Primary Concerns of Faculty

According to the consultant’s report, the faculty of the Department expressed concerns about the question of administrative separation. Brodhead stressed that the information services “should compete as an adjunct to all departments, not as an arm of one.” He also pointed out that many, if not most, of the departmental faculty disagreed with this position and voiced the following concerns:

• What will be the role of those faculty members who have traditionally devoted a large portion of their time to the service mission of the Department?
• The faculty needs to be involved in the work of the support function in order to keep their own skills up to date so as to be more effective teachers, and to keep their skills available to the support organization.
• The faculty will no longer be able to utilize support personnel in either the in-service or resident instruction programs as resource people as they have in the past.
• The support area will no longer be available as a laboratory for Communication Arts students.
• The academic program needs the “weight” of the support function in order to compete effectively for its fair share of resources to fund a quality academic program.
• Association of the support function with the academic part of the Department gives more status to the support personnel.

Brodhead argued that “the picture of an academic program as a hitchhiker on a support function is one that is not complimentary. It is an injustice to the academic program to have it hidden behind a much larger support operation.”

Consultant’s Final Report

The consultant’s recommendations, along with notations by the Department after submission of his final report follow:

Organization
A. “That the units normally referred to as ‘service units’ be administratively separated out of the Department of Communication Arts to form an Educational Information Support Group (EISG) to be headed by a Director who is responsible to a Board composed of the deans and directors of the major supported organizations.”
(Notation: The separation was approved by the administration with a director reporting to the two deans and the director of Cooperative Extension. The latter would be responsible for day-to-day administrative support.)
B. “That EISG be organized with five functional sections, each with a Head. These five sections with appropriate sub-sections should be: Visual, Editorial, Media, Production and Distribution, and Technical Facilities.”
Philosophy and Mission

A. "That the functions which have traditionally been characterized as 'communications services' be hereafter recognized as 'communications support.'"

B. "That the stated mission of the support organization be along the following lines - 1) To assist in the development of plans and strategy for the interpretation, dissemination and encouragement of the application of research-based knowledge through all communication channels to improve the quality of life of all citizens; 2) to implement such agreed upon plans; 3) to provide support for the development and implementation of use of the media in the instructional process both in and out of the formal classroom; 4) to assist in the training of faculty and field personnel in the effective use of communication methods; 5) to keep the University's publics informed of other newsworthy information concerning its instructional, research or extension programs."

C. "That the mission of the support organization be broadened to include providing similar functions to the College of Veterinary Medicine and the School of Industrial and Labor Relations, thereby placing it in support of all statutory units."

Priorities and Planning

"That a communications planning and priority setting process be established to focus the communications effort on the accomplishment of the stated institutional goals and to contain fairly and equitably the demand for communications support within prescribed boundaries."

(Notation: The emphasis on planning was one of the principal values of the Brodhead report. However, he recommended the creation of a "Communication Planner" who would provide the "single highly visible point of entry" for users of support services. This was probably based on the account execu-
tive concept used by advertising agencies, but it would not work in academia, particularly in Cornell's statutory colleges with several hundred faculty members and professional personnel.

Centralization

A. "That the basic policy be to centralize communication support functions, but that individual exceptions be permitted where particular needs or skills and sufficient demand justify location of certain functional capabilities outside the home of EISG. In such instances the personnel involved should have a joint appointment with EISG, even if all funding is coming from another department. In general, the advantages of centralization outweigh the advantages of location closer to the user."

(Notation: The Department of Communication Arts tried over the years to get all its information services and academic program housed in one place. They were spread all over the campus which created administrative and functional problems.)

Multi-media Center

B. "That plans be developed and implemented at the earliest possible moment to build a sophisticated multi-media center which would house all of the EISG functions plus whatever needs develop for professional support for improvement of the instructional process through the Center for the Improvement of Undergraduate Education and the Education and Communication Arts Departments of the College of Agriculture and Life Sciences."

(Notation: The recommendation to have a "sophisticated multi-media center" was first made by the Department in the late 1960s and after that. Plans were drawn for such a center to be included in proposed new buildings on the agricultural campus, but the center never materialized.)

Search for a Director

In the fall of 1974, a search committee was appointed to find a director for the new Media Services unit. This committee, with David L. Call, director of Cooperative Extension as chairman, included: Professor Freeman, Thomas Hanna, and James Griffith of the Department of Communication Arts, Professor Alexander Dickson of the Department of Natural Resources, and Professor Marjorie Washbon of the Department of Human Nutrition and Food.

On March 27, 1975, Director Call announced that D. Christopher Whittle, Director of Communication and Public Relations for the American Bar Association, had been selected as the Director of Media Services, effective July 1, 1975. He continued in this position until 1986 when he came to the Department of Communication Arts as a senior lecturer to teach an advertising and public relations course and manage the internship program. This appointment ended in June 1992.

David Watkins, who first served in the Department of Communication Arts as head of the Educational Television Center, became the Director of Media Services. Efforts were made to build a bridge between Media Services and the Department of Communication. (One example: a memorandum of un-
standing established a system of computer graphics technology to be used jointly.)

Refocusing the Department Program

After the separation decision, the Department faculty began the preparation of orderly sequenced plans of restructuring and refocusing its agenda. These plans included explicit identification of five “program areas” of communication: organizational, environmental, rural development, health/nutrition, and international. Advantages of this arrangement were: (1) provide substance and depth to students’ undergraduate studies; (2) strengthen the College of Agriculture and Life Sciences’ program through an interdisciplinary emphasis which tied in communication with major commitments; and (3) bring into focus the Department’s public service/extension efforts.

Dean Proposes Merger

The next blow which shocked the faculty of the Department followed closely on the heels of the separation decision. In December 1974, Dean Kennedy proposed a merger of the Department of Communication Arts and the Department of Education. Dale R. Corson, President of Cornell University, had requested the deans of the colleges to undertake a study of ways and means to “address a deteriorating financial condition” and mentioned the possibility of consolidating or merging programs and/or departments. According to President Corson, social sciences represented a “good case.”

A committee was established to consider the proposed merger with Dean Kennedy as chairman, two other college administrators, and three faculty members from each of the two departments: (Communication Arts) Victor R. Stephen [acting chair], Chester H. Freeman, Royal D. Colle, and William B. Ward; (Education) Helen L. Wardberg [chair], George W. McConkie, George J. Posner, and Frederick K. T. Tom. The faculty members of this committee met once or twice a week during December (1974) and January (1975), to consider the pros and cons of a merger, review various organizational plans, and prepare a final report to the administration.

Students and alumni also became involved. One of the graduate student leaders of the Department of Communication Arts when asked if he would still come to Cornell in case the two departments were merged replied: “Definitely not, I would certainly go elsewhere. When you combine the two, you subtract from each.” Alumni who contacted the Department about this issue also expressed their opposition. For example, Al Wegener, Editor-in-Chief of The Cornell Countryman when he studied at Cornell and who later became an executive of a large New York advertising agency, wrote to Dean Kennedy: “In my view the merger would result in a serious loss not only to the College of Agriculture and Life Sciences but to the entire University. This loss, I believe, would come about through dilution of the stature, effectiveness, and vigor of the Department of Communication Arts (CA) .... To my knowledge no other curriculum at Cornell offers undergraduate and graduate students an intensified course of study in communications .... This has given the Department a respected and distinctive identity, not only among students but also among
those of us in business who work in the communications field. Another concern I have is that the merger would cause CA to lose its reputation among students as a department which is “in touch” with the post-graduate world .... Communications and education are two distinct fields, each attracting students with different interests, motivations, and expectations.”

Faculty Opposition

The “merger committee” also stressed that the two departments represented different fields. Furthermore, it said the assumption on the part of some people that there was a large measure of overlap in the content of the courses offered by the two Departments was erroneous. A careful study showed there was virtually none, and therefore the contemplated merger, as far as courses were concerned, would “mesh” with difficulty.

Although Dean Kennedy took the position that the merger would result in a reduction of administrative costs, no cost-saving figures were presented. The faculty committee recognized one department chair would cost less than two, but pointed out that a merger would result in an increase in the complexity of administering the affairs of a merged department.

