A CELEBRATION
OF
THE LIFE AND MEMORY OF

PRESIDENT EMERITUS
RICHARD M. CYERT
(1921 - 1998)

Carnegie Mellon
Of this resplendent earth,
We know this is a hard time to become a college president,
We gather, nonetheless, to bless this man on his way,
Knowing that he shall require
The wisdom of Solomon and the patience of Job,
The resourcefulness of Horatio Alger,
The endurance of Methuselah,
The loving openness of St. Francis,
And the tenacity of Winston Churchill,
The creative intellect of Einstein,
And the strength and stick-to-it-iveness of epoxyresin.
Sustain this good and courageous man
In the days and years ahead,
And surely it would not be too much to hope
For a few friends with the wealth of Croesus
And the generosity of Andrew Carnegie.
Bless this man, our friend, and the cause
Of excellence, education and truth
To which he and this university are dedicated.

Amen

A PROGRAM TO CELEBRATE THE LIFE OF RICHARD M. CYERT

PRELUDE

Allegro moderato from String Quartet in D Major
opus 65, no. 5 by Joseph Haydn

REMEMBRANCES

Jared L. Cohon
President
Carnegie Mellon University

James G. March
Jack Steele Parker Professor of International Management, Political Science,
Sociology and Education Emeritus
Stanford University

Martha Cyert
Assistant Professor, Department of Biological Sciences
Stanford University

Kalman J. Cohen
Distinguished Bank Research Professor Emeritus
Duke University

INTERLUDE

Allegro (minuet) from String Quartet in D Major
opus 65, no. 5 by Joseph Haydn

Frederick A. Rogers
Senior Vice President and Chief Financial Officer
Cornell University

Stephen E. Fienberg
Maurice Falk University Professor of Statistics and Social Science
Carnegie Mellon University

Margaret McCormick Barron
Public Affairs Consultant

Angel G. Jordan
Keithley University Professor of Electrical and Computer Engineering
Carnegie Mellon University

David Herndon
Minister
First Unitarian Church of Pittsburgh

POSTLUDE

Allegro from String Quartet in D Minor
opus 76, no. 2 by Joseph Haydn

CLOSING IMAGES OF AN EXEMPLARY LIFE

Music by The Phillips String Quartet
Eugene Phillips, violin; Christopher Wu, violin; Paul Silver, viola; Lauren Scott Mably, cello
REMEMBRANCES

Friends and colleagues of Richard M. Cyert have provided these remembrances in honor of this celebration.

The notion of Carnegie Tech as an innovative school, whose important role in the world was to innovate and demonstrate valuable new ideas and ways of doing things, was already part of the tradition; but Dick, in his successive administrative roles, brought this capability to a new peak. He strengthened already strong developments in business education, public management (SUPA), computer science and psychology, and initiated new ones: notably in biology, statistics, philosophy and research on engineering design methods, for example. Perhaps the most important was his role in enabling and pushing the computer networking of the campus during his presidency.

One thing that made all this possible was Dick’s leadership style. He did not equate a lively and productive organization with a neat one. Strict lines of command and communication were not for him. He talked with, and listened to, anyone and everyone on campus, often to the dismay of his deans and vice presidents, who thought that everything should go through “channels.” He understood how to pay for vigor at a reasonable cost in chaos. In this way, his earlier study of organizational decision making stood him in good stead, for he had learned the difference between real organizations and those drawn as charts on paper.

His style was reminiscent of a story told about Franklin D. Roosevelt. FDR told one of his Cabinet members: “You have convinced me that what you are proposing that I do is right and necessary. Now go out and stir up the citizens so that they will force me to do it.” When Dick was convinced that Carnegie Mellon could be a pioneer in bringing computer networks to college campuses, and that this was an important direction for education, he set up a committee led by Allen Newell to form a plan and to stir up enough faculty and student enthusiasm that the university would have to go ahead with it vigorously. And that is exactly what happened.

Dick was like all of us in appreciating recognition for what he accomplished, but he was not envious of recognition accorded to others, and for that reason, he was able to create teams that worked together with great enthusiasm and effectiveness; and for the same reason, he was able to tolerate and enjoy having strong-minded and vigorous people around him. Probably Lee Bach, the first dean of the Graduate School of Industrial Administration, was a role model for Dick on that (and other) dimensions, but whatever the reasons, he had this trait in greater measure than most managers of my experience.

