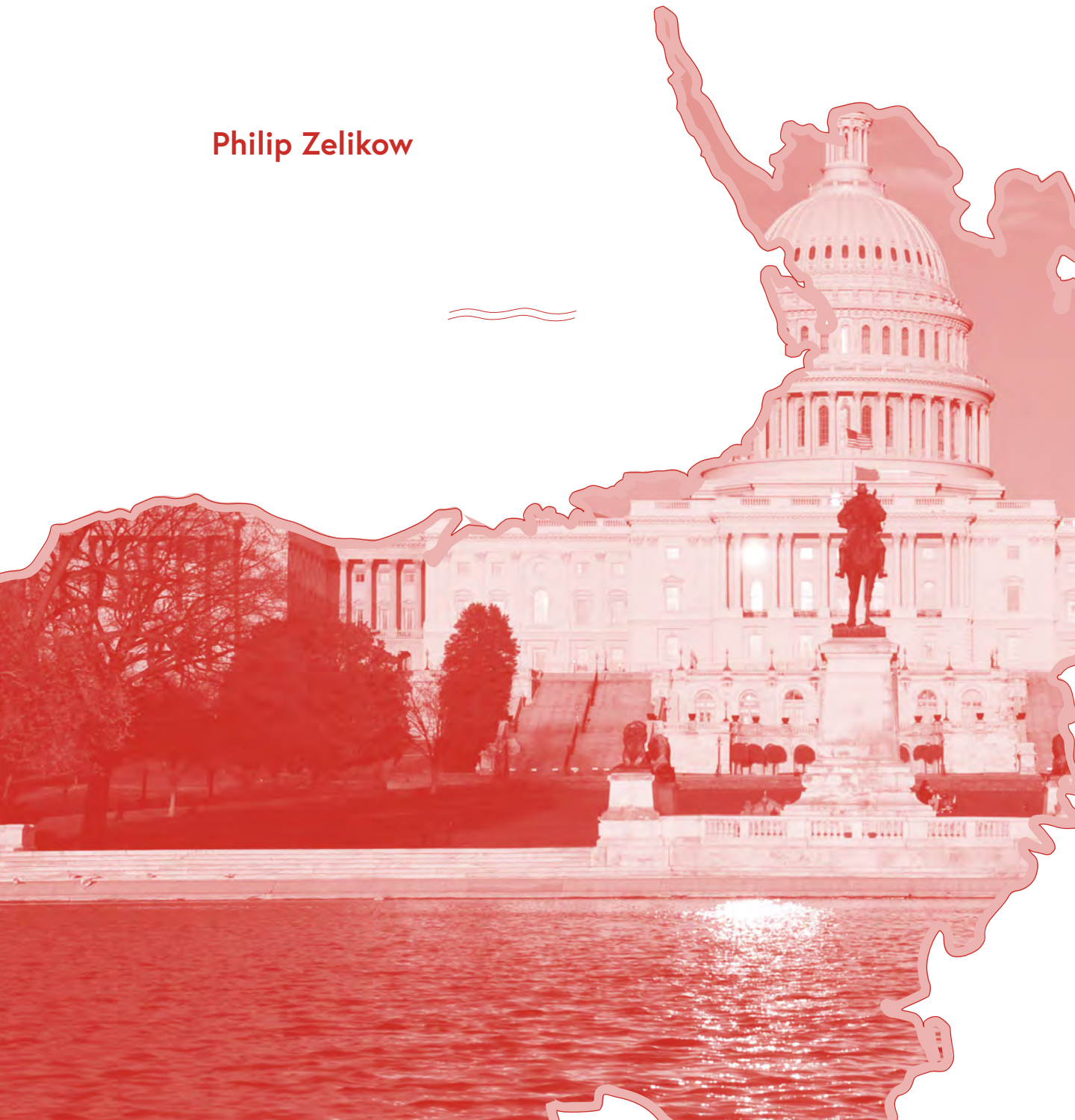




# TO REGAIN POLICY COMPETENCE: THE SOFTWARE OF AMERICAN PUBLIC PROBLEM-SOLVING

Philip Zelikow



American policymaking has declined over the past several decades, but it is something that can be regained. It is not ephemeral or lost to the mists of time. The skills needed to tackle public problem-solving are specific and cultural — and they are teachable.

Policymaking is a discipline, a craft, and a profession. Policymakers apply specialized knowledge — about other countries, politics, diplomacy, conflict, economics, public health, and more — to the practical solution of public problems. Effective policymaking is difficult. The “hardware” of policymaking — the tools and structures of government that frame the possibilities for useful work — are obviously important. Less obvious is that policy performance in practice often rests more on the “software” of public problem-solving: the way people size up problems, design actions, and implement policy. In other words, the quality of the policymaking.

Like policymaking, engineering is a discipline, a craft, and a profession. Engineers learn how to apply specialized knowledge — about chemistry, physics, biology, hydraulics, electricity, and more — to the solution of practical problems. Effective engineering is similarly difficult. People work hard to learn how to practice it with professional skill. But, unlike the methods taught for engineering, the software of policy work is rarely recognized or studied. It is not adequately taught. There is no canon or norms of professional practice. American policymaking is less about deliberate engineering, and is more about improvised guesswork and bureaucratized habits.

My experience is as a historian who studies the details of policy episodes and the related staff work, but also as a former official who has analyzed a variety of domestic and foreign policy issues at all three levels of American government, including federal work from different bureaucratic perspectives in five presidential administrations from Ronald Reagan to Barack Obama. From this historical and contemporary vantage point, I am struck (and a bit depressed) that the quality of U.S. policy engineering is actually much, much worse in

recent decades than it was throughout much of the 20th century. This is not a partisan observation — the decline spans both Republican and Democratic administrations.

I am not alone in my observations. Francis Fukuyama recently concluded that, “[T]he overall quality of the American government has been deteriorating steadily for more than a generation,” notably since the 1970s. In the United States, “the apparently irreversible increase in the scope of government has masked a large decay in its quality.” This worried assessment is echoed by other nonpartisan and longtime scholars who have studied the workings of American government.<sup>2</sup> The 2003 National Commission on Public Service observed,

The notion of public service, once a noble calling proudly pursued by the most talented Americans of every generation, draws an indifferent response from today’s young people and repels many of the country’s leading private citizens. ... The system has evolved not by plan or considered analysis but by accretion over time, politically inspired tinkering, and neglect. ... The need to improve performance is urgent and compelling.<sup>3</sup>

And they wrote that as the American occupation of Iraq was just beginning.

In this article, I offer hypotheses to help explain why American policymaking has declined, and why it was so much more effective in the mid-20th century than it is today. I offer a brief sketch of how American education about policy work evolved over the past hundred years, and I argue that the key software qualities that made for effective policy engineering neither came out of the academy nor migrated back into it.

I then outline a template for doing and teaching

1 Francis Fukuyama, *Political Order and Political Decay* (New York: Farrar, Straus & Giroux, 2014), 469.

2 On other quality critiques, see, e.g., Donald Kettl, *Escaping Jurassic Government: How to Recover America's Lost Commitment to Competence* (Washington: Brookings Institution Press, 2016); and Paul Light, “A Cascade of Failures: Why Government Fails, and How to Stop it,” Brookings Institution, July 2014, [https://wagner.nyu.edu/files/faculty/publications/Light\\_Cascade\\_of\\_Failures\\_Why\\_Govt\\_Fails.pdf](https://wagner.nyu.edu/files/faculty/publications/Light_Cascade_of_Failures_Why_Govt_Fails.pdf).

3 *Urgent Business for America: Revitalizing the Federal Government for the 21st Century*, National Commission on Public Service, chaired by Paul Volcker (Washington: Brookings Institution, 2003), 1–2.

policy engineering. I break the engineering methods down into three interacting sets of analytical judgments: about assessment, design, and implementation. In teaching, I lean away from new, cumbersome standalone degree programs and toward more flexible forms of education that can pair more easily with many subject-matter specializations. I emphasize the value of practicing methods in detailed and more lifelike case studies. I stress the significance of an organizational culture that prizes written staff work of the quality that used to be routine but has now degraded into bureaucratic or opinionated dross.

Many former officials share such concerns, as will become apparent.<sup>4</sup> My suggestions use a relatively simple template, making it easy for people to learn and use it. But, as in engineering, knowing the steps for good policy design is much simpler than implementing them in professional practice. That is why in-depth case work in training and a strong organizational culture in practice are so important, and so difficult.

Of course, some will point to dysfunction in the hardware of American politics and policy as a cause of the decline in policymaking prowess. But whatever the other issues, surely part of the solution to improving American policymaking must include better performance in analyzing, crafting, and implementing solutions to public problems.

## **Policymaking: Hardware vs. Software**

The software of substantive public problem-solving overlaps with the formal procedures of government, but it is really a different subject. The software of policy is about how policies are crafted within a given set of processes and constraints. Software includes methods or routines for the way the substantive work is done, at the level of the individual professional and the institution. At every stage, the software includes organizational cultures for getting and evaluating information, for doing analysis, and for recording what is being done.

