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ABSTRACT

The written proceedings of the 1975 Southwest American Business Communication Association (ABCA) Spring Conference, in Houston, Texas, whose theme was "The Many Roles of the ABCA Member" are contained in this report. The five major parts of the document discuss the ABCA member as a job counselor, graduate research advisor, semanticist, and researcher with emphasis in one section on women. Included in this book are such articles as "Counseling for Oral and Written Interview: The Career Search Memo" by Jody Elliott; "Current Status of Business Communication Compared to Needs of Selected Business Establishment in Texas, 1974" by Blanchard LeNoir; "A General Semantic Approach to Psychological Growth and Organizational Behavior" by Bobby Vaught; "Comments on Status of Women Faculty Members in the Field of Marketing" by Bette Stead; Personality Characteristics of Boundary Spanners in an Interorganizational Network" by Eugène Bell; and "Games, Roles, and Simulations" by Dr. Phillip Lewis. (TS)

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PROCEEDINGS

ED119234

# THE MANY ROLES OF THE ABCA MEMBER

## 1975 SOUTHWEST ABCA SPRING CONFERENCE

SAM J. BRUNO, EDITOR

PUBLISHED BY  
SCHOOL OF PROFESSIONAL STUDIES  
UNIVERSITY OF HOUSTON AT CLEAR LAKE CITY  
2700 Bay Area Boulevard  
Houston, Texas 77058

## FOREWORD

The story is told about Michaelangelo, the famous sculptor. As he was rolling a long stone along a dirt road one day, a man approached him and asked what he was doing. Michaelangelo's reply was, "Shhh! There's an angel in here!"

That allegory reflects the intent, content, and direction of these 2nd Annual Proceedings of the Southwest ABCA. I sincerely believe there's an angel ahead throughout or somewhere for each of you in the forthcoming pages. And there are many angels -- beautiful people -- responsible for its final publication. First, there are those people who researched, wrote, and presented the papers on March 3 and 4 in Houston. Without their work, these Proceedings could not have been published. Second, there are those people who attended, listened, and reacted at the 1975 Houston meeting. Without them, there would have been no people with whom these ideas could have been initially exchanged. Third, for those of you who could not attend the meeting this year, you can glean some of the climate of that event by the written word -- in these Proceedings line by line and between the lines.

Last, and certainly not least, all of us are indebted to the work of Sam J. Bruno, our Editor. It was his initial idea to publish the Proceedings in 1974. That original publication as well as this one have been almost entirely the result of his untold number of thankless hours of work on behalf of the Southwest ABCA. He has had to edit, retype, set up production, and handle mailings for these publications for the last two years. Without question, all of us owe Sam our thanks in so many, many ways. I would hope that we would remember that and tell him so in future meetings. In addition, Louis Rodriguez, Vice Chancellor and Provost of Academic Affairs at the University of Houston at Clear Lake City, provided the academic climate and supplemental financial support for these 1975 Proceedings to become a reality. His support, too, should be appreciated and long remembered.

I personally, can take pride in the fact that we in the Southwest are the only part of the American Business Communication Association to publish its proceedings. Within and without, directly and indirectly, the work and interests of many good people made these 1975 Proceedings possible -- our editor, his dean, our members, our contributing authors,

and all those participating in ABCA activities; in other words -- YOU!  
That goodness in each of you manifests itself in these 1975 Proceedings.  
It is that goodness also that I would hope will continue and grow in  
1976. My thanks go to you for sharing it with me!

John D. Pettit, Jr.  
Vice President - Southwest American  
Business Communication Association

North Texas State University  
January 1976

## PREFACE

These proceedings represent the written record of the 1975 Southwest American Business Communication Association Spring Conference, held at the Hyatt Regency in Houston, Texas, March 5-8.

The conference theme was "The Many Roles of the ABCA Member." With minor exceptions, its coverage was within the overall theme.

The exception included a session on "Women in Academia." However, our very able Program Chairperson, Bette Ann Stead, skillfully integrated this session into the conference theme. This was done by taking the broad view that communication is an all encompassing process through which any social event can be described. Surely, the plight of women in higher education is a social event which warrants more communication.

Aside from the session on "Women in Academia," other major sessions covered such topics as ABCA Member as Job Counselors, Graduate Research Advisors, Semanticists, Researchers, and Classroom Catalyst.

In all seriousness, Bette and her session Chairpersons did an outstanding and exhaustive job of amassing talented speakers which produced a very enriching academy meeting. Although 18 conference speakers appeared on the program, not all are represented in these proceedings, for one reason or another. However, the complete conference program accompanies these introductory remarks.

The sequencing of these proceedings corresponds to the conference program. Each paper was compiled as presented in its entirety at the session itself. Editorial changes were necessary, in many cases, to achieve uniform style and presentation.

As with most acknowledgments, it is impossible to name all of those who have provided indispensable assistance to the completion of these proceedings. However, thanks must go to several secretaries at the University of Houston at Clear Lake City for typing parts of this manuscript. Separately, I am indebted to Etta Watson, my efficient student worker, for her skillful typing of these proceedings during its final stages of completion and for carefully proofreading the entire manuscript. A note of appreciation is also due Dr. W. Frank Tolbert, Texas Southern University, for reading parts of these proceedings for typographical errors.

A special note of appreciation and acknowledgment must be extended to Dr. Rosemary Pledger, Dean of the School of Professional Studies, for her interest in having these proceedings published and scheduling needed secretarial help. All of us are indebted to Dr. Louis J. Rodriguez, my former Dean and now Vice Chancellor and Provost at UH/CLC for his encouragement and financial assistance in the publication of this manuscript. I also wish to offer my sincere thanks to those who prepared papers and contributed to a highly rewarding conference.

Hopefully, readers of this collection of conference papers will find them professionally rewarding and academically enriching.

Sam J. Bruno  
Editor  
ABCA -- Southwest Region

University of Houston at Clear Lake City  
January, 1976

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PROGRAM  
SOUTHWESTERN REGIONAL MEETING  
AMERICAN BUSINESS COMMUNICATION ASSOCIATION  
"THE MANY ROLES OF THE ABCA MEMBER"

Thursday, March 6, 1975

Dogwood B Room

1:45 am WELCOME AND INTRODUCTIONS

Chairperson: Bette Ann Stead  
University of Houston

Speaker: John D. Pettit, Jr.  
North Texas State University  
Vice-President Southwest Region

2:00 am THE ABCA MEMBER AS JOB COUNSELOR: RESUMES, APPLICATION  
LETTERS, AND JOB INTERVIEWS

Chairperson: Xymena Kulsrud  
University of Tulsa

Speakers:

*Counseling for Oral and Written Interviews: The Career Search  
Memo*

Jody Elliott  
University of Houston

*The College Placement Office and the Company Recruiter --  
Another Viewpoint*

Boyd Armstrong  
University of Houston

3:15 am THE ABCA MEMBER AS GRADUATE RESEARCH ADVISOR: OUR GRADUATE  
STUDENTS RESEARCH FINDINGS

Chairperson: Bobbye Persing  
Central (Oklahoma) State University

Speaker:

*Current Status of Business Communication Compared to Needs  
of Selected Business Establishments in Texas, 1974*

Blanchard L. LeNoir  
Cleveland Special Services  
Cleveland, Texas

6:30 pm DINNER

Chairperson: Sam Bruno  
University of Houston at Clear Lake City

Speaker:

*The Management of Time*  
Jean Voyles  
National President, ABCA

Friday, March 7, 1975

8:45 am THE ABCA MEMBER AS SEMANTICIST: GENERAL SEMANTICS  
APPLICATIONS AS APPLIED TO CURRENT TOPICS

Chairperson: John D. Pettit, Jr.  
North Texas State University

Speakers:

*Interrelating General Semantics and Creative Interchange  
to Develop a Concept and a Process of Creativity for  
"Open" Organizational Communication*

Jim Carter  
North Texas State University

*Values for Working and General Semantics: Application to  
Communication and Motivation*  
Bernard Coda and Vincent Flowers  
North Texas State University

*A General Semantics Approach to Psychological Growth and  
Organizational Behavior*  
Bobby Vaught  
Tarleton State University

10:00 am COFFEE

10:15 am SPECIAL SESSION ON WOMEN IN ACADEMIA  
CROSS-DISCIPLINE, ACCOUNTING, BUSINESS COMMUNICATIONS,  
MANAGEMENT AND MARKETING

Chairperson: Dorothy Herbert Griest  
Northeast Louisiana University

Speakers:

*Women in Accounting, Current Status in Big Eight Accounting  
Firms*

Gayle Rayborn  
Memphis State University

Discussant: Virginia Bean  
University of Colorado

*Status of Women Faculty Members in the Academic World of  
the Field of Marketing*  
Dev S. Pathak and W. Daniel Rountree  
Appalacian State University

Discussant: Bette Ann Stead  
University of Houston

*Attitudes Concerning the Socio-Cultural Roles of Women  
Among Men and Women in an Academic Environment*  
Stephanie S. Robbins and Anne J. Sweaney  
University of Alabama

Discussant: Rose Knotts  
Prarie View A&M University

*Closed Door to the Executive Suite, An Analysis of the  
10-Year Career Patterns of 21 Boston Women*  
Agnes Missirian  
Babson College

12:00  
Noon

LUNCH

2:00 pm

THE ABCA MEMBER AS RESEARCHER: RESEARCH IN ORGANIZATIONAL  
COMMUNICATION

Chairperson: Winford E. Holland  
University of Houston

Speakers:

*Personality Characteristics of Boundary Spanners in  
Interorganizational Networks*  
Eugene C. Bell  
University of Oklahoma

*Solving Organizational and Departmental Morale and Attitude  
Problems Communicatively*  
Phillip V. Lewis  
Oklahoma State University

*Patterns of Returns on First Mailings of Survey Questionnaires:  
Some Preliminary Findings*  
W. Jack Duncan and Fred L. Myrick  
University of Alabama

*Patterns of Interpersonal Communication In/Between Large  
Scientific Organizations*

William T. Flannery      William E. Natameyer  
University of Houston      University of Houston

3:15 pm THE ABCA MEMBER AS CLASSROOM CATALYST: EXPERIMENTAL  
LEARNING -- GAMES THAT COMMUNICATE AND TEACH

Chairperson: Raymond V. Lesikar  
Louisiana State University

Speakers:

*Games, Roles, and Simulations*

Philip V. Lewis  
Oklahoma State University

*An Experiential Laboratory in Nonverbal Communication*

Marie Dalton  
College of the Mainland (Texas City)

*Weiman's Five Human Interaction Skills Applied to Business  
Communication*

John D. Pettit and Jim Carter  
North Texas State University

Handout Corral

Coordinator: Marie Dalton  
College of the Mainland (Texas City)

PART 1  
THE ABCA MEMBER AS JOB COUNSELOR: RESUMES,  
APPLICATION LETTERS, AND JOB INTERVIEWS

## COUNSELING FOR ORAL AND WRITTEN INTERVIEW:

### THE CAREER SEARCH MEMO

Jody Elliott  
University of Houston

### INTRODUCTION

Every business student must meet two realistic communication challenges if the transition from college to corporate life is to be successful: he must communicate effectively in the job interview or when writing the company-oriented, persuasive cover letter which requests an interview. It is the responsibility of the business communications teacher to serve as job counselor in preparing the student for these entry-level communication experiences. This paper introduces a simple student preparation device called the Career Research Memo, which a teacher may use to fulfill these counseling responsibilities.

### THE CAREER RESEARCH MEMO

The Career Research Memo is a 5-part outline assignment, designed to provide the business communication teacher with a multi-purposed teach-device. It can be used to teach:

1. the need for organization in business writing;
2. the memo format which allows for selective rather than forced reading;
3. the research procedure for data collection; and
4. the technique for reporting it in a documented form used and respected in the professional business environment.

However, its use as a counseling device is the primary concern of the paper. It is a counseling instrument which:

1. introduces the student to career sources typically recommended;<sup>1</sup>
2. allows the student to develop decision-making skills;
3. prepares the student for answering frequently-asked job interview questions;



### Recommended Sources

Part I ideally requires the use of at least two of the principal sources typically recommended for career information:<sup>2</sup> the Occupational Outlook Handbook and the College Placement Annual. The handbook describes hundreds of jobs by title, covering such information as nature of the work; places of employment; training, other qualifications, and advancement; employment outlook; earnings and working conditions; and sources of additional information. Dr. John L. Holland describes it as "the best single source for information about occupations".<sup>3</sup> It is also as valuable an information guide to the researcher who is only nine hours away from a degree in finance as it is to the novice. And for the student who has worked full time for several years and is returning to school to concentrate on getting his degree, the handbook provides up-to-date information about earnings and/or new sources of occupationally-related job information because it is updated every two years by the Bureau of Labor Statistics.

The College Placement Annual is used to provide needed information for the C Part: Three companies who hire . . . and it contains an alphabetical and geographical listing of some 1800 companies in the United States and Canada describing job openings, the majors they hire, and the name, address, and title of the person to contact about a job. This source is useful to sophomores or seniors, the employed or unemployed, because it is a yearly publication and can be used to update, confirm, or establish the fact that companies are currently hiring graduates in a particular major.

### Provides Communication Preparation

When this section of the Career Research Memo is completed, the student can answer such interview questions as:

"Why did you select marketing as a major?"<sup>4</sup> or the closely related "Why did you change your major from accounting to finance?"<sup>5</sup> Once a student has described in writing his reasons for selecting or changing his major, he can logically and confidently discuss this subject with the interviewer, exhibiting more verbal control than would be possible if he were ad-libbing an answer. Frequently, enthusiasm is added to confidence when the student realizes the major chosen provides for job variety and flexibility of career alternatives.

### Meets Counseling Responsibility

When firm reasons for selecting a major are given, the teacher can know the student is prepared to function well in this area of the interview. However, even if reasons for selecting a major are vague or obviously "significant-other" motivated, the written instructions on the memo to "be more specific here" or "to read more extensively" provides the teacher with the knowledge that at least the student has gained useful feedback for guidance in interview preparation.

Part II: Establishes Procedure to Determine Factual Base for Company Choice:

The second part of the Career Research Memo, as shown in Figure 2, is structured to provide students with names of company officials, the competitive position of the company, its growth potential, and so on, which assists them in establishing a base for selecting a potential employer.

II. Company:

- A. Name, title, address of person to contact:
- B. Reasons I selected \_\_\_\_\_ :
- C. Information I learned about \_\_\_\_\_ :
  1. Type of company - products or services:
  2. Size:
  3. Its competitive position:
  4. Growth rate - potential:
  5. Company policies and procedures:
  6. Organization structure:

Figure 2: Base for Company Choice

Library References:

This section is used to introduce the student to the following sources of information: Library of Congress reference numbers are provided in a subsequent memo (used to illustrate the intracompany use of this form) to ensure a thorough search of these library stand-bys:

Fortune Double 500 Directory (Ref/HD 2785/F59)

Moody's Manuals

<u>Industrials</u>	(Ref/HG 4916/M67)
<u>OTC Industrials</u>	(Ref/HG 4961/M715)
<u>Public Utilities</u>	(Ref/HG 4961/M7245)
<u>Transportation</u>	(Ref/HG 4971/M74)
<u>Banks and Finance</u>	(Ref/HG 4961/M65)
<u>Municipals and Governments</u>	(Ref/HG 4931/M58)

Standard and Poor's Register of Corporations (Ref/HG 4057/A4)

Fortune Double 500 Directory (Ref/HD 2785/F59)

Possible Standard and Poor's Industry Surveys (Ref/HG 4055/S7)

25,000 Leading U.S. Corporations (Ref/HD 9723/N4)

American Exchange (Ref/HG 4915/S66)

New York Stock Exchange (Ref/HG 4915/S7)

Over-the-Counter and Regional Industry Surveys (Ref/HG 4905/S66)

Business Periodicals Index (Ref/HB Z7164 C81 B9)

Funk and Scott Index of Corporations and Industries (Ref/HF Z7164 C8 F6)

Wall Street Journal Index (Ref/HG 1 W26) and

Brochures/Interviews with the company itself.

### Meeting Communication Objectives

When the student has gathered the information necessary to complete Section II, he has the specific name and title of the person to whom he should address his persuasive cover letter requesting a job interview, and is instructed to use the title as printed in the brochure or book he consulted. He has determined his own reasons for selecting the company, and he has found company-oriented information, such as competitive position or growth-rate potential, with which to gain the attention of his reader in the first paragraph of the contact letter he may write, if an interview at the Placement Center can not be arranged.

The student also decides that a company's policies and procedures are those he is familiar with from past experience, or that the company is a size he would feel comfortable being a part of. One student revealed his ability to understand the term "company" or "people-orientation" by including with his diagram of organization structure the names of all the secretaries in the accounting department of the company he researched.

### Completing Counseling Responsibility

In addition to knowing the student now has details to use in writing an application letter which requires them to be effective,<sup>6</sup> the teacher can be confident that the student can answer another frequently asked question in most 30-minute sessions: "Why did you decide to interview with our company?"<sup>7</sup> One student reported that her interview session with IBM began with this question and when her response was "I chose IBM as the company I would research for a class assignment and got so turned on to the company name that I've been reading every IBM mention I found while doing research papers in marketing", he asked that she tell him what she knew. The result was that, instead of hiring her for the entry-level computer operator job she was interviewed for in the Marketing Department, he hired her as a management trainee with a starting salary of \$850.00 and a company-paid trip to New York for the training.

Last, but not least, the teacher has provided the student with an effective procedure for collecting kinds of information about a company which can help him decide to change jobs and/or prepare for future company interviews when career changes are needed. The graduating senior normally has from 6 to 10 interviews on campus if he signs up for the Placement Center recruiting sessions. Knowing where to find information and what kinds to collect is helpful information to use for future interview preparation.

Part III: Requires Formulation of Specific Job Goals

The final section of Career Research Memo is designed to provide students with detailed information for specific job choice

III. Job I'll apply for:

A. Job description:

B. Job requirements:

1. Educational:

2. Personal characteristics necessary for success:

3. Other (certification, bonding, etc.):

C. Salary range:

---

Figure 3: Information for Specific Job Choice

Sources for Career Information

Current newspapers and career-oriented magazines are suggested sources of information useful in determining qualifications for specific jobs. Listed below are several career information sources:

Career Guidance: A Handbook of Methods (Ref HF 5381 C2657)

Career Counseling and Placement in Higher Education (LB 2343 S673)

Cowles' Guide to Careers and Professions (Ref HF 5382.5/U5/M37)

Encyclopedia of Careers and Vocational Guidance (Ref/HF 5381/E52/v.1-2)

Occupational Literature;  
and Annotated Bibliography (Ref/HF/Z7164/C81/F6/1971)

Sources of Occupational Information (Ref/Z7164/V6/048/1970)

Careers and Opportunities in ---- (Ref/HF 5629/5628/QD39.5/P6)

Careers for College Women (Ref/HF 27164/V6/WC)

### Communicating Responses

"What makes you think you'll like the work Arthur Anderson expects from a junior accountant?", or its similarly-worded counterpart, "What qualifications do you have that make you feel you will be successful in your field?"<sup>8</sup> are questions which the student is prepared to answer when he completes Part III of the Career Research Memo.

But more important is the background that collecting these facts gives the student. When a student knows what he will be expected to do, in a general way, he can respond specifically by describing his own interests and capabilities as they relate to these questions. He can also ask the interviewer about specific company requirements which might exceed or differ from the general ones.

### Accomplishing Counseling Function

The teacher is rewarded after reading the application letters which result from the student's ability to describe the work that will be expected of him in the interest-building sentences of the letter. "Proof" examples such as "Your requirement that a systems analyst know the Fortran and Cobol languages is one I can meet..." can be found more readily when this research precedes the lecture and reading material on application letters. A more alert student response can be observed in giving letter instructions as well.

Writing and interviewing requirements needed by students to effectively meet entry level communication expectations in business have been provided when the teacher receives thorough research in this part of the Career Research Memo.

### STUDENT-PERCEIVED UTILITY OF CAREER RESEARCH MEMO

Last year, 100 students enrolled in the business communications core course (17 seniors, 58 juniors, and 25 sophomores) and participated in a survey to determine the usefulness of the career memo assignment. The results were as follows:

1. Upwards of 7 out of 10 indicated that the assignment provided specific information they did not have before they did the research. For instance, the student "learned that my major prepares me for more jobs than I knew before the research"; "learned the names of specific companies who hire my major"; "learned more specifically the requirements of the job I will apply for"; or, "learned more about what I would do in the job I will apply for".
2. Approximately 50 per cent replied that the research actually led to a decision: "decided on a company I would like to interview with"; or, "decided on a job I want when I graduate".

3. Substantially fewer students, almost 2 per cent, revealed the following effects: "decided on a company to work for"; "made a job contact"; "learned something new about the company I now work for"; or, "decided to change my major".

Further survey results are presented in Table I.

TABLE I

STUDENT-PERCEIVED BENEFITS OF CAREER RESEARCH ASSIGNMENT

Total Student Response in %	Student Responses by Classification in %			Actual Response Items
	Sen.	Jr.	Soph.	
71	11	43	17	Learned that my major prepares me for more jobs than I knew before the research.
71	13	39	19	Learned the names of specific companies who hired my major which I did not know before.
69	9	43	17	Learned more specifically the requirements of the job I will apply for.
66	7	42	17	Learned more about what I would do in the job I will apply for.
54	12	31	11	Decided on a company I would like to interview with.
44	7	27	10	Decided on the job I want when I graduate.
27	10	11	6	Decided on a company to work for.
23	3	13	7	Decided on a major.
18	2	10	6	Made a job contact.
12	2	4	6	Learned something new about the company I now work for.
9	1	3	5	Decided to change my major.

Source: Primary

It is interesting to note that the majority of students surveyed responded favorably to the Career Research Memo assignment. Listed below are representative responses to the question, "Please write in the space below any positive or negative information and/or feeling you have about the Career Research Memo assignment":

The assignment didn't tell me much I didn't know.

\* \* \* \* \*

I felt this assignment stressed the importance of finding out specific information about employment too much. At least when a person decides to seek employment I will have an idea of where to start.

\* \* \* \* \*

This is information I wouldn't normally seek, but it will be useful in the future.

\* \* \* \* \*

...provided me with the ability to research job opportunities and prepare for interviews throughout my career.

\* \* \* \* \*

It got me to do some heavy thinking. I guess the truth is that what I mainly found out is how much I didn't know about my future. I have since then gotten an interview with counseling and testing.

\* \* \* \* \*

Learned how to use the Placement Center. I now intend to use it to find a job related to my major this summer.

\* \* \* \* \*

Found out courses to take as electives to help me round out my major.

\* \* \* \* \*

...was made aware of career information available in the library that I didn't know existed.

\* \* \* \* \*

This assignment has proved to be the most rewarding piece of research I have ever done. This will be an extremely useful procedure to follow in the future. We need more assignments like this. I'm confident now in my major. Thank you!

Of the 62 responses to the above question, 53 were positive, 5 were mixed, and only 4 were negative.

## SUMMARY

The Career Research Memo is a 5-part outline assignment used as a counseling device which (1) helps students make data-based career decisions after graduation; and (2) provides a simple way for the business communication teacher to meet some of the counseling responsibilities required before the student can communicate effectively.

The completed research memo, then, makes the teacher confident that the student has made (or now knows to make) some career decisions which might have been put off without the push this assignment provides. The teacher can also see that contact with helpful information sources has been made and that the student has some of the specific information he will need (1) to discuss the company, its job and himself during the job interview and/or (2) to write more realistically the company-oriented cover letter requesting a job interview. One insurance company defined confidence as "the feeling you have before you know the facts". The purpose of the Career Research Memo is to remove the student's false confidence of this type and replace it with the confidence that comes when one knows what to expect and is prepared for it. As a result, the teacher can be sure that counseling responsibilities have been met in these areas and can hope the student will be more articulate when confident and more confident when prepared.

REFERENCES

<sup>1</sup>J. H. Menning and C. W. Wilkinson, Communicating Through Letter and Reports, Richard D. Irwin, Inc., Homewood, Illinois, 1967, pp. 428-430.

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<sup>3</sup>John L. Holland, The Self Directed Search, Consulting Psychologists Press, Palo Alto, California, 1970, p. 12.

<sup>4</sup>Robert Aurner and M. Philip Wolf, Effective Communication in Business, Southwestern Publishing Co., Dallas, Texas, 1974, p. 278.

<sup>5</sup>Dawe and Lord, op. cit., p. 209.

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PART 2  
THE ABCA MEMBER AS GRADUATE RESEARCH ADVISOR:  
OUR GRADUATE STUDENTS RESEARCH FINDINGS

CURRENT STATUS OF BUSINESS COMMUNICATION COMPARED TO NEEDS  
OF SELECTED BUSINESS ESTABLISHMENT IN TEXAS, 1974

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What is status of Business Communications in Texas today? How do the deans and department heads feel about requiring communication courses? More important, what does management feel about business graduates having business communication courses once on the job?

William (Jack) Lord, Past President of the ABCA, did a study of Business Writing Course offerings in 1962,<sup>1</sup> emphasizing what type of courses were being offered (Letters only, reports only, combination of letters, reports and other types, etc.). At the 1970 Southwest Regional meeting of the ABCA, Dr. Lord conducted an informal discussion about the current status of business communication courses in Texas colleges.

There was concern expressed about current trends of communication courses in the business curricula. Some expressed fear of elimination or deemphasis of the course. The idea for updating Lord's study was presented and approved.

The study was designed to investigate the business curriculum, to find trends, and to compare the importance of the course for academic administrators and business managers.

Results of the study indicate that significant changes have occurred in the following areas:

1. Type of course offerings
2. Academic qualifications of professors
3. Value ratings of business managers
4. Number of colleges offering and/or requiring Business Communication courses
5. Number of courses offered and/or required per college
6. Projected trends from academic administrators of business (Deans, Department Heads, etc.).

## METHODOLOGY

The general method utilized mail questionnaires for three groups in Texas:

1. Academic administrators of 53 colleges of business
2. Business Communication professors
3. Selected business management groups (i.e., cluster sample, Houston personnel consultants, and management seminar.)

Responses were interpreted using descriptive statistics and one-way frequency distributions. A high response was obtained from all groups (75.5% to 100%).

All senior colleges and universities in Texas (53) were sent questionnaires in 1974. One form was directed to the academic administrator and another to the professor teaching the communication course. A higher response was received from administrators than faculty. The highest responses came from the business management groups surveyed.

Three research hypotheses were investigated:

- I. Qualifications of college professors who teach business communication courses are vague in Texas colleges.
- II. College administrators and business management have differing priorities assigned to communication skills.
- III. The types of business communication courses offered and required have changed in the last 14 years(1960-1974).

## RESEARCH HYPOTHESES

### Hypothesis I: Qualifications of Professors

Dennis B. Ford, Dean of Business Administration at Texas A & I University, conjectured in 1973 that the qualifications of business communication professors were vague. Data submitted by 48 professors indicates little, if any, relationship between having had the communication course (or English course) and teaching the course. Professors who teach accounting majored in accounting, those who teach management majored in management and so on. Few professors teaching communication courses majored in business communications (at least in Texas).

The 48 responding business communication professors had the following characteristics:

- 46.8% held academic rank of assistant professors
- 62.2% held degrees from Texas college
- 68.8% had tenure
- 54.2% were ABCA members
- 78.7% taught 6 hours or less of business communications.

At the undergraduate level, 21.1% had not had any business communication course. Jack Lord, our 1974 ABCA President, found in 1960 that 60.2% of the business graduates were required to have a business communication course.<sup>2</sup> In this study only 42.5% had taken over the three hour minimum. If it is assumed that 60% were required to have had the course since they graduated during this period, then today's business communication professors have no more business communication courses (undergraduate level) than any other business professor.

Using graduate level business communication courses as possible preparation for a business communication assignment, only 29.8% had graduate level courses (master's degree) and 25% had doctor's level courses. At all levels, significant percentages of the respondents did not have the very course they taught. It should be noted that most (78.7%) also did not have full-time business communication assignments.

Going to English courses as a qualification, only 27.8% had over 20 hours of English at the undergraduate level. At the master's degree level, 80.9% did not have any English hours. Only 10.5% had any English courses at the doctor's level.

Thus, there seems to be little support for either business communication and/or English courses being a definite qualification to teach the communication course. The hypothesis that qualifications are vague would be considered to be true for the group surveyed in Texas.

### Hypothesis II: Differing Priorities

This hypothesis states that differing values exist as to priorities assigned to communication skills by college academic administrators and business management groups. The following table compares the responses of the two groups.

TABLE I

Business Management Groups Compared to College  
Academic Administrators, 1974

<u>CATEGORY</u>	<u>BOLE</u>	<u>CLEVELAND</u>	<u>HOUSTON</u>	<u>ACADEMIC ADMINISTRATOR</u>
Business Communications of value, now	100%	96.0%	----	77.8%
Business Communications Should be Required	94.5%	90.0%	88.8%	83.8%
Value of Business Communications to other Business Course (4-5 rating)	56%	61.4%	61.5%	69.7%
Same as above but 3-5 rating	73%	92.8%	100% <sup>a</sup>	88.3%

<sup>a</sup>Using importance to business graduates for Business Communication courses

The composite average of the business groups stating that business communications should be required is 90.4% compared to 83.8% for the academic administrators. Management thus is more in favor of requiring the course than the college administrators.

As seen by Table I, the college administrators have a much lower value (77.8%) of the course to themselves professionally than do the business management groups (100% and 96%). The fact that 37.5% of the college administrators had never had a business communication course may be affecting this judgement. On the other hand, 34% of the Bole Management Seminar group, 67.0% of the Cleveland businessmen group, and 44.5% of the Houston Personnel Consultant group did not take business communications courses either. When these management groups were asked if they would take the business communication course if they could do it over again, 100%, 80% and 83.3% stated they would, respectively.

The very fact that the business groups had fewer business communication courses than the academic administrators and yet rated the course higher supports the hypothesis that these two groups do have differing values as to priorities assigned. The business groups expressed a greater desire to have the course required and assigned a higher value to the course than did the college administrators. It is encouraging that both groups gave relatively high ratings to the course.

### Hypothesis III: Changes in Communication Courses

The last hypothesis considers trends in the offering and/or requiring of the business communication course over a 14 year period (1960-1974). Table II summarizes the findings.

TABLE II

Changes in Business Communication Courses, 1960-1974

BUSINESS COMMUNICATION COURSE	UNITED STATES 1960 Lord Study		TEXAS COLLEGES 1974 Composite	
	<u>OFFER</u>	<u>REQUIRED</u>	<u>OFFER</u>	<u>REQUIRED</u>
Combination*	----	----	73.3%	54.7%
Letters	71.6%	55.5%	18.9%	17.0%
Reports	22.0%	20.9%	18.9%	11.3%
Any Type	79.3%	53.2%	92.5%	73.6%

\*Data from Lord study did not report any combination courses in 1960

The most significant change is the dramatic increase in the combination (letters, reports, other types) course. In the 1960 study by Lord, the combination course was almost non-existent. By 1974, 73.3% offer and 54.7% require it.

Accompanying the increase in the combination course is the decrease in the letter-type course. Table II shows that more colleges both offer and require more business communication courses in 1974 than in 1960.

### CONCLUSIONS

At the 1971 Southwest Region ABCA meeting the fear that courses would be either eliminated or combined was reported by about half the participants. Only four colleges responding required two

courses in 1974. The increase in the number of colleges offering and/or requiring business communication courses indicates an increased interest in the course. On the other hand, the implied trend is that fewer hours of communication courses are being offered and/or required.

By comparing the number of courses reported to the number of colleges reporting, a ratio of 1.45 business communication courses per college. Using data in 1974, a ratio of 1.1 is achieved.

These ratios support the fear expressed at the 1970-71 ABCA meetings (Southwest Region) that offerings declined. However it is important to note that the number of colleges either offering or requiring communication courses has shown a significant increase.

On the negative side the largest university in Texas (U. of Texas at Austin) no longer requires the course of all business majors. Two other large universities (U. of Texas at Arlington and Texas A&M University) do not offer the course.

To end on a positive note, it should be stated that none of the college administrators said that they were even considering the possible elimination of the course. Trends reported by these administrators indicate that 23.3% are considering adding new courses in the future.