I have made Dick sound like a paragon of all virtues. He was not, and I could recount many stories of disagreements we had (in which, obviously, I was right and he was wrong). None of us is a paragon. But to make a productive and imaginative and caring society, whether that society be a nation or a university, we need people who have the energy, the positive attitude toward life and action, the ability to use and be used by the strength of others, the curiosity that leads to insight and to warm collaboration with others, and the dedication to excellence and creativity of the kinds that Dick had. Any organization is indeed fortunate to have, from time to time, a leader with such qualities.

Herbert A. Simon
Richard King Mellon University Professor of Computer Science and Psychology
Carnegie Mellon University
You will be remembered for your profound contributions to social science. And for your administrative achievements that lifted Carnegie Mellon to the global scene.

Yet, your heart was always with people around you who are working hard. Your family, your doctoral students, young assistant professors.

My wife, Tomo, and I remember your sparkling eyes whenever you talked about your daughters. And your asking our kids every time you saw them, “Are you studying hard?”

We think you are still working hard somewhere, Dick. Thank you for your love and care, and many fond memories you left behind.

Yuji Ijiri
Robert M. Trueblood University Professor
of Accounting and Economics
Carnegie Mellon University

Dick Cyert deeply believed that Carnegie Mellon University could be the best university in the land. He set high goals and then expressed firm confidence that Carnegie Mellon would achieve them. His belief and confidence in Carnegie Mellon inspired and motivated everyone around him. More often than not the goals were realized or exceeded. Dick also believed in his friends and colleagues and fully supported them with all of his abundant talents and energy. I feel most fortunate that Dick included me and my family among his friends.

Richard L. Van Horn
Regent’s Professor and Director, MIS Division
Michael F. Price College of Business
President Emeritus
University of Oklahoma

I first met Dr. Cyert in the early 1980s upon joining Copperweld Corporation, where he had been a board member since 1972. Back then I knew Dick as a quiet and thoughtful, but strong-willed, individual, not easily dissuaded from his point of view. That was Dick Cyert, the businessman and academic.

But over the last few years I got to know more personally a man who, up against the greatest personal challenge of his life, showed that same steady resolve and optimistic perspective that had characterized our relationship on the board. His character was unbowed, regardless of his circumstances.

He was a good friend and he will be missed.

John D. Turner
President and CEO
Copperweld Corporation

The passing of Richard M. Cyert has been a great loss to his family, his friends and the world—especially the world of higher education. As an academic researcher, administrator and teacher, the results of his efforts are evident in the rise of Carnegie Mellon University to front-rank status as a research university with a further impact that has affected education—especially management education—not only in the United States but also in Australia, the United Kingdom and the Scandinavian countries. We all honor the memory of Richard M. Cyert for these contributions and their continuing effects into the future even as we mourn his loss.

William W. Cooper
Foster Parker Professor of Finance
and Management Emeritus
The University of Texas at Austin

Friends are people you like and respect, but with whom you do not always agree. Dick was my friend, and my like and respect for him began more than 30 years ago, and has been steadfast since. What disagreements we had were always over form rather than substance. Who could not respect a man who, almost singlehandedly, in a remarkably short period of time, created a new and powerful institution that itself has earned the respect of international scholars and industrialists? And at the same time stayed close to his family? I shall miss my friend both for what he did and for what he was.

Jim Taylor
Trustee Emeritus
Carnegie Mellon University
Dick and Margaret have been our friends for almost 50 years. Dick was that rare individual who combined superior intelligence with a remarkable work ethic, unselfish goals and a caring concern for his community. His many accomplishments were no surprise to those of us who worked with him. We will miss Dick but rejoice that he has set very high standards for those who follow.

Andrew W. Mathieson  
Retired Vice Chairman  
Richard King Mellon Foundation

Dr. Richard Cyert was a very talented educator and also a great baseball fan and friend of the Pittsburgh Pirates.

I first met Dr. Cyert in the spring of 1995 when I was putting together a group of investors to help purchase the Pirates. Dr. Cyert sat on the board for the previous ownership group and was very instrumental in giving me direction on how to maneuver through the very diverse political and corporate channels throughout the city.

