedules that will balance future streams of income against long-run obligations.

As the insurance model captured a piece of the causal logic governing public pensions, however, it stripped away other causal dynamics. Most strikingly, the model simplified away the distinctive conditions governing a *public* program. Whereas a private firm relies on relations of voluntary exchange to extract revenues, a state has recourse to unique powers of coercion. If a public pension scheme’s income is insufficient to pay benefits, the state can always raise contribution rates or taxes to close the gap; insolvency per se is not a meaningful possibility (Manow, 2000).⁶ Similarly, the private insurance model obscured the implications of financing methods for the flow of *real* social resources. For a private life insurer, the distinction between nominal value (money) and real economic value is not an important one. The private insurer’s financing problem is typically a nominal one: With insurance benefits promised in nominal currency units, the task is simply to maintain sufficient nominal resources on hand to pay them. What happens to currency values or prices is of no concern. For a state policy maker, however, the underlying distribution of *real* economic resources to

pensioners might in principle be of greater interest and—for reasons elaborated later—will be captured only partially by the scheme's balance sheet.

Furthermore, the insurance analogy failed to capture the uniquely political risks that could bedevil public pension financing (F2 sequence). In particular, the model simplified away the problem of property rights over public pension funds. In the well-ordered German *Rechtsstaat*, a private insurance firm could assume that it would retain property rights over any funds that it accumulated. In the world of politics, where dispositions of resources are subject to revision by the sovereign of the day, an additional complication arises: Funds accumulated today for one long-run end can be raided or redirected tomorrow for an entirely unrelated purpose (Moe, 1990).

Bismarck's officials invested disproportionate attention in those potential causal sequences captured by the insurance model, especially the dynamics of actuarial balance. As records of internal deliberations reveal, officials repeatedly deliberated about how their choices would affect the scheme's financial solvency over the long run.⁷ Most commonly, they reasoned that funding would mean that the scheme always had sufficient assets on hand to discharge its accumulated liabilities; thus, "the continued financial capacity of the insurance institutions is as secure as possible."⁸ In contrast, their discussions of PAYGO centered on the fact that such a method would generate little buffer and would thus be vulnerable to unexpected contingencies or miscalculation (P2a, P2b, P2c).⁹

Similarly, the model of a pension scheme as a self-supporting actuarial arrangement pointed actors toward the contribution rates that each financing method would require to maintain solvency. Officials deliberately sought detailed information on this causal sequence, commissioning calculations of contribution rates several decades into the future. As these calculations showed, PAYGO financing would start out with contribution rates 1/10th the level required for funding but would later require premiums 13 times as high (Rosenstock, 1934). In written and oral deliberations, Reich officials repeatedly reasoned through the long-term implications of this actuarial logic (P1). They pointed out that PAYGO would irresponsibly "shift a part of the burden onto the future"¹⁰ and encumber future workers in "a prohibitively expensive and unjustified way for the sake of current workers"¹¹ (P1a), nourishing "discord over the increasing burden of workers' insurance" (Preußischer Volkswirtschaftsrat, 1887; P1c).

Equally striking are the causal dynamics to which decision makers did not attend. At no point did actors within the executive challenge the application of actuarial notions of solvency to a public scheme. Most significantly,

in light of later events, decision makers paid virtually no attention to the causal dynamics of commitment—the possibility that accumulated funds might be subject to political manipulation or diversion (F2). A thorough examination of records of extensive written and oral deliberations within the executive yielded not a single mention of the possibility that accumulated pension funds might be raided by future governments for other purposes. Nor was any distinction made between the nominal value and the real value of accumulated assets or any reference made to potential threats to their real value, such as inflation (F1).¹²

With the insurance metaphor widely accepted in elite political circles, the same allocation of attention prevailed in other deliberative venues. The pension scheme's proposed financing method was discussed in depth both in parliament and among Germany's business leaders. From a rationalist perspective, the institutional context in which legislators and interest groups were operating ought to have raised especially strong concerns about funding's political vulnerabilities (North & Weingast, 1989). Reich institutions offered actors outside the executive few tools for protecting pension funds against predation by a future government. Not only did the legislature have weak veto powers, but producer interests were as yet weakly integrated into the policy-making process in ways that would help hold governments to account (Craig, 1981). There is, however, almost no evidence that legislators or business leaders attended to threats to the commitment of pension funds over time. A wide-ranging review of debates outside the executive—in closed Reichstag committee meetings, in Reichstag plenary sessions, and among business leaders (whose firms would be paying part of the scheme's costs)—uncovered only a single instance in which a participant raised the possibility that pension funds might be diverted or misappropriated. The comment elicited not a single response.¹³ The insurance model did not simply tell actors what to prefer; some business leaders, for instance, believed that funding's high short-run costs outweighed its benefits (Bueck, 1887). But perhaps most telling is that even legislators and industrialists who strongly opposed funding—and thus had strong incentives to consider its risks—did not refer to potential dangers that were outside the dominant model. Though funding's political and inflationary vulnerabilities would have constituted powerful lines of criticism, opponents almost never raised them as possible disadvantages. Even funding's opponents largely shared the understanding of a pension scheme as insurance, and this model systematically directed their attention away from highly plausible causal sequences.

