## PAPER-BASED COORDINATION MECHANISMS Jun Yoneyama

## **Abstract in English**

The subject of this thesis is the role of coordinative paper-based artifacts in orchestral management.

The empirical basis for this is a study of the routinely "enembleformation" of an orchestra - the last few weeks of preparations of an orchestra before a production. During this period the orchestra is prepared and configured to perform the pieces, is coordinated by the orchestral managers using few simple documents. Thereby the orchestral managers have succeeded with one of the more ambitious goals in CSCW – creating systems for complex coordinative processes that are maintainable and re-designable by users (Schmidt & Bannon 1992).

This thesis shows that coordinative artifacts and coordinative practice are well integrated in organizational concerns and work practice:

- The coordination of the ensembleformation is dictated by the production form of the orchestra. The coordination mechanisms (Schmidt 1994) explicate concerns and orders prevalent in the orchestral work.
- Coordination mechanisms not only coordinate the cooperative ensemble, but also integrate other concerns that are related to the roles of the coordinative artifact in other uses.
- Coordination mechanisms form complexes that address coordinative concerns of the whole process.
- Technologies (e.g. information technology, photocopiers, mundane devices like poster boards) and common practices (e.g. habits, distribution of responsibilities) form a basis for the use of paper as material for coordinative artifacts.

The last point is an extrapolation of Sellen & Harpers findings, that IT plays a crucial role in modern uses of paper in offices (Sellen & Harper 2002). IT is relevant for coordinative practice based on paper, but not in the usual conception in CSCW of coordinating or mediating systems. IT is part of a broad range of technologies and practices supporting paper as material basis for coordinative artifacts.