

# New Tools for Personal Learning

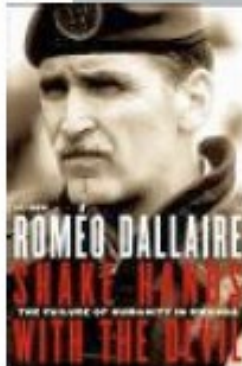
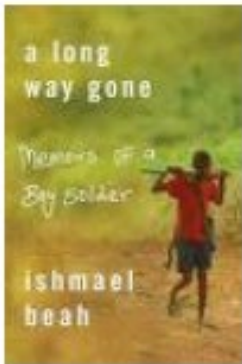


Stephen Downes

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

[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*

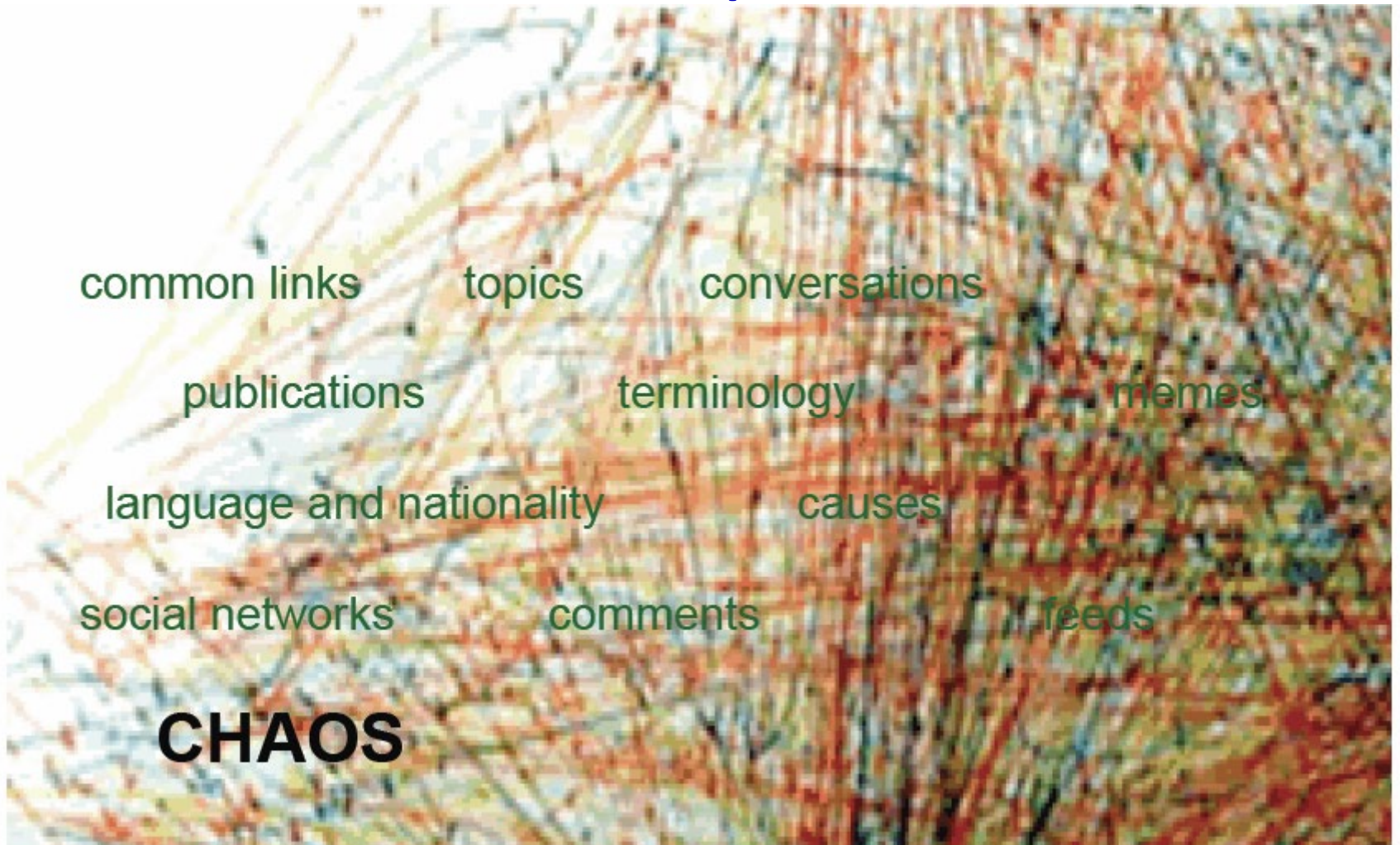
You are logged in as [Guest](#)