Ultimately, the government proposed funding, and parliament approved this method with modest modification. Given the dominant explanation of Bismarck's welfare state project—as an attempt to win worker loyalties in the face of socialist mobilization (Ritter, 1983)—the choice is a striking one, for it would impose far higher costs on workers in the near term. The decision makes sense, however, in light of the dominant mental model and the manner in which it tilted the cognitive and argumentative scales in funding's favor. Specifically, the model focused actors' reasoning and information-gathering on causal sequences that favored that method (P1 and P2), including sequences through which PAYGO might ultimately inflame worker discontent (P1c). Moreover, the model made cognitively less available important causal logics that would have spoken against funding—especially, the political and inflationary threats to the long-term commitment of assets (F1 and F2).

After Failure: Interwar Reasoning

Within three decades, funding had produced disastrous results—through causal dynamics not captured by the insurance model and not attended to in the 1880s. During World War I, over half the funds accumulated in the pension scheme were invested in Reich war bonds (Manow, 2000). Meanwhile, the government took the inflationary steps of leaving the gold standard and financing the war largely through borrowing (Craig, 1981). Together, these choices constituted a raid on all Reichmark-denominated savings to finance the war. Exacerbated by the terms of defeat, inflation was followed by hyperinflation that wiped out the entire real value of the pension scheme's assets, built up over 30 years. Benefit promises, denominated in nominal units, were similarly rendered worthless in real terms.

The record of experience in interwar Germany thus substantially diverged from the logic of the dominant mental model. This sequence of events, in principle, suggested important ways in which a public pension program differed from a private insurance plan, dramatizing both the critical distinction between real and nominal value and the political risks to public fund accumulation. In the decades since the pension scheme's creation, however, the insurance model had become deeply institutionalized within the German state. A large insurance bureaucracy had been established to administer and maintain the program on a funded basis. Routines of information gathering and processing within these agencies were premised on and structured by the norms and procedures of actuarial science—now an established academic discipline—such as the calculation and balancing of long-term liabilities and assets (Borscheid, 1989; Sniegs,

1996). The vast majority of German social policy bureaucrats and experts in this period continued to understand a pension scheme as a method of insurance (Geyer, 1987; Manow, 2000).

In spite of disconfirmatory empirical evidence, these elites overwhelmingly continued to favor funding, as the insurance model continued to powerfully direct their causal reasoning. As policy makers considered how to rebuild the system, they devoted generous attention to the nominal sufficiency of the scheme's assets but focused little on the political and economic threats to the real value of those assets (F1 and F2). Civil servants in the 1920s, at both the Reich Insurance Office and the Labor Ministry, emphasized the same causal sequences that had preoccupied decision makers in 1889: the vulnerability of PAYGO financing to the risk of insolvency (P2) and its tendency to shift undue burdens onto the future (P1).¹⁴

The experience of failure did eventually introduce new lines of causal reasoning into public debate. It is only after the currency's collapse that we observe the first prominent arguments identifying the risk that inflation posed to fund accumulation (Geyer, 1987; Günther, 1923). If such experience and arguments were available in principle, however, the insurance model continued to systematically bias actors' calculations away from them. For instance, in negotiations in 1921 among trade unions, employers, and civil servants over the financing of the miners' pensions scheme—in the midst of rapid price increases—the dangers of inflation were not even mentioned during the debate over funding. Once again, even those actors who opposed funding did not employ this potentially powerful line of reasoning (Geyer, 1987).

Nor did officials think seriously about the political risks to funding. The available record of the Weimar debates reveals no instance in which a civil servant voiced a concern that future political majorities might raid the pension fund to increase pension benefits or to spend on other purposes.¹⁵ This is striking not only in light of prior experience but also given the structure of Weimar institutions, which placed enormous policy authority in the hands of legislators with strong incentives to please constituents in the near term.

How could this allocation of attention survive the experience of policy failure? Patterns of information processing were critical: Actors interpreted the available evidence of policy failure in ways that supported the insurance model and deflected attention away from causal sequences outside it. In the era's dominant causal story, the source of failure was not the *policy* choice to accumulate funds but, rather, a rare external shock that had undermined the program's actuarial foundations (Aurin, 1923; Seelmann-Eggebert, 1932). For instance, a top official of the Labor Ministry referred to hyperinflation

as an “ordeal” visited upon the scheme, while pointing to the 3 billion marks in assets accumulated before the war as evidence of the “time-tested” effectiveness of the social insurance method (Grieser, 1928). The causal interaction that had played out in the early 1920s was viewed as exceptional, not as a systematic risk of funding itself. Yet, when exogenous conditions—global depression—strained the interwar scheme’s PAYGO finances, officials employed exactly the reverse logic to reinforce their preferences: PAYGO financing *itself* was held to be inadequate because it was not resilient to the external shock of an economic downturn (P2; Dobbernack, 1933; Seelmann-Eggebert, 1932).