By contrast, the tools and structures that frame the possibilities for useful work may be described as the hardware of policymaking. Explanations for failures of policy tend to focus on the structure of government. While hardware constraints are real, in my experience, problems often have at least as

much to do with bad software.

Good software is also one of the few defenses against bad hardware. For instance, amid all the public controversies about law in America, the United States still does reasonably well upholding the rule of law and the administration of justice. Why? One reason is because the American legal profession has established very strong norms about what constitutes appropriate legal reasoning and quality legal research and writing. This is software.

Such norms are no sure cure for partisanship, caprice, incompetence, and corruption. But, in the American legal world, generally accepted norms for legal research and writing do help constrain excesses, clarify arguments and evidence, and expose sloppy work. They provide a common vocabulary for evaluation and analysis. In American public policy design, however, there are no comparable norms that distinguish professional craft. There is no commonly understood set of habits that routinely force out necessary questions and naturally highlight gaps in information or analysis.

Good software, rigorous training, and strong organizational culture can decisively improve performance. One of the more interesting social-science experiments ever conducted for policy work, the University of Pennsylvania and U.C.-Berkeley's "Good Judgment Project" led by Philip Tetlock, Barbara Mellers, and Don Moore, funded by the Intelligence Advanced Research Projects Activity, ran from 2011 to 2015. It included work from more than 25,000 forecasters making more than a million predictions about world developments. The study's basic conclusions: "First, talented generalists often outperform specialists in making forecasts. Second, carefully crafted training can enhance predictive acumen. And third, well-run teams can outperform individuals."<sup>5</sup> Consider that an illustration of what is possible in just one facet of work.

## **Preparing to Make Policy**

Bad policymaking is almost unavoidable when policymakers undertake complex and difficult work without adequate training or preparation. Unfortunately, a lack of adequate training or preparation seems to be the norm among American policymakers today. Why? I offer three premises:

*First*, general training among senior and mid-

<sup>4</sup> A group of former officials who are also educators, and have thus worked on both sides of the fence, recently joined me in publishing a "Statement on Education for Public Problem Solving," posted at a website that also includes some suggestive scholarship: <https://fsi.stanford.edu/publicproblemsolving/docs/statement-working-group-public-problem-solving>.

<sup>5</sup> Paul J. H. Schoemaker and Philip E. Tetlock, "Superforecasting: How to Upgrade Your Company's Judgment," *Harvard Business Review*, May 2016, 4, <https://hbr.org/2016/05/superforecasting-how-to-upgrade-your-companys-judgment>; see generally Tetlock and Dan Gardner, *Superforecasting: The Art and Science of Prediction* (New York: Broadway Books, 2015).

level policy professionals is radically insufficient to prepare them to do action-focused analysis and assessment, high-quality written policy design work, and adaptive, people-centered implementation. Usually this training simply does not exist.

*Second*, whatever the talents of individual politicians or officials or commentators, they will remain idiosyncratic unless the craft is institutionalized in a canon of professional education and the related ideas are better understood.

*Third*, even if certain professional or graduate schools (e.g., in public policy, law, political science, or economics) had an effective canon of this kind, which I believe they do not, such programs — as currently configured — simply will not reach, or are effectively unavailable, to the large majority of people who will find themselves actually filling most senior and mid-level policy jobs.

Modern American political history offers support for these premises, as I outline below. As this sketch reveals, the best practices that made the software of American policymaking successful in the mid-20th century neither came out of the academy nor migrated back into it. They were never adequately turned into canonical methods, “carefully crafted training,” or an organizational culture of well-run analytical teams.

## **A Brief History of Preparing Policymakers**

American education for public service “has differed from such education in most if not all other parts of the world.”<sup>6</sup> Outside of the Army and Navy, the notion of professional “careers” in public service did not emerge in America until the late 19th century. The passage of the Pendleton Act in 1883 created the first national civil service in America and many states adopted similar reforms. These laws required competitive examinations for entry into public service — although the educational levels required were not high. Basic literacy and numeracy were desired, as was some knowledge of accounting and some constitutional history.

A loosely defined field of “public administration” arose during the early 20th century. The impetus for it was a delayed reaction to the rapid urbanization of America, one of the great social upheavals in the history of the country. The field of public administration combined general administrative

skills and knowledge (e.g., finance, accounting, personnel management), relevant technical knowledge (e.g., hydrology, criminology), and some knowledge about emerging social sciences.

The Training School for Public Service, founded in 1911, was typical among pioneering public administration institutions. At first not associated with any university, it was instead part of the New York Bureau of Municipal Research, founded in 1906. In 1931, the Training School in New York City broke up. Part of it went to Columbia University and part to the important Maxwell School of Citizenship and Public Affairs at Syracuse University, which was founded in 1924 with six public administration students. The Woodrow Wilson School was established at Princeton University in 1930. In Washington, DC, Robert Brookings founded a research institute and graduate school in the early 1920s, later reduced just to research. Between 1914 and 1930, several dozen institutions created small programs in public or municipal administration.<sup>7</sup>

Diplomacy escaped all formal professionalization until early in the 20th century. Diplomats, as distinct from consuls, did not begin to have to pass examinations until the mid-1920s. “Then, as now, many of the higher diplomatic posts remained ‘spoils.’”<sup>8</sup>

In the United States, expertise in statecraft was often equated with experience in the principles and practice of international law. To foster its study, the American Society of International Law was founded in 1906. Some indication of the society’s stature can be gathered from noting that its first president was Elihu Root (1906–24), who had been Theodore Roosevelt’s secretary of war and then secretary of state. When Root stepped down, his place was taken by the then-secretary of state (and future chief justice of the Supreme Court), Charles Evans Hughes (1924–29). In those years, the society regularly held meetings at the White House and was addressed by the president.

In addition to skill in the practice of international law, skill in foreign policy work was also often associated with the knowledge of international business. Familiarity with diplomatic history was a plus, as was knowledge of foreign languages, geography, and culture.

The new law schools could well have become a broader base for training policymakers. But the formative ones, such as Harvard Law under Dean Christopher Langdell, sought to foster as their

6 Alexander Keyssar and Ernest May, “Education for Public Service in the History of the United States,” in *For the People: Can We Fix Public Service?* ed. John D. Donahue and Joseph S. Nye Jr. (Washington, DC: Brookings, 2003), 225.

7 Keyssar and May, “Education for Public Service in the History of the United States,” 232.

8 Keyssar and May, “Education for Public Service in the History of the United States,” 230.



distinct intellectual identity a new science of legal thinking, its principles to be discovered through the study of cases. In this context, “administrative law” became a field within law schools, conceived of as an effort to decode the legal principles that guided court review of administrative decisions.<sup>9</sup>

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Very early, the public administration schools moved away from older styles of training in governing philosophies, political thought, and civic virtue, the kinds of educations urged by men like Thomas Jefferson, James Madison, Abraham Lincoln, or John Stuart Mill. Like the founders of American political science, these academic leaders thought such educational agendas were old-fashioned and too concerned with formal structures.

Instead, the new leaders of these schools wanted to move beyond discussions of political philosophy and civic virtue. They wanted to build policies on the scientific study of social conditions and political behavior. They hoped that “scientific — ‘what is’ — studies would replace public-spirited — ‘what should be’ — studies.” Their argument was that by understanding the sociology of criminal behavior, the economics of labor unrest, the public health of cities, or the patterns of behavior among elected

officials, there would be a scientific basis for action, and that this was better than just a lot of nostalgic, virtuous philosophizing.<sup>10</sup>

This model for a school of public administration added some value. Various disciplines gathered valuable information about social conditions and theories about social behavior. Public administration was then informed by such knowledge. But neither the early schools, like Maxwell, nor the emerging discipline of “political science,” developed a canon for how best to apply scientific knowledge to higher-level policy design.<sup>11</sup>

Political science was built up as a discipline to consider policymakers objectively, as objects of study. Such scientists view the behavior of policymakers much as entomologists view the behavior of insects. Neither set of scientists are necessarily concerned with giving “how to” advice to their subjects.

In saying this, I am not trying to join a culture war decrying the relevance of social science. I simply observe the way such scientists tend to formulate their problems and questions, which then affects everything else. Much of the debate about relevance in those disciplines is a supply-side argument: that if they produced different scholarship, such work would be more influential. My argument in this article is different. It is a demand-side argument. It is that, as the software of policy work has deteriorated, the people doing policy work no longer do the analysis — or articulate the questions — to seek out and use relevant knowledge, whatever its source. I think it will be most impactful to fix the demand side of the problem.

### The Golden Age of American Policymaking

Policy staff work of all kinds achieved a relative high point with the crises of the 1940s. The craft and discipline of policymaking was already surging because of the public responses to the Great Depression. But World War II produced a vast mobilization of talent to tackle a staggering array of military, economic, and governance problems.

