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Group Relations Psychology and Computer Supported Work:

Some New Directions for Research and Development

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Abstract

Computer support for work groups and cooperative work tasks is an area of active research and development. Software products are advertised for facilitating cooperation and collaboration, from collective authoring systems to computer support for multimedia communications and face-to-face meetings. Increasing work group productivity through the use of computer technology requires that the nature of group work practice be well understood.

This paper describes a psychodynamic model of group relations and the perspective it provides on the behaviors and motivations of work groups and their larger containing organizations. The paper argues that the systemic and psychological model and insights of the psychodynamic perspective are fundamental to an understanding of the actual day-to-day activities of work groups. Furthermore, utilizing these insights can help develop richer models of work group experience, and provide a more realistic ground for developing effective computer assistance for work groups and their tasks.

Since computer systems affect the social conditions of work groups, models and methods of the social sciences must be incorporated into the development practices of computer system engineers. The value of the psychodynamic perspective is described with two examples. First, some current research on computer mediated communication is reviewed in terms of group relations. Second, the application of this model to the changing nature of organizational work is outlined.

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1. Introduction.

The development of groupware products has been accompanied, in part, by a growing recognition of the value of sociological and socio-technical studies of work life. [1] These studies stress the need to understand what people do when they work together in groups. Observations of work practices are encouraged to explore and gather requirements. Participatory co-development relationships with users are promoted as ways of getting early feedback on product ideas. These methods also hold the promise that products and systems resulting from such co-development relationships will satisfy user needs better than products developed in labs separated from user's actual work places. [4]

Emphasis on the situated nature of work and especially group work has changed the models that are used as the basis for design of computer systems. In the language of general systems, a work group, and the technologies chosen to assist with its work, form an open system. This system Interacts with its environment to procure resources and to deliver required outputs. Focusing attention on the interaction between and systems and their environment helps place work groups in their organizational context. In large organizations there Ire many interdependent work groups, and the skill and effectiveness with which thev can work together to support the overall goals and tasks of the larger organization have a direct effect on the viability and life of that organization. The growth in groupware aims to promote the effectiveness with which groups work together,

The premise of this paper is threefold. First, developing computer systems for work groups involves manipulating social conditions as well building sophisticated apparatus. Second, psychological models of group relations have important concepts and insights to add to the valuable contributions that anthropological and sociological studies are making to the understanding of group work practices. Third, models and methods of these disciplines must be incorporated into the development of computer systems that support and foster work groups.

2. Group Relations Psychology.

The application of insights from psychiatry and psychology to the behavior and effectiveness of organizations and work groups developed from the work done by members of the Tavistock Clinic, in London, during and after the second World War. During the early part of World War II, a group of psychologists joined the Directorate of Army Psychology and tried several new methods to help the British army with its immediate human resources problems. These ambitious tasks required broadening the range of disciplines from “psychiatry and clinical psychology to social psychology, sociology and anthropology .’’[10]] Many of the current efforts in participatory design of computer systems owe their beginnings to this early sociotechnical work of the Tavistock Clinic. [n time the Tavistock organization branched out into several different institutions, and some of the most innovative work around the psychological aspects of group experience arose from the post-war work of the Clinic.

Although many people participated in the development of the contemporary Tavistock group relations work, Wilfred Bion is credited with elucidating the basic psychic forces that are manifested and expressed when people gather together in groups. Bion’s early efforts were directed at rehabilitating men who had difficulties in the army, and he saw his task as helping them regain their ability to function in groups. He viewed group therapy as therapy for the group as a whole, not for the individual members, even though individuals have their own problems.

There are three distinguishing aspects of Bion’s model of human behavior in groups. First, it is a systems model that views a group as an interdependent collection of individuals. Although a group is nothing more than collections of individuals, the behavior of individuals is viewed as an expression of the mental life produced collectively by the group members. Bion postulated that the group mentality results from the unanimous wishes of group members, and that the group culture, or its structure, “stems from the conflict between the anonymous and unconscious collective willpower and the individual’s wishes and needs .’’[6] This conflict creates an ever present individual dilemma regarding group membership. Each group member faces the task of trying to join the group and maintain their individuality.

Second, when viewed as systems, the behavior of individual group members are viewed as symptoms of the group culture. so, for example, scapegoating or blaming group task failure on the characteristics of one member is viewed as dysfunctional behavior that the group must face, not as simply the result of one member’s personal weakness (although a member’s competency for given tasks may also be a problem). As a result, the healing of a dysfunctional group is a matter of treating the group as a whole, rather than trying to help individuals who are behaving in maladaptive ways. From a systems view group work requires learning and adjustment for all group members. However, people resist learning that requires substantive change, and groups of people develop behaviors that avoid this learning. Scapegoating is one common defense that group members use to avoid the individual learning and change required for growth and group task accomplishment.

Finally, Bion elucidated two distinct and opposing modes of group behavior that occur simultaneously in all groups: Work Group behavior and Basic Assumption behavior. A group operating as a work group has several attributes: it is cooperative, it tends to talk rationally about its tasks, and it often makes use of scientific models to solve its problems. The language used in discussions is rich and symbolic, the group is energetic and dynamic in the give and take required to get things done. Participating in a work group requires many sophisticated skills which are learned by members as they gain experience working in groups and as they mature as adults.