Without Dr. Cyert’s support and introduction to many influential people throughout the city, our purchase of the Pittsburgh Pirates might not have happened. But because of his persistence and dedication, the team that he loved will be in the city that he loved for many, many years.

Kevin McClatchy  
CEO and Managing General Partner  
Pittsburgh Pirates

Dick Cyert was a great university president and a warm friend. He was instrumental in building Carnegie Mellon University to its current eminence. He had a keen sense of strategic planning, but more to the point, unlimited energy and an enthusiasm for transforming those plans into actual achievement. Certainly, Carnegie Mellon’s eminence in the arts, artificial intelligence, computer science and molecular biology reflects Dick’s leadership. He gave the university a new sense of confidence and high aspirations, which lifted the sights of the entire Carnegie Mellon community. And, notwithstanding the pressures and distance inevitably imposed by his presidential role, he retained a continued, deep identification with the faculty, staff, students and alumni.

Arnold Weber  
President Emeritus  
Northwestern University

I have lost a valued associate, and more, a friend. His uniqueness as an academician with outstanding strategic and management qualities, the very attributes leading to his successful reign at Carnegie Mellon University, served also to make him a valued member of the board of directors of American Standard Companies, Inc.

He served during a time of critical change, when the moral and ethical behavior of industry was being challenged, and global economics forced major restructuring. The broad vision and the intellectual honesty that he brought to these problems were of immense help to me and to the company.

All who were fortunate enough to work with him will miss him. I offer my sincere condolences to his wife, Margaret, and his family.

William A. Marquard  
Chairman Emeritus  
American Standard Companies, Inc.

As for most of us, several people have played critical roles in our lives. Dick Cyert was one of the most important of those people in my life. He provided me with the opportunity to, as he put it, “compete in the major leagues” of academia. And he did this with a personal courage that I’ve come to appreciate and admire more and more over time. In 1963, in his first year as dean of the Graduate School of Industrial Administration (GSIA), Dick invited me to a job interview at the AEA winter meeting on the strength of a recommendation by Bill Starbuck, who was then only a graduate student. Several weeks later Dick offered me a job based on that interview alone:
no visit to GSIA, no job talk, just his own evaluation. And a year later he hired Nancy Schwartz, my co-author for the next 17 years, in the same way. Each of Dick’s junior hires in 1963 have gone on to chaired professorships and one, Bob Lucas, was awarded the Nobel Prize.

Morton J. Kamien
Joseph and Carole Levy Distinguished Professor of Entrepreneurship
Northwestern University

Dick was a man of outstanding attributes. He was a scholar, an intellect, a corporate leader, a community leader and a man with deep family values. Carnegie Mellon University and the City of Pittsburgh are richer because of Dick’s role in the affairs of both. A man of integrity, leadership, intellect, and blessed with the greatest quality of all — common sense. Dick was a faithful friend as he was always faithful to his Margaret and his family. Carnegie Mellon will miss his guidance as will the City of Pittsburgh but heaven will be enriched. As a human being, Dick Cyert was a 4.0 all the way.

David M. Roderick
Retired Chairman of the Board and CEO
USX Corporation

Richard Cyert was an extraordinary leader! His vision for Carnegie Mellon drove all of us far beyond our individual goals toward a new level of excellence for the whole university. He gave department heads the elbow room to make change and to move their units forward. He allowed us to take risks and encouraged us to strive for quality. Watching him give 200 percent all the time inspired us to do the same. His leadership shines for me as brightly today as ever before.

Marilyn Taft Thomas
Director of Graduate Studies, School of Music
Carnegie Mellon University
Richard Michael Cyert died on Wednesday evening, Oct. 7, at his home in Fox Chapel following a long illness. He is survived by his wife of 52 years, Margaret Shadick Cyert, and their three daughters: Lynn Anne Cyert, Ph.D., Lucinda Cyert Steffes and Martha Cyert, Ph.D. He is also survived by three grandsons: Michael Steffes, Jacob Simon and Max Simon, and two sisters: Constance Conradi and Charlotte Wilson. Dr. Cyert was a Phi Beta Kappa and a member of the First Unitarian Church and the Duquesne Club.

Dr. Cyert, president emeritus and Richard M. and Margaret S. Cyert professor of economics and management at Carnegie Mellon, is internationally recognized for his work in economics, behavioral science, statistics and management. He became Carnegie Mellon’s sixth president in July 1972. Through Dr. Cyert’s leadership, Carnegie Mellon became financially solvent, strengthened its educational programs and significantly expanded its research.