On January 16, 1975, the faculty committee submitted this conclusion to the administration: “There does not appear to be a clear intellectual, disciplinary, or subject matter basis for a merger. Therefore [we] cannot support the proposal that the two departments be merged.” (A large majority of faculty members of both departments had voted against the merger.)

On February 7, 1975, Dean Kennedy announced that “our decision is to take no direct action at this time in regard to implementing a merger of the two departments.” His off-the-cuff comment to a faculty member: “I got my tail feathers burned.” But regardless of faculty opposition, he stressed in the announcement that “the administration will schedule a review and reconsideration of the proposal within the next three years. We continue to believe further exploration of a merger is in order.” Fortunately, there was no reconsideration of a merger. Nothing happened on his merger proposal during the three-year period.

But evidently, Dean Kennedy was not yet through with advancing changes he wanted made in the Department of Communication Arts. Its staff members felt as if they were on the auction block. In early January 1976, he discussed the serious financial situation faced by the College and his proposals for budget cuts for the Department. Professor Freeman, Department Chairman, informed him that if the cuts were carried out as proposed, it would mean elimination of Communication Arts as a major field of study at both undergraduate and graduate levels. Only a small service unit to teach oral and written communication courses would be left. He pointed out that the College and the Department of Communication Arts had a responsibility to students for the completion of their academic studies. Furthermore, the College would lose significantly in accessory instruction. For spring term (1976) approximately 1,230 students were registered in Communication Arts courses of which 38% were students from endowed colleges. This amounted to an accessory instruction income of $119,850 for the term for the College of Agriculture and Life Sciences. When computed for the two-term academic year, about $240,000 was involved. Based
on the past few years' experience, this would be expected to increase as both the total numbers of students had been climbing each year. Teaching only oral and written courses would mean the loss of most of this income.

Professor Freeman said he realized that "fairness and honor cannot always be upheld in these times. I feel especially frustrated when after the service units were separated and the question of merging the two departments was settled, we were promised three years to build and strengthen Communication Arts as an academic department. Now in less than a year we are being essentially destroyed. This is hard to accept for I believe we have made significant progress in this short time in areas such as strengthening our teaching program, our MS degree proposal, plans to enlarge research efforts, working out a cooperative MPS degree program with the Division of Nutritional Sciences, acquiring additional facilities on Stewart Avenue, and assuming leadership for Extension inservice training. I cannot accept the elimination of all this without the feeling of being betrayed."

He made it clear that he would resign as chairman if the Department was reduced to only teaching courses requested by other departments and could not offer its own major. This did not happen, although some budget reductions were applied to all departments, including the Department of Communication Arts. It gradually proceeded to build a strong department, particularly under a new College administration.

Advisory Committee

One of the Department's actions which proved to be valuable was the selection of an Advisory Committee shortly after the separation of the academic program from the information services functions. This committee had three principal functions: (1) guidance for the teaching, research and extension programs with special attention to long-range problems and goals; (2) liaison with communication and related industries; and (3) assistance in obtaining outside financial support. The committee met once or twice a year, with the first meeting held on May 14, 1976. Members of the initial committee included: Mort Adams, Cornell Trustee and former President and Chairman of the Board of Curtice-Burns, Inc.; Carroll Arnold, Professor of Speech Communication, Pennsylvania State University; Constance Cook, Cornell Trustee and former member of New York State Assembly; Herrell DeGraff, former President of the American Meat Institute and a professor in the College of Agriculture at Cornell University; Arthur J. Fogerty, Agway Director of Public Relations; Claude Gifford, Director of Communication for the U.S. Department of Agriculture; Richard K. Manoff, President, Richard K. Manoff, Inc.; Roy H. Park, President of Park Communications; Lewis Perdue, Deputy Director of Public Relations for the Republican National Congressional Committee and a Communication Arts graduate; A.H. Wegener (Chairman), Senior Vice President of Keenan & McLaughlin Advertising Agency and a Communication Arts graduate; Elynor A. Williams, Extension Communication Specialist, North Carolina Agricultural and Technical State University and a former Communication Arts graduate student.
As mentioned in Part Five, the deans of the two Colleges were requested to consider another name for the new Department instead of "Extension Teaching and Information" before the recommendation was sent to the president of the University on June 1, 1945. But the deans vetoed the request for several reasons as stated previously and offered the possibility of a name change in five or six years. Twenty-one years later—in April 1966—it happened. (See organization chart Appendix H.)

The process to get the name change even then did not have smooth sailing through the bureaucracy. When the recommendation landed on Provost Dale R. Corson's desk in early 1966 that the name be changed to the Department of Communications, he called Professor Ward with this response: "I don't like the proposed name. To me the term mainly is associated with communication systems such as cable and microwave transmissions, and the like. Your department is more involved with the creative side of communication. Therefore, I suggest 'Communication Arts.' If this recommendation comes to me, it will be approved and submitted to the Board of Trustees."

Although this meant starting the approval process all over again through the two colleges, the departmental faculty was happy with Provost Corson's decision. (He became president of the University in 1969.) Actually the faculty originally wanted the name "Communication Arts" but thought it would raise strong opposition from the College of Arts and Sciences. He said not to worry about this. Soon after the recommendation for the new name reached the president's office, it was presented to the Board of Trustees and approved.

The name change had a dramatic effect in several directions. Although not solely responsible for the gradual disappearance of opposition to a graduate program, it did have an important influence on the final outcome.
Another name change was approved in 1987: Department of Communication. According to the faculty, it symbolized a growing emphasis on the study and application of social science theory and research in communication. The single term “Communication” was intended to represent the overarching nature of the Department’s program encompassing mass communication, speech and rhetoric, and other aspects of the so-called “information society.”

Graduate Program Stymied But Not Permanently

The faculty of the Department had been stymied for at least 10 years whenever it presented a proposal to the Graduate School for a Master’s Degree. For example, one was presented in October 1965 and tabled with the same result two years later, even though it had the support of the deans of the two Colleges, plus several distinguished professors there and in the College of Arts and Sciences.

The objective of the 1967 proposal for a graduate program, with a major and minor in communicating the sciences, was to prepare students for positions requiring clear and accurate interpretation of scientific and technical information for professional and lay publics. Such positions existed in industry, government, education, mass media, universities, and other research institutions. The findings of many scientific investigations risked obscurity because they did not come to the attention of various publics which had concern and interest in them. This situation resulted, in part, from scientists’ inability to disseminate information about their discoveries, or from their lack of interest in doing so, or from the lack of suitable professional communicators to assist them.

Uniqueness of the Proposed Program

The need for persons capable of interpreting scholarly material without betraying its scientific integrity was shown by the large number of requests the Department received for science writers. Universities were searching widely for persons of this description to fill staff positions, and industry and government agencies alike were seeking well-qualified persons to communicate specialized information to their publics.

Further evidence of the need for a program with this emphasis came from students themselves. Several Cornell graduate students in other fields requested members of the Department’s faculty to serve on their graduate committees. Also, inquiries came from students outside the University. The type of graduate program proposed could not be found in the catalogs of any major university. While some offered courses in science writing, these did not represent a major effort to focus on both understanding the nature of scientific inquiry and investigating the most appropriate way of communicating its results.

Because the proposed graduate program was largely inter-disciplinary in character, it was essential to have the cooperation and participation of professors in the social, biological, and physical sciences, and in the humanities. Several senior professors from these areas expressed an interest in the development of this type of graduate program at Cornell. The excellence of the faculty, the existence of special research and area programs and centers, and the consequent
expectation of scientific breakthroughs made this an especially appropriate environment for the development of such a graduate emphasis.

Among those who supported the proposal were L. Pearce Williams, Professor of the History of Science, who wrote: "There can be no doubt of the real need for such a program and the need will grow exponentially in the coming years." R. S. Morison, M. D., Director of the Division of Biological Sciences, said "I can easily testify that there is a large unfilled demand for people who are expert in the communication arts and who also know something about science .... I believe enough information already exists on which to base a good master's degree program, and I hope you get the opportunity to try it out." Similar endorsements came from Charles E. Palm, Dean of the College of Agriculture, Helen G. Canoyer, Dean of the College of Home Economics (now College of Human Ecology) and Kenneth L. Turk, Director of International Agricultural Development. Even with this additional support, the proposed program was again tabled by the Graduate School.

