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# 1

## Communication of Innovations: A Journey with Ev Rogers

JAMES W. DEARING *and* ARVIND SINGHAL

WHEN WE WERE GRADUATING WITH OUR DOCTORATES IN COMMUNICATION, Ev Rogers was amassing papers and laying the groundwork for what would become his 1994 book, *A History of Communication Study*. He had a number of other projects ongoing as well, including a few with us, but there was a special shimmer in his eyes when he was on the trail of an account or document that he expected might illuminate some forgotten or overlooked aspect of the founding of the field of communication. Ev had always been keen on history, on names and places, precedents and consequences, and especially the social connections that tie people together and might explain aspects of their character and accomplishments. He'd predictably put his students on the spot publicly ("So Tom, perhaps you could tell our guests about the correspondence between the fields of statistics and communication as they relate to agricultural science?"). But pulling the pieces together for his history book was a special self-indulgence for him. What historically-minded sociologist wouldn't relish weeks in the library of the University of Chicago? Or rummaging through the archives of the Rockefeller Foundation? Or interviewing Robert K. Merton about his first meeting with Paul F. Lazarsfeld and the genesis of focus group research?

For a writer, even a collaborative and social one like Ev, solitude is bliss. Ev collaborated so much, with so many students and colleagues and practitioners, and served in so many group processes with advisory boards and in consulting and with universities and professional societies, that the opportunity to go away and think and interview and read and write—by himself—turned into an intellectual treasure hunt



**Plate 1.1**

The co-editors of this volume, Singhal (left) and Dearing (right), with mentor Ev Rogers during their Ph.D. graduation at the University of Southern California in 1990

**Source:** Personal files of author Singhal

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almost too good to be true. The unburnished nuggets he'd turn up and share with his students and colleagues—an insight here, an explanation there—and his glee in their revelation, made it clear to us that Ev Rogers would have made a hell of a historian.

Or even a novelist.

Instead, he became a social scientist! A distinguished one!

## **A positivist**

Ev's orientation to social science was positivist in the best sense of the term. He believed that academics could affect change, not only study it; he believed that practitioners had much to teach social scientists since practitioners experimented day in and day out in the real business of social betterment; and he embraced the assumption that the generalization of lessons across the specifics of communities,

## A farm boy who almost never went to college

When Ev Rogers passed away on October 21, 2004, his ashes were returned—according to his wishes—to the family's Pinehurst Farm in Carroll, Iowa, where he was born on March 6, 1931 (see Shefner-Rogers, Chapter 10). In a career spanning 47 illustrious years, Ev wrote 36 books, 138 book chapters, 176 peer-reviewed journal articles, and over a hundred research reports.

Who would now believe that Ev almost never went to college? During a flight between Rio de Janeiro and Sao Paulo in March 2001, Ev told Arvind that he would have stayed home and farmed if it were not for Pep Martens, his high school vocational agriculture teacher. One day in May 1948, Martens packed a bunch of five promising seniors in his car, including Ev, and drove them to Ames, Iowa, the home of Iowa State University. It was Ev's first visit to Ames, located 60 miles from the family farm. Ev liked Ames, and decided to pursue a degree in agriculture.

Iowa State in those years had a great intellectual tradition in agriculture and in rural sociology. Numerous agricultural innovations were generated by scientists at Iowa State. Rural sociologists—including Bryce Ryan and George Beal, Ev's doctoral advisor—were conducting pioneering studies on the diffusion of these innovations, like the high-yielding hybrid seed corn, chemical fertilizers, and weed sprays. Questions were being asked about why some farmers adopted these innovations, and some didn't. These questions intrigued Ev.

Back at his farm, Ev saw that his father loved electro-mechanical farm innovations; but was resistant to biological-chemical innovations. For instance, Ev's father resisted adopting the new hybrid seed corn, even though it yielded 25 percent more crop, and was resistant to drought. However, during the Iowa drought of 1936, while the hybrid seed corn stood tall on the neighbors' farm, the crop on the Rogers' farm wilted. Ev's father was finally convinced. It took him eight years to make up his mind.