The Allied successes included extremely high-

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<sup>9</sup> See William Chase, *The American Law School and the Rise of Administrative Government* (Madison: University of Wisconsin Press, 1982), 29–49.

<sup>10</sup> “Scientific,” Ralph Ketcham, *Public-Spirited Citizenship: Leadership and Good Government in the United States* (New York: Routledge, 2015), 102 (discussing the address of Harvard president A. Laurence Lovell to the new American Political Science Association in 1910). A perceptive Chinese political thinker of the early 20th century, Liang Qichao, much influenced by the work of John Dewey, was worried in 1919 about the trend in American political science toward “the omnipotence of science” amid a presumed social Darwinism of struggle among conflicting interests. Liang, trying to adapt Western ideas to his more Confucian sensibility, believed these trends were neglecting the older concentration on civic virtue and defining the public good. Ketcham, *Public-Spirited Citizenship*, 104–05.

<sup>11</sup> Ketcham, *Public-Spirited Citizenship*, 101–30. Ketcham illustrates his argument with an appendix that offers a sharply observed history of the evolution of the Maxwell School at Syracuse (see pages 205–52). Both William Mosher, at Syracuse, and Charles Merriam, at the University of Chicago, produced early exemplary textbooks that tried to balance their social scientific observations of American public life with hortatory statements of their idealistic hopes for American government planning. Reviewers noted the “unresolved” tension between the specific science and the sermonizing idealism about how it should be applied in practice. Ketcham, *Public-Spirited Citizenship*, 226–27.



quality policy work on grand strategy, logistics, and problem-solving of every kind. The German and Japanese high commands were comparably deficient in all these respects.<sup>12</sup> Paul Kennedy calls this software advantage the “most important variable of all.” Analytically, he noticed “a support system, a culture of encouragement, efficient feedback loops, a capacity to learn from setbacks, an ability to get things done.” All of this could permit “the middlemen in this grinding conflict the freedom to experiment, to offer ideas and opinions, and to cross traditional institutional boundaries.”<sup>13</sup>

From these tremendous accomplishments, I note five observations:

*First*, no one should overly romanticize the often quarrelsome, wasteful, and chaotic world of Washington during these years. There were many mistakes, some of them deadly and disastrous. Nor did the skills come from a well-thought-through template of the kind proposed in this paper. They emerged piecemeal from vast and stressful experience, amid plenty of bureaucratic rivalry and confusion.

*Second*, the experience arose from years of trial and error in managing the most challenging rival sets of claims and arguments on a global scale. With their long experience in doing this, including the challenges of managing resources, shipping, and manpower, the British staffing systems were the

12 On the deficiencies of high-level German military staff work, especially on higher-level strategy, intelligence assessment, resource management, and logistics, see, e.g., Geoffrey Megargee, *Inside Hitler's High Command* (Lawrence: University Press of Kansas, 2000).

13 Paul Kennedy, *Engineers of Victory: The Problem Solvers Who Turned the Tide in the Second World War* (New York: Random House, 2013), 362, 372. A similar argument is made by Richard Overly, in *Why the Allies Won* (New York: Norton, 1997), who does not delve as deeply into the software that made the structures he praises so functional.



most evolved. British staffing practices were envied and then emulated by the Americans.

*Third*, the relevant qualities did not, by and large, migrate from the American universities. Nor did the qualities migrate back to them.

*Fourth*, the relevant qualities did emerge from some distinctive cultures and leaders. One big tributary was the very strong, decentralized problem-solving culture of American business in the 1920s, 1930s, and 1940s.<sup>14</sup> In that era, the paradigmatic discipline of American business and industry was engineering, and the paradigmatic figure was that of the ingenious tinkerer who deeply understood both design and production and knew his way around the shop floor. Bill Knudsen at General Motors, who started his career in bicycle and auto parts, and as a builder of steam engines, was a typical and well-known exemplar.

Another great tributary was the managerial culture inside the armed forces, fostered by specific individuals. The military leaders during the war who set the tone for the high-level staff work were strategic managers — men like George C. Marshall or the civilian resource manager, Ferdinand Eberstadt, rather than “warriors” like Douglas MacArthur. It was no accident that Marshall elevated his most trusted staffer and planner in 1942, Dwight Eisenhower, to top command. Marshall and Eisenhower had strong views about the organizational culture of effective policymaking. Underperforming staff officers or program managers were frequently relieved and reassigned.

*Fifth*, the wartime and immediate postwar experience profoundly influenced organizational culture for another generation or so. A great many Americans had been drawn into the work of higher-level policy design on numerous topics. “One analyst referred to [the war] as the largest program in postdoctoral education for faculty in the nation’s history.” There was a similar impact on the nation’s lawyers.<sup>15</sup>

The breadth of experience summed up by these five observations about policy culture and staff work carried over into postwar efforts. In 1947, as secretary of state, Marshall used his first national radio address to the American people to remind them that, “Problems which bear directly on the future of our civilization cannot be disposed of by

general talk or vague formulae – by what Lincoln called ‘pernicious abstractions.’ They require concrete solutions for definite and extremely complicated questions.”<sup>16</sup>

The military and business cultures of the United States in this period were intensely oriented toward practical problem-solving. They emphasized meticulous written staff work: unending flows of information and estimates, habitual preparation of meeting records or minutes, constant and focused debates about priorities and tradeoffs, and guidance directives drafted with concise precision that a lawyer would envy.

The result, especially by 1943 and afterward, was marked in dozens of projects from the atom bomb to the Marshall Plan to the Berlin Airlift. Any close study of such efforts reveals superior construction of large-scale, complex multi-instrument policy packages, including frequent adjustments.

The point about constant adjustment and iteration is notable. Even in military technology, most of the key Allied innovations turned out to be second-generation innovations. In other words, they were not the airplanes or ships that were available or in production at the start of the war. Instead, they were new or improved models of every kind, several of which had not even been imagined before the war. They were developed with agility and on a massive scale by a number of agencies and scores of companies in response to ongoing lessons learned, lessons that were constantly, consciously being extracted and studied.

It is difficult for those who have not pored through the archives to appreciate the scale and scope of this work, ranging from economic statecraft to amphibious operations to science policy. The extraordinary sets of official history volumes from World War II, familiar to historians of the period, give a sense for the work. They are also a striking illustration of the organizational culture that would produce such meticulous and admirable historical analyses.

The organizational culture that accomplished so much during the war was passed along mainly through imitation and apprenticeship. But the best practices did not migrate into standardized training or academic degree programs.

14 See, for example, Thomas McCraw and William Childs, *American Business since 1920: How It Worked*, 3rd ed. (New York: Wiley Blackwell, 2018), 26–28, 72–75 (emphasizing the decentralized management approaches of both Alfred Sloan at GM and Ferdinand Eberstadt in organizing war production). Explaining the “deindustrialization” of the 1970s and 1980s, they stress that, by then, “American management became more enamored with ‘financialization’ than with creating new products and services.” See page 232.

15 Keyssar and May, “Education for Public Service,” 233.

16 Marshall radio address, April 1947, quoted in Philip Zelikow, “George C. Marshall and the Moscow CFM Meeting of 1947,” *Diplomacy and Statecraft* 8 no. 2 (1997): 97, 116, <https://doi.org/10.1080/09592299708406045>.

## The Microeconomic Turn

The mid-20th-century academic paradigm of policymaking assumed a relatively neat separation between “policy” on the one hand (often equated with lawmaking) and “administration” on the other, presumably informed by good social science. By the 1960s, this older paradigm seemed more and more out of date. Although intellectuals recognized the huge intermediate space that was being filled by policymaking, academia had trouble figuring out how to teach it. Older public administration programs suffered an institutional identity crisis. The private foundations that had helped build up that field in the 1930s lost interest. The field of public administration fell into lower repute as compared with the rising social sciences.

Partly in response, a new trend in public policy education took shape. The social sciences were developing new techniques for the systematic analysis of public policies using analytic models, many derived from economic theory, along with quantitative methods. The federal government was pouring money not only into the expansion of government services, but also into training programs. In 1958, the Government Employees Training Act became law, while grants from the Civil Service Commission helped to subsidize large numbers of mid-career students. Princeton’s Woodrow Wilson School was transformed by a 1965 gift from Charles and Marie Robertson. In 1968, the University of Michigan converted its public administration institute into an institution for “public policy studies.” Also in 1968, Harvard scrapped its former school of public administration, established a new John F. Kennedy School of Government, and developed an entirely new academic program for it. During that same academic year, the University of California created a new Graduate School of Public Policy at its flagship Berkeley campus, awarding a new “public policy” degree to replace its earlier offering in public administration.

Dedicating one of the new buildings at the Woodrow Wilson School in May 1966, President Lyndon Johnson proclaimed that “the public servant today moves along paths of adventure where he is helpless without the tools of advanced learning.” He said the country would need “enormous new drafts

of trained manpower into the public service.” A presidential task force recommended new programs to train these “enormous new drafts.” Foundations like Carnegie and Ford took on the role that the Social Science Research Council had played in an earlier generation.

