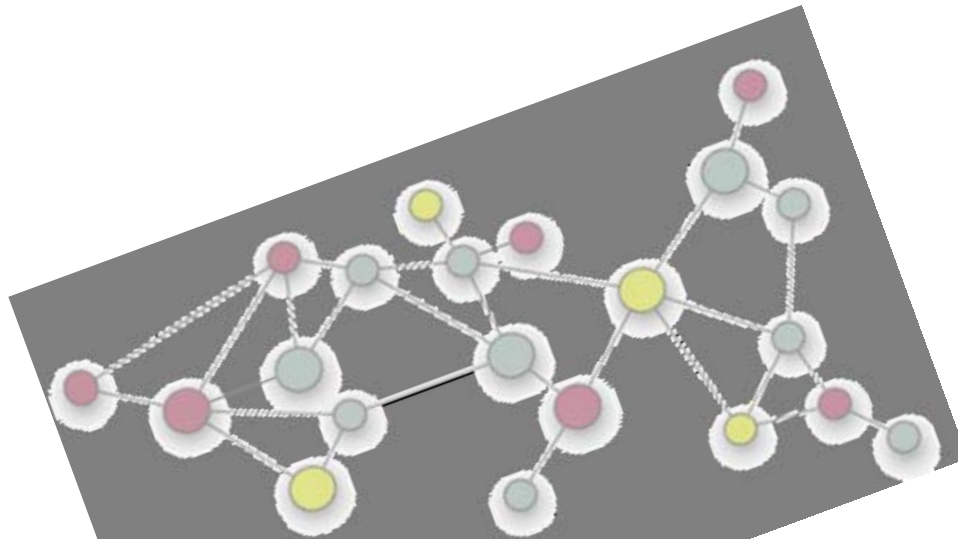




Complaining about NetVis: One Ego's Perspective

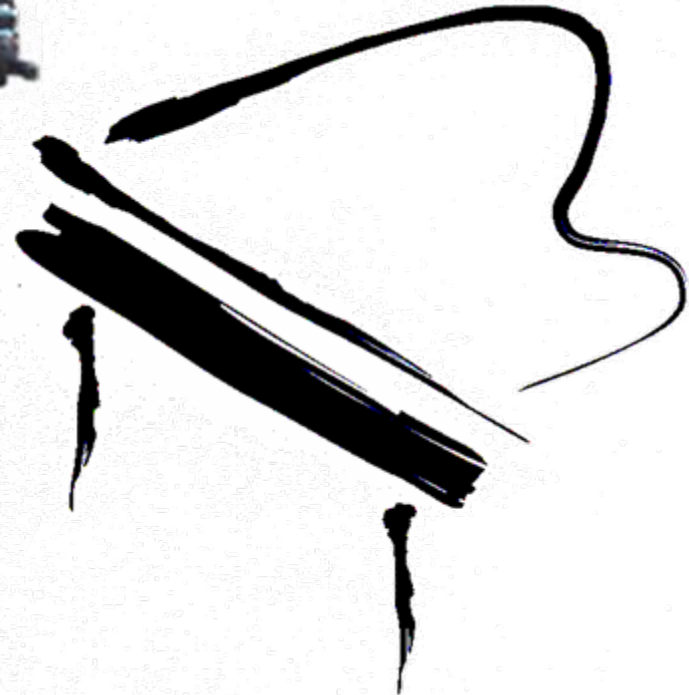


Bruce Hoppe, PhD

Department of Computer Science, Boston University
Founder and President, Connective Associates LLC

