KARL WOLFGANG DEUTSCH 1912-1992

A Biographical Memoir by

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K ARL WOLFGANG DEUTSCH was born in 1912 in Prague, Czechoslovakia. His father was an optician. His mother, active in various political causes both at home and internationally, eventually became one of Czechoslovakia's first female parliamentarians. After graduating with high honors in 1931 at the German Staatsrealgymnasium in Prague, Deutsch went on to take his first degree in 1934 at the Deutsche Universität in Prague. His advanced studies at that university were interrupted because of his outspoken leadership of anti-Nazi groups. After a clash with the faculty of the Deutsche Universität, which by then had fallen under the control of a pro-Nazi majority, he left for a period to study optics in England. Fortunately for the social sciences, his study of optics, together with his study of mathematics there and earlier, helped prepare him for his later pioneering work in quantitative political science. On returning to Czechoslovakia he was granted admission to the Czech national Charles University, a signal honor for a Germanethnic Czech, where he attained high honors in seven fields and received his doctorate in law (JUDr) in 1938. Shortly thereafter, Deutsch and his new bride, Ruth, went to the United States for what was intended to be a brief stay. But with the capitulation of Britain and France to Hitler at Munich and the Nazi takeover of the Sudetenland, Karl and Ruth decided it would be unsafe to return.

In 1939 Karl and Ruth began a new life in the United States. The recipient of a student-funded scholarship for refugees from Nazism, Deutsch entered Harvard University for further graduate training. During his first years in America, he toured the country extensively, speaking on behalf of the Free Czechoslovak movement. America's entry into the war led Deutsch into the service of the United States government, where among other things he was a major contributor to the famous "Blue Book" on Juan Peron's efforts to extinguish democracy in Argentina. Later he was a member of the International Secretariat of the San Francisco Conference of 1945, which created the United Nations.

The war over, Deutsch resumed his doctoral studies at Harvard while teaching at the Massachusetts Institute of Technology. Simultaneously he began publishing articles that showed both his mature scholarship and, more significantly, perspicacity in his view of society and politics. His dissertation, "Nationalism and Social Communication," was awarded Harvard's Sumner Prize in 1951. The following year Deutsch was promoted to the rank of professor of history and political science at MIT, and a year later his dissertation appeared as a book.¹

Almost immediately Deutsch was in great demand in the scholarly community. In 1953-54 he was at the Center for Research on World Political Institutions at Princeton University, where he integrated the findings of an interdisciplinary group with his own thinking and turned the result into a highly significant theoretical analysis of large-scale political integration, *Political Community and the North Atlantic Area.*² During the year 1956-57 he was a fellow at the Center for Advanced Study in the Behavioral Sciences at Palo Alto, California, where he laid the basis for the

book that would prove to be one of his most significant contributions, *The Nerves of Government*.³ During the same period he held a visiting appointment at the University of Chicago (in 1954) and received his first Guggenheim Fellowship (in 1955).

In 1957 Deutsch went to Yale University as visiting professor and a year later accepted a permanent appointment as professor of political science. His first substantive accomplishment there was the completion of a book (with Lewis J. Edinger), Germany Rejoins the Powers,4 that used data on public opinion, the background of elites, and economics to analyze the federal republic's postwar progress, and was a highly original study of politics and society in West Germany. During his 10 years at Yale he completed the intellectual framework and set up an organization—the Yale Political Data Program—to develop quantitative indicators for testing significant theories and propositions in social science; organized a multi-university research team, sometimes called the Yale Arms Control Project, to investigate the prospects for arms control, disarmament, and steps toward unification in the Western European environment; and took on an increasingly important role in the development of international social science. In 1960 he also held a visiting appointment at Heidelberg University and in 1962 he was a visiting fellow at Nuffield College of Oxford University.

Deutsch moved to Harvard University in 1967, and in 1971 was appointed Stanfield Professor of International Peace. Despite the rapidly growing demand for his appearance as a guest lecturer and his dramatically expanding role in international social science, he continued his steady record of initiating and completing new projects. He held guest professorships at the Goethe University in Frankfurt-am-Main, the University of Geneva, Heidelberg University, the University of Mannheim, the University of Paris, and the

University of Zurich. He also lectured at major universities throughout the world, and served as consultant to various government agencies. And he received such further honors as a second Guggenheim Fellowship (in 1971) and appointment as resident scholar at the Aspen Institute of Humanistic Studies (1973-74).

