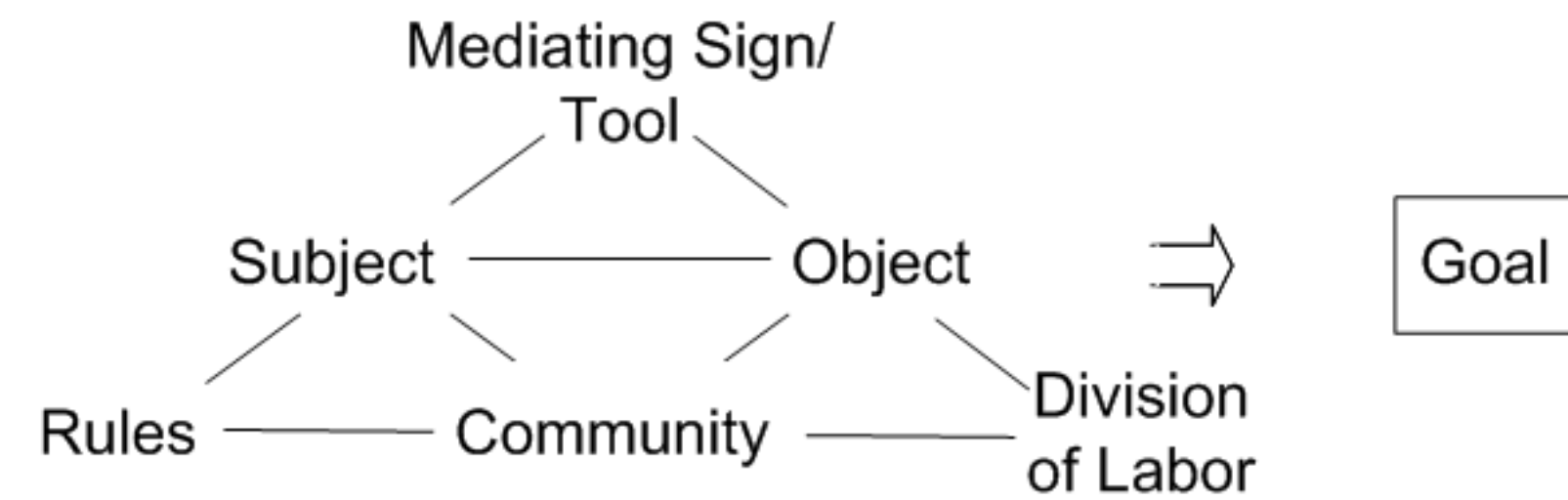
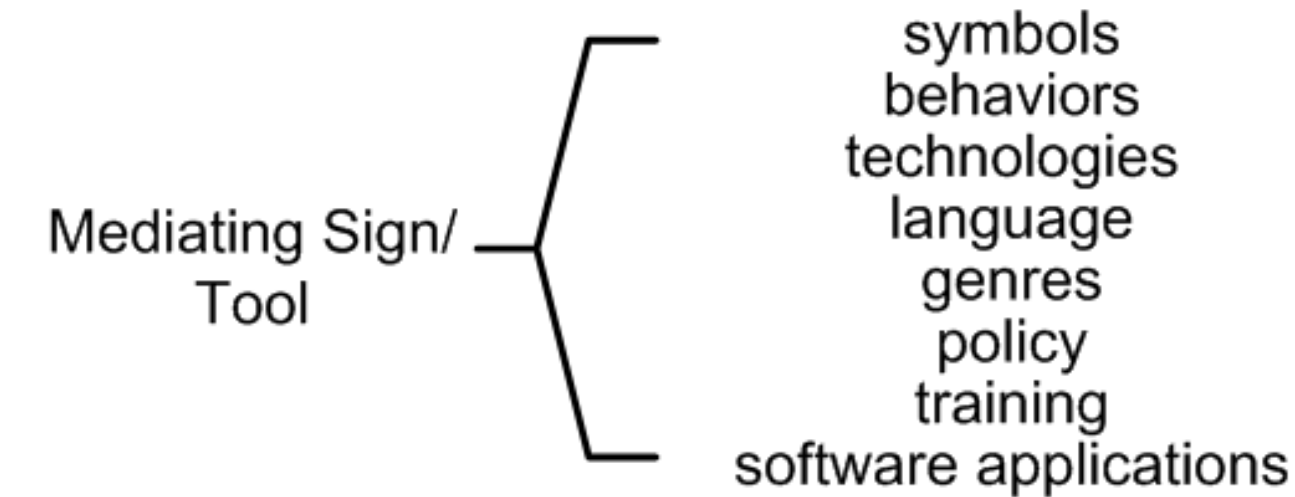


