

New Tools for Personal Learning

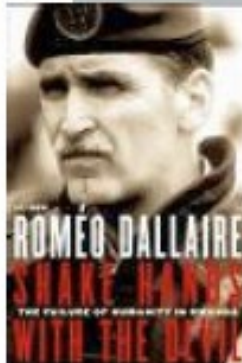
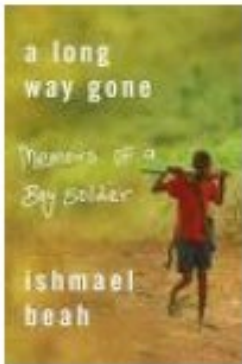


Stephen Downes

MEFANET 2009 Conference

Brno, Czech Republic, November 25, 2009

Prologue



- It turns out to be very easy to teach people things - people are very impressionable
- What proves to be very hard is teaching people the right things - how *not* to learn

<http://www.surgeryminor.com/showcase/propaganda.html>

What I do

OLDaily

[S] [SEARCH] [ABOUT] [ARCHIVES] [OPTIONS]

Stephen's Web

Elsevier Won't Pay (Any More) for Praise

So. Another lesson in ethics from our favorite academic publisher, Elsevier.
"Elsevier officials said Monday that it was a mistake for the publishing giant's marketing division to offer \$25 Amazon gift cards to anyone who would give a new textbook five stars in a review posted on Amazon or Barnes & Noble."
What they mean, of course, is that it was a mistake to do it in such a way that they would be caught. Scott Jaschik, *Inside Higher Ed*, June 23, 2009. [Link]
[Tags: Books, Marketing, Academia] [Previous][Next] [Edit] [Delete][Spam]

Comments

Comment

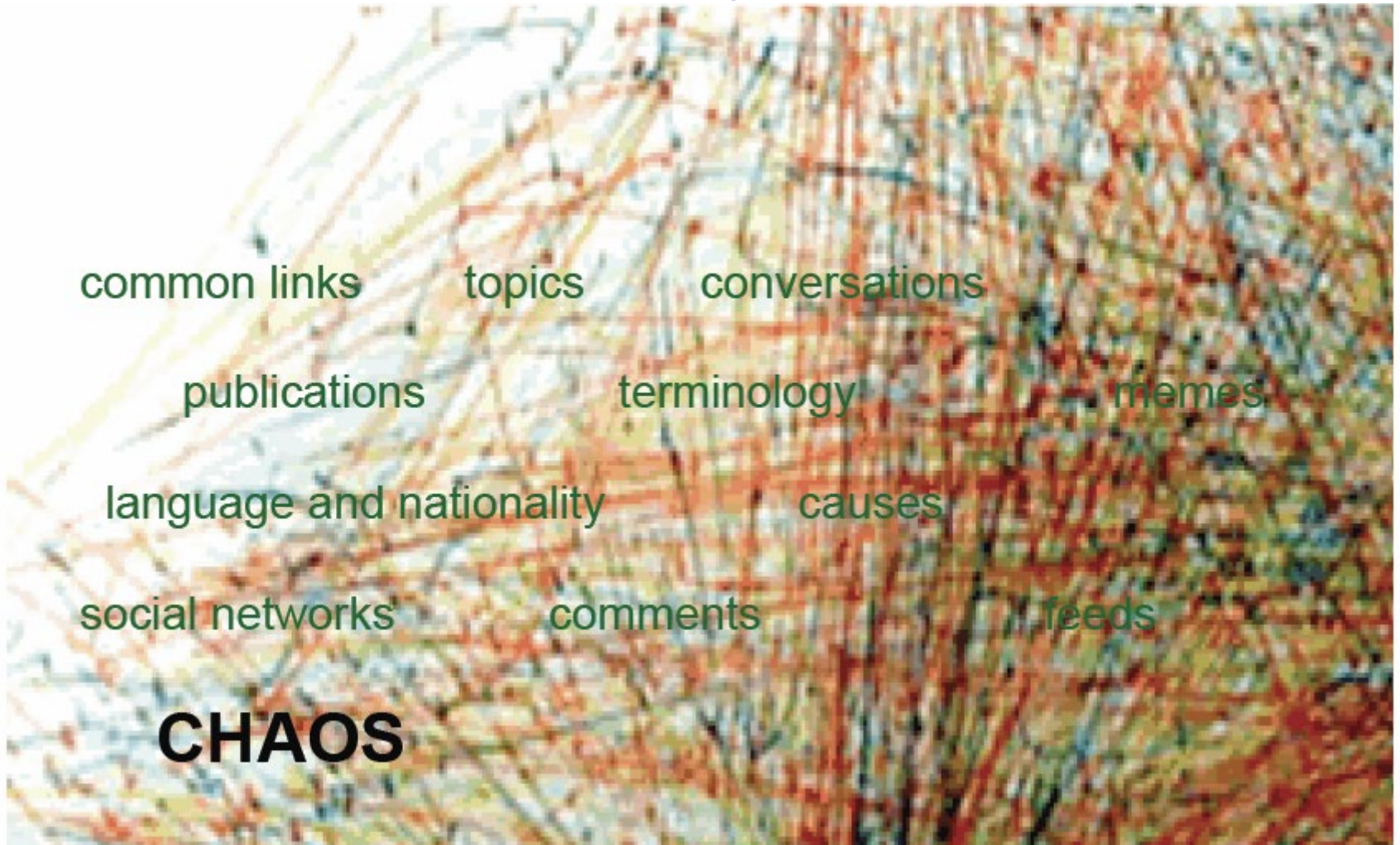
You are logged in as G

Showing rows 0 - 29 (16,171 total, Query took 0.0027 sec)

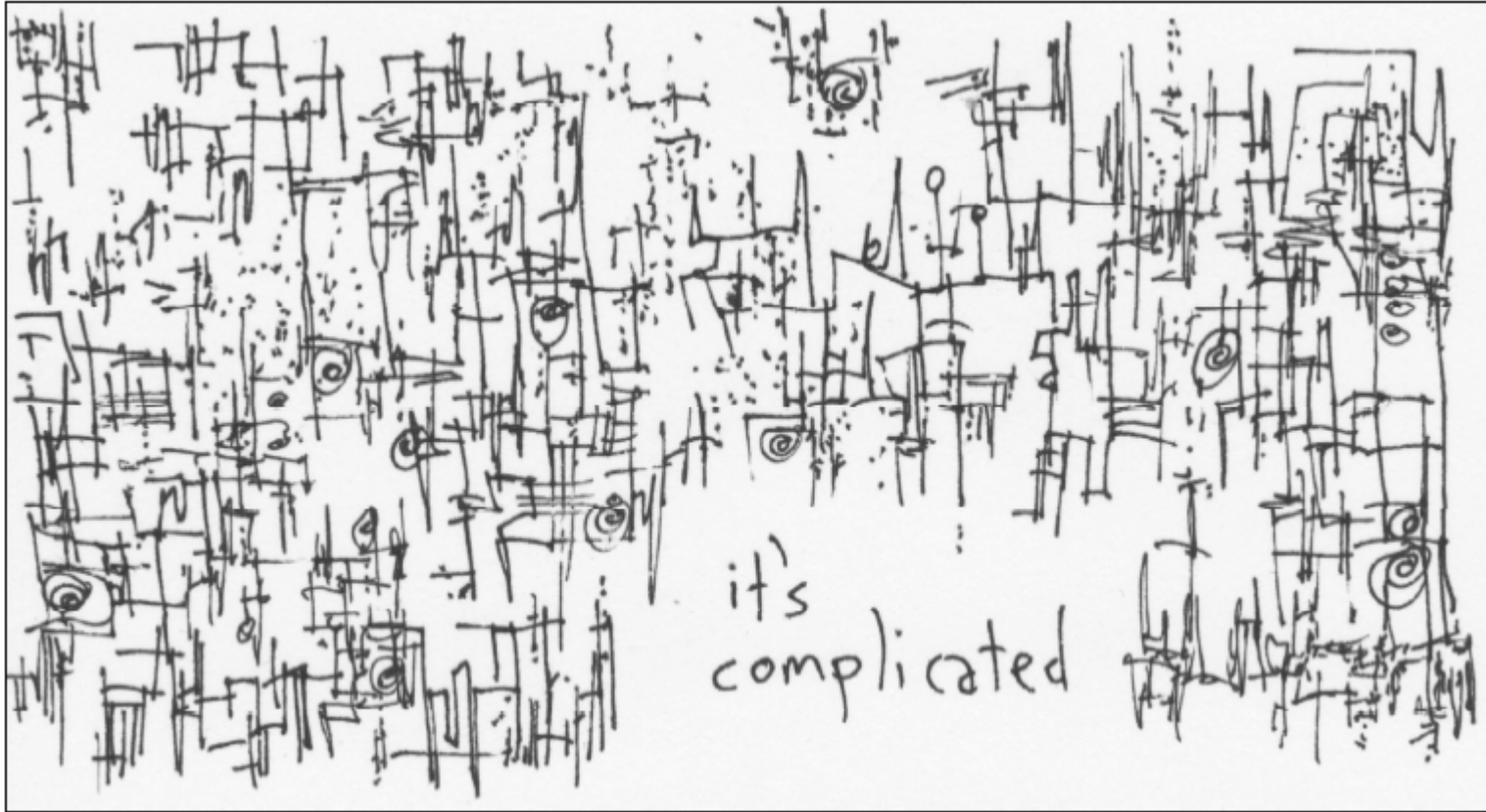
SQL query:

```
SELECT `post_title`  
FROM `post`  
WHERE `post_type` = 'link'  
LIMIT 0 , 30
```


What does 16,000 posts look like?



Complicated, Complex

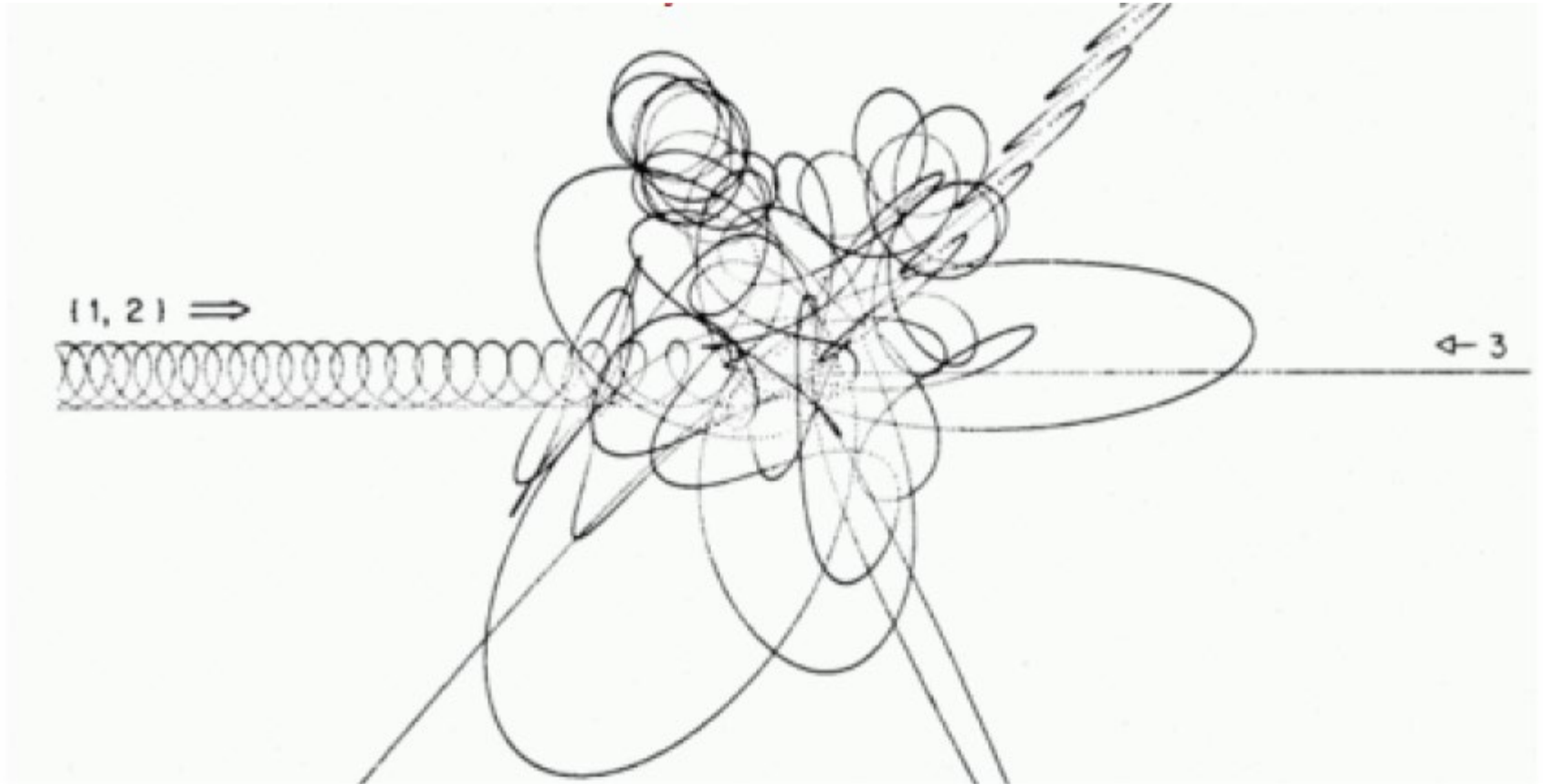


The (First) Butterfly Thesis



a butterfly flapping its wings in South America
can affect the weather in Central Park.... so why
don't we **get that butterfly?**

The Three Body Problem



http://www.scholarpedia.org/article/Three-body_problem

<http://www.dynamical-systems.org/threebody/index.html>

Connectivism: Engagement

- There is no curriculum, no theory, no body of knowledge
 - (or, more accurately, the curriculum is the McGuffin)
- The product is not the knowledge, it is the *learner*
- It's not that there's nothing to learn, it's that it's *complex* and needs to be navigated... not memorized



The three Ls: language, logic and learning



First Theme

active engagement, not passive observation...