All this momentum produced one of the most significant changes in professional higher education of that generation. “At the heart of this shift [during the 1960s and early 1970s] was a growing faith in the power and prestige of economics as a field, a method, and even a science.” For instance, “in and around Robert McNamara’s Department of Defense, economists put into practice techniques of program analysis and benefit-cost measurement, which President Lyndon Johnson then forced on all domestic departments involved in building his Great Society.” One scholar involved in this shift recalled

visiting the office of a cabinet secretary in order to explain to him a several-hundred-page booklet on policy planning budget systems, one of the hallmark techniques of the era. He came upon the secretary fingering the booklet and asking, “What is this piece of shit?” He had the pleasure of responding, “That piece of shit, sir, is what the president of the United States has directed that you introduce into your department.”<sup>17</sup>

The triumph of the RAND analysts, as some called it, put a lasting mark on education for public service. The core curriculum for that degree and similar foundational programs, like the one at Berkeley, then set a widely imitated paradigm which claimed that it taught “policy analysis.”

Economic tools for analyzing policy were regarded as novel. They fostered evidentiary discussion of outcomes. And, because the tools came from “demanding social science disciplines,” they “helped give the curriculum of the fledgling public policy schools a certain kind of legitimacy in the academic world in which they were struggling for academic respect.”<sup>18</sup>

“But left open, however,” one of the founding deans of such schools recalled,

17 Keyssar and May, “Education for Public Service,” 234; and Graham Allison, “Emergence of Schools of Public Policy: Reflections by a Founding Dean,” in *Oxford Handbook of Public Policy*, ed. Michael Moran, Martin Rein, and Robert Goodin, (New York: Oxford University Press, 2006), 64. See generally, telling this triumph of the microeconomic turn as a success story, Beryl Radin, *Beyond Machiavelli: Policy Analysis Comes of Age* (Washington, DC: Georgetown University Press, 2000). Radin’s conception of policy analysis is triumphantly exclusive. It seems to simply ignore the existence of lawyers, diplomats, and health care policy wonks, among the many categories of people who believe they do such work.

18 Allison, “Emergence,” 68. Allison recounts that he focused much of his agenda as dean on offsetting this curricular bias by building up the public management curriculum, fostering executive programs, and raising funds for problem-focused research centers. This work did help the school take off and become relatively successful. But, even from his account, it is not clear that he ever fully addressed the two questions that bothered him from the start.



were the answers to two further important questions: first, the extent to which schools of public policy intended to train individuals to participate effectively in the governmental process as policy makers as well as policy analysts; and if so, how individuals trained to be policy analysts, or policy makers ... would relate to the political processes that were an inevitable part of policy making in a democratic society.<sup>19</sup>

As a result, even as it triumphed in this part of academia, the microeconomic paradigm of policy analysis was passing out of fashion in much of government. In the world of foreign policy, the microeconomic paradigm never gained much traction to begin with, except in segments of development work.<sup>21</sup>

Some studies have been done on the alumni of this kind of policy analysis education to see how well it worked for them in practice. The results

seriously question the value of such core curricula. The alumni told the investigators that they wished they had learned more about topics like “policy design.”<sup>22</sup>

While the study of policy analysis was taking its microeconomic turn, the study of “public administration” went through its crisis and advanced forward. It was revived as a field of “public management.” That field, fortunately, has continued to mature and advance.<sup>23</sup>

**Many public policy problems are like this, "thick" with successive stages of problem-solving, each with layers of analysis and context.**

Further, in the new curricula the definition of “policy analysis” was narrowed. In this paradigm, policy analysis teaching would focus on “economics, statistics, and quantitative analysis.”

In such core curricula, at least half of the courses are in economics and statistics.<sup>20</sup> They focus especially on cost-benefit analysis and the microeconomic fields of behavioral economics, game theory, and operations research. Any student who masters this curriculum and the relevant statistics applications would be equipped to contribute to certain kinds of policy-related research. The student could model theories of action for certain kinds of public problems.

But most policymaking challenges, and the related staff work, call upon different sets of skills.

### **Social Science and the Return of the Lawyers**

After World War II, law and lawyers became more and more powerful in establishing paradigms for domestic policymaking in the United States. In foreign policy, the story was very different. The older paradigm for expertise, that of international law, lost its dominant standing. No critic was more influential than the famous former diplomat George Kennan, who published a set of polemical lectures on “American Diplomacy” in 1951 attacking what he regarded as a legalist-moralist strain in American statecraft.<sup>24</sup> Kennan himself had no particular use for social science. He spent the rest of his life writing history and historical reflections.

19 Allison, "Emergence of Schools of Public Policy," 65.

20 Such courses are currently 16 of the 30 credits in the Harvard Kennedy School's first-year master in public policy core curriculum: "Degree Requirements," Harvard Kennedy School, accessed Aug. 26, 2019, <https://www.hks.harvard.edu/educational-programs/masters-programs/master-public-policy/degree-requirements>.

21 As I saw firsthand when chairing part of the Harvard Kennedy School's core curriculum during the 1990s, several of the founders of the Harvard Kennedy School were deeply dissatisfied with the way the school's core curriculum had developed. They believed the school had succumbed to the desire of much of the faculty to join the "third best economics department in Cambridge." Richard Neustadt quoted in Graham Allison, "Institution Builder," in *Guardian of the Presidency: The Legacy of Richard E. Neustadt*, ed. Matthew Dickinson and Elizabeth Neustadt (Washington, DC: Brookings Institution Press, 2009), 146–47.

22 For articles that focus on alumni of the Harvard Kennedy School, see, Carol Chetkovich, "What's in a Sector? The Shifting Career Plans of Public Policy Students," *Public Administration Review* 63 no. 6 (November 2003): 660–74, <https://doi.org/10.1111/1540-6210.00330>; and Mark Henderson and Carol Chetkovich, "Sectors and Skills: Career Trajectories and Training Needs of MPP Students," *Journal of Public Affairs Education* 20 no. 2 (2014): 193–216, <https://doi.org/10.1080/15236803.2014.12001782>.

23 The modern field of public management has innovated and matured into a global movement, borrowing much from management innovations in the private sector. At the level of day-to-day job performance and integrity, federal bureaucrats seem to do at least as well as employees in private firms. See Donald Kettl, *The Global Public Management Revolution*, 2nd ed. (Washington, DC: Brookings Institution, 2005); and Hal Rainey, *Understanding and Managing Public Organizations*, 5th ed. (San Francisco: Jossey-Bass, 2014), chap. 14.

24 George F. Kennan, *American Diplomacy 1900-1950* (Chicago: University of Chicago Press, 1951).

History and social science continue to be invaluable resources for evidence about trends and causes in social behavior. The gap remains in the application of this knowledge to the solution of practical problems. This is not because academics do bad work. Their work varies, as always. But, as I mentioned earlier, their work is fundamentally oriented to answering questions that are meaningful within their scholarly fields. These questions are very different from the kinds of questions actually encountered in the application of their knowledge to the solution of practical problems. There is a similar divide between the world of laboratory science disciplines and the world of engineering. Chemical engineering is not just applied chemistry. It is a distinctive discipline with canonical methods of its own. In the engineering disciplines, this point was grasped more than a hundred years ago.

Law schools have become principal producers of the people who are actually going into the policy jobs. Lawyer-officials have ready gifts. They know how to make an argument. They are usually experienced writers. On a good day, they are relatively rigorous in attending to factual and legal detail. The tradeoff for these “generalist” skills, however, is a lack of much subject-matter or foreign expertise. Experienced as advocates who can pick evidence to defend a position, lawyers are not necessarily trained to weigh and sift positions on both sides. Experienced in being asked to decide what “can” be done, lawyers are not trained to analyze what “should” be done, even in policies having to do with policing or the administration of justice. They have no necessary experience in policy design, analysis, or implementation.

Perhaps above all, a lawyerly cast to government tends to emphasize process over substance. Meetings proliferate. Sides are heard. The quality of written staff work takes second place.

### **The Teaching Problem and “Thick” Cases**

The World War II generation learned much about effective policy work, but never quite figured out how to teach it. Data for the microeconomic sort of policy analysis is also rarely connected to the data about implementation. Experts in program evaluation and experts in performance management became estranged, “a tale of two

children who were brought up in the same house but were raised by different tribes and aren’t so friendly with one another.”<sup>25</sup>

One part of the problem is that policy engineering is complicated. Assessing a policy situation is a classic problem of “thick description.” In academia, if readers will forgive me for lapsing momentarily into academic-speak, thick description

accurately describes observed social actions and assigns purpose and intentionality to these actions, by way of the researcher’s understanding and clear description of the context under which the social actions took place. Thick description captures the thoughts and feelings of participants as well as the often complex web of relationships among them. Thick description leads to thick interpretation, which in turn leads to thick meaning of the research findings. ... Thick meaning of findings leads readers to a sense of verisimilitude, wherein they can cognitively and emotively ‘place’ themselves within the research context.<sup>26</sup>

For readers who got bogged down in that definition, the punch line is in the last sentence.

