

# Dimensions of a Learning Network

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Find something you have in common  
Bring them around to your point of view  
Make them laugh at themselves

Erin McKean



Image: <http://www.imdb.com/media/rm3822688768/tt0161180>

# The humour is in the listener

<http://halfanhour.blogspot.com/2010/09/uniqueness-and-conformity.html>

Today's Topic

Constraints and Conditions



Learning Networks, or  
Networks that Learn

## Using networks to learn...

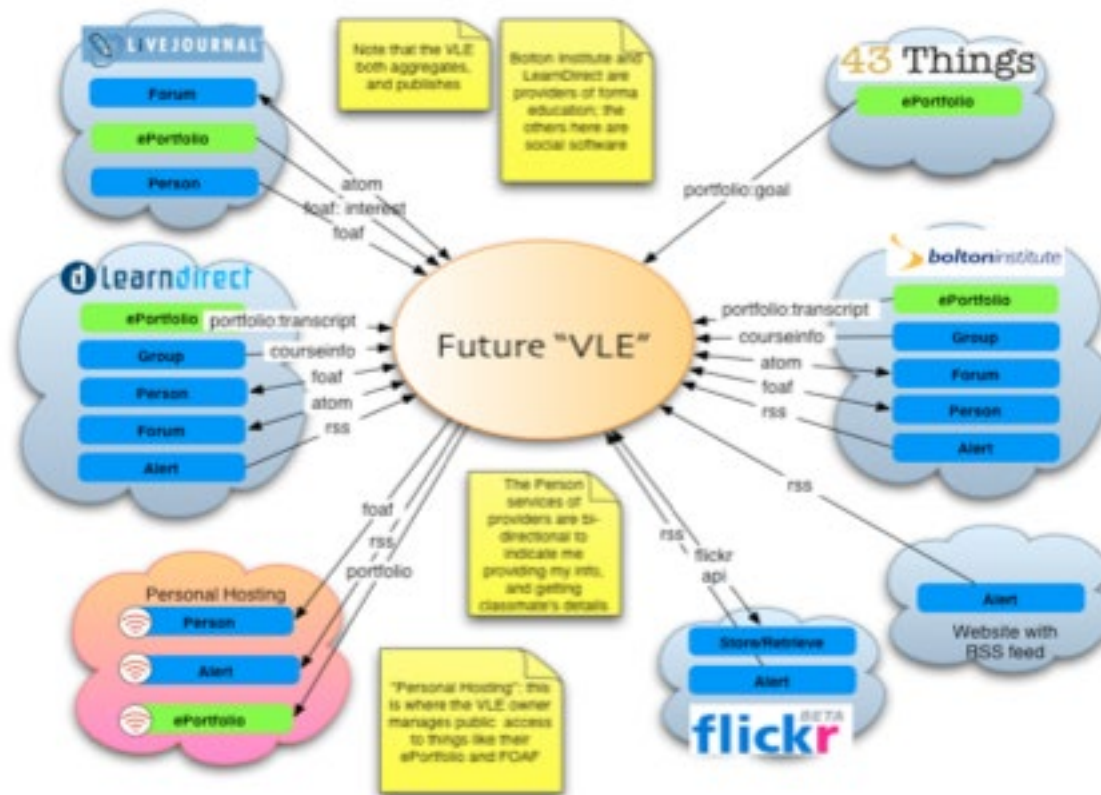


Image: <http://www.cetis.ac.uk/members/ple/resources/edf.ppt>

