
THESIS SUMMARIES

HUMAN COMMUNICATION NETWORKING IN A TELECONFERENCING ENVIRONMENT

Ronald Rice (Ph.D. Thesis, Institute for Communication Research, Stanford, 1981)

ABSTRACT

The objectives of this dissertation are to study the communication patterns of groups operating in a nation-wide computer conferencing environment, how these patterns change over time, the nature of group- and system-level structure, and what implications these patterns and changes have for telecommunications design, policy, and implementation.

The primary procedures used to detect and describe the communication patterns of interest, over time, include longitudinal plots of useful communication ratios, log-linear models of group structure, and transition matrices showing patterns of development in system structure. Additional procedures include regressions, clustering and multidimensional scaling.

Results based on analyses of 25 months of computer-monitored data generally support the following:

- (1) the nature of the user group appears to be a prime determinant of how that group uses a medium such as computer conferencing;
- (2) groups differ in their preferences for internal communication;
- (3) measures of internal linkages are useful indicators of group roles, behavior and cohesion;
- (4) reciprocity in communication becomes, over time, a fundamental aspect of group relations in a system;
- (5) ratios of messages sent to messages received also may indicate levels of group cohesion, but in general are group-independent and fundamental components of communication in a large-scale system;
- (6) it is normal for members to "electronically migrate" outside their groups;
- (7) stability in group relations occurs moderately early in the development of long-term, large-scale computer-moderated communication systems;
- (8) groups may be characterized as occupying kinds of system-wide roles, based upon the level and direction of information flows, in rigorous and substantively useful ways;
- (9) information roles in which groups receive, send, and keep information at levels all less than average levels of other groups (and so are called isolates), or at levels all greater than average levels of other groups (primary roles), are the two most likely of roles, and all other kinds of roles quickly transit into either of these roles, with transiting into or staying in the isolate role the most likely. The route from isolate to primary is unlikely and indirect;
- (10) the use of computer-monitored communication data which were far more longitudinal, complete, and free of self-report discrepancies, allowed analyses of the development of communication networks in a complex system that simply would not have been possible otherwise;
- (11) both the network analysis methods used in this study and the teleconferencing environment for analysis, have proved useful in the study of human communication processes with new communication technologies.

Overall, the results show that a large-scale telecommunications environment such as computer conferencing does not homogenize group communication activity, but does provide indices of communication activity which could be used to detect groups' potential patterns of development. System structure changes over time as groups occupy different roles which are based on the flows of information within the system.

GENERATIONAL RELATIONS AND SUCCESSION: A STUDY OF AUTHORITY AND RESPONSIBILITY IN FAMILIES

Carolyn J. Rosenthal (Ph.D. Thesis, Sociology, McMaster University, 1982)

ABSTRACT

This study develops two novel concepts in the study of family life: the familial division of labour and family headship. Together, these concepts allow for a characterization of family life which is at the same time somewhat novel and supportive of or contributory to a broader understanding of many phenomena of family life which have been observed and reported. The study of the division of labour directs attention to aspects of family structure which have not been systematically investigated elsewhere and which are shown here to be socially real.

The data for this study were collected through interviews with a stratified random sample of 464 men and women aged 40 and over living in Hamilton and Stoney Creek, Ontario. All had lived in Canada for at least ten years. Interviews averaged one and one-half hours and were conducted in English.

The division of labour is investigated through task-specific positions which involve responsibilities and activities enacted on behalf of the extended family and which contribute to family solidarity and continuity. Specifically, the positions of kinkeeper, comforter, placement officer, financial advisor, and ambassador are shown to exist in a division of labour in contemporary families. While the division of labour is a widespread aspect of family structure, there is great variability among families as to its shape and extensiveness.

The concept of headship is developed through an exploration of a central leadership position, the head of the family. The term refers to the person who is understood by others to possess authority and exercise the most leadership in the family. Most families in the study had such a person.

The concept of familial succession brings together interests in structure and process, and the ways in which the meaning and experience of family life change for individuals as they grow older. Succession refers to the passing of family responsibility and authority from one generation to the next, a process which is investigated through an examination of patterns of occupancy in headship and the familial division of labour, and the ways in which these change through time. The study argues that changes in the locus of responsibility in headship and the division of labour are tied to significant family life course events as well as to aging and mortality.

When the concepts of the familial division of labour and headship are used as a basis for analysing the family as a type of work organization, the organizational structure of families is shown to follow the same principles as any work organization. An ideal typology of families--bureaucratic, democratic, autocratic, and anarchic--is developed, based on their organizational structure.

The study shows that the familial division of labour and headship are widespread phenomena which were meaningful to study participants. People were able to discuss aspects of the various positions in detail. These positions persist over time, and in many families they are passed on from one generation to the next in socially meaningful ways. Findings indicate that generational succession does occur, with each new generation coming to see itself as taking up family responsibility. However, elderly individuals, as their generational peers die, are less likely than younger family members to perceive the wider family as being an active, supportive group. This suggests a tempered view of the positive picture of intergenerational relationships conveyed by extant literature on families in later life.

**AN INTELLIGENTLY STRUCTURED
CORRESPONDENT NETWORK
ELIMINATES FRICTION
IN ALL THE RIGHT SPOTS.**