The Department did not consider the tabling of its request as final and tried again in 1968; this time with success. Approval for the degree, "Master of Communication," was voted by the faculty of the College of Agriculture on November 6, 1968, and by the Graduate School faculty on February 28, 1969. The University faculty voted its approval on April 9 of the same year. Final approval was given by the New York State Department of Education soon thereafter, but with the request that it be designated Master of Professional Studies (Communication Arts), or M.P.S. (CA), to fit the general format for professional degrees throughout the State University system. This was done by the Cornell University faculty on December 10, 1969. Professor Robert Crawford became its first Graduate Faculty Representative.

High and Low Points

During 1969, the Department had both high and low points. Approval of the graduate program could be considered a high point, but the racial upheaval on the Cornell campus in the spring of 1969 definitely became a low point for all departments in the University. It was then that African-American students seized Willard Straight Hall and threatened to "burn down Cornell." Each department was asked to organize a 24-hour fire watch by the administration. Black students demanded that actions be taken by the administration and the faculty to correct racial and other matters at the University which they considered to be unfair. Fortunately, the critical issues were resolved without burning down the University and without loss of lives. However, the series of traumatic events during this time left painful scars.

Focus of the M.P.S. Degree

From its beginning in September 1970, the Master of Professional Studies Program gave graduate students a chance to explore systematically what is known about communication and using this knowledge to develop communication strategies in particular situations of professional interest to them. Communication courses related to research, new technology, intercultural relations, organizations, and developing nations provided flexibility to meet the range of inter-
ests represented by students who joined the program, a flexibility which was accentuated by the broad range of course offerings available at Cornell.

Graduate students in the program—an annual average of about 20 in the early years—came from diverse backgrounds: approximately 20-30% from other countries (as near as Canada and as far as Taiwan, Indonesia, and Australia) and the rest from the United States. M.P.S. degree programs were generally designed for "mid-career" type persons, but because the Department had only one graduate program at this time, it attracted recent college graduates as well as those already in the field. The mix did not present problems; to the contrary, it became a benefit to all. Many of the U.S. graduate students had financial support from the Department, principally teaching and research assistantships; others, particularly some of those from abroad, had grants from foundations, their own governments, or international agencies. From June 1971 to September 1987, the number of M.P.S. graduates reached 167.

Faculty for this graduate program came largely from the Department but also included a few professors from Education, Psychology, Industrial and Labor Relations, and other fields. All held advanced degrees, and most of them had professional communication experience with mass media, agriculture, industry, government, international organizations, or the military service. Among the Adjunct Professors were Robert L. Bruce of Education, James B. Maas and Daryl Bem of Psychology, William W. Frank of Industrial and Labor Relations and Randall Peterson of the Johnson School of Management. They added strength to the Department's academic program.

A Home for the Graduate Program

No space was available for the new graduate program in the five different locations housing the faculty and staff of the Department in 1969: Roberts Hall, Mann Library, Stone Hall, Martha Van Rensselaer Hall, and the radio, film, and exhibit studios on Judd Falls Road. These widely separated physical facilities caused internal communication problems and extra travel time.

The search was on to find a place on or near the central part of the campus to house the graduate program. The Department located just the right one at 640 Stewart Avenue across the street from Noyes Center. It was the former home of the Robert E. Treman family. Cornell bought this residence in 1944 and leased it to Phi Sigma Delta fraternity. This fraternity disbanded in 1969, making the house available for other purposes.

It was no easy task to persuade the administration in Day Hall to assign the building to the Department for its graduate program because several other departments and programs wanted it. Dean Palm's strong support helped swing the decision in favor of the Department. He pledged $14,000 from college funds to make necessary repairs, buy furniture, and establish a lease arrangement with the University. On January 22, 1970, the Department head (Professor Ward) received an official letter granting permission to occupy the building.

The fraternity had left the building in a mess, and several dump trucks of trash had to be taken to the dump. Faculty members and students volunteered scores of hours to clean walls and floors, paint, and do other renovation jobs. Mrs. Thora Ward worked on the selection and purchase of furniture, carpets, drapes, and other furnishings. She was able to "stretch" the funds available by
getting special low prices for quality materials through a neighbor who owned a large furniture store in Ithaca. All those involved in this rather extensive volunteer effort agreed that working together generated a certain esprit de corps within the Department.

Fortunately, the beautiful hand-carved wooden frescoes around large mirrors and some of the walls downstairs in the building were left intact. They were made by Mrs. Laura Treman with chisels and a burning iron when the house was built. During the time the Treman family lived there, they invited Mr. and Mrs. Franklin D. Roosevelt to be their guests. As Governor of New York State at that time, he and Mrs. Roosevelt accepted invitations to speak at Cornell's Farm and Home Week. Because the governor and future president could not climb stairs, a small elevator in the house would take him from the main floor to his suite on the second floor.

When the building was ready on September 1, 1970, to accommodate the new graduate program, a special bronze plaque was put in the foyer with the wording "Graduate Teaching and Research Center, Department of Communication Arts." M.P.S. graduate courses, two courses for undergraduates, and a majority of the Department's seminars, workshops, and social events were scheduled there. Also, offices for six professors and their support staffs, and desk space for graduate teaching assistants were provided in the building.

Three-Stage Development Plan

Initially, the M.P.S. program was limited to 15 graduate students. From 30 applicants the first year (1970), the faculty selected 13 and added new graduate courses to the curriculum. In most instances, the time of study for the degree was four semesters (two academic years), although some students completed their studies in three semesters by using the summer for their projects which primarily applied communication planning and strategy to solving practical problems.

Within five years (1970-75), 45 had graduated with the M.P.S. degree and by 1998 the number reached 286. (Appendix N.) About one fourth of them entered doctoral programs. Others accepted professional and management positions in fields such as public relations, program planning and coordination, public and community education, sales and management, personnel services, advertising account management, college admissions, teaching, international development, technical writing, media services, educational and network television and radio, book and magazine publishing, and video production.

Offering the M.P.S. degree was the first step in a three-stage development plan for the Communication Graduate Field. The second stage—a Master of Science degree (M.S.)—received final approval in 1990. By the end of the 1998/99 academic year, 60 graduate students had received M. S. degrees. (Appendix N.) The curriculum for this degree complemented the M.P.S. program by emphasizing analysis of communication research and theory, but it focused on the development of research skills and the ability to generate new knowledge about the communication process. A major component of each student's M.S. program involved original research and the preparation of a thesis that dealt in some significant way with research questions in communication.
Just before this graduate program got underway, the Department of Communication and the Graduate Field of Communication moved in January 1990 into a new building (Kennedy Hall). It included research laboratories (including an interactive multimedia laboratory), computing/word processing room, audio and video taping rooms, and other facilities associated with teaching and research.

In 1992, the third and final development phase for the Graduate Field of Communication—a Ph.D. program—was approved with the first students accepted in 1993 and two Ph.D. degrees granted in 1997. (Appendix N.) The doctorate was designed as a small, high-quality program focusing on three strengths of the Graduate Field of Communication: science and environmental communication, communication and social change, and the psychology of communication. Plans called for no more than 16 students in the program at any one time, with four new admissions each year.

In planning the program, a graduate faculty committee listed these expectations:

- Create greater opportunity for New York State residents and others to avail themselves of advanced graduate study in Communication in order to take advantage of the expanding demand for faculty in academia and highly qualified practitioners in the state and nation.
- Help the Department of Communication maintain a high standard of communication research and increase research productivity.
- Enhance the Department's current success in attracting minority graduate students who add diversity in the classroom while they are at Cornell and elsewhere after they complete the Ph.D.
- Serve the educational needs of master’s candidates who wish to go on to the Ph.D.
- Complement the foci of the College of Agriculture and Life Sciences with research and instructional attention to: (1) science communication including that related to environmental, health, and food risks; (2) extension information dissemination and the adoption of new ideas by extension clients; (3) communication for domestic and international development; (4) new and enhanced uses of communication technology; and (5) how humans learn, process, and use information in different settings.