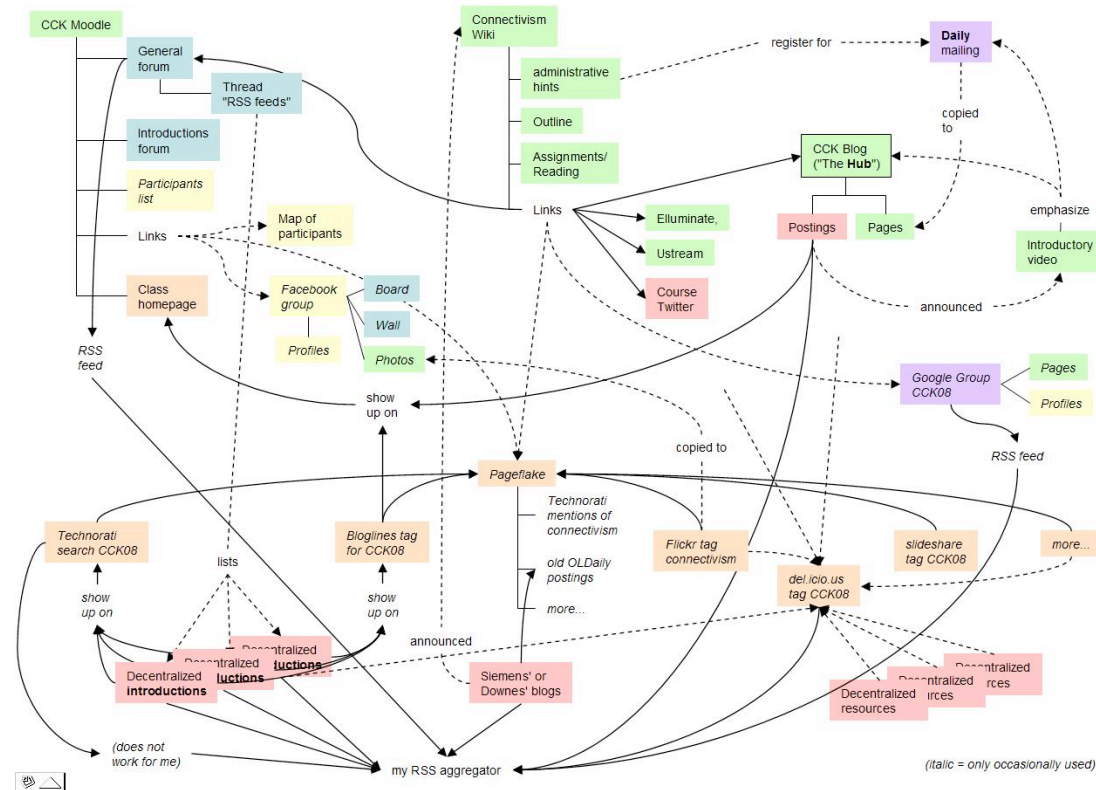
# The Personal Learning Environment

<http://ple.elg.ca/>

An instantiation of these constraints

A distributed learning environment

The MOOC



# #PLENK2010

<http://connect.downes.ca/>



Attempting to understand using yesterday's values...

Power, trust, incentive, propagation, broadcast, messaging

What we saw were surface phenomena

That's why we saw so many maps

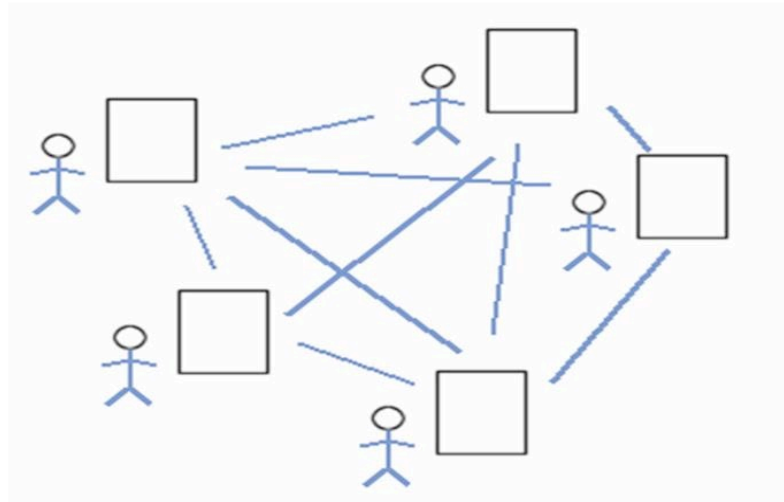


Yesterday

David Reed: the power of peer is in the peer

Is the power of the brain in the neuron?

Really?