A very high per cent of business management groups think the course should be required. The academic administrators also feel the course should be required and anticipate future additions to the business curriculum.

In a related study of personnel officers of 250 Fortune 500 firms in 1974, "over 92% of those responding felt that it would be beneficial for an executive to take a communication course at the graduate level."<sup>3</sup> The preceding study and comments from management groups indicate that colleges need to give better training to business graduates in communications areas.

If academic administrators accept the findings of this study, and others of the ABCA (like Bobby Pershing's report on needs), that business graduates should have a good background in business communications and place more emphasis on the course; the implication is that professors who teach business communications courses need to be better qualified in the immediate future. Consider this statement from the Science Digest:

How do you keep college and university professors up to date on their specialties? This is a problem causing concern at the National Science Foundation. Many comparatively young faculty members in the sciences have life-long tenure in their positions....NSF officials believe there should be some sort of continuing education to help such faculty members keep up with their speciality through additional opportunities for research and training.<sup>4</sup>

If better qualified professors might be anticipated, then colleges need to offer majors in the area of communications. This should be a goal of ABCA. Most colleges have courses in several disciplines that could be combined to offer a major in business communications. This would serve to better prepare professors in this area and also to emphasize the importance of communications. At Texas A&M University a proposal is being considered by the English Department to offer a major in Communications.

Business communication courses are an important part of the business curriculum. It should not take second place to any other set of courses. It is hoped that this study will emphasize the importance of these courses for business graduates to the extent that college administrators who make decisions will see that communications is an essential element of the core curriculum.

Every search of the literature emphasizes the importance of communications, as do findings from the business leaders surveyed. The academic administrators are positive as to the addition of new courses in business communication. Implied, I hope, is an increased emphasis on business communication courses in Texas colleges for the future.

## NOTES AND REFERENCES

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PART 3  
THE ABCA MEMBER AS SEMANTICIST: GENERAL SEMANTICS  
APPLICATIONS AS APPLIED TO CURRENT TOPICS

INTERRELATING GENERAL SEMANTICS AND CREATIVE INTERCHANGE  
TO DEVELOP A CONCEPT AND A PROCESS OF CREATIVITY  
FOR "OPEN" ORGANIZATIONAL COMMUNICATION  
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Orientation to the Purpose

Archimedes, a Greek mathematician of the third century B. C., while sitting in his bath, discovered that his body replaced its own volume in the water. He shouted, "Eureka." Archimedes' shout of "eureka" means "I have found it"--a method for determining the purity of gold. Sir Isaac Newton, an eighteenth-century English physicist, while sitting under an apple tree and observing the fall of an apple, "discovered" the law of gravity.

These "sudden" illuminations of Archimedes and Newton have their counterparts with men and women individually and in organizations. A child working with building blocks, a woman working in a laboratory, a man working on a concept of creativity--each a situation-as-a-whole which contains the essential elements for a "new" insight that was not previously known to the awaring mind. Thus, there is little reason to infer that the flash of insight that occurred with Archimedes and Newton is not similar to the "new" revelations which occur with persons less noted for genius. Or, stated positively, the same process which eventuated in new discoveries by Archimedes and Newton is relatively active in each person.

Consequently, the supposition of this paper is that each person is capable of originality--creative expressing. And, while recognizing that the creativity of individuals is quantitatively different, only a part of the processing which results in creative expressing is actualized in each individual. One factor inhibiting such expression is the lack of awareness of the interacting processes which permit unique solutions, ideas, approaches, et cetera.

The Purpose and Some Limitations

In order to increase awareness, the purpose of this undertaking is to interrelate some of the more pertinent elements of General Semantics and Creative Interchange in developing a concept and a process of creativity.<sup>1</sup> And, while acknowledging that the concept and the process cannot realistically be separated, it is necessary to distinguish

and define the component parts in a sequence which allows the process to establish the concept.<sup>2</sup> The limitations of this undertaking are related to the lack of scientifically derived evidence and the awareness of known scholarly empiricism.<sup>3</sup>

As to the lack of scientific research, one of the areas of investigation will be the nonconscious state of man. As Jung observed, this state cannot be dealt with directly because it is unreachable (6, page 39).

Thus, even though both General Semantics and Creative Interchange are directly attributed to reputable scholars and the interrelating of these two disciplines is within the scope of reason, the nonconscious interactions and the preconscious connections can only be "perceived" by the imagining of the mind and the results observed as "insights"--innovative approaches.

#### The Organization Plan And A Preview

As previously stated, the descriptive purposes of this undertaking necessitate a sequencing which focuses separately on the component parts which in an interacting process result in creative expressing. As each component part is described, it will be represented as an interactant on those elements previously presented.

In implementing the above plan, a first step is to define General Semantics (its pertinent concepts) and Creative Interchange and discuss the interrelatedness of these two disciplines. Next, the potentially creative individual will be described, and the interacting process between the individual and a situation will be discussed as it relates to creative expressing. Then two processes for allowing creative expressing will be introduced, and the last section will suggest ways for developing the climate for creativity.

#### Introducing General Semantics and Creative Interchange

It would be impossible and unnecessary to define fully either General Semantics or Creative Interchange since both of these nonstatic disciplines are of considerable depth. Therefore, some of the component parts of General Semantics relating directly or by implication to creativity will be identified and defined. Creative Interchange will be viewed as interconnecting processes which freight the concepts of General Semantics and provide the quality of interacting between unique individuals and events which stimulates creative expressing.

## Presenting General Semantics

Alfred Korzbyski, a proponent of synthesis,<sup>4</sup> has integrated several sciences into a discipline for evaluating reality (11 and 7). Pettit (11) defined this system of evaluating--General Semantics--in the following statement.

In general, the discipline of general semantics analyzes how man perceives reality and how man structures his perceptions and relates to the real world through symbols. General Semantics attempts to relate three areas of human development: man's thought processes, his language function, and his behavioral responses.

Several concepts of General Semantics are important in developing a concept and a process of creativity. These concepts will be defined relative to the purpose of this paper.

## The Process of Abstracting

Korzbyski's main intent was to lift to awareness the process of abstracting. To abstract in the discipline of General Semantics means to pick or select certain components of a situation, an event, a person, et cetera, while neglecting or forgetting others. Bois defines the process of abstracting as follows:

We pick and choose the elements that we assemble to form the entire picture of an object, a person, or a scene. From what is happening--from the universe of processes that flow incessantly, and of which we ourselves are a moving part--we abstract, collect, and put together some of the features that are within the range of our senses to form a consistent whole. We do not abstract all the features that we can perceive; we select those that we are interested in, those that we are in the habit of paying attention to, or those that suit our purpose at the moment; and we ignore the rest (2, page 64).

A modified version of the structural differential, originally formulated by Korzbyski (7, page 393), presents a visual picture of the process of abstracting and the levels of abstraction (Figure 1). An understanding of this model will increase awareness and benefit the development of the concept of creativity espoused by this research.

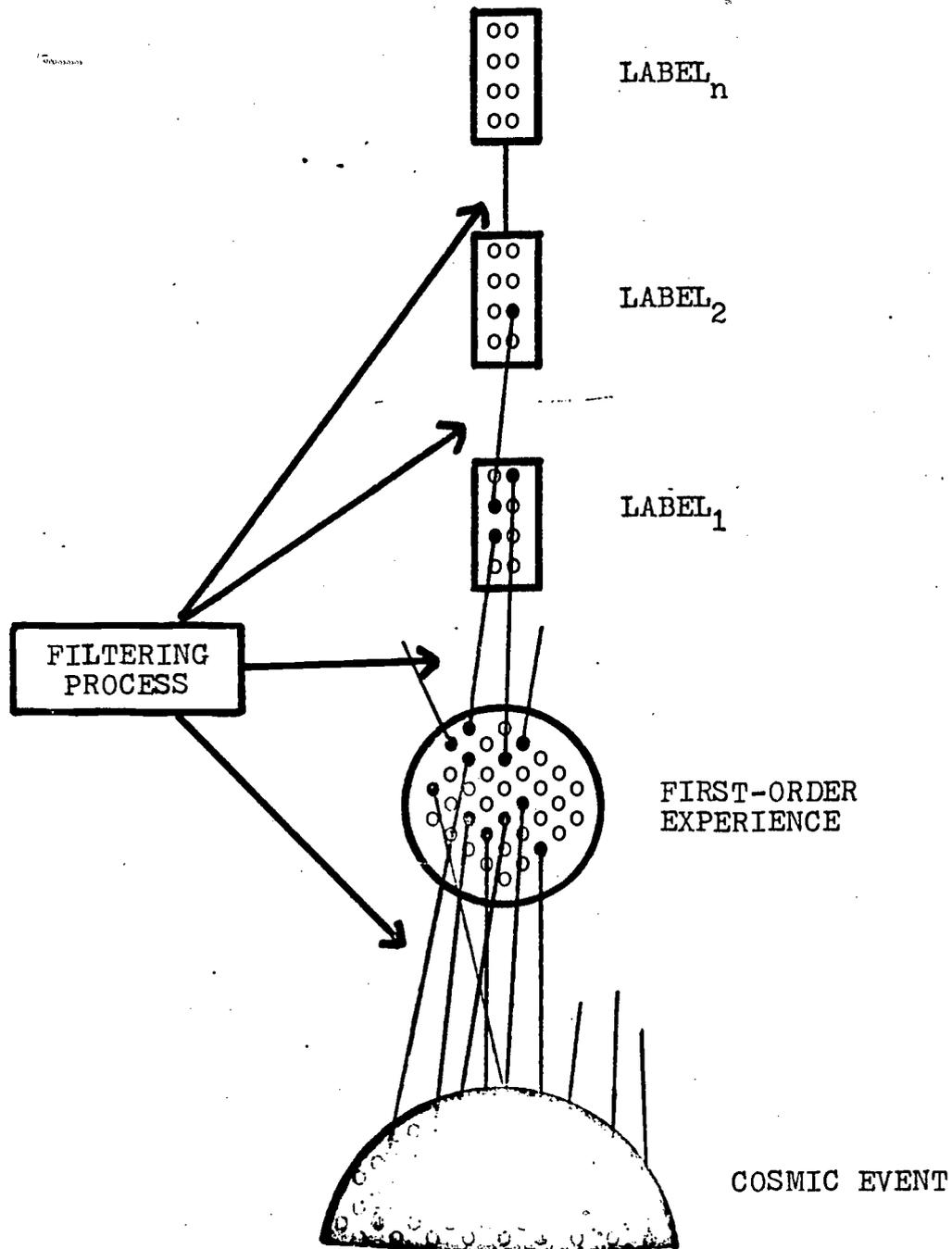


FIGURE 1. A MODIFICATION OF KORZYBSKI'S STRUCTURAL DIFFERENTIAL SHOWING DIFFERENT LEVELS OF ABSTRACTING.

The Cosmic Event. The first basic premise of the process of abstracting is that there is an infinite number of characteristics which constitute every event. In Figure 1, the cosmic event is represented by a parabola that stretches into infinity. The intent of such an illustration is to point to the constant change occurring in every event; even inanimate objects are a process of unrepeatable changes. Known human senses cannot detect--even with the aid of instruments--all of the ongoing process-movement-energy that is happening in each event. Thus, every event--person, situation, object, et cetera--contains movements, changes, characteristics, and energies which are not perceptible to the human senses.

As a result, it is impossible to know all there is to know about any "cosmic event." From the process-event, perceivable characteristics are abstracted, but many other characteristics are unavailable and unknowable.

The Filtering Process. In addition to the abstracting which occurs due to the limits of human sensory perceptions, there is also a filtering process which is unique to each individual. Bois described this filtering process in the following manner:

We are different in age, in education, in experience, in habits, in interests, in environment, in ambitions, and in purposes. My abstractions are filtered through a series of psychological meshes that are made of the elements I have just enumerated, and of many more; your abstractions are filtered through a different set of meshes; and therefore our abstracting processes are different from each other (2, page 68).

First-order Experience. As a result of the sensory limitations and the filtering process, first-order experience contains what an individual has abstracted (experienced) from the infinite, unique and changing number of characteristics within the cosmic event. The disconnected lines emerging from the cosmic event represent all of the characteristics not abstracted.

Label<sub>1</sub>. An individual moves from the nonverbal, first-order experience to the verbal level of describing the experience. In General Semantics terms, lower-order nerve sensations move to higher-order neurological structures. Again abstracting occurs since the individual cannot identify all of the experience with words; verbal labels cannot convey all that the individual has experienced. Also, the filtering process is again operative between the experience and the verbal descriptions causing further omissions.

Label<sub>2</sub>, Label<sub>n</sub>. As the individual moves from the identifying/

describing level to the interpreting and generalizing levels, less and less of the cosmic event and the experience of the event is retained--as initially experienced. Thus, as the individual moves to "higher" levels of abstraction, with the filtering process intervening at each level, he moves from description to inference, from extensional orientation to intensional orientation, from experiencing to meaning-evaluating.

### The Time-Binding Man

The mind of man has a history, a present, and a future. Man is a time-binder. This unique characteristic of man, compared to plants and animals, enables him to select and gather together characteristics of cosmic events from various periods in time. He can combine these characteristics, transform them, and make of them something new within any given "present" (2, page 182). The language of man enables him to share his experiences and observations and is the tool which enables him to learn from the previous experiences of other generations (11). The word "experience-binding" better suits the purpose of this exploration and research.

### The Multidimensional Event

The work "multidimensional" was coined by Korzybski to point to the various dimensions of an event as perceived and abstracted by individuals (11). It has been noted that man only abstracts a portion of the infinite number of characteristics from an event and that different individuals will abstract different elements. Thus, an event will not "appear" the same to different persons or to the same person at a different time. The "reality" of an event is its dimensions characteristic as perceived by individuals.

The concepts of General Semantics that have been chosen and defined are not all of the concepts that could apply to the purpose of this undertaking. Certainly, other concepts of General Semantics have been implied within the definitions of those identified, and these others will be fruitful for continued and expanded research.

### Creative Interchange--Interconnecting Processes

Creative Interchange is a model of the process of creating formulated from the philosophy and concepts of Henry Nelson Wieman, especially stated in his book, Man's Ultimate Commitment. The model, as it relates to interpersonal communication and developed by Creative Interchange Consultants, International, is outlined in Table 1. The four

processes of interacting, appreciating, integrating and expanding will be briefly discussed to show their mutuality and to describe the necessary conditions for their effective use.

### Interacting

Individuals are constructively interacting when they risk sharing their individual uniqueness with each other (trust) in each new moment-in-time (spontaneity) with words, voice tones, and body-language communications that reflect feelings, thoughts, and values (honesty). This process encourages creative expressing--uniqueness--but it is recognized that this risk-taking will not likely be repeated unless there is appreciating.

### Appreciating

Individuals are appreciating when they recognize that persons and situations, et cetera, are in a process of change (awareness), listen to discover the newness of the persons and situations (understanding), and value persons and personal contributions even though their own perceptions are different (accepting). When the processes of interacting and appreciating are present, a foundation exists for synergistic integrating to occur.

### Integrating

Individuals are integrating when they are willing to modify their stances (openness), appropriate the usefulness of other ideas with their own into an "innovative-both/and-approach" (synergy), and are able to sustain the innovative approach as behavior in an ongoing process (actualization). When individuals are interacting with appreciation and synergizing ideas into creative expressing, then there is expanding.

### Expanding

Individuals and communities are expanding when there is self and other awareness of uniqueness, awareness of the changes taking place in persons and events, and support and development of the ideas of each other in a climate which values individuals and their contributions.

TABLE I

## THE CREATIVE INTERCHANGE MODEL

Developed by Creative Interchange Consultants, International

PROCESS	CONDITIONS FOR FACILITATING THE PROCESS	RESULTS
INTERACTING	<ol style="list-style-type: none"> <li>1. <u>TRUSTING</u> (Willingness to risk)</li> <li>2. <u>SPONTANEITY</u> (Here-and-Now self disclosure and feedback to others)</li> <li>3. <u>HONESTY</u> (Congruity of thought, feelings, values, behavior, etc.)</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>INCREASED KNOWLEDGE</u></li> <li>2. Increased Individual Uniqueness</li> <li>3. Diversity of thought, feelings, values, behavior, motives, needs, perspectives, etc.</li> </ol>
APPRECIATING	<ol style="list-style-type: none"> <li>1. <u>AWARENESS</u> (Self, others, world)</li> <li>2. <u>UNDERSTANDING</u> (Empathy)</li> <li>3. <u>ACCEPTING</u> (No denial or devaluing)</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>INCREASED VALUE</u></li> </ol>
INTEGRATING	<ol style="list-style-type: none"> <li>1. <u>OPENNESS</u> (Willingness to modify) (Unfreezing)</li> <li>2. <u>SYNERGY</u> (Both/and awareness) (Learning)</li> <li>3. <u>ACTUALIZATION</u> (Making new learning behavior) (Refreezing)</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>INCREASED CONTROL</u> (Coordination)</li> <li>2. Increased Identity and Wholeness</li> <li>3. Increased Freedom</li> </ol>
EXPANDING	<ol style="list-style-type: none"> <li>1. <u>INTERDEPENDENCE</u> (Needs and resources of self and others)</li> <li>2. <u>INTIMACY</u> (Significant others &amp; closeness)</li> <li>3. <u>COMMITMENT</u> (Loyalty to self, others, organizations, and creative interchange)</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>INCREASED COMMUNITY</u></li> <li>2. Cooperation (Affection)</li> <li>3. Cohesiveness</li> </ol>

## Interrelating General Semantics and Creative Interchange

The discipline of General Semantics contains concepts essential to creativity. Creative Interchange provides interconnecting processes to implement those concepts. The interrelating of these two disciplines provides a framework of concepts-in-process which stimulates creative expressing.

The abstracting process is of primary importance to this investigation. No individual can know all there is to know about an event, and no two individuals will perceive the event in the same way. As a result, diversity is a given. And this diversity, emerging from unique individual perceptions of a cosmic event, is stimulating if there is constructive interacting with appreciation.

The synergizing process--putting seemingly paradoxical ideas, concepts, approaches, et cetera, together for a novel product--is essential to creativity. The patterns--established as persons lock themselves into one way, one truth, one approach--can be broken when the challenge of a diverse view is acknowledged and appreciated. General Semantics disclaims sameness, and Creative Interchange appropriates diversity for creative expressing.

The abstraction process at the experience level defines the method by which man becomes a time-binder (experience-binder). And time-binding as described by Bois is in essence the concept of creativity espoused by this research.

Man is a time-binder; he selects, gathers together, and combines into something new the various elements that belong to different periods of time. He combines them, transforms them, and makes out of them something that did not exist before. He can repeat this operation as often as he wishes, each time creating a modification, an enlargement, a complexification of the world in which he lives (2, page 182).

Man will integrate (abstract) more from the experiences happening around him if he is interacting with appreciation (awareness). He will also have more access to the time-bound experiences if he allows himself to interact appreciatively with diverse perceptions in a synergizing process instead of one of competition.

Therefore

Having interrelated General Semantics and Creative Interchange, a more graphic presentation of the concepts and processes resulting in creative expressing will follow.

## THE EXPERIENCE-BINDING INDIVIDUAL AND CREATIVE INTERACTING

As a result of establishing a framework of concepts-in-process by interrelating General Semantics and Creative Interchange, the exploration now proceeds to view the experience-binding individual and his creative interacting.

### The Multiconscious Individual

Each individual consists of a conscious state, a preconscious state, and a nonconscious state with a filtering censor between consciousness and preconsciousness. In Figure 2 the multiconscious person is depicted. Each conscious state and the filtering censor needs explanation to discover more of the abstracting-experience-binding person.

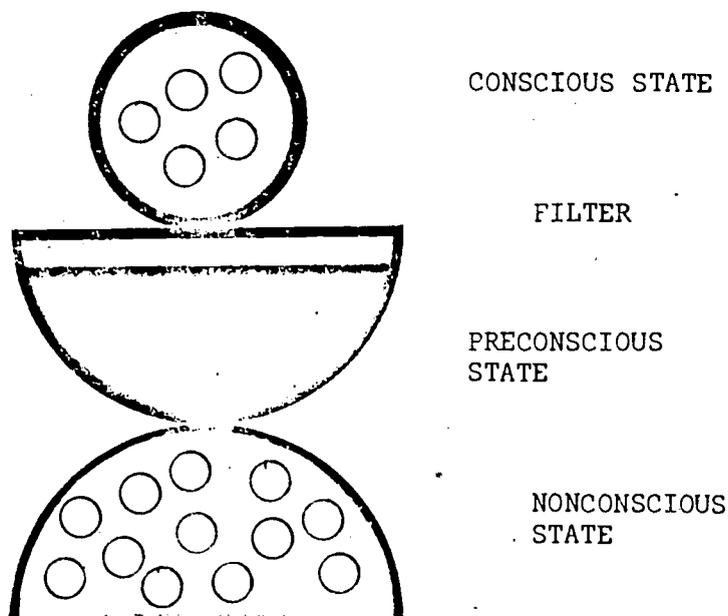


FIGURE 2. THE VARIOUS STATES OF A MULTICONSCIOUS INDIVIDUAL EXTRAPOLATED FROM THE IDEAS OF PRINCE, KORZYBSKI, AND JUNG

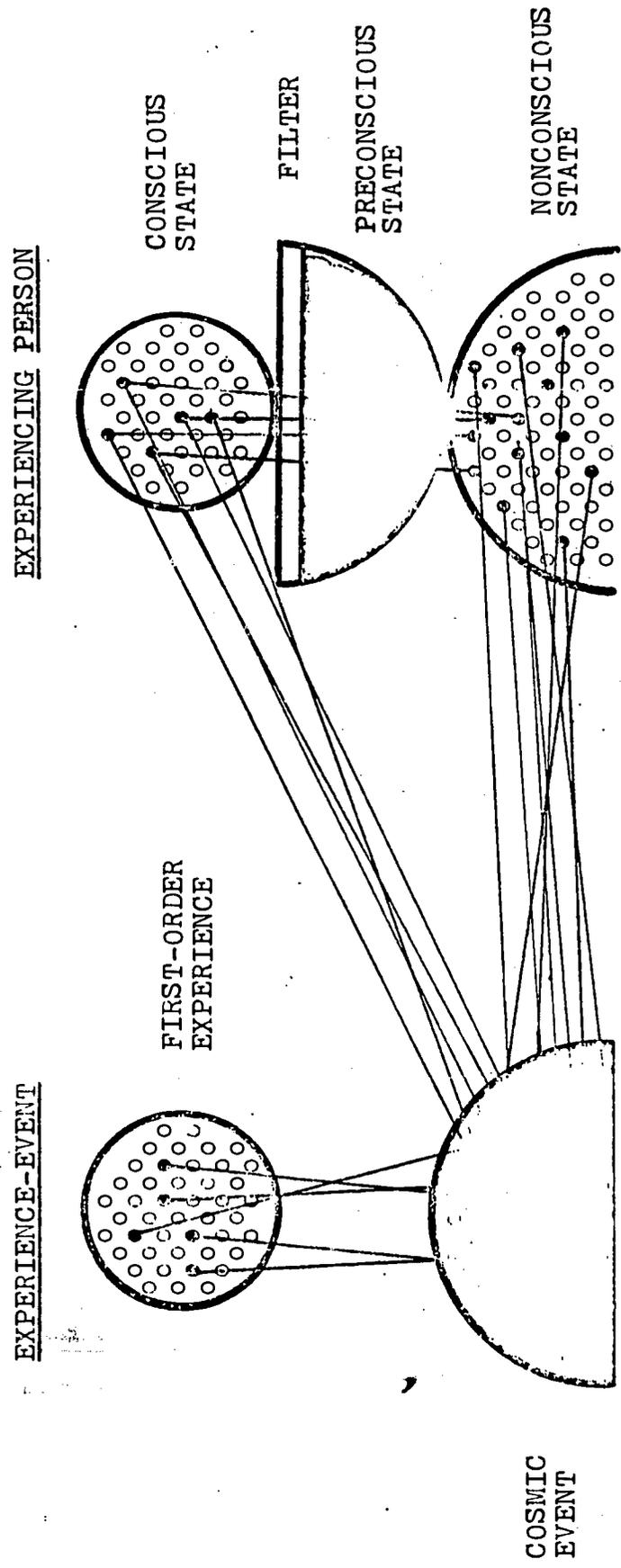


FIGURE 3. A DEMONSTRATION OF THE CONSCIOUS AND NONCONSCIOUS ABSTRACTING PROCESSES)

### The Conscious State

The conscious state of an individual consists of all that is readily available to him. This state is useful in that it is organized, logical, and categorical. As such, it coordinates persons, events, tasks, et cetera, by using the conscious memory available. Its limitations are directly related to its usefulness. The conscious state tends to operate by rules which preclude innovative thinking. The "way-we-have-always-done-it" approach limits the view to new possibilities, and the rule-observance determines fairly narrow operational parameters.

### The Filtering Censor

The filtering censor protects the conscious mind from the "irrational" constellations of experiences that emerge from the non-conscious as innovative ideas. The censor is developed--it is not a part of the original makeup of a person--as the individual learns more of the "right thinking" processes in response to the expectations of himself and others. Thus, as behaviors and attitudes become more fixed, the filtering censor becomes stronger in preventing exceptions to whatever established norms prevail.

### The Preconscious State

The preconscious state serves as "a problem-oriented, opinionated, independent file clerk" (12, page 68). When the conscious experiences a situation, problem, person--any cosmic event which warrants some response--the preconscious scouts the nonconscious for data (historically-bound-experiences) which it considers pertinent for the response.

### The Nonconscious State

The nonconscious state "is a storehouse of relics and memories of the past" (6, page 44). This reservoir is the vault for time-bound experiences which, after interacting and connecting in some unobservable fashion, form the basis for creative approaches to situations.

In Figure 2 the conscious state containing abstracted characteristics is depicted and these are remembered and readily available. The nonconscious state contains many more abstractions from past experiencing and they need some stimulus to become consciously available.

As indicated in Figure 3, the process of abstracting stores characteristics in the conscious and nonconscious states of the individual (person). The first-order experience is represented as similar

to the conscious state of the person. While affirming that the first-order experience is an abstraction at both the conscious and nonconscious states, the nonconsciously abstracted characteristics are unavailable for addressing situations creatively without some stimulus. Thus, for practical purposes, the first-order experience and the conscious state are viewed as similar.

Of importance also is the nonconscious-abstracting process. The time-experience-binding function of man gives him creative potential. Consciously abstracted data also reach the nonconscious, as shown in Figure 3.

#### Creative Potential and Interaction

The individual, with his wealth of time-bound experiences stored in the nonconscious state, has innumerable alternative approaches to any situation/event. In order for this potential to become available, a stimulus needs to be introduced which can penetrate the filtering censor and stimulate the nonconscious interaction of connecting characteristics from past experiencing into a new approach to a problem.

As Figure 4 illustrates, the stimulus-induced connection in the nonconscious state results in a new idea. Moreover, the stimulus is an abstracted characteristic from a cosmic event (problem, person, situation, et cetera).

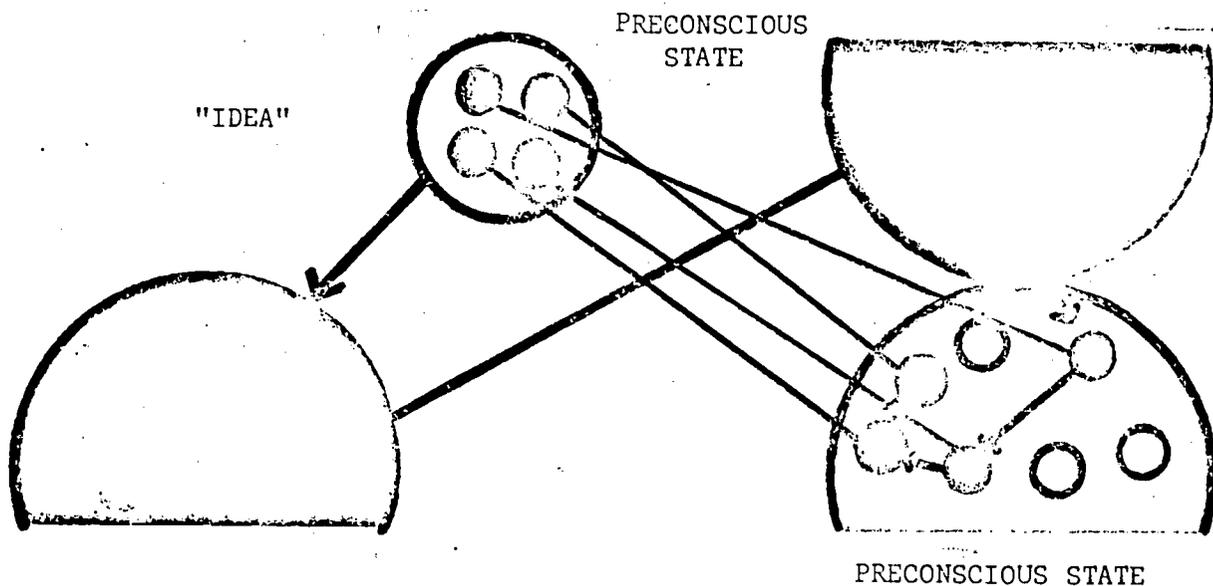


FIGURE 4. STIMULUS-INDUCED CONNECTION

The stimulus, also shown in Figure 4, from the cosmic event is "perceived" by the preconscious state which selects a characteristic from the nonconscious state. This selected characteristic attracts and joins with other characteristics (from different time periods and events), and the merged characteristics emerge as an "idea" ("insight" similar to the "new" revelations of Archimedes and Newton). Such a new idea is addressed to the cosmic event (problem, situation, et cetera).

### Summarizing and Concluding

The experience-binding quality of man exists as the source of his creativity. Man abstracts from all of his experiencing, and the abstracted characteristics are stored in his nonconscious. These stored data can connect in an infinite number of ways, thus giving the individual innumerable alternative approaches to any problem.

It is concluded that the nonconscious state has its own sensory perceptions, which not only allows it to abstract, but also lets the individual know when he is on the "right tract" in responding to a situation. This nonconscious sensing is called intuition (12, page 71). And training can increase the intuition of a person, thus adding to his creative expressing. Empirical investigation is needed in this area.

### ALLOWING CREATIVE EXPRESSING

Thus far creative expressing has been described and illustrated as a process of connecting the experiences of persons into a new constellation that emerges as a new idea or an insight. It has been noted that man is uniquely capable of storing all of his perceptions of events, persons, situations, et cetera, in his nonconscious vault. These time-bound experiences are the source of the creative approaches that solve here-and-now problems or give alternative approaches to situations. Just how the perceptions of a person from different times in his history are connected for a new insight in the present is demonstrated in Figure 5.

It has also been noted that the conscious mind and the filtering censor inhibit the emergence of these new insights since the insights are often not "rational" and not the "way things have been done." Thus, to increase the probability of creative expressing, a way needs to be found to decrease the stifling effect of the conscious mind and the filtering censor.

