

scholars and students alike, for both its substantive arguments and its theoretical achievements.

Acceptable Risks: Politics, Policy, and Risky Technologies.

By C. F. Larry Heimann. Ann Arbor: University of Michigan Press, 1998. 188p. \$44.50.

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After a promising start by Martin Landau more than 30 years ago, and advances by a small coterie of mostly Berkeley and Stanford political scientists and organization theorists, the study of organizational reliability has largely been orphaned by American political science. One reason such an important area of research has been given short shrift is that many political scientists do not think of reliability as a subject based in politics. It has been deemed more worthy of the attention of other disciplines, especially engineering and operations research. Another reason is that we have become even more obsessed with transactional efficiencies than was the case when Landau issued his warnings in 1969. Larry Heimann presents a nuanced study on the problem of reliability that incorporates politics, organization, and technology and offers a series of convincing arguments about some reliability paradoxes in policymaking. His book centers on the connection between bureaucratic structure, reliable decision making, and the incentives public agencies have for responding to risk in one way or another.

In earlier work, Heimann focused on the National Aeronautics and Space Administration (NASA) and the Challenger space shuttle disaster in 1986. Building on his past scholarship, the author offers here a richer and more inclusive structural analysis of NASA's successes and failures, and he adds another contrasting case study, the Food and Drug Administration (FDA). He argues that agencies fail in one of two ways: Either they act when caution and forbearance should prevail (Type I error), or they delay or fail to act when action is clearly warranted (Type II error). Much of *Acceptable Risks* explores the logic behind an organization's strategy to focus on reducing either type of error. In NASA's case, the decision to launch Challenger on January 28, 1986, was a classic Type I error. Conversely, the FDA avoided a Type I error when it refused to license thalidomide for sale in the United States in the early 1960s. Were it not for limited resources and political pressures, agencies would more likely err on the side of caution, commit more Type II errors and move more deliberately, but with fewer Challenger-type disasters. When agencies repeatedly perform tasks without incidence, however, pressures mount for them to produce results more efficiently. Legislators turn their attention away from reliability concerns and more toward whether tasks can be accomplished more cheaply or, if not, whether they are necessary. The political message is translated into an organizational one: Administrators begin to worry more about cheaper, faster, better than about failure avoidance.

A substantial literature explains how and why agencies respond to political pressures, but most of it is decidedly thin on the subject of how administrators interpret political signals and translate them into organizational norms of behavior. *Acceptable Risks* fills that gap and carries the problem to the next stage, carefully analyzing the structural choices that face public agencies charged with managing different kinds of risky technologies. Heimann's contribution is in the best tradition of public administration as the author methodically explores how and why administrators follow one path or another in coping with constraints imposed by both political superiors and technological uncertainties. He does

so at two levels. First, after roughing out the general problematic, Heimann lays out a set of reasonable assumptions regarding structural alternatives for increasing reliability at agencies like NASA and the FDA. He then formally models how structure affects organizational reliability. In the process he gives some persuasive arguments for how administrators respond to the reliability problem structurally. Heimann maintains that, depending on resource constraints and whether most decisions tend toward the programmed or nonprogrammed variety, administrators will choose systemic change (typical of reorganizations) versus tactical adjustment, which involves changing components of the organization by, say, augmenting expertise. Second, he connects this more abstract analysis to decisions made by NASA and the FDA, explaining the logic behind their choices. He offers the reader a brief but useful history of both agencies that helps in understanding the context in which key decisions are made.

In exploring paths of failure, the author puts forth a reasonably detailed analysis of the variable utility of serial versus parallel redundancy, demonstrating the reliability consequences of each type. For organization theorists, this may be the most interesting contribution of the book, especially since Heimann clearly applies the logic of the modeling exercises to his NASA and FDA case studies. Landau's pioneering work on organizational reliability argued for the introduction of redundant mechanisms into decision-making processes, but his emphasis, and that of most of his followers, centered on parallel systems. Heimann demonstrates, both formally and from his case studies, that in the real world of administration, problems of moral hazard and adverse selection among experts can persist, even with parallel redundancy. Indeed, he argues for the superiority of serial redundancy in reducing these agency pathologies and therefore Type I errors, under select conditions.

Beyond the specifics of NASA and the FDA, many of us wonder whether public agencies—or any organization—can be designed to manage highly risky technologies in a failure-proof manner. Heimann locates his argument somewhere between two very different perspectives on the subject, the high reliability proponents and the normal accident theorists. The former, led by Todd LaPorte, Karlene Roberts, and Gene Rochlin, argue that complex systems can be made highly reliable, given an unobstructed commitment to that pursuit. The latter group, named after Charles Perrow's book on risky technologies, *Normal Accidents* (1984), argues a different point. For them, certain technologies and the systems designed to run them entail a significantly high probability of failure as part of the bargain.

Heimann seems to come down more on the side of the normal accident proponents. Agencies like NASA and the FDA are forced to oscillate between avoidance of Type I and Type II failures, depending on political pressures to avoid disasters (usually after the occurrence of one), or to cut costs. The author terms this the "cycle of failure" for public agencies. As Mary Douglas and Aaron Wildavsky pointed out in *Risk and Culture* (1983), interpretations of risk are socially and politically constructed. The level of risk that politicians and the population at large are willing to tolerate depends on a lot of factors. Even for public agencies that manage dangerous technologies, trying to operationalize the concept of risk is often an imprecise exercise.

