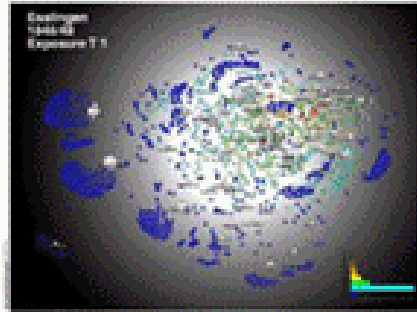


Four-Campus Video-Conference Series, F-W-S 2005-6 Human Sciences and Complexity



April 21: Friday, 1:30-3:00 - VidCon S06#2

Tsutomu Nakano (Kwansei Gakuin University) and Doug White (IMBS, UCI)

"Networks-Affect-Pricing Theory in Modern Production Industry: Three Network Studies of the Giant Industrial District of Tokyo"

Abstract: We analyze six questions about production-chain markets that emerge from three empirical studies of trade relationships among over 8,000 firms in a large-scale industrial district in Tokyo. Are they Small-World? Scale-free? Hierarchical? Etc. Analyzing predictive cohesion structures and substructures in the network we find support for network-affects-pricing theory that differs from H. White's model. Supplier-buyer relations are hierarchical (a directed acyclic graph), with no exchange cycles that would promote price equilibrium. We find linked network configurations likely to affect pricing. Multi-connectivity is a critical seeding mechanism where quasi-optimal exchange pricing can be achieved. But a core of elite firms was also detected that organizes status differences among firms and serves to institutionalize role structures in the production markets. In addition, structural advantages in pricing accrue to core firms because suppliers upstream in the hierarchy operate through a preponderance of multiple-supplier triads, enforcing competition among suppliers and transmitting pricing benefits to elite firms downstream. Elites exert power over the hierarchy from the top down, share elite suppliers with other elite end-producers, and can dominate price-setting from the top.

Video Conference Locations for Participants

UCLA: 285 Powell Library - vidcon@ucla.edu

UCSD: 260 Galbraith Hall (CLICS) - mgibsen@ucsd.edu

UCR: A139 Olmsted Hall - mcap@ucr.edu

UCI: 120 Social Science Tower – Dwayne Pack (949)824-7581