# Constructing a Collaborative Software Environment

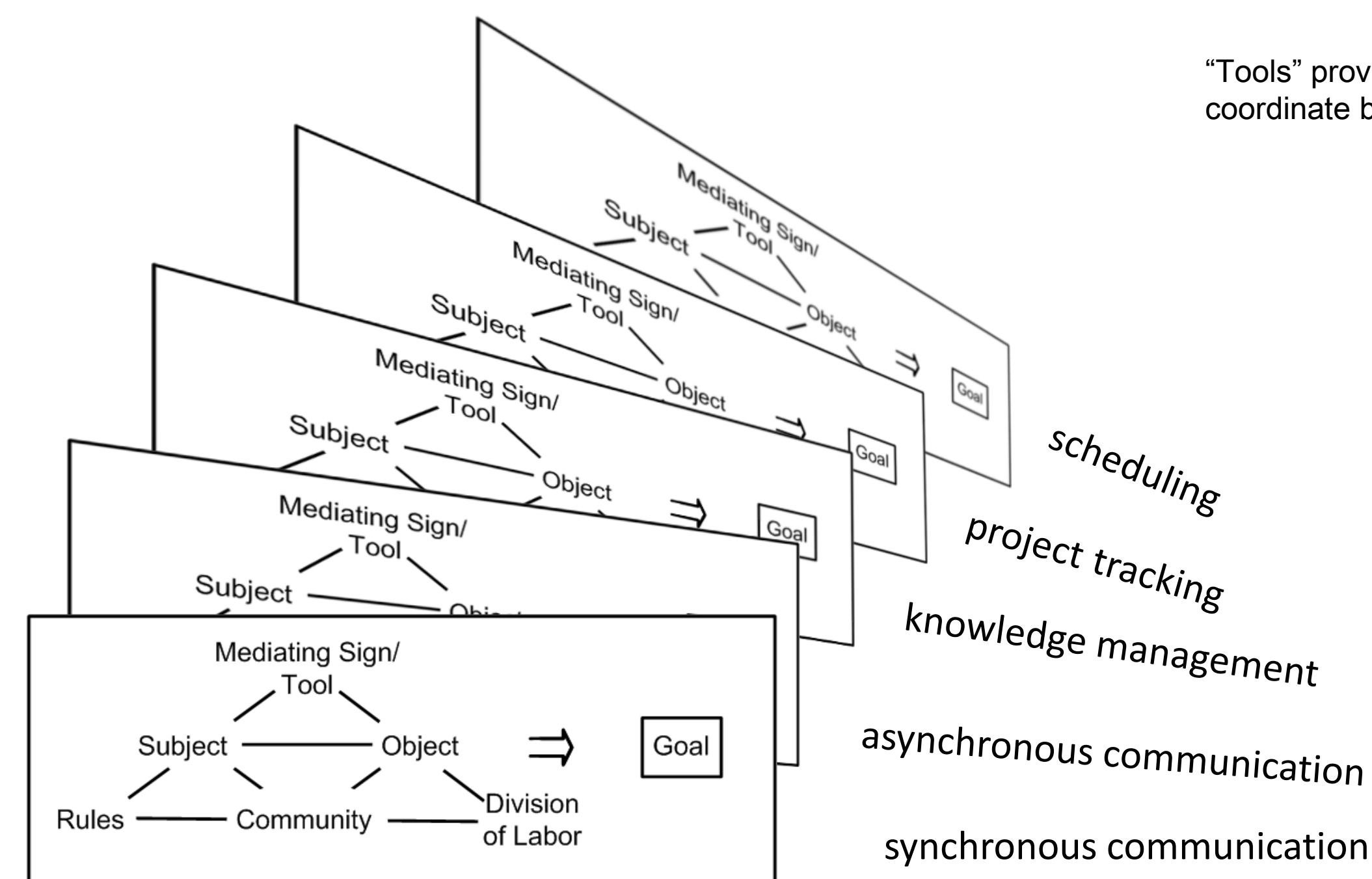
## Selecting Software, Developing Practices, Training Users



Model of activity systems for explaining complex social behavior (Engeström, Y. (1987).



"Tools" provide means to coordinate between individuals



Modern networked organizations have dozens of partial goals, each requiring particular behaviors, tools, and regulations. Often, software applications are tied to these partial goals.

## Introduction

Networked organizations increasingly ask their members use a wide array of software tools in their collaboration with others. Developing competency with these tools and extending it to an entire organization becomes more difficult due to innovations like contemporary social networking and due to the growing number of alternatives for traditional applications like email and instant messaging. Presumably, constructing an effective collaborative environment requires 1) selecting appropriate applications, 2) developing effective practices for using them, and 3) spreading those technologies and practices throughout an organization.

Since selecting applications, developing practices, and training users likely becomes more complex all the time, this project will examine how two actual organizations achieve these goals by examining the decisions, language practices, strategies of persuasion, and genres of communication that construct to the collaborative working environment.

## Background

Selecting software and coordinating its use are old problems, and a wealth of scholarship from HCI, MIS Professional Communication, and related fields addresses the difficulties of adopting software packages. Examples include Downing's study of call center technician's adoption of knowledge management software (2004) and Spinuzzi's examination of varying practices in the use of a customer service database (2008, p. 18, 49). The challenges are compounded by increasing degrees of choice. Franch and Carvallo's, emphasize the increasing "importance of commercial off-the-shelf software" and propose to make the quality of software a key factor in decision making in addition to function (2003, pg 34). The availability and quality of both commercial and open source software has increased dramatically (Spinellis et al., 2009, pg 5; Ven et al., 2008, pg 54). Furthermore, trends in social software also shape workplace behavior (Stolley 2009, pg 350).

## Methodology

To examine the decisions, language practices, strategies of persuasion, and genres of communication surrounding the social construction of a collaborative space, this project uses a naturalistic study of two groups of working professionals in the software industry. Both groups consist of 15-25 individuals. One is an IT department of a small company. The other is a team operating within a very large company. Field notes, documentation, and interview data will be collected and analyzed over 6 months and will be complemented by analysis of software applications in use at the organizations.

## Expected Findings

The social psychological tradition of Activity Theory offers a model for how individuals behave in groups in order to achieve organizational objectives. Behavior specializes as the individual strikes a balance between the objective, tools, subject, rules, community, and division of labor (Engström, 1987). In the course of this project, the researcher expects to see the behaviors of the two populations map differently onto this activity model. Examining how the balance responds to the differing constraints of each group will lead to a better understanding of how to select or develop collaborative software and practices of use. It will also suggest ways to extend those practices to all members of an organization more efficiently and effectively

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