- a bit like ANT, but no presumption of commonality, translation...
- a bit like action research, but no presumption of a community of practice

http://carbon.cudenver.edu/~mryder/itc_data/ant_dff.html

<http://www.emtech.net/actionresearch.htm>

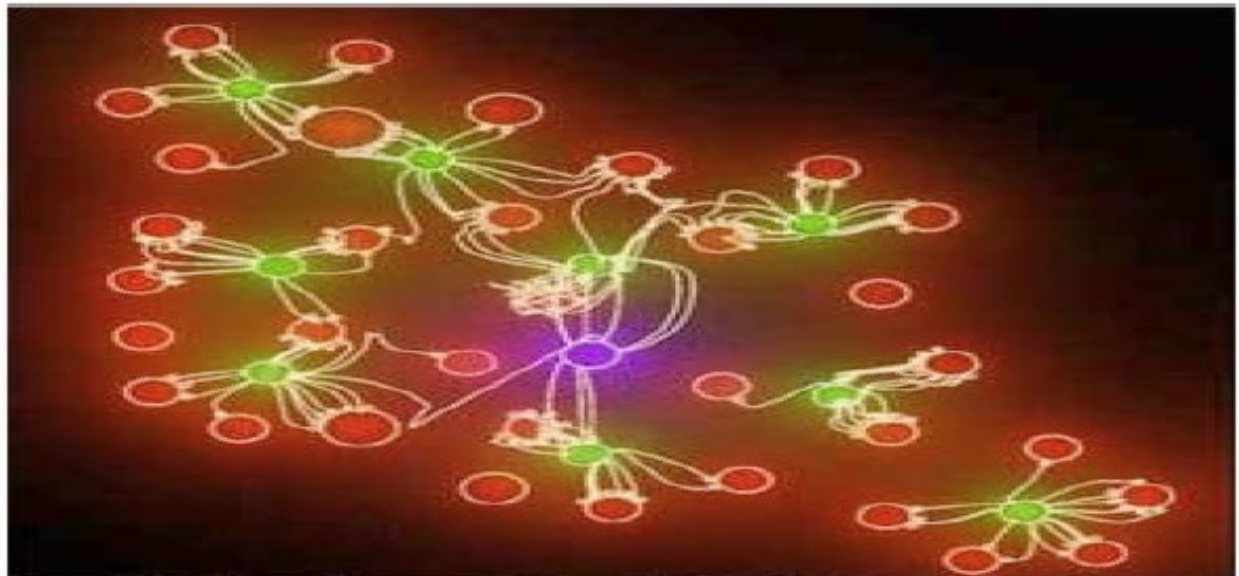
A photograph showing the silhouettes of three people standing on a dark, rocky cliff overlooking the ocean at sunset. The sky is a vibrant orange and yellow, with the sun low on the horizon. The person on the left is standing tall, looking out. The person in the middle is standing slightly behind and to the right. The person on the right is crouching or sitting low, looking down. The ocean waves are visible in the distance.

Thinking for yourself

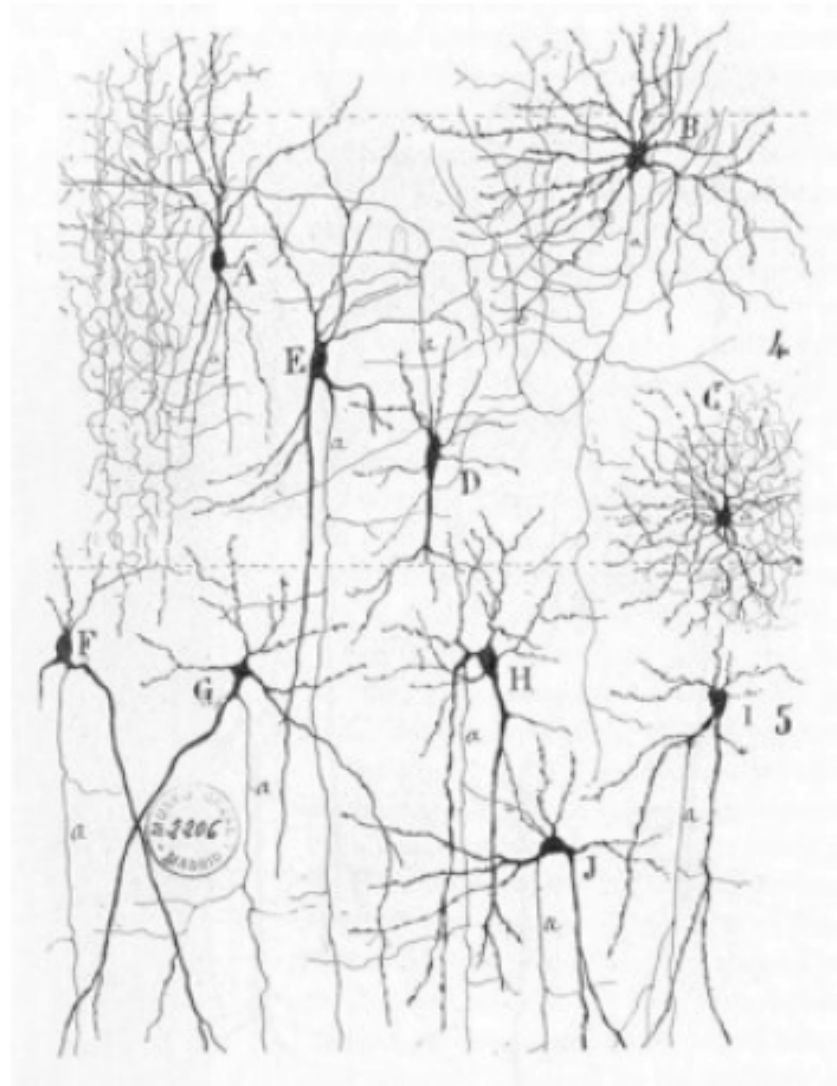
Critical thinking and reflection

Free Learning

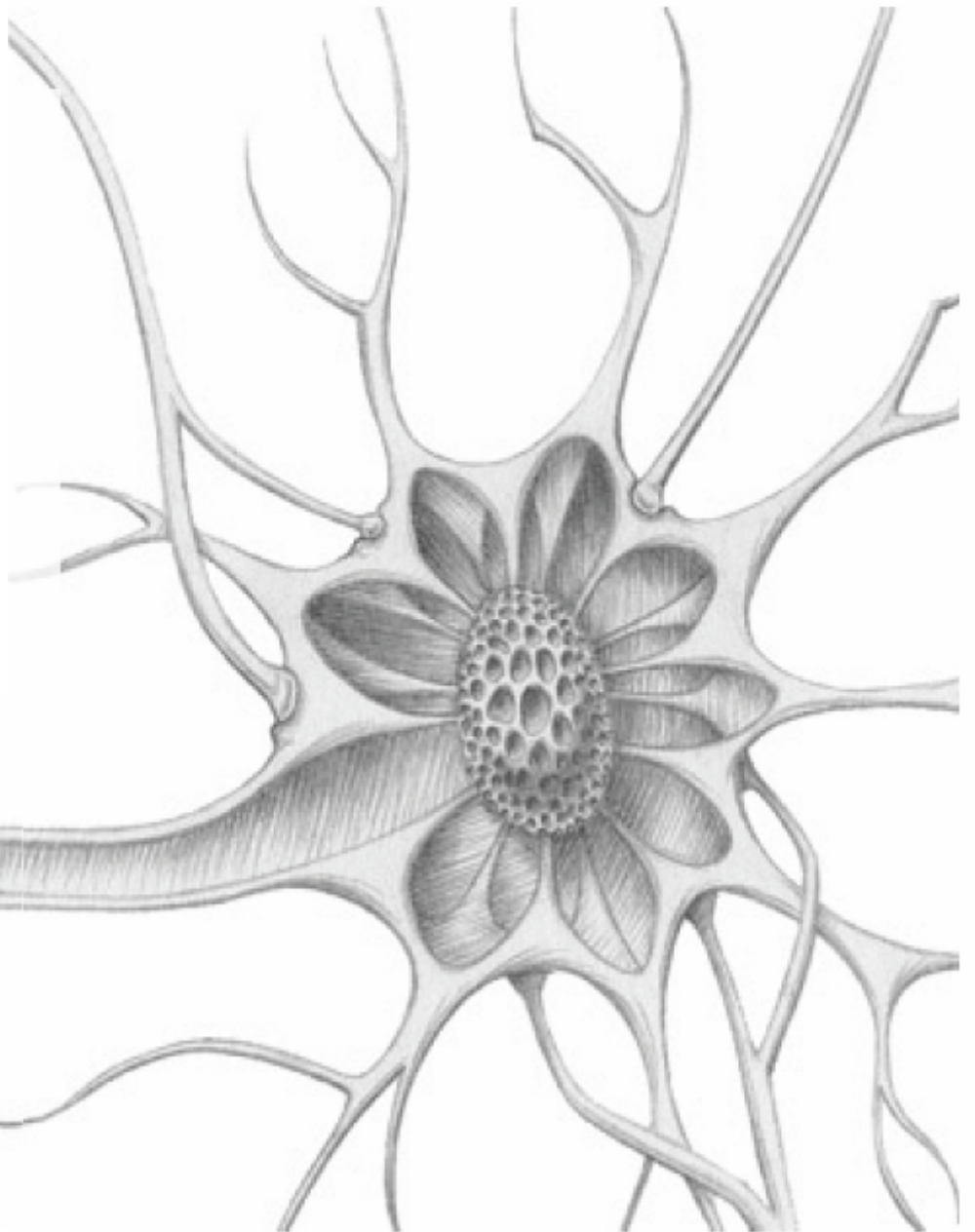
- The *picture* of learning you should have is one of a large set of connected nodes (like the neurons in a brain)



- Teachers are nodes, students are nodes
- Both teaching and learning consists of sending and receiving communications to other nodes



Aggregate
Remix
Repurpose
Feed Forward



ARRFF

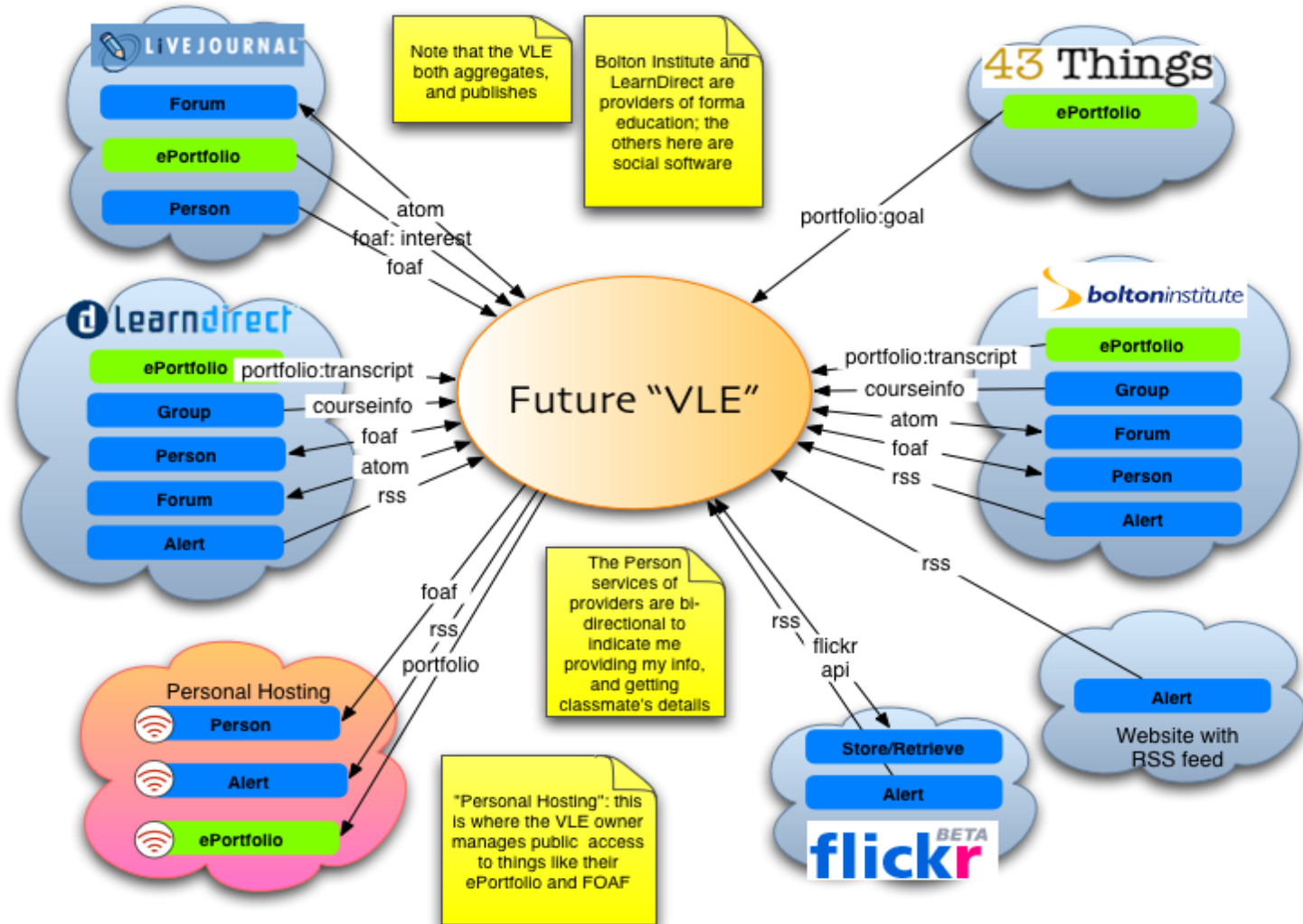
A high-angle photograph of a river flowing through a dense, vibrant green forest. The river is surrounded by thick foliage on both banks. In the middle distance, a small waterfall cascades over rocks, creating a misty spray. The water reflects the surrounding greenery. The overall scene is serene and natural.

pattern recognition

It's a river,
not a
reservoir

Surfing
Sensing
Experiencing

The Idea of the PLE...