Faculty to operate the Ph.D. program were in place. In 1995, the Graduate Field of Communication included 16 faculty members, 14 in the Department of Communication and two from the Department of Psychology. The graduate faculty from the Department included Njoku E. Awa, Royal D. Colle, Geraldine K. Gay, Carroll J. Glynn, Bruce V. Lewenstein, Alicia A. Marshall, Daniel G. McDonald, Ronald E. Ostman, Clifford W. Scherer, Donald F. Schwartz, James Shanahan, Michael A. Shapiro, Shirley A. White and J. Paul Yarbrough.

By the academic year 1999-2000, the faculty taught 27 graduate level courses:

- Organizational Behavior and Communication
- Seminar in Organizational Communication
- Communication and Persuasion
- Public Opinion and Social Processes
Research Program Influenced by Department’s History and Organizational Environment

In the early days of the Department, its research projects were largely limited to evaluation studies of information services, but more formal and sophisticated research projects were gradually developed with support from federal Hatch funds provided by the Cornell University Agricultural Experiment Station, grants from other government and non-government sources, and the infusion of additional personnel with Ph.D. degrees and the creative talents of graduate students. The Hatch funds were effective in providing recurring resources for research and helped to attract substantial outside funding, particularly in the late 1980s and early 1990s.

Early research studies in the 1970s helped to develop communication and community strategies to reach farmers and low income people in rural and city areas. One example of the former involved a Hatch-financed project under the direction of Prof. Njoku Awa to discover factors affecting communication with farmers and the use of agricultural research by North Country area dairy farmers. Another research project during the 1970s, under the direction of Prof. Royal D. Colle, involved a Cassette Special Communication System (CSCS). It became a part of a northeast regional project known as “Paths Out of Poverty” and was designed to bring to low income people information in appropri-
ate inexpensive “packaging” to help them use their own and their communities’ resources to improve their lives.

Among the other research programs during the decade of the 1970s were: Relation of Communication to Attitudes on Agricultural Land Use Policy; Dynamics of Innovation and Adoption: New Communication Media; Feasibility of Individual Learning Centers in Extension Work; Comparative Analysis of Sources of Information with Emphasis on Agricultural Development; Video Tape and Programmed Instruction in Teaching Basic Theory in Speech; and Realistic Yardsticks to Measure Effectiveness of Oral Expression.

Five Year Plan

Beginning in August 1980, Prof. Donald F. Schwartz became chairman of the Department and under his direction a five year research development plan was drafted with these goals: (1) expand a comprehensive program in both basic and applied research in the field of communication, (2) help fulfill the research mission of the College of Agriculture and Life Sciences, and (3) provide funding for graduate research projects for the faculty.

Research capabilities were enhanced with the establishment of an infrastructure in 1982 to implement projects. Two areas of specialization emerged: rural studies represented by the Cornell Rural Communication Research Program under the leadership of Professor Yarbrough and development communication guided by Professor Colle. These two areas provided “umbrellas” under which faculty-directed projects were conducted. Examples of these included: Computer Diffusion among Farmers; Utilization of New Telecommunication Technology among Rural Residents; Bio-technology Transfer; Linking Basic Researches with Entrepreneurs; Cognitive and Affective Responses to the Visual Communication of Scientific and Technical Information; Effects of Communication on Public Opinion about Acid Precipitation Issues; and Toxic Chemicals and the Media.

Department research projects were usually planned and executed by a group of faculty members and the projects “endorsed” by the faculty as a whole. Individual research projects, initiated by faculty members, were carried out independently. Often these resulted from an individual professional interest and ranged from the “theoretical” to the “applied.” The geographic focus was equally broad, some relating specifically to New York State, others were international in scope. (Examples of the latter are described in Part Eleven.)

According to a special review of the Department in 1987 by an outside committee selected by the Cooperative State Research Service of the U. S. Department of Agriculture, “the Cornell Cooperative Extension System seems to be getting its money’s worth from the Communication Department.” The review team, made up mainly of nationally recognized researchers in the field of communication from land-grant universities, mentioned a dozen or so research and/or evaluation studies “directly relevant and important to Extension.” It recommended that Extension turn more to the Department to plan and conduct such studies in collaboration with Extension staff members and programs. Also, the team urged the Department to periodically review all the studies it conducts to see what could be drawn from them to help Extension. “Unless
such a special periodic review is undertaken, these kinds of studies will remain discrete research pieces with no particular relationship to one another.”

Research Projects in the 1980s and Early 1990s

Among the research projects conducted during the 1980s and early 1990s which had implications for Extension and other “clients” were the following:

- New information technologies focusing on impacts of the new communication technologies on the delivery of information, the adoption of new technologies, and the development of infrastructure to support farm use of microcomputers. (Project Directors: Professors Yarbrough and Scherer)
- Science, technical and health communication dealing with questions relating to how scientific and technical information can be more effectively communicated to various audiences. (Cooperating scientists: Professors Yarbrough, Schwartz, Glynn and Lewenstein)
- Environmental issues focusing on acid rain and media coverage of toxic chemicals. (Professors Glynn and Ostman)
- Mass media and political communication studies encompassing a wide range of topics from studies of rural social movements to an examination of the changing broadcast audiences, and on the behaviors of media professionals. (Professor McDonald)
- Organizational communication relating to communication problems between two levels of employees within an organization. (Professors Schwartz and White)
- Interpersonal communication involving family power structures. (Professors Awa and Scherer)
- Strategies for communicating risks affecting the public. (Professor Scherer)
- Predicting interest in mass media science stories and memory and decision processes in the construction of social reality. (Professor Shapiro)
- Institutional constraints on science journalism. (Professor Lewenstein)

Departmental facilities devoted primarily to communication research included:

1. The Cornell Communication Research Laboratory designed to accommodate a variety of social-psychological investigations. It is suitable for running experiments with individuals or groups. In addition to paper and pencil measures, computer facilities are available to record both categorical and continuous responses for up to eight subjects to a variety of communication stimuli. The time needed for a response could also be measured and these responses matched frame-by-frame to video or audio presentations;
2. An Interactive Media Research Laboratory designed to investigate the cognitive, motivational, and affective skills required to take advantage of the features and control options available in a complex hypermedia system. Such systems combine computers, audio and
video materials. The laboratory is equipped with state-of-the-art video and computer equipment.

(3) Several areas for designing and conducting surveys, including the Department's link to the Cornell Institute for Social and Economic Research. It offers services including questionnaire design, sampling, data collection, data coding, and data entry and analysis, and an extensive data archive that contains demographic, economic, and international statistics, social surveys, and small-area socioeconomic data.

(4) Archives in the history of science journalism: the Science Writing Archives, including archives from the National Association of Science Writers and the Council for the Advancement of Science Writing, and a national archive for information about science journalism connected to cold fusion research.

(5) IBM and IBM-compatible personal computers for graduate faculty are equipped with statistics programs and other software needed for research and linked by network to Cornell's mainframe computers. Similar personal computers are reserved for graduate student research. The University provides mainframe computers (both IBM and DEC using several operating systems) for faculty and student use. In addition, the Cornell National Supercomputer Facility provides access to two state-of-the-art supercomputers. Cornell is also linked to several national and international computer networks, allowing university researchers to easily communicate with others around the world. Public or semipublic computing facilities for students and faculty, containing more than 500 microcomputers, are in 24 locations on and off campus. Cornell Information Technologies provides a variety of hardware and software support and consulting services.

(6) World-renowned collections of materials in the Cornell library system, including the main graduate library of the University (Olin) and Mann Library on the College of Agriculture and Life Sciences campus. The latter has social science holdings of particular value to communication research.

Outside Grants

Faculty members searched far and wide for major outside funding to supplement the support from "start up" Hatch funds provided by the College's Director of Research. They began to cluster research activities into more visible programs and enter into partnerships with several entities on and off the university campus. These developments brought success in getting outside grants from such sponsors as the National Science Foundation, Apple Computer, IBM, Intel, John Wiley & Sons, GE Foundation, Hewlett Foundation, Water Management Institute, U. S. Agency for International Development, National Association of Broadcasters, Modern Talking Pictures, World Bank, and U. S. Department of Agriculture. The principal investigators for the research projects funded by these sponsors included Professors Colle, Gay, Glynn, Lewenstein, McDonald, Schwartz, and White.
The Department's most widely known research, supported almost entirely by substantial outside grants, is conducted by the Interactive Multimedia Group founded in 1986 with Professor Gay as the Director. (Later named Cornell Human Computer Interaction Group.) This group is an interdisciplinary research and design team with expertise in communication, design, and evaluation. Its work has concentrated on applying communication research to human-computer interface design.