# ~~Collective~~ Connective Intelligence

<http://www.downes.ca/post/43456>

We're trying to understand society by collecting individuals  
But a sand castle isn't just a pile of sand



Image: <http://pixdaus.com/single.php?id=25529>

# Organization

<http://www.downes.ca/presentation/257>



Knowledge is distributed across a network of connections  
Learning is the ability to traverse and grow those networks



# Connectivism

<http://www.downes.ca/post/38653>

# The product of learning is the learner

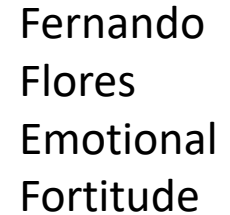


Image: [http://www.masternewmedia.org/news/2008/06/01/making\\_sense\\_of\\_new\\_technologies.htm](http://www.masternewmedia.org/news/2008/06/01/making_sense_of_new_technologies.htm)

<http://www.downes.ca/post/51122>

It's not that there's nothing to learn  
But that it's complex, and needs to be *navigated*  
Not memorized



Image: <http://www.gapingvoid.com/complicated128.jpg>

# Complexity

<http://www.downes.ca/post/48669>

A tool for learning networks

It functions as a *node*

Not as part of a *mass*



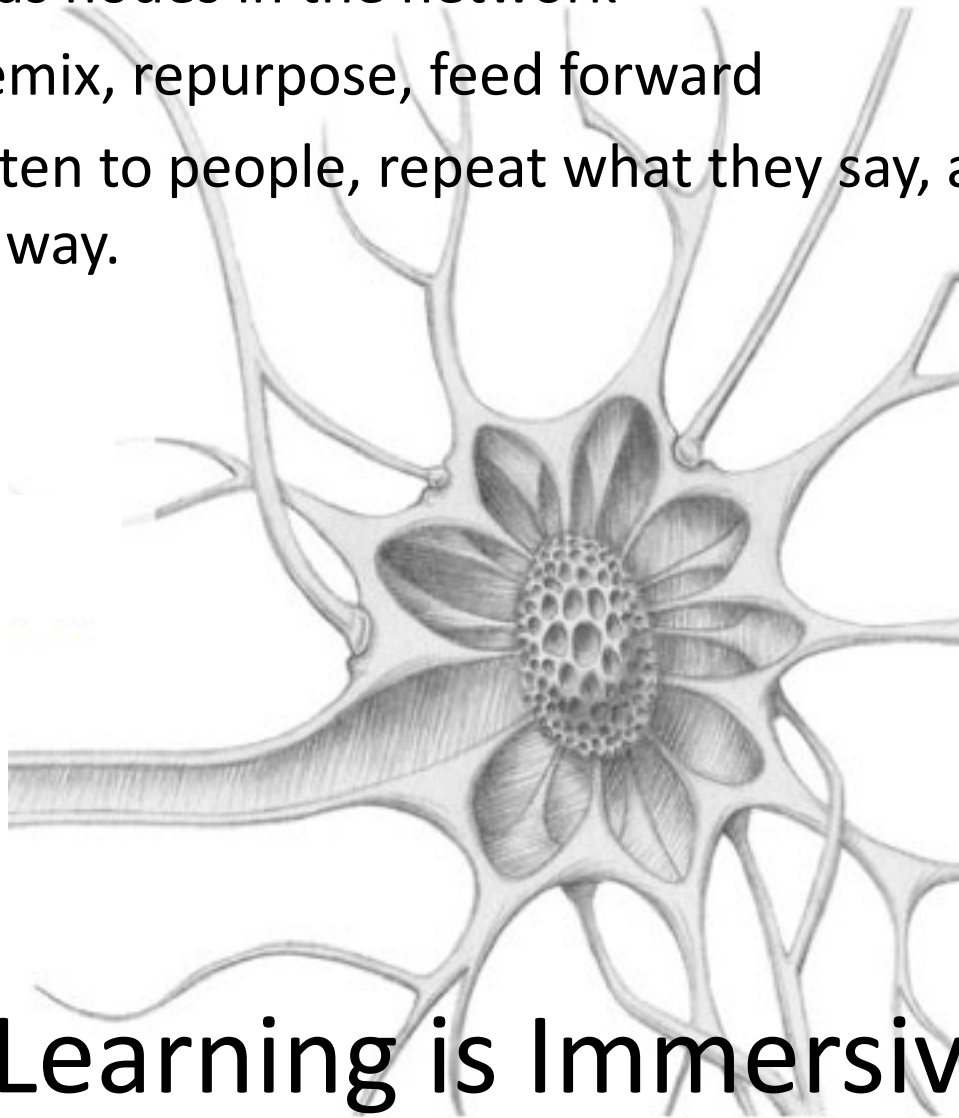
# gRSShopper

<http://grsshopper.downes.ca/>