Plex Personal Learning Environment Example

The screenshot displays the Plex Personal Learning Environment interface. The main window is titled 'Plex' and contains several panes:

- Opportunities Explorer:** A tree view on the left showing a hierarchy of opportunities. The selected item is 'learn three chord rock guitar'.
- Opportunity Viewer:** A pane on the bottom left showing details for the selected opportunity. It includes fields for Title, Number of registered people, Provider, and Location.
- Search Results:** A pane on the right showing a list of search results for the query 'learn three chord rock guitar'. The results are displayed in a table with columns for Title, Provider, and Location.
- Web Browser:** A pane at the bottom right showing the details of the selected opportunity on the 43 Things website.

The search results table is as follows:

Title	Provider	Location
Leran to play the guitar like no one has ev...	43 Things	http://www.43things.com/things/view/161919
learn to play acoustic guitar, also get a gu...	43 Things	http://www.43things.com/things/view/161919
Learn to play the guitar guitar properly an...	43 Things	http://www.43things.com/things/view/161919
meet Mcfly and just chill out with them an...	43 Things	http://www.43things.com/things/view/161919
Create a music room downstairs, with a dr...	43 Things	http://www.43things.com/things/view/161919
i want to keep playing guitar and play infr...	43 Things	http://www.43things.com/things/view/161919
i want to learn to play the guitar and then...	43 Things	http://www.43things.com/things/view/161919
Sing and play bass guitar at the same tim...	43 Things	http://www.43things.com/things/view/161919

The web browser pane shows the details of the selected opportunity on the 43 Things website. The address bar displays the URL <http://www.43things.com/things/view/161919>. The page content includes a search bar, a 'GO' button, and a message that '1 person wants to do this...'.

<http://reload.ces.strath.ac.uk/plex/>

Collecting and Filtering RSS

<http://www.downes.ca/mygluframe.htm>

MyGlu

By Stephen Downes

[About](#)

Force: 1

Harvesting <http://del.icio.us/rss/Downes>

Feedfile is: myglu/feedcache/del.icio.us_rss_Downes

No content. Harvesting from source.

URL: <http://del.icio.us/rss/Downes>

Parsing Feed=HASH(0x9f0f10c)

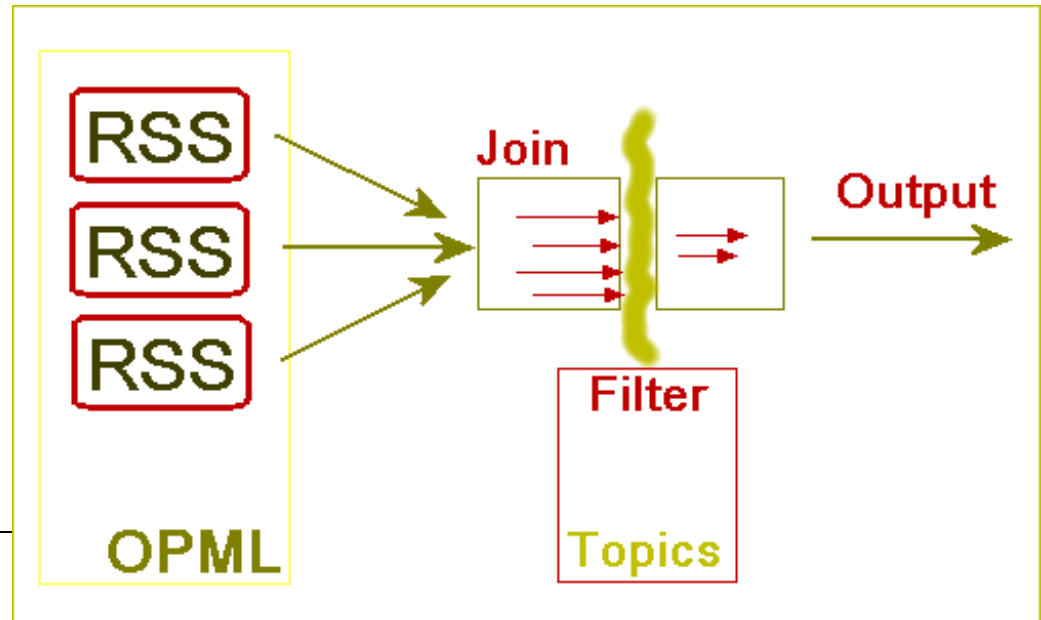
Harvesting <http://www.downes.ca/news/OLDaily.xml>

Feedfile is: myglu/feedcache/www.downes.ca_news_OLDaily.xml

No content. Harvesting from source.

URL: <http://www.downes.ca/news/OLDaily.xml>

Parsing Feed=HASH(0x9f0ef8c)



RSS Writr

Start Search

[[Change Theme](#)] Stephen's Web
[OLDaily](#) [[Archives](#)] [[Threads](#)] [[Best Of](#)] [[Search](#)] [[Options](#)]

Welcome to RSS Writr

Select a content source from the list (see the panel at the lower right hand side of the page).

When you see an item that interests you, drag it into the editing area (at right). You can drag multiple items into the editor.

When you have finished editing, save your new post to your blog.

Title:

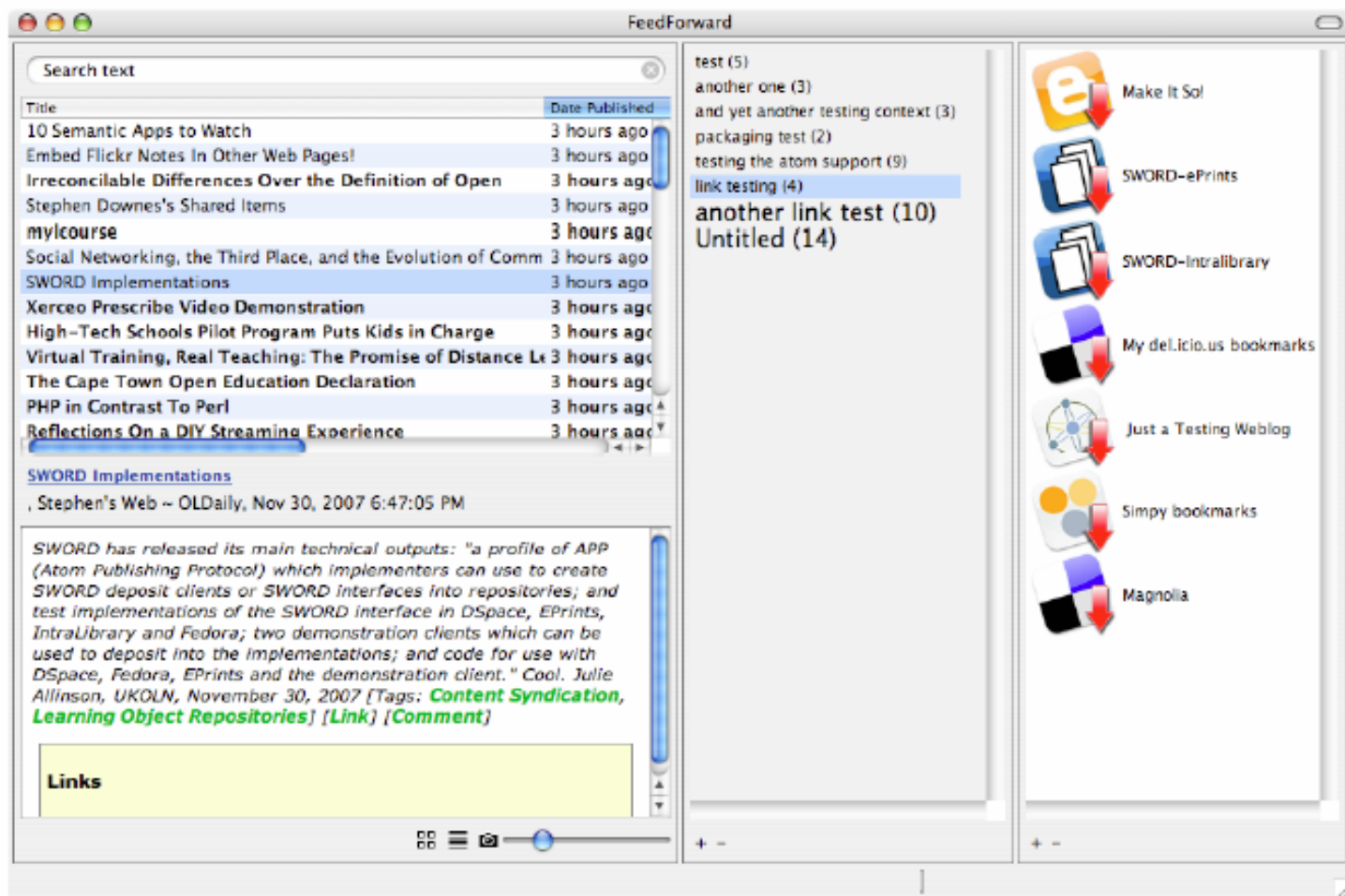
Shift+Enter for single line space

Content Sources

Stephen's MyGlu Test

<http://www.downes.ca/editor/writr.htm>

FeedForward



Second Theme



Learning.... vs the right learning

= no simple cause & effect

Me and my network of friends

O = primary

() = no more

tangento	x	(x)	x				x	
kris	x	(x)	x				x	
jigga	(x)	x	x		x		x	x
gumbo	x	x	x	x	x		(x)	
olgerik	x	x	x	x	x	x	(x)	x
sz	x		x	x			(x)	(x)
								x