Consider the Marshall Plan, for example. The simple memory of this might be that Americans wisely displayed exceptional generosity and foresight in committing a lot of money to help rebuild Europe. But that level of understanding barely begins to comprehend the qualities of the work involved in developing and implementing the European Recovery Program.

The genius of the program is found in the details of the design, which are difficult to summarize quickly but include the way the plan involved the Europeans in working out the program designs and new ways to cooperate within Europe, the way the program set up and used local “counterpart” funds for acquisitions in each of the participating European countries, and the way it rallied wary U.S. congressmen with elements that appealed to the businessmen in their districts. Even at the level of higher strategy, the Marshall Plan reflected a choice of where to commit resources and energy — in this case, a massive commitment to Western Europe amid the simultaneous clamor for a commitment instead to America’s favored side in

25 Donald F. Kettl, “Making Data Speak: Lessons for Using Numbers for Solving Public Policy Puzzles,” *Governance* 29 no. 4 (October 2016): 573–79, <https://doi.org/10.1111/gove.12211>; “a tale of two children,” Donald Moynihan quoted in Katherine Barrett and Richard Greene, “Government’s Data-Driven Frenemies,” *Governing*, March 17, 2016, <http://www.governing.com/columns/smart-mgmt/gov-performance-measurement-program-evaluator.html>.

26 Joseph Ponterotto, “Brief Note on the Origins, Evolution, and Meaning of the Qualitative Research Concept Thick Description,” *Qualitative Report* 11 no. 3 (2006): 538, 543, <https://nsuworks.nova.edu/tqr/vol11/iss3/6/>.



China's civil war.

Many public policy problems are like this, “thick” with successive stages of problem-solving, each with layers of analysis and context. Such thick problems are relatively resistant to social science generalizations. They also confound quests for generic forecasting. The problem has spawned an extensive literature about the craft of analyzing and sifting specific information, although in America much of this work is mainly known and taught among professional intelligence analysts.<sup>27</sup>

All this is hard to translate to the classroom for a variety of reasons. First, many teachers do not have the requisite knowledge of policy-relevant details, because they have never been involved in the subject-matter specialization and because their scholarly disciplines do not usually expect (or even want) them to master such problem-solving skills.

*Second*, hiring practitioners does not necessarily help. When ex-practitioners go into the classroom, they can often tell stories. They remember some of the details. Yet, they have no canon for how to teach about their experiences. One expert who surveyed courses in diplomacy all over America found that the differences were enormous. Across academics and practitioners alike, she concluded, “I could not find a common core.” Instead, what she found were courses that just elide the messy challenge of how to solve problems, especially if they involved other governments.

Some courses focus on acquiring transnational expertise, “without distrusted national governments getting in the way.” Other courses dodge engagement by being aimed more at Americans who view the world as “a pathological mess” and just want protection from it. Then they focus on security studies, including intelligence, like the study of how to diagnose a disease, without attempting to teach about how to solve a foreign problem.<sup>28</sup>

*Third*, college courses prefer “thin” cases that are easy to digest and understand in a single class before moving on to the next topic. The structure of a course usually leaves little time for students to delve very deeply into the details, personalities, and issues in any specific episode. To do so

requires too much reading or assumes too much background knowledge. Students like stories. But, in the classroom, memorably thin descriptions and colorful anecdotes are preferred. Even classes that use a case method rarely devote multiple classes, much less weeks, to microexamination of a single case, however rich it may be.

One popular solution to teaching about problem-solving is to stage a simulation. Yet, simulations in such simplified thin cases “devolve rather rapidly into theater.” International crisis simulations reinforce the notion of diplomacy as “an event or series of events, of crisis management or negotiations done in a matter of days.” To a veteran practitioner, “Diplomacy is to simulations as the practice of medicine is to the TV show ‘ER.’”<sup>29</sup>

Another practice in contemporary teaching about policy work enjoins students to try writing “options” papers, modeled on policy memos. A typical policy memo in contemporary American government consists of some discussion of what is going on, something about process, and recommended talking points. If there is any policy analysis at all, it rarely advances much beyond op-ed style argument.

As if to learn to imitate this mediocrity, students writing options papers are often urged to keep their papers short — op-ed length — supposedly so they can learn how to engage the attention of busy policymakers. The would-be experts thus learn to be experts by dumbing themselves down. Such training does not prepare students to engage professionally with the messy details of the policy instruments being used or the messy details of the local circumstances in which these concepts may actually be tested.

## **The Organizational Culture Problem**

The usual focus in the study of organizational culture is on the culture of operators, of the “street-level bureaucracy,” as the title of one classic work put it.<sup>30</sup> These studies tend to neglect the organizational culture of higher-level policy work.

Yet, it was just that part of organizational

27 An introduction to this literature is available through the essays collected in Roger George and James Bruce, eds., *Analyzing Intelligence: National Security Practitioners' Perspectives*, 2nd ed. (Washington, DC: Georgetown University Press, 2014).

28 Donna Marie Oglesby, “Diplomacy Education Unzipped,” *Foreign Service Journal* (January/February 2015): 27, 28, <https://www.afsa.org/diplomacy-education-unzipped>.

29 Barbara Bodine (a retired diplomat and current director of Georgetown's Institute for the Study of Diplomacy), “Teaching Diplomacy as Process (Not Event): A Practitioner's Song,” *Foreign Service Journal* (January/February 2015): 21, 24.

30 E.g., Michael Lipsky, *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*, 30th anniv. rev. ed. (New York: Russell Sage, 2010). For an example in the case of U.S. diplomats, see Kenneth Weisbrode, *The Atlanticists: A Story of American Diplomacy*, rev. ed. (Santa Ana, CA: Nortia Press, 2015).

culture that was so essential in the software of the American organization for victory in World War II and its most effective public problem-solving in the postwar years. This part of the software is made up of formal and informal routines for activities that seem mundane, but are not.

These cultural routines and habits define the way the key organizations distribute information about what is going on, including the ways top officials get their information every morning; comment upon or “clear” incoming reports or policy papers; delegate policy work; interact with “the field”; analyze issues for higher-level discussion and decision; resolve differences, either through written work or in meetings; record and brief about policy discussions and decisions; and critique their work.

There are great variations in these practices. American practices are different than in other governments. They even vary greatly over time within the same agency.

Two specific examples, both in the foreign policy world, illustrate this point. Through World War II and the postwar years, daily information about what was going on in the world was provided to top leaders by diplomatic and military reports, from the State Department and the armed services. Beginning in the 1960s, and evolving very slowly during the next 30 years, the CIA took over the job. The CIA became a systematic primary source of daily publications and briefings to tell top leaders what was going on in the world. The armed forces’ products quickly receded in importance and the quality deteriorated. By the 2000s, the State Department’s daily morning product had disappeared altogether and was abolished.

Intelligence agencies have very particular strengths and weaknesses in what they follow and what they do. So, reliance on the intelligence agencies for the morning “papers” has very large effects on what policymakers see about the world. It also has very damaging effects on the incentives and quality surrounding diplomatic and military reporting. But this growing reliance on the daily worldview of the intelligence community (not necessarily drawing from foreign field presence or experience) was not the product of a conscious policy choice. It evolved incrementally, with little notice or reflection.

Records of policy discussions provide another example of the variation of organizational cultures over time. Through the war and postwar years, careful records were usually kept for all high-level meetings among American officials. This is hard to do. It was not done mainly out of regard for

historians, although that was a factor. It was done because such records were considered essential for good government. It forced reflection on what had been said or not said. It helped others stay current if they had a need to know what was going on.

These habits were so thoroughly ingrained that even when President Eisenhower met one-on-one with his secretary of state, almost invariably one or both men would routinely prepare a written record of what they had just said to each other. The secret recording systems used by Presidents Kennedy, Johnson, and Richard Nixon were an extension of such habits, as dictabelts and tape machines made their way into offices. Henry Kissinger’s staff prepared excellent records of about 15,000 of his meetings and telephone calls. These routines remained relatively strong through the 1970s and even well into the 1980s, though they were starting to fade.

It is now rare to find any good records kept of what is said at meetings among American officials. The quality of the records of meetings with foreigners has also deteriorated. The usual excuse given is the horror of leaks. But that horror was perfectly familiar to officials of the wartime and postwar generation as well. Though constantly irritated by leaks, those past officials thought that the net value of routines of good governance took precedence. The real reasons for the change are likely more banal. There was no conscious policy choice across the administrations to quit preparing good records. It is just hard to do it. Without a routinized discipline, it vanishes from the day-to-day culture.

In the postwar period, detailed written estimates and policy staff work were the norm. Papers were subjected to constant peer review from colleagues who were similarly trained and experienced. Very busy officers were accustomed to writing and reading lengthy papers of this kind every day. Thousands of Americans acquired such experience. They could be found operating at the highest levels in Marshall Plan development (such as the famed economists Charles Kindleberger and Edward Mason), occupation governance (such as the young Kissinger), strategic planning, research and development (for example, Vannevar Bush’s team at the wartime Office of Scientific Research and Development and later in the creation of the National Science Foundation), and much more.