Professor Gay describes the mission as linking “cutting edge technology with the everyday needs of students and teachers. That may mean providing access to experts in Nevada or Japan, accessing information in libraries all over the world, or helping students and faculty create electronic notebooks and online discussion groups to suit individual needs.”

Delivering Research Results

During the decade of the 1980s and in the early 1990s, the faculty members and graduate students made special efforts to devise organizational mechanisms and information delivery vehicles for pulling together the diverse results of research in ways that were useful to client groups such as media, health professionals, community leaders, farmers, and others. A review of publications during this time showed a large number of refereed articles in professional journals, books authored by faculty, reports for specialized audiences, and conference and convention papers.

The “outside” review team from other universities mentioned earlier stated in its final report in 1987 that the Department’s research component “yielded solid evidence of both richness and relevance. Though we heard questions about diversity of research directions, we viewed this diversity as a strength, since the body of accruing knowledge is clearly relevant to the College’s mission. A few of the research project categories illustrate this relevance: information technologies; science, technology and health information; communication and environmental issues; mass media, public opinion and political communication; developmental communication; media and rural social movements; international communication; interpersonal communication; Extension education roles and processes. These studies, as well as others not included in these illustrative categories, bear directly on the college mission, particularly that part of the mission relating to knowledge and resource development. All in all, the Review Team found that the anticipated movement toward highly visible research status is well underway and the Department faculty, as well as the College, may well be proud of the progress to date.”

Change of Department Chairman

Professor Colle became chairman of the Department on October 10, 1986, and held this position until June 30, 1995. During the years of his leadership, the Department had a significant expansion in research, undergraduate and graduate teaching, and faculty links beyond Cornell University. (See Appendix I for the latter.) Furthermore, the greatest growth in the Department’s international program (see Part Eleven) happened during his tenure. He took the position that communication as a discipline and as a profession should not be
limited by the borders of the United States and that it became richer when applied more broadly. He strongly believed in this position taken by the American Council of Education's Commission on International Education in a published report entitled, *What We Don't Know Can Hurt Us*: “To maintain and increase international competence means the education and preparation of an ever-increasing number of Americans who understand other peoples and societies well enough to be able to work effectively with them on a broad range of economic, political, and security issues. . . .”
A Long Tradition

Cornell University has had a long tradition in international activities on the campus and around the world, going back to the late 1800s. In 1874, a Cornell professor studied soils in Brazil. Foreign students were represented in the first graduating class and a student from Russia enrolled in the first class offered in agriculture. At the turn of the 20th century, Cornell had 17 agricultural students from 11 foreign countries. Before the end of the century, more than 400 international students from scores of countries were studying in the College of Agriculture and Life Sciences. The forerunner of present U. S. aid programs was a cooperative plant breeding research project from 1925-1931 between Cornell and the University of Nanking in China. Results? Barley production increased 20 percent and wheat yields increased an impressive 50 percent in targeted areas. One of the Chinese barley cultivars brought back to the U. S. by the Cornell scientists was widely adopted by New York farmers and lingers yet in the ancestry of several modern varieties.

Although the College of Agriculture had been involved in international activities almost from the beginning of Cornell University, it was not until 1962 that the Governor of New York State and the legislature officially recognized this function as “the fourth dimension.” By legislative act, the International Agricultural Development Program took its place with resident instruction, research, and extension in the organizational structure. The Department was asked to develop a series of special publications for the program.
Goals of Department’s International Programs

International communication programs have had four principal goals: (1) build a strong teaching, research, and extension program in cooperation and in concert with the College’s international programs (IAP and CIIFAD); (2) increase the competence of undergraduate and graduate students from the United States and other countries (particularly developing nations) to understand and use effective means of communication; (3) enrich the professional experiences of faculty members through their involvement in international projects; and (4) provide technical assistance in communication for developing nations.

From the beginning of its international activities in the early 1950s, the Department has moved in several directions: some have been formal programs as part of college-wide efforts, some conducted solely as departmental programs or in collaboration with other Cornell units, and some have been undertaken by individual faculty members as visiting professors on sabbatical leave or as consultants. In this context, they have been involved with more than 39 countries. (See World Map Appendix J.)

Professor Victor Stephen had the first overseas assignment in Costa Rica from 1951-52. Other examples of this international involvement and the locations include the following:

THE PACIFIC RIM

Philippines

Formal international activities of the Department of Extension Teaching and Information (now Department of Communication) began in the Philippines with the Cornell-Los Baños Project. (Phase I from 1952-60 and Phase II from 1963-72.)

The unique partnership between Cornell and the University of the Philippines resulted in the rebirth of the College of Agriculture at Los Baños following its almost complete destruction during World War II. Under the able leadership of Professor K. L. Turk, director of Cornell’s International Agricultural Development Program (1963-1974), the project became widely known throughout the world and was often referred to as one of the most successful agricultural research and education ventures ever undertaken and a model for others. Cornell President Frank H. T. Rhodes (1977-95) said the project “formed a continuing bond between Cornell and the Philippines with a relationship dominated by a philosophy of mutual cooperation and understanding. Cornell professors working in the Philippines broadened their experiences, while American students had the opportunity to live and work in the rich and diverse culture of the Philippines. Students from the Philippines, in turn, expanded the outlook of Cornell itself while making valuable contributions to research in a number of fields.”

In his book The Cornell Los Baños Story, published in 1974, Professor Turk traced the history of communication functions in which the Department participated. A. J. Sims, extension editor at the University of Tennessee, was selected in 1954 to be the first visiting professor for 18 months to the newly created Office of Extension and Publications at Los Baños. His assignment had three broad objectives: (1) expand and facilitate the handling of news, radio,
and other information materials on agricultural research results; (2) develop working relationships with the appropriate government agencies, and (3) undertake an in-service training program for provincial extension workers. Thomas G. Flores, a graduate of the University of the Philippines College of Agriculture and holder of a Master's degree in education from Cornell, assisted Professor Sims and taught an extension organization and methods course. During 1958-1960, he completed a Ph.D. degree at the University of Wisconsin and in 1965 became the first Filipino visiting professor to Cornell under Phase II of the Los Baños program. While at Cornell, he prepared a 10-year development program in international communication.

During Professor Ward's academic year in Los Baños (1956-57), the teaching program was expanded and the staff participated in the National Rural Community Development Program initiated by Ramon Magsaysay, President of the Philippines. Public information functions of the Office of Extension and Publications took on greater significance because of four dominant trends: (1) increased value placed on communication by the College administration; (2) positive attitude of the faculty toward serving agriculture through mass media; (3) a growing reliance on the College by the nation's press; and (4) closer cooperation with government agencies. The first Radio Farm News Service was started for 22 stations, a publications agreement signed between the College and the National Department of Agriculture, and a 45-minute documentary motion picture produced in cooperation with the United States Information Service.

In 1962, the Office of Extension and Publications at Los Baños was upgraded to the Department of Agricultural Information and Communications with Professor Juan F. Jamias as the newly appointed chairman. It had an academic program offering an undergraduate major and 40 staff members, some of whom had received advanced degrees from abroad. In 1964, it announced the degree of Master of Science would be available. (Later a Ph.D. degree in Development Communication was added.)

Professor Ward returned to the Philippines in the summer of 1965 to review the activities of the new department, including plans for a Rural Communication Research Center and for strengthening the programming of the College radio station DZLB. It was chosen by the World Bank to be the nucleus of a nation-wide educational broadcasting system in agriculture.

In the early 1980s, the Department participated in a farming systems research program in the Philippines sponsored by the Ministry of Agriculture and Forests and the Visayas Agricultural College. Professors Colle and Scherer developed workshops and graduate training for Filipinos in this project.