Most persons have had the experience of facing a situation that required a quick and effective response and they spend enormous energy in trying to think of an adequate or appealing approach. All of their

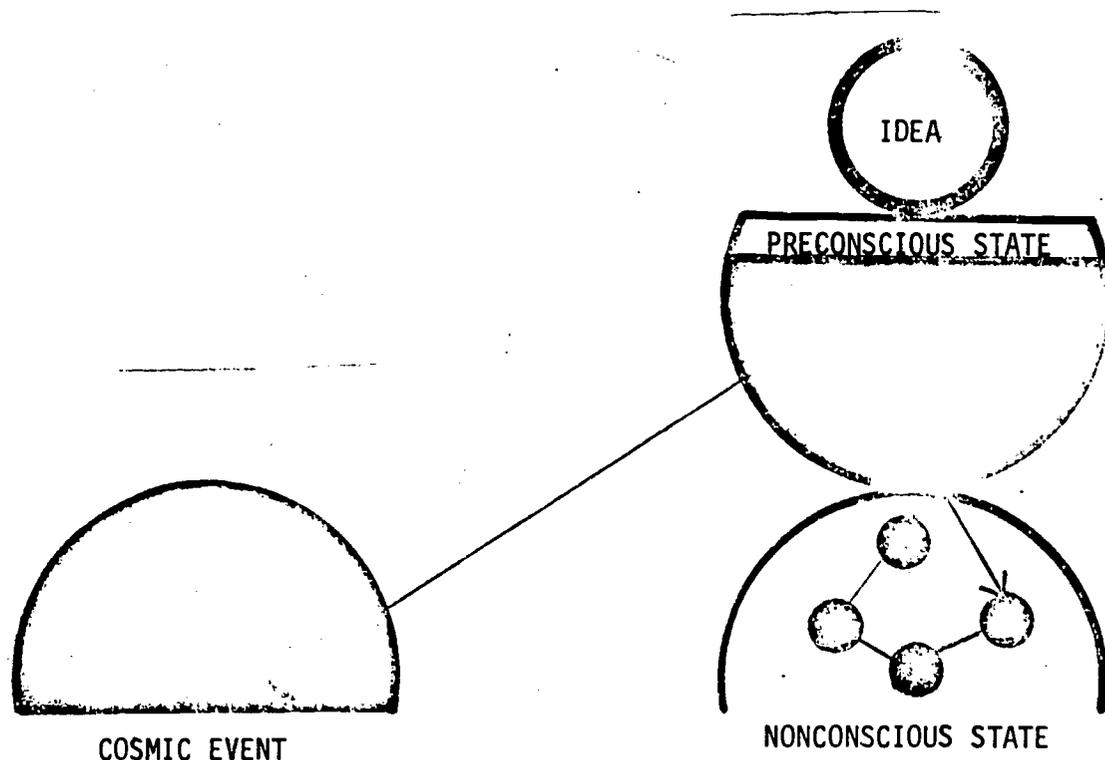


FIGURE 5. AN INTERPRETATION OF THE CONNECTING OF TIME-BOUND EXPERIENCES IN THE NONCONSCIOUS STATE

conscious efforts reap futility, and in frustration, they lay the problem aside. Then in the midst of something else, an idea emerges that solves the problem they had so feverishly worked on. In all probability, the desired solution could not emerge until the conscious mind had been given a vacation (12, page 74). When the conscious mind is no longer working on the problem, it also loses its control on the innovative ideas that emerge from the connecting process of the nonconscious. The filtering censor is also deactivated. As a result, those parts of human thinking -- conscious mind and filtering censor -- which have learned the rules of "rational thinking" lose their power to prevent the emergence of the ideas formed from the connecting process of the nonconscious.

Therefore, the task to allow creativity to occur is one of eliminating the power of the conscious mind and the filtering censor without the delay usually needed for the vacation of the conscious mind. To achieve these processes, ways need to be found to transfer the thinking process. Thinking laterally and using analogies are two such methods.

## Lateral Thinking

De Bono (6) discusses the two sides of the brain related to the thinking processes. Physiologically, the left side of the brain is the more analytical, evaluative, functional side and is the more developed because of the emphasis on rational thinking that is part of culture and education. This part of the conscious mind inhibits and filters, thus preventing the emergence of innovative ideas that have developed from the connecting process of the nonconscious. The right side of the brain is the appreciating, connecting part and functions consciously in putting here-to-fore unrelated ideas, elements, and concepts together. Thus, this part of the brain is viewed as serving consciously the same function as that of the nonconscious state. Because of the emphasis on "rational thinking," the right side of the brain is usually less developed and increasingly inactive as behaviors and patterns of thinking are established. Therefore, it is important to reactivate and stimulate this part of the brain to allow connectional thinking -- creative expressing.

In demonstrating the concept of De Bono, Figure 6 portrays the multiconscious individual with two conscious states. One conscious state serves the analytical, rational functions of the individual. The other conscious state functions as the appreciating, connecting part. In view of the above, an individual is creative when the left side of the brain is deactivated and the right side of the brain comes into conscious use. Thus, methods are needed to allow the left side to take a vacation while stimulating the right side to function consciously.

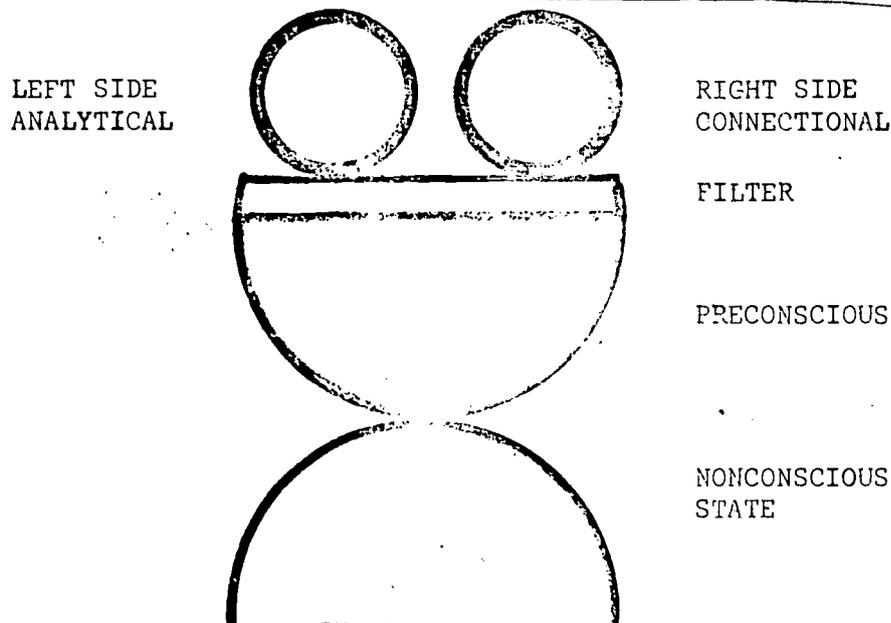


FIGURE 6. TWO FUNCTIONS OF CONSCIOUSNESS IN THE MULTICONSCIOUS INDIVIDUAL BASED ON THE IDEAS OF DE BONO

### Using Analogies for A Vacation

The need to increase the creative process can be fulfilled if the left side of the brain (analytical) is on vacation (12, page 74). This vacation also robs the filtering censor of its power. The experiments of Synectics, an organization devoted to creative problem solving, (result in the following statement.).

Our research told us that if we use our capacity to make and pursue metaphors, we increase the probability of fresh, unthought-of-lines of speculation. The problem was then, How could we make the use of metaphor operational? How could we generate and use this raw material of potential solutions in a controlled and repeatable way? How could we do consciously what the great inventors and discoverers seemed to do unconsciously? The Synectic system has been called by some an artific vacation (underlines added) because it seems to let us take a holiday from the problem by not having to think about it consciously for a while, and it encourages us to put aside our business-suit thinking, our usual tight, analytical frame of mind; but it is an artificial vacation, because while our conscious enjoys making the analogies our preconscious is hard at work on the problem (12, page 73-74).

Thus the "sudden insights" of Archimedes in his bathtub, Newton under the apple tree, and lesser known insights of individuals who suddenly get a breakthrough while they are resting from the problem occur when the left side of the brain and the filtering censor have been deactivated. The use of analogies allows this resting stage to occur within a planned structure.

### Climatizing the Organization

If it adopts the attitudes and behaviors of openness, honesty, congruence and synergy, then an organization has a high probability of achieving growth, stability, and interaction. The content of General Semantics and the process of Creative Interchange can be effectively utilized to accomplish these goals; certainly they are not closed, static processes, because they invite additional insights, inquiries, and investigations. As such, they represent methodologies for innovative thinking and for expanded parameters of organizational communication. Out of General Semantics and Creative Interchange, a philosophy of organizational communication can unfold as "communication adaptability."

## CONCLUSION

All of the foregoing ideas about relationships between Creative Interchange and General Semantics have immediate and direct application to this Business Communication Section of the Southwest Federation of Administrative Disciplines. By making such application, it can be shown that Creative Interchange and General Semantics can be utilized to tap undeveloped human talent in business and not-for-profit organizations -- whether it be in the total organization, in a division, in a department, or at any level of operation. As such, immediate applications exist for the vitality, creativity, and viability of the Business Communication Section of the Federation in particular and other types of organizations in general.

As one of the earliest divisions of the American Business Communication Association, the Southwest Region (known as the Business Communication Section of SWFAD) has generated interest and enthusiasm for the field of business communication and such qualities still exist among its members. But, what will the section become and how will it build on present strengths 5, 10, 15, or 20 years from now? Will the present high energy level maintain itself throughout the coming year? Hopefully it will, but we believe the concepts and philosophy provided for in the Creative Interchange model make strong probabilities for continued enthusiasm.<sup>5</sup> And how might this philosophy be adopted for practical use by the section?

First, its members must be made aware of its potential and their own creative abilities. This first level applies obviously at the intrapersonal communication level of analysis; it represents always the nucleus of the model and its application. Secondly, the technique must be practiced by organizational communicators themselves on a regular basis -- particularly should it be encouraged by section leaders from year to year. By drawing diverse members (from academia, industry, government, etc.), new ideas can be generated. By interacting with other sections within the Federation, new applications and concepts can be examined. By interacting also with other communication societies, professional associations, and study groups, new relationships could expand in numerous directions and continue to indefinite levels of abstraction. That idea undergirds both Creative Interchange and General Semantics. And that is also the undergirding belief guiding the future vitality of intrapersonal and interpersonal communications in organizations.

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<sup>5</sup>The Creative Interchange approach could be demonstrated here or in the business meeting if it would be appropriate.

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A GENERAL SEMANTICS APPROACH TO PSYCHOLOGICAL  
GROWTH AND ORGANIZATIONAL BEHAVIOR

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Introduction

The purpose of this study is to show there exists a direct relationship between an individual's psychological growth and his ability to reason and communicate with others. In other words, the principles of psychology should be compatible with the principles of general semantics. It is the philosophy of this paper that an individual can use the tools of general semantics in achieving a more effective personality in the work environment. It is hoped that the results of this study will be used to help bridge the gap between communication theory in the classroom and communication practice in business organizations. If nothing else, it should at least show how man can be caught up, through communication inefficiencies, in his own psychological traumas.

Psychological growth is more than just the satisfaction of one's needs. Rather, it is the constant interaction and adjustment of one's mental processes with others in hopes of a more stimulating environment. This is not to say that real growth can always be achieved. Indeed it seems that real individual growth has been thwarted in many modern organizations. However, as far as this paper is concerned, psychological growth is worth pursuing at least in the business environment.

Frederich Herzberg, the psychologist, has interpreted real psychological growth as the necessity to actualize the human potential for increased perfection. He indicates that only man has the power to select his own environmental relationships. Herzberg has developed six stages<sup>1</sup> of psychological growth (each stage representing a higher development of growth than the preceding one): learning more, relationships in knowledge, creativity, effectiveness in ambiguity, individuation, and real growth. Through these stages of psychological maturity, it is hoped that the individual will satisfy his need for emotional security, recognition, self-actualization, self-esteem, and the like.

Likewise, Alfred Korzybski (sometimes called the father of general semantics) has also developed a theory of reality, perception and interaction.<sup>2</sup> Through man's thought processes, his language function, and his behavioral responses, Korzybski has derived his methodology of evaluating reality. An individual's knowledge of Korzybski's general semantic principles should provide him with the stimulus and ability to relate and trans-

ceed through the six stages of psychological growth.

The preceding is not to say that other writers have not made valuable contributions to his respective field. Indeed, the opposite would seem to be the case. Going further, no one person's ideas can be used conclusively in attempting to explain any body of philosophy. However, in order to develop a conceptual frame of reference for comparison purposes in this paper, the ideology of Korzybski and Herzberg will be used. It is hoped they will be representative of the aggregate.

### An Attempt to Reach Real Psychological Growth

Today's worker has been surrounded by a wall of rules, regulations, and structuralism. He has been forced to conform to an avalanche of requirements handed down by a faceless supervisor representing a faceless corporation.

Can he transcend this wall and escape to a fuller life of growth, responsibility and self-esteem? Is there any hope for the employee in today's organization? One answer may lie in self-determination and individual effort on the part of the worker himself. Psychological growth can occur from within.

1. The first characteristic of Herzberg's system of psychological growth is one of "knowing more." He indicates that the aging man, although decaying physically, can continue to add more knowledge to that which he already possesses. He may forget more, but he can also learn more. Going further, an individual will never achieve even the first level of psychological growth unless there is a difference today from yesterday in what he knows. The human mind has an infinite capacity to add and categorize new knowledge. The man who says, "I haven't learned anything in ten years" is only kidding himself. The truth is that he is dying psychologically.

Now, how can general semantics help in achieving this first level of psychological growth? This characteristic of "knowing more" can be more readily understood by considering one of Alfred Korzybski's basic semantic principles--"Non-allness." Korzybski believes that because of man's limited sensory perception he can never perceive, much less symbolize, the all of an object. No matter how thorough the research and resulting conclusion, much more can always be said. Korzybski goes on to explain that to develop a complete Non-Aristotelian system of language one must remove entirely from his semantic relations this noxious habit of "allness." It can only lead to dogmatism and eventually identification.

2. The next stage of Herzberg's system of psychological growth is more "relationships in knowledge." This is interpreted to mean the ability of an individual to relate new information to past learning. In other words, he can know A or he can know B, but will he ever see that they may be relating it to other stored information.

Herzberg's relationships in knowledge theory can be seen to be very analogous to Korzybski's "abstraction process of forgetting certain

details of an entity in reality while focusing on others. The abstraction process is inevitable if not indeed necessary in all human communication. Korzybski went on to develop the structural differential model which symbolizes man's perception of reality. He recognized that man is able to order abstractions at various levels from reality; in other words, throughout the process, only certain stimuli are mentally and symbolically acted upon. In a sense man's ability to order higher level abstractions from reality or from past experiences is a measure of his psychological growth. Inferences made from descriptions, inferences about inferences, conclusions, and generalizations--all enable man to interrelate facts or ideas. Through the abstraction process he can relate A or B.

3. The third characteristic of Herzberg's psychological growth pattern is "creativity." It is a scientific fact that the human brain, like the computer, is capable of taking in an enormous amount of information and connecting this information in some logical order. However, the truly creative person, unlike the impersonal computer, can attach a new meaning to this same information. Creativity, then, to Herzberg is a new awakening in the individual. It is a new opportunity for the individual to utilize the knowledge of his environment and adapt it to his own inherent needs as well as that of society.

How can this creative process be seen in the language and thought of everyday events? Korzybski, when explaining his principle of self-reflexiveness, indicates that through language it is possible to describe perceptions of reality infer about these descriptions to others and on and on. These inferences, and inferences of inferences, are the act of placing one's self more vigorously in the communication process. In terms of producing creativity within an individual, these inferences could be interpreted to mean a higher and possibly a more unique order of abstraction than was previously observed. Creativity can only come from one's utilization of his own inferences. This is self-reflexiveness in thought and action.

4. The truly adjusted individual has learned to live with his reality. A day-by-day existence has taught him many lessons in the "art" of coexistence. Herzberg has labeled this characteristic of adjustment "effectiveness of ambiguity." Herzberg goes on to explain that, as a child, the individual is not expected to cope with the ambiguity that adults must handle. He is protected and reassured by his parents' absolutes, unconditionals, and perfections. Children are more or less excused for their mistakes in decision making; however, as adults they are not accorded this convenience. Emergence from childhood can only come from toleration and effectiveness in ambiguity.

This idea of constant change and alteration in the real world can also be explained in the language of the general semanticists. They contend that the real world consists of events and processes rather than things or entities. The basic theory is one of a dynamic and constant state of flux or change--an ever-changing process world below the perception level of ordinary sensory receptors. To general semanticists, reality is infinite in its complexity and unique in every aspect. Korzybski

presented the idea as a "mad dance" of electrons, different every instant, never repeating itself. This "mad dance" of electrons only exemplifies the point Korzybski was trying to make. Objects experience constant change at the submicroscopic level; one's perception of reality should only be an extension of this dynamic process.

5. Man begins his existence from the meager joining of one egg and one sperm. From this point until death each person grows as a distinct individual, both physically and emotionally. This principle of physiological growth is one of the rules of human differentiation. Herzberg calls his fifth stage of psychological growth "individuation." Every human being is a separate, distinct, and a unique individual. No two persons are exactly alike. However, through the process of socialization the individual is forced to conform to the norms of the group. Through the years the child becomes regimented to the ways of society, and their respective beliefs, customs, ideas, morals, etc. There soon becomes no longer any room for individual response to life. Herzberg indicates that each individual must shrug off this fear of being separated from society and therefore alone. Any continuation of this socialization process beyond that of a day-by-day interface is nothing more than partial suicide.

Closely related to the idea of "individuation" is Korzybski's ideal of "relativity of perception." He points out that each individual evaluates reality from his own unique perception. Thus, even assuming a static form of reality (which in theory is impossible) there can never be an absolute universal acceptance of any abstraction process. Using the idea of reality in process coupled with changes within the individual himself, no two perceptions will ever be precisely the same. Individuation can only come about through the "correct" perception of reality and one's own self in the light of his particular socialistic process. Even though the individual must continue to conform to the demands of the social matrix, he must never lose sight of his unique perception of himself and his environment.

6. Herzberg's last characteristic of psychological growth within the individual is "real growth." This apex of growth that Herzberg is attempting to define seems to be a combination of all the previous characteristics. However, one aspect of psychological development has been added. The ability to detect fact from fantasy has got to be the height of individual achievement in this dynamic world. Indeed, the sanatoriums of this country are filled with individuals who, in the most extreme sense, could not detect the real world from their delusions.

Herzberg explains his last stage of psychological growth as a childhood analogy. As a child everyone is free to bathe in the popular game of "make believe." Inhibited only by a child's own imaginative powers, he is unable to cleave fantasy from the real. It is so easy to be a child in a world of children. Adults are not afforded this luxury. The world of responsibilities and work brings with it new roles and new expectations. Real growth comes through meeting new roles as a mature, rational individual--one who truly "knows himself."

Closely related to this idea of "real growth" is Alfred Korzybski's "principle of non-identity." Translated simply for language use, non-identity declares that a word is not a thing or event it represents. However, this seemingly undressed definition involves more than meets the eye. Korzybski's primary point was that the structure of language affects the functioning of one's nervous system. Because of the fundamental inadequacy of human behavior, Korzybski was able to trace this inadequacy to the interaction of nervous systems with symbolic language.

Korzybski also coins the terms "extensional" (reality oriented) and "intensional" (word-minded). Generally speaking, an extensional--oriented person is aware of things, facts, and events, in the way they are in nature instead of in the way they are talked about. He is better able to differentiate from reality than the word-minded or intensional individual. By being aware of the inadequacy of human behavior and language, the mature individual should be able to detect fact from fantasy. He will be hopefully more aware of the intensional symbols of the inferent world, the "taller" individual will not become surrounded with airtight reationalizations. This is real growth.

#### An Application to Organizational Behavior

Herzberg indicates that man in the long run is a master of his own destiny. He is not entirely predetermined in his environmental choices by biological or socialistic laws. He can pick and choose those inputs necessary to meet his individual needs. He must at the same time, however, effectively interface with the organization. Compatibility of goals and open communication are the prerequisite for organizational effectiveness--easy enough in theory but difficult to practice.

The following discussion may offer an insight into this particular problem of organizational behavior. The tools<sup>3</sup> of general semantics can be very useful.

1. In acquiring the first level of psychological growth, "knowing more," an individual must constantly stress the unfamiliar in each job task. He must not be content to accept every job assignment as only another exercise in routine retrospect. All situations can lead to an increase in what can be done. This ability on the part of the worker to pick up any surplus knowledge will indicate if he actually has the capacity to grow psychologically.

Korzybski has used the term "etc." as an extensional device to avoid allness. Korzybski believes that because language is an abstraction process, no statement about events or objects can ever tell all. Through the use of the silent "etc.", an individual would be conscious that no matter what has been learned or spoken, there is always something else which can be said or known.

The business enterprise of today is one of heavily structured tasks. It would be extremely difficult for the average individual to even acquire the knowledge required to perform all of the duties necessary in running a modern day corporation. However, he can and should

strive to acquire an increased education in his own individual situation. Through the unconscious use of "etc." in his everyday thinking and communicating, he can at least achieve this partial knowledge from each job task.

2. Herzberg contends that even though an individual may be able to acquire added knowledge from each job task, he may not be able to relate it to a past situation or even reality itself. A library of facts is entirely useless until in some way they can be related to each other through reality. The same applies to the everyday thinking of individuals in business.

Likewise, Korzybski realized the interrelatedness of nature. Words and consequently the human thinking processes have a way of separating things that are not separated in nature. Korzybski, in quoting the scientists, believed that everything in nature was related and interdependent. Hence, he advocated the use of the hyphen in attempting to subconsciously relate objects, events and symbols to each other and to reality. Through the use of the hyphen he believed one's nerve centers should produce and discover thought processes which tend to be more related than the unrealistic verbal separations--such as mind-matter, knowledge-education and sex-love.

Thus through the use of the hyphen in each job experience the mature individual should be able to constantly store and recategorize added information. By constantly relating old knowledge to new knowledge and hence reality the hyphen will continue as a subconscious tool for increased psychological growth. With this concept in mind the mature worker in the organization will be better able to accept each new assignment as an extension of the organizational objectives.

3. Even though an individual may be able to relate elements of knowledge, he may never be able to infer from these relationships to create new ideas. In other words, he lacks the ability to infer from acquired knowledge some new relationship about that knowledge. The ability to create is the ability to use deductive and inductive reasoning in a logical manner. In relating to the business environment this means approaching each job assignment as an extension of one's self. Satisfaction from a job well done can only come through the interjection of one's own expressions and ideas. Creativity on the job can lead to a creative organization, and creative organizations are the keystones of democracy.

The ability of an individual to inject himself into his thought and language is directly related to his ability to order abstractions of higher and higher orders. This ability to abstract from language and reality can lead to favorable results if accomplishments are made on a realistic level. To avoid errors in abstraction, Korzybski formulated the structural differential, which includes four levels of abstraction: the event, the unspeakable level, the verbal level, and the inference level. It is through the self-reflexive nature of language and thought that the fourth and last level is possible--inference. The ability to reach this level indicates individual creativity.

Therefore the mindful individual in business should be constantly aware of his ability to abstract to higher and higher inferences. Creativity can only come about through the injection of one's self into each job assignment. For the sake of society (and the business enterprise) as well as psychological growth in the individual, the structural differential should at least be considered.

4. It is generally recognized that the only constant element in today's complex society is change. Every molecule is in a constant state of movement. How then can the individual, in such a dynamic environment as the business community usually is, ever hope to be effective in ambiguity? Herzberg indicates that one should not only be aware of ambiguity in the business environment, but he should also welcome it! It is only through uncertainty that inquisitiveness can flourish. How can the maturing individual utilize ambiguity in his job or position in the most appropriate way?

Korzybski felt he had the answer to this universal problem. He advocated the use of dating to emphasize the process nature of reality. The semantic device of dating reminds the user of words that reality is constantly changing whereas language is basically static. Likewise, he believed man's thinking processes become static, thus disallowing any flexibility in reevaluating. To eliminate this psychological aspect of language and thinking, one must, according to Korzybski, date objects, persons, or ideas in time, i. e., Smith 1920 is not Smith 1940. Thus Korzybski does offer hope for some sort of effectiveness in ambiguity. Through the constant re-evaluation of one's job elements the employee can possibly achieve at least some idea of the process nature of reality. The subconscious use of dating will force this problem of adapting to the business organization to be of a less frustrating nature.

5. In the confines of today's modern business society, the opportunity for meaningful individualism appears to be coming more and more removed from the everyday regiments of work. Indeed, in the purely practical sense, the worker is very likely to succumb to the demands of his superior as the only alternative he foresees. However, determination along with patience, can lead the mature individual past his overstructured existence into some worthwhile relationship with his job, supervisor, and co-workers.

Herzberg indicates that, on a purely theoretical basis, the personal enhancement of the individual is superior to that of the group. However, cooperation is necessary. Growth of the organization can only come about through individual growth. This conclusion seems to be in disagreement with the clearcut objectives of some modern-day corporations.

Korzybski perceived the individual differences in people, objects, and events. In attempting to differentiate between relative objects, he developed the use of the index to show uniqueness. The index reminds the individual that there are no two persons or things in the whole wide world exactly alike--Pencil<sub>1</sub> is different than Pencil<sub>2</sub>, is different than Pencil<sub>3</sub>.

Thus, Korzybski introduced a technique to denote differences in

reality perception. The psychologically growing individual in the business environment should benefit profusely from the use of this device. Through the use of indexing in the perception of others as well as himself, he will become more aware of himself as a distinct and separate individual. Likewise today's employee must accept the fact that every individual in the business enterprise is unique and sees problems from a distinct perspective. By recognizing this fact the alert employee cannot only utilize his own talents but those of people around him. Psychological growth can only come in part from a reinforcement of the individual's self-concept in a realistic manner.

6. It seems conceivable that an individual could achieve more knowledge, added relationships, creativity, effectiveness in ambiguity, and some form of individualism without ever achieving real growth. Real growth is to relate to the real world. One could say that this is the point in the process of psychological growth in which sanity is differentiated from insanity. The effort to escape from fantasy to fact, however, is not limited in the broadest sense to the criminally insane. In fact, Herzberg suggests that the business enterprise may be a cultivating place for artificial growth. In other words, there may be individuals in industry that would strive for success through some make-believe world of symbols. This effort on the part of the individual to stop "kidding" himself and face the reward or punishment from his accomplishments is indeed difficult. It is easier to hide behind the names and labels that have been developed for just this purpose. Eventually, the extensional world of Korzybski must be faced.

In attempting to answer this same question concern-fallacious reasoning and judgements, Korzybski has originated the extensional device of quotes. Underlying the hypothesis of his entire text they were designed to correct the short comings of language structure. In short, it was a subconscious way of defining things in nature as they were, not as they appeared in one's mind. It trains the individual to realize that words and thoughts are not necessarily the things they represent. Therefore the term "sex" must be looked at objectively as "sex" in the mind.

Thus, it seems that the individual in industry seeking real as opposed to artificial growth does have some hope of becoming extensional. By placing the silent quote around his environment he will at least be reminded that the effort to escape from fantasy to fact is a never-ending problem. Employees (and more importantly, managers) must understand that people produce at the work station only because they see it as satisfying a basic need. Working because one is truly motivated positively by his work is much more effective than the negative motivation of rules, regulations, and industrial discipline. Building a world on labels and symbols can only lead eventually to disappointment and frustration.

### Summary and Conclusion

The extension of the growth period can only come through determination. Man's determination to realize his full capabilities as a creative individual is the only means of achieving real psychological growth. Inasmuch as industry has become the dominant factor in the individual's life,

it is only logical that he would emphasize real growth on his job. However, as has been pointed out, this has not always been the case. It is therefore the purpose of Herzberg and Korzybski to provide the stimulus and means to this end.

Herzberg, then, has contended that before any real growth can take place in the organization, more learning and added relationships must take place with each job task. From this will hopefully come a base on which to operate and create new ideas. He also indicates that one must not let his evaluations become frozen; he must continue to strive to be effective in the ambiguous business world. It is through the strength of this characteristic plus the individual's use of self-reflexiveness that he can become a unique and distinct individual. However, in the unique business environment of today there has been a parting of the ways when it comes to Herzberg's last and most important characteristic--real growth. Now more than ever before it is important for the individual to structure his relationship with the job so that real, rather than artificial, growth is apparent.

Likewise, Korzybski has invented certain extensional devices for use in obtaining a greater security. Through the unconscious use of "ect." and hyphens the working individual will be on a constant alert for added knowledge and its relationship to reality. The ability to order higher abstractions to relate and create ideas can come through the use of Korzybski's structural differential. Accompanied with dating and indexing the structural differential becomes the tool necessary for the creative worker to remain flexible within the confines of remaining distinctively unique in his thought and action processes. Korzybski also has an answer for real growth--the quote. Through the quote the worker learns to differentiate objects from labels, fact from fantasy.

Thus man can determine his own environment, at the same time interfacing with the industrial organization. Through the strict use of the principles laid down by Herzberg and Korzybski he can obtain partial if not full self actualization. If he fails in carrying out this social and individual responsibility it can only lead to psychological death. This must never happen.

## REFERENCES

<sup>1</sup>The six stages of psychological growth as used in this paper are taken from: Frederick Herzberg, Work and Nature of Man. (New York: The World Publishing Co., 1966), Chapter 5.

<sup>2</sup>The framework of general semantics as used in this paper is taken from: Alfred Korzybski, Science and Sanity. (Lakeville, Connecticut: The Institute of General Semantics, 1958), Parts II and, VII.

<sup>3</sup>The extensional devices are used in this paper are taken from: Alfred Korzybski, Science and Sanity, (Lakeville, Connecticut: The Institute of General Semantics, 1948), Introduction, Section F.

PART 4  
SPECIAL SESSION ON WOMEN IN ACADEMIA CROSS-DISCIPLINE,  
ACCOUNTING, BUSINESS COMMUNICATIONS, MANAGEMENT  
AND MARKETING

## WOMEN IN ACCOUNTING, CURRENT STATUS IN BIG EIGHT ACCOUNTING FIRMS

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Within the accounting profession there are the following public accounting firms known as the Big Eight: Arthur Andersen & Co.; Arthur Young & Co.; Ernst & Ernst; Haskins and Sells; Peat, Marwick, Mitchell & Co.; Price Waterhouse & Co.; Ross Brothers and Montgomery; and Touche Ross and Co. These firms are larger than most of the largest management consulting firms, brokerage houses, law firms and advertising agencies. Not only are these firms large, but their business clients are usually of great size. This distinction between the number of large clients that each Big Eight firm has in comparison to other accounting firms is expected to continue in the future since it is difficult to join the ranks of the Big Eight. Clients of Big Eight firms receive a widely recognized and respected seal of approval at a price that is not much higher than what the smaller accounting firms can offer.<sup>1</sup>

In June 1970 this writer mailed a questionnaire concerning job opportunities and employment practices for 1969 to the members of the American Women's Society of Certified Public Accountants (AWSCPA). There were 663 questionnaires returned which contained sufficient information for classification. In the past women CPAs have not been encouraged to enter the employment of a Big Eight firm because they often felt that they would not be given the opportunity for advancement or salary that men accountants are in these firms. Since the accounting profession is still dominated by these eight firms, it was felt important to again contrast the status of women CPAs within the Big Eight firms with positions occupied by other women CPAs.

A second questionnaire was designed and mailed in November, 1974 to the 663 respondents of the first questionnaire. Of this 1974 survey, 538 were able to be contacted. The others were not able to complete the questionnaire because of the following reasons: death, envelope returned unopened because the respondent had moved and left no forwarding address, respondent was retired or was self-employed and did not feel the questionnaire applied to them. An attempt was made to obtain a more current address for the envelopes that were returned. The extent and effect of nonresponse cannot be determined.

Replies containing sufficient information were received from 383 women CPAs; this represents 71.2 percent of the adjusted population. In both surveys not every respondent answered all questions and in some of the exhibits the part-time and non-accounting related respondents are excluded. This explains the reason that in some of the accompanying exhibits the number of respondents do not add up to the total received.

The returned questionnaires present a comprehensive picture of a broad cross section of American women CPAs. However, statistically it is not a fully representative sample of women CPAs since it excludes completely women CPAs who did not belong to AWSCPA in 1969.

### Employment Categories

Respondents were asked to indicate the field of accounting in which they were employed in 1974 and if they were working full or part time. Full time was defined as 35 hours per week for 40 or more weeks per year in both surveys. Of the 383 replies, 344 were working full time and 39 were working part time. There were 234 respondents in 1974 employed in public accounting; of these only 37 respondents or 16 percent were employed by Big Eight firms. It is not known whether this low percentage is due to the fact that women CPAs have felt that they had limited opportunity in Big Eight firms and have hesitated to apply for positions open or if they had applied and were refused employment.

Of the 37 respondents employed by Big Eight CPA firms in 1974, 4 were employed part time, 32 were employed full time in accounting related work and 1 was employed as a lawyer in nonaccounting related work. There were 17 of the respondents from the 1969 survey who had left Big Eight firm employment for other accounting fields; on the other hand, 10 of the 1969 respondents had joined the staffs of Big Eight firms during this time period. These respondents gave no indication as to why they left or joined these firms.