Aggregate

Remix

Repurpose

Feed Forward



email



tlf



sms



flickr



under
sky



twitter



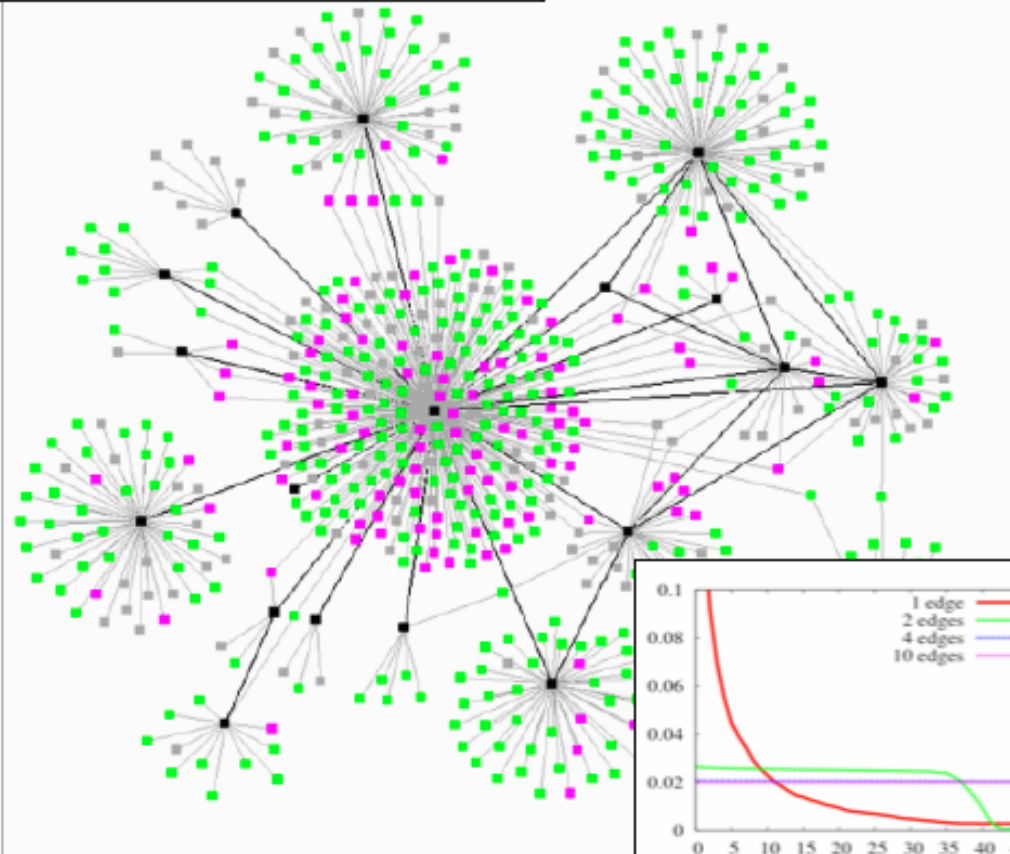
im



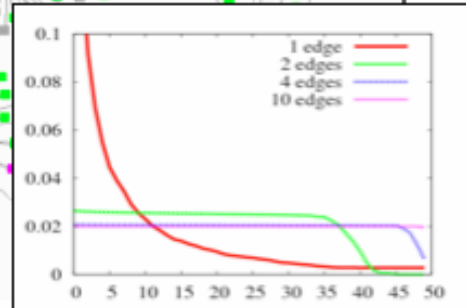
desktop

Network Structures - Tree

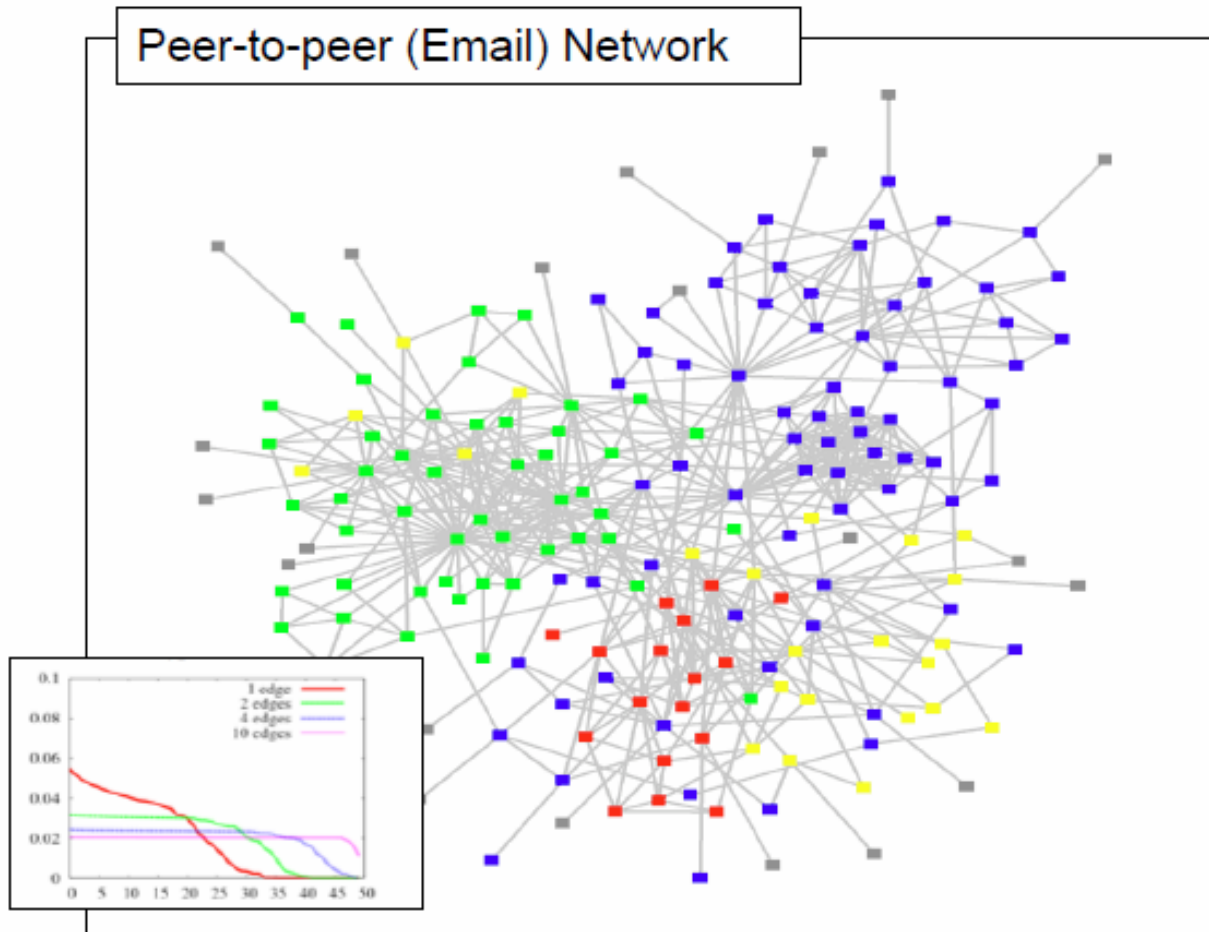
Traditional social network



Central
Influence
Power Law
Viral
Hierarchy



Network Structures - Mesh



Distributed
Discussion
Balanced
Reflective
Democracy

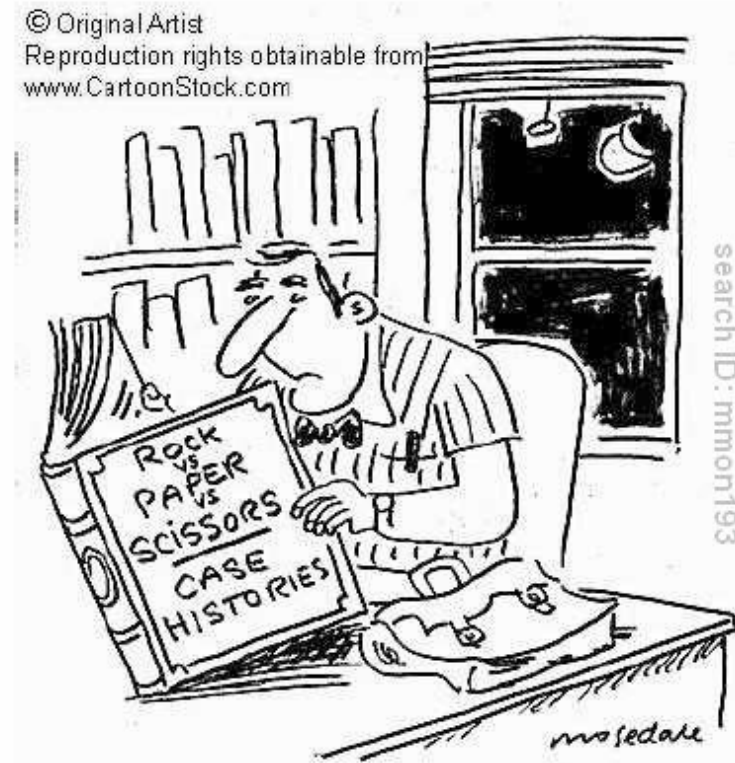
<http://www.daniel-lemire.com/fr/abstracts/DIVERSITY2008.html>

<http://www.mailchimp.com/blog/using-email-to-uncover-hidden-social-networks/>

Individualism vs Mutuality

Independent
variables vs
dependent
variables

eg. Rational
decision - vs role
model



The myth of solitary autonomy

When we ourselves become the story



The Sharing Thesis

- Not just competition - cooperation
- Open Educational Resources (OERs)
- The only sustainable model



<http://zaidlearn.blogspot.com/2008/06/university-learning-ocw-oer-free.html>

The (Second) Butterfly Thesis



<http://www.flickr.com/photos/durhamskywriter/2858347734/>

Connectivism

“At its heart, connectivism is the thesis that knowledge is distributed across a network of connections, and therefore that learning consists of the ability to construct and traverse those networks.”

What Connectivism Is

<http://halfanhour.blogspot.com/2007/02/what-connectivism-is.html>

Course Components

- The Wiki...



navigation

- [Main Page](#)
- [Recent changes](#)
- [Random page](#)
- [sandbox](#)
- [Help](#)

ltc links

- [LTC Website](#)
- [Activities](#)
- [Workshops and Resources](#)
- [Teaching with Technology](#)

um projects

- [Educational Psychology](#)

[page](#) [discussion](#) [view source](#) [history](#)

Connectivism

Welcome to the **Connectivism and Connective Knowledge Online Course** support wiki.

Conference tags: CCK08

This page is also available in: [Spanish](#), [Portuguese](#), [Italian](#), [Hungarian](#), and [Chinese](#) (Simplified Character Version). See also [this short post](#) on making surfing in China easier]

This course also has a FaceBook group at [CCK08](#)

Contents [hide]

- 1 Please enter your email address here if you'd like to be involved (either for free participation or to enroll for cre
- 2 Course blog is available here
- 3 Course Details
- 4 Weekly Activities
- 5 Learner Assignments and Evaluation
- 6 Course Links
- 7 Pre-week 1
- 8 Week 1: What is Connectivism? (September 8-14)
- 9 Week 2: Rethinking epistemology: Connective knowledge (September 15-21)
- 10 Week 3: Properties of Networks (September 22-28)
- 11 Week 4: History of networked learning (September 29-October 5)

<http://ltc.umanitoba.ca/wiki/Connectivism>

Course Components

- Course Moodle Forum

Connectivism and Connective KnowledgeYou are currently using guest access ([Login](#))

Courses ▶ CCK08

Bloglines

#cck08 Reading the Moodle forum... It is me, or does ti really looks...

#cck08 Reading the Moodle forum... It is me, or does ti really looks like mrs. Fitzpatrick is trolling?

Trying to determine why I cannot connect to the CCK08 Moodle Forum

Trying to determine why I cannot connect to the CCK08 Moodle Forum...

User:Vtaylor/Connectivism and Connective Knowledge

[<http://valerie.posterous.com/cck08-is-...>]

How to filter your CCK08 email (in Gmail)

How to create a filter for your CCK08 email.

Bill Kerr's Challenge to Connectivism

I'm struggling to complete my reading assignments for George and Stephen's online course on Connectivism and Connected Knowledge.

Topic outline

Connectivism and Connective Knowledge is a twelve week course that will explore the concepts of connectivism and connective knowledge and explore their application as a framework for theories of teaching and learning. It will outline a connectivist understanding of educational systems of the future.

Introductions

Google Map of participants

General Forum

Connectivas Spanish pageflakes site

Connectivism English Pageflakes site

Week 1: What is connectivism

1

What is Connectivism?

Calendar

September 2008

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Global events

Course events

Connectivism Course Blog

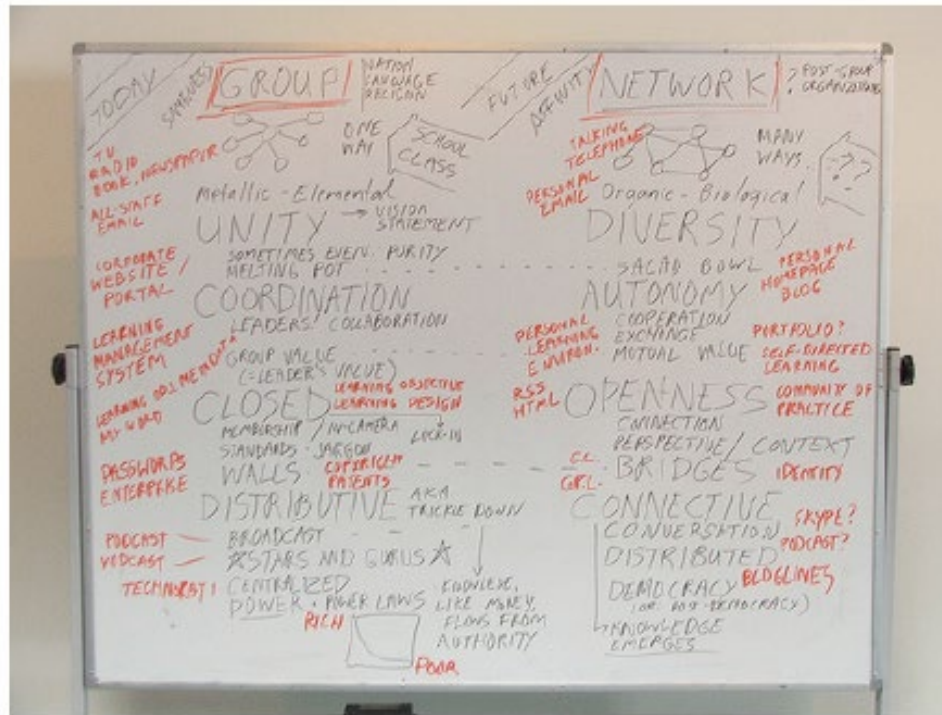
Comparing Connectivism

I've posted a comparison between different theories of learning. It's not a final word summary, but hopefully it can provide a bit of a starting point for discussing the attributes of different concepts. While

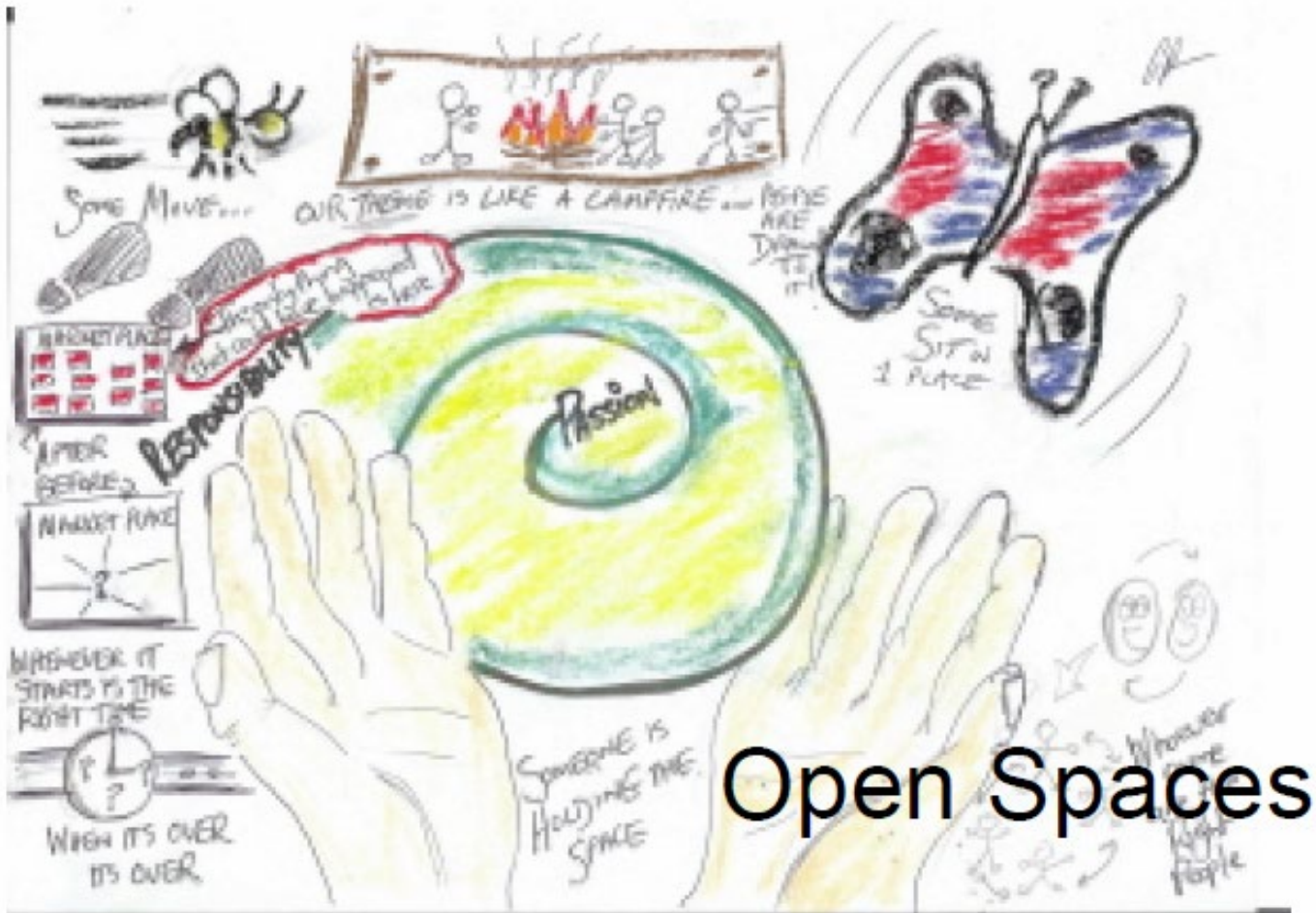
<http://ltc.umanitoba.ca/moodle/course/view.php?id=20>