We function as nodes in the network

Aggregate, remix, repurpose, feed forward

Newmark: listen to people, repeat what they say, and then get out of the way.



# Learning is Immersive

<http://ple.elg.ca/course/?p=18>



We develop our neural net by participation in the social net  
That's also how we develop the social net



# Learning is growth

<http://www.downes.ca/post/53527>

# Two kinds of knowledge

## Networks in general

## A common set of principles

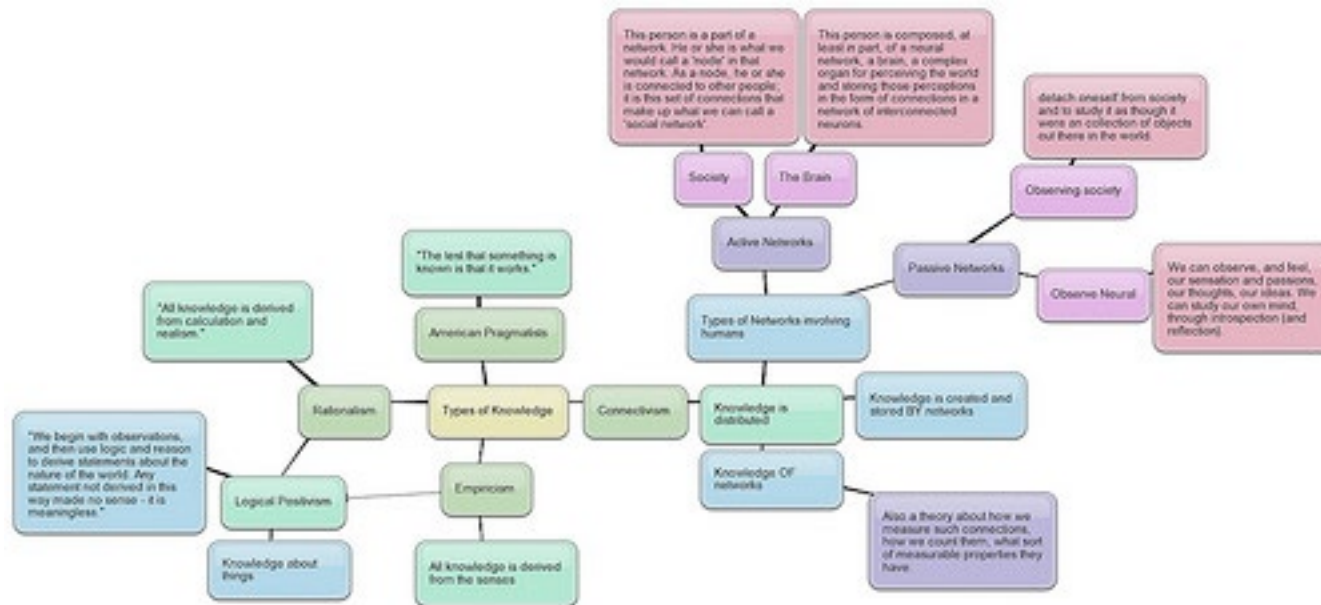
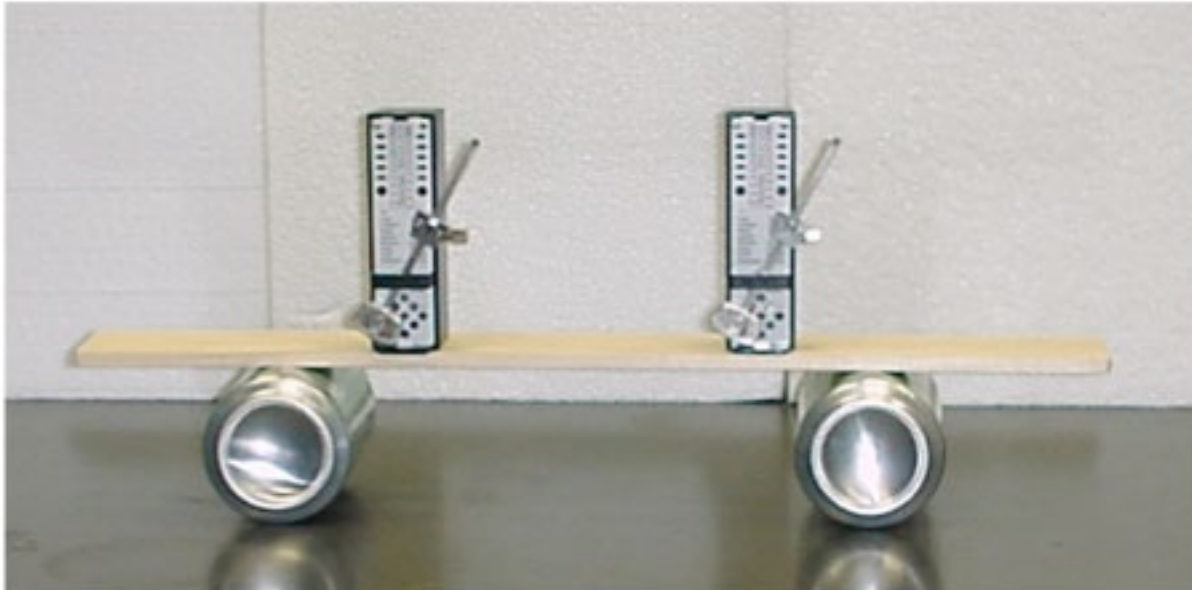