His colleagues gave testimony to their esteem for his work by electing him to offices in numerous scholarly organizations. Deutsch was elected president of the New England Political Science Association in 1964-65; president of the American Political Science Association in 1969-70, after having served as program chairman of its 1963 annual meeting; and president of the Peace Science Society (International) in 1973. He served the International Political Science Association as a member of the program committee (1970-76), coordinator of the triennial International Political Science Association world congress (Montreal, 1973), vice-president, and finally as president for 1976-79. He received six honorary degrees from American and European universities.

Deutsch made his impact on scholarship not only by his numerous publications but also equally from the force and manner of his personal presentations. His commitment to teaching was manifested in both lectures and seminars. His undergraduate lectures, although often extemporaneous, almost always combined profundity with wit. At Yale he gave uncounted lectures to packed lecture halls, and virtually without exception each lecture was followed by an ovation. Yale undergraduates honored him in 1965 by awarding him the William Benton Prize of the Yale Political Union for having done most to stimulate and maintain political interest on campus—an award, incidentally, that alone was featured prominently in the Deutsch home.

During a period when many graduate students in political science were seeking a greater degree of analytical rigor

and concern for quantitative evidence than had characterized the field, they found Deutsch's combination of intellect, range, and verve enormously stimulating. His teaching skills were also revealed in his two influential textbooks, *The Analysis of International Relations*⁵ and *Politics and Government*,⁶ which not only made basic material accessible to students but also stimulated their involvement in serious analysis of political phenomena. His influence on students was so great that some of the most productive scholars who followed him in the fields of international and comparative politics had been students in his seminars.

Deutsch believed that an important part of his task as educator was to present guest lectures at universities and elsewhere in the United States. He was invariably generous with his time and his thoughts and seemed happiest when he engaged an individual or audience in an intellectual dialogue where the give and take of discussion, with both challenges and stimulation, provided an opportunity for him, as well as his audience, to learn something new. He was noted for his ability to generate enormous numbers of ideas in rapid-fire fashion, typically in what appeared to be, and probably was, a spontaneous association of ideas, when he would briefly consider a bit of data or an idea and immediately ask for more information or come forth with a new hypothesis or even a full-blown theory. Although he ran the risk of propounding ideas that were not well thought out and on further consideration might prove to be mistaken, the sheer volume of his intellectual sparks generated a fire that stimulated his audiences to think more deeply about his remarks.

In his relations with students Deutsch was interactive, nurturant, generative. He truly cared about his students and former students. Above and beyond normal expectations, he helped them with the challenges of getting a job,

writing assignments, conference invitations, and other opportunities. He wrote many articles and books with students and junior colleagues, during which he shared work and authorship equitably. Perhaps the most unkind comment any of his former students could recall him making concerned a senior colleague who, he said, was the sort who never sends the elevator back down.

Although his work contributed directly or indirectly to many different aspects of political science, in several areas his work revolutionized scholarly thought and research: large-scale political community formation at the national and international levels; cybernetic approaches to politics and society; and the development and use of quantitative data to test and reformulate political theories.

Deutsch's youth was spent in a multinational state destined to endure a series of tragedies. Doubtless in response to his observation of the horrors brought to Europe by narrowminded nationalism before and during the Second World War, Deutsch early in his career focused his emotional and intellectual energies on issues involving nationalism and the formation of large-scale political communities. Indeed. he wrote his doctoral dissertation on nationalism—a brave decision given both the flood of past writing on the topic and the strong emotions it engendered among even the most intellectual of scholars. Nationalism and Social Commu*nication*¹ recast the traditional literature into a more rigorous form, enriched not only by concepts drawn from anthropology, social psychology, and other social sciences but also by Deutsch's own insights. What was perhaps even more innovative at the time, he tested his conjectures against quantitative data from the real world. The book presented a new model of nationalism based upon the idea of a "people" bound together by habits of and facilities for communication. New data derived from four case studies of national

growth and decay demonstrated the validity of the model and set the stage for further data gathering and tests of the basic model. For many years the paradigm offered by Deutsch in these books and elsewhere⁷ dominated the scholarly study of nation building and international integration.