These questions about innovation diffusion, including the strong resistances, and how they could be overcome, formed the core of Ev's graduate work at Iowa State University in the mid-1950s. Ev's doctoral dissertation sought to analyze the diffusion of the 2-4-D weed spray (and a bunch of other agricultural innovations) in Collins, Iowa, not far from the family farm. In the review of literature chapter,

## BOX—CONTINUED

Ev reviewed the existing studies of the diffusion of all kinds of innovations—agricultural innovations, educational innovations, medical innovations, and marketing innovations. He found several similarities in these studies. For instance, innovations tend to diffuse following an S-Curve of adoption.

In 1962, Ev published this review of literature chapter, greatly expanded, enhanced, and refined, as the *Diffusion of Innovations* book. The book provided a comprehensive theory of how innovations diffused, or spread, in a social system. The book's appeal was global. Its timing was uncanny. National governments of countries in Asia, Africa, and Latin America were wrestling with how to diffuse agricultural, health, and family planning innovations in their newly-independent countries. Here was a theory that was useful. During the 1960s and 1970s, for every copy of *Diffusion of Innovations* that was purchased in the US, Ev estimated that four were being purchased in the countries of Asia, Africa, and Latin America.

When the first edition of *Diffusion of Innovations* was published, Ev was 31 years old. But he had already become a world-renowned academic figure. "It became my calling card for the next four decades," noted Ev in a lecture at Ohio University in October 2003. According to the Social Science Citation Index, *Diffusion of Innovations* is the second most cited book in the social sciences.

Not bad for a farm boy who almost did not go to college!

populations, times, and topics for the improvement of both scholarly understanding and social conditions was the very purpose of social science. In this, he was a product of those who had come before him and whose ideas formed the basis of his graduate and continuing education: Sir Francis Bacon, who foresaw the policy and social improvement functions that a science of society might fulfill; August Comte, the founder and proponent of sociology and of positivist philosophy; and Georg Simmel, Robert E. Park, and Kurt Lewin, whose ideas and studies of the dependence of the individual on one's immediate network of interpersonal relations foreshadowed the diffusion paradigm's role accorded to local informal opinion leaders and peers.

The influence of George Beal, Ev's dissertation committee chair, was strong on the student's choice of dissertation, which was completed in 1957 as *A Conceptual Variable Analysis of Technological Change*,



**Plate 1.2**

Between his undergraduate and graduate degrees at Iowa State University, Ev Rogers served in the United States Air Force during the Korean War

Source: Ev Rogers. Copy provided to author Singhal in 2000

chapter two of which became the basis for the 1962 publication *Diffusion of Innovations*. In the dissertation chapter, the giant dwarfing the doctoral candidate-cum-author was Robert K. Merton, whose ideas about the role of theory and testable hypotheses in relation to the accumulation of knowledge were used by Ev to justify the empirical approach taken. The antagonist pitted against Merton was Herbert Blumer, the University of Chicago sociologist and star student of George Herbert Mead, whose critical stance against variable-based analysis for the study of social interaction had been well publicized and debated in departments of sociology and rural sociology. In later years, Ev would come to carry out some of his empirical studies in ways that Blumer would have recognized as similar to symbolic interactionism. Yet Merton's influence on Ev never waned.

Merton's concept of "theories of the middle range" that were not grandiose to the point of being all-encompassing and untestable, nor strictly derived from logical positivism such that data could be devoid of theorizing, captured what Ev Rogers set out to do with abstracting a general model of diffusion based on empirical work from various disciplines. Ev's dissertation committee at Iowa State argued against such extrapolation beyond farmers' adoption of agricultural innovations, but the eventual surprisingly warm reception by practitioners and academics alike to the publication of *Diffusion of Innovations* made a strict delimited disciplinary interpretation of diffusion a mute point. Ev had promulgated an interdisciplinary paradigm of innovation

diffusion. Others hovered importantly around the many unresolved issues of the process of diffusion, notably Elihu Katz, James Coleman, Nan Lin, Wilbur Schramm, Bradley Greenberg, Daniel Lerner, Steve Chaffee, Inayatullah, Syed Rahim, Lawrence Green, Vijay Mahajan, Lawrence Mohr, Marshall Becker, Eric von Hippel, Jack Walker, Paul Berman, Paul Deutschmann, and Ithiel de Sola Pool, but Ev's prolific and clear prose, doctoral students (he guided some 150 doctoral dissertations in his career), accessibility, and humbleness put other scholars in the paradigmatic position of often reacting to him when they wrote of diffusion. He worked nonstop, leading and collaborating on studies in international development, rural sociology, and soon, technological adoption and the diffusion of mass mediated news.