Postwar Reform

In the 1930s, largely in response to Labor Ministry demands, the National Socialist regime pushed the pension system back onto a basis of full funding (Geyer, 1987). This second experience with funding, however, ended as badly as the first. Decreeing in the late 1930s that the social insurers had to invest 75% of their funds in state bonds, the Nazi regime used these resources to finance Germany’s rearmament and war effort (Teppe, 1977). After World War II, defeat and inflation once again destroyed the pension reserves.

As the German economy recovered from the devastation of war, Konrad Adenauer’s center-right government turned in the mid-1950s to the task of rebuilding and reforming the state pension scheme. Policy makers now approached the problem of pension financing under dramatically changed ideational conditions. Although the insurance model had survived one spectacular failure, a second sequence of fund manipulation, rapid inflation, and fund devastation now left the analogy deeply discredited. If the first episode could be discounted as exceptional, confirmatory cognitive mechanisms were unable to withstand the repetition of such clear and dramatic evidence of policy failure. Once actors turned their attention to this evidence, the insurance model could not make sense of the pattern. In a world of unstable currency values and unreliable political commitments, the task of pension financing no longer looked like an actuarial problem of balancing assets and liabilities. For the first time, the record of internal government pension policy deliberations in the 1950s reveals numerous participants’ taking pains to draw a sharp *distinction* between public retirement benefits and private insurance.¹⁶

Meanwhile, alternative ideas about the logic of social policy were now readily available in the intellectual environment. The most prominent new

conception, grounded in contemporary understandings of the macro-economy, modeled social welfare policies as *redistributive* mechanisms rather than as methods of insurance. The redistributive logic was most famously formulated by economist Gerhard Mackenroth: “All social spending,” he wrote, “must always be paid for out of the national income of the period in which it occurs” (Mackenroth, 1952, p. 41). In this model, there is no way for a society (unlike an individual) to save for the future by accumulating funds. No matter how pensions are financed—whether from current tax revenues or accumulated assets—they always represent a reallocation of current production from nonbeneficiaries to beneficiaries. Just like paying pensions out of current taxation, financing them out of the earnings on assets allocates to pensioners a claim on a share of the *real* goods and services currently available in the economy (F3). Whether funded or PAYGO, a pension scheme’s outlays thus effect the same redistribution of real resources from producers to retirees.

Since about 1950, the redistributive model had achieved wide acceptance in elite social policy circles (Hockerts, 1980), and participants in reform debates explicitly and repeatedly brought it to bear in discussing the method of financing of the state pension plan.¹⁷ One of Adenauer’s most influential advisors, Bonn economist Wilfrid Schreiber (1955), famously grounded his arguments in an understanding of a public pension scheme in redistributive terms—as a “contract of solidarity between generations” (p. 18)—and explicitly contrasted this social mechanism with private life insurance and individual savings (Hockerts, 1980). Minutes and memoranda from internal government deliberations reveal a wide range of participants echoing this understanding of the public pension scheme as a distinctive arrangement through which younger generations supported the old.¹⁸

Like the insurance model that preceded it, the model of pension policy as a mechanism of redistribution of real resources captured some causal dynamics while simplifying others away. In particular, the new model was well suited to reasoning about threats to fund accumulation. In representing the problem of pension financing as a matter of real economic value, the model could aid reasoning about inflation. In this model, accumulated money has no value aside from the real resources that it represents; a devaluation of the currency thus stands out as a serious threat to any attempt to stockpile funds over time. Moreover, in characterizing the scheme as a distinctly *political* arrangement—a pact over time between social groups—the redistributive model lent itself far more easily than the insurance metaphor to reasoning about political threats to this bargain.

Again, however, this new mental model did not simply “indicate the appropriate policy response” (Goldstein, 1993, p. 250) for actors to follow. In designing the postwar pension arrangement, government ministers were active seekers of information and argument, establishing an elaborate system of advisory and interdepartmental committees staffed by senior bureaucrats and outside experts that engaged in intensive and extended debate, data gathering, and analysis (Hockerts, 1980). Within committee deliberations, however, a redirection of attention was starkly apparent. Participants now showered cognitive resources on threats to the long-term commitment of pension funds. In committee meetings and internal correspondence, decision makers made continual references to the twin financing disasters of the past, citing them as evidence of the grave danger that inflation posed to funding (F1).¹⁹ As one senior Finance bureaucrat advised his minister, “the past has proved that the accumulation of a large capital stock corresponding to actuarial calculations is not possible. . . . Twice, the loss of insurance reserves through inflation.”²⁰ The objective future risks of inflation were no higher than they had been during the Weimar period; indeed, with the emergence of an increasingly independent and hawkish Bundesbank, they were arguably lower (Berger, 1997). Yet policy makers and experts, operating with a new mental model of pension policy, now repeatedly expressed broad and deep concern about the stability of currency values and their impact on long-term fund accumulation.²¹

Similarly, in sharp contrast to interwar discussions, records of postwar debate reveal widespread anxiety about political threats to a pension fund. Policy makers repeatedly expressed the fear that governments might divert accumulated assets toward non-social policy purposes²² or that legislators would spend the excess cash on imprudent benefit increases (F2).²³ Against rationalist expectations, these threats to commitment received far greater attention at a time when political institutions were far better designed to bind governments’ hands than they had been during Bismarck’s era—particularly with strong neocorporatist structures for representing workers and employers in the scheme’s administration.