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

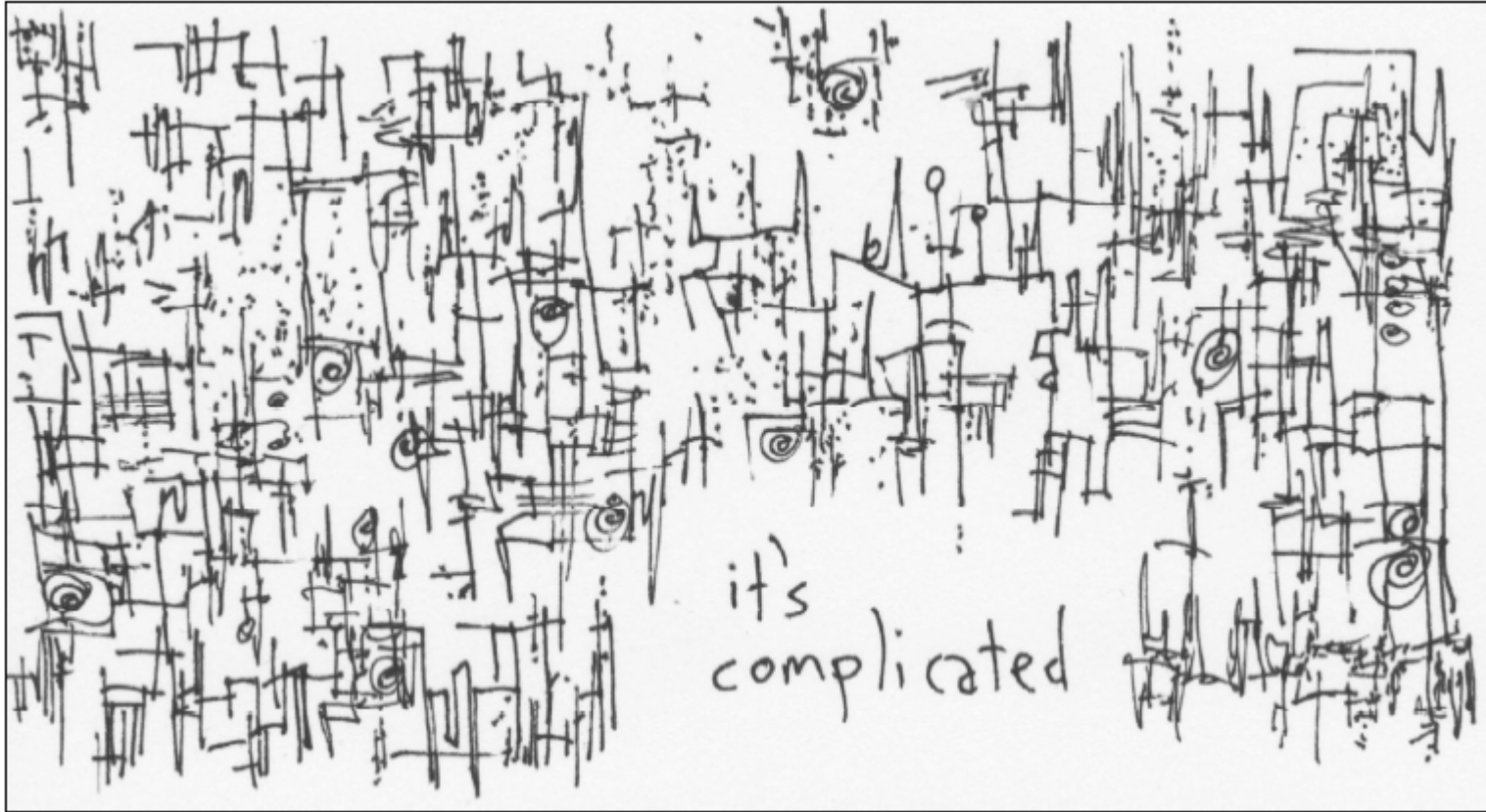
SQL query:

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

# What does 16,000 posts look like?



# Complicated, Complex

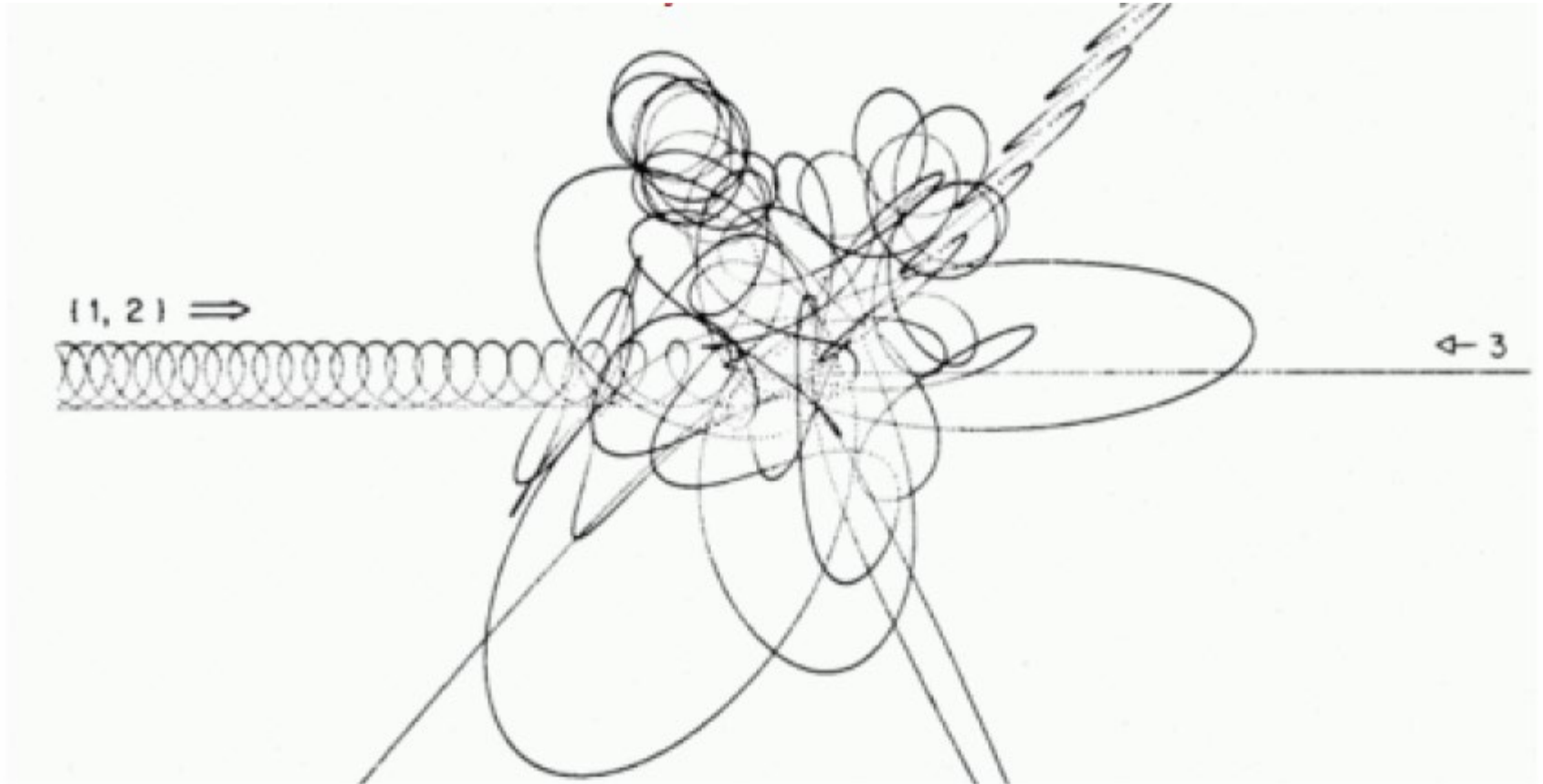


# The (First) Butterfly Thesis



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

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

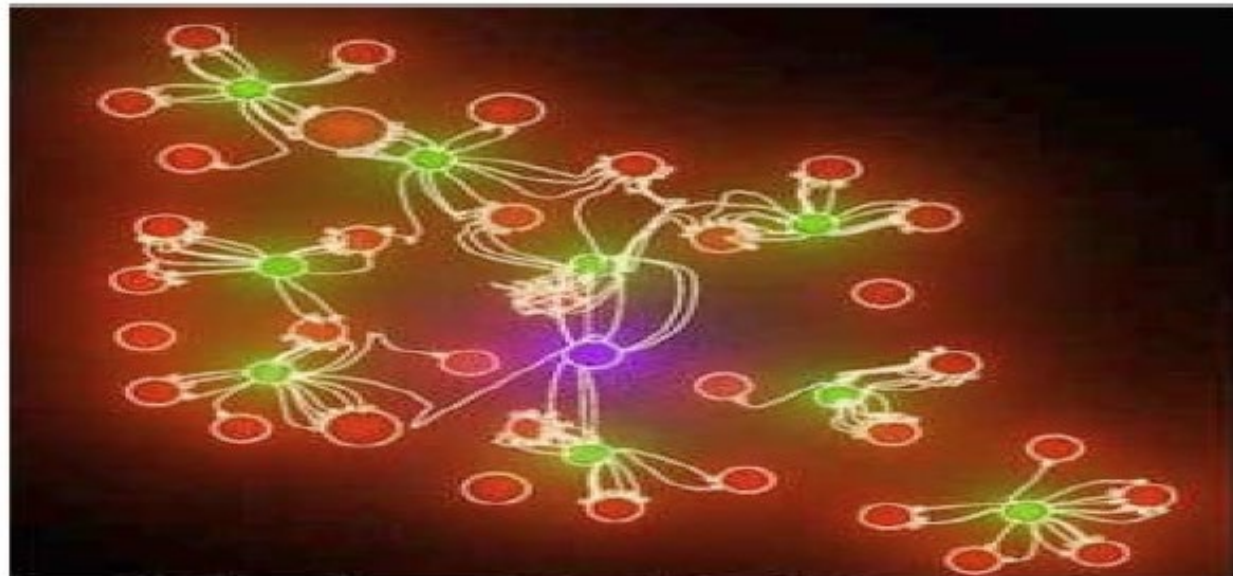
The image shows three silhouetted figures on a dark cliff overlooking the ocean at sunset. The sky is a vibrant mix of orange, yellow, and red, with the sun low on the horizon. The figures are positioned from left to right: a tall man standing, a shorter man standing, and a person sitting on the ground in a contemplative pose with their hand to their face. The overall mood is one of quiet reflection and introspection.