### Age Category

The ages for full-time employed respondents working in accounting related jobs is given in Exhibit 1.<sup>2</sup> The data is further broken down by Big Eight respondents and other respondents for 1969 and 1974. There were no respondents from Big Eight firms in 1974 over 60 years of age. It was felt important to analyze the Big Eight firm's policy in regard to hiring women in certain age categories and to determine if the Big Eight firms were more interested in hiring the younger woman CPA than other firms. Exhibit 1 further shows the pattern of hiring and retention used by the Big Eight firms.

The data was subjected to the chi-square contingency table test. The comparisons between Big Eight and other firms as frequency counts readily suggested the use of this testing procedure. Although one case of small size was encountered, the basic requirements for the test were met.<sup>3</sup>

The results of the testing procedure were most clear. The difference in the frequencies observed was found to be significant at a level of .01 for 1969 and for 1974. This indicates that in the last five years a pattern has continued in which the Big Eight firms seek a larger proportion of younger women CPAs. There is also a tendency for other firms to employ older women CPAs.

Exhibit 1	Ages for Full Time Employed Respondents Working in Accounting Related Jobs			
	Years	1969 <sup>a</sup> Big Eight Respondents	Other Respondents	1974 <sup>a</sup> Big Eight Respondents
Under 31	39	94	7	17
31-40	13	92	12	74
41-50	12	152	6	95
51-60	9	104	7	79
Over 60	<u>2</u> <u>75</u>	<u>41</u> <u>483</u>	<u>0</u> <u>32</u>	<u>41</u> <u>306</u>

<sup>a</sup>The total for 1969 was 558 respondents and for 1974 was 338 respondents.

## Income

The annual earnings for full time employed respondents working in accounting related positions is given in Exhibit 2. The data is broken down for Big Eight respondents and for other respondents in years 1969 and 1974. Although no attempt is made to compare the respondents' income between the two surveys because of inflation over time, a much higher percentage of the total respondents earned a salary over \$20,000 in 1974 than they did in 1969. In 1974 only 2 Big Eight respondents or 6.3 percent earned a salary under \$15,000; in 1969 there were 49 Big Eight respondents or 65.3 percent earning salaries under \$15,000.

It was felt important to compare the Big Eight respondents' earnings with women CPAs employed in other accounting related positions to determine if Big Eight firms offer higher salaries. A chi-square contingency test was used in the analysis. The difference in the frequencies observed was not found to be significant at a level of .01 for either year. A different insight regarding earnings can be gained by comparing the respondents' salaries to a male associate's salary in the same position. Exhibit 3 gives the answers for the Big Eight employees for several questions in regards to promotion and pay.

## Legal Protection Against Sex Discrimination

The Equal Employment Opportunity Commission administers Title VII of the Civil Rights Act of 1964 which, as amended, prohibits discrimination in employment based on sex as well as on race, color, religion or national origin. Under this act, it is unlawful for employers, labor unions, or employment agencies to discriminate in hiring or firing; wages, fringe benefits, classifying, referring, assigning, or promoting employees; extending or assigning facilities; training, retraining, or apprenticeships; or any other terms, conditions or privileges of employment. In general all employers of 15 or more employees are covered, except Federal agencies which are covered by an Executive Order, federally owned corporations, and Indian tribes.<sup>4</sup>

Executive Order 11246, as amended, also prohibits discrimination based on sex as well as on race, color, religion or national origin by Federal contractors or subcontractors who perform work under a federal construction contract exceeding \$10,000. Coverage includes all facilities of the contractor, regardless of whether they are being used in the performance of the Federal contract. In addition Revised Order No. 4, which was issued by the Office of Federal Contract Compliance of the U.S. Department of Labor, requires nonconstruction contractors with 50 or more employees and a contract of \$50,000 or more to take affirmative action by setting written goals and timetables for recruiting, hiring, training, and upgrading minorities and women, where they have tended to cluster in low-paying, dead end jobs.<sup>5</sup>

Even though it is a violation of both title VII of the Civil Rights Act of 1964 and the Executive Order for Federal contractors to be denied equal opportunity for promotion, Exhibit 3 indicates that many of the respondents employed by the Big Eight firms felt that they had been.

Exhibit 2 Annual Earnings<sup>a</sup> for Full Time Employed Respondents Working in Accounting Related Positions

	1969				1974		
	<u>Big Eight Respondents</u>	<u>Other Respondents</u>	<u>Total Respondents</u>		<u>Big Eight Respondents</u>	<u>Other Respondents</u>	<u>Total Respondents</u>
Under \$10,000	5	94	99		0	13	13
\$10,000 - 14,999	44	221	265		2	56	58
\$15,000 - 19,999	14	101	115		9	83	92
\$20,000 - 24,999	5	36	41		5	79	84
Over 24,999	<u>7</u>	<u>37</u>	<u>44</u>		<u>16</u>	<u>75</u>	<u>91</u>
	<u>75</u>	<u>489</u>	<u>564</u>		<u>32</u>	<u>306</u>	<u>338</u>

<sup>a</sup>Annual Professional earnings excluding rent, interest, dividends, capital gains and inheritances.

PROMOTION POLICY FOR 1974 BIG EIGHT RESPONDENTS

	Yes		No		Other Answers	
	# of Respon- dents	Per Cent	# of Respon- dents	Per Cent	# of Respon- dents	Per Cent
Since 1969 do you feel that you have been qualified for a position and deliberately not considered because you are a woman?	9	31.0%	20	69.0%	no answer	

Since 1969 do you feel that you have been qualified for a position and deliberately not considered because you are a woman?

If you have been promoted since 1969 is your present salary the same as your male associates in the same position?

If you haven't been promoted since 1969 do you presently earn the same salary as your male associates in the same position?

Since 1969 have you and a male associate with equal or less qualifications ever been considered for promotion and the male associate received the promotion?

Since 1969 have you and a male associate with equal or greater qualifications ever been considered for a promotion and you received it?

Since 1969 have you received any job promotions or offers because you were wanted as their "token woman"?

There were 9 respondents or 31.0 percent of those who answered the question who stated that since 1969 they had felt qualified for a position and deliberately not considered because they were women. There were 3 respondents who indicated that they did not earn the same salary as their male associates in the same position. In the past some Big Eight accounting firms have been known to emphasize the secrecy of their pay policies to the point that accountants are asked to resign if they are heard discussing their earnings with another staff member. This policy is reflected in many of the respondents' answer as a large percentage indicated that they did not know if they earned equal salaries. One Big Eight respondent said that she did not find out that her salary was unequal until 1974; she then protested and was put on an equal salary level at that time.

If the respondent knew that she did not receive the same salary as her male associate in the same position, she was asked if she knew the reason. One respondent said that her employer told her that married men supporting families are entitled to more money. Another respondent said that her employer admitted to her that women are paid less than men in general.

### Promotion

Replies to the question, "Since 1969 have you and a male associate with equal or less qualifications ever been considered for promotion and the male associate received the promotion?" are also tabulated for the Big Eight respondents in Exhibit 3. The 9 respondents who indicated that this had happened. One respondent said that the reason that she was given for not being promoted to manager was that even though she was excellent in all other areas, she did not have enough corporate tax experience. Her firm indicated that this was not her fault, and they would try to give her more corporate tax work. Another respondent said several promotions were made from staff to senior several years ago, and she was not promoted even though she was equally qualified. Another respondent said this situation had occurred when a man with equal tenure but less managerial experience was promoted ahead of her to manager. A similar situation had happened to another respondent when two men were promoted to manager in the tax department of her Big Eight firm. She indicated that both men were younger and had been with the firm half as long as she had; in addition one of the men was not even a CPA and this was supposed to be a requirement for promotion. When three men of equal qualifications were promoted over her, another Big Eight respondent said she complained violently and was promoted six months later. Another woman CPA was still trying to get an explanation for a similar situation and concluded that apparently the audit partners did not know what she does or what she is capable of doing. Another respondent said that in 1971 while she was working for a Big Eight firm, a male with no experience in the banking industry was brought in over her on a new bank audit although she had extensive experience in the industry. Before leaving the firm, she investigated the situation and received the answer that this was a man and he was also older than her. Another respondent suggested that it appeared that a prime qualification for promotion in her firm was the ability to attract new clients.

## Tokenism

There were five respondents who indicated that they had received a promotion since 1969 over a male associate with equal or greater qualifications. The respondents did not explain the circumstances involved or the reason they felt they received the promotion. With much talk of affirmative action plans, one cannot help but wonder if tokenism influenced the Big Eight firm's decision to promote the woman over the man. As one Big Eight respondent admitted, "I realize that I am used frequently as 'their woman' in meetings and reports."

An additional insight into how prevalent tokenism really is in the Big Eight firms is gained by examining the answers to the question, "Since 1969 have you received any job promotions or offers because you were wanted as their 'token women.?' " Exhibit 3 indicates that 9 respondents said that they had experienced this situation. One respondent said she felt there is a sincere interest in hiring more women as they feel the public expects them to have a woman partner or manager. The reasons for some of these job offers may be twofold as indicated in the following respondent's reply: "Many firms have approached me on the basis of tokenism, but they are also eager to hire me because of my CPA certificate and my eight years of public accounting experience."

## Office Space and Facilities

Of those answering the question in the 1974 survey, there were 32 respondents employed by Big Eight firms or 97 percent that indicated their assigned office space and facilities were equal to their male associates in the same position. Several said that if anything their offices were somewhat larger or had a better view. Only 1 respondent indicated that her office space and facilities were not comparable as she had to share office space with the reference library whereas her male associates had their own private office.

## Job Assignments

Since it was desirable to determine if there has been a stronger resistance against women in public accounting than in other accounting fields, the writer included a question concerning job assignments in public accounting. Of those women CPAs employed in public accounting in 1974; 131 respondents or 86 per cent indicated that there was no difference in the way jobs were assigned between men and women of the same skill level. In the survey five years ago, 51 percent of the total respondents indicated no initial difference in job assignments between men and women. The pattern of job assignments in the Big Eight firms has also improved since only 37 respondents or 52 percent of the Big Eight respondents in 1969 indicated no initial difference in job assignments between men and women. The corresponding figure for 1974 was 28 respondents or 93 percent for the Big Eight firms.

In the 1974 survey one Big Eight respondent said she always received the same job assignments as her male associates in the same

position except with the firm's clients who were physicians. Her firm felt that physicians would find it hard to work with women CPAs because physicians are accustomed to a superior-subordinate relationship with women nurses. Another Big Eight respondent indicated that she was not permitted to interview men seeking positions with her firm.

Women accountants often hear that the reason Big Eight firms are not interested in hiring them is because they are not able to perform out-of-town assignments and/or observe inventory counts. Instead they must be given more jobs suited for women such as retail or service establishments rather than manufacturing or industrial assignments. Exhibits 4, 5, and 6 examines these questions.

Survey participants were asked to describe the frequency of their out of town assignments in comparison with others of their same experience and background. Their answers are given in Exhibit 4. A Chi-square contingency test was used in the analysis. The difference in the frequencies observed was not found to be significant at a level of .01 for either year.

Exhibit 5 gives the respondents' answers concerning the frequency of their inventory observations in comparison with others. There were no Big Eight respondents in 1974 who indicated less frequent inventory observations. While Exhibit 5 is limited by small sample sizes, it appears that women CPAs in Big Eight firms are experiencing more frequent inventory observations than women CPAs employed in other public accounting firms.

Women CPAs working in public accounting in 1974 were asked if they receive more jobs suited "for women" such as retail or service establishments rather than manufacturing or industrial assignments. The respondents' answers to this question are given in Exhibit 6. Only 5 of the total respondents, one of which was employed by a Big Eight firm, indicated that they always received more jobs suited "for women." There were 76 respondents in 1969 who gave an answer of always to this question. This represents an improved work pattern for professional women accountants who at the same time feel that they must also be required to perform the same type of jobs that men do.

### Conclusion

No doubt everyone will agree that much attention has been focused on defining and publicizing the plight of the female employee; however, how much progress has been made to the full utilization of women in the accounting profession is even more important. Many women CPAs feel that there has been only talk and too little action.

They further feel that the accounting profession has not properly dealt with the scope of the problem or provided possible solutions to insure equality for women. Often accounting firms do not know what other organizations are doing to provide for equal pay and opportunity for women CPAs.

OUT OF TOWN ASSIGNMENTS<sup>a</sup>

	<u>1969 Big Eight Respondents</u>	<u>Other 1969 Respondents Employed in Public Accounting</u>	<u>1974 Big Eight Respondents</u>	<u>Other 1974 Respondents Employed In Public Accounting</u>
Equally as Frequent	18	89	13	42
Almost as Frequent	12	49	6	12
Less Frequent	<u>39</u>	<u>240</u>	<u>5</u>	<u>34</u>
	<u>69</u>	<u>376</u>	<u>24</u>	<u>88</u>

<sup>a</sup>The Total for 1969 was 447 respondents and 112 respondents for 1974.

Exhibit 5

FREQUENCY OF INVENTORY OBSERVATIONS

	1969 Big Eight Respondents	Total 1969 Respondents Employed In Public Accounting	1974 Big Eight Respondents	Total 1974 Respondents Employed In Public Accounting
Equally as Frequent	13 (20%)	118 (26%)	9 (75%)	52 (50%)
Almost as Frequent	12 (18%)	78 (17%)	3 (25%)	13 (13%)
Less Frequent	41 (62%)	253 (57%)	0 (0%)	39 (37%)
	<u>68</u> (100%)	<u>449</u> (100%)	<u>12</u> (100%)	<u>104</u> (100%)

Exhibit 6 Receipt of More Jobs Suited "For Women"

	1969 Big Eight Respondents	Total 1969 Respondents Employed in Public Accounting	1974 Big Eight Respondents	Total 1974 Respondents Employed in Public Accounting
Always	11 (15%)	76 (15%)	1 (4%)	5 (4%)
Often	19 (26%)	127 (26%)	0 (0%)	17 (12%)
Occasionally	27 (37%)	172 (35%)	17 (65%)	49 (34%)
Never	16 (22%)	120 (24%)	8 (31%)	70 (50%)
	73 (100%)	495 (100%)	26 (100%)	141 (100%)

Even though Title VII is now several years old, data from the survey indicate that many women CPAs in Big Eight firms feel that sex discrimination in employment practices still exist. Often the respondents said that it was not until they became aware of differences in pay, that they received the same pay as their male associates. It was hard to isolate the effect of tokenism on the job offers received by these respondents because all were CPAs and had valuable work experience.

Data from the survey indicates that many of the myths about women CPAs are gradually disappearing. There exists within the accounting profession an atmosphere of consciousness raising. Many women CPAs believe that real acceptance of women will continue to improve but at a slow pace. Despite the legal ramifications, double standards will continue for a long time. While data from the 1974 survey as compared to the 1969 survey indicate that on the surface acceptance appears better, the ultimate subconscious kind of acceptance is more difficult to achieve. However, this is true not only in accounting, but elsewhere.

## REFERENCES

<sup>1</sup>For an additional discussion see: John F. Lyons, "The Big Eight Accountants: How Far Should They Go?" Corporate Financing, (January/February, 1970), pp. 22.

<sup>2</sup>The writer wishes to thank Dr. Donald W. Satterfield, Associate Professor of Management, Memphis State University, for his suggestions in the statistical analysis of the exhibits.

<sup>3</sup>Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw-Hill Book Company, Inc., 1956), pp. 104-111.

<sup>4</sup>U. S. Department of Labor, Woman's Bureau Employment Standards Administration, A Working Woman's Guide to Her Job Rights (Washington, D. C.: Government Printing Office, June 1974), p. 5.

<sup>5</sup>Ibid., pp. 6-7.

## STATUS OF WOMEN FACULTY MEMBERS IN THE FIELD OF MARKETING

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### The Setting

Recent upsurge of interest in the issue of equality of men and women in this country is not a new phenomenon. The early surge of interest in the late 19th and the early 20th century resulted in the Nineteenth Amendment in 1920. This amendment legally removed the barriers that stood between the equality of men and women. The Nineteenth Amendment was further reinforced by Title VII, Civil Rights Act of 1964 (later amended as Equal Employment Opportunity Act, 1972) assuring equal opportunity for women and minorities to enter any occupation, and in all terms and conditions of employment.

Laws, however, do not automatically result in implementation. The academic world is no exception to this legal exercise in futility. Various studies (Astin and Bayer, 1972; Chase, 1971; Oltman, 1970) suggest that these laws have not resulted in equality "in all terms and conditions of employment" between men and women in academia. A recent study (Joesting, 1974) narrowed its focus and studied the status of women in academia, in Ph.D. granting Psychology departments in the Southeast. However no study as yet has focused on the status of women in a specific field of academe--marketing.

### Purpose

The purpose of this study is to fill this gap by investigating the status of women in the area of marketing in institutions involved in education beyond the high school level in North Carolina.

### Need for the Study

Need for such a study cannot be overemphasized. The study will provide invaluable data on status of women faculty members in the area of marketing in the institutions of higher learning. Though the data will be based on the survey of the academic institutions located in North Carolina, it will still provide some insight into how much the legal equality of women does indeed exist in the field of marketing. Understanding of equality of women in the marketing area is necessary not only on practical, but also on moral grounds. Fuller utilization of the talents of all members of a community is a necessary condition for the health and well-being of any society (Kimmel, 1974). This

is an important and legitimate goal to pursue especially for marketers as marketing is a discipline devoted to delivering a better standard of living for the society (Mazur, 1947).

### Methodology

All the Chairpersons of the Departments of Business or Marketing in the Higher Educational institutions in North Carolina were sent a questionnaire by mail. The Questionnaire, among other things, was designed to provide data on:

1. Number, rank, salary, and qualifications of female and male faculty members.
2. Specific courses taught by women faculty members.
3. Productivity of women and men faculty members.
4. Special efforts, if any, made by the departments and/or institutions to recruit women faculty members.
5. Normative judgments of the chairpersons as to the special efforts, if any, to be made by any marketing department.

### Results and Discussion

13 of the 45 senior institutions<sup>2</sup> and 32 of the 67 junior institutions<sup>3</sup> (47.7%) responded. If all the institutions were divided into public and private institutions, 36 of the 72 public institutions (50.0%) and only 9 of the 40 private institutions (22.5%) responded. Overall, 45 of the 112 institutions (40.0%) of higher education in North Carolina responded to the questionnaire. Six of the 32 responses received from the junior institutions were not usable.

Table 1 and 2 provide data on the rank, number, salary, and qualifications for male and female faculty in senior and junior institutions. Tables 1 and 2 are based on responses of only 21 of the 39 usable responses because 18 other institutions considered the salary and other figures requested in the questionnaire for each of its faculty members as confidential. Both the tables show that after removing the institutional (i.e. senior or junior institutions) and the academic degree (i.e. doctorate or masters) differences, female faculty members make between \$1,600 to \$2,000 less than male faculty members regardless of their academic rank. The cost of being a female, in terms of job salaries, is not specific to the academic world only. It seems to have permeated other segments of our society. Another study conducted at the Appalachian State University by our colleagues (results of which will be presented at this year's annual meeting of the Southwestern Marketing Association) show that "being female costs approximately \$2,882 in salary while being non-white costs about \$1,177 in salary, annually" (Roy and Frampton, 1975, p. 12) in the wholesaling and retailing industries. Though additional evidence may be necessary to understand the role of sex variable in salary differences within various industries, especially in the academic world, the argument that women got paid less than men, may not be all that unfounded and may be worthwhile exploring.

Table 3 shows that 149 of 229 (65%) are male faculty members and 80 of 229 (35%) are female faculty members. Among the institutions with both male and female faculty members, senior institutions have 74% male to 26% female faculty members; whereas junior institutions have 57% male and 43% female faculty members in their department of business and/or marketing. The results indicate that senior institutions in North Carolina employ less female faculty members (in absolute as well as relative terms) than junior institutions.

One of the questions on the questionnaire requested information on frequency of specific marketing courses taught by women faculty members. The responses show that women faculty members teach Principles of Marketing, Consumer Behavior, Promotional Strategy, Advertising, Sales Management, and Salesmanship courses frequently; whereas, they very rarely teach courses such as Physical Distribution, Industrial Marketing, Marketing Research, Product Management, and International Marketing. Courses such as Marketing Management and Retailing are taught occasionally by women faculty members. This result seems to indicate that women faculty members seem to concentrate on teaching of general or behaviorally oriented marketing courses. It may also indicate an unfilled niche for women in teaching of quantitatively oriented marketing courses and other courses usually not associated with behavioral orientation like Physical Distribution and Industrial Marketing.

Productivity of male and female faculty members is shown in Table 4. Women faculty members do seem to be active in presenting papers at local association meetings. Overall, except for paper presentations at local meetings, male faculty members do seem to be more productive in paper presentations and in articles and book publications than their female colleagues.

As regards to the question, "has your department made any special efforts to recruit women marketing faculty members," 33% answered yes and 67% answered no. The percentage answering yes or no were approximately the same for questions regarding special efforts made by their institutions or should any departments make special efforts to recruit women faculty members. Most of the yes or no answers were explained by one of the two reasons:

1. Equal opportunities are or should be provided to both male and female members of the sex and HEW guidelines are or should be followed.
2. Ability and qualifications, and not sex, are or should be the deciding factor.

However, there were some interesting isolated explanations of why special efforts should be made. Need for diversification and versatility were cited as factors why special efforts should be made to recruit women faculty members. One chairperson advocated that special efforts be made to hire black women. In addition to the two major reasons mentioned above, institutional factors were also mentioned for not making special efforts to hire women marketing faculty. They were: 1. No vacancy or enrollment has reached a leveling off period; and 2. HEW requirements are already exceeded.

### Limitations

The results of this study, should be interpreted in the light of the following: Limitations: (a) the data were collected from only one state, (b) only 40% response was obtained, and out of these responses, 80% of them were from public institutions, and (c) only 50% of the respondents provided information about salary and other necessary informations because of the confidentiality reason.

## Conclusion

The following summary conclusions can be drawn from the above discussion about women in marketing and/or business faculty members in North Carolina:

1. Women faculty members salaries are \$1,600 to \$2,000 lower than their male colleagues.
2. Women faculty members are fewer in number, in absolute as well as relative terms, at senior institutions as compared to junior institutions.
3. Productivity of male faculty members in terms of their paper presentations and article and book publications is substantially higher than their female colleagues.
4. Female faculty members generally are teaching either principles or behaviorally oriented courses, and there seems to be an unfilled niche for women faculty members to teach quantitatively and/or less behaviorally oriented courses.
5. Most of the chairpersons of senior or junior institutions in North Carolina do intend to follow the HEW requirements and provide equal opportunity to both men and women with proper qualifications.

Finally, it may be most appropriate to close this paper with a comment from one of the chairpersons: "I hope the day comes soon when we can assume women are routinely considered for appointments on the basis of their overall qualifications, not on whether they are women. I know it will be sometime before that happens."

TABLE 1

COMPARISON OF REPORTED SALARY OF FEMALE AND MALE  
FACULTY MEMBERS IN SENIOR AND JUNIOR INSTITUTIONS  
IN NORTH CAROLINA

Senior Institutions							
Rank	Female			Male			
	Salary (9 mos. in \$s)			Salary (9 mos. in \$s)			
	N	$\bar{x}$	Range	N	$\bar{x}$	Range	Diff.
Professor Associate Assistant Instructor & Others	1	17,500		5	19,100	16,500-20,500	1,600
				3	16,833	16,500-17,500	--
	2	11,500	10,500-12,500	16	13,500	8,500-16,500	2,000
	4	10,250	8,500-11,500	4	11,875	9,000-15,500	1,625
Junior Institutions							
Professor Associate Assistant Instructor & Others	8	10,937	8,000-13,000	16	12,718	8,500-15,500	1,781

TABLE 2

COMPARISON OF REPORTED SALARY AND TENURE  
OF MALE AND FEMALE FACULTY MEMBERS  
ON THE BASIS OF THEIR QUALIFICATIONS

Rank	With Doctorate						
	Female			Male			
	N	$\bar{x}$	Range	N	$\bar{x}$	Range	Diff.
Professor	1	\$17,500	--	5	\$19,100	\$16,500-20,000	\$1,600
Associate		--	--	3	\$16,833	\$16,500-17,500	--
Assistant		--	--	5	\$13,900	\$8,500-18,500	
Instructor & Others		--	--	-	--	--	
With Masters							
Professor		--	--	-	--	--	
Associate		--	--	-	--	--	
Assistant	2	\$11,500	\$10,500-12,500	11	\$13,318	\$8,500-15,500	\$1,818
Instructor & Others	12	\$10,666	\$8,500-13,000	20	\$12,525	\$8,500-15,500	\$1,859

TABLE 3

COMPARISON OF NUMBER OF MALE AND FEMALE FACULTY  
MEMBERS IN SENIOR AND JUNIOR INSTITUTIONS  
IN NORTH CAROLINA

			Sex				
			Male		Female		Total
			No.	%	No.	%	
1.	Institutions with no Female faculty members	Senior (n=7)	16	100	--	--	16
2.	Institutions with Male and Female faculty members	Junior (n=4)	10	100	--	--	10
		Senior (n=5)	40	74	14	26	54
		Junior (n=22)	83	57	63	43	146
		Total	149	65	80*	35	229*

\*Includes the results of one institution (Senior) with no male faculty members but 3 female faculty members not included elsewhere in the table.

TABLE 4

COMPARISON OF PRODUCTIVITY OF MALE AND FEMALE  
FACULTY MEMBERS IN HIGHER EDUCATION INSTITUTIONS  
IN NORTH CAROLINA FOR 1973-74

	Institution with no Female Faculty (n=11)						Institutions with Male and Female Faculty (n=27)					
	Senior.		Junior		Total		Senior		Junior		Total	
	M <sup>1</sup>	F <sup>2</sup>	M	F	M	F	M	F	M	F	M	F
1. Papers pre- sented at various associations:												
Local	3	-	3	-	6	-	10	2	16	13	26	15
Regional	1	-	1	-	2	-	14	1	2	2	16	3
National	2	-	-	-	2	-	1	-	1	-	2	-
TOTAL	6	-	4	-	10	-	25	3	19	15	44	18
2. Articles in Journals:												
Local	1	-	-	-	1	-	-	-	-	-	-	-
Regional	2	-	-	-	2	-	8	-	-	-	8	-
National	19	-	-	-	19	-	5	-	3	1	8	1
TOTAL	22	-	-	-	22	-	13	-	3	1	16	1
3. Books Published	5	-	-	-	5	-	-	-	-	-	-	-
TOTAL	5	-	-	-	5	-	-	-	-	-	-	-

<sup>1</sup>M = Male Faculty

<sup>2</sup>F = Female Faculty

## FOOTNOTES

<sup>1</sup>The list of all the institutions involved in education beyond the high school level in North Carolina was obtained from the newsletter published by the University of North Carolina on Higher Education in North Carolina, Vol. 1, No. 4, February 23, 1973.

<sup>2</sup>Senior institutions include institutions included in the University of North Carolina system, senior private institutions, and senior private colleges.

<sup>3</sup>Junior institutions include technical institutes, community colleges, and Junior colleges.

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COMMENTS ON STATUS OF WOMEN FACULTY MEMBERS  
IN THE FIELD OF MARKETING

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I applaud Professors Pathak and Rountree for adding to the evidence that women are being taken in still another field - - that of Marketing.

The researchers concluded from their data that women are less productive in numbers of papers and publications. May I offer a reason? Research is not intended to be a lonely road. One of the continual problems addressed by deans is providing a climate where faculty will informally get together and find common research interests that they carry through. If there are any deans within earshot, may I submit that there is an additional cultural barrier that women face in getting into the informal system that produces research. Many women are simply not included in office rap sessions or lunch breaks. There is one advantage for those few women who do manage to publish - - they are generally the sole author on their articles which does carry weight in some circles. I know of no women who are playing the game of forming coups with several other faculty members so that all of their names appear on whatever each of the others produces. Then each coup member has an enormous publication record each year. I am not saying that women wouldn't be interested in such a coup deal - - I am just saying that women haven't broken the barrier to get in on one yet.

Pathak and Rountree made a valiant effort to get data. Out of 112 questionnaires sent out, 39 (35%) useable questionnaires were returned. But 18 of the 39 institutions considered salary and other figures as confidential. So two of the four tables in the study represent only 21 (19%) of the 112 institutions. From these remaining data, we find that female marketing faculty members make between \$1600 and \$2000 less than male marketing faculty members, regardless of their academic rank. Based on the lack of cooperation seen from the return and the large salary gap, I find it curious that the researchers would list as a conclusion that "most chairpersons of senior and junior institutions in North Carolina do intend to follow HEW requirements and provide equal opportunity to both men and women with proper qualifications". Quite frankly, my personal feeling is that this conclusion is based more on the fact that the researchers must go back to live in North Carolina.

The government does not have enough staff to review and evaluate all affirmative action plans. The headlines telling of massive back-pay settlements by a few universities represent only a tiny margin of retribution for injustices. The reality is that most of the very few universities who have taken a stand for equality are simply paying lip service to it. Many will do nothing until federal pressure is applied. HEW has an acute shortage of lawyers further hampered by inadequate training. During the House Appropriations' spring hearings, HEW revealed that the Office of Civil Rights had filled only one-quarter of its positions. The higher education division has a shortage of personnel and can't locate people with higher education backgrounds who can understand the discriminatory subtleties there. A startling statistic is that out of 900 or so colleges and universities which have federal contracts, HEW has approved only 14 affirmative action plans. And so we see, nationally, that women full time faculty earn over \$1700 less than their male counterparts - - just like women in Marketing in North Carolina.

A glimmer of hope came in late November when the National Organization for Women, the Women's Equity Action League, the National Education Association, the Federation of Professional Women, and Women in Science joined to sue HEW and the Department of Labor for not doing their jobs. However, "a reliable source" tells me that that suit put Washington into such a snit that they are doing even less.

Tell the women Marketing faculty in North Carolina they might as well stay put as there is no place to run where things are any better. You see, we live in a country that took six months to ratify an amendment giving 18-year-olds the right to vote, yet this same country is taking years to ratify an amendment giving 51% of its population equal rights.

ATTITUDES CONCERNING THE SOCIO-CULTURAL ROLES OF WOMEN  
AMONG MEN AND WOMEN IN AN ACADEMIC ENVIRONMENT

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"Men believe, and women accept their belief, that woman's role should be selfless, dedicated to being man's helpmate, and any work or career on the part of a woman should fill in the gaps of time and energy left over from their primary obligations as wives and mothers." (Rossi, 1972) However, historical, societal and economical circumstances in the last fifty years have brought about rapid and profound changes in the aforesaid role of women in American society. Today, women who no longer wish to pursue traditional roles have entered the work force in large numbers. Unfortunately, the transition from traditional to current broader role definitions for working women has not been without problems.

For the many women who enter the work force, the myth of man's helpmate goes with them. As a result, they are employed in help-oriented clerical and secretarial capacities. As a result and over time, this factor has contributed to underutilization or non-utilization of the economic talents of American women.

Cultural norms have been the most effective deterrent to women holding executive and managerial level positions in businesses and academic organizations. Those outstanding women who do manage to move into positions of responsibility are frequently confronted with the "Secretary Syndrome." The Secretary Syndrome - a subtle form of discrimination - operates to insure that a female always works in a semi-secretarial capacity. She is treated accordingly and requested to undertake secretarial-type duties without evaluating the appropriateness of the request.

Of all the cultural factors affecting the performance of women in job situations, the various psychological attitudes of both males and females concerning the role of women in society has been the most influential. These psychological attitudes are formed in childhood and although societal conditioning occurs prior to the commencement of formal education, the educational system seems to reinforce traditional cultural values. For example, a recent study of five social studies textbooks written for grades one to three revealed that men were shown or described in over 100 different jobs and women in less than 30. (Suelzle, 1973) Almost all the women's jobs described were those usually associated with feminine societal roles. Furthermore, women were portrayed as having a limited number of interesting jobs available and were encouraged to maintain traditional roles and values.

Women as a whole, though, do not necessarily accept the cultural role for themselves as readily as men. Data has shown that men are more conservative concerning women's roles than women themselves are. (Rossi, 1972) Since changes in the sexual status quo are usually met with resistance, legislation, enthusiasm or good personnel programs cannot be depended upon to pave the way for the acceptance of women in equal positions to men. This is particularly true since the type of discrimination experienced by women is subtle and less likely to be understood by both men and women. Congresswoman Shirley Chisholm once said that she had experienced more discrimination as a woman than as a black. Nevertheless, men must increasingly work with women on a peer basis and their attitudes toward a woman's "place" is important in coordinating their work roles.