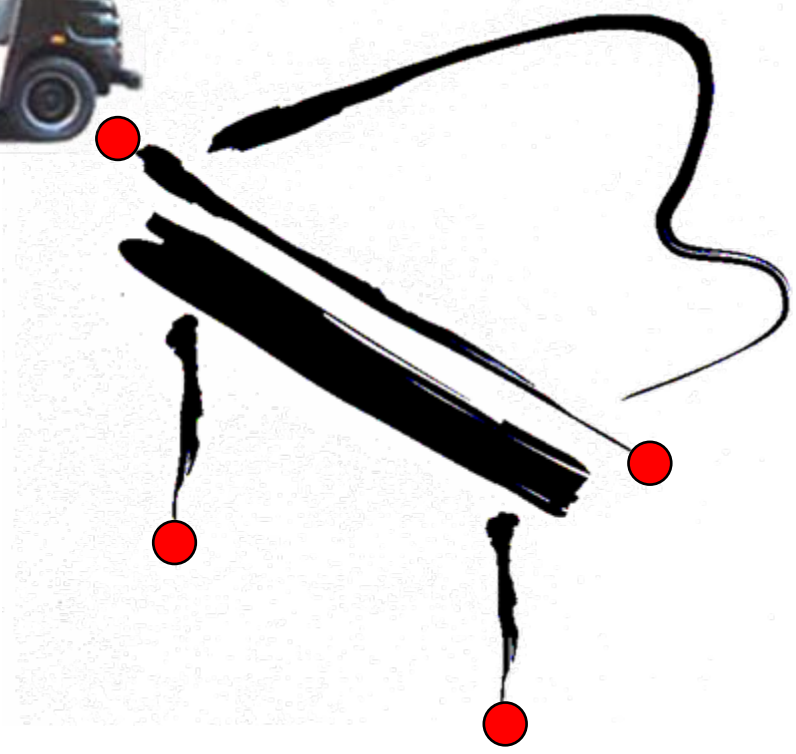


Introduction





Introduction

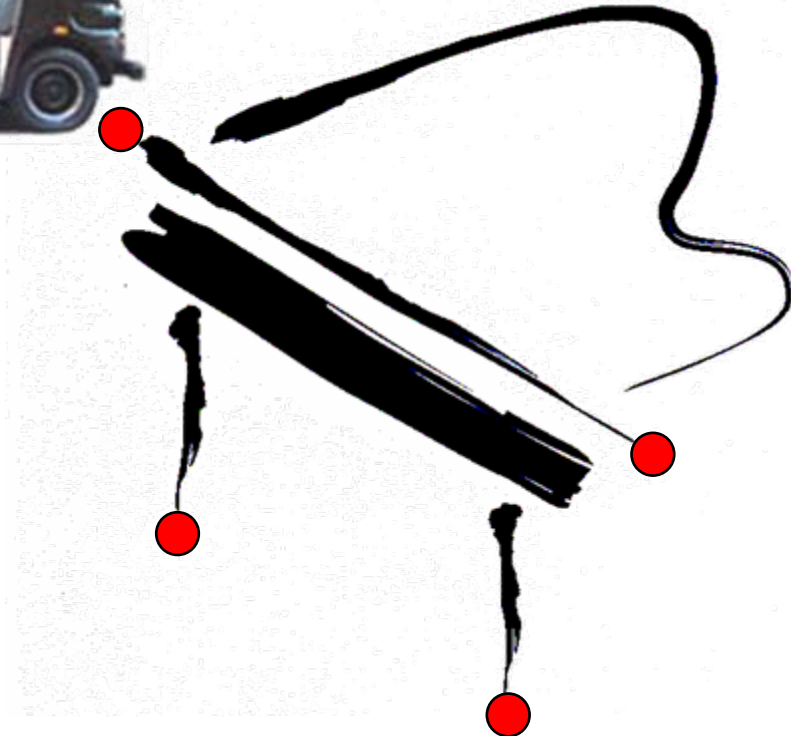




Introduction



Internet Technology + Web Programming





Where We Fit In

SNA Research
Community

Connective Associates

Businesses,
Nonprofits,
Consultants



Our Network Perspective

- We create network maps for organizations
 - visual aids to strategic group discussion
 - demonstration of desired collaborative behavior
- We discourage use of absolute network metrics
- We attempt to track incremental changes in a meaningful way





Collective Leadership Development

Bridging

= Brokering
between “them”