# Thinking for yourself

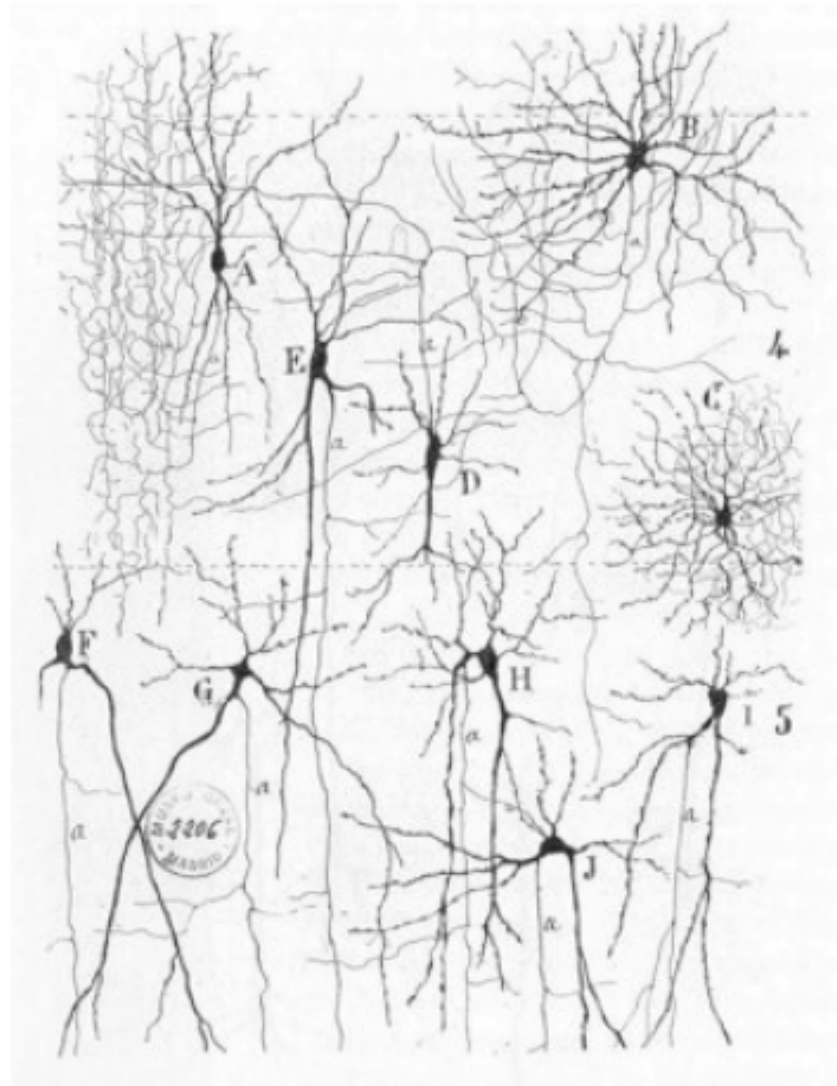
Critical thinking and reflection

# Free Learning

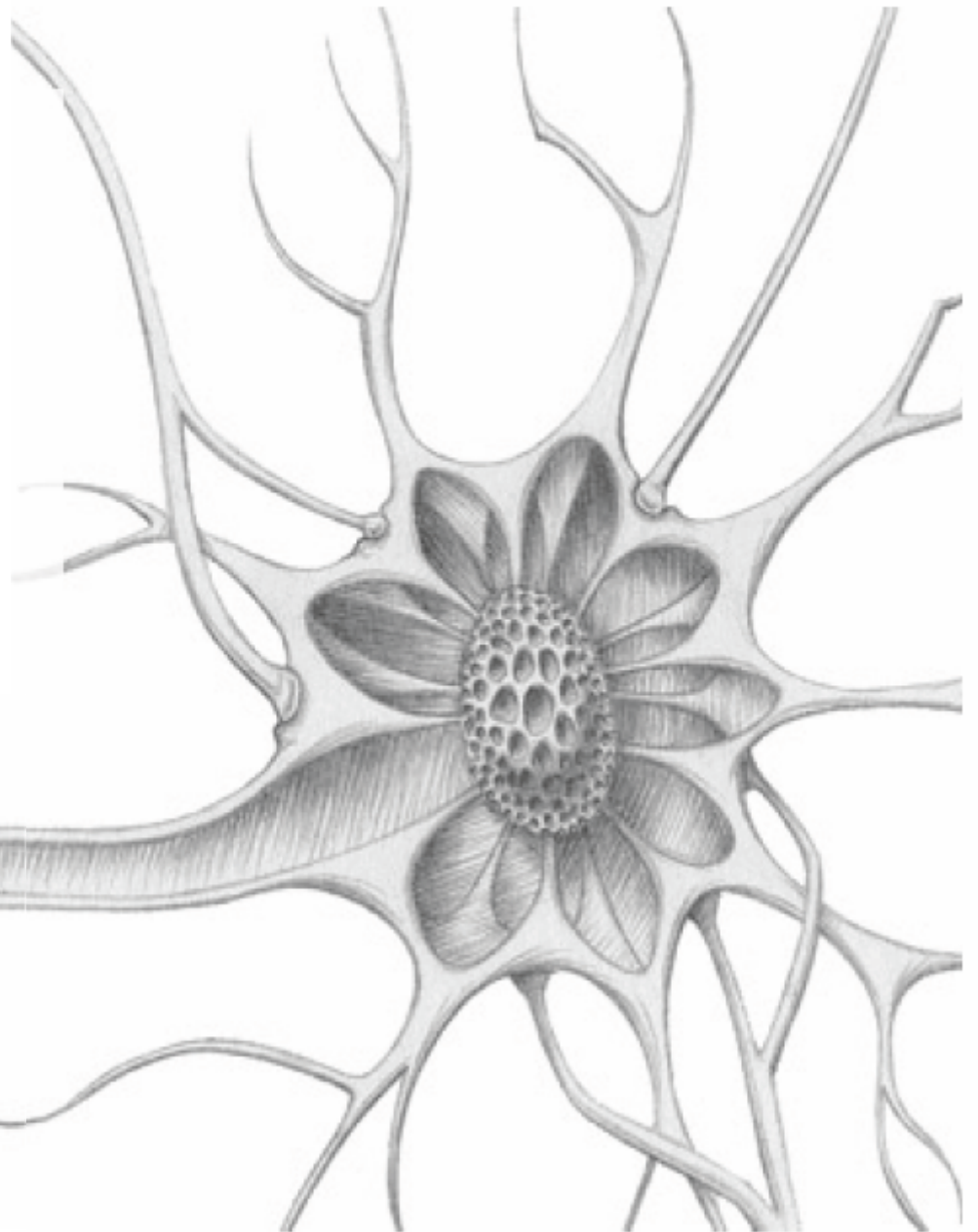
- The *picture* of learning you should have is one of a large set of connected nodes (like the neurons in a brain)