During his tenure, Carnegie Mellon enhanced its reputation as one of the nation’s leading educational and research institutions. Dr. Cyert has been described as “the archetype of the new breed of leaders at American universities” by The New York Times.

In “Searching for Academic Excellence,” a book published by the American Council on Education in 1986, the authors stated that “Carnegie Mellon has been repeatedly noted for its strategic planning and has been a model for colleges and universities across America. In addition, Richard Cyert has been widely recognized for raising Carnegie Mellon to national stature.”

Dr. Cyert retired from the presidency of the university on June 30, 1990, when he returned to faculty life. From 1990-92, he headed the Carnegie Bosch Institute, endowed by Germany’s Bosch Corporation to study and improve international management.

Dr. Cyert was at Carnegie Mellon for 50 years. He joined the Carnegie Mellon faculty as an instructor of economics in 1948, and rose through the ranks to professor of economics and industrial administration before being appointed dean of the William Larimer Mellon Graduate School of Industrial Administration (GSIA) in 1962.

Under his direction, the “management game” for business education was developed and expanded. It is now a model for other schools and is used extensively throughout the U.S. and the world.

Dr. Cyert has authored or co-authored 12 books and has written more than 100 articles for professional journals in the fields of economics, behavioral science, management and statistics. His books and articles have been used widely in universities and colleges in the U.S. and abroad. “A Behavioral Theory of the Firm,” one of Dr. Cyert’s most recognized texts, has been named a Citation Classic by the Institute for Scientific Information.

Dr. Cyert has been a consultant in economics and management science in Belgium, Germany and Australia. He holds honorary doctorates from the University of Gothenburg, Sweden (1972), the University of Leuven, Belgium (1973) and several colleges in the United States.

He was elected a fellow of the Econometric Society, the American Association for the Advancement of Science and the American Statistical Association. Dr. Cyert received a Ford Foundation Research Fellowship (1959-60) and a John Simon Guggenheim Memorial Foundation Fellowship (1959-60), where he was able to spend a year in Cambridge, England, at the university.

Starting in 1969, Dr. Cyert played a significant role—along with Gaston Durinck, head of the Foundation-Industry in Brussels, Belgium; Marshall Robinson, vice president of the Ford Foundation; George Schultz, then director of the Office of Management Budget; and Richard Van Horn, associate dean at GSIA—in developing a plan for a cooperative institute that would work with European industries to create a doctoral program in management for the European community. In 1971, this effort resulted in the establishment of the European Institute for Advanced Studies and Management in Brussels.

Dr. Cyert has been a director and consultant for numerous businesses, for state and federal governments, and for nonprofit organizations. In 1986, Pennsylvania Governor Robert P. Casey named him to chair a committee to find a director for statewide economic development. In 1980, he headed Governor Dick Thornburgh’s Tax Commission to review and make recommendations for Pennsylvania’s tax laws.

He has been honored frequently for his leadership role in the economic revitalization of Western Pennsylvania. Dr. Cyert participated in working with and advising numerous organizations, including the Pittsburgh Pirates and the Pittsburgh Cancer Institute.

Mrs. Cyert attributes much of Dr. Cyert’s success in leadership to the fact that he included all members of the Carnegie Mellon community in his extended family. He was, in fact, the son of two orphans, who were placed in Winona, Minn., and he was raised there. He benefited from policies of the New Deal and earned his way through the University of Minnesota as a page in the library. He acquired his Ph.D. at Columbia University under the G.I. Bill. He was an officer in the U.S. Navy in World War II.

Memorial contributions can be made to the Carnegie Mellon University libraries or to the Pittsburgh Cancer Institute at the University of Pittsburgh.

This biography was provided by the Cyert family.
IDEAS AND WORK OF RICHARD M. CYERT

by Richard H. Day and Shyam Sunder

Richard M. Cyert is one of the two central figures in the development of the behavioral theory of the firm. He and James G. March gave body to the black box of the neoclassical firm in the form of empirically relevant, process-oriented models of concrete decisions in organizations. This achievement provided a solid theoretical foundation for the development of management and created a bridge between economics and organizations theory as well as to the behavioral sciences. In developing the behavioral theory of the firm, Cyert also established a firm tradition of field-based observation and computer simulation as important research tools for the study of markets and organizations.