Modification of men's and women's attitudes toward women in such areas as vocational, educational and intellectual roles of women is the only alternative to resolving the problem of economic equality between the sexes. Unfortunately, current agreement on appropriate roles for women have resulted in economic discrimination, particularly for women in academic areas. Qualified women faculty members tend to be hired in lower academic ranks with salaries often well below those of men with comparable credentials and productivity. Recent estimates indicate that women hold approximately 38% of the instructorships and just 5% of the full professorships in U. S. universities. (Time Magazine, July 15, 1974) "...Few women in academic life are seriously considered for higher administrative positions, and if considered, are seldom selected as deans, provosts, or vice-presidents." (Reagan & Maynard, 1974) Affirmative action programs designed to increase the number of women employed in professional capacities in higher education have not provided the answer as the number of women on college faculties has increased only .9% in the past few years. (Time Magazine, July 15, 1974)

Numerous problems plague the accomplishment of economic equality for women in academic positions. Lack of information about the nature and seriousness of attitudinal differences between academic men and women surely contribute to the implementation of solutions. As a first step toward understanding attitudinal differences, this study sought to explore the attitudes about women that both academic men and women hold. Particular emphasis was given to the area of women's attitudes toward women and their relationships with their male peer group in a higher educational setting. Attitudes toward vocational, educational and intellectual roles of women, freedom and independence, dating, courtship and etiquette, sexual behavior and marital relationships and obligations were evaluated.

### Methodology

Attitudes toward women among three different types of academic groups were examined. The following classifications were used to distinguish group characteristics:

1. Traditional Women: Women whose long range career goals are in fields in which women predominate such as secretaries, clerical help, social workers, librarians, home economists, elementary and secondary educators. (Rossi, 1972)

2. Pioneer Women: Women whose long range career goals are in predominantly masculine fields such as educational administrators, business personnel, educators who have earned doctorate degrees, medical physicians, and women in the natural sciences. (Rossi, 1972)
3. Men: Men who are currently employed in administrative positions including deans, and department/area chairmen.

The faculty/Staff Directory of a major state university in the Southeast was selected as a frame since it provided individual background data.<sup>2</sup> All women were evaluated for their suitability as traditional or pioneer women according to the stated definitions. All men listed in the Faculty/Staff Directory section entitled "The Administration" were assigned to the third group since these men are in the position of influencing hiring practices, promotions, tenure, salary questions, and their attitudes about women would affect the career achievement of academic women.

In order to provide a factor of commonality, all persons without a bachelor's degree were not included in the sample. Since the number of women earning a doctorate is less than 15% of total doctorates earned annually, women who have long-range career goals in fields that women dominate but who have terminal degrees were included in the Pioneer category.

The total number of persons in the three populations was 494 - consisting of 200 traditionals, 115 pioneers, and 179 men. All persons were included in the study.

The Attitudes Toward Women Scale developed by Janet T. Spence and Robert Helmreich was used as the measurement instrument. The scale contains 55 items with each item consisting of a declarative statement with four response alternatives. Each item was given a score from 0 to 3 with 0 representing the most conservative response and 3 the most liberal pro-feminist. For descriptive purposes, Spence and Helmreich categorized the 55 items into six independent groups according to their context. The categories were as follows: I) Vocational, educational and intellectual roles, II) freedom and independence, III) dating, courtship and etiquette, IV) drinking, swearing and jokes, V) sexual behavior, VI) marital relationships and obligations.

The AWS scale and a cover letter which requested cooperation but did not reveal the purpose of the study were distributed through the University's intra-campus mail system. Two weeks later a follow-up letter was sent to nonrespondents. The overall rate of return was 58 percent, consisting of 65 pioneer women, 125 traditional women, and 90 male administrators.

### Findings

Analysis of variance techniques applied to the AWS scores of the three populations indicated that responses between the three groups were significantly different ( $f=8.794$ ,  $df=2$ ,  $P<.01$ ) as shown by Table 1.

Differences between age groups of the three populations were also significant. ( $F=4.009$ ,  $df=4$ ,  $P .01$ ) Lack of significant interaction effects between group and age indicated that the age category did not significantly and differentially affect the groups.

Table 1  
Analysis of Variance of  
Attitudes Toward Women Scores

Main Effects	df	MS	F
A - Groups: Pioneer, traditional, male administrators	2	4113.367	8.794**
B - Age: 20-29, 30-39, 40-49, 50-59, 60-60+	4	1875.497	4.009**
Interaction			
A x B	8	785.254	1.679*
Error (within)	262	467.771	

\*\* P .01

\* P .10

Overall descriptive characteristics of each of the three groups were summarized in Table 2. The highest possible liberal pro-feminist score was 165 while the most conservative was 0.

Table 2  
Selected Statistics for Three Groups  
Pioneer Women, Traditional Women, Male Administrators

Group	Mean	Median	Range	N
Pioneer Women	118.57	123.0	54-162	65
Traditional Women	114.30	119.0	60-156	125
Male Admin- istrators	100.56	99.0	42-150	90

Both the median and the mean scale values showed that male respondents were the most conservative in their responses with a median score of 99 and a mean score of 100.56. The range was 108 points from a conservative score of 42 to a liberal score of 150. Next in conservativeness were the traditional women with a median score of 119 and a slightly lower mean score of 114.3. The range for traditional women was 96 points from a conservative score of 60 to a liberal score of 156. The most liberal scores were for the pioneer women who received a median score of 123 and a mean score of 118.57. The range for pioneer women was 108 points from a conservative score of 54 to a liberal score of 162.

### Age Patterns

Graphical patterns were developed by plotting the mean scores for age categories within groups. As Figure 1 shows, the pioneer women had a consistent and negatively sloped relationship. As the age of pioneer respondents increased, the liberalness of their score decreased. The traditional women had a conservative dip at the 30-39 age group and an average 10 point increase from the 30-39 to 40-49 age group. From the 40-49 age group until retirement age, traditional women slightly surpassed the pioneer women in liberal attitudes.

The male administrators were consistently more conservative in their responses and showed a consistent pattern with the exception of the 50-59 age category at which point their average score dropped to 90. Male administrators appeared to become slightly more liberal at age 60-69. From 60-69 all three groups converged.

### Attitudes Breakdown by Group

An analysis of intra-scale attitudes followed the six Spence and Helmreich dimensions - I) Vocational, Educational and Intellectual Roles, II) Freedom and Independence, III) Dating, Courtship, Etiquette, IV) Drinking, Swearing, Jokes, V) Sexual Behavior, VI) Marital Relationships and Obligations. A total score for each dimension was obtained and then divided by the number of respondents in each group. This produced an average score for that dimension ranging from 0, the most conservative, to 3, the most liberal. See Table 3.

### Vocational, Educational and Intellectual Roles

As a whole, all three groups appeared the most liberal on this dimension. The most conservative response in this dimension was given to the item stating that there are some professions and types of businesses that are more suitable for men than women. The most liberal score was given to a question pertaining to equal pay for equal work and services rendered by women workers.

### Freedom and Independence

This dimension clearly showed the three groups in their respective positions. The pioneer and traditional women scored equally liberal while

## Figure Captions

Figure 1 - Mean Scores of the Three Groups by Age

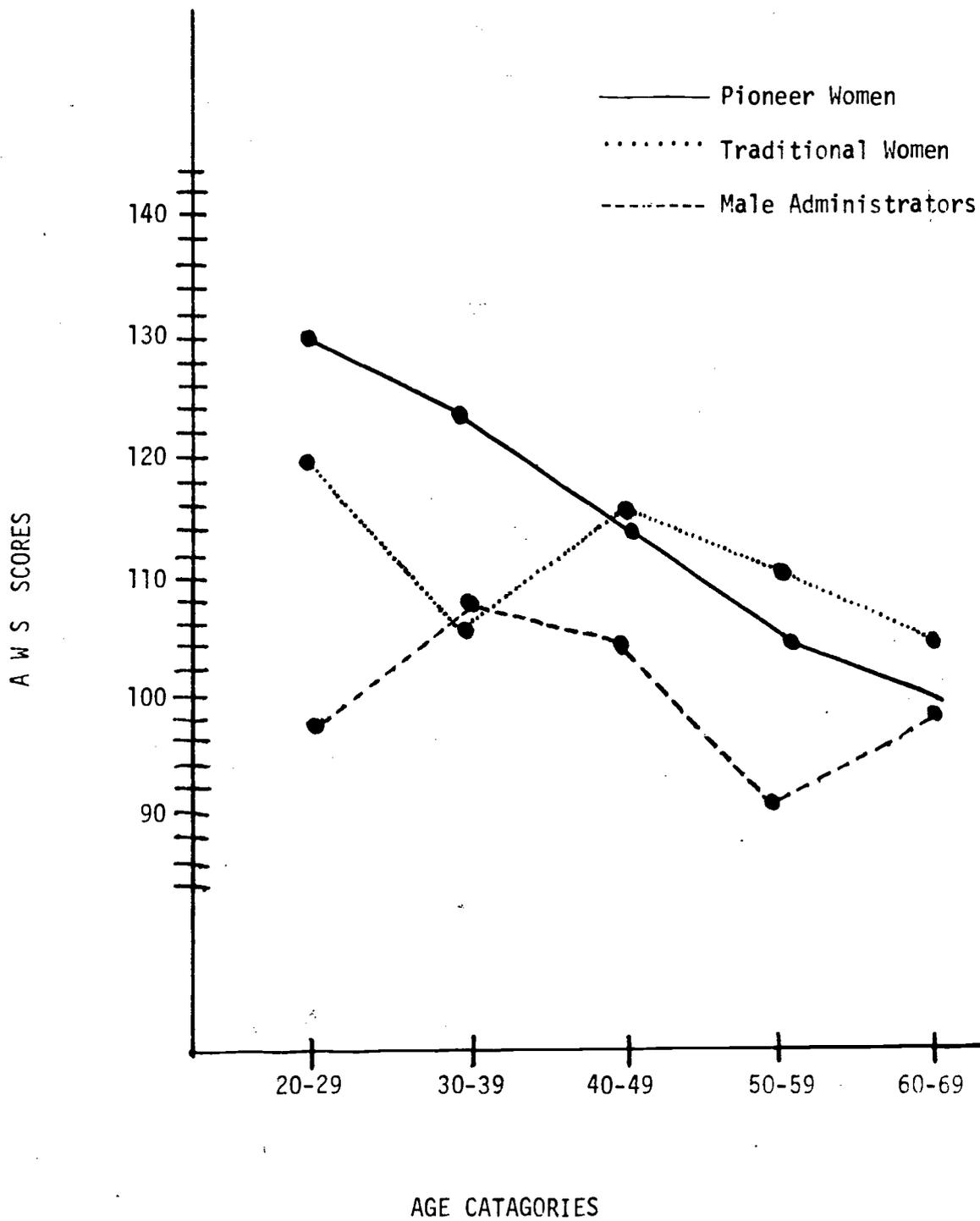


Table 3  
Means of AWS Dimensions  
By Group

Dimension	Pioneer Women Mean	Traditional Women	Male Administrators Mean
1. Vocational, Educational and Intellectual Roles	2.5	2.5	2.1
2. Freedom and Independence	1.9	1.8	1.3
3. Dating, Courtship Etiquette	1.5	1.3	1.3
4. Drinking, Swearing, Jokes	1.8	1.7	1.5
5. Sexual Behavior	1.4	1.1	1.1
6. Marital Relationships & Obligations	2.4	2.3	2.0

male administrators were more conservative in their response. The males were most conservative when replying to the item suggesting that women should not go to exactly the same places or have quite the same freedom of action as men. The two groups of females were most conservative in their response to a question concerning traditional male protection and support. The male administrators most liberal response in this dimension pertained to their belief that the modern girl is entitled to the same freedom from regulation and control given to the modern boy. The two women groups gave their most liberal response to agreeing that women should have the same freedom of action as men.

### Dating, Courtship and Etiquette

This dimension received conservative scores from all three groups. The average scores of males and traditional women were similar. The item pertaining to men being courteous to women was given conservative scores. All groups believed that men should continue holding doors open and helping women with their coats. The mean scores for all items in this dimension were most conservative for traditional women. All three groups were slightly liberal in their belief that women should not take a passive role in courtship.

### Drinking, Swearing, Jokes

All three groups had only a slightly liberal score with almost identical weights. The exception was the male response to swearing and obscenity. Male administrators indicated that swearing and obscenity is more repulsive in the speech of a woman.

### Sexual Behavior

Items in this dimension received the most conservative response from all three groups. The item rated most conservatively was the one pertaining to women having an obligation to be faithful to their husbands. This may be explained by the fact that it was the first question on the scale. Another item receiving a conservative rating from all three groups concerned wives having an occasional, casual, extra-marital affair. On this item males were slightly more liberal in their response.

### Marital Relationships and Obligations

This area was rated highly liberal by all three groups with pioneer women scoring highest, followed by traditional women and male administrators. All three groups gave liberal ratings to the following items: Both husband and wife should be allowed the same grounds for divorce; husbands and wives should be equal partners in planning the family budget; and husbands have an obligation to inform wives of financial plans. All three groups scored conservatively on the following items: It is childish for a woman to assert herself by retaining her maiden name after marriage; a wife should make every effort to minimize irritation and inconvenience to the male head of the family; and it is insulting to have the "obey" clause remain in the marriage service. All three groups demonstrated a similar liberal-conservative response on the six dimensions. Dimension I (Vocational, Educational and Intellectual roles) and VI (Marital Relationships and Obligations) attitudes were highly liberal, while dimension III (Dating, Courtship and Etiquette) and V (Sexual Behavior) scores would fall in the conservative range. The remaining two dimensions - II (Freedom and Independence) and IV (Drinking, Swearing and Jokes) - were only slightly liberal.

## Discussion and Conclusions

The analysis of the attitudes by age of the respondent yielded patterns which have definite implications for employee relations. The difference between men and the two groups of women in the 20-29 age category indicates certain conflict between men and women which will affect professional relationships may occur. Young men starting in their business careers are likely candidates for interpersonal conflict should they professionally interact with a pioneer woman in the same age category.

Another area of potential conflict is suggested by the male administrator's mean score. While consistently more conservative in their responses than the two groups of women, their scores took a sharp dip at the 50-59 age category. Since men in the 50-59 age group are most likely to be in upper-echelon management positions and have positions of influence and power, their conservative attitudes toward women could adversely affect those women moving into academic and administrative positions. Given the nature of academic situations such conservative attitudes could subversively bar academic women from professional achievement. While men in academic and administrative capacities may verbally support the recruitment of competent women for higher academic positions, they may fear the competition. Acting in concert, they have the power to create an atmosphere of subtle discrimination that could inhibit a woman's ability to be assimilated into responsible management positions.

Another area of possible conflict concerns the attitudinal difference between male administrators and pioneer women. Pioneer women, particularly the younger pioneer women, are more liberal than their peers. By pursuing non-traditional career patterns, they disrupt traditional cultural patterns which induce discomfort for men who cannot understand or accept their desire for achievement. As pioneer women move into positions of responsibility, sharp attitudinal differences between them and their male peers are likely to create an underlying source of tension which traditional methods of dealing with conflict such as compromise are not appropriate or acceptable. These ongoing differences which affect sequential issues are part of the failure of affirmative action programs which cannot provide guidelines for interpersonal compatibility.

This study supported the theory that men are more conservative than women. However, it did not indicate that women in executive positions emulated the conservativeness of their male peer group. Solutions to the potential interpersonal problems produced by the difference are not self-evident. Emulating male administrators' attitudes would create inner conflict and individualism produces overt tension. It may be that there are no high reward achievement areas for women without conflict. Those women who opt for success in non-traditional areas should perhaps integrate their feminine role with a compatible career choice. A woman believing her role to be submissiveness and conflict avoidance will have difficulty handling jobs requiring aggressiveness. Pioneer women's attitudes will be different from male administrators and this difference may create tension and conflict unresolvable by conventional administrative alternatives.

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- <sup>1</sup>The authors wish to thank Dr. Minnie C. Miles, Professor of Organizational Behavior at the University of Alabama for her assistance in the conceptualization of this study.
- <sup>2</sup>The University of Alabama, a major state university, is located in Tuscaloosa, Alabama, and has a student population of approximately 14,000.

Comments on  
ATTITUDES CONCERNING THE SOCIO-CULTURAL ROLES OF WOMEN  
AMONG MEN AND WOMEN IN AN ACADEMIC ENVIRONMENT

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One need only look at the disparity of salary, rank, and administrative positions among males and females at most universities and recognize the inequitable as well as illegal imbalances that exist which justify additional research examining this asymmetrical predicament. As a victim of these "disparity" factors, it is encouraging that more attention is being focused upon the issues, although the offenders causing the disparity usually avoid such issues.

While the authors outline some of the cultural and environmental factors that have impeded women in developing their full potential, it is felt that some of the relevant factors excluding women in academic situations have not been mentioned. The paper cites the psychological training and societal conditions of earlier childhood on through commencement of formal education and occupational counseling which contribute immeasurably to the attitudes of sex stereotyping, but it is believed that the greatest impediment to professional women, particularly those in academia, starts upon graduation from high school, in post secondary institutions. The requirement of university professors to hold advanced degrees is defensible, but many women are denied or discouraged from participation in undergraduate education, the prerequisite for graduate education and university appointments.

Our post-secondary institution systems have been set up to foster sex discrimination by admission practices and regulations, curriculums, age restrictions, and services offered. Ekstrom (6) has grouped these "barriers" into three categories:

1. Institutional barriers--discriminatory admission and financial aid practices, discriminatory institutional regulations, types of curriculum and services offered, and faculty and staff attitudes.
2. Situational barriers--family responsibilities, financial need, and societal pressures.
3. Dispositional barriers--fear of failure, attitude toward intellectual activity, role preference, ambivalence about educational goals, level of aspiration, passivity, dependence, and inferior feelings.

In support of the reality of the first two barriers, one need consider university admission policies that violate the concept of higher education (acceptance of the most qualified) by limiting the number of females admitted (5, 6, 7, 11, 15) or placing higher scholastic requirements for females than males (1, 6, 10, 12, 13, 15). And, though a smaller proportion of women apply for fellowships and grants, a much smaller proportion receive this assistance though some of the females rejected have better grades than many of the males selected (5); thus women are more likely to depend upon loans, savings or family for financial assistance (2). And, discouragingly, it is estimated that only one in 300 women today who have the potential to earn a Ph.D. does so, while one in 30 men with the same potential will receive a Ph.D. (14); the percentage of doctorates in 1968 was 12.6 females and in 1930, 28 percent females. (14).

With respect to the research instrument, little evidence was found to support the validity of the AWS, though the authors did seem to have a credible record of publications. Also, dubiousness is expressed of instruments measuring controversial attitudes that propose direct questions that might give respondents a good indication of what is being evaluated. Respondents are more inclined to endorse socially acceptable responses rather than exemplary feelings. Perhaps an instrument constructed in which motives are vague or concealed, such as the one used by Rosen and Jerdee (16), would elicit more representative responses.

In limiting the sample group to one campus, there is also a question of a conservative Southern stereotype. It would be interesting to see responses of campuses at different geographical locations, difference sizes, and racial compositions.

The classification of the pioneer group raised a question in my mind as to whether those women with terminal degrees in "women's occupations" should be included, although the authors adequately defended their decision to do so.

Not only could the results of the study been predicted by one having extensive involvement in women's studies, but the return rate of the AWS. While traditionals had the highest return rate, 62 percent, and pioneers had a 56.6 percent return, men had only a 50.3 percent return. Though the cover letter did not reveal the purpose of the AWS, it is doubtful that many respondents didn't attempt to second-guess the purpose--which might account for the lower return rate among the administration. Then too, this might be indicative of their interest in this type of research.

Conclusions drawn from the results produced some valuable insight. The inference that conservative attitudes of men in the 50-59 age group are most likely to have influence and power in promotions and appointments is a logical deduction. And the suggested conflict that is likely to develop between pioneer women and administration will probably not be confined to those two groups: Hawkins (9) found that women discriminate against other women, so the pioneer women are sometimes without any support. Other conclusions drawn were equally representative.

This study and others indicate that affirmative action programs

have been ineffective in the substantial change of university policy or attitude. While this research effort reflects a great deal of work and admirable effort, may the challenge to the authors be a continuation of their efforts in this direction.

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## CLOSED DOOR TO THE EXECUTIVE SUITE

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### Introduction

In today's society - even acknowledging the differences in the socialization of female children as opposed to male - the majority of girls enjoy a relatively open environment, a good basic education and the illusion, at least, of being able to develop themselves as individuals. The new sexual freedom that girls enjoy because of the availability of the pill extends the illusion still further. It isn't until they begin to search for purpose and meaning in life that girls - now women - come face to face with the reality that they are something less than men in our society, and very often nothing more than appendages to enhance the total "image" of the men they marry. (Douvan 1968).

For some, this is a reality they refuse to accept, and they proceed to spend the rest of their lives trying to prove that they are as good as, if not better than, the next man.

For others whose ego is less developed, the reality tends to reinforce basic fears about their own dependency and consequently, they may readily accept the role society has assigned to them as right and proper.

And for still others, who cannot accept the reality but lack the fortitude to fight against it, life becomes a compromise, where they deny the reality in order to preserve their own self-esteem.

Each woman's solution for "coping" is alternately tragic because powerful energies are dissipated in maintaining psychological equilibrium, and a potentially creative pool of human resources is wasted.

Obviously, it is not within the scope of this paper to address the problems of women in general, but rather to consider closely a select, well-educated and career oriented group of women in Boston who were identified in 1963 as the "Leading Ladies in Boston Business."

In Part I, I have endeavored to examine the social and economic background against which these women developed their careers over the past ten years; in Part II to report the results of a questionnaire to develop a composite profile of these women, and more specifically, to learn from them what they consider significant variables in their respective career paths; finally, in Part III to examine the implications beyond the statistics and the words per se.

## Women in Upper Levels of Employment - Part I

Much of the current literature about the Women's Movement, Affirmative Action Programs and the consciousness raising effect they are having would lead many to believe that the door to the executive suite has at last been opened to women. Not so. While there are many more women working now than ever before, their number in the top ranks of employment has not increased.

Statistics show that in 1970 in the field of science, 10 percent of the 350,000 scientists were women. Women in the sciences earn fewer doctorates, and the National Academy of Sciences has only nine women among its 800 members. In medicine, 7.6 percent of the 345,000 doctors were women; however, they represent only one percent of the general surgeons who are the largest medical earners.

In law and education the figures are equally distressing. There are only 200 women judges out of 10,000 in all the U. S. courts. There are 9,000 women lawyers in the U. S., up one percent since 1948, representing 3 percent of the 325,000 total.

In education 85 percent of the elementary school teachers are women, but women account for only 21 percent of the principals. In 1970, women made up 20 percent of college and university faculties, yet only 9 percent of the full professors.

Moreover, in 1974, heralded as the "year of the breakthrough for women," there were 18 women elected to the House of Representatives -- exactly the same number as served in 1962! There are presently no women serving in the Senate. (Congressional Quarterly, 1974.)

In every area of the employment spectrum similar imbalances exist. (Comprehensively compiled in the "Women's Rights Almanac 1974," edited by Nancy Gager.) In some cases, women are in worse financial positions today than they were 20 years ago despite the Equal Pay Act of 1963. For example, in 1955, women earned 64 cents for every dollar earned by men; today, they earn 59 cents per dollar. Forty years ago, 55 percent of the student attending graduate school were women; today only 39 percent are female.

Inasmuch as the educational background of a worker determines, in most cases, not only the type of work but also the level of job within an occupation for which he or she can qualify, here again women appear to be losing ground.

### Sociological Factors:

What sociological factors have contributed to the discrimination of women in the upper levels of employment? Several authors, Page Smith, Germaine Greer, Betty Friedan and John Henry Cutler, et. als. feel one of the compelling reasons is that most women do not strive for the top.

By the time girls become adults most of them have had their intellectual curiosity, achievement motives, ambitions and initiative

socialized out of them. Their main aim in life becomes finding a husband and having children. (Docuan 1968.) It appears that society has not changed very much since Rousseau said, "The whole education of women ought to be relative to men."

### Leading Ladies of Boston Business - Part II

Against the background of the social, cultural and economic environment just described, a select group of Boston Businesswomen assembled in John Hancock Hall in 1963 to attend a seminar on the Status of Women. The program was sponsored by the John Hancock Insurance Company and the brain-child of Margaret Divver, a vice president of the company, and not incidentally, a woman whose merchandising creativity had brought her to national prominence in the industry.

The consensus of the distinguished panel, was summed up by the keynote speaker, Paul Foley, vice chairman, McCann-Erickson, Inc.:

"In today's busy America, with its exploding population, its leading role in world affairs, its unending challenges, a woman can have virtually any career to which she is willing to make a personal commitment."

"If, however, young women decide to behave in a tribal manner that is to stop educating themselves in their mid-teens, to marry as though that fact ended all other facts, to make no commitments to perfect themselves as individual human beings beyond their 20th year--then these young women must expect to be treated by the world, especially the professional world, as card-carrying members of the lowest common denominator."

Clearly, the women who attended this conference on the "Status of Women" were intelligent, well-educated and mature women whose management potential was already recognized -- Indeed, they were designated "Leading Ladies of Boston Business." What happened to their career patterns from 1963 to 1973?

I interviewed by questionnaire and in person 21 of the attendees of that conference who are still employed in the Boston Area, many with the same company.\*

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\*No attempt has been made to develop a statistically significant sample. Some 150 business women attended the conference in 1963. The sponsoring company, John Hancock Insurance Company, could not or would not supply a list of their names. Consequently, the names obtained were culled from newspaper accounts of the conference. Of that number only 21 women could be identified and located in the Boston area in 1973.

The women surveyed are employed by a representative cross-section of Boston business: John Hancock Insurance Co., State Street Bank & Trust, Poloroid Corp., Sonesta Hotels International, U.S. Department of Labor, and other equally prominent employers.

The composite profile of the Boston Businesswoman of 1973 is attached for your interest, as well as a comparison with her profile of ten years ago.

#### SAMPLE ANSWERS TO OPEN-ENDED QUESTIONS:

What in your judgement is the greatest obstacle to integrating women into the higher echelons of business management i.e., decision-making roles?

"A woman's own incapability for the position she is seeking."  
"Tradition, chauvinism, ultra conservatism."

"The greatest obstacle that women presently face is the education of the male, senior echelon to a degree of acceptance and understanding of women as their equals. To dispel the old wives' tales and myths that our society has spent many years in formulating, will require long and arduous re-education and consciousness raising."

"Ambitious men!"

#### COMPOSITE PROFILE OF THE 1973 MANAGEMENT WOMAN

(21 Boston Management Women Responding)

Age: 30-40 yrs...30%      40-50 yrs...40%      50-60...30%  
Marital Status: Single in every case except one.  
Average No. of Years with company: 18 years (3 women as long as 30 yrs.)  
Average No. of Years in present position: 10 years  
Salary range: 12-16k...20%      16-20k...80%      (20k plus....only one.)  
College: All, except one.  
Advanced Degrees: 50%  
Would you vote for a woman for president? Yes... all except one.  
Do you find being a businesswoman an advantage? Yes ... all except one.  
Career goals: Majority stated that the career goals held in 1963 had been reached.

#### TEN-YEAR COMPARISON

	<u>1963</u>	<u>1973</u>
Age:	50	45
Marital Status:	Single	Single
Salary Range:	10-12K	16-20K
College:	Yes	Yes
Woman President:	Yes	Yes
Businesswoman Advantage:	Yes	Yes

"I think the attitude of many women in business--their feeling of superiority and IMPORTANCE - may destroy them."

"Jealously on the part of men for invading their territory and privacy, which is understandable in many respects, particularly with older men. Younger women in our organization are not having as much difficulty with their contemporaries; and I do believe time will eventually help matters considerably."

"The greatest obstacles to integrating women into decision-making roles are: Management's attitude toward businesswomen, their lack of experience as compared to men their own age, and a woman's own attitude toward other women in management -- women are conditioned to the preference of working for men. The characteristic of female aggressiveness necessary in a competitive business environment conflicts with a woman's concept of femininity; and the very real choice a woman must make concerning having a marriage and children or a career and/or both, and then integrating that choice. A top-echelon job in business, government or a profession is very demanding. A husband would have to be in full agreement with his wife's career goals - and understanding."

What were the factors which most influenced your reaching/not reaching your career goal?

"Unsuccessful male boss combined with personal success and being in the right place at the right time."

"Some of the factors involved in reaching the goal of Recruiting Coordinator are age old: luck, timing and being in the right place at the right time. Realistically, management recognized such things as initiating new recruiting methods and researching areas of diversity while working as Employment Manager. Helpful also was the ability to make verbal presentation to groups of students on many educational levels and in diversified areas of interest. Last but not least, being endowed with a high energy level, enthusiasm and desire that permitted carrying two separate functions with a fair degree of accomplishment in each."

"Accepted responsibilities in many areas. Career was watered down."

"This was my first job out of high school. I was very fortunate to have started at the bottom and worked up to what I consider to be my goal as far as employment is concerned. I am not a WOMAN'S LIB person. I am very happy to lean on my husband on many many things, things at home and elsewhere.

"I feel, rightly or wrongly, that I have not reached my goals for the following reasons:

- a. I am a woman.
- b. Single
- c. Not of Anglo-Saxon origin (a must in banking.)
- d. Was always in the wrong place at the right time.

"The factors that most influenced reaching my present goal was meeting the right people; learning myself where advancement was possible and taking steps in that direction; working extra hours to become proficient in my

field; and a bit of luck. (Personality and perseverance come into play.) Future advancement may be difficult due to a woman normally having to prove she is better than a man in getting roles of leadership. There are capable men all around! In the Social Service area of government, women do better than in industry. For example: the Dept. of Welfare. (Although there are no women commissioners!)"

If you were counseling a young woman interested in getting ahead in business today, what advice would you give her?

"I would advise the young woman to re-evaluate her goals to be sure she understands what it really means to pursue a career full force. I feel women like myself must possibly sacrifice a lot in their personal lives if they choose to pursue a career. A naive desire to achieve at an early age can drastically change the course of a woman's life, and at a later age, it may be difficult if not impossible to re-route this course. However, if a woman still desires to 'get ahead in business' I feel, just as with a man, her drive, desire and intellectual capability will lead her to her goal. I feel that opportunity is definitely available for the capable woman as for the capable man."

"The world's your oyster. Excel, and sell yourself!"

"To direct her education to a needed and saleable field; to build the best communication skills that she possibly can; to read voraciously and keep up on current events; to really apply and involve herself in her chosen field; and to remain cool and professional in all situations."

"Work hard. Try to do everything right, no matter how trivial. Be a lady."

"Too many young women are interested in their job surroundings, their salary, their titles, their benefits, etc. and are not reaching out for responsibility. They think of themselves as Executive Assistants and are really nothing more than glorified secretaries. I was enthusiastic about my position at all levels. I was eager to learn and to be a part of what came next."

"Unless she has a particular vocation, select the field that is most receptive to women economically, and for personal development learn her trade well and eventually go into business for herself. Otherwise, I believe the battle of the sexes in business will be felt for at least another generation. Unless a woman is very aggressive (which we all are not) and she is willing to be mobile, she will not fare much better than her predecessors."

"My primary regret is that in my career, I have had to work twice as hard, always earned less money, and have had to be one step ahead of my male colleagues, and still have not had the promotions only because of my sex and ethnic background. But contrary to most women, I blame myself for not having had the courage to seek opportunity elsewhere, rather than to stay where the situation was clearly against me."

"The woman who wants to succeed should know herself - the demands of a career and the demands of a marriage. She should see and talk to people in different professions to determine if what she wants to do is really for her. She has to speak up, to be aggressive, but not overbearing. She must plan to work hard to achieve her goal."

### Behind The Statistics And Words - Part III

Nothing has changed. For the majority of the management women surveyed, the only thing that has changed appreciably is their age. They are now ten years older than they were in 1963. Yet all of these women, with one exception, reported that they have never been discriminated against and that their career goals have been realized.

