Under what conditions are “Industrialization” and “Integration” useful concepts in the building sector?
Using Words

Kendall: “Industrialization” and “Integration” in the building sector /Loughborough, May 2008 / I3CON
Disaggregation vs “fragmentation”

Kendall: “Industrialization” and “Integration” in the building sector /Loughborough, May 2008 / I3CON
Industrialization
(the supplier takes the initiative)

Construction
(the demand side takes the initiative)

Prefabrication
(another form of construction)
Integration

But what is INTEGRATION in buildings?
A diagramming tool to explain patterns of control

Parts and Operations

Kendall: “Industrialization” and “Integration” in the building sector /Loughborough, May 2008 / I3CON
Operation Sequences
Interaction of control agents

**Dispersed control pattern**

Kendall: “Industrialization” and “Integration” in the building sector /Loughborough, May 2008 / I3CON
Interaction of Control Agents

Overlapping control pattern
Interaction of control agents

*Pattern of inclusion*
Specification Agents and Control Agents Interacting

Do any of these diagrams represent “integration”?
Another diagram to explain patterns of control

**LEVELS of INTERVENTION**
(or, who controls what, when?)

Architecture • Open Building

the base building concerns what is shared by everyone

the fit-out concerns what is decided by each tenant independently

Base Building Level

Fit-out Level

Kendall: “Industrialization” and “Integration” in the building sector /Loughborough, May 2008 / I3CON
CONCLUSION

• Industrialization and integration can only be understood in relation to patterns of control

• Control is not a technical question, but technical questions always reside in a pattern of control