But his contributions are more varied; they include applications of Bayesian theory to economics, statistical sampling in accounting and auditing, experimental economics and the application of strategic management principles to higher education.

1. Behavioral Theory of the Firm

Cyert's overarching contribution to the economic sciences has been to turn the lights on inside the black box of the neoclassical model of the firm. He led and enabled social scientists to explore and understand the internal decision-making processes of the firm within the context of factor and product markets in which it operates.

The neoclassical abstraction of the firm is an entrepreneur who maximizes profit subject to various resource constraints. This model yielded powerful results about the role of firms in determining prices and allocations in competitive and oligopolistic markets.

In spite of its simple elegance, the neoclassical model had its weaknesses. Many important classes of externally observable actions of firms are difficult to understand in terms of this model. And as business schools began to flourish after World War II and to develop serious research programs into the management process, the neoclassical model was wanting as a foundation for building a theory of management. Cyert, in partnership with March, addressed this problem by building a behavioral theory of the firm on specific, empirically verifiable assumptions about the behavior of the decision makers.

Cyert had studied price behavior of oligopolies at Columbia and began to wonder if the traditional models could adequately capture the behavior of markets in which a small number of large firms compete. "It seemed to me," he said, "that the way information was gathered and processed within the organization had to be incorporated into the decision-making process." He grew uncomfortable following the beaten path of mainstream theory.

A teaching position at Carnegie Mellon University (then Carnegie Institute of Technology) brought him into contact with Herbert Simon and organization theory. In this environment, his doubts about the traditional oligopoly theory led him to ask if an understanding of the organization structure and information flow within the firm may help understand its behavior in markets. He discussed the idea with an enthusiastic colleague, March, and a remarkable partnership and friendship was started. They published their first co-authored paper, "Organizational Behavior and Pricing Behavior in an Oligopolistic Market" in the American Economic Review in 1955. In approximately 10 years, they completed their landmark work. "A Behavioral Theory of the Firm."

The result of this decade-long research program was the development of "an empirically relevant, process-oriented, general theory of economic decision making by business firms." In doing so, they helped shift the primary unit of theoretical as well as empirical analysis from industry to the firm. They linked economics and organization theory with enough structure on which a meaningful theory of management could be built in the ensuing quarter century.
2. Bayesian Statistics and Economic Theory

About the time "A Behavioral Theory of the Firm" went to press, Cyert became the dean of the Graduate School of Industrial Administration and shortly thereafter March left for California. This phase of Cyert’s work came to a close. Again, Cyert returned to his thoughts from his thesis on oligopoly theory. Traditional theory not only lacked any specification of the decision process, it was also bereft of any learning on the part of the firm or its decision makers. Models like the “kinked demand curve” could not be sustained under learning. This was a natural direction to build on "A Behavioral Theory of the Firm." In the late sixties, in his Saturday meetings with Morris DeGroot, a distinguished Bayesian statistician, he set out to show that Bayesian learning creates an empirically adequate account of economic behavior. They published their first paper in 1970, and their book, “Bayesian Analysis and Uncertainty in Economic Theory” in 1987. Their sequential decision processes brought the same power to dynamic models as marginalism had brought to the static models 100 years earlier.

Cyert built on his research with March by giving a concrete shape to the idea of organizational learning. Bayesian statistics provided both the framework as well as the discipline for the models. The major contribution of this work is to flesh out what had previously been bare-bones duopoly theory in the context of more realistic assumptions about the behavior of the duopolists. While this work was not accompanied by field work in parallel, Cyert continued to use his observations as the member of the board of directors of several large corporations as guideposts for his work on how firms learn and behave. He used this experience as a director to develop a control theory of the firm that addresses the problem faced by the upper management in using imperfect instruments to steer the firm to meet its targets.

3. Statistical Sampling in Accounting and Auditing

Cyert’s third important contribution is in business economics, as the pioneer, with Robert M. Trueblood, of statistical sampling in accounting and auditing. From its origins in his 1953 work, statistical sampling has spread to cover virtually all aspects of accounting and auditing, bringing great economies in effort and time spent.