One pattern in the War Department culture was that responsibility for planning and responsibility for operations were inseparable. A planner had to be willing and able to convert his work into action.<sup>31</sup>

31 See, for example, the detailed portrait in Ray Cline, *Washington Command Post: The Operations Division*, in the Historical Series on the U.S. Army in World War II, subseries for the War Department (Washington: Office of the Chief of Military History, 1951).

Developing these habits, the Americans during the 1940s were strongly influenced, through common work in various Allied organizations, by long-established and relatively high-quality British processes for collective policy analysis and staff work. Eisenhower was both a product and exemplar of such Allied experience.

Although the origins are almost forgotten, the 1947 creation of America's National Security Council system was greatly influenced by the model of British systems, including the British War Cabinet system. Many of the Americans had come to know, imitate, and grudgingly admire those staffing methods. They consciously adapted analogous habits of systematic paper preparation, record-keeping, historical evaluation, peer commentary, lucid guidance, and collective decision-making. Eisenhower well understood this background about why the National Security Council was created and how it was originally expected to function. He was the last American president who did.<sup>32</sup>

The Pentagon Papers on the decisions made during the Vietnam War, the subject of the 2017 film, "The Post," were an anachronism in more than one way. As bad as the Vietnam decisions were, the policy papers were long, detailed, and rigorous. The Pentagon Papers were such a revelation because this underlying policy work, and the dilemmas being presented, were relatively lucid and self-revealing.

Suppose contemporary officials actually opened up and read some of these documents about Vietnam today. Suppose they contrasted the quality of the memos written in the 1960s with the papers they have seen cross their desk more recently, say, on policy toward Afghanistan or Iraq. These officials might be a bit bewildered. In their own working lives, they may never have seen written staff analyses of this kind, work that was so commonplace 50 years ago.<sup>33</sup>

The sheer existence of the Pentagon Papers project is another revealing symptom of a vanished organizational culture. This work of thoroughgoing historical reflection was done at the direct behest of Secretary of Defense McNamara, during the

Johnson administration. Back then, this sort of high-quality review was not so strange. There were other searching, *internal* self-examinations, like the ones done after the Bay of Pigs fiasco, or after the swine flu vaccine mess during the Ford administration. It is hard now to imagine the kind of American government that would even commission an *internal* study as meticulous as the Pentagon Papers, or the kind of studies the Kennedy and Ford administrations ordered to examine their own failures.<sup>34</sup>

Outsiders — and even many insiders, especially the less-experienced ones — are unconscious of most of this software, and how much it varies. Historians rarely notice such things or compare contrasting routines over time. Although the details of such staffing practices have been extensively studied in Britain, I do not know of any comparable published work on these practices in the United States.

One way to spot the decline in the quality of written policy work is to notice if the paper simply describes what is going on and then moves on to statements of what "we" want, with "talking points." In this environment, PowerPoint slides replace prose analysis.

As the quality of written staff work declines, fewer decisions can be made based off the paperwork. High-level meetings proliferate. They become a surrogate for good written analysis and advocacy.

In such oral processes, delegation of analysis and action is more difficult. More and more policy work gets pulled up to the level of overworked principals, and their own ill-documented oral meetings. Meanwhile, senior agency officials turn more and more into functionaries. As they know their work or views are less meaningful, the trend reinforces the downward cycle.

The older organizational culture naturally placed a high value on in-depth knowledge and analysis. In the CIA's analytic world, for instance, Cold War-era estimates "could draw on a deep base of knowledge," the 9/11 Commission observed in 2004. But,

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32 The initial proposal for a national security council, in the Eberstadt Report, was modeled on the British War Cabinet system and the wartime State-War-Navy Coordinating Committee, which had also been modeled on British practice. Douglas Stuart, *Creating the National Security State* (Princeton, NJ: Princeton University Press, 2012), 89. For background on the Roosevelt practice, see also, Matthew Dickinson, *Bitter Harvest: FDR, Presidential Power and the Growth of the Presidential Branch* (Cambridge, UK: Cambridge University Press, 1999). Though this is mostly forgotten now, President Harry Truman was suspicious of the national security council proposal. He was suspicious precisely because he understood that it was modeled on the British War Cabinet and, like that system, was meant to dilute the power of the head of government and constrain him in a more deliberate, analytical, and collective decision-making system.

33 When national security officials of the Obama administration reflect on the best written policy work they encountered, the two standouts seem to have been the preparatory work done before the May 2011 Bin Laden raid into Pakistan and the policy support work on Iran that culminated in the Iran nuclear deal of 2015. But I think those episodes stand out so much to them because the fine quality of that written policy work was *not* the norm.

34 As illustrations see, for example, the studies published in Richard Neustadt, *Report to JFK: Skybolt in Perspective* (Ithaca, NY: Cornell University Press, 1999); Richard Neustadt and Harvey Fineberg, *The Swine Flu Affair: Decision Making on a Slippery Disease* (Washington, DC: Government Printing Office, 1978).

[w]hen the Cold War ended, those investments could not easily be reallocated to new enemies. The cultural effects ran even deeper. In a more fluid international environment with uncertain, changing goals and interests, intelligence managers no longer felt they could afford such a patient, strategic approach to long-term accumulation of intellectual capital. A university culture with its versions of books and articles was giving way to the culture of the newsroom.<sup>35</sup>

With the disappearance of these organizational cultures, largely unnoticed, the software of policymaking that went with them also faded away about a generation ago.

The deterioration in policymaking software has had a huge impact, as several recent policy episodes, including the Iraq War, have made clear. Yet, the present generation of policymakers and politicians are, understandably, not even aware of what has happened or how the government has changed.

### **A Template for Policy Engineering: Assessment ... Design ... Implementation**

“Design process” is a phrase that is foundational in engineering education, in which students are trained in how to apply knowledge to the solution of practical problems. One of the main purposes of an engineering design process is to generate better questions and focus them constructively. Such focused questions then drive more specific, in-depth assessment.

Engineers are often taught a set of steps they must memorize, steps that are put on a card they carry in their wallet. The specific steps memorized by engineering trainees vary from textbook

to textbook or teacher to teacher. Common formulas have five or seven steps. MIT’s fine course on “Engineering Innovation and Design” in its renowned Gordon Engineering Leadership Program has a 10-step design process.<sup>36</sup>

“Design” has become a fashionable concept during the last 10 years. Although the usages overlap, they vary in important ways. In the business world, “design thinking” has become a term synonymous with a search for greater creativity in thinking about what the firm is trying to do. A leader in this field is the Hasso Plattner Institute of Design at Stanford’s d.school. Its guide to design thinking breaks down a process with five stages (with sub-methods for each): empathize (with the user), define (the challenge), ideate, prototype, and test.<sup>37</sup>

At the end of the 2000s, reacting to a very difficult and complex set of wars in Iraq and Afghanistan, the U.S. Army decided it needed to add the concept of “design” to its basic field manual for “the operations process.” Officers now argue about what “Army design methodology” means in practice. At a minimum, it is the Army’s way of urging commanders who are confronting complex or unfamiliar problems to stop and think harder about what they are trying to do. Officers are urged to at least “give a bit of structure to those periodic conversations any commander has with his staff officers to improve his appreciation of the mission.” This should at least take the form of four questions, about what is going on, what exactly is the desired end state, what is the theory of strategic action to get that result, and how to act and speak to make good on that theory.<sup>38</sup>

Meanwhile, within academia, some scholars of public management have pressed for a turn toward a “new” study of policy design, what they call “design 2.0.” These experts reject the

35 *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York: Norton, 2004), 91. I was the commission’s executive director. This particular passage of the report was drafted with the input of a former deputy director of the CIA and the former head of the CIA’s Center for the Study of Intelligence, both of whom were on our staff. During the 2000s and 2010s, reacting to problems in analytic tradecraft, exemplified by the Iraq weapons of mass destruction catastrophe, the intelligence community built up a National Intelligence University, operated by the Defense Intelligence Agency. The CIA has developed its Sherman Kent School of Intelligence Analysis. The substance of the CIA’s analytic training has improved, although some of those involved in these innovations believe the intelligence community needs to make further significant progress.

36 The ten steps are: 1) identify needs (what’s the problem?); 2) information phase (what exists?); 3) stakeholder phase (what’s wanted and who wants it?); 4) planning/operational research (what’s realistic and what limits us?); 5) hazard analysis (what’s safe and what can go wrong?); 6) specifications (what’s required?); 7) creative design (ideation); 8) conceptual design (potential solutions); 9) prototype design (create a version of the proposed design); and 10) verification (does it work and, if not, redesign). From the version of MIT’s course 6.902 taught in Fall 2012 by Blade Kotelly and Joel Schindall and available through MIT OpenCourseWare.