- 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

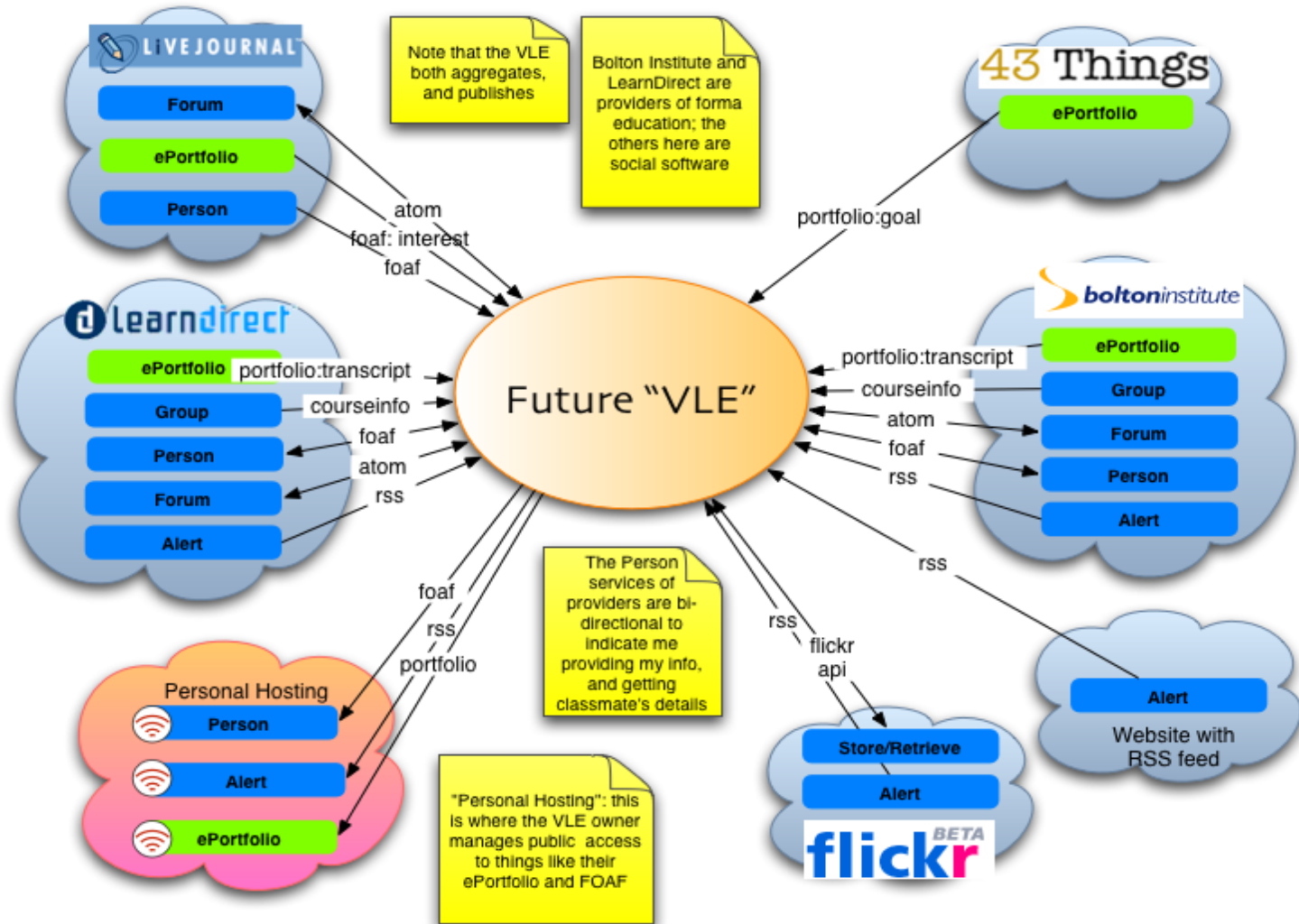
pattern recognition

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 showing a hierarchy of opportunities. The selected item is "learn three chord rock guitar".
- Opportunity Viewer:** A detailed view of the selected opportunity. It shows the title "learn three chord rock guitar", the number of registered people (1), the provider (43 Things), and the location (http://www.43things.com/thing:). There is a "Browse" button next to the location field.
- Search Results:** A pane showing search results for the selected opportunity. It includes a "Find It!" button and a "Filter results by:" field. Below is a table of results:

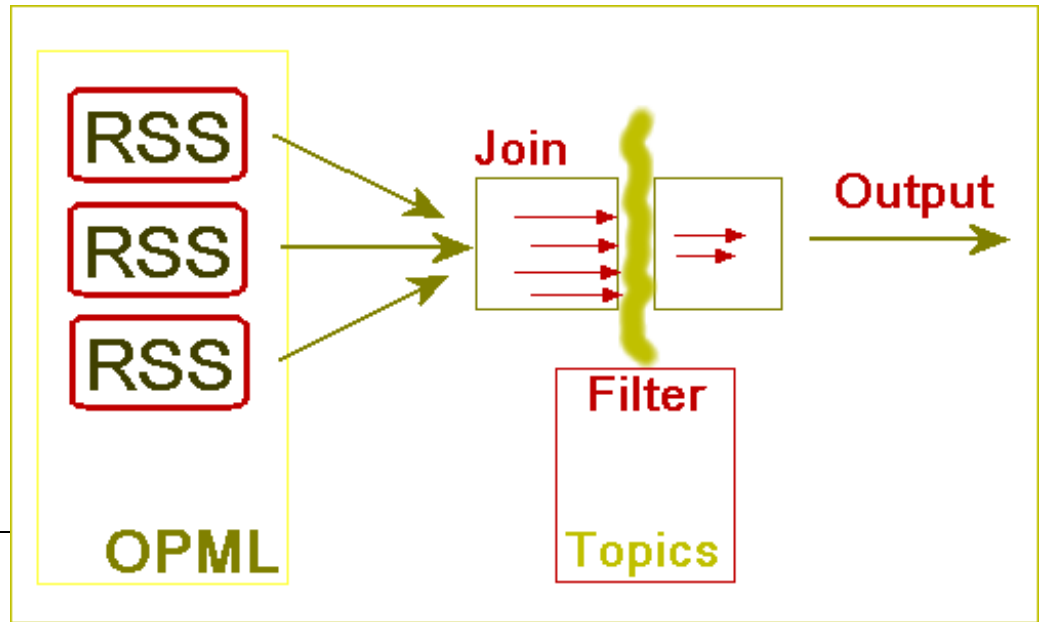
Title	Provider	Location
Leran to play the guitar like no one has ev...	43 Things	http://www.4...
learn to play acoustic guitar, also get a gu...	43 Things	http://www.4...
Learn to play the guitar guitar properly an...	43 Things	http://www.4...
meet Mcfly and just chill out with them an...	43 Things	http://www.4...
Create a music room downstairs, with a dr...	43 Things	http://www.4...
i wnat to keep playing guitar and play infr...	43 Things	http://www.4...
i want to learn to play the guitar and then...	43 Things	http://www.4...
Sing and play bass guitar at the same tim...	43 Things	http://www.4...

Below the search results, there is a "Details" tab and a "Search Results" tab. The "Search Results" tab is active, showing the address bar with the URL "http://www.43things.com/things/view/161919". The page content shows a search bar with "GO" and a message "1 person wants to do this...".

[learn three chord rock guitar]

# 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

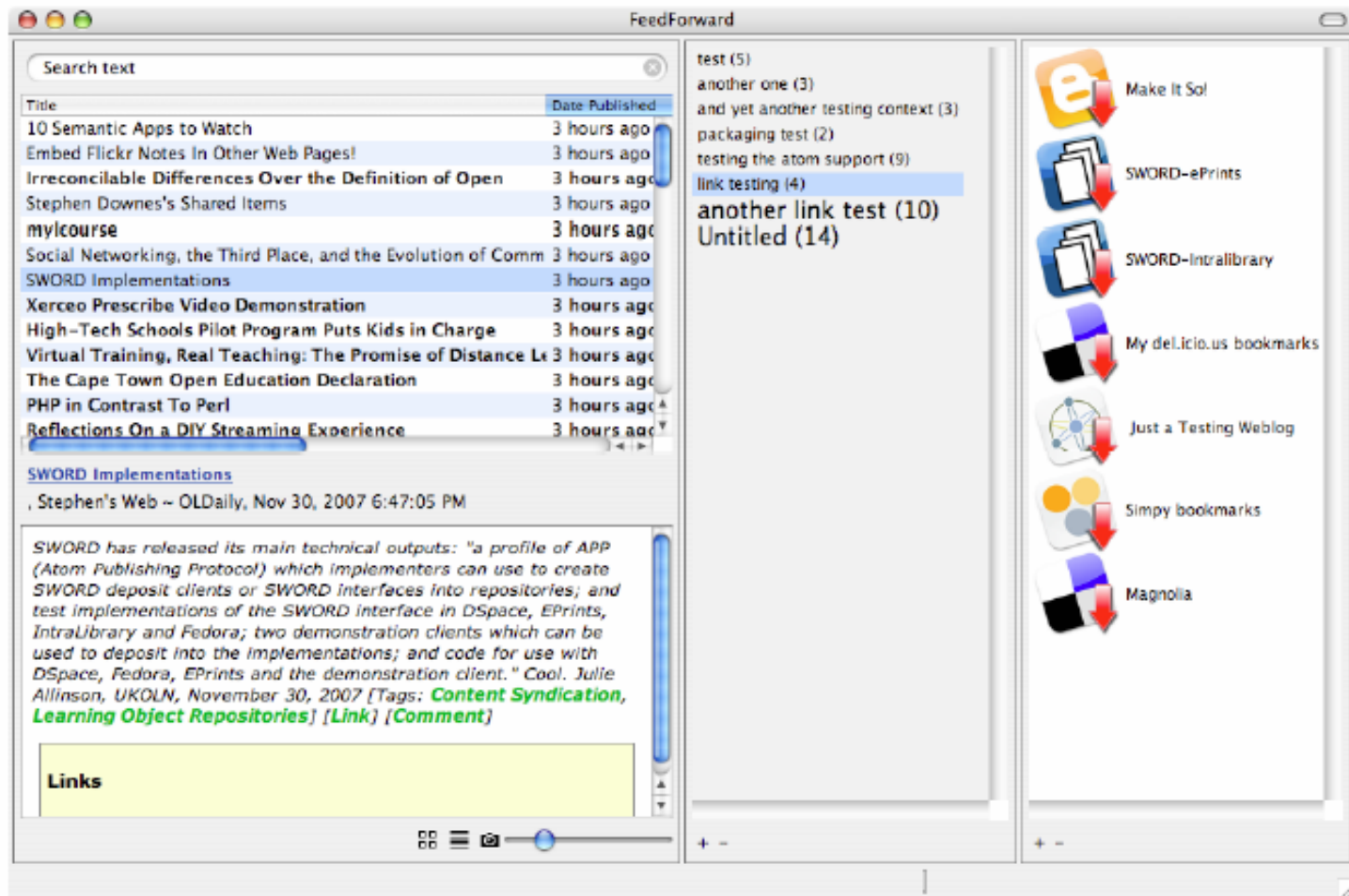
The screenshot shows the RSS Writr web editor interface. At the top left, there is a search input field and a "Start Search" button. Below this are navigation links: [Change Theme], Stephen's Web, [OLDaily], [Archives], [Threads], [Best Of], [Search], and [Options].