Third Theme

Groups vs networks



Nancy White - Me, We, Network



Objects We Care About

- Nancy White - networks, not just about connecting the people, but the objects they care about



Distributed Resources



The object system, revisited



**I want a guarantee of
immunity before I tell any
smashed flower pot story.**

Repositories and Syndication

- Academic - OAI-PMH, Dspace, Fedora, Eprints, SWORD, Connexion, OCW
- Web - Flickr, YouTube, Slideshare

RSS

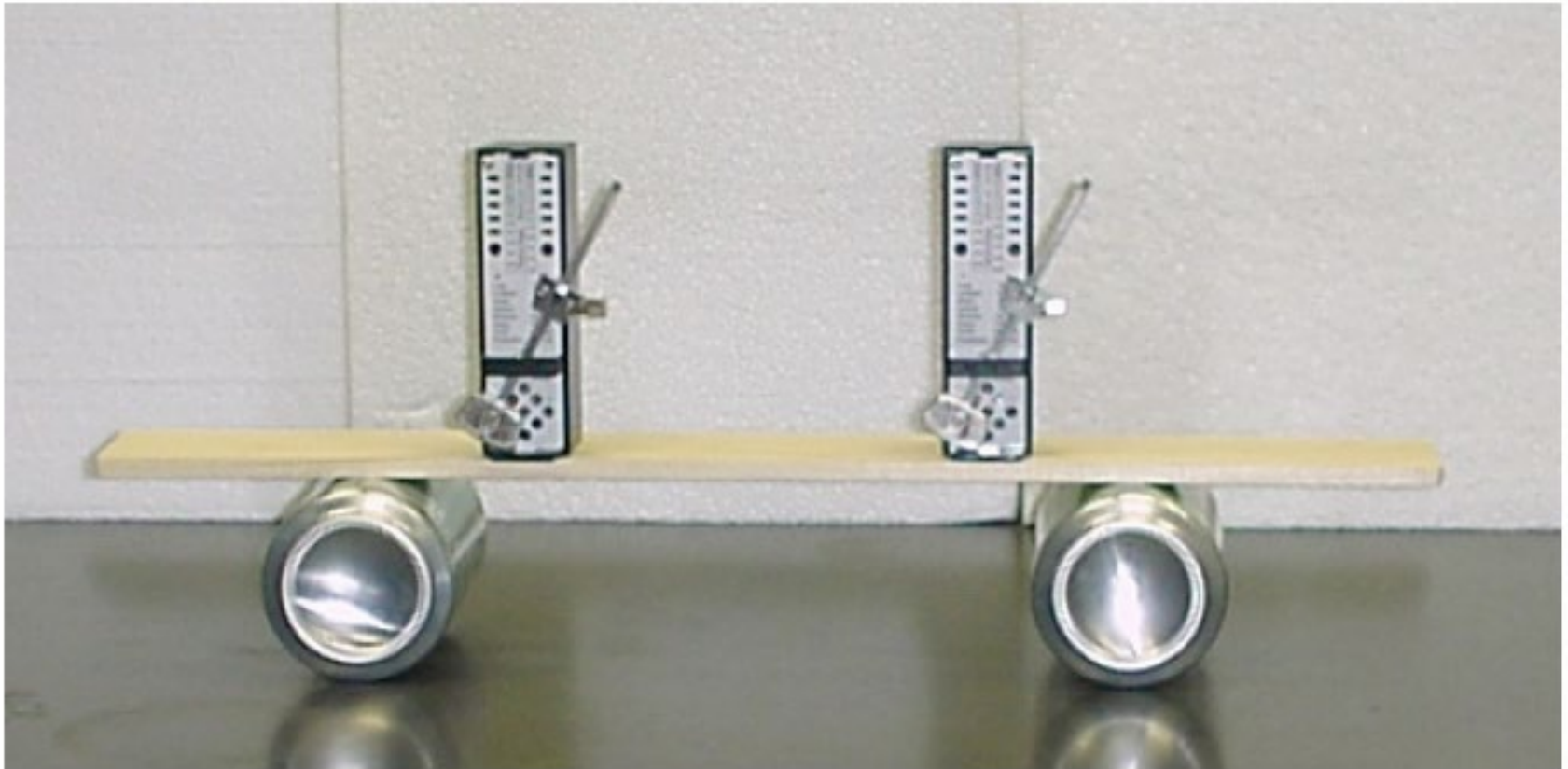
OAI

DC

Atom



Self-organization - metronomes



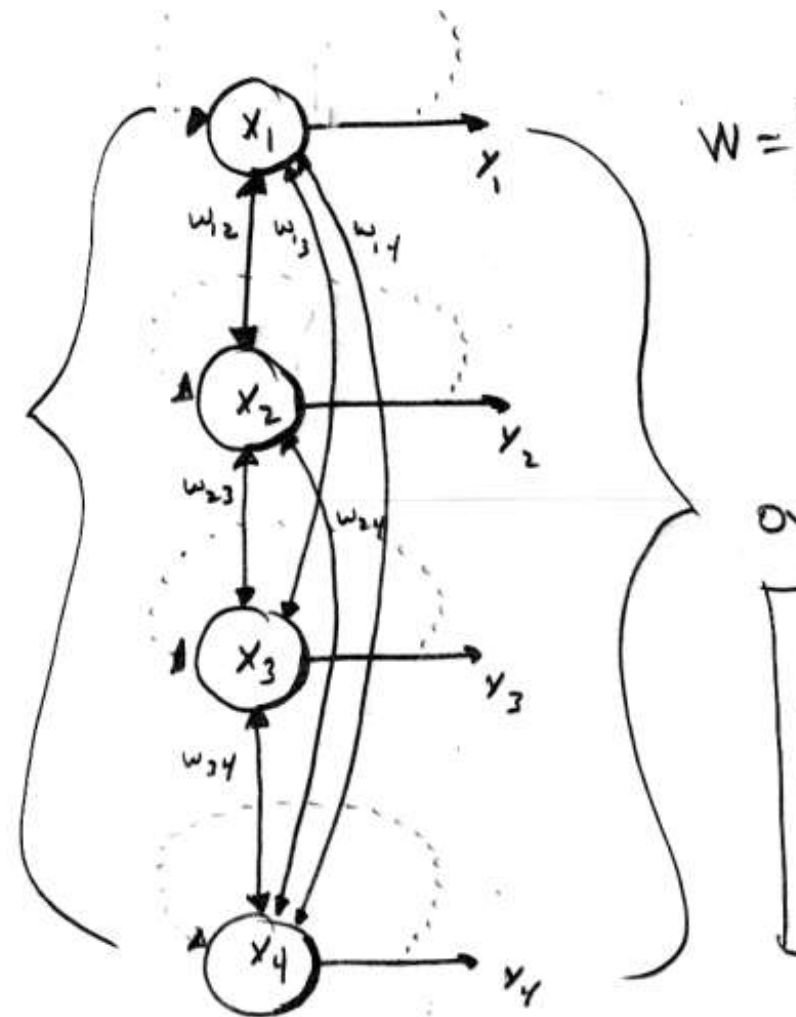
<http://sail.uak.alaska.edu/dept/metro.html>

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

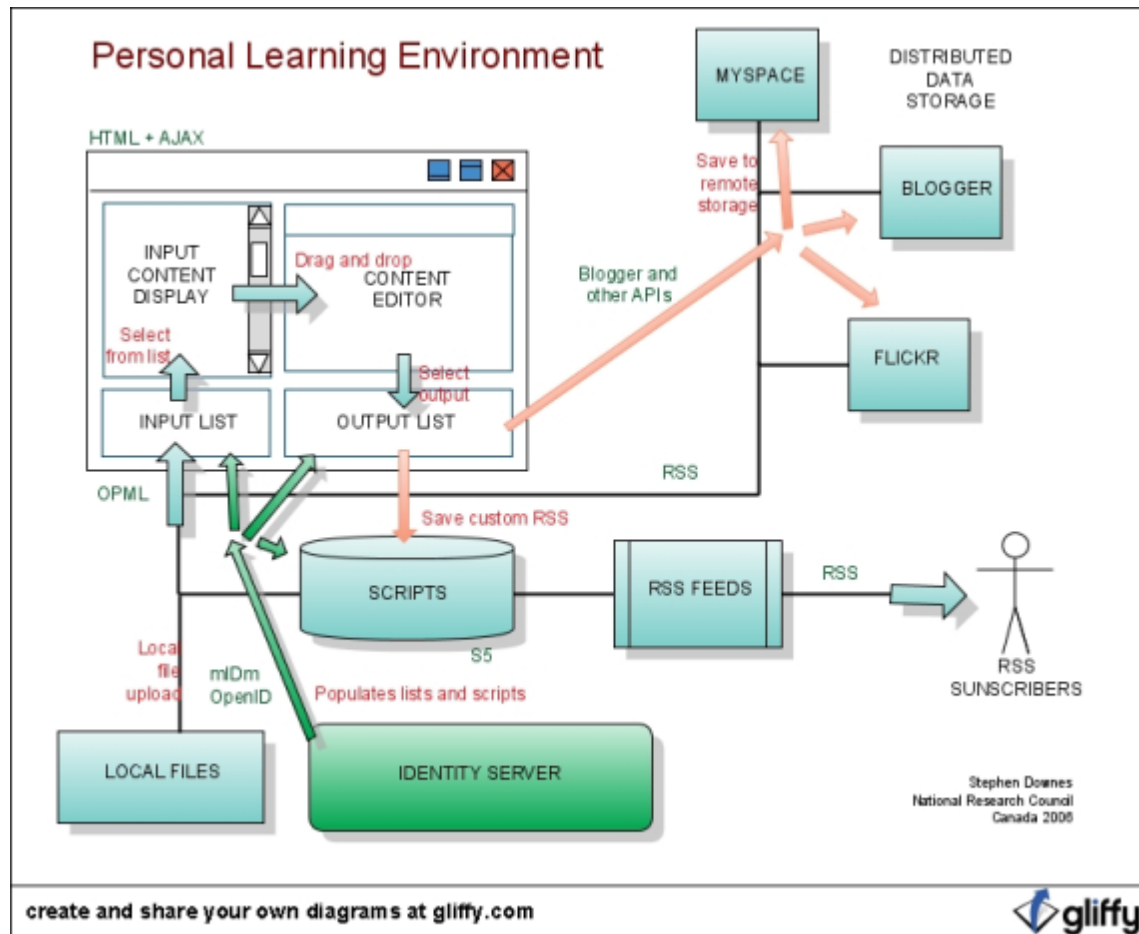
Self Organization

Network Learning

- Hebbian associationism
 - based on concurrency
- Back propagation
 - based on desired outcome
- Boltzman
 - based on 'settling', annealing



- Single Layer
- Inputs X_i act as outputs Y_i



The application provides mechanisms to input, process, and distribute content.

Page Creation

Edit Page ~ Stephen's Web ~ by Stephen Downes - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.downes.ca/cgi-bin/admin.cgi?page=2&action=edit

Admin Menu ~ Stephen... Google Reader Calendar

Google Image Result for http://... Connectivism & Connective K... Manage Subscriptions ~ gRSS... Edit Page ~ Stephen's We...

Edit Page

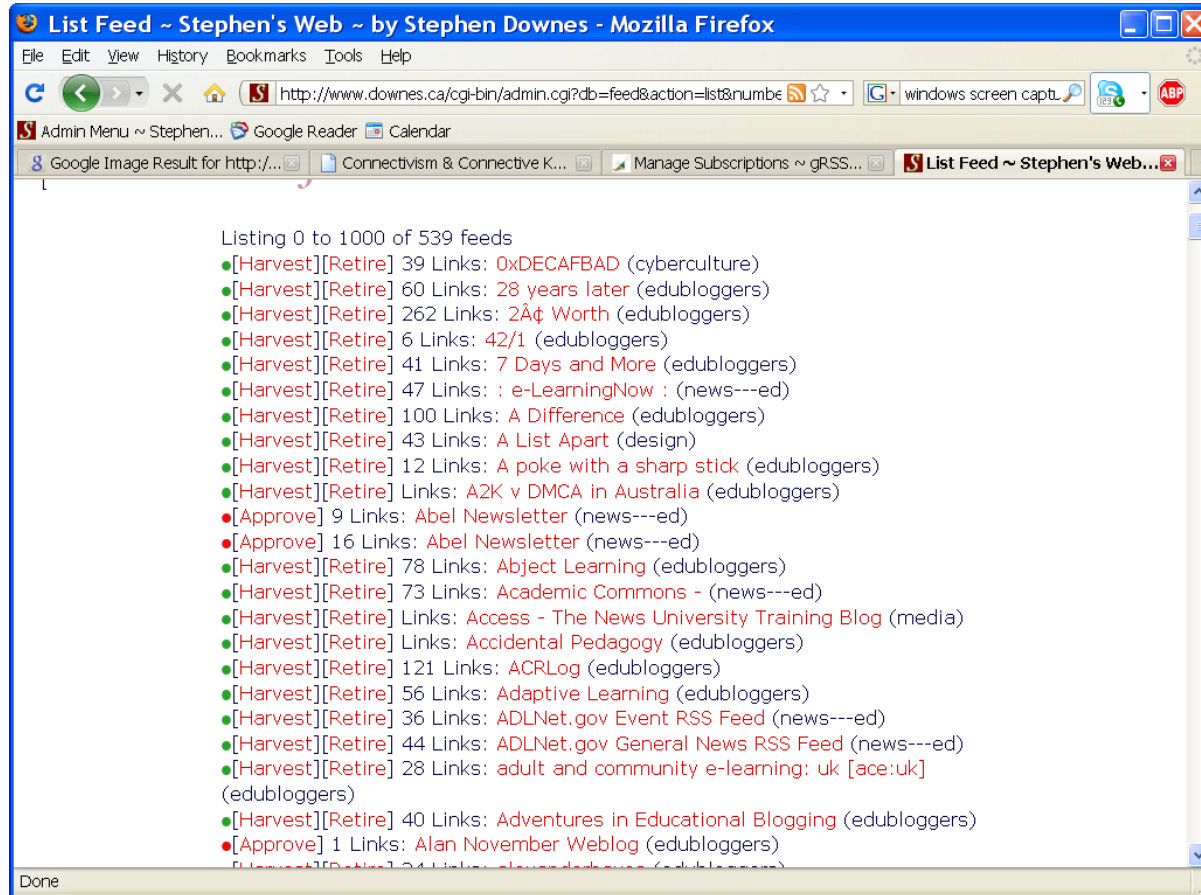
(ADMIN)