Ev's pursuit of generalizable knowledge a.k.a. Merton meant that he needed an intellectual home that was sufficiently broad so that he could study the spread of any type of innovation. Diffusion more than innovation was his focus. The prize question was how well the diffusion process that he along with others were busily codifying mapped across fields and disciplines. The fewer the qualifications that had to be made, the better. More qualifications meant less parsimony, and would reduce the eloquence of the theory. Communication, a derivative field institutionalized by Wilbur Schramm at the University of Illinois in the late 1940s, and then solidified at Stanford University in the mid-1950s, was sufficiently new and undetermined so as to suit the proclivities of such a pursuit. The nascent field had a professional emphasis stemming from journalism and a performance emphasis stemming from rhetoric and speech. Growth of mass communication in the United States and overseas was rapid; new communication technologies full of promise and uncertainty. The largest private foundations were onboard and willing to gamble. The young communication scholars took on the monumental challenges of international development and public health improvement through diffusion-informed communication campaigns. It was a perfect match, even if the results would prove disappointing.

Over the years, Ev would exhibit a knack for joining universities just prior to their crests of communication study prominence (Table 1.1). His arrivals, of course, contributed mightily to the reputation of communication study at Michigan State, University of Michigan, Stanford, University of Southern California (USC), and

**Table 1.1**  
Key events in Ev Rogers' life

March 6, 1931	Born, Carroll, Iowa
1946-44	One-room country school in Carroll, Iowa
1944-48	Carroll High School, Carroll, Iowa
1948-52	Iowa State University, Ames, Iowa, B.S., Agriculture
1952-54	United States Air Force, Second/First Lieutenant, Korean War
1954-57	Iowa State University, Ames, Iowa, MS and Ph.D., Rural Sociology
1957-63	Assistant Professor and Associate Professor of Rural Sociology, Ohio State University
1962	<i>Diffusion of Innovations</i> (first edition) published by Free Press
1963-64	Fulbright Lecturer, Faculty of Sociology, National University of Colombia, Bogotá
1964-73	Associate Professor and Professor of Communication, Michigan State University
1973-75	Professor of Population Planning in the School of Public Health, and Professor of Journalism, University of Michigan
1975-85	Janet M. Peck Professor of International Communication, Institute for Communication Research, Stanford University
1981	Fulbright Lecturer, French Press Institute, University of Paris, Paris, France
1985-92	Walter H. Annenberg Professor of Communication, Annenberg School for Communication, University of Southern California
1991-92	Fellow, Center for Advanced Study in the Behavioral Sciences, Stanford, California
1993-2004	Professor and Chair, Regents' Professor and Distinguished Professor, Department of Communication and Journalism, University of New Mexico
1996	Ludwig Erhard Professor, University of Bayreuth, Bayreuth, Germany
1998	Wee Kim Wee Professor of Communication, School of Communication Studies, Nanyang Technological University, Singapore
1999-2000	Visiting Professor, Center for Communication Programs, School of Hygiene and Public Health, Johns Hopkins University
2000-2001	Nanyang Professor, School of Communication Studies, Nanyang Technological University, Singapore
2004	Distinguished Professor Emeritus, Department of Communication and Journalism, University of New Mexico
October 21, 2004	Died, Albuquerque, New Mexico

Source: Ev Rogers' curriculum vitae



**Plate 1.3**

Ev Rogers conducting a diffusion workshop at CIESPAL, Ecuador, in the late 1960s. Ev was fluent in Spanish since the early 1960s, when he served as Fulbright Lecturer in Bogota, Colombia

**Source:** Ev Rogers. Copy provided to author Singhal in 2000

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University of New Mexico, yet he was an acute judge of potential. He spoke of communication departments and their universities in terms of organizational histories, of their rise and fall, of better times and worse times to be at a particular place. Ev was always eager to share with students his perceptions of a hot department “on the make.” Bright students, attention, and resources flowered about him, and followed him when it was time to depart.