Equally important are the ways in which the redistributive model suppressed other lines of reasoning. In particular, this new model did not capture causal sequences that had gripped the minds of policy makers before World War II. As a model of real resource flows, it blurred any distinction between the costs of the two financing arrangements over time—between one method’s reliance on taxes and the other’s reliance on asset yields. Thus, in stark contrast to earlier policy discussions, policy makers and advisors on key deliberative committees in the mid-1950s rarely referred to the

tendency of PAYGO financing toward increasing contribution costs over the long run (P1) or the potential effects on labor demand (P2; Hockerts, 1980). Similarly, the model of pension financing as redistribution by the state, rather than as insurance, shunted actors' attention away from the actuarial implications of their decisions. Policy makers in the 1950s devoted strikingly little attention either to the problem of balancing assets and liabilities or to the possible advantages of having funds on hand to cover the scheme's long-run outlays.²⁴

Again, this allocation of attention aligned poorly with objective risks: As demographic and economic conditions worsened in later decades, the PAYGO method was prone to mounting contribution burdens, imposing a rising tax on employment that would in the 1990s be widely considered a major drag on the German economy. Particularly revealing is that even those who opposed PAYGO financing did not employ actuarial arguments in the Adenauer years. Rather, they reasoned within the terms of the dominant mental model about the effects that a fund might have on the real macro-economy, arguing that it could be invested in real capital to increase the productive capacity of the economy.²⁵

In 1957, the government chose to place the system on a modified PAYGO basis, financing most benefits out of current premiums while maintaining a modest reserve. Policy-analytic considerations were not the only force behind this choice: PAYGO financing also allowed the center-right government to deliver large pension increases before an imminent election without raising contribution rates proportionately (Hockerts, 1980). What is striking, however, is that most *unelected* senior civil servants and pension experts strongly favored PAYGO. Even in the absence of electoral pressures, it is thus highly unlikely that the government would have opted for funding. Although the new mental model had not ended disagreement over pension financing, it had markedly tilted the cognitive and deliberative scales by shifting decision makers' attention away from PAYGO's actuarial and intertemporal dangers (P1 and P2) and toward the risks of fund accumulation (F1, F2, F3).

Conclusion

From long-term policy planning to institutional design, many of the most important choices that political actors make involve high levels of causal and informational complexity. With cognitive effort a scarce resource, actors facing complex decisions must typically forego comprehensive calculation and

allocate their attention selectively across features of their choice situations. As I have argued, ideas play a critical role in shaping decision-makers' preferences by systematically guiding this allocation of attention. As elites argue and process information, mental models channel their reasoning toward certain causal possibilities and obscure others from view, while biasing their search for and weighting of available evidence. These same attentional dynamics also make ideas self-reinforcing and fundamental learning rare: It typically takes repeated, dramatic, unambiguous evidence of failure to open cognitive space for major ideational change.

The article's attentional argument suggests more than a theory of ideas: It also suggests a unifying logic within which we can understand when ideas, as opposed to material conditions, will matter most. When material considerations drive actors' calculations, it may not be simply because they are material. It will often be that the choice situation is structured in ways that make those consequences more salient than other causal possibilities. For instance, when large costs or benefits are transparently inscribed into statute and will arrive in the short term, those effects will be highly salient and take little cognitive effort to interpret. In such situations, we can probably explain preferences as though they were a straightforward response to the distribution of these material policy spoils. The critical point is that attentional effects are still operating in such choice situations because cognitive effort is drawn to a set of clearly signaled material stakes. In contrast, where the largest or most valued consequences of a choice are distant, complex, or ambiguous, actors' attention is less likely to be directed by objective parameters of the choice and more likely to be guided by simplified mental representations of the domain.

The analysis further suggests that a focus on attention carries important methodological advantages for the study of ideas. Analysts have often studied ideational effects by examining how ideas introduce beliefs or goals into processes of decision making. Testing for such effects usually takes the form of a search for *affirmative* evidence—that actors were exposed to the idea, explicitly discussed its propositions, and chose options consistent with it. By focusing on these affirmative effects, however, analysts have likely understated the consequences of mental constructs for political life. The most powerful effect of an idea may not be the beliefs and goals that it supplies but the way in which it *obscures* important dimensions of a choice situation, diverting analysis and deliberation away from them altogether. A full assessment of ideational effects thus requires an analytic focus on the features of the world that are simplified *out* of actors' ideational frameworks and on the relevant considerations on which actors fail to reflect.

Notes

1. Among other theorized structures are associative networks, distributed memory, and exemplars.

2. In part, these attentional dynamics could explain patterns of punctuated learning (Hall, 1993).

3. See also, Derthick (1979) on the use of an insurance analogy in U.S. Social Security politics.

4. “Denkschrift, betreffend Alters- und Invalidenversicherung” (no author), July 6, 1887, R43/565, pp. 87-98RS. Archival records are from the Bundesarchiv-Berlin (Bismarckian and Weimar periods) and the Bundesarchiv-Koblenz (postwar period). Where indicated, I consulted transcriptions of original documents furnished by Florian Tennstedt and Ulrike Haerendel. All citations are to the original archival locations. All translations are mine. Note that numerous documents from the Bismarckian period can also be found in Haerendel (2004).