Many of the theoretical perspectives that animated Deutsch's analysis of nationalism and social mobilization also apply to his work on large-scale political integration and unification. He used these perspectives to focus the sometimes-divergent research performed by members of the research group at Princeton University's Center for Research on World Political Institutions. Each individual member had worked on a case study of national integration or disintegration but the various pieces were essentially an accumulation of case studies. Deutsch was invited to join the project with the specific hope that, by applying his historical knowledge of nationalism and his concepts derived from the study of communication in societies, he could integrate these disparate pieces.⁸ The result was the pioneering study *Political* Community and the North Atlantic Area.² In this view, the formation of large-scale community rested less on factors like common language or high levels of mutual responsiveness and, as with the development of nationalism, more on the existence of two-way channels of communications between elites and mass and among non-elites.

Although one manifestation of political integration may be the creation of a new state by amalgamating two or more previously separate units, Deutsch emphasized the creation of "expectations of peaceful change," that is, "security communities" among peoples who may or may not be unified under a single government. This focus on community formation, rather than on amalgamation per se, was central not only to Deutsch's work but also to that of the integration theorists who worked with him or otherwise attempted

to apply his insights. While much work remains to be done, Deutsch's highly original formulations lend themselves well to cumulative research. His attention to domestic politics and transnational actors as powerful influences on relations between nation-states was taken up in the transformation of theory and research on international politics at the end of the twentieth century. 10

One of Deutsch's key insights in his treatments of integration at the national and supranational levels was that unified government is neither a necessary nor a sufficient condition for peace among the various parties. Indeed, in some cases unified government may even damage the prospects for peace. Deutsch focused attention on two possible sources of failure. First, if unification is undertaken before certain necessary or desirable background conditions exist the outcome may be conflict and a breakdown of the association. Second, if unification occurs among unequal partners, their association may lend a degree of rigidity and legitimacy to the exploitation of the weak by the strong.

Central to Deutsch's new paradigm was his view of anarchy, war, and amalgamation. Picking up an earlier strand of political thought from Hugo Grotius, Deutsch argued that no axiomatic relationship exists between anarchy and war. Indeed, historical evidence suggests that ineffective or premature efforts to mitigate anarchy may even cause war. Using the language of communications theory, Deutsch showed that amalgamation engenders transactions that increase loads on a governmental system. If the system does not have or is unable to develop capabilities commensurate with these added loads, the consequence may be mutual frustration and hostility. Accordingly, the search for world government can become self-defeating.

This concern, derived from his theoretic study of communications and his empirical examination of nationalism

and political community in the North Atlantic area, informed the investigation undertaken in the mid-1960s by Deutsch and others of arms control and unification in Western Europe. The project rested on systematic interviews with French and West German political and economic leaders, studies of public opinion, and quantitative analyses of the press in four countries. It sought to determine existing trends and then to project these trends into the short-range future. ¹¹ In general, the study found an imbalance between what was commonly expected from a united Europe and the infrastructural support needed to create whatever institutions were necessary to satisfy these expectations. On the basis of this research Deutsch cautioned against further immediate steps toward unification.

Strong ties among unequal partners, Deutsch argued, also carried dangers. Although a structure that enforces a rigorous division of labor between the masters and the enslaved may indeed enhance the overall production in a society, the appearance of stability may be deceptive. Deutsch's studies of nationalism and national integration revealed that an imbalanced scheme for organizing society, in which some pay an extraordinary price while others enjoy extraordinary benefits, is inherently unstable and hides the development of patterns of social communication, which can lead to unrest and even revolution. In the global system, too, members of some nation-states, especially those with poorly developed economic systems, fear that their involvement in the world economy and the political system produces an extremely disproportionate distribution of benefits both globally and within their own states. This leads them to question the legitimacy of the prevailing structures. At the same time, however, the costs of dissociating themselves from those structures can be immense. These conflicting demands, anticipated by Deutsch and manifested under the pressures

of globalization, pose one of the great dilemmas of our times.

Throughout much of Deutsch's scholarly life this dilemma, spawned by economic and political interdependence, led to furious debate and some scientific analysis. Analyses directed against the industrialized states, which were perceived as benefiting most in the long run from the status quo, became commonplace, as did strident exhortations to the less developed world to dissociate itself from the prevailing system, whatever the immediate cost might be. Deutsch insisted on scientific analysis directed to the central questions: How accurately did conflicting interpretations of this great dilemma reflect the real world? How could we devise means to ascertain the direction and speed of current developments? In addition to his cool analysis of the assumptions and logic of theories about dependency and structural imperialism, ¹² Deutsch forced scholars to search for objective, reproducible, and when possible, quantitative data with which to test assertions and the theories themselves.