Their answers reveal, however, that this same majority has not advanced in their respective corporate positions over the past ten years! And if we were to apply an inflation factor to their reported earnings in 1963, they have not improved their financial positions either -- though their salaries have been increased. Their careers have been at a virtual standstill for the past ten years, yet they claim to have achieved their career goals. One wonders.

One possible explanation is that these women fall into the third category I described in the Introduction -- those women who deny the reality of discrimination and compromise their objectives accordingly in an effort to sustain their own sense of worth and accomplishment.

When you consider that none of these women, with one exception, has been married or has had children, their career achievement would seem to have been bought at the price of an entire segment of the human experience.

The one woman who was the most successful, both in societal terms and in financial terms, was the most critical of the personal struggle she endured and the private life she felt she had to forego to achieve her professional goals. (She is an attorney, a senior trust officer of one of the largest trust institutions in the country, and only a month ago was named a vice president).

The major obstacles barring women's access to the executive suite seem to stem from both management's attitude toward women and women's attitude toward themselves.

### Sponsorship as an Operant Factor

Perhaps another explanation for the career plateaus observed here is that the traditional corporate practices of sponsoring aspiring young men are not generally functional for women. The close rapport that the sponsorship route engenders can be a treacherous tightrope for women. They must command the respect of their corporate peers and superiors, while at the same time carefully avoid bruising any male egos. However, if, as in the case of Dr. Hennig's "Executive Women" (HBS, 1970) the sponsor happens to be a father or husband, a woman can avoid the conflict and enjoy the advantages that sponsorship affords.

### Goal Orientation Weak

Businesswomen tend to be self-effacing in competitive situations, and are not as goal oriented as their male counterparts (Horner, 1973). Without going into the underlying sociological causes, women act as though they believe that if they are "good girls," do what they are told, and perform well, that they will somehow be rewarded. They fail to develop career strategies and appear to be woefully ignorant of the corporate mechanisms of promotion at higher levels.

For example, when there is a top-level opening, usually the man next in line has been grooming for the position, and it is "understood" that the job is his. If on the other hand, the backup position happens to be filled by a woman, management generally looks around for a qualified man on the outside or a young "comer" within the firm to fill the vacancy. The woman is never seriously considered for the job unless she really pushes for it. Most often it is expected that she will help the new man over the rough spots until he learns the ropes. In many large companies, second string management women are the ones who maintain corporate continuity, while the men hop from rung to rung on their climb up the corporate ladder. It would seem that women play out their socially prescribed roles even in the corporate family.

### Affirmative Action Lags

Affirmative Action legislation, contrary to its stated goals, has stimulated only token response on the part of management. The problem is that it insures only equal entry into the corporate hierarchy; it says nothing explicit about upward mobility. Many companies, particularly those against which class action suits have been filed, are busy trying to comply with the order by boosting the number of women in higher-paying skilled jobs or entry level management jobs.

A case in point is the American Telephone & Telegraph Co., which spent thousands of dollars in consulting fees and in advertising fees on a campaign to encourage women to become linemen, a relatively high-paying skilled job previously not open to women, but definitely a dead end. Other companies are assuming similar postures in an effort to meet quotas and give at least the appearance of compliance with the law.

However, the fact that every newspaper and periodical in the country features articles about "women" at every level of the employment spectrum is not meaningful if ten years of legislation, writing and reading has not had a positive effect upon integrating women into the decision-making mainstream of corporate life.

### Conclusion

Perhaps we are all guilty of using the word "women" as though it had some real meaning when applied to all females. Obviously, it has no more specificity of meaning than the word "men". Still, it appears to be part of our cultural pattern that we discuss women en masse

far more glibly than we do men - - particularly in relation to such abstractions as education, ability, management skills, etc.

Consequently, women who aspire to positions of leadership today should think of themselves as individuals and continually exercise their right to be evaluated as an individual - - to be treated as a unique person, with a unique contribution to make, and to be rewarded as a unique person - - not as a relatively faceless member of a group.

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PART 5  
THE ABCA MEMBER AS RESEARCHER:  
RESEARCH IN ORGANIZATIONAL COMMUNICATION

## PERSONALITY CHARACTERISTICS OF BOUNDARY SPANNERS IN AN INTERORGANIZATIONAL NETWORK

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### Problem

The question investigated in this paper is the extent to which individuals in boundary spanning roles in a particular interorganizational network differ psychologically from other individuals of comparable education. Data were collected in the course of an exploratory study of personality and organizational correlates of the use of conflict resolution modes.<sup>1</sup> Formal hypotheses were not posed for the present paper.

Boundary spanners or boundary personnel<sup>2</sup> can be defined simply as people who represent their organization in interorganizational relations. They conduct transactions at interfaces<sup>3</sup> between their organization and the others in a network or supersystem.<sup>4</sup>

Personality theories in general conceptualize an internal structure of enduring predispositions to behave in certain ways.<sup>5</sup> Personality variables investigated in this paper are derived from the works of Murray<sup>6</sup> and Murray and Kluckhohn.<sup>7</sup>

### Method

The instrument used to obtain data from boundary spanners on strength of their personality needs was the Edwards Personal Preference Schedule, abbreviated EPPS. Edwards (1959)<sup>8</sup> attempted to operationalize Murray's conceptualization of needs. Edwards furnished two sets of normative data, from administration to a general adult sample of 4031 males and 4932 females and to a college sample of 749 men and 760 women enrolled in day or evening liberal arts classes at various colleges. Since there are significant differences between the two norm sets on several of the EPPS variables, it is common practice to compare an individual's responses to the set which more closely represents his educational level. In this study, the college norms were used, since all subjects had at least some higher education. Edwards' college normative data are shown in Table 1.

Edwards' definitions of EPPS variables (which correspond quite closely to Murray's needs of the same names) can be summarized as follows: achievement, to accomplish tasks requiring skill and effort; affiliation, to participate in friendly groups; dominance, to make group decisions;

aggression, to attack contrary points of view; deference, to follow instructions; order, to have things organized; exhibition, to be the center of attention; autonomy, to be independent of others in making decisions; intraception, to analyze one's motives and feelings; succorance, to have others be sympathetic about one's problems; abasement, to give in and avoid fights; nurturance, to assist others with kindness; change, to do new and different things; endurance, to complete any job undertaken; and heterosexuality, (not studied by Murray as a separate need), to engage in social activities with members of the opposite sex.

The focal network for this research was comprised of six agencies which provide various services to alcoholics, alcohol abusers, and their families within the metropolitan area of a large city in the southwestern United States. These six agencies had been linked into a planning consortium by a separate, federally-funded agency for approximately one year at the time data were gathered. Each of the six component agencies had been in operation for several years. They had been conducting inter-agency transactions among themselves, on an informal basis, for some years before the consortium was formed.

Boundary spanners in each component agency were identified in a three-step procedure. First, top administrators in each agency were asked to identify boundary departments in their agency. The second step was to contact the heads of the identified departments and ask them to name the boundary spanners in their department. The third step was to contact the boundary spanners and ask them to name the people in each of the other five agencies in the network with whom they conducted inter-agency transactions. To qualify for further participation in the current research, a boundary spanner had to be able to name at least two correspondents, in at least two different agencies in the network.

Twenty boundary spanners were identified and qualified by this procedure, three from five of the agencies and five from one. Nineteen completed the EPPS, ten men and nine women.

### Results

Mean scores of the 19 boundary spanners on the 15 EPPS variables and the consistency measures<sup>9</sup> are reported in Table 1, along with Edwards' college sample norms. The boundary spanners differed significantly ( $p < 0.05$ ) from the college norms on three variables.

The boundary spanners scored significantly higher on deference, lower on exhibition, and lower on abasement. In addition, their higher mean score on order approached significance ( $p < 0.11$ ). Otherwise, their mean scores differed only slightly from Edwards' college norms.

### Conclusions

The boundary spanning role includes linking one organization to others. It requires a dual loyalty, at least to some extent. Boundary

spanners are expected to get information and other resources needed by their organization from other organizations. This need to acquire would generally be facilitated by reciprocity.

It seems reasonable that individuals with certain personality characteristics would tend to be found in boundary spanning roles. The characteristic, deference, generally a need to follow others' instructions and directions and, by extension, to seek advice (Murray, 1938), seems compatible with the boundary spanning role.

Abasement, the need to give in and avoid fights, is a characteristic largely independent of deference. The boundary spanners tested for this research had significantly lower abasement scores than the norms. This finding also seems consistent with the role requirements of boundary spanning. Boundary spanners cannot avoid fights, but on the contrary must represent their organization against other organizations at times.

The finding on exhibition is not so easily explained. All one can say is that the boundary spanners tested seemed to be less inclined to show off, as a group, than Edwards' college normative group. It is probably reaching to speculate that boundary spanning is more of a deliberate, painstaking task than it is a flamboyant one.

Combining the findings on deference and abasement, however, one could conclude that boundary spanners (or more precisely the particular boundary spanners tested herein) would actively seek advice and directions from others (high deference), but would not avoid fights (low abasement), when, for example, the demands of their own organization could not be easily reconciled with the demands of the network of organizations.

TABLE 1  
 Mean EPPS Scores of Boundary  
 Spanners Compared to  
 Edward's College Sample Norms

EPPS Variable	Boundary Spanners' Mean Score ( $n = 19$ )	Edward's College Norms	
		Mean	S. D.
Aggression	10.5	11.7	4.7
Dominance	17.2	15.8	5.0
Affiliation	17.0	16.2	4.4
Achievement	15.6	14.4	4.4
Deference	13.5 *	11.8	3.7
Order	11.8	10.2	4.3
Exhibition	12.5 *	14.3	3.6
Autonomy	13.8	13.3	4.5
Intracception	17.8	16.7	5.0
Succorance	10.7	11.6	4.6
Abasement	11.4 *	13.7	5.1
Nurturance	15.5	15.2	4.8
Change	15.5	16.4	4.9
Endurance	13.9	12.6	5.2
Heterosexuality	15.0	16.0	5.7
Consistency	11.5	11.6	1.8

\* $p < .05$ , two-tailed test.

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<sup>9</sup>Consistency scores are based upon a comparison of the number of identical choices made in 15 duplicated pairs of statements.

<sup>10</sup>Edwards (1959) reported an intercorrelation on these two variables of .16 (r) in the college normative group.

## PATTERNS OF RETURNS ON FIRST MAILINGS OF SURVEY

### QUESTIONNAIRES: SOME PRELIMINARY RESULTS

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In recent years social and behavioral scientists have made substantial use of mail questionnaires in researching a variety of topics. Because of this increased utilization, it is understandable that significant attention has been directed toward this technique in the research-oriented literature.

Essentially, one can identify two major concerns which have preoccupied social science writers. First, a great deal of effort has been devoted to the formulation of questionnaire formats and the proper design of questions. More recently attention has been directed toward increasing the return rates on mailings so as to reduce the bias evident in lower responses.<sup>1</sup> Out of this research has grown a variety of recommendations for increasing returns such as personalized cover letters,<sup>2</sup> specific types of envelopes and stamps,<sup>3</sup> social utility and altruistic appeals,<sup>4</sup> and follow-ups.<sup>5</sup>

Surprisingly little has been written on the pattern which might be expected with regard to mail questionnaire responses. Specifically, this is a question of response timing and is important to the researcher for several reasons. A few of the more important ones are listed below.

1. There is a certain value in simply knowing how response patterns, in general, appear. This allows the researcher to observe his replies and see if they generally conform to a standard pattern. Thus, he could make periodic checks on his responses based on some standard model.
2. The timing of the follow-up is extremely important. Although this requires considerable judgment, if a researcher knows, for example, that 70 percent of the returns are usually received by the end of the second week after mailing and 95 percent are usually received by the end of the first month he would have more information upon which to base his follow-up decision. If his responses are below what is normally expected, he might be inclined to invest more in his follow-up efforts.

3. Timing information might suggest new research directions such as response pattern variations among different types of groups and different questionnaire formats.

With this background information in mind, the response patterns in four surveys conducted among two general group stereotypes were charted in an effort to obtain useful information for social science researchers.

#### SURVEY DESCRIPTIONS

Initially, we shall describe the general nature of the surveys included in this study. Briefly, the objective of the survey, the sample size and response rate, and the questionnaire formats will be described.

The four surveys were conducted in two professional groupings--businessmen and university researchers. Because of their social status, both groups might easily be considered somewhat elite in nature.<sup>6</sup>

Survey one ( $A_1$ ) consisted of a random sample of 560 members of the Academy of Management obtained from the latest directory. Responses on the first mailing were received from 245 members for a response rate of approximately 43 percent. The questionnaire was designed to determine respondents' perceptions on various topics relating to the transfer of management theory to practice such as the more effective media, organizational barriers to the utilization of knowledge, and so on. Respondents were asked to provide a series of rankings and to provide certain classification data on a four page questionnaire. Personalized cover letters were used with the assistance of an IBM MT/ST typewriter.

Survey two ( $A_2$ ) was comprised of a random sample of 380 university management professors without regard to their association in a single society. In this survey, a six page semantic differential questionnaire was used which also asked for certain classification data. Responses were received from 147 (39 percent) participants who were willing to give their views on several topics relating to the methodology of the behavioral sciences. A mimeographed cover letter with a "Dear Professor" greeting was used.

Survey three ( $P_1$ ) was conducted among 630 randomly selected businessmen who belonged to a large professional association. Responses were received from 264 or 42 percent on the first mailing. A personalized cover letter was used and the questionnaire format was the same as the one in Survey  $A_1$ . The objective of the study was to determine how practicing businessmen differed with respect to the management teachers relative to selected aspects of management theory and practice.

Survey four ( $P_2$ ) was made up of top level executives, 100 randomly selected from both the pulp and paper and public utility industries. Responses were received from 93 (46 percent) executives who were asked to evaluate the importance of various influences on policy decision making. The four page questionnaire was constructed around a Likert-type scale. Personalized cover

letters were used.

The first three questionnaires included printed business reply business envelopes with a university address clearly included in the hope of increasing returns. Survey four included a self-addressed envelope with a first class stamp. A summary of the essential survey information is included in Table 1.

TABLE 1  
SUMMARY OF SAMPLE DATA

Sample	Number in Sample	Number Responding	Approximate Return %	Personalized Cover Letter	Business Reply Env.	Stamped Env.
A <sub>1</sub>	560	245	43%	X	X	
A <sub>2</sub>	380	147	39		X	
P <sub>1</sub>	630	264	42	X	X	
P <sub>2</sub>	$\frac{200}{1770}$	$\frac{93}{749}$	$\frac{46}{42}$	X		X

## RESULTS

The conventional wisdom of survey research argues that mail questionnaire responses are somewhat Poisson distributed<sup>7</sup> or follow a distribution with similar characteristics. It can be seen from the cumulative totals in Table 2 and the corresponding plottings in Figure 1 that the surveys under examination followed the expected pattern. However, the exact timings provide additional insights which have not been extensively examined by researchers in the field.

Data presented in Table 2 and Figure 1 reveal several things. Perhaps most important is the fact that in all cases examined, the majority of replies were received by the second week after the mailing. In excess of 80 percent were received by the end of the third. Therefore, it would seem that a good time to begin the follow-up is during or after the third week of the initial mailing.

TABLE 2  
CUMULATIVE RESPONSES TO FIRST MAILINGS  
ON FOUR SURVEYS

Sample	Cumulative Percentage Responses by Weeks*					
	1	2	3	4	5	6
A <sub>1</sub>	6	54	81	88	90	95
A <sub>2</sub>	19	75	88	94	95	96
P <sub>1</sub>	3	71	85	91	95	98
P <sub>2</sub>	6	89	94	100	100	100

\*Percentage computed as a percent of returns received. The number received each week was divided by total returns returns received and cumulative totals developed.

Although the data is not sufficient to generalize with any degree of confidence, the results do suggest certain possibilities for further research. For example, there appear to be no obvious differences in the rates of return by university professors and practicing businessmen to surveys of this nature. The patterns of response for these two groups, however, do reveal certain variations. Specifically, the professors tended to have a longer response range as illustrated by the figures in the last column in Table 2. By the end of the sixth week, 4 to 5 percent of the professors who would eventually respond had not yet replied. The business-men, on the other hand, had reached this point a week earlier. Since all surveys were national in scope, geographical factors are not likely to have been significantly important in explaining this difference.

It is also interesting to note that the highest response on the first mailing came from the sample (P<sub>2</sub>) which included both a personalized cover letter and stamped envelope. The smallest was from sample A<sub>2</sub> where the mimeographed cover letters was combined with a business reply envelope. In the two cases (A<sub>1</sub> and P<sub>1</sub>) where personal letters and business reply envelopes were combined, there was no practical difference in initial responses.

Obviously, the findings presented in this study are tentative. It is hoped, however, that they will suggest certain research directions that can be taken. Most additional research in this area can easily be incorporated as part of projects designed to examine more general topics by means of mail questionnaires.

Cumulative  
Percentage

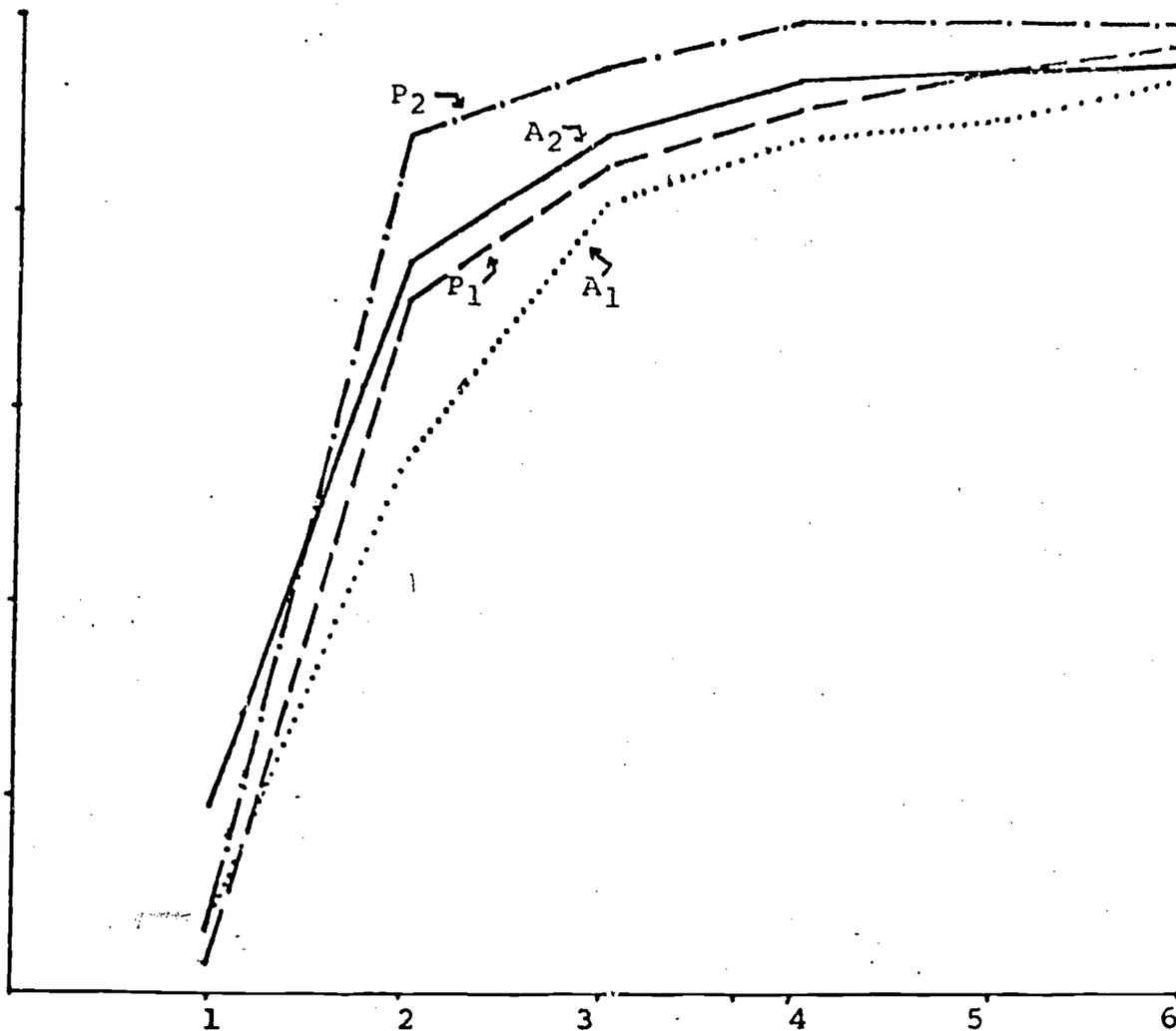


Figure 1. Pattern of Responses

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<sup>3</sup>John Gullahorn and Jeanne Gullahorn, "An Investigation of the Effects of Three Factors on Response to Mail Questionnaires," Public Opinion Quarterly, Vol. 27, 1963, pp. 294-296, and J. David Martin and Jon P. McConnell, "Mail Questionnaire Response Induction: The Effect of Four Variables on the Response of a Random Sample to a Difficult Questionnaire," Social Science Quarterly, Vol. 51, 1970, pp. 409-414.

<sup>4</sup>Walter L. Slocum, LaMar T. Empey, and H. S. Swanson, "Increasing Response to Questionnaires and Structured Interviews," American Sociological Review, Vol. 21, 1956, pp. 221-225.

<sup>5</sup>Walter E. Boek and James H. Jade, "A Test of the Usefulness of the Post Card Technique in a Mail Questionnaire Study," Public Opinion Quarterly, Vol. 27, 1963, pp. 303-306, and Don A. Dillman, "Increasing Mail Questionnaire Response in Large Samples of the General Public," Public Opinion Quarterly, Vol. 36, 1972, pp. 254-257.

<sup>6</sup>See Bogdan Denitch, "Elite Interviewing and Social Structure," Public Opinion Quarterly, Vol. 26, 1972, pp. 143-158, and Harriet Zuckerman, "Interviewing an Ultra-Elite," Public Opinion Quarterly, Vol. 36, 1972, pp. 159-175.

<sup>7</sup>The essential characteristics of the Poisson distribution for our purposes is that it begins at a certain point where the first response is received, increases rapidly, peaks, and drops off followed by an asymptotic approach to the horizontal axis.

## PATTERNS OF INTERPERSONAL COMMUNICATION IN/BETWEEN LARGE SCIENTIFIC ORGANIZATIONS

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Information-exchange networks within an organization can differ significantly in structure and in dynamics from those networks that link the organization with other organizations or client groups. Whereas the intra-organizational networks reflect the unique characteristics of a particular organization, inter-organizational networks reflect, at least to some degree, unique characteristics of each organization the network serves. A case in point is the communication network between a science community and a research-sponsoring organization. This network must support not only the individual research efforts of the scientists, but also must capably transmit administrative and program information. The main purpose of this paper is to examine the structure of the communication network linking scientists and a government agency sponsoring a major science program, and to study the dynamics by which information is exchanged in this network.

### Background

The information exchange in a science community and that in a research sponsoring agency differ. Whereas communications within a science community are normally loosely structured, the communication networks within the sponsoring agency tend to reflect the formalized, hierarchical structuring of the organization.

Before analyzing inter-organizational communications between a science community and a research organization, we will present a brief discussion of the major characteristics of communication networks within these two types of organizations.

### Intra-Organizational Communication Network--The Scientific Community

Information exchange within a science community fulfills two unique roles: it provides a means by which scientific paradigms can be developed and tested (1), and it provides a means by which outstanding contributors to the acceptable paradigms can be recognized and rewarded for their efforts (2).

The networks that support these functions are normally highly complex and continually changing in order to meet the needs of their con-

stituencies. In spite of this complexity, these communication networks normally have many characteristics in common (3). Of these characteristics, we are specifically interested in those that effectively describe the structure and dynamics of the network.

One of the unique features of the scientific community is its propensity for clustering into "invisible colleges" centered about those research laboratories and scientists who have contributed most to the disciplinary development. Information exchange tends to flow actively within and between such centers, and the network structure is defined by this exchange pattern (4). Not surprisingly, these centers of activity are generally clustered within the high status university departments (5).

The dynamics of information exchange, however, are affected by other factors. For example, information is more likely to be exchanged between those scientists whose perceptions concerning their own research are similar (6); and who are of similar status (7). More importantly, the scientists who are frequently turned to for advice by their colleagues also have common characteristics, i.e., they are normally of similar or higher professional status (8).

#### Intra-Organizational Communication Networks--The Research Organization

Formal communication systems link each and every member of the organization. However, information is carried via this network relatively slowly, tends to be limited, and is often lacking in sufficient detail to satisfy the needs of many organizational members. Individuals within the organization, particularly technical personnel, must depend upon informal information sources to provide information rapidly and with sufficient detail and depth to fulfill their specialized needs. Within the organization, it is possible to identify key people who are highly active in the informal exchange of information (9). The degree to which information-exchange is activated, however, depends in large part upon the perceived norms related to information sharing within the organization (10).

#### Inter-Organizational Communication Networks

The remainder of this paper will focus upon the communication patterns between members of the science community and a large government agency which sponsored a major research endeavor. The communication network characteristics mentioned in the two preceding sections can be generalized to inter-organizational communication situations, namely:

1. Communication tends to cluster around the higher-status research centers and scientists.
2. Scientists tend to communicate through informal rather than formal channels.

In order to analyze these and other communication patterns in and between large scientific organizations, a questionnaire survey was conducted.

### The Study

We mailed questionnaires to 255 scientists supported during 1972-1973 for scientific studies associated with a major government science program. A total of 155 (61.1%) of the mailed questionnaires were returned. This return rate compares favorably with returns obtained in other studies of social systems associated with scientific or technological disciplines (11).

The return questionnaires represented a cross-section of the Principal Investigators (PIs) and panelists active in the science program. Via the questionnaire, we obtained data concerning each scientist's background, his degree and manner of participation in the science program, and information-exchange behaviors. From this data, characteristics of the inter-organizational communication network were identified.

Since the purpose of the study was to examine the general characteristics of the communication networks that emerged to service this particular science community, sociometric techniques were used to analyze the data.

### Results

#### Structure of Inter-Organizational Communication Networks

Each scientist was asked to identify those individuals (other than members of his research team) that he considered to be his most important sources of the following types of special science information:

- a) archiving, data management, data reduction, and basic descriptive study information;
- b) interdisciplinary studies and problem-oriented fundamental research information;
- c) theoretical modeling and research synthesis information; and
- d) science program information.

From this data, three characteristics of the communication network structure were derived: (1) the major institutions involved in the information exchange, (2) the individuals within these institutions who played key roles in this exchange of information, and (3) the type of information exchanged. The universities serving as major sources of information are listed in Table 1.

UNIVERSITY	DATA MGT.	FUNDAMENTAL RESEARCH	RESEARCH SYNTHESIS	PROGRAM	TOTAL
California Institute of Technology	11	28	23	9	71
University of California at San Diego	5	10	13	1	29
Massachusetts Institute of Tech.	2	11	11	2	26
University of California at Los Angeles	4	8	6	1	19
University of Chicago	2	4	8	0	14
University of California at Berkeley	3	4	1	4	12
State University of New York at Stony Brook	3	6	1	1	11
Washington University at St. Louis	2	3	3	2	10
Columbia University	2	1	2	0	6
University of Texas at Galveston	3	2	1	0	6
Harvard University	2	2	1	0	5
Arizona State University	1	2	1	0	4
Rice University	1	2	0	1	4
Stanford University	2	1	1	0	4
University of Washington	1	2	1	0	4
University of Minnesota	0	3	0	0	3
University of Pittsburgh	0	2	0	1	3
University of Arizona	1	1	0	0	2
University of Oregon	0	1	1	0	2
University of Texas at Dallas	1	1	0	0	2
University of Utah	2	0	0	0	2
University of Wisconsin	0	1	1	0	2
Brown University	0	1	0	0	1
Case Western Reserve University	0	0	1	0	1
Cornell University	0	0	1	0	1
Johns Hopkins University	0	1	0	0	1
Oregon State University	1	0	0	0	1
Purdue University	1	0	0	0	1
University of Colorado	0	1	0	0	1
University of Delaware	0	1	0	0	1
University of New Mexico	1	0	0	0	1
University of Massachusetts	0	0	1	0	1

TABLE 1: MAJOR SOURCES OF INFORMATION--AMERICAN UNIVERSITIES

Also, the universities have been grouped according to their geographic locations, i.e., Northeastern, North Central, Southeastern, South Central, Southwestern, Western, and Northwestern. The number of times universities in each geographic area are listed as sources of science information is shown in Table 2. This table also indicates distribution of information seekers in the geographic areas. An indication of the relative importance

SOURCES OF INFORMATION \ SEEKERS OF INFORMATION	SOURCES OF INFORMATION							GOVERNMENT AGENCY	Σ SEEKERS	Σ SOURCES / Σ SEEKERS
	NORTH CENTRAL	NORTHEASTERN	SOUTHEASTERN	SOUTH CENTRAL	SOUTHWESTERN	WESTERN	NORTHWESTERN			
Government Agency	6	1	-	1	1	11	-	29	49	3.51
Western	3	2	-	2	-	4	-	42	30	.80
Northeastern	2	24	1	-	1	11	-	38	77	.44
North Central	1	4	-	-	2	5	1	25	38	.42
Southwestern	-	1	-	-	1	-	2	13	17	.41
South Central	4	2	-	2	1	4	-	23	36	.13
Northwestern	-	-	-	-	-	-	-	1	1	3.00*
Southeastern	-	-	-	-	1	-	-	1	2	.50*
Σ Sources	16	34	1	5	7	72	3	172		

\*Insufficient Data

TABLE 2: GEOGRAPHIC DISTRIBUTION OF INFORMATION SEEKERS AND SOURCES

of each geographic section was determined by computing and comparing the ratio of information sources to information seekers for each area. This method essentially normalizes the non-uniform geographic distribution of PIs. Table 2 also presents the results of this analysis. It can be seen that there were two major contributors to the special science information, namely, the government research site and West Coast (California) universities. The government research site, being the administrative center of the special science program, was the leading information source for the program. The Western universities proved to be significantly more important as information sources than did universities in any other geographic area. By this measure, the Northeastern universities were not significantly more important than either the North Central universities or the Southwestern universities. The South Central universities were relatively insignificant contributors to this special science information. Comparisons for the Northwest and Southeast were not possible because of the relatively few investigation seekers and/or sources in their areas.

These comparisons demonstrate several important factors in the interfacing of participants in a science program with the sponsoring agency. First, the sponsoring agency has tremendous information-- exchange requirements placed upon it. Second, a definite geographic influence is evident in the information-exchange network. This pattern is manifested in the geographic distribution of principal investigators and in the information-exchange flow among the geographic areas.

#### Major Sources of Information

##### A. Archiving, data management, data reduction, and basic descriptive study information.

Four individuals were cited five or more times in response to questionnaire item (a). Table 3 provides professional information on each.

As might be expected, the focal information-source individuals for archiving, data management, data reduction, and basic descriptive study information are those controlling access to or in some way managing this information. The three most frequently cited sources are all located

Number of Times Cited	Institutional Affiliation	Position	Remarks
1. 39	Sponsoring Agency	Curator	Both a scientist and an administrator, this individual plays a crucial interfacing role between the sample scientists and government agency's Curatorial function.
2. 15	Sponsoring Agency	Co-Investigator on several contracts	Major interface between science community and government agency's computerized data.
3. 7	Sponsoring Agency	Assistant to the Curator	Plays a focal interfacing role between scientists and the agency's Curator's office.
4. 5	Cal Tech	Principal Investigator (PI)	Involved in several contracts, member of two major science panels.

TABLE 3: MAJOR SOURCES OF ARCHIVING DATA MANAGEMENT, DATA REDUCTION, AND BASIC DESCRIPTIVE STUDY INFORMATION

at the sponsoring agency, where much of the data (and samples) are stored. The fourth source listed is important because of his involvement in several contracts in more than one field, and because of his membership on various science panels.

##### B. Interdisciplinary studies and problem-oriented fundamental research information.

Seven individuals were cited five or more times as important sources of this type of information. None of these people can be viewed

as the leading information source, for, in contrast to the previous section, the range of citings is small (5 citings to 11 citings). Table 4 provides a professional sketch of these seven individuals.