37 See, e.g., “An Introduction to Design Thinking: Process Guide,” Hasso Plattner Institute, accessed Aug. 26, 2019, <https://dschool-old.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf>.

38 “Field Manual 5-0: The Operations Process,” Department of the Army, March 2010; “ADP 5-0: The Operations Process,” Department of the Army, May 2012. The impetus for the “design” movement appears to have come from the Army’s Command and General Staff College and School for Advanced Military Studies, both at Fort Leavenworth. The quote and questions, paraphrased, are from Lt. Col. Celestino Perez, “A Practical Guide to Design,” *Military Review*, March–April 2011, 43–45, [https://www.armyupress.army.mil/Portals/7/military-review/Archives/English/MilitaryReview\\_20110430\\_art008.pdf](https://www.armyupress.army.mil/Portals/7/military-review/Archives/English/MilitaryReview_20110430_art008.pdf); see also Heather Wolters, “Army Design Methodology: Commander’s Resource,” Department of the Army, Feb. 2012, <https://apps.dtic.mil/dtic/tr/fulltext/u2/a558054.pdf>.

stock analyses that just relate tools to outputs, a superficial “means-ends understanding of policy formulation.” Instead, they call attention to the multilayered and deeply context-dependent nature of modern policy design.<sup>39</sup>

In the world of business schools, the field of “decision analysis” — a required part of the usual first-year MBA curriculum — consists substantially of teaching students how to assign number weights to values and probabilities and then work up equations that integrate the calculation of these variables.<sup>40</sup> It does not, however, actually teach a policy design framework.

A process for policy work, which itself is often called a “design process,” is all about assessment, design, and implementation.<sup>41</sup>

## Assessments

Assessments are judgments about circumstances. These appreciations are always a compound of *assessments of reality*, what we or “they” think is going on; *assessments about values*, what we or “they” care about; and *preliminary assessments about action* — what, if anything, might be done. In this context, the action judgment is simply the threshold cognitive judgment — can we do something about this? — that then influences how much attention we give to the problem.

There are various heuristic aids to assessment: weighing alternative interpretations of available evidence, weighing alternative futures and scenarios, assigning probabilities, and more.<sup>42</sup> Good assessment has at least four elements:

- *detailed knowledge* with regard to the issue, though not necessarily from a professional specialist;
- *unpacking the assessment* into its component variables or presumptions;
- *using heuristic tools*, such as distinguishing

what is known, unknown, and presumed; constructing scenario analyses; assigning specific probability weights; and weighing generic probabilities from other cases against the distinguishing features of the case at hand; and

- *the right team* to bring the expertise and analytic rigor to bear in a specific case.<sup>43</sup>

## Design

Design is the choreography of action. A more academic definition of policy design, developed by scholars working in Canada and Singapore, calls it: “an activity conducted by a range of policy actors at different levels of action in the hope of improving policymaking and policy outcomes through the accurate anticipation of the consequences of government actions and the articulation of specific courses of action to be followed to achieve different levels of policy goals and ambitions.” Such design work occurs “within the context of designing complete policy packages. ... [So] each policy and program is a complex arrangement of ends and means-related goals, objectives, instruments, and calibrations that exists in a specific governance and temporal setting, and these contexts must be taken into account if effective program design is to result from design efforts.”<sup>44</sup>

To put this a little more simply, the “design” part of a policy design process includes choices about:

- *Operational objectives* — converting values into a concrete, working definition of success;
- *Strategic theories of action* — that spell out the presumed relations of means to these ends;
- *Choreographies/blueprints of required action* — who does what and when, using what instruments and institutions.

39 One template for policy design, derived from domestic policy experience, offers a five-level framework: high-level abstraction, program-policy linkages, program-level operationalization, program implementation linkages, and specific measures. Michael Howlett, Ishani Mukherjee, and Jeremy Rayner, “Designing Effective Programs,” in *Handbook of Public Administration*, 3rd ed., ed. James Perry and Robert Christensen (San Francisco: Jossey-Bass, 2015), Table 10.5, 196. See generally Michael Howlett, Ishani Mukherjee, and Jun Jie Woo, “From Tools to Toolkits in Policy Design Studies: The New Design Orientation Towards Policy Formulation Research,” *Policy & Politics* 43 no. 2 (April 2015): 291, 297–99, <https://doi.org/10.1332/147084414X13992869118596>. For more on this notion of “design 2.0” as a research agenda, see also Howlett and Mukherjee, “Policy Design: From Tools to Patches,” *Canadian Public Administration* 60 no. 1 (March 2017): 140–44, <https://doi.org/10.1111/capa.12209>.

40 See, e.g., Paul Goodwin and George Wright, *Decision Analysis for Management Judgment*, 5th ed. (New York: Wiley, 2014).

41 Earlier and different versions of this design framework were first tried out in Philip Zelikow, “Foreign Policy Engineering: From Theory to Practice and Back Again,” *International Security* 18 no. 4 (Spring 1994): 143–71, <https://www.jstor.org/stable/2539180>. This framework has been tried out in the classroom at Harvard and elsewhere. At Stanford, Jeremy Weinstein and Francis Fukuyama are developing an analogous framework in their teaching.

42 See, e.g., the illustrations catalogued in Atul Gawande, *The Checklist Manifesto: How to Get Things Right* (New York: Henry Holt, 2009); and Steven Johnson, *Farsighted: How We Make the Decisions that Matter the Most* (New York: Riverhead, 2018).

43 These four elements are a synthesis of methods suggested in Richard Neustadt and Ernest May, *Thinking in Time: The Uses of History for Decision-Makers* (New York: Macmillan, 1986), along with the way Neustadt, May, and I then developed and taught these ideas. See also Tetlock and Gardner, *Superforecasting*. I’m indebted to Michael Morell for discussions about the most basic elements of good assessment. See also the good discussion in Bodine, “Teaching Diplomacy as Process (Not Event),” 21–26.

44 Howlett, Mukherjee, and Rayner, “Designing Effective Programs,” 195.

To offer a simple illustration of how such a framework could be applied, just consider one part, the “operational objectives,” in the Trump administration’s trade and tariff policy toward China.

Are they to gain a trade deal that would more fairly *recouple* the American and Chinese economies? If so, what would be a concrete definition of success?

Or the operational objectives could be the opposite — to *decouple* the two economies. Again, what would be a concrete, working definition of whether that objective had been attained?

Or the operational objectives could be defined as a targeted increase in U.S. manufacturing employment, or as a reduction of U.S. bilateral current account deficits. And so on.

Obviously, the analysis of these different operational objectives then open up quite different questions about the best theories of action and choreographies of what should be done. Yet, since at the moment (September 2019) no one can tell what the operational objectives are for the U.S. policy, the policy becomes inherently incoherent.

## Implementation

Implementation is the final part of the policy work. It is attentive to local circumstances, the realities of the field, and the many stakeholders involved. At every stage, the software includes the organizational cultures for getting and evaluating information, for doing analysis, and for recording what is being done. As with the other elements, implementation is not separate from assessment and design. It interacts with them, as implementation informs ongoing reevaluation of everything else.<sup>45</sup>

This whole template — conscious methods for assessment, design, and implementation — is itself just a kind of heuristic tool. As with the engineering trainees memorizing the steps on their wallet cards, such tools are both a discipline and a defense. They are a kind of analytical checklist that provides a bit more protection against so many insistent claims that divert and distract attention.

## Policy Education Should Not Stand Alone

The wartime and postwar science adviser, public official, and longtime president of Harvard, James Conant, regarded Harvard’s public administration school, established in the late 1930s, as his greatest failure. He observed that two approaches had to be balanced. Such public affairs education should not, he thought, duplicate business schools by trying to build an entirely separate faculty. He thought such education should draw on the resources of the university as a whole. At the same time, Conant thought it was important to have a curriculum that did not emphasize a science of public administration separated from its policy content.<sup>46</sup>

Colleges of arts and sciences, and the major professional schools (law, business, engineering, medicine) all turn out women and men who work on public policy. In fact, despite the growth of the policy schools, these older institutions empirically still contribute the great majority of the citizens who work on such problems, including at the higher levels of policymaking. Yet, none of those “regular” schools are, or can be, *primarily* interested in public policy or education for public service. Even at the leading policy schools, only a fraction of their graduates actually go into public service.<sup>47</sup>

The challenge, then, is in how to offer a distinctive preparation for citizen involvement in public policy. Aside from the general education of citizens, the professionals who are most likely to identify a need for more professional training tend to be in government, including the military, foreign service, intelligence, and legislative staff; law, including as a possible addition to law school work; business, including as a possible addition to business school work; academia, including as a possible addition to PhD or MA programs; applied science, including engineering, public health, and medical practice; and nonprofit organizations.