Although the field of cybernetics was first developed by Norbert Wiener of the Massachusetts Institute of Technology, Deutsch spelled out the political implications of cybernetics in a series of impressive articles that formed the basis for *The Nerves of Government*.³ His subsequent research examined a number of questions stimulated by his interest in cybernetics: the ratio between internal and external communications and transactions of a country as an indicator of the degree of its self-preoccupation or self-closure over time; governments' share of facilities for controlling the flow of information and the effect of this variable on governmental performance; the ways decision-making systems deal with communications overload; and the forms and consequences of decentralization in governmental decision making.

Applying cybernetics to politics made crystal clear the need for data—impersonal, replicable, quantitative—to test significant propositions derived from major theories. Deutsch assembled data on population movements, language assimilation, and the flow of such international transactions as trade and mail. In a seminal article of 1960 "Toward an Inventory of Basic Trends and Patterns in Comparative and International Politics," Deutsch generalized this research experience and assessment of needs to suggest how large-scale data banks could aid in the development and testing of theory on such topics as political development and the probabilities of war and peace.

Deutsch's ideas on the development of cross-national data banks contained four elements. First, it was necessary to use data that, however insufficient they might be, could be obtained fairly readily to show that the entire notion had intellectual merit and theoretic promise. Second, efforts would have to be undertaken, always within a theoretic frame of reference that informed the researcher's criteria of relevance and reliability, to gather systematically sets of better data. Third, since no single scholar could accomplish the task of assembling adequate data relevant to political theories, data programs should comprise multidisciplinary and, Deutsch hoped, multinational research teams. Even if this was not always possible, it was imperative to create a multidisciplinary and cross-national network of conferences and other means of communication to exchange scientific information, evaluate each other's efforts, and search out new directions for future research and analysis. Fourth, new techniques must be developed to analyze the data in a theoretically meaningful way.

Deutsch was in the forefront of all these developments, which he viewed as simultaneous, mutually reinforcing, and requiring prodigious organizational and intellectual work.

With the intellectual collaboration of Harold D. Lasswell and the practical support of two younger political scientists, Richard L. Merritt and Bruce M. Russett, ¹⁴ Deutsch set up the Yale Political Data Program. Its first major publication, *World Handbook of Political and Social Indicators*, ¹⁵ provided a massive body of data that was drawn on in numerous scholarly articles by Deutsch, Russett, and others in contributions to the development of empirical theory. ¹⁶ Deutsch's insistence on the speedy publication of these volumes and on the widespread dissemination of the machine-readable data sets epitomized his commitment to the sharing of scientific information.

Deutsch's influence and the importance of quantitative data were felt in other ways as well. For one thing, Deutsch together with Stein Rokkan and others helped to create a series of conferences to discuss questions of quantitative data, data banks, and social science theory. Many of these resulted in substantial volumes that contributed to what some have called the data movement.¹⁷ This work stimulated other collections of political and social indicators by scholars across the world.¹⁸ In short, the increasing use of aggregate data and the increasing sophistication of modes of mathematical analysis have revolutionized the study of politics.

Returning to the concept of steersmanship: Nation-states can act in ways to enhance or diminish the chances of war. Steersmanship is even more possible when we have data and models for projecting nation-state behavior into the future. Only in recent years have scholars developed data-based econometric and sociometric models sufficiently sophisticated to permit reasonably accurate forecasting and hypothetical adjustments of variables to stimulate contingent futures. The possibility of creating comprehensive models

for world politics nonetheless once seemed remote to most scholars.

The possibility of global modeling intrigued Deutsch not only because of the challenge it posed but no doubt also because it brought together all his interests and skills: a concern with preventing the outbreak of violence, the need of nation-states for strategic roadmaps to help them steer their way in the global system, and a focus on generating hypotheses about human behavior, testable by data from the real world, that can be used to model social processes. Early efforts at global modeling he found disappointing because of their questionable assumptions and lack of attention to key social and especially political variables.¹⁹

The next logical step, then, was to create the organizational framework to make global modeling more useful for political decision makers. The opportunity came in 1976 when Deutsch was asked to help found and co-direct the International Institute for Comparative Social Research of the Science Center Berlin. There he created a research team on global modeling with the aim of producing a functioning, computerized model of global society based not only on an integrated set of mathematical equations but also on hard data about political and social processes.