In contrast, groups operating in Basic Assumption mode have characteristics antithetical to work groups: discussions are lethargic, the language used is empty of meaning, concepts are deified, and the group is often bored, tired, and emotional. The behavior of a group in basic assumption mode is often irrational and the group is unable to act to complete its assigned tasks.

A group in basic assumption mode is operating to maintain an unconscious fantasy about itself and its

purpose. The behaviors of the group members serve to avoid discussions and actions that are unpleasant and that raise deep anxieties for individual group members, either about the work task of the group or the relationship of the group to its leaders and its containing organization. Furthermore, since this behavior often results from an unconscious collusion among group members, the group often sees its own behavior as reasonable and appropriate for the situation. When something happens that brings the fantasy to light, it is often denied.

Although the irrational life of individuals in a group can impede the satisfaction of group tasks, it can also serve to support the group and further its work tasks. The real work of group leadership is to align the irrational energy of the group with its required tasks. In service of this end systems built solely on rational models of group work practice may successfully support the group's assigned tasks, but may fail to satisfy a group's basic assumption needs. For example, often computer system users must depend on people who have little knowledge or understanding of their work, and with whom they have few social contacts. How do these dependency relations affect work practices? How do people feel about depending on others outside their group for support of the tools needed for day to day work activities? These are the kinds of questions that emerge from a psychodynamic model of work groups.

3. Application to Research: Computer Mediated Communication.

An active area of investigation is the impact of electronic messaging systems on work group dynamics. There are many published studies of how electronic mail and bulletin board systems provide new ways of carrying out many common group work tasks. Software products are being developed to assist in group meeting and decision making activities.

One aspect of computer mediated communication was recently reported by Galegher and Kraut. [5] In this experiment three different groups of students were asked to organize and carry out a group project. One group met only in person, a second group was only permitted to use electronic mail and telephone calls, and the third group was restricted entirely to electronic mail. The study recorded the number of interactions and the subjective quality of how well each group felt the technology (or lack of it) supported the assigned task. The group restricted to only electronic mail had many more and longer interactions (almost twice as much total time was spent on the project) than the tace-to- face group. The face-to-face group met frequently in the beginning and less frequently as the project neared completion. Furthermore, the students restricted to electronic mall experienced more difficult in getting the task started. From a psychodynamic perspective this is hardly surprising. One expects an easier time in face-to-face meetings settling issues of authority and leadership around tasks compared with phone or text-only communications.

One well-known characteristic of electronic mail and bulletin board systems is the phenomena of "flaming" and the use of typographic conventions to help give an affective dimension to simple text. Many of the psychodynamic aspects of group relations involve splitting, projection, introjection, and reprojection of personal feelings. How are these emotional dynamics of group work mediated by electronic mail? Most people who have used email heavily in work situations have had the experience of a particular message being completely misunderstood by others in the email group. Depending on the dynamics of the group, participants can become quite angered and the subsequent written communications polemical and personal. In some cases these exchanges can be personally painful. Even in electronically mediated groups scapegoating can be common.

Conversation and communication provide more than simple transfers of information. From a psychodynamic perspective the important questions about the use of electronic mail include: (1) How safe do people feel in various email groups? What is the effect of knowing members personally on the level of participation people feel is appropriate? (2) In terms of group relations research on large groups, do anonymous and large email groups permit individual members to join the group without being overwhelmed by the unconscious fantasies about authority and power that are common in most large groups? (3) Does email actually attenuate some of the covert pressures that group members exert on one another? Are these effects peculiar to particular group work tasks? (4) What are the issues of authority and leadership in electronic mail groups? How are these problems resolved by the group?

4. Application to Work Group Organization.

Group relations studies of organizational behavior often point out that bureaucracies, and their attendant structures ancf policies, function as social and psychological defenses. [8] Positions and roles are institutionalized to avoid the anxiety and unpleasant situations that might arise in less structured organizations. To the extent that organizations and their component work groups function as defenses, it is likely that any computer systems developed and deployed will incorporate and further these defensive functions. Implementing systems designed without consideration of the power and strength of institutional divisions can meet with stiff and subtle resistance.

Current work on a project involving engineers and end users in co-development of an innovative technology and new work practice has provided an arena for applying group relations insights. [3] Building working relationships of trust and honesty between engineers and users forced the project team to face issues of communication with a different work culture, as well as internal management issues of autonomy and leadership. [2] Understanding the nature of group dynamic forces helped the engineering team respond to these organizational and sociological problems. This kind of understanding of the social fabric of group work is important for the successful development of computer systems and products. Furthermore, these kinds of action research experiments on innovative relationships between customers and vendors are receiving recognition in the popular management literature. [9]

Larry Hirschhorn argues that the growth of service industries and other “post- industrial” businesses has produced new forces that organizations must tace if they are to successfully compete in the larger world marketplace. [7] If this analysis is correct, then effective computer support for work groups requires sophisticated understanding of modern organizational work roles. If, indeed, people need to manage more flexible and complex boundaries between themselves, their customers, and their managers, then the effects of computer systems on work groups and their boundaries need expanded exploration and elucidation. Engineers need to know how to Intervene and work in these complex social systems in order to design and implement products that successfully support work groups.

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