**Western Samoa**

The South Pacific Regional Agricultural Development Project (SPREAD) started in the early 1980s with the University of Hawaii as the prime contractor and Cornell a sub-contractor. It involved 11 island countries with headquarters at the University of the South Pacific campus in Western Samoa. Purpose of the project was to help obtain maximum benefit from the islands' agricultural potential. With Hawaii handling the technical agricultural responsibilities, Cornell (through the International Agriculture Program and the Departments of Communication and Education) provided assistance in agricultural education, extension, and communication. The Department was directly in-
volved in agricultural information system design, media production, and both short-term and graduate training. Professor Colle spent a sabbatic leave in 1982 to help set up a new Agricultural Information System (AIS) that introduced the idea of having representatives of the AIS based in member countries to work with extension agents in accessing research-based information at SPREAD's Institute of Research and Extension in Agriculture at Western Samoa's USP campus. Professor Colle and Professor McDonald also conducted a communication workshop for extension officers from various South Pacific island nations.

**Indonesia**

The Department was requested by the Agency for Agricultural Research and Development in the Ministry of Agriculture to plan and produce a series of publications presenting the results of five years of research from 1976-1980 and again from 1981-1986. Also, establishing a new research journal was added to this assignment. The premier issue of the *Indonesian Agricultural Research and Development Journal* came off the press in 1979. Published in both English and the national language of Indonesia, it continues to be widely distributed around the world to scientists, government officials, educators, and others.

Professor Ward wrote a book in 1985 for the first of a new series of science and technology-related texts sponsored by the U.S. Agency for International Development. Entitled *Science and Rice in Indonesia*, it documented the investments and policies contributing to that nation's own "green revolution." Over a 15-year period, Indonesia (the world's fifth largest nation in population) doubled rice production. It raised the availability of rice to 148 kilograms per person compared with only 93 kilograms per person, despite a population growth of 38 million. One of the principal purposes of the book was to bring such a success story to the attention of planners, policy makers, researchers, and others who would find it useful to extrapolate elements of the Indonesian approach to other development undertakings. Professor Colle spent several months in Indonesia in the late 1980s as a consultant in a World Bank-funded project for the government's Department of Health. He developed a national communication strategy designed to increase Indonesia's consciousness of nutrition issues related to health.

**Japan**

The Global Digital Museum Project started in 1993 with the goal of fostering emerging technologies to improve access to ethnographic, artistic, and natural history collections from museums worldwide and facilitating the use of those collections to enhance teaching and research. It is co-directed by Professor Gay, head of the Department's Interactive Multimedia Group. Others involved are Dr. Hong of IBM's Tokyo Research Lab, Dr. John Reeve of the British Museum, and researchers from the National Ethnology Museum in Osaka, Japan.

This project serves as a forum for interaction, a site for testing and evaluation, and a focal point for development of new collaborative models. It also contributes to the development of a common client-server network providing access to information that identifies and describes collections and facilitates the incorporation of digital sources into the educational process.
AFRICA

The African Development Institute at Cornell focuses on long-term solutions to development in Africa, and the Department found ways to support its efforts by instituting scholarships for both short-term and graduate degree training for Africans. Also, it forged links with African communication organizations such as the African Council for Communication Education.

Several faculty members had consulting activities in Nigeria, Ghana, Kenya, Liberia, Ivory Coast, Egypt, Tanzania, and Ethiopia. For example, Professors Colle and Ostman worked with the Department of Educational Mass Media (DEMM) in Ethiopia’s Ministry of Education to train television producers and evaluation personnel. They planned and carried out the training in the early 1990s in Addis Ababa as the DEMM moved toward extensive production of television for in-school and non-formal education contexts. Research on alternative television delivery systems to assist the Ministry of Education’s policy-making and planning also received attention.

They returned to Ethiopia in 1997 to work on implementation of the government’s Population Policy. Ethiopia was the first country in Africa to develop a comprehensive strategy for the new concept of reproductive health and Colle and Ostman trained regional officers in adapting the national reproductive health communication plan to their own regions. They also assisted the Population Office in refining the national communication strategy.

Professor Colle and Gordon Webb, a radio broadcast specialist in the College’s Media Services unit, went to Nigeria in the late 1980s to train radio broadcast journalists in contemporary radio news gathering and broadcasting techniques. The project was sponsored by the United States Information Service to aid Nigeria in its planned transition to a civilian government.

LATIN AMERICA

Guatemala

Three professors in the Department (Ward, Colle, and Stephen) were asked to assist with the Basic Village Education Project (BVE) in Guatemala during the 1970s. Professor Ward went to Guatemala in 1973 for short periods during the planning stages of the project, Professor Colle for a sabbatic year in 1974/75, and Professor Stephen for six months in 1976. Because of a major earthquake in early February 1976, the latter was asked by the Minister of Agriculture to work on specific disaster problems.

The Guatemala experimental project was launched on March 22, 1974, by Guatemala’s Minister of Education when he inaugurated Radio Quesada (TGME). The project was designed to reinforce the efforts of extension agents, teachers and others through the use of modern communication methods. Small, often illiterate subsistence farmers were the primary audience. Program content stressed information that would help those farmers improve their production and income from basic grain crops. When fully operational, the project included matched experimental and control areas in eastern Guatemala and in the Quiché-speaking Indian Highlands of western Guatemala.

Radio broadcasts were supplemented by local field monitors trained by BVE staff members who led radio forums and used audio cassettes and various
visual aids in their contacts with farmers. Professor Colle concentrated on the radio, audio cassette, and forum aspects of the project and Professor Stephen on the planning, production and evaluation of visual materials. Technical assistance in agriculture was provided by the Ministry of Agriculture. Much of what had been learned in the Department's audio cassette studies in rural areas of New York State was tried out in the new setting in Guatemala.

Another location for research on this method of communication where the people control when and how frequently they wish to listen to messages was selected on the Pacific Coast of Guatemala. Underwritten by the Pan American Health Organization, the project used audio cassettes with 30-minute programs that combined health information, music, and novellas (dramatic skits). Basic information was presented to women coffee plantation workers on how to improve nutrition and health for themselves and their families.

These women worked almost continuously during waking hours. The project's directors, Professor Colle and his Guatemalan spouse, Susana Fernandez de Colle, chose the pilas or community laundry centers on the plantations as the location for their research. Here the women could learn informally about nutrition and health without disrupting their work. A follow-up survey showed that they preferred and used advice presented on the audio cassettes over the music or novellas. One of the specific impacts of the project: the plantation had a 92 percent rate for second vaccinations for children against polio and diphtheria compared with only 60 percent at a control plantation. A planned extension of the project and its operation by Guatemalans had to be cancelled because of the 1976 earthquake.

Honduras

In the 1980s, the Department's largest official international effort in collaboration with the College's International Development Program was the Communication for Technology Transfer in Agriculture (CTTA) Project. Involvement in this project was primarily with the Honduran Agricultural Research Foundation. (FHIA: Fundación Hondureña de Investigación Agrícola.)

After two years of intensive and careful planning by teams from public and private sectors, this new and exceptionally unique institution was created in 1984 to help improve a lagging economy and generally low standard of living. It is a private, non-political, non-profit research organization dedicated to the expansion and improvement of technology generation and transfer systems in Honduras and the region responsive to the production needs of small, medium, and large farmers. Until the advent of FHIA, no effective private, autonomous research organization concerned with the farming sector had existed in Honduras or in the other countries of Central America to help the country modernize the agricultural base.

The project's purpose was to assist FHIA in expanding and improving the Honduran agricultural research system to make it more responsive to the technological needs of farmers. To achieve this, the research system would have to be integrated into a larger technology development and transfer process where a viable and active communication subsystem would be an integral part. The adoption and integration of long-term systematic communication planning and design procedures into the Honduran agricultural technology development and transfer system were major aspects of the project.
Financial support came mainly from USAID with the Academy for Educational Development as the prime contractor and Cornell University as a sub-contractor. The contract with Cornell was signed on July 25, 1986, after several months of work under a "letter of agreement." Professor Colle became the first project coordinator, followed by Professor Ward. Professor David Thurston of the Department of Plant Pathology provided leadership for agricultural technology and Larry Zuidema of the College's International Agriculture Program was responsible for administrative management.