An examination of the characteristics of the seven individuals sketched above reveals certain remarkable phenomena. Three of the seven are located together at a California school, three are based at the sponsoring agency research facility, and one resides at the Smithsonian Astrophysical Observatory (SAO): this geographical dispersion coincides

Number of Times Cited	Institutional Affiliation	Position	Remarks
1. 11	Cal Tech	PI	Widely known and respected in science community. Member of many panels.
2. 9	Sponsoring Agency	PI Branch Chief	Branch chief, member of major panel.
3. 8	Sponsoring Agency	PI, Head of major division at government research site.	High status scientist, science representative from sponsoring agency, member of many panels.
4. 8	Sponsoring Agency	PI Branch Chief	Branch Chief; member of many panels.
5. 8	Smithsonian Astrophysical Observatory	PI	Chairman of a major panel for two years.
6. 5	Cal Tech	PI	Involved in several contracts. Member of two major panels.
7. 5	Cal Tech	PI	Heavily involved in training. Member of several panels.

TABLE 4: MAJOR SOURCES OF INTERDISCIPLINARY STUDIES AND PROBLEM-ORIENTED FUNDAMENTAL RESEARCH INFORMATION

with the organizational clustering discussed earlier. California Institute of Technology and SAO are leading sources of science information in their geographical regions, with the sponsoring agency being the overall primary source.

Another interesting finding is that the perceived importance of an individual as an information source seems to correlate closely with his visibility to the science community via membership on science panels or tenure as a science administrator with the sponsoring agency. This is understandable, of course, in that individuals with somewhat broader than normal experience would be likely candidates as information sources for interdisciplinary studies and problem-oriented research.

#### C. Theoretical Modeling and Research Scientist Information.

Six individuals met the criteria (five or more citings) of being major sources of theoretical modeling and research synthesis information.

This particular group of major sources is unique in that each resides at a different locality. Table 5 provides pertinent information about these people.

Number of Times Cited	Institutional Affiliation	Position	Remarks
1. 16	Sponsoring Agency	Head of major division at research site. PI	High status scientist, science representative from sponsoring agency; member of many panels.
2. 14	Cal Tech	PI	Widely known and respected in science community, member of many panels.
3. 11	Smithsonian Astrophysical Observatory	PI	Chairman of major panel for two years.
4. 10	MIT	PI	Member of several panels.
5. 7	U.C.-S.D.	Science Advisor	Nobel Prize winner.
6. 6	U. of Chicago	PI	Though not a member of any panels, this individual is widely known as a leading researcher in chemistry.

TABLE 5: MAJOR SOURCES OF THEORETICAL MODELING AND RESEARCH SYNTHESIS INFORMATION

It appears that the characteristics of these sources of theoretical modeling and research synthesis information are somewhat different from those of the previous two groups. First, it does not appear to be advantageous to be located at any one institution to be perceived as a major information source. This can perhaps be best explained by viewing theoretical modeling and information about research synthesis as being available from the more creative minds in the science community who are known for their innovative contributions to science. All six of the major information sources described above are among the most creative, well-respected, and well-known scientists in the field. The most cited scientist is the head of a major division at the government research site. Some others are members of several science working panels. One is a Nobel Prize winner. Without a doubt, all are extremely high-status scientists perceived by their colleagues as being capable of providing them with this somewhat intangible yet vital information.

#### D. Science Program Information.

The fourth group of major information sources provides information regarding the administration, direction, and future plans of the science program. Thirteen individuals were cited five or more times as sources of program information and thus are included in this discussion. Table 6 presents a professional sketch of each.

The first striking observation from the above list of major sources of science program information is that nearly all are located at a government facility. More specifically, six reside at the government research site, and four at the Washington, D. C., headquarters. The three exceptions are, not surprisingly, located at the Smithsonian Astrophysical Observatory, the Carregie Institution, and the California Institute of Technology.

All of these individuals are in positions of high information input. In other words, each is among the "first to know" in his respective field. Unlike the previous two sections, membership on science panels does not appear to be a requirement, particularly for the government research administrators.

#### Summary Comments Regarding Questions a,b,c, and d

1. The characteristics common to important information sources depends in part upon the nature or content of the information.
2. Individuals managing or in any way controlling access to desirable data are likely to be cited as important sources of information.
3. Scientists reputed to be highly creative or innovative are likely to be viewed as important sources of information regarding theoretical modeling and research synthesis (type C).
4. Membership on science panels appears to be a contributing factor toward being viewed as an important source of information relating to interdisciplinary studies and problem-oriented fundamental research (type B) and theoretical modeling and research synthesis information (type C).
5. In all, 30 primary sources of information were identified above (4 for A, 7 for B, 6 for C, and 13 for D). These 30 sources are comprised of 20 different individuals, which means that several (seven) are perceived as sources of more than one type of information. Table 7 lists these "multiple sources".

The characteristics of these multiple information sources reinforce earlier comments that membership on science panels and/or being in a primary administrative position with access or control of desired data (or samples) are conditions extremely conducive to being able to provide valuable information to other interested parties.

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Number of Times Major Source	Number of Times Cited				Institution Affiliation	Position	Remarks
	A	B	C	D			
1. 2	5	5	x	x	Cal Tech	PI	Member of several panels
2. 2	39	x	x	21	Sponsoring Agency	Curator	Manager of curatorial facilities
3. 2	x	8	x	5	Sponsoring Agency	PI	Branch Chief, Member of several panels
4. 2	x	9	x	8	Sponsoring Agency	PI	Branch Chief, panel member
5. 3	x	8	11	7	Smithsonian Astrophysical Observatory	PI	Member of several panels
6. 3	x	11	14	5	Cal Tech	PI	Member of several panels
7. 3	x	8	16	21	Sponsoring Agency	Division Head	Member of many panels, science representative from government agency

TABLE 7: MULTIPLE SOURCES OF INFORMATION

## The Dynamics of Inter-Organizational Information Exchange

### Contact with Sponsoring Agency

The participants in the science program were asked to estimate: a) the frequency with which they contacted the sponsoring agency's science management about science research, research administration, or professional activities such as conferences, panel meetings, etc., and b) the frequency with which they were contacted by the sponsoring agency's management about their program activities. Each scientist was also asked to indicate the communication media used in the exchange of information, i. e., face-to-face exchange, telephone, informal memo, or formal memo.

As can be seen from Table 8, the PIs contacted the sponsoring agency's management concerning their own or someone else's actual research considerably more often than for information involving science professional activities or science administration. Regarding the means of communication, it is clear for all three categories that the telephone was the primary means of obtaining information. Face-to-face communication seems next most important, followed by formal memos and informal memos.

	$\frac{a}{\text{(Re: Actual Research)}}$	$\frac{b}{\text{(Re: Science Administration)}}$	$\frac{c}{\text{(Re: Science Professional Activities)}}$
	N = 96	N = 96	n = 96
Face-to-Face	$\Sigma = 851$ $\bar{x} = 8.9$ 20%	$\Sigma = 362$ $\bar{x} = 3.8$ 17%	$\Sigma = 652$ $\bar{x} = 6.8$ 24%
Telephone	$\Sigma = 2,187$ $\bar{x} = 22.8$ 52%	$\Sigma = 1,115$ $\bar{x} = 11.6$ 51%	$\Sigma = 1,497$ $\bar{x} = 15.6$ 55%
Informal Memo	$\Sigma = 623$ $\bar{x} = 6.5$ 15%	$\Sigma = 264$ $\bar{x} = 2.8$ 12%	$\Sigma = 200$ $\bar{x} = 2.1$ 7%
Formal Memo	$\Sigma = 548$ $\bar{x} = 5.7$ 13%	$\Sigma = 435$ $\bar{x} = 4.5$ 20%	$\Sigma = 363$ $\bar{x} = 3.8$ 14%
	$\Sigma\Sigma = 4,209$	$\Sigma\Sigma = 2,176$	$\Sigma\Sigma = 2,712$
N = Number of respondents $\Sigma$ = Summation of responses in cell $\Sigma\Sigma$ = Summation of responses in column $\bar{x}$ = Mean response for cell			

TABLE 8: FREQUENCY AND METHOD OF CONTACT CONCERNING SCIENCE INFORMATION

The other questionnaire item asked the respondents to indicate how often they were contacted by members of the sponsoring agency. Table 9 shows the results obtained for this questionnaire item.

	$\frac{a}{\text{(Re: Actual Research)}}$	$\frac{b}{\text{(Re: Science Administration)}}$	$\frac{c}{\text{(Re: Science Professional Activities)}}$
	N = 87	N = 87	n = 87
Face-to-Face	$\Sigma = 449$ $\bar{x} = 5.2$ 17%	$\Sigma = 232$ $\bar{x} = 2.7$ 14%	$\Sigma = 506$ $\bar{x} = 5.8$ 25%
Telephone	$\Sigma = 1504$ $\bar{x} = 17.3$ 56%	$\Sigma = 893$ $\bar{x} = 10.3$ 52%	$\Sigma = 951$ $\bar{x} = 10.9$ 40%
Informal Memo	$\Sigma = 311$ $\bar{x} = 4.8$ 12%	$\Sigma = 182$ $\bar{x} = 4.6$ 11%	$\Sigma = 205$ $\bar{x} = 4.6$ 10%
Formal Memo	$\Sigma = 416$ $\bar{x} = 4.8$ 15%	$\Sigma = 402$ $\bar{x} = 4.6$ 23%	$\Sigma = 398$ $\bar{x} = 4.6$ 19%
	$\Sigma\Sigma = 2680$	$\Sigma\Sigma = 1709$	$\Sigma\Sigma = 2050$
N = Number of respondents $\Sigma$ = Summation of responses in cell $\Sigma\Sigma$ = Summation of responses in column $\bar{x}$ = Mean response for cell			

TABLE 9: FREQUENCY AND METHOD OF BEING CONTACTED CONCERNING SCIENCE INFORMATION

The telephone was, once, again, the most common means of communicating between the sponsoring agency's science management and the PI. Compared with the telephone, formal memos and face-to-face communication were used considerably less, but still more often than informal memos.

As was true for the first item, the content of the communication between the sponsoring agency's science management and the PIs most often concerned the PI's actual research, followed by science professional activities, and finally by science administration. However, from a percentage standpoint, the topic of the communication varied less when the agency contacted the PIs than when the PIs contacted the agency (see Table 10).

	(PIs Contact Agency)	(Agency Contacts PIs)
a. Actual Research	$\Sigma = 4209$ 46%	$\Sigma = 2680$ 42%
b. Administration	$\Sigma = 2176$ 24%	$\Sigma = 1709$ 26%
c. Professional Activities	$\Sigma = 2712$ 30%	$\Sigma = 2060$ 32%

TABLE 10: THE FREQUENCY OF THE THREE TOPICS OF COMMUNICATION

A final observation concerning these items relates to the frequency with which the PIs contact the agency versus the agency's contacting the PIs. Based on the response means (which corrects for the somewhat larger N responding to the first item), the PIs initiated contact with the agency slightly more often than the agency initiated contact with the PIs (56.1% versus 43.9%).

#### Contact with Other Scientists

The purpose of two questionnaire items was to ascertain frequency distributions relating to the number of scientists with whom the respondents communicate, as well as how often the respondent was consulted about research by other scientist. The first read as follows:

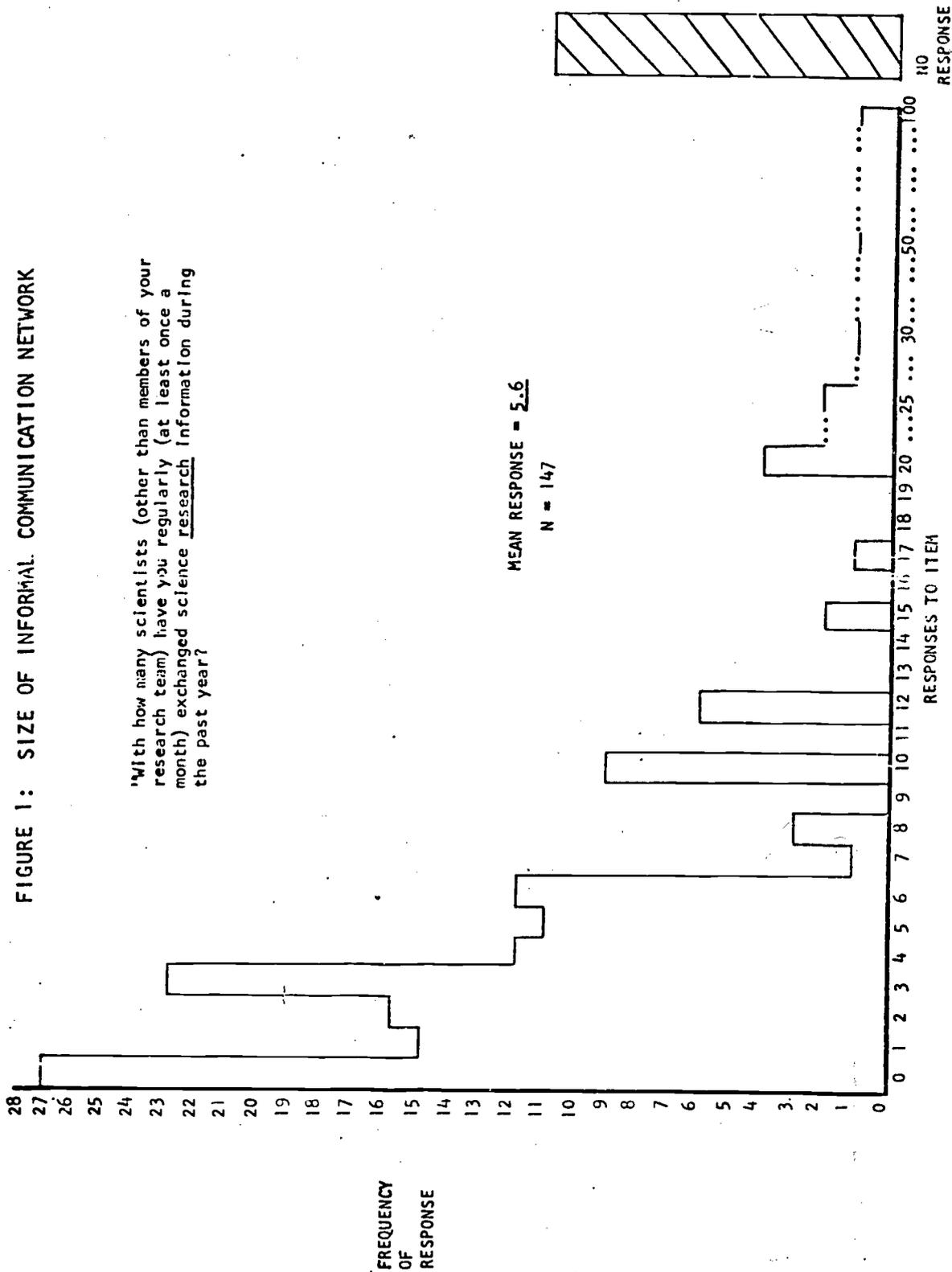
With how many scientists (other than members of your research team) have you regularly (at least once a month) exchanged science research information during the past year?

Since you would expect the respondent to exchange information with members of his research team on a regular basis, the question was phrased so as to exclude these people. The results of this item are presented in Figure 1. It is interesting to note that 18% of the respondents did not exchange information with any outside scientists, while only 12% exchanged information with more than ten scientists other than members of their research team. The mean response to this questionnaire item was 5.6 scientists.

Most remarkable about these findings is the range of response. While most PIs exchanged information with only a few outside scientists,

FIGURE 1: SIZE OF INFORMAL COMMUNICATION NETWORK

'With how many scientists (other than members of your research team) have you regularly (at least once a month) exchanged science research information during the past year?



others exchanged information with 20 or more. One respondent estimated that he exchanged science information with 100 outside scientists.

The second questionnaire item was similar, but asked:  
How many times per month are you consulted about research by scientists (other than members of your research team)?

Nine percent of the respondents were never consulted, while 6% were consulted more than 10 times per month. The mean response was 5.2 exchanges per month. Figure 2 summarizes these results. A cursory examination of the individual responses to both items indicated that the correlation between frequency of exchanging information and being consulted by other scientists is high.

#### Information-Sharing Norms

Respondents were asked to evaluate the degree to which most of their science colleagues were willing to share information if asked, and without being asked.

The results obtained from these questionnaire items are presented in Figure 3. Based on the results shown for the first item, several observations can be made. First, there appeared to be a very strong norm among the science community to share information very willingly. Eighty-three per cent of the respondents felt that their colleagues cheerfully or enthusiastically provided information if asked. Less than two per cent felt that their colleagues were reluctant to provide or avoided providing information if asked.

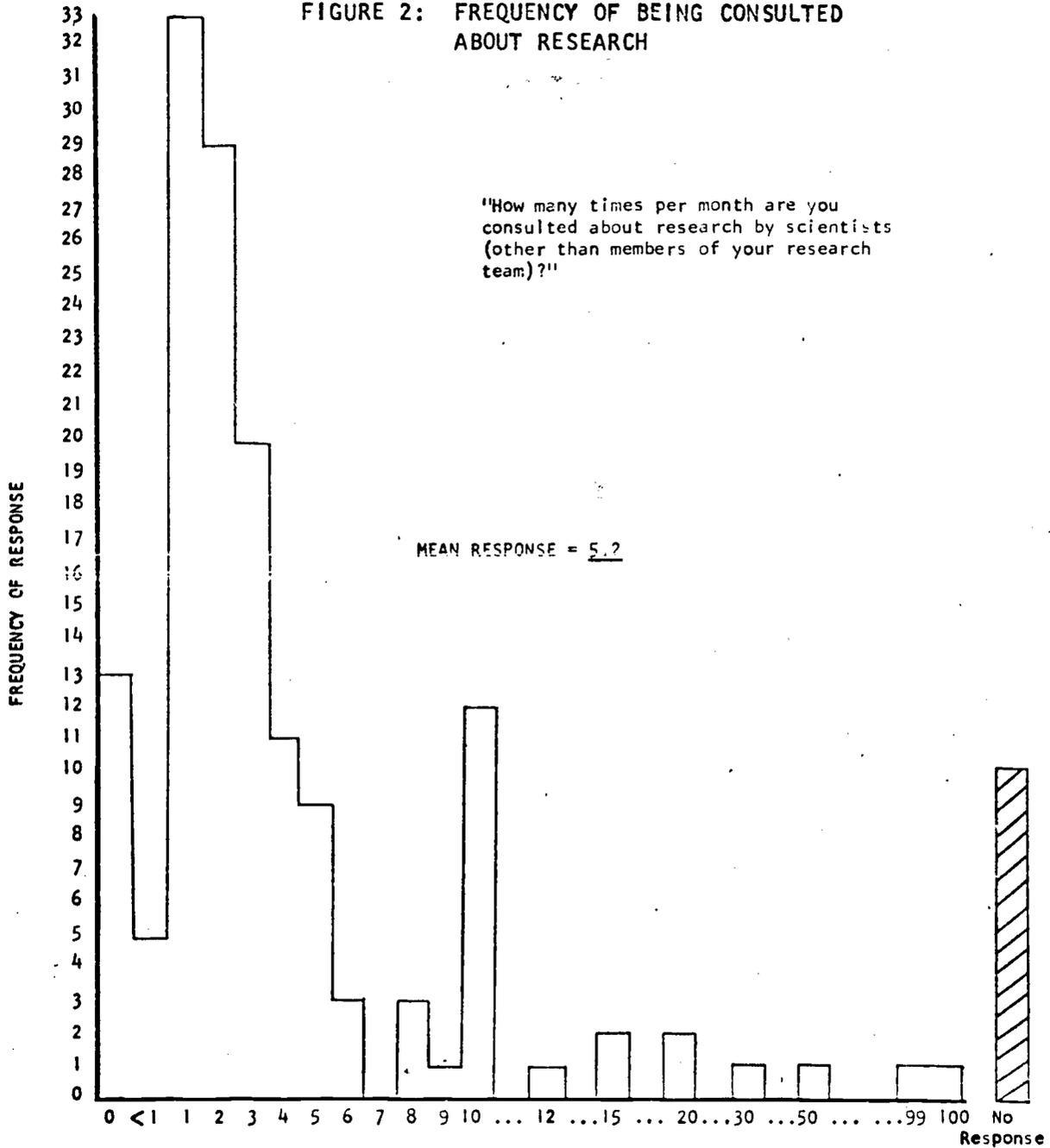
It did not appear to be a strong norm to provide information to colleagues without being asked. Only 14% of the respondents felt that their peers very frequently or constantly offered information to them. However, the offering of unasked-for information was hardly a rarity, as evidenced by the 47% of the respondents who felt that their colleagues frequently offered information without being asked. Thirty-nine percent felt that their colleagues seldom or never offered information without being asked.

Considering the responses to both items together, it can be concluded that the sharing of information among science colleagues had developed into a strong norm, particularly when the information was requested.

#### Summary

This study has examined the structure and dynamics of the communication networks linking a scientific community with the government sponsor of a large-scale science program. The results of this study suggest that the communication networks linking these two organizational bodies closely parallel the networks commonly found in invisible colleges. Key communicators in the network were centered at a few easily identifiable institutions that are generally recognized throughout the science community for the calibre of their scientific contributions. In addition, selected members of the scientific staff at the sponsoring agency emerged as high communicators.

FIGURE 2: FREQUENCY OF BEING CONSULTED ABOUT RESEARCH



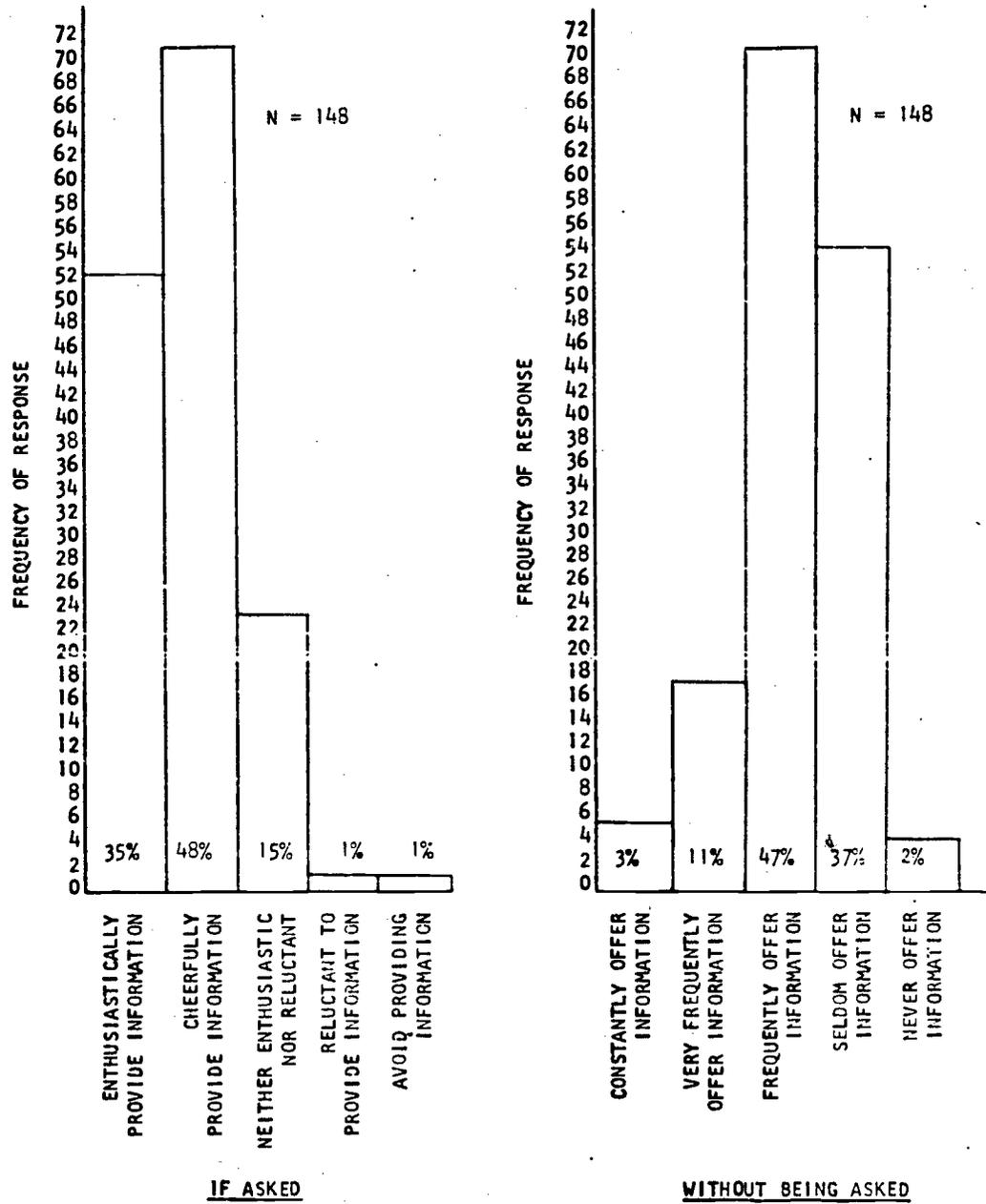


FIGURE 3: INFORMATION-SHARING NORMS

Of particular interest is the finding that, in addition to scientific information, the basic communication network also effectively transmitted administrative and program information to program participants; in fact, many of those identified as important sources of scientific information were also identified as important sources of program information.

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As examples of return rates that can be expected from questionnaire surveys, H. D. Dewhirst, Academy of Management Journal, 305-315, September, 1971, reported a return rate of 66 percent from a sample of 450 members of the technical professional staff at a government agency research center; N. C. Mullins, American Sociological Review, 786-797, 1968, reported a return rate of 57 percent or 257 usable questionnaires, from a sample of biological scientists; and B. Berelson, Graduate Education in the United States, McGraw-Hill, New York, 1960, obtained a response rate of 41 percent in a survey of faculty members of U. S. graduate institutions. Much higher rates of return have been reported when mailed questionnaires were followed by personal interviews with non-respondents. For example, W. O. Hagstrom, Sociology of Education 44, 375-397, 1971, obtained a return rate of 89 percent in a survey of faculty members of several university departments in mathematics, physics, chemistry, and biology.

PART 6  
THE ABCA MEMBER AS CLASSROOM CATALYST:  
EXPERIMENTAL LEARNING - GAMES THAT  
COMMUNICATE AND TEACH

## GAMES, ROLES, AND SIMULATIONS

Dr. Phillip V. Lewis  
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Communication games, role-plays, and simulations can aid students in identifying and resolving their communicative needs by providing them with an opportunity to observe and criticize their own behavior. In reality, nearly every type of game constitutes a life experience because most of us in our family and business relationships are constantly playing games with each other. What's more, in the words of Dr. Eric Berne--the inventor of "games"--we are striving, often unconsciously, for an emotional "payoff" which is startlingly different from what we might rationally expect to get from winning or losing our game. Thus, games seem to weave from social interaction in culture a special context.

According to Krupar, game theory should occur in small group settings because it is in these small group situations that each student solves many of his/her problems in the "real" world. Game theory also helps students develop their self-concepts: who they are, where they are going, and the why's and how's of their experience. Games likewise serve as an introduction to life, according to Coleman: social roles and rules, playing under different roles with different rules, ideas of aiding another person and of learning to expect aid from others, ideas of collective goals and group problem-solving.

The following "games" are used in General Administration 3223, Administrative Communication, at Oklahoma State University primarily because of a philosophy that one of the best ways to motivate is to teach relevance. The primary objective of these games is to allow students to experience selected, "real-life" communicative events. Secondary objectives include fostering a change in communicative behavior and developing new attitudes toward communication and the problems associated with it.

### GAME 1 - SERIAL COMMUNICATION OF INFORMATION

The first game used in GENAD 3223 illustrates some of the problems involved in passing on information to others. It is adapted from Irving J. Lee and Laura Lee's Handling Barriers in Communication (NY: Harper and Row, Publishers, Inc., 1968). Fundamentally, this game illustrates (a) what happens when information is passed on from one person to another, (b) the kinds of errors that occur in serial communication, (c) the "fall-off" in the number of details that get through, and (d) tangentially, how varying perceptions of the same event can create communication

breakdowns. The loss-of-information demonstration is then followed with a discussion of how to reduce the number of errors.

### Procedure

1. Select six people from your class and number them from 1-6. Ask all but 1 to wait outside the room until they are called in one at a time.

2. Instruct number 1 that he/she will be shown a transparency and allowed to study this scene depicted on the screen for two minutes. Then 2 will be called in and be told by 1 all that has been learned from the transparency. (Note: a scene which may be used is Figure 1.)

3. After 1 relates to 2 all he/she received from looking at the screen for two minutes, 3 is called in and 2 repeats as much of what 1 told as possible. This procedure continues with 3 telling 4, who will tell 5, who will then tell 6.

4. After 6 has been informed by 5, he/she sketches on the chalkboard his/her perception of the event. The scene may be drawn in any way the student wishes--line drawings, diagram, etc. The student should not worry about making it artistic.

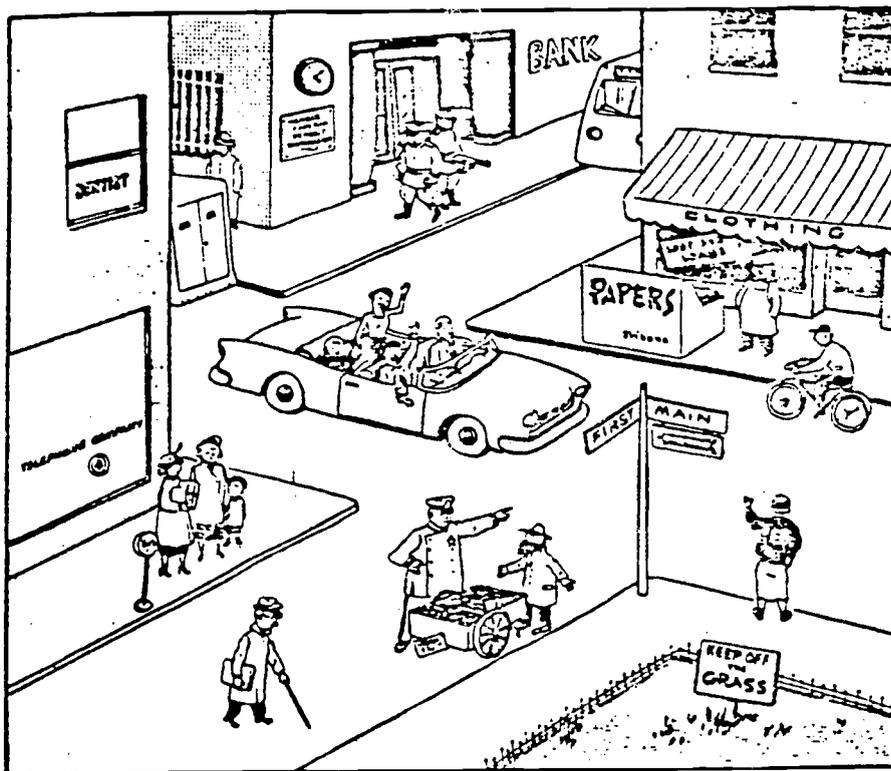


Figure 1

5. After 6 has sketched his/her interpretation of the transparency, the "real" scene may be viewed and a discussion begun on the kinds of errors that occurred and why.

6. Finally, some discussion should be generated among the students as to methods available for overcoming any errors proposed in step five.

## GAME 2 - LEADERSHIP AND DECISION-MAKING SKILLS

Another game used in GENAD 3223 explores the techniques of leadership and decision-making skills. It requires at least four participants but may be handled in several groups of four at the same time for comparison purposes at the conclusion of the discussion/decision. The fundamental decision involved is explained below in "Role for Sales Manager." The other three participants are salesmen for a company--Baker, Charles, and Daniel; their respective roles also are explained below. These roles should be duplicated and given to each participant for study before engaging in the game, of course, no one should have access to the other "player's" information. This game also lends itself to a demonstration of the three basic leadership styles and steps taken in the decision-making process.

### Role for Sales Manager

As sales manager for Able Company, your principal task is to decide which of three salesmen will be given a new automobile. All three men use a company car; but because funds are rather limited, your company has decided that at this time just one of the three cars will be traded for a new one. The three salesmen are now in your office so that you can (a) explain to them that just one of them will get a new car, (b) make a decision concerning who will get the new car, and (c) tell them that the remaining two cars will be traded for new cars in another six to twelve months.