[New] [List] Author [List Pages]
[New] [List] Box [View Generated Version of Page]
[New] [List] Cite [Publish Page]
[New] [List] Event [View Published Page]
[New] [List] Feed
[New] [List] File
[New] [List] Journal
[New] [List] Link
[New] [List] Optlist
[New] [List] Mapping
[New] [List] Page
[New] [List] Person
[New] [List] Post
[New] [List] Presentation
[New] [List] Publication
[New] [List] Project
[New] [List] Task
[New] [List] Template
[New] [List] Theme
[New] [List] Topic
[New] [List] View

Title	OLDaily		
File	newsOLDaily.htm		
Header	email_html_header	Footer	email_html_footer
Feed			
Autopub	yes	Archive	yes
Sub	yes		
Days	Monday,Tuesday,Wednesday,Thursday,Friday,Saturday		
Type	email		
<input type="button" value="Update Record"/>			
Code	<pre><h2 style="font: italic 28pt/32pt Georgia,serif; color: #91c6e7;">OLDaily</h2> <p style="font: 400 12pt/16pt Verdana,Arial, sans-serif;color:#000040;">by Stephen Downes
 #TODAY#</p> <keyword db=post:number=20:type=announcement;format=announcement_email;expires=48; all;sort=crdate DESC> <keyword db=presentation:number=20;format=email;expires=16;all;sort=crdate DESC> <keyword db=post:number=20;type=article;format=article_email;expires=24; all;sort=crdate DESC> <keyword db=post:number=20;type=link;format=link_email;expires=16;all;sort=crdate DESC></pre>		

Done

Pages are created automatically from a database of content types



Feed
Management

Content input comes from RSS
feeds harvested by gRSShopper

Edit Mapping ~ Stephen's Web ~ by Stephen Downes - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.downes.ca/cgi-bin/admin.cgi?mapping=1&action=edit

Admin Menu ~ Stephen... Google Reader Calendar

(ADMIN)

[New] [List] Author
[New] [List] Box
[New] [List] Cite
[New] [List] Event
[New] [List] Feed
[New] [List] File
[New] [List] Journal
[New] [List] Link
[New] [List] Optlist
[New] [List] Mapping
[New] [List] Page
[New] [List] Person
[New] [List] Post
[New] [List] Presentation
[New] [List] Publication
[New] [List] Project
[New] [List] Task
[New] [List] Template
[New] [List] Theme
[New] [List] Topic
[New] [List] View

title:A Day In The Life -> journal

A mapping is a way to direct where you want harvested data to be stored. The mapping source is always a feed, while the mapping destination is always a database table.

Source

Either...

<input type="radio"/> Specific Feed:	ACRLog	
<input type="radio"/> Feed Type	Atom	Help
<input type="radio"/> Feed Fields	title	Help
<input checked="" type="radio"/> Value Pair	title:A Day In The Life	Help

Destination

Select a destination table: journal

link:

Map Table Elements

Source		Destination: journal
hits	---->	
cites	---->	

Done

Incoming content can be mapped to any of a variety of data types

Course Components

- The Daily

Connectivism & Connective Knowledge

[\[Home\]](#) [\[The Daily\]](#) [\[Wiki\]](#) [\[About\]](#) [\[Aggregations\]](#) [\[Readings\]](#)

The Daily

September 9, 2008

Highlighted Resources

[Time Change for Wednesday Session](#)

Important: We've made a change to our Wednesday (in our part of the world) schedule. The illuminate session will be held at 11:00 am CST (see [conversion here](#)). The event will be held in ellumnate ([link here](#)). Sorry about this last minute change. If the time doesn't work for those in Australia and Asia, please let me know ([gsiemens@elearnspace.org](mailto:g Siemens@elearnspace.org)) and we can try and arrange a smaller discussion group at a different time). CCK08, , September 9, 2008 [\[Link\]](#) [Tags: none] [\[Comment\]](#)

[Connections, Learning, and Ptolomeus \(CCK08-W1\)](#)

Nice post on the question of whether we 'grow' or 'build' new learning. Diego Leal cites John Medina's book *Brain Rules* (I'll have to get that one) on learning: "No defined structure, no progressive storage. Just the creation and recreation of connections between neurons. So, the process seems to be closer to something growing out (or expanding?) than to something being built." Here's the [Brain Rules](#) website, if you want to have a look. [Diego Leal](#), [.Edu.Co.Blog](#), September 9, 2008 [\[Link\]](#) [Tags: none] [\[Comment\]](#)

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

Course Components

- Feed Harvesting

CONNECTIVISM & CONNECTIVE KNOWLEDGE

a rather large open online course...

[HOME](#)[THE DAILY](#)[WIKI](#)[ABOUT](#)[AGGREGATIONS](#)[READINGS](#)[SIGNING UP](#)

List feeds

[\[ADMIN\]](#)

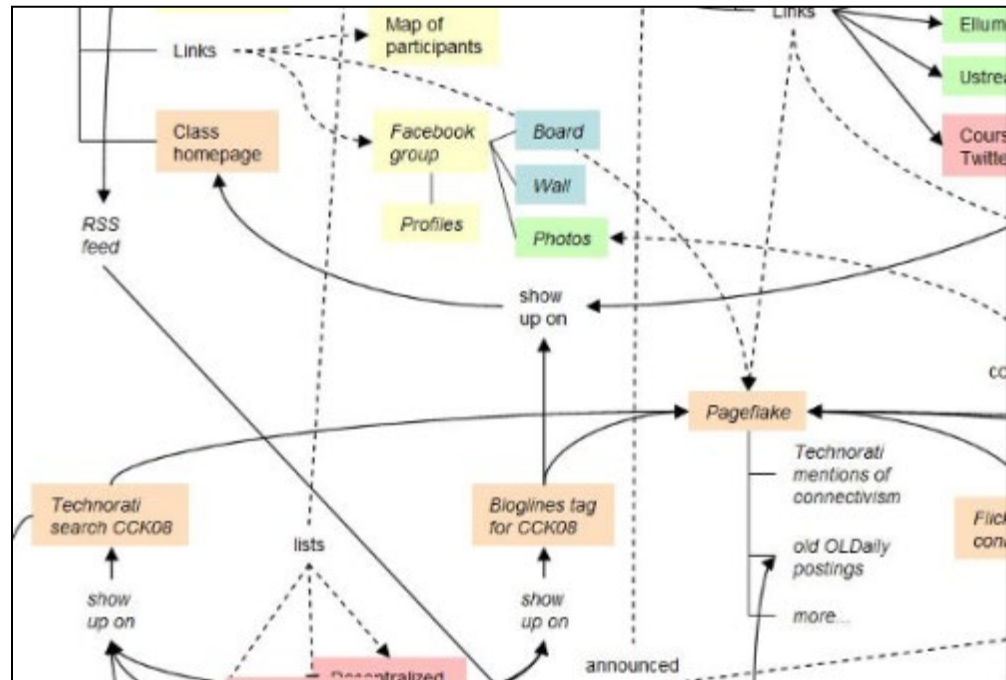
[New]	[List]	Author
[New]	[List]	Box
[New]	[List]	Cite
[New]	[List]	Event
[New]	[List]	Feed
[New]	[List]	File
[New]	[List]	Journal
[New]	[List]	Link
[New]	[List]	Optlist
[New]	[List]	Mapping
[New]	[List]	Page
[New]	[List]	Person
[New]	[List]	Post
[New]	[List]	Presentation
[New]	[List]	Publication
[New]	[List]	Project
[New]	[List]	Task
[New]	[List]	Template
[New]	[List]	Theme
[New]	[List]	Topic
[New]	[List]	View

Listing 0 to 1000 of 106 feeds

[Harvest]	[Retire]	Links: ActionsFLE en formation (category)
[Approve]		Links: Aggregator Blog (category)
[Approve]		Links: Al dAa (category)
[Approve]		Links: Alvin's Educational Technology Blog (category)
[Approve]		Links: An Education and Technology Blog (category)
[Approve]		Links: An Oxonian's Learning Journey (category)
[Approve]		Links: Beespace (category)
[Approve]		Links: blog.puntopanto.it, bloggers she wrote (category)
[Approve]		Links: Bradley Shoebottom Blog (category)
[Approve]		Links: Brett Powell CCK (category)
[Approve]		Links: Buthaina-Connect08 (category)
[Approve]		Links: CCK-No8 (category)
[Approve]		Links: cck08 - learning (category)
[Approve]		Links: CCK08-Viplay Baxi (category)
[Approve]		Links: Classroomblogging.com (category)
[Approve]		Links: Coalesce (category)
[Approve]		Links: Concetta Gotlieb's Blog (category)
[Approve]		Links: Connecting Online (category)
[Approve]		Links: Connective Knowledge Weblog (category)
[Approve]		Links: Connectivism & Connective Knowledge (edubloggers)
[Approve]		Links: Connectivism and Connective Knowledge (category)
[Approve]		Links: Connectivism by the Nile (category)

The Students

- The Course Map...



<http://x28newblog.blog.uni-heidelberg.de/2008/09/06/cck08-first-impressions/>

The Internet of 2007



Social Networks
blogs and blogging
wikis and collaborative
writing
tagging and Digg and...