Image: <http://techticker.net/2008/09/16/types-of-knowledge/>

# Networks, Network Theory

<http://www.downes.ca/post/33034>

## Self Organization

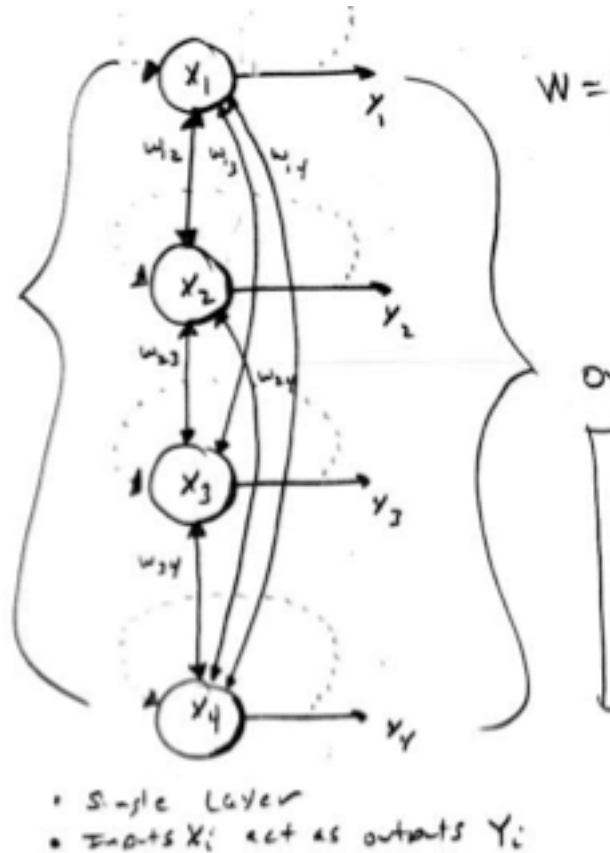


## Metronomes

<http://salt.uaa.alaska.edu/dept/metro.html>

<http://www.youtube.com/watch?v=W1TMZASCR-I>

How networks learn = how networks form connections



## Principles of Association

Quality of network learning =

Retained and expanded capacity to form connections

Cascade phenomena (diseases, propaganda) = network death

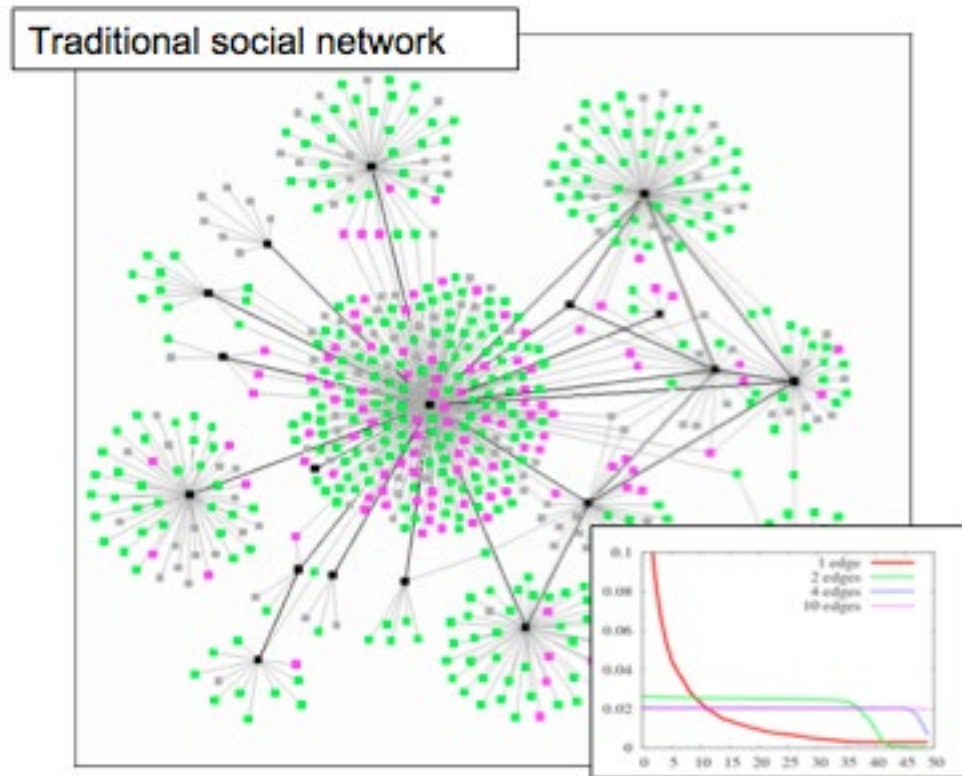


## Cascade Phenomena



Centralized, based on influence, trust

Characterized by power law, viral propagation, hierarchy

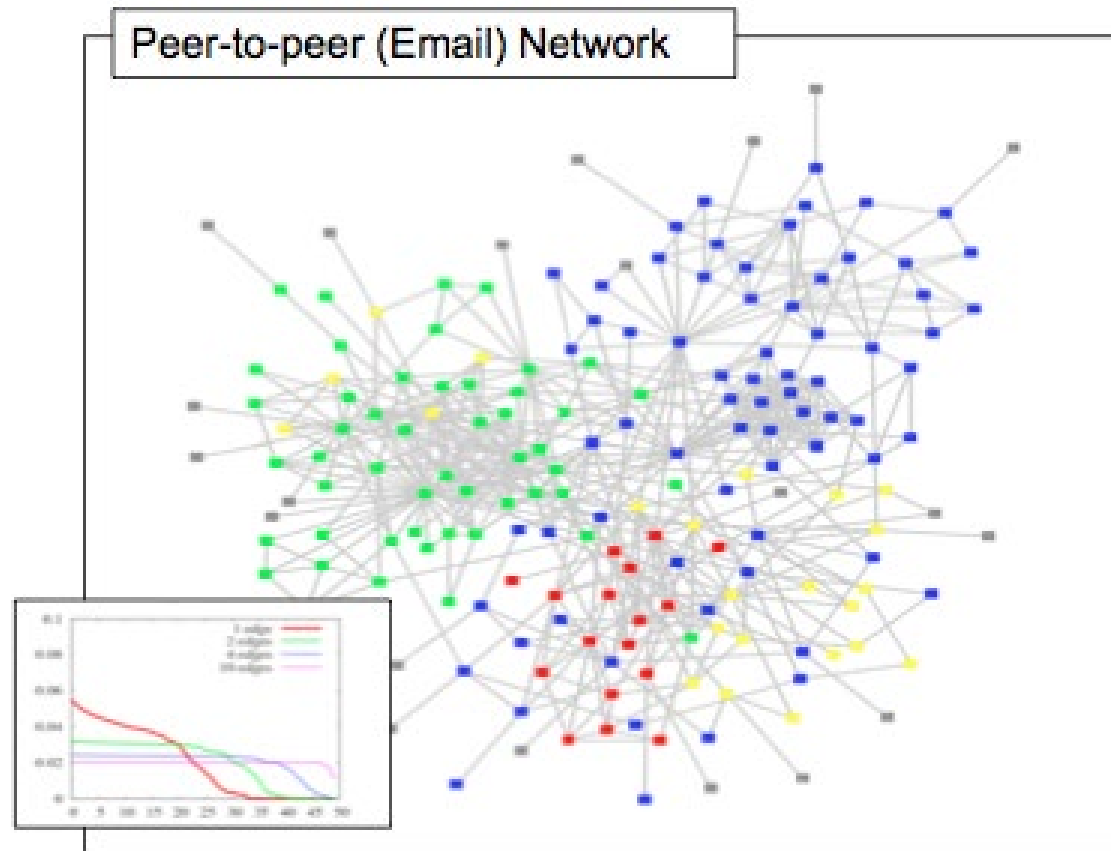


## Network Structure - Tree

Distributed, discussion based

Balanced, democratic

Stable



## Network Structure - Mesh

<http://www.daniel-lemire.com/fr/abstracts/DIVERSITY2008.html>  
[blog/using-email-to-uncover-hidden-social-networks/](http://www.daniel-lemire.com/blog/using-email-to-uncover-hidden-social-networks/)

When networks are not limited by physical constraints  
They tend toward network death



Image: <http://limitedfun.wordpress.com/category/photography/page/6/>

## The Limits of Scale Free

<http://www.downes.ca/post/48579>

Decentralize  
Distribute  
Disintermediate  
Disaggregate  
Dis-integrate  
Democratize  
(The Semantic Principle)  
Dynamize  
Desegregate