The first task assigned to the Department was to develop a communication unit to support the dissemination of technology from the FHIA research staff to government extension workers, mass media, cooperatives, farmer organizations, and farmers. Secondly, it was to help create a fund-raising strategy and a plan for a unit to support FHIA's financial needs. An intensive international search was made for directors of the Communication Division and the Office of Development. Jairo Cano from Colombia was selected for the communication position and G. C. Millensted from Honduras for the development post. They and FHIA's Director General, Fernando Fernandez, came to Cornell for briefings on resources available to the Foundation.

Cornell arranged for advisors to assist with needs assessments and the development of communication strategies and plans, facilities design, and equipment purchases, including complete computer systems, and desktop publishing and information dissemination software. They also trained FHIA staff in communication skills. A major development prospectus entitled *A New Dynamic Organization of Agricultural Research* (with the sub-title *Fostering Economic Development in Central America*) was produced and published for presentation to potential donors.

When the project started, virtually no communication or development staff, facilities, or equipment existed. By the project's end in 1988, a communication and training center building had been renovated and equipped. It consisted of administrative offices, library, public relations unit, radio/television studio, printshop, graphic arts and photography unit, and writing and editing facilities.

The Department became further involved in Honduras when it was asked in the mid-1990s to design a communication component to a CIIFAD community development project there. Professor Colle enlisted a graduate student, Katherine Karriker, and an undergraduate student, Magdalena Cerdá, to join him and Pilar Parra, a senior research associate in Nutritional Sciences, in Honduras on a project to train rural women and adolescents in nutrition, goat husbandry and sanitation. The students, who spoke fluent Spanish, spent one summer training the women and young people, and then leading them in designing, writing and producing cassette recordings for distribution in their remote mountain community. Ms. Karriker based her Master's thesis on the project, and Ms. Cerdá completed a senior honors thesis on a related aspect of the project. The project demonstrated how simple communication technology could complement the extension work of "tecnicos."

**Argentina**

At the request of the National Commission for Administration of the Fund for Economic Development in Argentina, Professor Ward helped to plan an improved nation-wide agricultural information program to disseminate experi-
ment station research results to farmers. The work was concentrated during 1961-62 in the Instituto Nacional de Tecnología Agropecuaria (INTA), the Argentine government's agricultural research and extension agency with headquarters in Buenos Aires. It had 10 research institutes at nearby Castelar and 45 experiment stations and 94 extension agencies in various areas of the country.

Results of research at the experiment stations were generally published in technical journals for scientists but not often translated into understandable language and disseminated to extension agents and farmers. Only infrequently did INTA use press and radio facilities even though Argentina had the best and most extensive mass media in Latin America, plus the highest literacy rate. Selection and hiring of competent professional writers for the regional experiment stations quickly improved this situation. In cooperation with scientists, they prepared well-written material which was used extensively by the mass media. In addition, extension agents received communication training and practical publications for their use and for farmers. Universities were encouraged to offer agricultural communication courses for their students which could become the long-range source of trained personnel for INTA.

Colombia

In March 1974, the Department cooperated with the College and the Centro Internacional de Agricultura Tropical (CIAT) to sponsor a symposium in Cali, Colombia, for 58 participants and 46 observers from Latin America, Asia, Africa, and North America who were actively engaged in rural development and communication. Most of them came from nations striving to be more self-sufficient in food production and trying to create the conditions which would enable farmers to adopt new technology. Among these conditions were suitable communication systems between a nation's rural areas and its agricultural and scientific "knowledge centers."

The program planning committee, which included two professors from the Department (Colle and Ward), designed the symposium with these major objectives: report and analyze recent research findings, exchange ideas and strategies for improving communication systems, and explore feasible procedures for developing more training and research in communication to meet rural needs. Prior to the symposium, copies of papers to be presented were sent to all participants for study and review. The proceedings were compiled and edited by the Department and published in book form (278 pages) with the title Communication Strategies for Rural Development, edited by Professors Ward and Crawford.

SOUTH ASIA

India

Several members of the Department's faculty, including Professors Ostman, White, Colle and Ward have provided assistance to India. The work there began with the Uttar Pradesh University of Agriculture and Technology (later renamed the G. B. Pant University of Agriculture and Technology) in Pantnagar, Uttar Pradesh, India. Established in 1960, it was the first of its type in that country and was modeled after the Land Grant universities in the United States.
wherein teaching, research and extension were combined into an integrated program.

In 1969, Dr. D. P. Singh, the university’s Vice Chancellor, supported a unique dimension of this Indian university: a coordinated communication center with university-wide responsibilities in publishing, mass media (press, radio, television), audio visual aids, and in-service training in communication. Plans for the Communication Center were prepared by Cornell consultants led by Professor Ward and funding was provided by the Ford Foundation. The new entity was also charged with the development of academic and research programs in the field of communications and undergraduate level courses. Professor Colle spent a year in 1969-70 implementing the plan, including the construction and equipping of modern radio studios. This University became the first entity in India other than the government’s All India Radio to produce programs for radio. From one station in 1969, the number of stations taking those radio programs grew to more than 20.

Cornell’s involvement at Pantnagar laid the foundation for one part of a multi-million dollar Food and Agriculture Organization project with the Indian government designed to create various “centers of excellence” in agricultural science. One of the centers was in agricultural communication and the University at Pantnagar was chosen as the site. Professor Colle became FAO’s key consultant for the five year institution building program. Professor Ostman served as a consultant in the project and, while working with the faculty at the University, edited a book titled “Communication and Indian Agriculture.” Colle later became a consultant for a World Bank project in India called the National Agricultural Technology Project and another in Uttar Pradesh called Diversified Agricultural Support Program.

Other universities in India began to seek means to develop a better understanding of the role of communication in building stronger institutions and speeding up agricultural and rural development. Several have made considerable progress, among them being the University of Agricultural Sciences at Bangalore and the University of Poona at Pune. At the latter, a five-year (1985-1990) Development Communication Research Project with Professor White as director created new models of communication. This project, funded by the U.S. Department of Agriculture and the Government of India, linked resources of the University of Poona to village-level problem solving. It formulated a broad based communication framework within the university structure and fine-tuned the media subsystems encompassed by that framework. The project developed new infrastructures and empirically validated communication models for rural development using modern communication technology. The central research concept was participatory decision making. Professor Ostman dedicated a sabbatic leave working on the Poona project.

Following an extensive baseline survey, data for four different communication strategies (predominantly using visual channels) were collected from experiments in four “treatment villages” and a “control village.” Each village diagnosed its own need and put together a centralized dissemination environment including a Community Communication Center. These centers were manned and controlled by staff and students from an affiliated college in the village area who were trained at the Research and Development Center at the University of Poona’s School of Communication Studies. A Data/Documenta-
tion/Center was set up there which also functioned as a training facility and a link for international cooperation. Papers presented at a “Seminar on Development Communication Research” at the University of Poona were published in a book *Perspectives on Development Communication* edited by Professor White and Professor K. Sadanandandan Nair of the University of Poona.

Professor Ward also helped to establish an Information and Communication Division for the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) at Hyderabad. The request came from the Director General in the early days of the Institute in 1973.

In 1998, the Department became involved in another India project, again in South India. The World Bank’s support of Human Resources Development programs nationwide in India included the Tamil Nadu University of Veterinary and Animal Sciences. Under this project, the University invited Professor Colle to serve as a consultant on building its extension education program. He helped re-design its undergraduate and graduate curriculum and provided plans for revitalizing various University Training and Research Centers scattered throughout Tamil Nadu.

**Multi-national Program**

Shortly after the scope of population programs expanded into the more comprehensive and multi-faceted concept of reproductive health at the 1994 Cairo international meeting on population and development, the World Health Organization invited the Department of Communication to join it in providing communication training for reproductive health researchers and specialists in developing nations. Professors Colle and Ostman accepted the challenge and designed short intensive workshops that would help scientists and media people begin to understand each others’ professional worlds. By the end of 1999, their initial success in Bangladesh led to later workshops in Thailand (twice), India, Zimbabwe, and China (twice).