Web 2.0

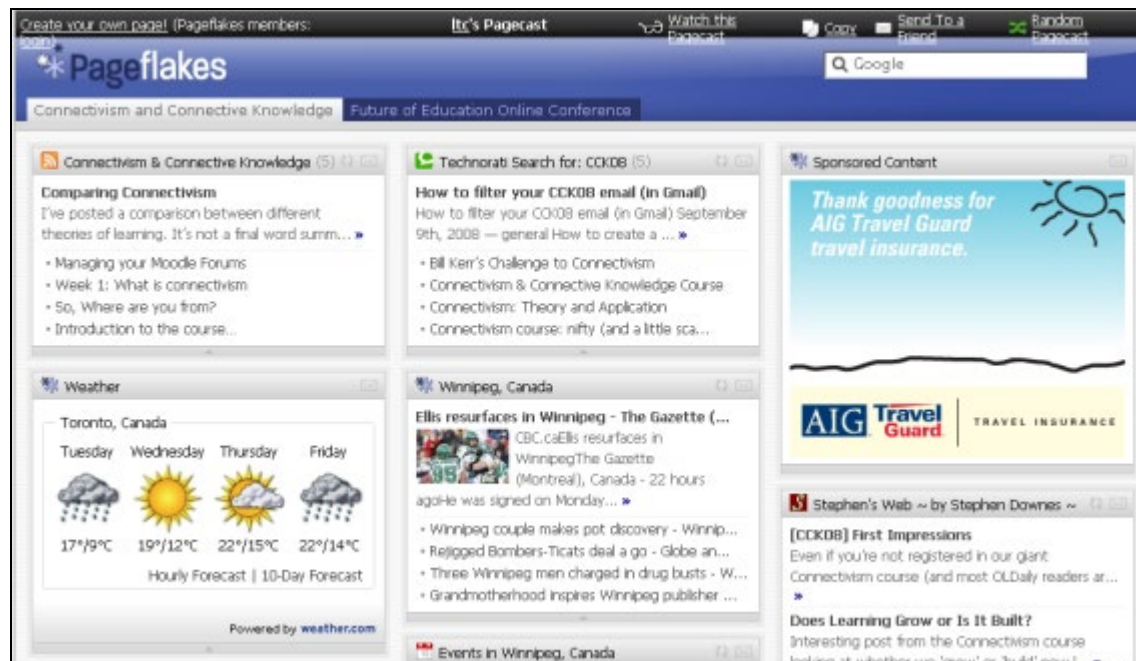
The Internet of 2009

Beyond Web 2.0



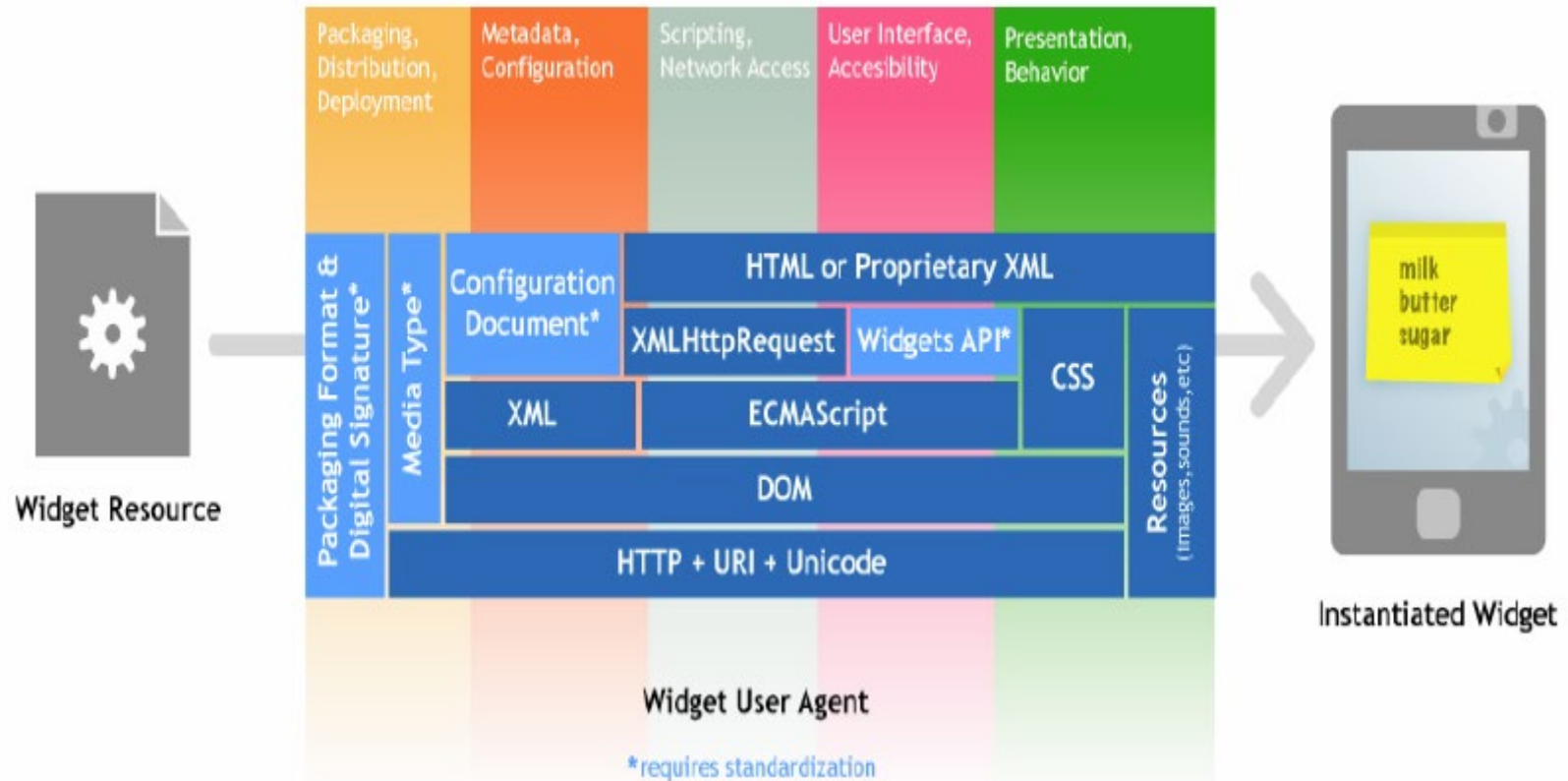
Creating Course Components

- Pageflakes Site



<http://www.pageflakes.com/lrc>

Widgets and Gadgets

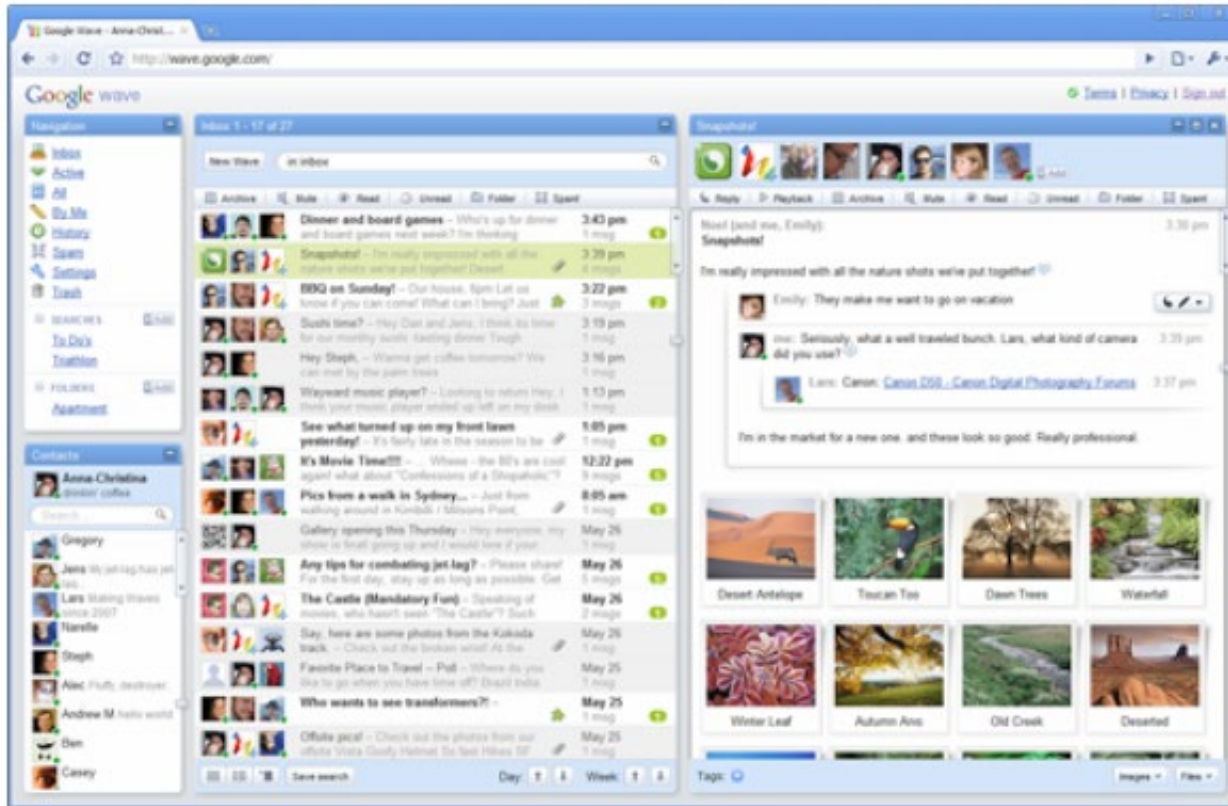


Widget Landscape

Market-Leading Widget User Agents			
Widget User Agent	Vendor	Version	Platform
<i>Kontabulator</i>	Yahoo!	4.5	Windows XP, Windows Vista, MacOS
<i>Windows Sidebar</i>	Microsoft	1.0	Windows Vista
<i>Google Desktop Gadgets</i>	Google	1.x	Windows XP, Windows Vista
<i>Opera Widgets</i>	Opera	9.5 Beta	Mac OS 10.5, Windows XP, Windows Vista
<i>Dashboard</i>	Apple	1.1	Mac OS 10.5
<i>Web-Runtime</i>	Nokia	1.0 Beta	S60 3rd Edition, Feature Pack 2 (emulator)
<i>Joost Widgets</i>	Joost	1.0 Beta	Mac OS 10.5, Windows XP, Windows Vista
Widget User Agent	Vendor	Version	Platform

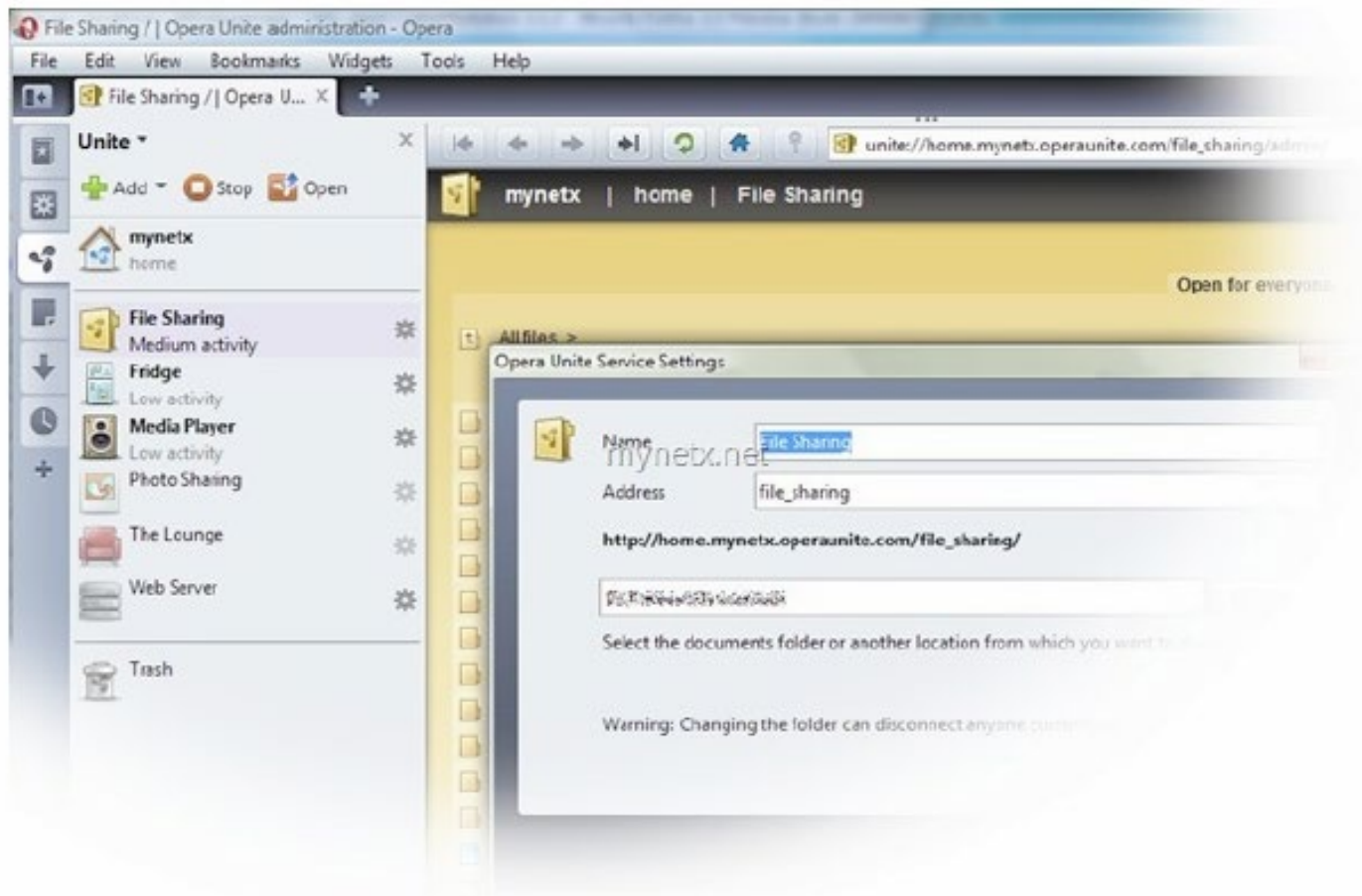
<http://www.w3.org/TR/widgets-land/>

Google Wave



<http://wave.google.com/>

Opera Unite



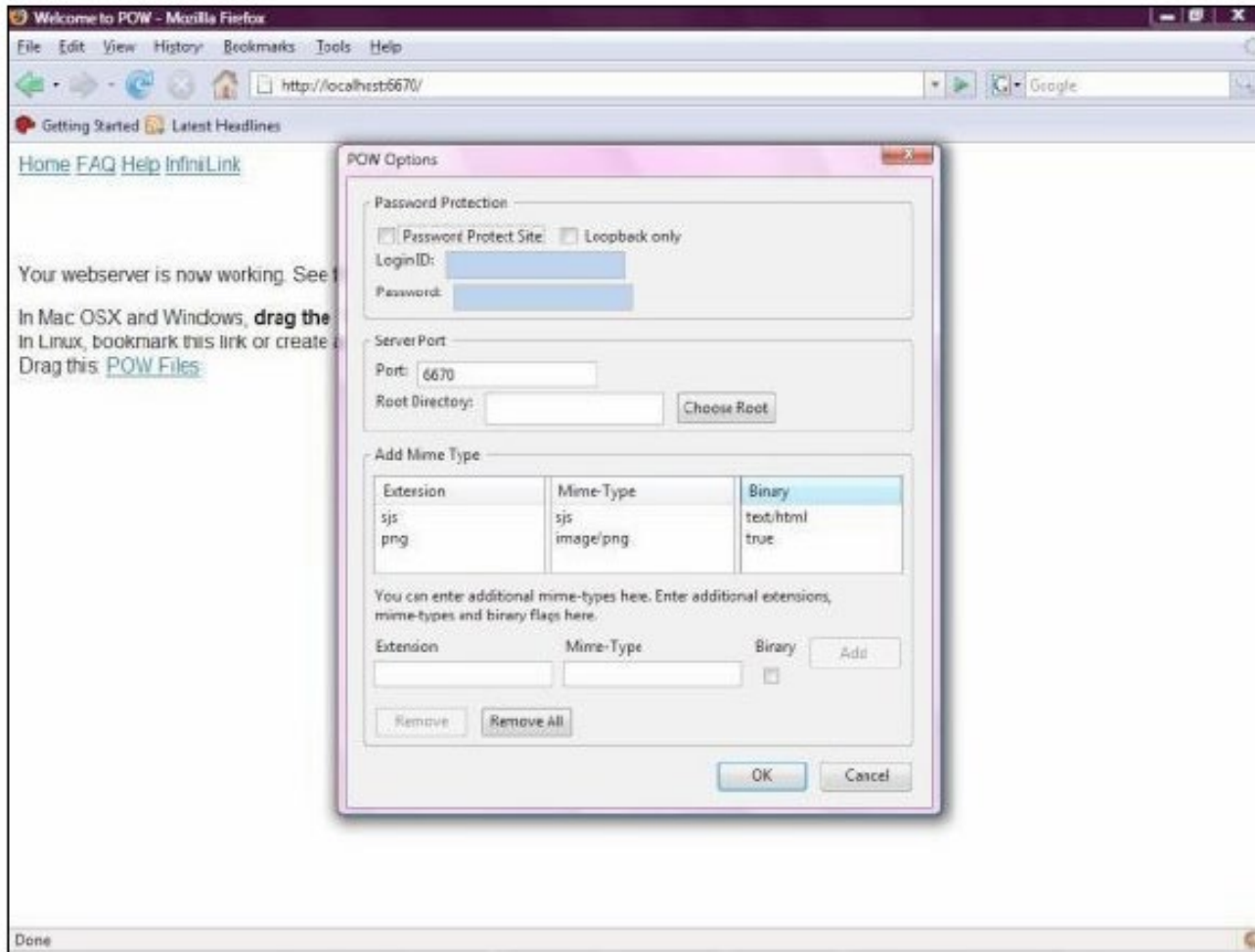
<http://blog.mynetx.net/windowslive/opera-unite-how-client-server-future-look-like/>