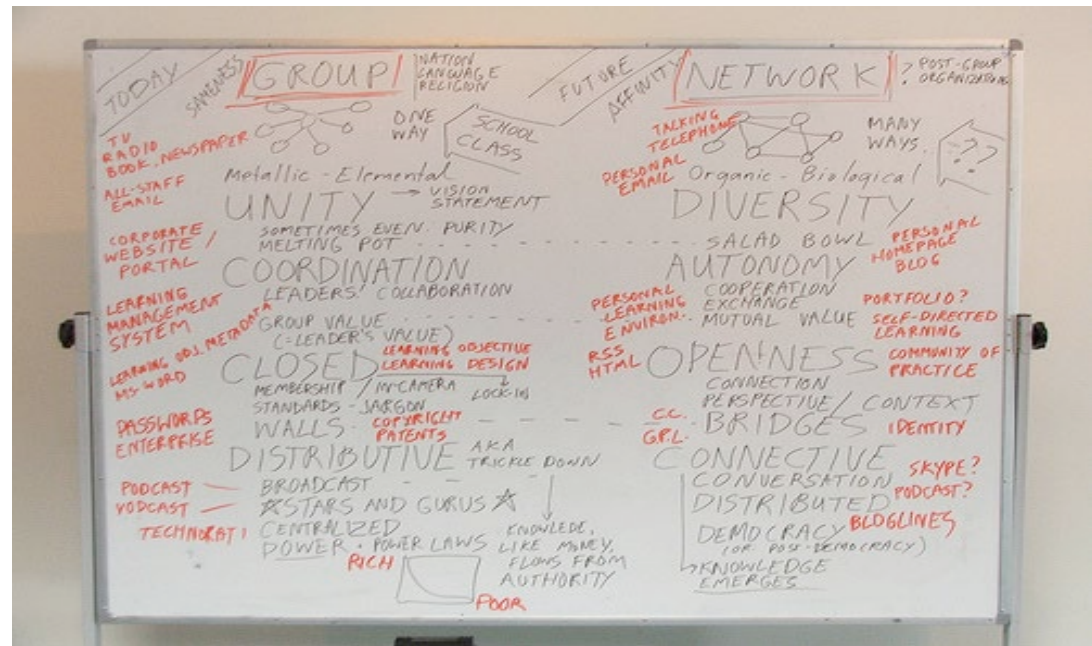
# Stable (Self-Organizing) Networks

Autonomy – individual values, not collective (or corporate) values

Diversity – each person has a distinct perspective

Openness – there are fluid boundaries, no ownership or walls

Interaction – the knowledge is the network, not in the individual



Fernando Flores

Pluralistic Networks

# The Semantic Principle

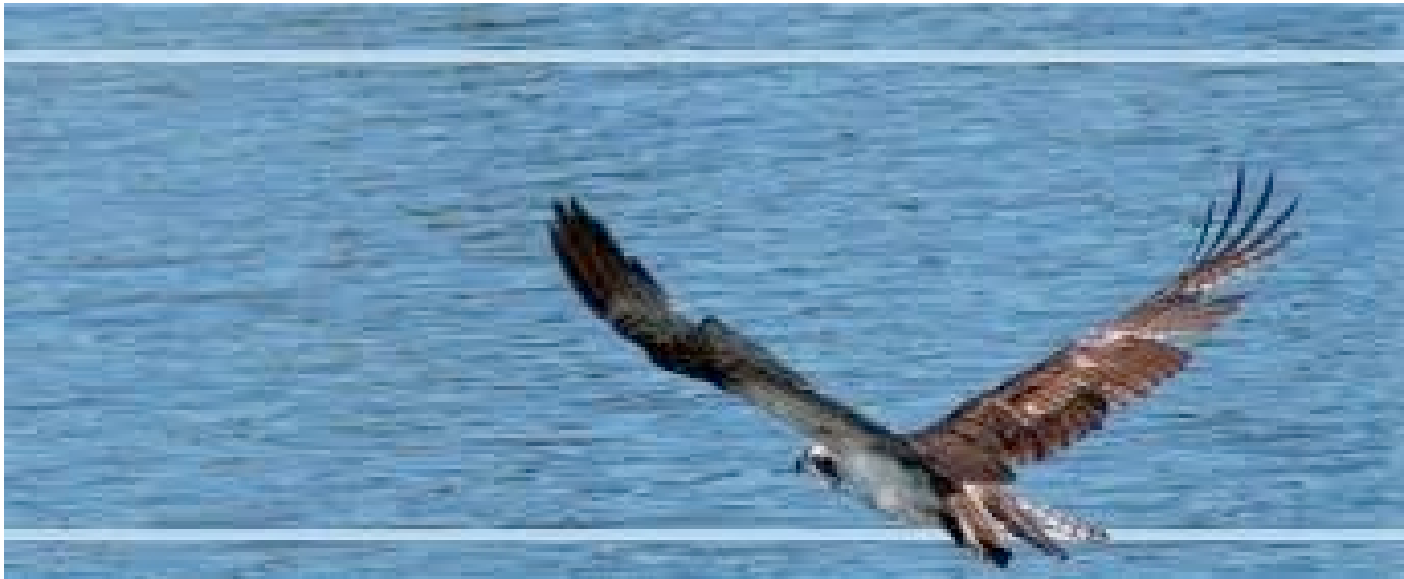
[http://www.flickr.com/photos/stephen\\_downes/252157734/](http://www.flickr.com/photos/stephen_downes/252157734/)



These values are not just abstract

They represent a shift in business values from ownership and control to stewardship, agility and stability

They should inform everything from management practices to software purchases



## Your Business Takeaway

<http://www.downes.ca/post/38502>

<http://www.downes.ca>



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