### **Linking macro and micro levels of diffusion**

Though Ev Rogers would remain for decades the single most recognizable name associated with the diffusion of innovations, many scholars took up the game. And many diffusion scholars played a game that was different than Ev’s. In particular, some working in the paradigm took a macro structural perspective on diffusion, especially those in population planning, demography, economics, and international relations. Anthropologists studying the spread of culture and



linguists studying the spread of language also preferred a structural perspective on diffusion, which conceptualized waves of innovations washing over societies. To these structuralists, the study of diffusion was the study of social change writ large. For them, units of adoption were countries or cultures.

This macro orientation to diffusion was highly enticing to scholars because of its deductive and parsimonious potential based in a simple mathematical law of nature that describes a logistic (S-shaped or exponential) growth curve. Marketing scientists, epidemiologists, demographers, and political scientists instantly appreciated the predictive potential and eloquence of the population perspective on diffusion. Mathematical modeling formed the basis of this work, most of which continues today apart from more qualitatively informed micro-level studies of diffusion. A large part of Ev's contribution was to explain how this macro process of system change was linked to micro (individual and group) level processes. And impressively, the explanation offered showed both how micro-level units of adoption (usually people) were influenced by system norms, as well as how system change was dependent on individual action. Diffusion was one of the very few social theories that persuasively linked macro with micro-level phenomena.

But if you grow up watching farmers not adopt new technology as Ev did on an Iowa farm—and in his eyes thus not prosper as they might have done—then sociology comes alive in the study of individual behavior in relation to immediate others. The structural study of abstract systems was not his preference, or at least not what he spent his time doing. Ev focused on community-level phenomena, on interpersonal networks, and on the boundedness of such social systems. They were open systems to be sure—how could that not be acknowledged in the era of television and satellites—but their strength, their resilience to keep out the many worthless innovations and to adapt the few good ones, rested in interpersonal relationships that functioned as very effective filters and gatekeepers. If diffusion is about change and destruction and uncertainty, then interpersonal networks and opinion leaders were about stability, normative influence, and the measured appraisal of new ideas. Though he would go on to study diffusion across nations as well as technology transfer

## Ev Rogers' distinguished career

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Some of the key recognitions bestowed on Ev Rogers included:

- Paul D. Converse Award of the American Marketing Association for Outstanding Contribution to the Science of Marketing (1975 and 2004).
- Distinguished Service Award, International Communication Division, Association for Education in Journalism and Mass Communication (1986).
- Distinguished Rural Sociologist Award, Rural Sociological Society (1986).
- *Diffusion of Innovations* designated as a Citation Classic by the Institute for Scientific Information, Philadelphia (1990).
- Distinguished Service Award, Association for Education in Journalism and Mass Communication (1993).
- *Diffusion of Innovations* selected by *Inc.* magazine as one of the 10 classic books in business (December 1996).
- Honorary Doctorate in Political Economy, Ludwig-Maximilians Univ. of Munich (1996).
- Wayne Danielson Award for Distinguished Contributions to Communication Scholarship (1999).
- Outstanding Health Communication Scholar Award, International Communication Association/National Communication Association (1999).
- Lifetime Achievement Award, Division of Intercultural and Development Communication, International Communication Association (2000).
- First Fellows Book Award in the Field of Communication (for *Diffusion of Innovations*), International Communication Association (2000).
- *Diffusion of Innovations* named as a Significant Journalism and Communication Book of the Twentieth Century by Journalism and Mass Communication Quarterly (2000).
- National Communication Association (NCA) Applied Communication Division's Distinguished Book (for *Entertainment-Education: A Communication Strategy for Social Change*, with Arvind Singhal) (2000).

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- Lewis Donohew Outstanding Scholar in Health Communication Award (2002).
- CHOICE Outstanding Academic Title Award (for *India's Communication Revolution: From Bullock Carts to Cyber Marts*, with Arvind Singhal) (2002).
- Univ. of New Mexico 47th Annual Research Lectureship (2002).
- National Communication Association (NCA) Applied Communication Division's Distinguished Book (for *Combating AIDS: Communication Strategies in Action*, with Arvind Singhal) (2004).