Yields

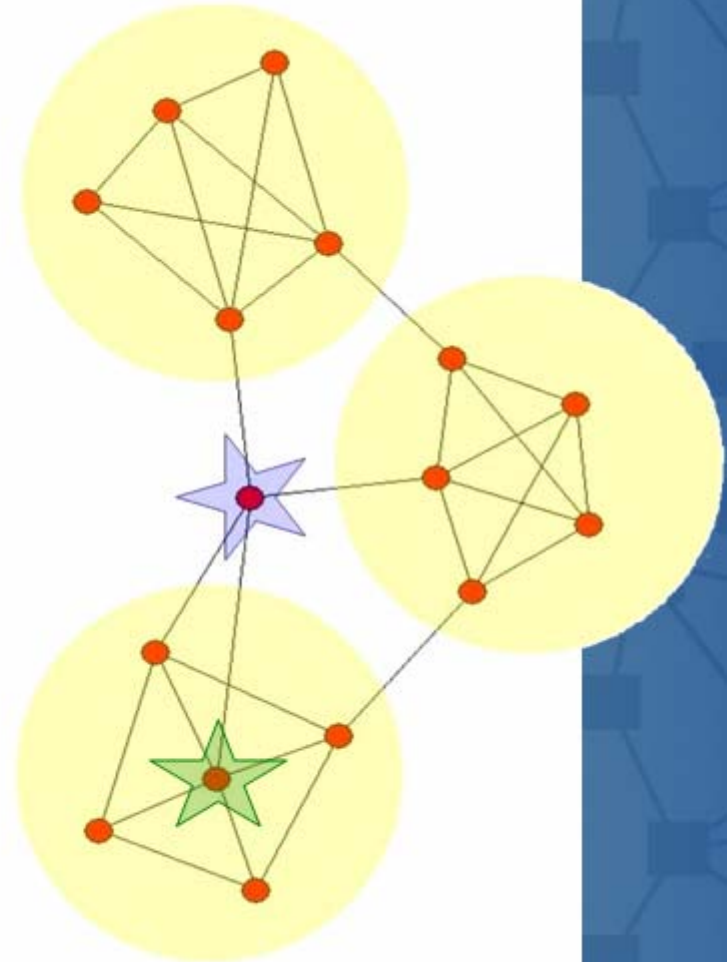
- Access
- Resources
- Innovation
- Impact
- Profit

Bonding

= Becoming
“us”

Yields

- Affinity
- Efficiency
- Trust
- Support
- Community



<http://connectedness.blogspot.com>

(Burt, Ronchi, Putnam)



Tools of a Technology Broker

- NetDraw – general visual analysis
- Visone 2.1 – elegant illustrations
- Visone 1.0 – spatial hierarchy layout
- GUESS – motion and unusual layout needs
- NetMiner – clustering and radial layout
- UCINET – network influence metrics
- Krackplot – quick animated demos
- InFlow – popular tool



Complaint #1

- NetVis tools focus on global analysis at the expense of modeling reality
 - We devote great effort to create a map that represents “now.”
 - No matter how small a change I want to model, network layout tools give me an all or nothing choice.



Complaint #1

- NetVis tools focus on global analysis at the expense of modeling reality
 - We devote great effort to create a map that represents “now.”
 - No matter how small a change I want to model, network layout tools give me an all or nothing choice.
 - Support for managing multiple related network scenarios is negligible.



Complaint #2

- NetVis tools have an impractical selection of layout algorithms
 - More than enough spring-force models
 - Not enough node attribute clustering
 - Not enough structural equivalence
 - Not enough spatial hierarchy
 - Radial layouts are not quite right



Complaint #2

- NetVis tools have an impractical selection of layout algorithms
 - More than enough spring-force models
 - Not enough node attribute clustering
 - Not enough structural equivalence
 - Not enough spatial hierarchy
 - Radial layouts are not quite right
 - **Not enough concern for ambiguous maps**



Complaint #1 + #2

- NetVis tools focus on global analysis with an impractical selection of layout algorithms
- **I want to apply different layout algorithms to different subgraphs in the same map**



Complaint #3

- NetVis tools are not complicated enough!!
 - Keeping it simple is the service I perform for my clients; it is not what I ask of NetVis software designers.
 - In order to keep it simple, I need more sophisticated tools that seriously address complaints #1 and #2



Thank you

Bruce Hoppe, PhD
Connective Associates LLC
1281 Massachusetts Avenue, Suite 3
Arlington, MA 02476
781.641.3555
bruce@connectiveassociates.com