Windows Live Mesh



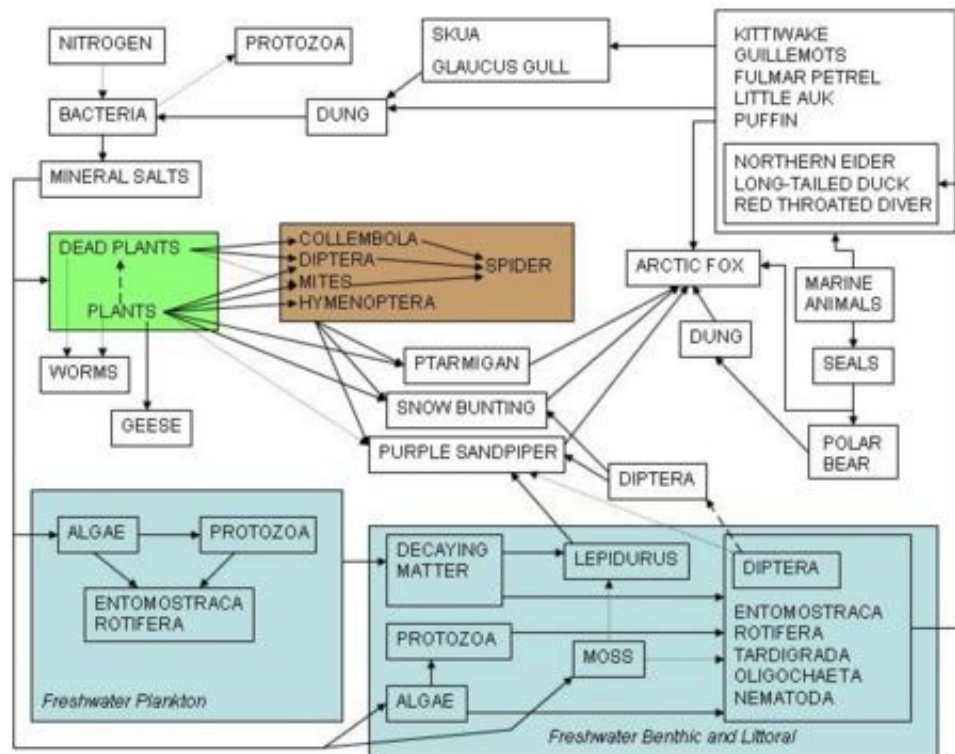
<https://www.mesh.com/welcome/default.aspx>

Firefox Plain Old Web Server



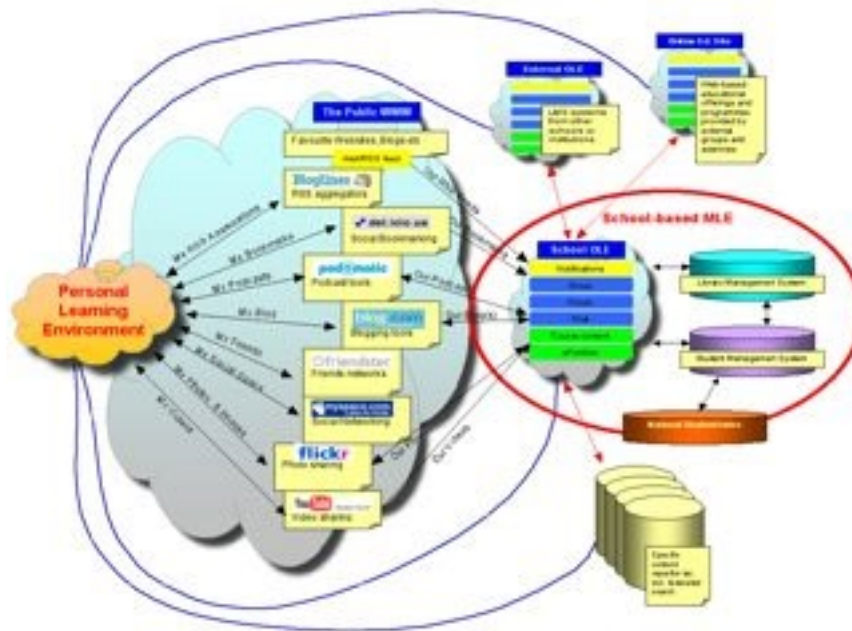
<https://addons.mozilla.org/en-US/firefox/addon/3002>

- Networks of interactions (aggregate, remix, repurpose, feed forward) – syndication



An ecology...

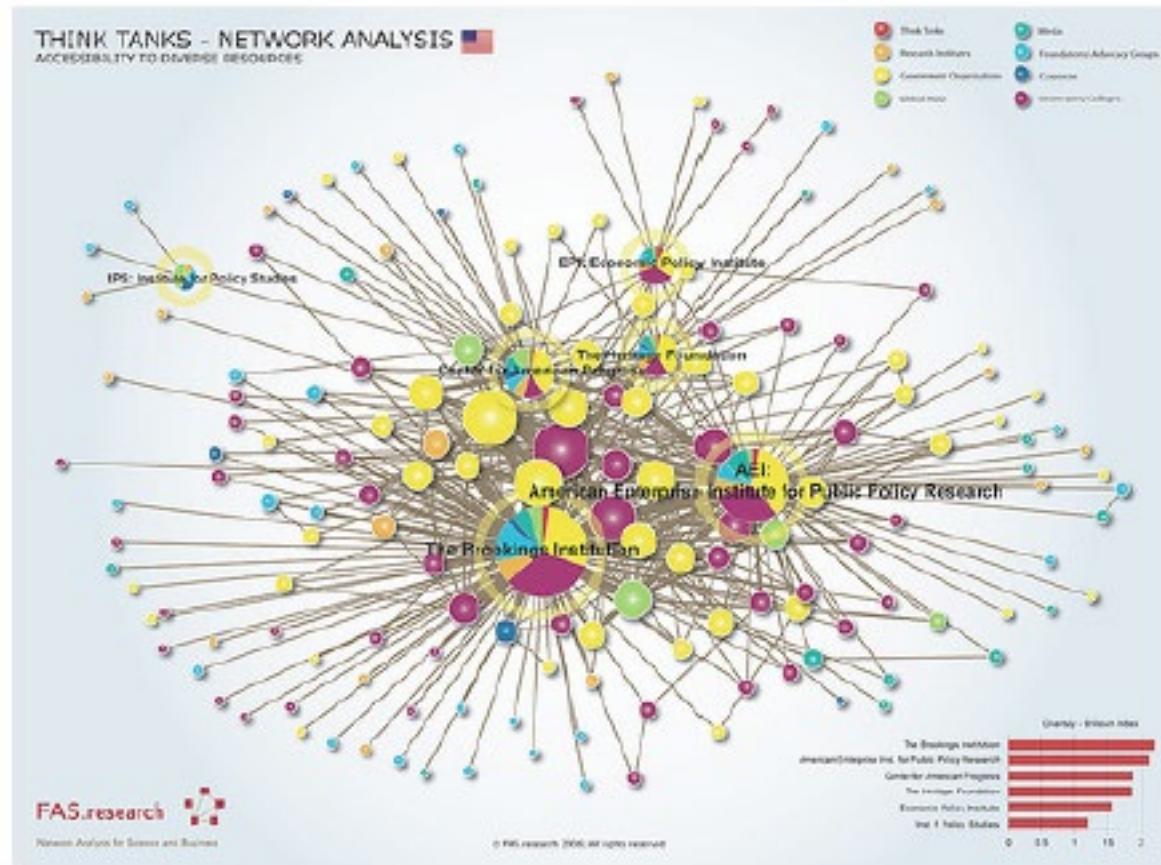
- The *personal* learning centre



Autonomy

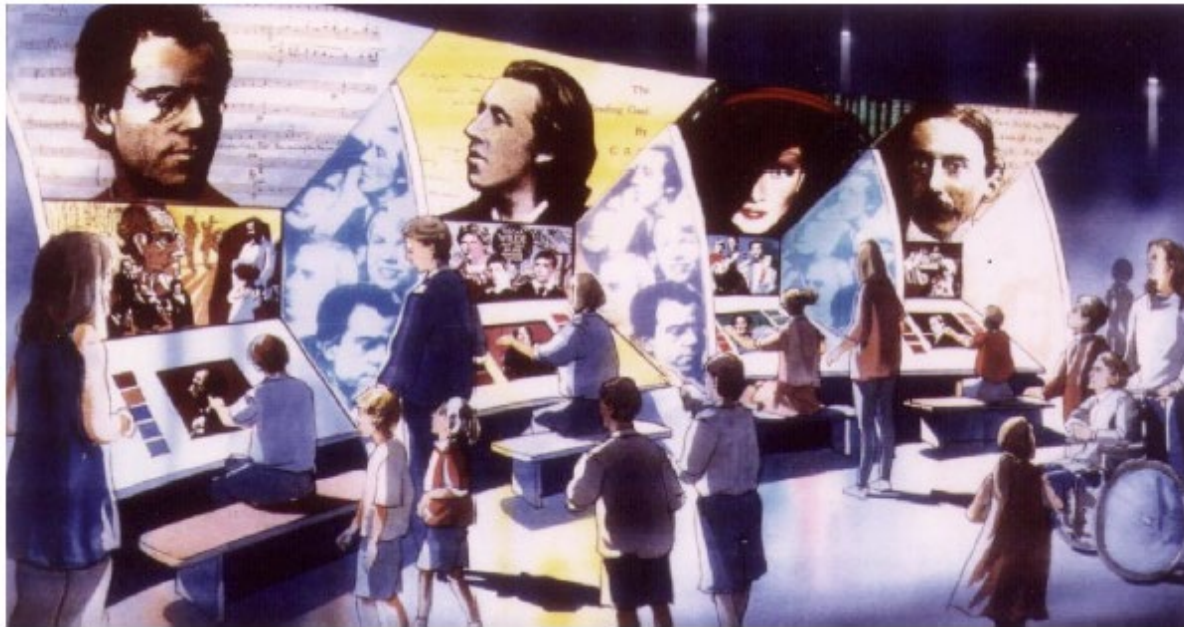
http://blog.core-ed.net/derek/2006/11/more_on_mles_and_ples.html

- The Network is Diverse – multiple views, multiple technologies

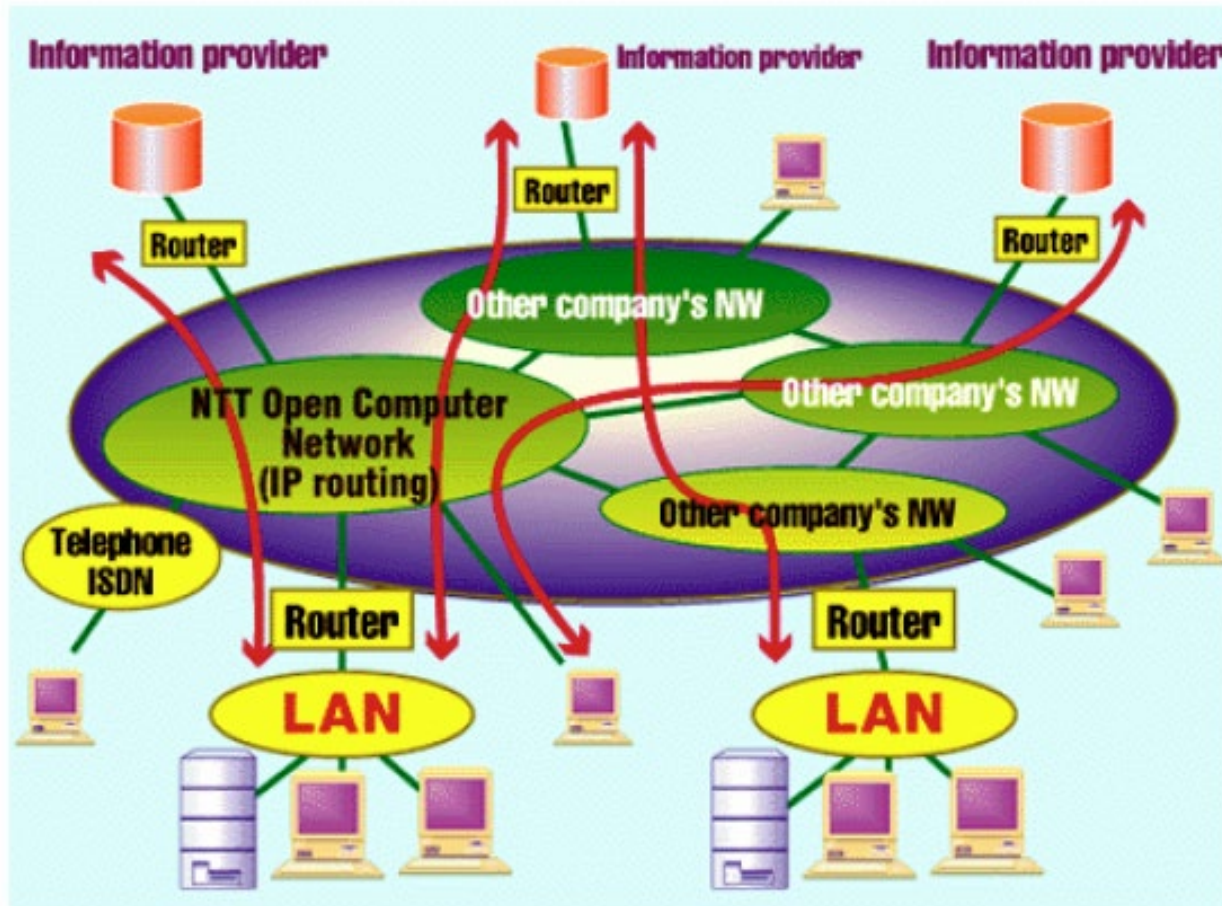


<http://flickr.com/photos/11242012@N07/1363575474>

- The Network is connected and interactive (*not* ‘integrated’) – small pieces, loosely joined



- The Network is *open*



http://park.org/Japan/NTT/DM/html_f4/F4_10600_e.html

Stephen Downes

<http://www.downes.ca>