Many of the key jobholders already in government are primarily trained in specialized field and technical duties. Their often-admirable

45 For more on this emphasis on local, ground-level knowledge, see generally, written more in the context of domestic policymaking, Tara Dawson McGuinness and Anne-Marie Slaughter, “The New Practice of Public Problem Solving,” *Stanford Social Innovation Review*, Spring 2019, 27–33, [https://ssir.org/articles/entry/the\\_new\\_practice\\_of\\_public\\_problem\\_solving](https://ssir.org/articles/entry/the_new_practice_of_public_problem_solving). For some promising work on how to implement effective programs in the realm of state institution building, what they call “Problem Driven Iterative Adaptation,” see Matt Andrews, Lant Pritchett, and Michael Woolcock, *Building State Capability: Evidence, Analysis, Action* (New York: Oxford University Press, 2017). In more of a conflict/security context, see the pair of outstanding recent case study illustrations of analysis from the ground up, offered in Carter Malkasian, *War Comes to Garmser: Thirty Years of Conflict on the Afghan Frontier* (New York: Oxford University Press, 2016) (the paperback edition has a valuable afterword reflecting on more recent U.S. efforts); and *Illusions of Victory: The Anbar Awakening and the Rise of the Islamic State* (New York: Oxford University Press, 2017).

46 Allison, “Emergence of Schools of Public Policy,” 67; James Conant, *My Several Lives* (New York: Harper & Row, 1970).

47 Such placement trends led to a major lawsuit against Princeton, in which the members of the Robertson family that had originally donated the funds to enlarge the Woodrow Wilson School sued because the school no longer seemed to be using the gift to educate students for public service. Part of the 2008 settlement required Princeton to sponsor a \$50 million foundation dedicated to that mission. Tamar Lewin, “Princeton Settles Money Battle Over Gift,” *New York Times*, Dec. 10, 2008, <https://www.nytimes.com/2008/12/11/education/11princeton.html>.



training does not include adequate preparation for policymaking challenges outside their traditional functional and managerial skillsets.

Traditional graduate studies related to policy work tend to bifurcate into two very distinct tracks — a professional master's degree program and an academic PhD program. Both of these programs serve important purposes, but they leave a major gap. The PhD students develop rigorous research skills to investigate theories in their fields, but are largely insulated from consideration of real-world policymaking.<sup>48</sup> Professional master's students are exposed to some complexities and challenges of practice. The strength of these programs can be training in quantitative analytic methods, public administration, and advocacy. For various reasons, they do not provide rigorous training in the kind of strategic and design thinking needed for problem-solving, nor do they impart enough relevant substantive knowledge.<sup>49</sup>

In addition, students are forced to make a fateful choice early in their studies. They can either pursue the law or master's degree, which opens the path to the world of practice yet can mean foregoing a career in teaching and research. Or they can pursue the academic PhD and sharply steer away from training in practical problem-solving.

An alternative approach would be to develop a relatively flexible curriculum. It would be conceived not as an alternative educational pathway, but as a broadening or extension of a core path that a student or professional has already chosen. Rather than forcing students to choose between a traditional "major" or career track and public service, the purpose of the curriculum would be to help students learn how to apply their core interest (and others they may discover) to public service. This complementary curriculum thus need not emphasize in-depth subject-matter education in particular regions of the world or in functional specialties like development, public health,

cyberspace, or public order. The curriculum should instead be designed and delivered so that it can complement many such specializations.

Such a curriculum could have at least three especially distinctive features: *first*, instruction and practice in analysis of detailed information and the assessment of situations. These assessments must grow out of a relatively deep ability to understand and imagine governance in unfamiliar institutions.

*Second*, instruction and practice in a conscious policy design process: This process can teach students how to break down complex policy problems. Then they can learn how to unpack and identify critical questions or choices, using a common conceptual vocabulary.

*Finally*, the curriculum could make extensive use of detailed case studies, both historical and contemporary, as projects in which students can develop a series of specific skills in working with situations of potential cooperation and conflict. These projects can be sustained over weeks, to give a sense of iterative change and adjustment. Some programs have tried such "policy task forces/workshops."<sup>50</sup>

The skills to develop in such extended exercises can include attention to the routine habits of effective staff work. They include familiarity with the role of budgeting in policymaking, crafting public statements, participation in policy debates, role-playing to understand the perspectives of others and gain experience with negotiation, and learning to orchestrate and evaluate the implementation of a policy.

Such an educational initiative carries with it a major agenda for research. More and better "thick" case studies are needed, of the kind that are indispensable in other realms of professional education. The traditional scholarly disciplines have a specific understanding of what "case studies" mean for their investigations, but those case studies are rarely very useful for this kind of

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48 This depiction of the academic market failure draws in part from arguments developed by Jim Steinberg and Frank Gavin for the Carnegie International Policy Scholars program. The academic PhD programs suffer from another problem. Unlike the policy schools, which are often home to faculty from a variety of social science disciplines, and in some cases the natural sciences and engineering, PhD programs in international affairs are designed, taught, and administered in discipline-based departments, primarily political science. This arrangement may make sense for scholarly training in that discipline. But it is counterproductive for interdisciplinary policy training. That problem has been compounded by the long-term decline of area studies programs within political science departments.

49 The professional master's degree programs, typically one to two years, focus on professional skills training for future practitioners. These degree programs are the core of most APPAM (Association for Public Policy Analysis and Management) and APSIA (Association of Professional Schools in International Affairs) schools. To the extent they have a canon, they too reflect the "microeconomic turn." There are usually also courses that provide background information on international relations, current issues, and particular regions. As a nod to practical training, such schools frequently hire faculty as professors of practice and adjuncts who are current and former practitioners. They frequently draw from their experience to tell good policy stories and offer suggestive illustrations. This helps. But they then lack an established teachable canon for rigorous professional education.

50 There are some useful precedents in the "policy analysis exercises" used at some of the public policy schools. At Princeton's Woodrow Wilson School, Bodine describes policy task force/workshops as "more practical than the conventional academic approach and more conceptual, structural and historical than simulations or even case studies." Each focuses on a single major ongoing policy issue. Students produce a set of detailed papers on each facet of it. Bodine, "Teaching Diplomacy as Process (Not Event)," 25. The CIA's Kent School of Intelligence Analysis has had some success using an analogous approach in training intelligence analysts.

practical education. At some policy schools, such cases as exist have been prepared by professional “casewriters” who often do not have substantive training in the topic and whose work may not reflect the best scholarship or expert analysis. The range of possible studies of this kind is enormous. Such studies can bring “thick” problems and fateful choices to life.

## Conclusion

There are obviously several major ways to explain the decline in government performance and the collapse in public trust in the U.S. government since the high-water marks of the late 1950s and early 1960s. Since the early 1960s, the government has tried to do much more — around the world and at home — and it is perceived to have usually fallen short, sometimes catastrophically so.

It is not very useful to blame the anti-Washington discourse. Such scapegoating of Washington is not new. It is an old, old theme in American history. Nor do I blame incompetent delivery of basic services, which are still reasonably good in America.

Part of the story is a record of policy failures: the tendency to react to events rather than drive them, poorly specified objectives, confusing guidance, reliance on weakly evidenced suppositions, little grasp of organizational capacities, inability to adapt organizations to new problems, overreliance on ill-managed contractors. These are all symptoms. They are symptoms of policies that are badly designed.

Weak knowledge of the history of certain issues or even of the government’s own policy record, a superficial grasp of other communities or institutions, and a preoccupation with reactions to daily news: These, too, are symptoms. They are symptoms of a weakening capacity for in-depth professional assessment.

Of course, the marked tendency to militarize policy, to rely on military instruments and military policymakers, is no cure. It is another symptom of the breakdown, as American policymaking is dumbed down and becomes praetorian.

Some of these problems can be blamed on bad structures and on polarized, dysfunctional politics. But that’s not all of the story.

As the immensely powerful Qing empire in China began to decay in the early 1800s, a leading scholar began calling for reform of the Confucian system that selected and trained the country’s administrative elite. He looked around and saw

“everything was falling apart ... the administration was contaminated and vile.” The scholar, Bao Shichen, “found himself drawn toward more practical kinds of scholarship that were not tested on the civil service exams.”

Bao “would in time become one of the leading figures in a field known broadly as ‘statecraft’ scholarship, an informal movement of Confucians who were deeply concerned with real-world issues of administration and policy.”<sup>51</sup> Tragically, for Bao and many of his reformist allies, though their efforts made some headway, it was not enough. They could not reverse the decline of their empire.

The United States government has plenty of problems too. Fortunately, it is not yet at the point the Qing dynasty reached. Americans can reflect on a proud heritage, not far in the past, when Americans were notorious across the world for their practical, can-do skills in everything from fixing cars to tackling apparently insurmountable problems, public as well as private. These seemingly bygone skills were not in their genes or in the air. They need not be consigned to wistful nostalgia. The skills were specific. They were cultural. And they are teachable. 📖

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Photo: [Nicepik](#)

51 Stephen Platt, *Imperial Twilight: The Opium War and the End of China's Last Golden Age* (New York: Knopf, 2018), 233 (following the work of William Rowe).