5. Tonio Bödiker (president, Imperial Insurance Office) in minutes taken by Bödiker of a meeting with Paul Eck (under state secretary of the interior), Robert Bosse (director of economic affairs, Interior Office), Karl Heinrich von Boetticher (state secretary of the interior), July 7, 1884, R1501/100096 (transcription provided by Tennstedt and Haerendel).

6. Manow (2000) provides here a masterful historical account of German debates over pension financing.

7. Bosse to Jacobi (state secretary, treasury), August, 5, 1887, R2/41569, pp. 113-115RS; Jacobi to von Boetticher, July 20, 1887, R1501/100096, p. 158RS; and Erich von Woedtke (senior official, Interior Office) to von Boetticher, December 4, 1888, R1501/100024, pp. 227-229RS.

8. Jacobi to von Boetticher, July 20, 1887, R1501/100096, p. 158RS.

9. Bödiker in minutes of July 7, 1884, meeting, R1501/100096. Also, Bosse to Jacobi, August, 5, 1887, R2/41569.

10. Von Woedtke to von Boetticher, December 4, 1888.

11. “Denkschrift, betreffend Alters- und Invalidenversicherung” (Memo on Old Age and Disability Insurance; no author), July 6, 1887, R43/565, pp. 87-98RS. Similar arguments in Von Woedtke to von Boetticher, December 4, 1888. See also, Rosenstock (1934).

12. Bundesarchiv holdings searched include Reich Office of the Interior (lead department) file groups R1501/100024, 100026, 100027, 100035, 100043, 100054-100059, 100096-100098, 100104, and 100105; Reich Treasury Office file groups R2/41569 through 415172, 415175, 415176, 41599, 45800, 45801, 45803; Reich Insurance Office, parts of R89 Teil 3.

13. Legislator von Wendt’s comments in minutes of the 14th and 15th closed-door meetings of the Sixth Reichstag Committee, First Reading, January 29–30, 1889, R101/3138, pp. 161RS, 173RS (transcription furnished by Tennstedt and Haerendel). Other records searched include all parliamentary debates on the bill relating to the financing and administration of funds, Reichstag’s Seventh Legislative Period, Sessions 2 and 4 (Deutscher Reichstag, 1888, 1889); minutes of closed sessions of the responsible parliamentary committee, the Sixth Reichstagskommission, cited above; the committee’s report (6. Kommission des Reichstages, 1889); minutes of debate on the bill by the business-dominated Prussian Economic Council (Preußischer Volkswirtschaftsrat, 1887); and debates by the largest industry group (Bueck, 1887).

14. Reichsversicherungsamt (Reich Insurance Office), “Die Ergebnisse der versicherungstechnischen Bilanz zur Nachprüfung der Beiträge zur Invalidenversicherung” (The Results of Actuarial Calculations Reviewing Contributions to the Disability and Pension Insurance; n.d. [est. 1925–1927]), R3901/34871, p. 2; Seelmann-Eggebert (1932).

15. I rely here on Geyer's exhaustive treatments (1987, 1991) of the Weimar pension debates and on extensive writings and speeches by civil servants; a small sample of those consulted, aside from those cited above, includes Düttmann (1931), Grieser (1928), Heinze (1928).

16. Discussion in the lead Labor Ministry committee on pension reform, the general secretariat for social reform, in "Niederschrift über die 2. Sitzung des Arbeitsausschusses für Fragen der Rentenversicherung" (Minutes of the Second Meeting of the Working Group on Pension Issues), June 11, 1954, B149/422; in "Niederschrift über die 3. Sitzung des Arbeitsausschusses für Fragen der Rentenversicherung" (Minutes of the Third Meeting of the Working Group on Pension Issues), June 24, 1954, B149/422; in minutes of subsequent sessions in same file group; and in "Niederschrift über die 13. Sitzung des Arbeitsausschusses für Grundsatzfragen" (Minutes of the 13th Meeting of the Working Group on Basic Principles), March 28 and 29, 1955, B149/414.

17. Comments by Auerbach (Labor Ministry state secretary), Liebing (director, Association of German Pension Insurers), and Liefmann-Keil (Freiburg University economist), in "Niederschrift über die 13. Sitzung"; comments by Hensen (Kiel economist) at "Niederschrift über die 14. Sitzung des Arbeitsausschusses für Grundsatzfragen" (Minutes of the 14th Meeting of the Working Group on Basic Principles), April 25 and 26, 1955, B149/414; the contribution by Schmölders of the Finanzwissenschaftliches Forschungsinstitut at Köln University, "Die Pläne für eine Neuordnung der sozialen Leistungen im Lichte der Finanz- und Währungspolitik" (The Plans for Reforming Social Benefits in Light of Fiscal and Monetary Policy; n.d.), B126/13804; and comments by Bundesbank president Wilhelm Vocke before the Bundestag's Social Policy Committee, September 15, 1956, B126/13807.