Heimann answers the question of whether there is something wrong with agencies responding to political pressures with an "emphatic no" (p. 166, emphasis in original). I do not take issue with his belief in norms of democratic accountability, but his answer on this score is decidedly incomplete and unsatisfactory. Granted, his book is not intended as an

analysis of legislative or executive oversight. Yet, in view of the challenges faced by agencies like the FDA and NASA, some nod might be given to the idea that pathologies exist in how institutions of political accountability are designed in the United States. This problem is particularly troubling as it applies to whether and how agencies might be buffered from some of the cruder, short-term demands of politicians. This is a relatively minor shortcoming, however, in an otherwise sensible and important contribution to our understanding of the design of reliable administrative structures.

Heimann pulls together threads from a number of important traditions in public administration and political science and weaves them into a compelling analysis. There are important insights here for the followers of Gulick, Simon, and Landau. *Acceptable Risks* is a welcome addition to political science and administrative theory. Let us hope it signals more quality work on organizational reliability within political science.

Lobbying Together: Interest Group Coalitions in Legislative Politics. By Kevin W. Hula. Washington, DC: Georgetown University Press, 2000. 208p. \$55.00 cloth, \$23.95 paper.

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Many political scientists like institutions, in particular exogenous institutions, which guide and constrain actions and allow scholars to concentrate more narrowly on behaviors within well-defined settings. For the interest groups subfield, institutions tend to be more mercurial than those in other areas of American politics. For instance, fundamental aspects of Congress may be institutionalized, but groups and lobbyists come and go. The environment of interests is ever changing. Characterizing the interactions between legislators and lobbyists is made more difficult because of the lack of clear institutional structures that guide or constrain behaviors. The iron triangle concept was powerful and meaningful because it provided at the least a loose framework for the analysis of legislator-lobbyist interactions. Kevin Hula's new book follows the reasoning of Hugh Hecl and William Browne, who argue that the iron triangle concept is outdated and inappropriate. That convenient metaphor suggested an informal institutional structure that is simply no longer appropriate. Without the iron triangle, what can fill the void? For Hula and a growing number of scholars, group coalitions play an increasingly important role in the structuring of legislator-group interactions.

Numerous scholars have noted the increase in the sheer number of organized interests operating in Washington. The growing tendency for groups to work within coalitions expands the potential number of players exponentially. Given these facts, it is particularly important to develop some general characterizations of the interest group environment. How and when do coalitions form? How and when do they act? To address these and other questions, Hula interviewed 130 group representatives connected to the transportation, civil rights, or education policy areas. Citing the work of Burdett Loomis, he characterizes coalitions by their breadth of membership and longevity. Not surprisingly, his interviews suggest that some members are more equal than others.

Hula neatly defines three types of coalition members: core members, players, and tag-alongs. They vary considerably depending on their long- and short-term goals. Core members seek a bill or a key element of legislation. Players are satisfied if they can alter a paragraph or two in a bill. Tag-alongs seek a photo opportunity for their own narrow goals. Hula finds the tag-alongs the most intriguing, and I

agree. They lend their support, even though everyone recognizes that they will not marshal their membership or be particularly active (p. 47). In the words of one lobbyist: "All right, as a favor, use our name" (p. 47). Two possibilities immediately come to mind. The first is that groups may arrange logrolls as they form various coalitions. The second is that the breadth of coalitions should be discounted by legislators and others as they come to recognize that coalitions are less comprehensive than their masthead might lead one to believe.

Hula's attention to interlocks is particularly commendable. Formal or informal links across organizations reduce the coordination costs associated with the formation of coalitions. Interlocks at the board of director level are common and sometimes formally instituted. For instance, the American Council of Education reserves seats on its board for representatives of other education associations. More generally, Hula finds that interlocks are most important for short-term coalitions. Long-term coalitions have fewer, even though they have more time to reinforce their relationships with interlocks. When establishing coalitions, Hula finds that interlocks work in one direction only. Individuals call on their former employers, but organizations virtually never work to track down their former employees.

After reading this book, my appetite was whetted for more. For instance, it is unfortunate that no legislators were interviewed for this project. Hula's group representatives frequently note that they are sensitive to the legislative environment. Education lobbyists differentiate between their authorizing and appropriating environments (p. 163). More than once a representative suggested that a coalition was organized or encouraged by legislators themselves. "They have oftentimes told us . . . get together . . . work out what you want . . . [then] let us know" (p. 103). Or "Dingell was on the . . . Committee. He says, 'you guys get together . . . see if you can't find some common ground and come back to us'" (pp. 28–9). One committee highlighted is Transportation, and Chairman Shuster was known to be particularly active in the coordination of group activities. In sum, Hula's interviewees suggest that committee structures and legislators are key aspects of the access game, but Hula did not pursue these issues in the present work.

A greater emphasis on committee structures would complement the increasing focus of interest group scholars, including Hula, on policy areas. For instance, transportation policy is a fairly narrow area and primarily affected by only one committee. In contrast, civil rights and education policy are much broader, and numerous committees have a potential stake. Although Hula asks respondents about their breadth of interests, he does not ask about the number of committees they monitor or lobby directly. Indeed, a strong and compelling result in Hula's work is that groups concerned with multiple issue domains are more likely to work with coalitions. Breadth of interests leads to coalitional efforts. Even within single domains, group representatives may work with a small, medium, or large number of committees. The simple point is that access is affected by structures within Congress.

Although I wanted more information about the legislative issues involved, the importance of what was explored is not diminished. By highlighting the strategic concerns of group representatives as they contemplate forming coalitions, Hula makes a valuable contribution to an area of increasingly importance.