**Source:** Ev Rogers' curriculum vitae

within firms, it was understanding the social dynamics of community-level systems that was Ev's bread and butter (or *dosa* and coconut *chutney*, as the research site necessitated). In his thinking and approach to the study of innovations, Ev reflected the moral priorities of Amitai Etzioni, that community was a base of strength and support for individuals. Diffusion, Ev saw, could be a means of community capacity building just as it could be a divisive cumulative process by which the haves increasingly left the have-nots behind. To someone who had been a farm boy, the ideas of E. F. Schumacher, Garrett Hardin, and Muhammad Yunus made intuitive sense. Organizing at the community level was key, and the application of diffusion concepts was a means to that end.

Over the years, many observers and acquaintances of Ev's have asked us about him. "How does he do it?" they wanted to know. "How does he write so much? How does he know so many people? How does he know a story about everything?" Ev was a very driven man; driven, perhaps, by early formative experiences of growing up during the American depression, of going without and being hungry. When we knew him he seemingly had it all. But certainly that condition had not characterized his early years. Our best approximation of why he was the way he was harkens back to Max Weber's captivating speech at Munich University in 1918, "Science as a Vocation." In that speech, the great sociologist who would go on to so influence Merton who in turn would go on to so influence Rogers, laid out a compelling and simple formula for progress in the sciences: enthusiasm + hard work = the bright idea. To Weber, the key was intrinsic motivation, genuine

interest in a topic under study, what he labeled “the inward calling for science”:

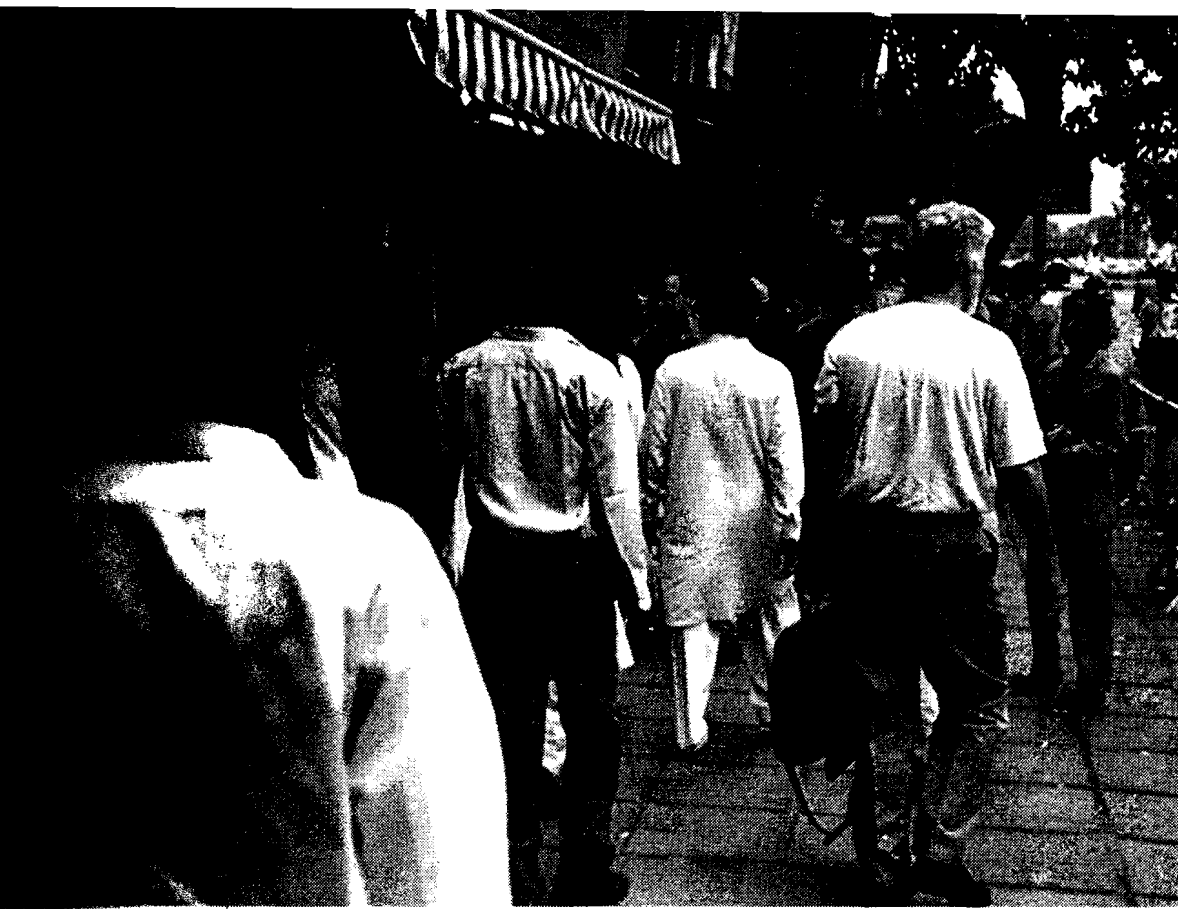
The idea is not a substitute for work; and work, in turn, cannot substitute for or compel an idea, just as little as enthusiasm can. Both, enthusiasm and work, and above all both of them *jointly*, can entice the idea .... Ladies and gentlemen. In the field of science only he who is devoted *solely* to the work at hand has “personality.” And this holds not only for the field of science; we know of no great artist who has ever done anything but serve his work and only his work. (Gerth and Mills, 1946: 136–37; italics in the original.)