18. The comments of multiple committee members in "Niederschrift über die 13. Sitzung" and of Imhof in "Niederschrift über die 14. Sitzung."

19. References to past disaster in remarks by Haensel (Senate president, Munich, member of Advisory Board for Reorganization of Social Benefits) and Lepinski (member, Working Group for Pension Insurance Issues) in "Niederschrift über die 13. Sitzung"; comments by Lepinski and Stock (former premier of Hessen; member, Advisory Council) in "Niederschrift über die Sitzung des Beirats für die Neuordnung der sozialen Leistungen" (Minutes of the Meeting of the Advisory Council for the Reform of Social Benefits), June 2-4, 1955, B149/410. Adenauer made prominent reference to experiences of inflation in Cabinet (Hockerts, 1980).

20. Draft memo from Unterabteilung IIC, Elsholz (division director, Finance Ministry) to finance minister, December 10, 1955, B 126/13804.

21. Comments by Tietz (division director, Labor Ministry) and Auerbach in "Niederschrift über die 24. Sitzung des Arbeitsausschusses für Grundsatzfragen" (Minutes of the 24th Meeting of the Working Group on Basic Principles), March 22, 1956, B149/423; and by Hofmann, Noack (member, Working Group on Pension Insurance Issues), and others in "Niederschrift über die 4. Sitzung des Arbeitsausschusses für Fragen der Rentenversicherung" (Minutes of the Fourth Meeting of the Working Group on Pension Issues), July 21, 1954, B149/422.

22. Lepinski and Stock in "Niederschrift über die Sitzung des Beirats"; Auerbach in "Niederschrift über die 24. Sitzung" and in "Niederschrift über die 14. Sitzung."

23. Der Generalsekretär für die Neuordnung der sozialen Sicherung, "Betr. Nächste Sitzung des Interministeriellen Ausschusses" (Re: The Next Meeting of the Interministerial Committee), November 30, 1955, B149/408.

24. Aside from file groups cited above, sources reviewed include Labor Ministry groups B149/412, 413, 425, 3316, 3764, 16832 and Finance Ministry groups B126/13804 and 13807.

25. See arguments by Schmölders in “Niederschrift über die gemeinsame Sitzung des Arbeitsausschusses für Grundsatzfragen (25. Sitzung) und des Arbeitsausschusses für Fragen der Rentenversicherung (22. Sitzung)” (Minutes of the Joint Meeting of the Working Groups on Basic Principles and Pension Issues), February 6–7, 1956, B149/423; Liebing in “Niederschrift über die 13. Sitzung”; Finanzwissenschaftliches Forschungsinstitut, “Die Pläne.”

References

- Anderson, C. A., & Kellam, K. L. (1992). Belief perseverance, biased assimilation, and covariation detection: The effects of hypothetical social theories and new data. *Personality and Social Psychology Bulletin*, 18(5), 555-565.
- Aurin, F. (1923). Das Reichsknappschaftsgesetz [The imperial miners' insurance law]. *Zeitschrift für die gesamte Versicherungs-Wissenschaft*, 23(4), 241-248.
- Baumgartner, F. R., & Jones, B. D. (1993). *Agendas and instability in American politics*. Chicago: University of Chicago Press.
- Berger, H. (1997). The Bundesbank's path to independence: Evidence from the 1950s. *Public Choice*, 93(3), 427-453.
- Berman, S. (1998). *The social democratic moment: Ideas and politics in the making of inter-war Europe*. Cambridge, MA: Harvard University Press.
- Bleich, E. (2003). *Race politics in Britain and France: Ideas and policymaking since the 1960s*. Cambridge, UK: Cambridge University Press.
- Blyth, M. (2002). *Great transformations: Economic ideas and institutional change in the twentieth century*. Cambridge, UK: Cambridge University Press.
- Blyth, M. (2003). Structures do not come with an instruction sheet: Interests, ideas, and progress in political science. *Perspectives on Politics*, 1(4), 695-706.
- Borscheid, P. (1989). *Mit Sicherheit Leben: Die Geschichte der deutschen Lebensversicherungswirtschaft und der Provinzial-Lebensversicherungsanstalt von Westfalen* [To live with security: The history of the German life insurance industry and of the provincial life insurance agency of Westphalia]. Greven, Germany: Eggenkamp Verlag.
- Bueck, H. A. (Ed.). (1887). *Verhandlungen, Mittheilungen and Berichte des Centralverbandes deutscher Industrieller, No. 38* [Proceedings, communications, and reports of the Central Association of German Industrialists]. Berlin.
- Cavanagh, P. (2004). Attention routines and the architecture of selection. In M. I. Posner (Ed.), *Cognitive neuroscience of attention* (pp. 13-28). New York: Guilford Press.
- Craig, G. (1981). *Germany, 1866-1945*. New York: Oxford University Press.
- Derthick, M. (1979). *Policymaking for social security*. Washington, DC: Brookings Institution.
- Derthick, M., & Quirk, P. J. (1985). *The politics of deregulation*. Washington, DC: Brookings Institution.
- Deutscher Reichstag. (1888). *Stenographische Berichte über die Verhandlungen des Reichstages* [Stenographic reports of the proceedings of the Reichstag]. Berlin: Julian Sittenfeld.
- Deutscher Reichstag. (1889). *Stenographische Berichte über die Verhandlungen des Reichstages* [Stenographic reports of the proceedings of the Reichstag]. Berlin: Julian Sittenfeld.
- Dobbernack, W. (1933). Die Finanzlage der deutschen sozialen Rentenversicherung [The financial condition of the German public pension insurance]. *Zeitschrift für die gesamte Versicherungs-Wissenschaft*, 33(4), 275-290.