Advances in global modeling with the stress on data and the use of increasingly sophisticated modes of mathematical analysis have revolutionized the study of politics. Deutsch was at the forefront of this movement. His own research broke new paths, and his teaching inspired others to push out even farther the frontiers of knowledge. His organizational efforts at the international level helped to create a worldwide network of scholars and data-based research programs that have provided a firm basis for still further developments.²⁰

Here again, as in all his teaching, lectures, and writing, Karl Deutsch displayed his deep commitment to the development and use of knowledge for the betterment of humankind.

NOTES

- 1. K. W. Deutsch. *Nationalism and Social Communication: An Inquiry into the Foundations of Nationality.* Cambridge, Mass.: Technology Press of the Massachusetts Institute of Technology, and New York: Wiley, 1953; 2nd ed., Cambridge, Mass.: MIT Press, 1966.
- 2. K. W. Deutsch, S. A. Burrell, R. A. Kann, M. Lee, Jr., M. Lichterman, R. E. Lindgren, F. L. Loewenheim, and R. W. van Wagenen. *Political Community and the North Atlantic Area: International Organization in the Light of Historical Experience.* Princeton, N.J.: Princeton University Press, 1957.
- 3. K. W. Deutsch. *The Nerves of Government: Models of Political Communication and Control.* New York: Free Press, 1963; 2nd ed., 1966).
- 4. K. W. Deutsch and L. J. Edinger. *Germany Rejoins the Powers: Mass Opinion, Interest Groups, and Elites in Contemporary German Foreign Policy.* Stanford, Calif.: Stanford University Press, 1959.
- 5. K. W. Deutsch. *The Analysis of International Relations.* Englewood Cliffs, N.J.: Prentice-Hall, 1968; 2nd ed., 1978.
- 6. K. W. Deutsch. *Politics and Government: How People Decide Their Fate.* Boston: Houghton Mifflin, 1970; 3rd ed., 1980.
- 7. See, for example, K. W. Deutsch and W. J. Foltz, eds. *Nation Building*. New York: Atherton Press, 1963; K. W. Deutsch. *Nationalism and Its Alternatives*. New York: Knopf, 1969; K. W. Deutsch. *Nationenbildung-Nationalstaat-Integration*, ed. A. Ashkenasi and P. Schulze. Düsseldorf: Bertelsmann Universitätsverlag, 1973; and numerous articles.
- 8. Deutsch spelled out his own ideas in *Political Community at the International Level.* Garden City, N.Y.: Doubleday, 1954.
- 9. Deutsch's basic ideas on nationalism and integration stimulated numerous monographs exploring their implications, leading to independent contributions. A few of those were B. M. Russett. Community and Contention: Britain and America in the Twentieth Century. Cambridge, Mass.: MIT Press, 1963; W. J. Foltz. From French West Africa to the Mali Federation. New Haven, Conn.: Yale University Press, 1965; A. Lijphart. The Trauma of Decolonization: The Dutch and

West New Guinea. New Haven, Conn.: Yale University Press, 1966; R. L. Merritt. Symbols of American Community, 1735-1775. New Haven, Conn.: Yale University Press, 1966; M. C. Hudson. The Precarious Republic: Political Modernization in Lebanon. New York: Random House, 1968; H. Stephens. The Political Transformation of Tanganyika, 1920-67. New York: Praeger, 1968; G. L. Schweigler. National Consciousness in Divided Germany. Beverly Hills, Calif.: Sage, 1975; and P. J. Katzenstein. Disjoined Partners: Austria and Germany since 1815. Berkeley Hills: University of California Press, 1976.