By Max Weber’s definition, Ev Rogers had “personality.” And this “personality” was duly recognized by many.

## About this volume

Together, the two of us have sometimes marveled at the diversity in perspective that has blossomed in the work of Ev’s colleagues and students. The point of his extensive relationships, frequent collaborations, and expert mentoring seems to have been a sort of propagation with natural selection. While some of his students continue to conduct what they explicitly label diffusion research, others have used their interactions with Ev to color and enrich related paradigms, including some that they themselves founded. In both cases, the influence of Ev’s work and companionship, as attested to by the contributors to the present volume, is considerable.

Our objective while planning for this book was a volume that would honor the memory and contributions of Ev Rogers. What we have got is something different. The book in your hands achieves its objective but goes considerably further as well. Taken together, the chapters that follow comprise an intellectual landscape about social change that illustrates where Ev’s students and colleagues have gone with their own scholarship and practice in communication, management, marketing, development studies, and health promotion. What you will read is a remembrance but more so a starting point; less a stock-taking and more a guide for future scholarship and practice.



**Plate 1.4**

Ev Rogers (right) on Janpath, the famed shopping street in New Delhi, India, in 1993. Notice his signature leather bag filled with papers, manuscripts, and readings. In a spare moment while shopping, Ev would pull out a manuscript and get to work. In his right hip pocket is his appointment book. He had a PDA (personal digital assistant) but never gave up his appointment book

**Source:** Personal files of author Singhal

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We think Ev would be very pleased with the prospective nature of the result.

How will history treat Ev Rogers? The answer is more obviously positive in cases of prolific scholars who fall centrally within one discipline or field, and are claimed by others working within that tradition as their own. Ev was communication-centric, but this modest field itself is marked by fissures and weak links across sub-specialties. Moreover, Ev was not clearly associated with one of the primary divisions in the field of communication such as mass communication, interpersonal communication, or organizational communication. His main intellectual contribution, the synthesis of the diffusion of innovation paradigm, was fashioned to span and tie together disparate disciplines and fields; thus it was bound to tie together (or fall between) the within-field specialties in communication as well. At a recent talk

about diffusion theory, one of us was asked by a natural science participant if anything other than the diffusion of innovations was taught in schools of communication in the United States. To us, the question is of course humorous, for in most communication units diffusion does not constitute its own course, let alone define the unit's purpose. We expect that Ev Rogers and his work will continue to be referred to, cited, and claimed as kin by communication scholars and those in other disciplines and fields. The extensiveness of the network of colleagues and students he worked with would seem to suggest as much. Yet the academy, in particular, is not known for celebrating, rewarding, and remembering inter-disciplinarians.

Thanks Ev, for straddling the lines.

## Reference

Gerth, H. H. and C. W. Mills (trans.). 1946. *From Max Weber: Essays in Sociology*. New York: Oxford University Press.