Each of the men is familiar with the facts of his own case only. You must decide in about 15 minutes who will get the new car. The men may help you arrive at a decision. Here are the facts about each car.

1. Baker's company car is 18 months old. His territory requires that he travel about 50,000 miles a year, so he now has 75,000 miles on his car.
2. Charles' company car is 36 months old. His territory requires that he travel about 20,000 miles a year. His car now has been driven 60,000 miles.
3. Daniel's company car is 24 months old. His territory requires that he travel about 25,000 miles a year. His car now has been driven 50,000 miles. Daniel has reported that his car has required fairly extensive repair work, and the record bares out his contention that thus far it has had a



supervisor and John, the employee--which follow. The six attitudes which the employee might assume should be typed on separate slips of paper and placed into an envelope; "John" will choose one at random when he has finished reading his role assignment.

The two volunteers may be sent out of the room to study their role assignments, (but not to show them to each other) while the instructor briefs the rest of the class on the situation and what is going to take place. The instructor may wish to emphasize that not even he/she knows which "attitude" John has chosen; thus the class can participate in the "game" by observing and trying to judge (a) which attitude John is displaying and (b) how well the supervisor is "reading" him and adapting strategy to this feedback.

The instructor may wish, also, to emphasize that discipline does not necessarily mean punishment and the objective of the interview should be to straighten John out, if possible, and to make sure similar errors don't happen. In accomplishing this objective, the supervisor has several options available. The wise supervisor will choose an option after he/she has (a) determined what lay behind John's actions, (b) predicted John's internal state accurately through feedback, and (c) used the information received from John to alter strategy.

The class should keep these things in mind in evaluating the supervisor's role-playing: (a) Did he "box himself in" because of an emotional reaction to John's mistake? (b) Does he believe that punishment is the only recourse regardless of John's attitude? Time should be allowed for group discussion at the close of the role-playing exercise.

### Role for the Supervisor

You are foreman of the maintenance department of a fairly large plant. You supervise a group of skilled craftsmen--electricians, carpenters, plumbers, millwrights, etc.--who are assigned as needed to maintenance jobs throughout the plant. The employees work pretty much on their own.

John is an electrician with 20 years' seniority with the company. He is 40 years old and was recently transferred to your department from another plant of the company. He was doing the same work there and was considered to be highly competent. However, because the other plant closed down, John had no choice but to take this job or be laid off. You have observed his work during the last two weeks and it seems to you he is either nervous or sloppy; you can't decide which.

Yesterday he made a serious error--really a stupid mistake that someone with his experience should never make if they are paying attention to their job. He incorrectly wired a control box and burned out all the transistors. The mistake cost the company about \$500, but it could have been much more serious and expensive. It could have destroyed the entire automatic control system and shut down the production line for several days.

You're pretty mad; in fact, you feel like firing John. You've

sent for him to come to your office, but while waiting for him to arrive you realize that you don't know how he will react so you decide to adapt your action to his attitude during the interview.

#### Case assignment

After the role-playing be prepared to answer these questions:

- (1) How would you describe the "attitude" that John was role-playing?
- (2) What were the clues that tipped you off to his role assignment?
- (3) How did you change and alter your strategy after you were sure of his reaction?
- (4) What were your communication objectives in the interview, and how well do you feel you accomplished these objectives?

#### Role for John

After twenty years with the same company as a skilled maintenance electrician, they suddenly closed your old plant and transferred you, two weeks ago, to this one. You are 40 years old, doing the same work, but are unhappy because you had to move to this city.

You know your new boss is mad. He's just found out about that stupid mistake you made yesterday. (You wired up a control box wrong and burned out the transistors). Now he's called you into his office. You don't really know what to expect since, of course, you don't know him very well. But the scuttlebutt is that the boss is a real tyrant, an expert in chewing a man out.

#### Case assignment

In the interview you are to adopt one of six different attitudes. (You will choose one by chance, as your instructor will direct you.) You may not reveal which attitude you have chosen, except through your words, gestures, facial expressions, etc. as you react to your boss's lecture. You may, within the limits of the facts outlined above, introduce new facts which seem to fit the "attitude" you are role-playing for your part in the interview. After the interview, we want to see whether your "boss" correctly interpreted your "attitude" and tailored the interview accordingly; therefore, don't spoil it by making it too easy for him. On the other hand, be honest about role-playing the "attitude" to the best of your ability.

Possible "Attitude" Assignments for John (one of these is to be chosen at random just before the interview begins):

- (1) You are worried about losing your job and are ready to apologize and promise it won't happen again.

- (2) You resent being transferred to this department and don't intend to let your new boss walk all over you.
- (3) You are seriously considering accepting an outside job offer, so you don't care one way or the other what your boss says. You certainly don't intend to defend yourself.
- (4) You are desperately afraid of losing your job, which is your "last chance" with this company. But you have decided to do the best you can to conceal your fears during the interview.
- (5) You don't think much of your new boss's intelligence, so you have decided to bluff it out and blame one of the other guys for the error. You are convinced that nobody can prove anything so long as you don't confess.
- (6) You're willing to admit you made the error, but so what? Nobody's perfect, and you know other errors just as serious have been made in the past by others. If the truth were known, the boss probably makes a few himself.

#### GAME 4 - LEVELS OF COMMUNICATION COMPETENCE

This game begins with a brief lecture on the four levels of communication competence--unconscious incompetence, conscious incompetence, unconscious competence, and conscious competence. Then ten individuals are selected, numbered, and asked to "brainstorm" for a few moments on the Ten Most \_\_\_\_\_ in the World. Numbers 1, 2, and 8 are asked to pick one of the ten and be ready to convince the other members of the group that their selection should be Number 1. These three individuals are then asked to leave the room for a few moments, compare notes and make sure all three have not selected the same thing. After they have left the room, the other group members are instructed to agree with 1, reject 2, and ignore 8. At this point, 1, 2, and 8 are asked to reenter the group and begin the "sales" presentation as to why their choice should be ranked on top and the other two members should finish nine and ten. At the conclusion of the experiment, each of the three should share how they felt during the process, and the professor should emphasize how these things happen everyday and reemphasize his discussion on the levels of competence.

#### GAME 5 - GROUP DECISION MAKING

##### "A Trip Across the Moon"

Game 5 seeks to provide how group decision making is more effective than individual decision making. (This particular game was given to me by Dr. Jim Koeninger of OSU.) The procedures are as follows:

## INSTRUCTIONS (I)

You are a member of a space crew originally scheduled to rendezvous with a mother ship on the lighted surface of the moon. Due to mechanical difficulties, however, your ship was forced to land at a spot some 200 miles from the rendezvous point. During re-entry and landing, much of the equipment aboard was damaged, and, since survival depends on reaching the mother ship, the most critical items available must be chosen for the 200-mile trip. Below are listed 15 items left intact and undamaged after landing. Your task is to rank-order them in terms of the importance for your crew in allowing them to reach the rendezvous point. Place the number 1 by the most important item, the number 2 by the second most important, and so on through number 15, the least important.

- \_\_\_\_\_ Box of matches
- \_\_\_\_\_ Food concentrate
- \_\_\_\_\_ 50 feet of nylon rope
- \_\_\_\_\_ Parachute silk
- \_\_\_\_\_ Portable heating unit
- \_\_\_\_\_ Two .45 calibre pistols
- \_\_\_\_\_ One case dehydrated milk
- \_\_\_\_\_ Two 100 lb. tanks of oxygen
- \_\_\_\_\_ Stellar map (of the moon's constellation)
- \_\_\_\_\_ Life raft
- \_\_\_\_\_ Magnetic compass
- \_\_\_\_\_ 5 gallons of water
- \_\_\_\_\_ Signal flares
- \_\_\_\_\_ First aid kit containing injection needles
- \_\_\_\_\_ Solar-powered radio

## INSTRUCTIONS (II)

This is an exercise in group decision making. Your group now is to employ the method of Group Consensus in reaching a final decision. This means that the prediction for each of the 15 survival items must be agreed upon by each group member before it becomes a part of the group decision. Consensus is difficult to reach. Therefore, not every ranking has or will meet with everyone's complete approval. On the GROUP SUMMARY SHEET place the individual rankings made earlier by each group member in the "Individual Rankings" squares. Then sum each line and determine an average; record these in the appropriate squares.

Finally, try, as a group, to make each ranking one with which all group members can at least partially agree, and record your final consensus ranking in the "Group Ranking" squares. Here are some guides to use in reaching consensus:

1. Avoid arguing for your own individual judgments. Exchange useful information.
2. Avoid changing your mind only to reach agreement and avoid conflict. Support only solutions with which you are able to agree, somewhat, at least.

3. Avoid "conflict-reducing" techniques such as majority vote, averaging, or trading in reaching decisions.
4. View differences of opinion as helpful rather than as a hindrance in decision making.

## GROUP SUMMARY SHEET

	Individual Rankings										Sum of indiv. Rankings	Ranking of Sums	Group Ranking	Correct Ranking
	1	2	3	4	5	6	7	8	9	10				
Box of Matches											15			
Food Concentrate											4			
50 Feet of Nylon Rope											6			
Parachute Silk											8			
Portable Heating Unit											13			
Two .45 Calibre Pistols											11			
One Case Dehydrated Pet Milk											12			
Two 100 lb. Tanks of Oxygen											1			
Stellar Map (of the moon's constellation)											3			
Life Raft											9			
Magnetic Compass											14			
Five Gallons of Water											2			
Signal Flares											10			
First Aid Kit Containing Injection Needles											7			
Solar-Powered Radio											5			

## GAME 6 - COMPETITIVE MANAGEMENT

## Writing Reports via Simulated Training

Game 4 has been used in GENAD 3223 in past years but has not been utilized since 1970. Because of its length, the entire game is not included in this paper. Those interested in knowing more about this approach will find information available in the following two articles: "Communications Made Meaningful Through Simulation," Collegiate News and Views, 23(4):5-6, May, 1970; "Simulation and Business Communication," Journal of Business Communication, 7(3):5-12, Spring, 1970. Both articles are by professors at Oklahoma State University.

Basically, the game consists of a handout of 18 pages which includes management game information. Students, working in very small groups, are asked to:

1. Make decisions involving the kinds of variables that are common to business firms.
2. After making a decision, process data by computer. (Each printout indicates how it fared compared to competing teams.)
3. Prepare an analytical report to inform management (inspector) of action taken and results of that action.

## CONCLUSION

Obviously there are many other games that could have been included in this paper, but space does not permit; (i.e., other games, roles, or simulations I use are (a) a listening game, (b) Alligator River - a value clarification/communication situation, (c) five squares - an information giving problem, and (d) Helen and Crazy T - another information giving problem. Although these games do not provide "actual" situations which being in a business or industry would afford, they do provide "real" personal involvement in communicative events.

## NONVERBAL COMMUNICATION

(A Six-Hour Experiential Laboratory Including Lecture Material)

Marie Dalton  
College of the Mainland

Some experts say that we cannot not communicate. Our actions often reveal more about us than do the words we use. Hand placement, body position, facial expression, tone of voice, the way we touch, our clothes, our manner of speaking, and where we position ourselves often communicate a great deal to others about us.

The study of non-verbal communication is gaining in acceptance and popularity as more and more people realize that we communicate as many ideas nonverbally as we do verbally. Universities are beginning to offer whole, separate courses on this subject; sensitivity training quite frequently stresses an awareness of nonverbals; and books on the topic are best sellers. Besides, it's fun, too.

For these reasons, a unit on nonverbal communication has been created for us in Business Communications 231 at College of the Mainland.

The following laboratory was designed to help students become more aware of this important aspect of communication. It was used for the first time during the Fall 1974 semester and was enthusiastically received.

Part I of this paper is the lecture outline for the experiential laboratory in nonverbal communication. Part II includes three experiences designed to be a part of the lab. The first exercise based on the Johari Window includes videotaping; it is to be done after a discussion on posture. The second exercise, to be done after a discussion on voice, is an adaptation of the Davitz and Davitz work on content-free speech and is included to show participants how important the voice is in transmitting affect. The last exercise is a form of instrumented training to provide lab participants with additional feedback; it permits them to compare the perceptions they hold of their nonverbal activity with the perceptions others hold of them.

Part III is a list of additional experiences that could be incorporated in this laboratory.

Part IV is a list of references used in creating this laboratory.

## I. NONVERBAL COMMUNICATION

### Lecture Outline

- I. Background
  - A. Importance of nonverbal communication
    - 1. More effective interaction
    - 2. Projection of feelings and attitudes
  - B. Impossibility of not communicating
  - C. Cues--studied in context
    - 1. Facial expressions
    - 2. Gestures
    - 3. Posture
    - 4. Eye contact
    - 5. Tone of voice
    - 6. Clothing
    - 7. Positioning
    - 8. Environment
- II. Apparel--"front"
- III. Facial Expression
  - A. "Internalizers" and "Externalizers"
  - B. Smiles
  - C. Pupil size
  - D. Eye contact
    - 1. Power relationships
    - 2. Affiliative relationships
    - 3. Cultural differences
- IV. Posture
  - A. Two basic signs of tension
    - 1. Static
    - 2. Kinetic
  - B. The body as a communicator of emotion
  - C. Recognition of lies
- V. Extra-linguistic dimensions of speech
  - A. Insecurity
  - B. Emotional states
- VI. Leadership and spatial arrangements
  - A. Communication patterns
  - B. Conflict development patterns
  - C. Influence of leadership styles on group interaction

**VII. Task and Location**

- A. Effect of environmental surroundings on human behavior
- B. Size and layout of room
- C. Furnishings

**VIII. Territoriality and personal space**

- A. Hall's Distance Zones
- B. Cultural differences

II. JOHARI WINDOW: AN EXPERIENCE  
IN NONVERBAL SELF-DISCLOSURE AND FEEDBACK  
(UTILIZING VIDEOTAPING)

Goals: To introduce the concept of the Johari Window  
To permit participants to process data about themselves  
in terms of their nonverbal self-disclosure and feedback.

Group size: 8-12 participants

Time required: Approximately 1 1/2 hours

Materials:

- Copies of the Johari Window Nonverbal Self-Knowledge and Recording Sheet for all participants
- Copies of the Johari Window Feedback Sheet for all participants
- Pencils for all participants

Physical setting: Circle of chairs with access to videotaping equipment, record and playback capabilities

Process:

1. The leader introduces a controversial topic<sup>1</sup> for the group to discuss and then videotapes the interaction for 30 minutes.
2. The leader presents a lecture on the Johari Window concept. (The name Johari refers to the originators, Joe Luft and Harry Ingham.) He displays the chart on a transparency or board and discusses the four "windows."<sup>2</sup>
3. The leader replays the videotape without sound, stopping to focus on each member four times. During each stop, the member focused on fills out the Johari Window Nonverbal Self-Knowledge and Recording Sheet and participants fill out the Johari Window Feedback Sheet.
4. The leader collects the feedback sheets and gives them to the participants evaluated. Participants record them on the Self-Knowledge

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<sup>1</sup>List of suggested topics attached

<sup>2</sup>A sheet for use as a transparency is attached. Additional information about the Johari Window may be found in Joseph Luft, Group Processes: An Introduction to Group Dynamics, National Press Books, 1970.

JOHARI WINDOW: AN EXPERIENCE  
IN NONVERBAL SELF-DISCLOSURE  
AND FEEDBACK

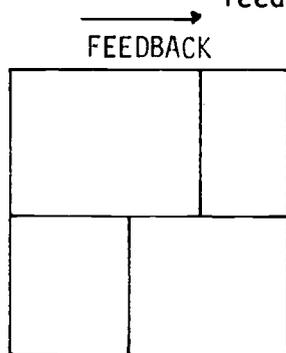
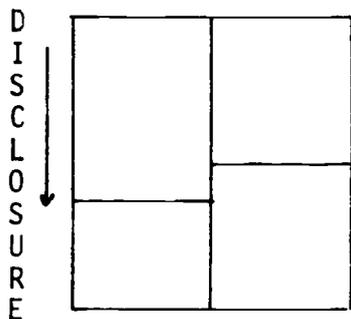
and Recording Sheet, which they keep. This provides data on Area II, the blind area, and permits the participant to obtain a measure of Window IV, the area of unknown activity. If Window II agrees with I or III for a particular nonverbal communication, that space in Window IV does not have to be darkened. The number of darkened items gives an indication of the size of the Window IV.

5. Group members discuss their reactions to the feedback received and to the concept of the Johari Window.

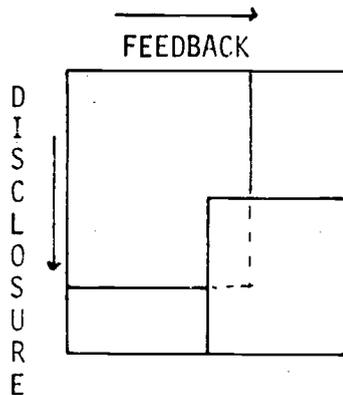
SUGGESTED TOPICS FOR USE WITH  
"JOHARI WINDOW: AN EXPERIENCE  
IN NONVERBAL SELF-DISCLOSURE AND FEEDBACK"

Religion  
Most shameful act in your past  
Premarital or extramarital sex  
Interracial dating  
Interracial marriages  
Manipulation of co-workers  
Abortion  
Euthanasia (mercy killing)  
Cheating on exams  
Lying to co-workers  
Couples living together without being married  
Your worst personality trait  
Money as a motivator  
Externalizing vs. internalizing of emotion  
Involuntary sterilization of people on welfare

	KNOWN TO SELF	NOT KNOWN TO SELF
Known to Others	I. Area of Free Activity (Public Self)	II. Blind Area ("Bad-Breath" Area)
Not Known to Others	III. Avoided or Hidden Area (Private Self)	IV. Area of Unknown Activity



These three small charts illustrate the effects of self-disclosure and feedback.



JOHARI WINDOW

PARTICIPANT BEING EVALUATED: \_\_\_\_\_

### JOHARI WINDOW FEEDBACK SHEET

Instructions: Write your impression of what you think the participant is feeling based on his nonverbal communication at the time the videotape is stopped. Be as brief as possible.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### JOHARI WINDOW NONVERBAL SELF-KNOWLEDGE AND RECORDING SHEET

<p><b>WHAT I THINK OTHERS THINK I FELT:</b> <span style="float: right;">I</span></p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p>	<p><b>WHAT OTHERS SAY I FELT:</b> <span style="float: right;">II</span></p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p>				
<p><b>WHAT I FELT:</b> <span style="float: right;">III</span></p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p>	<p><b>DISAGREEMENT:</b> <span style="float: right;">IV</span></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 30px; height: 30px;">1</td> <td style="width: 30px; height: 30px;">2</td> </tr> <tr> <td style="width: 30px; height: 30px;">3</td> <td style="width: 30px; height: 30px;">4</td> </tr> </table>	1	2	3	4
1	2				
3	4				

Instructions: If Window II agrees with Window I or Window III for the same numbered item, that item in Window IV does not have to be darkened.

1-2-3: A NONVERBAL EXERCISE IN  
COMMUNICATING EMOTION THROUGH CONTENT-FREE SPEECH\*

Goal: To determine whether the voice alone rather than any special content can express emotion

Group size: 8 in each group

Time required: Approximately one hour

Materials:

Emotion cards for each participant  
Pencils for all participants  
Perceiver's score cards

Physical setting: Participants should be seated so that "sender" is hidden behind a screen.

Process:

1. Announce: "In this exercise, you will be asked to express various emotions through speech. But this speech will consist only of numbers, not words. In each case, you will be asked to express a particular emotion simply by saying numbers, using your voice to express an emotion rather than any special content. You can stop at any point, repeat or omit numbers. The important point to remember is to try to express a particular emotion without using words. In this exercise, it is important that you feel as free and uninhibited as possible. As a first step, practice counting a few times just to warm up. Try to let yourself go, loosen up, get the feel of using numbers as if they were words, and expressing some emotion through the use of only numbers. Take as much time as you like to warm up. Then turn to the next card."
2. Each participant is given 10 cards with different emotions on them. Standing or sitting behind the screen, they recite the emotions one at a time.
3. The receivers are to try to determine which emotion was expressed in turn and put this information on the perceiver's score cards.
4. Then determine:
  - a) who was able to send the most correctly perceived emotions
  - b) who was able to perceive the most emotions correctly
  - c) the number of times each emotion was correctly identified.
5. Discuss the experience as a group.

---

\*Adapted from a study done by Davitz and Davitz, "The Communication of Feelings", by Content-Free Speech.

ANGER

FEAR

HAPPINESS

JEALOUSY

LOVE

NERVOUSNESS

PRIDE

SADNESS

SATISFACTION

SYMPATHY

EMOTION CARDS

NOTE: This page is to be duplicated and the cards cut out. Each participant is to be given one set of these cards, to be rearranged by the sender in the order he will express the emotions.

1-2-3: A NONVERBAL NAME OF PERCEIVER  
 EXERCISE IN COMMUNICATING EMOTION THROUGH CONTENT-FREE SPEECH\*

PERCEIVER'S SCORE CARD

Name of sender: \_\_\_\_\_  
 Emotion 1: \_\_\_\_\_  
 2: \_\_\_\_\_  
 3: \_\_\_\_\_  
 4: \_\_\_\_\_  
 5: \_\_\_\_\_  
 6: \_\_\_\_\_  
 7: \_\_\_\_\_  
 8: \_\_\_\_\_  
 9: \_\_\_\_\_  
 10: \_\_\_\_\_

Name of sender: \_\_\_\_\_  
 Emotion 1: \_\_\_\_\_  
 2: \_\_\_\_\_  
 3: \_\_\_\_\_  
 4: \_\_\_\_\_  
 5: \_\_\_\_\_  
 6: \_\_\_\_\_  
 7: \_\_\_\_\_  
 8: \_\_\_\_\_  
 9: \_\_\_\_\_  
 10: \_\_\_\_\_

Name of sender: \_\_\_\_\_  
 Emotion 1: \_\_\_\_\_  
 2: \_\_\_\_\_  
 3: \_\_\_\_\_  
 4: \_\_\_\_\_  
 5: \_\_\_\_\_  
 6: \_\_\_\_\_  
 7: \_\_\_\_\_  
 8: \_\_\_\_\_  
 9: \_\_\_\_\_  
 10: \_\_\_\_\_

Name of sender: \_\_\_\_\_  
 Emotion 1: \_\_\_\_\_  
 2: \_\_\_\_\_  
 3: \_\_\_\_\_  
 4: \_\_\_\_\_  
 5: \_\_\_\_\_  
 6: \_\_\_\_\_  
 7: \_\_\_\_\_  
 8: \_\_\_\_\_  
 9: \_\_\_\_\_  
 10: \_\_\_\_\_

Name of sender: \_\_\_\_\_  
 Emotion 1: \_\_\_\_\_  
 2: \_\_\_\_\_  
 3: \_\_\_\_\_  
 4: \_\_\_\_\_  
 5: \_\_\_\_\_  
 6: \_\_\_\_\_  
 7: \_\_\_\_\_  
 8: \_\_\_\_\_  
 9: \_\_\_\_\_  
 10: \_\_\_\_\_

Name of sender: \_\_\_\_\_  
 Emotion 1: \_\_\_\_\_  
 2: \_\_\_\_\_  
 3: \_\_\_\_\_  
 4: \_\_\_\_\_  
 5: \_\_\_\_\_  
 6: \_\_\_\_\_  
 7: \_\_\_\_\_  
 8: \_\_\_\_\_  
 9: \_\_\_\_\_  
 10: \_\_\_\_\_

Name of sender: \_\_\_\_\_  
 Emotion 1: \_\_\_\_\_  
 2: \_\_\_\_\_  
 3: \_\_\_\_\_  
 4: \_\_\_\_\_  
 5: \_\_\_\_\_  
 6: \_\_\_\_\_  
 7: \_\_\_\_\_  
 8: \_\_\_\_\_  
 9: \_\_\_\_\_  
 10: \_\_\_\_\_

\*Adapted from a study by Davitz and Davitz, "The Communication of Feelings by Content-Free Speech," Journal of Communication, 1959, 9, 6-13; in Weitz, Nonverbal Communication, 1974, pp. 99-104.

## INSTRUMENTED TRAINING IN NONVERBAL COMMUNICATION\*

Goal: To provide feedback to participants about how they are impacting others nonverbally.

Group size: 4 in each group

Time required: Approximately one hour

Materials: Form A, Instrumented Training in Nonverbal Communication  
Form B, Instrumented Training in Nonverbal Communication  
Pencils for all participants

Physical setting: Separate tables for every four participants

Process:

1. Distribute Form A to participants. Read instructions: "This is a way of letting you know how you impact on those around you. It tells you how you "come across" as a person based on everything except what you say. You will fill out Form A telling how you see yourself. Then others will fill out another booklet on you. Then you will be given their evaluations. You will score yourself; no one else will see how you came out. You will be able to compare how you perceive yourself with how others perceive you. So, do step one first; fill out honestly and fully Form A. You will have 10 minutes to do this. When you finish, wait quietly until everyone is through. Go ahead now."
2. After 10 minutes, check that everyone is completed. Announce: "Now we will pass out Form B. You will complete one Form B for each person at your table. Do not compare notes or talk. When you finish, put all copies of Form B in the center of the table. Then when everyone has finished, we will give them to the people they describe. Start now; be honest; you are helping your subject learn to see himself as others see him; don't hold back; and remember, do not sign your forms. You will have 30 minutes to do this; do not hurry; give careful thought to each question. When you are through, leave the table."
3. After 30 minutes, check that everyone is completed. Reassemble the group. Announce: "Now that we are reassembled, mix up the papers and each person pick out the B form with your name on them. Now compare those entries with yours and you will learn more about your non-verbal communication, whether the image you actually communicate is what you think it is."
4. Discuss this experience as a group.

---

\*Adapted from Richard M. Greene, Jr., The Management Game, Dow-Jones-Irwin, Inc., 1969, p. 205.

FORM A  
INSTRUMENTED TRAINING IN NONVERBAL COMMUNICATION\*

1. My name is \_\_\_\_\_.

2. The words which best describe me are circled:

aggressive	happy	humorous	glum
spirited	dynamic	stupid	dull
bright	sharp	enthusiastic	shy
quick	sly	stuff shirt	mild
strong	overbearing	tense	relaxed
verbal	defensive	afraid	logical
fearless	scared	withdrawn	angry
hopeful	pessimistic	interesting	optimistic
boring	lively	loud	perceptive
understanding	cold	kind	intelligent
coarse	bored	interested	annoyed

3. In dealing with others in a group, I usually: (circle two)

listen	talk	dominate	withdraw
interrupt	follow	show hostility	hold back feelings

4. Physically, my typical posture in talking with others when seated is: (circle one or more)

a) erect and attentive	b) lean on table or desk
c) smoke	d) fiddle with clothes or object
e) use hands to talk	f) lean back
g) feet under chair	h) feet normal place
i) feet and legs extended	j) feet and legs quiet
k) foot and leg movement	l) cover mouth with hand
m) stroke or cup chin	n) lean on elbows, hand to face
o) arms crossed	other: _____

5. People's initial reaction to me is: (circle one)

friendly	unfriendly	cautious	open
----------	------------	----------	------

6. I speak: (circle as appropriate)

loudly.....	softly.....	average
clearly.....	muffled.....	average
long words.....	short words.....	average
tension.....	comfort.....	average
interrupt.....	never interrupt.....	average

7. I listen: (circle as appropriate)

carefully.....	not too closely.....	average
understand.....	little respect.....	average
quietly.....	fidget.....	average

## FORM A - Continued

8. My typical reaction to frustration is: (circle one)

anger            wait            cry                    blame someone  
 humor           persist        find substitute      analyze what's wrong

9. My attire and clothing style is: (check one)

sharp \_\_\_\_\_ neat \_\_\_\_\_ average \_\_\_\_\_ sloppy \_\_\_\_\_

10. The only thing I really feel could be improved in my nonverbal communication with others is: \_\_\_\_\_

11. When challenged or questioned, I usually am: (check one)

Open and glad to hear their opinion \_\_\_\_\_  
 Worried I haven't made myself clear \_\_\_\_\_  
 A little annoyed \_\_\_\_\_  
 Aware they were not really listening \_\_\_\_\_  
 Interested in what's not clear to them \_\_\_\_\_  
 Aware their limitations and training make it hard for them  
 to understand \_\_\_\_\_

\*Adapted from Greene, ibid, pp. 206-207.

FORM B  
INSTRUMENTED TRAINING IN NONVERBAL COMMUNICATION

1. I am discussing \_\_\_\_\_.
2. I have circled the 10 words which best describe him, in my opinion.

aggressive	happy	humorous	glum
spirited	dynamic	stupid	dull
bright	sharp	enthusiastic	shy
quick	sly	stuff shirt	mild
strong	overbearing	tense	relaxed
verbal	defensive	afraid	logical
fearless	scared	withdrawn	angry
hopeful	pessimistic	interesting	optimistic
boring	lively	loud	perceptive
understanding	cold	kind	intelligent
coarse	bored	interested	annoyed

3. In dealing with others in a group, I think he tends to: (circle one)

listen	talk	dominate	withdraw
interrupt	follow	show hostility	hold back feelings

4. Physically, his typical posture when seated seems to be:  
(circle one or more)

a) erect and attentive	b) lean on table or desk
c) smoke	d) fiddle with clothes or object
e) use hands to talk	f) lean back
g) feet under chair	h) feet normal place
i) feet and legs extended	j) feet and legs quiet
k) foot and leg movement	l) cover mouth with hand
m) stroke or cup chin	n) lean on elbows, hand to face
o) arms crossed	other: _____

5. My personal first reaction to him was: (circle one)

friendly	unfriendly	cautious	open
----------	------------	----------	------

6. He seems to speak: (circle as appropriate)

loudly.....	softly.....	average
clearly.....	muffled.....	average
long words.....	short words.....	average
tension.....	comfort.....	average
interrupt.....	never interrupt.....	average

## FORM B - Continued

7. When he listens, he listens: (circle as appropriate)

carefully.....not too closely.....average  
 understand.....miss points.....average  
 with respect.....little respect.....average  
 quietly.....fidgets.....average

8. When he is frustrated, I think he would react with:

annoyance or anger \_\_\_\_\_  
 patiently with or withdrawn \_\_\_\_\_  
 give up or cry \_\_\_\_\_  
 search for substitute \_\_\_\_\_  
 laugh it off or make a joke of it \_\_\_\_\_  
 gently keep after it again and again \_\_\_\_\_  
 blame someone \_\_\_\_\_  
 stop and analyze the situation \_\_\_\_\_

9. His appearance, to me, is: (check one)

sharp \_\_\_\_\_ neat \_\_\_\_\_ average \_\_\_\_\_ sloppy \_\_\_\_\_

10. My personal opinion is that, if he should work on one thing to improve his nonverbal communication, it should be: \_\_\_\_\_

11. I think his first response to being challenged or questioned is: (check one)

Open to criticism and glad to hear other people's opinions \_\_\_\_\_  
 Repeats himself \_\_\_\_\_  
 Seems annoyed \_\_\_\_\_  
 Blames the questioner for not listening or paying close attention \_\_\_\_\_  
 Tries to find out how others feel; what's bothering them \_\_\_\_\_  
 Degrades the question asker \_\_\_\_\_

\*Adapted from Greene, ibid., pp. 208-209.

### III. ADDITIONAL LABORATORY EXPERIENCES

Other experiences that could be structured into the laboratory are these:

BODY TALK: THE GAME OF FEELING AND EXPRESSION (from PSYCHOLOGY TODAY)

BROKEN SQUARES: NONVERBAL PROBLEM-SOLVING (from Pfeiffer and Jones)

STARPOWER (from Pfeiffer and Jones)

WIN AS MUCH AS YOU CAN (from Pfeiffer and Jones) (A game of trust)

Dyadic experiences from Pfeiffer and Jones:

Trust Fall	Trust Walk
Trust Run	Pushing and Shoving
Feeling Faces	Progression
Tug-of-War	Patting
Mirroring	Finding a Distance

Group experiences from Pfeiffer and Jones:

Roll	Cradle
------	--------

Multi-group experiences from Pfeiffer and Jones:

Eye-Contact Chain	Circles
Newspaper Hitting	Milling
Group Grope	Feeling Music

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