- Düttmann, A. (1931). Um die Erhaltung der Invalidenversicherung [On the maintenance of the disability and pension insurance]. *Deutsche Invaliden-Versicherung*, 3(6/7/8), 81-84, 104-107, 122-124.
- Einhorn, H. J., & Hogarth, R. M. (1988). Behavioral decision theory: Processes of judgment and choice. In D. E. Bell, H. Raiffa, & A. Tversky (Eds.), *Decision making: Descriptive, normative, and prescriptive interactions* (pp. 113-146). Cambridge, UK: Cambridge University Press.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition*. New York: McGraw-Hill.
- Gentner, D. (2002). Mental models, psychology of. In N. J. Smelser & P. B. Bates (Eds.), *International encyclopedia of the social and behavioral sciences* (pp. 9683-9687). Amsterdam: Elsevier Science.
- Gentner, D., & Collins, A. (1987). How people construct mental models. In D. Holland & N. Quinn (Eds.), *Cultural models in language and thought* (pp. 243-265). Cambridge, UK: Cambridge University Press.
- Geyer, M. H. (1987). *Die Reichsknappschaft: Versicherungsreform und Sozialpolitik im Bergbau 1900-1945* [The miners' insurance system: Insurance reform and social policy in mining 1900-1945]. Munich, Germany: Verlag C. H. Beck.
- Geyer, M. H. (1991). Soziale Rechte im Sozialstaat: Wiederaufbau, Krise und konservative Stabilisierung der deutschen Rentenversicherung 1924-1937 [Social rights in the welfare state: Reconstruction, crisis and conservative stabilization of the German pension insurance, 1924-1937]. In K. Tenfelde (Ed.), *Arbeiter im 20. Jahrhundert* (pp. 406-434). Stuttgart, Germany: Klett-Cotta.
- Goldstein, J. (1993). *Ideas, interests, and American trade policy*. Ithaca, NY: Cornell University Press.
- Grieser, A. (1928). Sozialversicherung. *Mitteilungen der Vereinigung der Deutschen Arbeitgeberverbände*, 20, 274-275.
- Günther, E. (1923). Die Anpassung der Sozialversicherung an die Geldentwertung und Lohnsteigerung [Adjustment of the social insurance system to currency devaluation and wage inflation]. *Jahrbücher für Nationalökonomie und Statistik*, 121(1), 1-54.
- Haerendel, U. (Ed.). (2004). *Die gesetzliche Invaliditäts- und Altersversicherung und die Alternativen auf gewerkschaftlicher und betrieblicher Grundlage* [The public disability and old age insurance system and trade union and firm-based alternatives]. Darmstadt, Germany: Wissenschaftliche Buchgesellschaft.
- Hall, P. A. (1993). Policy paradigms, social learning, and the state. *Comparative Politics*, 25(3), 275-296.
- Heinze, O. (1928). Die Vorschriften über die Vermögensanlage in der Sozialversicherung [Rules on asset investment in social insurance]. *Die Reichsversicherung*, 2(6), 200-204.
- Hewstone, M., Hassebrauck, M., Wirth, A., & Waenke, M. (2000). Pattern of disconfirming information and processing instructions as determinants of stereotype change. *British Journal of Social Psychology*, 39(3), 399-411.
- Higgins, E. T., & Bargh, J. A. (1987). Social cognition and social perception. *Annual Review of Psychology*, 38, 369-425.
- Hockerts, H. G. (1980). *Sozialpolitische Entscheidungen im Nachkriegsdeutschland* [Social policy decisions in postwar Germany]. Stuttgart, Germany: Klett-Cotta.
- Johnson-Laird, P. N. (1983). *Mental models: Towards a cognitive science of language, inference, and consciousness*. Cambridge, MA: Harvard University Press.
- Johnston, A. I. (2001). Treating international institutions as social environments. *International Studies Quarterly*, 45(4), 487-515.