- 10. A recent example is B. Russett and J. R. Oneal. *Triangulating Peace: Democracy, Interdependence, and International Organization.* New York: Norton, 2001.
- 11. A summary of the findings is K. W. Deutsch. Integration and arms control in the European political environment: A summary report. Am. Polit. Sci. Rev. 60(2)(1966):354-65. The main publications of the project are K. W. Deutsch, L. J. Edinger, R. C. Macridis, and R. L. Merritt. France, Germany and the Western Alliance: A Study of Elite Attitudes on European Integration and World Politics. New York: Scribner, 1967; K. W. Deutsch. Arms Control and the Atlantic Alliance: Europe Faces Coming Policy Decisions. New York: Wiley, 1967; B. M. Russett and C. C. Cooper. Arms Control in Europe: Proposals and Political Constraints. Denver, Colo.: University of Denver, Social Science Foundation and Graduate School of International Studies, Monograph Series in World Affairs No. 2, 1967; R. L. Merritt and D. J. Puchala, eds. Western European Perspectives on International Affairs: Public Opinion Studies and Evaluations. New York: Praeger, 1968; and J. Z. Namenwirth and T. L. Brewer. Elite editorial comment on the European and Atlantic communities in four countries. In The General Inquirer: A Computer Approach to Content Analysis, ed. P. J. Stone, D. C. Dunphy, M. S. Smith, and D. M. Ogilvie with associates, pp. 401-27. Cambridge, Mass.: MIT Press, 1966.
- 12. K. W. Deutsch. Imperialism and neocolonialism. In Peace Science Society (International) *Papers: The Fifth International Conference, November 1973,* ed. W. Isard and T. M. Fogarty 23 (1974):1-26.
- 13. K. W. Deutsch. Toward an inventory of basic trends and patterns in comparative and international politics. *Am. Polit. Sci. Rev.* 54(1)(1960):34-57.
- 14. For its underpinnings, see K. W. Deutsch, H. D. Lasswell, R. L. Merritt, and B. M. Russett. The Yale Political Data Program. In

- Comparing Nations: The Use of Quantitative Data in Cross-National Research, ed. R. L. Merritt and S. Rokkan, pp. 81-94. New Haven, Conn.: Yale University Press, 1966.
- 15. B. M. Russett, H. R. Alker, Jr., K. W. Deutsch, and H. D. Lasswell. *World Handbook of Political and Social Indicators.* New Haven, Conn.: Yale University Press, 1964. Subsequent editions are C. L. Taylor and M. C. Hudson. *World Handbook of Political and Social Indicators*, 2nd ed., New Haven, Conn.: Yale University Press, 1972, and C. L. Taylor and D. A. Jodice. *World Handbook of Political and Social Indicators*, 3rd ed., New Haven, Conn.: Yale University Press, 1983.
- 16. See D. H. Jodice, C. L. Taylor, and K. W. Deutsch, *Cumulation in Social Science Data Archiving: A Study of the Impact of the Two World Handbooks of Political and Social Indicators* (Konigstein/Ts.: Anton Hain, 1980. An earlier review is B. M. Russett. The *World Handbook* as a tool in current research. In *Aggregate Data Analysis: Political and Social Indicators in Cross-National Research*, ed. C. Lewis Taylor, pp. 143-63. Paris: Mouton, 1968.
- 17. See, for example, S. Rokkan, ed. *Data Archives for the Social Sciences*. Paris: Mouton, 1966; M. Dogan and S. Rokkan, eds. *Quantitative Ecological Analysis in the Social Sciences*. Cambridge, Mass.: MIT Press, 1969; H. R. Alker, Jr., K. W. Deutsch, and A. H. Stoetzel, eds. *Mathematical Approaches to Politics*. San Francisco: Jossey-Bass, 1973; and K. W. Deutsch and R. Wildenmann, eds. *Mathematical Political Analysis: From Methods to Substance*. In *Sozialwissenschaftliches Jahrbuch für Politik*, vol. 5, ed. R. Wildenmann. München: Günter Olzog Verlag, 1976.
- 18. Among those contemporary with Deutsch are E. P. Mickiewicz, ed. *Handbook of Soviet Social Science Data*. New York: Free Press, 1973; J. D. Singer and M. Small. *The Wages of War, 1816-1965: A Statistical Handbook*. New York: Wiley, 1972; and M. Small and J. D. Singer. *Resort to Arms: International and Civil Wars, 1816-1979*. Beverly Hills, Calif.: Sage, 1982.
- 19. See K. W. Deutsch. Toward drift models and steering models. In *Problems of World Modeling: Political and Social Implications*, ed. K. W. Deutsch, B. Fritsch, H. Jaguaribe, and A. S. Markovits, pp. 5-10. Cambridge, Mass.: Ballinger, 1977.
- 20. A festschrift From National Development to Global Community: Essays in Honor of Karl W. Deutsch, eds. R. L. Merritt and B. M. Russett.