What is the contribution of business economics research to society? Not all research develops ever more clever techniques of playing zero-sum games in the world of business. “Development and application of statistical sampling in accounting and auditing” by Cyert and his various colleagues (William W. Cooper, H. Justin Davidson, Gerald L. Thompson and Trueblood) is a frequently cited exception. Beginning in 1953, Cyert and Trueblood (an accountant who went on to become a leader of the profession in the U.S.) teamed up to pool their statistical and accounting expertise to improve the efficiency of bad debt estimates of accounts receivable. In this very first application, they cut the amount of work needed by an order of magnitude. They pioneered the application of statistics to accounting and published the first books (including a textbook) on the topic. Statistical sampling has revolutionized accounting and auditing practice in all parts of the world, saving billions of dollars worth of accountants’ effort and time.

4. Computer Simulation

Carnegie Mellon was one of the first universities in the U.S. to get a computer. Since the computer was inside the Graduate School of Industrial Administration where Cyert worked, he and his graduate students started using computers for conducting their research experiments for testing their process-oriented ideas about the behavioral theory of the firm.
Algorithmic languages were ideally suited for translating the ideas about decision processes and information flows into computer programs for a speedy determination of the consequences of their process hypotheses. The Carnegie Tech Management Game and other advanced uses of computers in all aspects of economics and management education followed.

Cyert developed computer simulation of organizations (also called computational experiments) as a new method of economics and social science research. Today, computer simulations have become an essential tool in the methodological arsenal of all social sciences. During his presidency at Carnegie Mellon, these developments led to the creation of a world-class School of Computer Science.

5. Experimental Economics

Cyert was an early and vigorous proponent of experimental economics. In 1955, Cyert and March wrote: "In general, economists have not utilized laboratory studies to validate propositions concerning firm behavior to the same extent that students of the other social sciences have."

Laboratory experiments constituted one of the three empirical legs of the behavioral theory of the firm. Cyert, March and William Starbuck (1961) used the laboratory to study the effect of internal communications on decision processes. Cyert and Lester Lave (1964) conducted experiments to study collusion and conflict in prisoners' dilemma games. In the summers of 1964 and 1965, Cyert, Lave and Vernon L. Smith organized Faculty Research Workshops in Experimental Economics at Carnegie Mellon, with support from the Ford Foundation. This early experimental economics tradition continues to this day at Carnegie Mellon, as the applications of experimental methods to all aspects of economics have blossomed in the interim.

Field observation of decision making in actual organizations was an essential part of the behavioral theory of the firm agenda. The rules of behavior abstracted from this observation were then used to build computer simulation models of organizations to test out the predicted behavior of organizations under such rules. Examination of human behavior under laboratory organizational settings was the natural next step in this development. Cyert took these steps in the early sixties just as the development phase of the behavioral theory of the firm was close to completion. Smith and Charles Plott vigorously pursued experimental research in the seventies and helped develop it into a form that made it increasingly acceptable as a mainstream research tool in economics.

6. Economics, Strategic Management and Higher Education

During his 10 years as the dean of the Graduate School of Industrial Administration and 18 years as the president of Carnegie Mellon, Cyert pioneered the application of economics to develop a strategy for the management of higher education through his writings and speeches. He practiced and preached the concept of comparative advantage from international trade as a means of organizing the university. He imbued this concept in the minds of his deans and department heads.

After leaving the presidency, Cyert broke new ground with his co-authors in developing the field of economics and strategy using significant new analytic approaches. In the past this field has been dominated by case studies.

How to design organizations to promote innovation has been a major theme in Cyert’s scholarly writings, as well as in his work. The university as a whole
followed good economic theory, and the stature of Carnegie Mellon was raised to the point where it ranks among the best technologically oriented and innovative universities in the world. Cyert has been able to be both a pioneer and a successful practitioner of economics in his various functions as scholar, educational manager and innovator.

"The first decade of the new school that Cyert and his colleagues founded at Carnegie (The William Larimer Mellon Graduate School of Industrial Administration) was marked by an extraordinary congregation of men of ideas. In another place and time, these diverse ideas might have clashed and retreated to their own cubicles of academic disciplines. It was, perhaps, the fortuitous presence of unique personalities in this group of scholars that closed the exits for retreat and forced the ideas to clash—even spark—then fuse and generate new disciplines and lines of research."

Day and Sunder