**Institution Building**

Many of the activities described earlier should be placed under the heading “institution building.” Clearly, the projects in the Philippines, the South Pacific, Honduras and India were dedicated to establishing departments and programs that would last beyond the time the Department’s faculty members were involved. One of the most recent institution building activities was the Department’s collaboration with Nanyang Technological University (NTU) in creating a School of Communication Studies. It started with a high level delegation visiting Cornell in the early 1990s to get ideas on adding a journalism school to its engineering and business professional programs on the Singapore campus. Subsequently, NTU invited Professor Colle to Singapore to help design the school which was to become “Communication” rather than “Journalism.” The School opened in 1993, and NTU completed construction of a state-of-the-art building in 1995. In 1996, Professor Colle became the first occupant of a chair endowed in honor of Wee Kim Wee, a former President of Singapore.
ON-CAMPUS INTERNATIONAL INITIATIVES

Communication Planning and Strategy Program

The U.S. Agency for International Development (USAID) began to supply "seed money" in 1980 to encourage innovative programs for training decision-making professionals from public and private sectors in developing countries. The Department's application for one of these grants was approved, and Professor Colle initiated the Communication Planning and Strategy (CPS) program. He and Professor Awa were co-directors with several of the Department's faculty members volunteering to be instructors. After a start with the "seed money," the program became self-supporting.

For the 15 years of its existence, CPS attracted 321 participants from more than 60 countries. Each year, the locale was the Cornell University campus except for 1994 when the Nanyang Technology University in Singapore became the host.

The purpose of CPS was to increase participants' ability to use systematic communication support in development activities, especially those related to agriculture, health, nutrition, family planning, and adult education. It helped participants strengthen their skills in designing strategies and mobilizing resources for communication components of development programs. Participants included project directors, ministry officials, extension specialists, and officers from international and bi-lateral development agencies.

The CPS concept was not restricted to a summer program for international participants but was redesigned and made available to both undergraduate and graduate students at Cornell during the academic year. Other courses included "Intercultural and Development Communication" and "Communication in the Developing Nations."

Scholars-in-Residence and Field Trips Abroad

The Department's Scholar-in-Residence Program made it possible for international communication specialists to come to Cornell for a year of study and research. Also, the Department planned overseas internships for its students and organized field trips for them to places such as Jamaica, Puerto Rico and Europe where they experienced the drama and richness of another culture. The latter have sometimes triggered an unexpected array of other activities in development communication. For example, a field trip for communication majors to Puerto Rico in 1991 resulted in Professors Colle and Ostman making connections with the Division of Community Education (DIVEDCO), a program created in 1948 by the first elected governor of Puerto Rico. They discovered that the "jiberos" (rural people) were intimately involved in creating communication materials that helped community organizers mobilize communities to solve their own problems, and that DIVEDCO was ahead of the times in promoting the concepts of participation, empowerment and the status of women. Also, as a program that had lasted four decades, the Puerto Rican project appeared to have some answers to the problem of sustainability. Therefore, a research program was designed to document how DIVEDCO worked and how much it had achieved. Two graduate students' theses and two undergraduate independent study projects contributed significantly to an effort that spanned more than five years. Because DIVEDCO appeared to provide lessons for development efforts in the 1990s, Professors Colle and Ostman wrote and pre-
presented papers at professional meetings including those representing sociology, popular culture, speech, communication, and Hispanic studies.

An important by-product of the DIVEDCO research was another discovery: Jack Delano. He had been one of the architects of the DIVEDCO project and a key person in involving jiberos in media production. One of Delano’s most prominent products was an 80-minute feature film Los Peloteros (The Baseball Players) that received several international film awards. It dramatically portrayed the potential of self-help as a means of solving development problems and how indigenous people could play significant roles in media production. But Delano’s talents went well beyond film making: he possessed outstanding skills in photography, music, architecture, and graphic design. The two professors decided Delano could contribute to the intellectual life of the Cornell campus and prepared the documentation to nominate him as an Andrew Dickson White Professor-at-Large. He received this honor in 1991 and conducted several seminars and lectures on the campus during 1991-93.

This Puerto Rico story went even further. Professors Colle and Ostman began working on a book documentary of the life of DIVEDCO. A Puerto Rican graduate student in the Department participated in the book project and based her Master’s thesis on her work.

During the winter break in January 1993, six students accompanied Professor Awa and Lecturer Toni Russo on an 18-day field trip in France, Italy and England. Their objective: compare Western European and North American media systems and participate in conferences on Third World, Eastern Bloc, and Far East communications at media houses in Paris, Rome, and London. They gained experience in intercultural communication and explored the role of communication in international development projects.

Graduate Students from Abroad

Students from other parts of the world have come to study for advanced degrees in the Field of Communication since 1969 when the first program started: Master of Professional Studies (M.P.S.). By 1999, international students had received 89 M.P.S., 23 M.S., and 4 Ph.D. degrees. (The latter two programs began in 1990 and 1992.) Whenever possible, the faculty encouraged them to undertake graduate projects or theses related to their professional responsibilities in their own countries. Here are four examples with the names of the international students followed by the names of their advisors (in parentheses) and titles of projects or theses:

Mahyuddin Syam (W. B. Ward): Communication Strategies in Disseminating Research Findings from Indonesia’s Central Research Institute for Agriculture.


Anupama Dokeniya (J. Shanahan): Re-Forming the State: An Institutional Analysis of Telecommunications Liberalization in India.

(See Appendix N for a more complete listing.)
The Department has been involved with 39 countries since the early 1950s. Formal activities started in the Philippines in 1956 with the Cornell-Los Banos Project at the College of Agriculture of the University of the Philippines. (Gateway to campus shown on the left.) Extending over a period of 17 years, the project resulted in the rebirth of that college after major destruction by the Japanese during World War II. Faculty worked on the development of a new Office of Extension and Publications and its successor, Department of Agricultural Information and Communications. Right, Professor Ward reviewed plans with two future departmental chairmen, Juan F. Jamias (left) and Thomas G. Flores (center).

One of the major efforts of the Department in India was at Uttar Pradesh Agricultural University in Pantnagar (above). The Ford Foundation provided funds to help establish a communication center in 1969. The new entity, directly responsible to the Vice-Chancellor, had university-wide responsibilities in publishing, mass media, in-service training, and academic and research programs in communication. An exhibit prepared by the Center and Extension Service for a farmer's fair on the campus is shown on the right.
Television programs for rural villages in India received attention from Department personnel at the request of universities and government agencies. Headlines about "Satellite communication to be launched in 1974" and "TV coverage for 90 percent of India's population by 1980" turned out to be more formidable than expected because of problems of management and programming for many different languages and social customs. Left, shooting a rural program in a TV studio; right, a village tele-club audience gathering for an evening broadcast.

Three Department professors (Colle, Stephen and Ward) assisted the Basic Village Education Project in Guatemala during the 1970s. Professor Colle (far right) and Guatemalan members of the project take a field trip to collect data on local agricultural practices.

In cooperation with the College's Office for International Agricultural Development, the Department helped to design a week's symposium in Cali, Colombia in March 1974. Fifty-eight participants were actively involved in rural development and communication in South and North America, Asia, and Africa. The symposium's objectives: analyze recent research findings, exchange ideas and strategies for improving communication systems, and explore ways and means for developing more training and research in communication. The proceedings (275 printed pages) were compiled and edited by the Department. (The International Center for Tropical Agriculture (CIAT) was co-sponsor of the symposium.)
Several international agricultural research centers in Africa, India, Philippines, South America, Middle East, and other parts of the world requested assistance for communication training and development of communication strategies for a wide range of programs. Two of the centers are shown here: airview of the International Institute of Tropical Agriculture in Nigeria (left) and research plots at the International Center for Agricultural Research in the Dry Areas in Syria (right).

Under the South Pacific Regional Agricultural Development Project in the early 1980s, the Department was directly involved in both short-term and graduate training. Professor Roy Colle (left) and Professor Dan McDonald (far right) conducted communication training workshops in Western Samoa for extension officers from several island nations.

The Department's largest official international effort during the 1980s, in collaboration with the College's Agricultural Development Program and the Academy for Educational Development, was the Communication for Technology Transfer in Agriculture (CTTA) Project in Honduras. Its two primary responsibilities were to develop a communication unit to support the dissemination of technology created by the Honduran Agricultural Research Foundation (FHIA) and plan fund-raising strategies to support foundation financial needs. A publication (left), prepared in 1988, was used extensively by the Foundation's Office of Development; The diagram (right) shows the communication network with the Communication Unit (CU) as a focal point.

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