London: George Allen and Unwin, contains, in addition to many essays on topics central to Deutsch's work, a complete bibliography of his publications through 1980. This essay is adapted from the introduction to that volume.

SELECTED BIBLIOGRAPHY

1953

Nationalism and Social Communication: An Inquiry into the Foundations of Nationality. Cambridge, Mass.: MIT Press; and New York: Wiley, 2nd ed., 1966, with a new chapter: Introduction: Some changes in nationalism and its study, 1953-1965, pp. i-iv.

1954

Political Community at the International Level: Problems of Definition and Measurement. Garden City, N.Y.: Doubleday; repr. Hamden, Conn.: Shoe String Press, 1970.

1956

An Interdisciplinary Bibliography on Nationalism, 1935-1953. Cambridge, Mass.: MIT Press.

1957

With S. A. Burrell, R. A. Kann, M. Lee, Jr., M. Lichterman, R. E. Lindgren, F. L. Loewenheim, and R. W. Van Wagenen. *Political Community and the North Atlantic Area: International Organization in the Light of Historical Experience.* Princeton, N.J.: Princeton University Press; paperback ed., 1968; repr. New York: Greenwood Press, 1969.

1959

With L. J. Edinger. *Germany Rejoins the Powers: Mass Opinion, Interest Groups, and Elites in Contemporary German Foreign Policy.* Stanford, Calif.: Stanford University Press; repr. New York: Octagon Books, 1973.

1960

Toward an inventory of basic trends and patterns in comparative and international politics. *Am. Polit. Sci. Rev.* 54(1):34-57.

With I. R. Savage. A statistical model of the gross analysis of transaction flows. *Econometrica* 28(3):551-72.

1963

- The Nerves of Government: Models of Political Communication and Control. New York: Free Press; 2nd ed., 1966, with new introduction: The study of political communication and control, 1962-1966, pp. vii-xxiii.
- With W. J. Foltz, eds. *Nation-Building*. New York: Atherton Press; Atheling ed., with foreword: The study of nation-building, 1962-1966, pp. v-xi.

1964

- With B. M. Russett, H. R. Alker, Jr., and H. D. Lasswell. *World Handbook of Political and Social Indicators.* New Haven, Conn.: Yale University Press.
- With P. E. Jacob, H. Teune, J. V. Toscano, and W. L. C. Wheaton. In *The Integration of Political Communities*, eds. P. E. Jacob and J. V. Toscano. Philadelphia: Lippincott.

1966

- Integration and arms control in the European political environment: a summary report. *Am. Polit. Sci. Rev.* 60(2):354-65.
- Comparing Nations: The Use of Quantitative Data in Cross-National Research, eds. R. L. Merritt and S. Rokkan, pp. 27-55. New Haven, Conn.: Yale University Press.

1967

- Arms Control and the Atlantic Alliance: Europe Faces Coming Policy Decisions. New York: Wiley.
- With L. J. Edinger, R. C. Macridis, and R. L. Merritt. France, Germany, and the Western Alliance: A Study of Elite Attitudes on European Integration and World Politics. New York: Charles Scribner's Sons.

1968

The Analysis of International Relations. Englewood Cliffs, N.J.: Prentice-Hall; 2nd ed., 1978.

1969

Nationalism and Its Alternatives. New York: Knopf.

1970

Politics and Government: How People Decide Their Fate. Boston: Houghton Mifflin; 2nd ed., 1974; 3rd ed., 1980.

With R. L. Merritt. *Nationalism and National Development: An Interdisciplinary Bibliography.* Cambridge, Mass.: MIT Press.

1971

On political theory and political action. Am. Polit. Sci. Rev. 65(1):11-27.

1973

Quantitative approaches to political analysis: Some past trends and future prospects. In *Mathematical Approaches to Politics*, ed. H. R. Alker, Jr., K. W. Deutsch, and A. H. Stoetzel, pp. 1-60. San Francisco: Jossey-Bass.

1977

With B. Fritsch, H. Jaguaribe, and A. S. Markovits, eds. *Problems of World Modeling: Political and Social Implications.* Cambridge, Mass.: Ballinger.

1979

Tides among Nations. New York: Free Press.

1990

Global models: Some uses and possible developments. *Int. Polit. Sci. Rev.* 11(2):165-75.