- Jones, B. D. (2001). *Politics and the architecture of choice: Bounded rationality and governance*. Chicago: University of Chicago Press.
- Jones, B. D., & Baumgartner, F. R. (2005). *The politics of attention: How government prioritizes problems*. Chicago: University of Chicago Press.
- Kingdon, J. W. (1984). *Agendas, alternatives, and public policies*. New York: HarperCollins.
- Kommission des Reichstages. (1889). Bericht der VI. Kommission über denselben zur Vorberathung überwiesenen Entwurf eines Gesetzes, betreffend die Alters- und Invaliditätsversicherung [Report of the Sixth Reichstag Committee on the Bill on Old Age and Disability Insurance]. In *Stenographisches Bericht des Reichstags* [Stenographic report of Reichstag], Seventh Legislative Period, Fourth Session, Volume 5 (Print No. 141).
- Lodge, M., & Hamill, R. (1986). A partisan schema for political information processing. *American Political Science Review*, 80(2), 505-520.
- Lodge, M., & McGraw, K. M. (1991). Where is the schema? Critiques. *American Political Science Review*, 85(4), 1357-1364.
- Mackenroth, G. (1952). Die Reform der Sozialpolitik durch einen deutschen Sozialplan [The reform of social policy by a German social plan]. *Schriften des Vereins für Sozialpolitik*, 4, 39-75.
- Manow, P. (2000). Kapitaldeckung oder Umlage: Zur Geschichte einer anhaltenden Debatte [Funding or pay-as-you-go: On the history of a continuing debate]. In S. Fisch & U. Haerendel (Ed.), *Geschichte und Gegenwart der Rentenversicherung in Deutschland: Beiträge zur Entstehung, Entwicklung und vergleichenden Einordnung der Alterssicherung im Sozialstaat* (pp. 145-168). Berlin: Duncker & Humblot.
- March, J. G., & Olsen, J. P. (1989). *Rediscovering institutions: The organizational basis of politics*. New York: Free Press.
- Miller, G. (1956). The magic number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63, 81-97.
- Moe, T. (1990). The politics of structural choice: Toward a theory of public bureaucracy. In O. Williamson (Ed.), *Organization theory: From Chester Barnard to the present and beyond* (pp. 116-153). Oxford, UK: Oxford University Press.
- Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises *Review of General Psychology*, 2(2), 175-220.
- North, D. C., & Weingast, B. R. (1989). Constitutions and commitment: The evolution of institutions governing public choice in seventeenth-century England. *Journal of Economic History*, 49(4), 803-832.
- Preußischer Volkswirtschaftsrat. (1887). *Protokolle über die Sitzungen des Preußischen Volkswirtschaftsraths* [Minutes of the meetings of the Prussian Economic Council]. Berlin: Preußischer Volkswirtschaftsrat.
- Ritter, G. A. (1983). *Sozialversicherung in Deutschland und England: Entstehung und Grundzüge im Vergleich* [Social insurance in Germany and England: Origins and features in comparison]. Munich, Germany: Verlag C. H. Beck.
- Rosenstock, G. (1934). *Versicherungstechnische Probleme in der Geschichte der Bismark'schen Sozialgesetzgebung* [Actuarial problems in the history of Bismarckian social legislation]. Köslin, Germany: C.G. Hendeß.
- Rudloff, W. (2000). Politikberater und opinion-leader? Der Einfluß von Staatswissenschaft und Versicherungsexperten auf die Entstehung der Invaliditäts- und Altersversicherung [Political advisor and opinion leader? The influence of political science and insurance experts on the origins of the disability and old age insurance]. In U. Haerendel & S. Fisch (Ed.), *Geschichte und Gegenwart der Rentenversicherung in Deutschland: Beiträge zur*

- Entstehung, Entwicklung und vergleichenden Einordnung der Alterssicherung im Sozialstaat* (pp. 93-119). Berlin: Duncker & Humblot.
- Savage, L. J. (1954). *The foundations of statistics*. New York: Wiley.
- Schreiber, W. (1955). *Existenzsicherheit in der industriellen Gesellschaft: Vorschläge des Bundes Katholischer Unternehmer zur Reform der Sozialversicherung* [Security of subsistence in industrial society: Proposals of the Federation of Catholic Businessmen for the reform of the social insurance system]. Köln, Germany: Verlag J. P. Bachem.
- Seelmann-Eggebert, O. (1932). Zur Sanierung der Invalidenversicherung [On the recapitalization of the disability and pension insurance]. *Deutsche Invaliden-Versicherung*, 4(10), 161-163.
- Sikkink, K. (1991). *Ideas and institutions: Developmentalism in Brazil and Argentina*. Ithaca, NY: Cornell University Press.
- Simon, H. A. (1971). Designing organizations for an information-rich world. In M. Greenberger (Ed.), *Computers, communication, and the public interest* (pp. 37-72). Baltimore: The Johns Hopkins University Press.
- Smith, E. R. (1998). Mental representation and memory. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (Vol. 1, pp. 391-445, 4th ed.). San Francisco: McGraw-Hill.
- Sniderman, P. M., Brody, R. A., & Tetlock, P. E. (1991). *Reasoning and choice: Explorations in political psychology*. Cambridge, UK: Cambridge University Press.
- Sniegs, M. (1996). *Die Gestaltungskraft der Prognose: Modellrechnungen in der Invaliditäts- und Altersversicherung 1891-1912* [The creative power of prediction: Modeling calculations in the disability and old age insurance system 1891-1912]. Bremen, Germany: Universität Bremen.
- Teppe, K. (1977). Zur Sozialpolitik des Dritten Reiches am Beispiel der Sozialversicherung [On the social policy of the Third Reich: The case of social insurance]. *Archiv für Sozialgeschichte*, 17, 195-250.
- Weyland, K. (2005). Theories of policy diffusion: Lessons from Latin American pension reform. *World Politics*, 57(2), 262-295.

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