The main content area is divided into two columns. The left column contains the heading "Welcome to RSS Writr" and three paragraphs of instructional text: "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.", and "When you have finished editing, save your new post to your blog." The right column contains a "Title:" input field, a rich text editor toolbar with icons for Bold (B), Underline (U), Italic (I), Bulleted List, Numbered List, Indent Left, Indent Right, Undo, and Redo, and a text area containing the word "Hello".

Below the editor is a "Content Sources" section with a dropdown menu currently showing "Stephen's MyGlu Test".

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

# FeedForward



# Second Theme



Learning... vs the right learning

# Understanding Interdependence



= no simple principles

= no simple cause & effect

# Me and my network of friends

O = primary

( ) = no more

tantyento	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

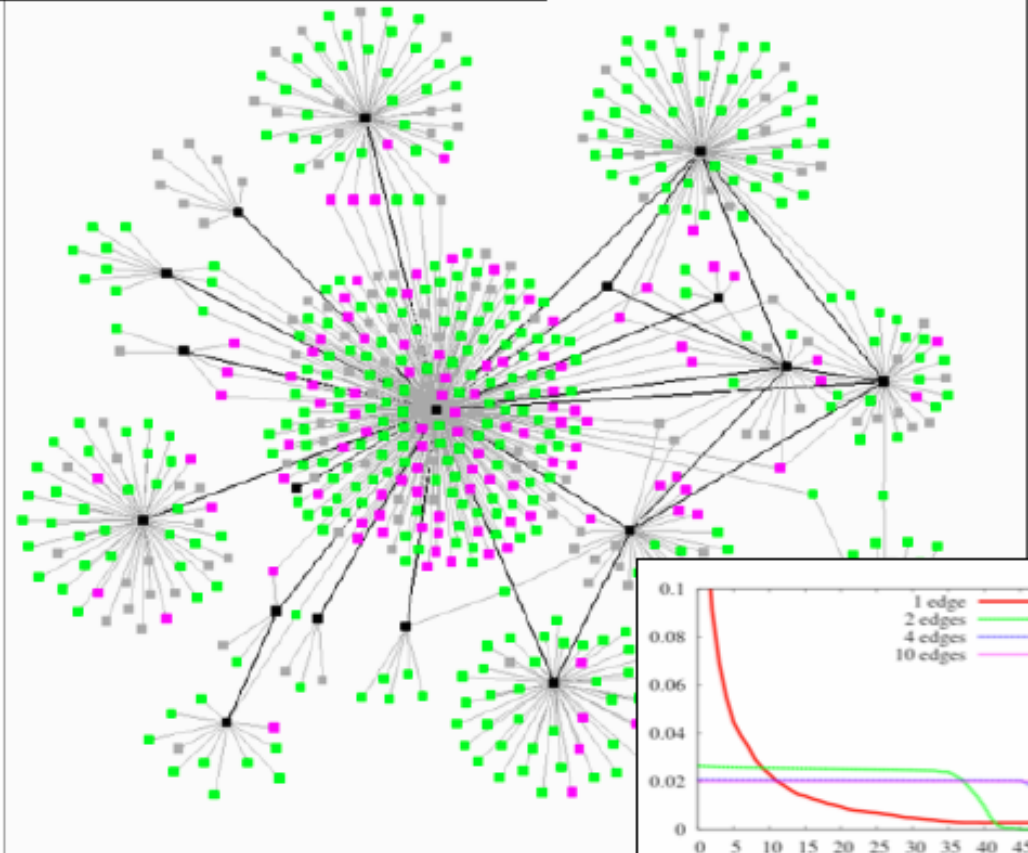
twitter

im

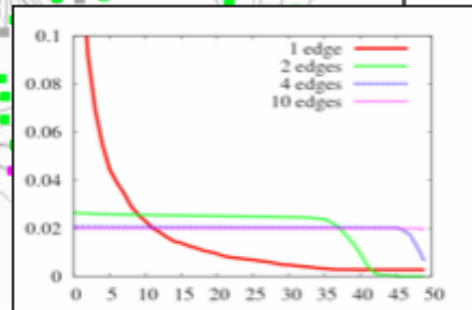
desktop

# Network Structures - Tree

Traditional social network

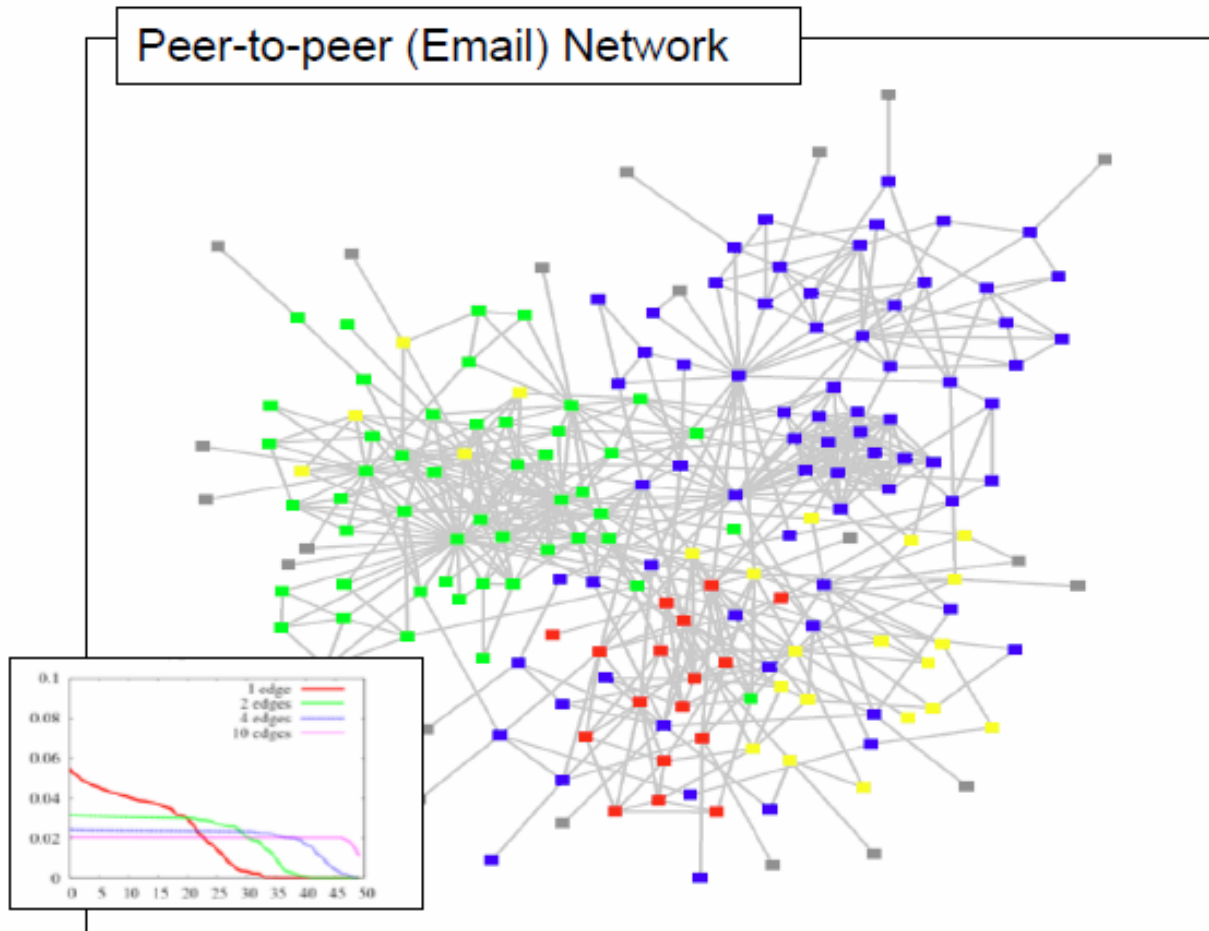


Central  
Influence  
Power Law  
Viral  
Hierarchy





# Network Structures - Mesh



Distributed  
Discussion  
Balanced  
Reflective  
Democracy

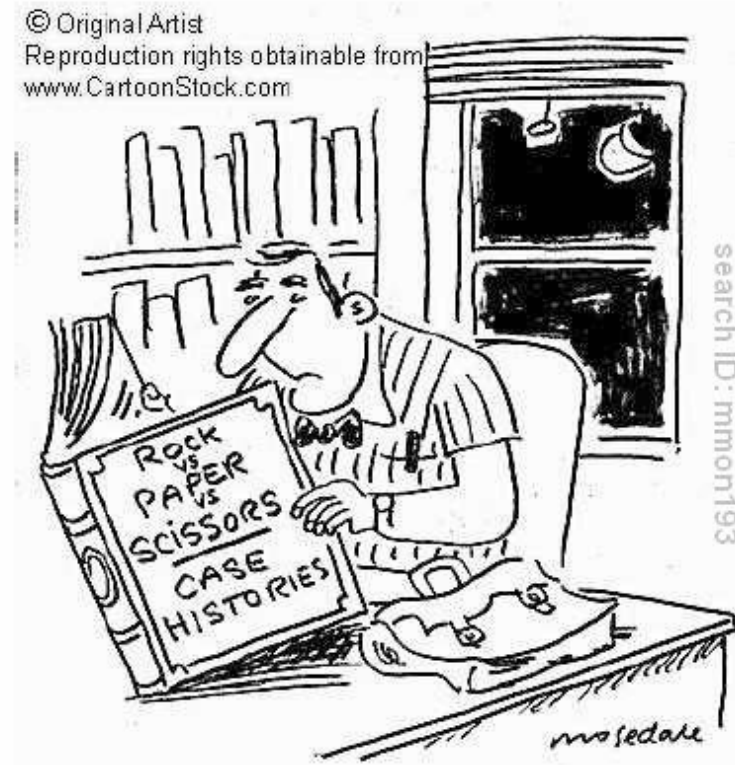
<http://www.daniel-lemire.com/fr/abstracts/DIVERSITY2008.html>

<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...



The screenshot shows a web page for the 'Connectivism' wiki. At the top right, there is a 'Log in / create account' link. Below this are navigation tabs for 'page', 'discussion', 'view source', and 'history'. The main heading is 'Connectivism'. Below the heading, there is a welcome message: 'Welcome to the **Connectivism and Connective Knowledge Online Course** support wiki.' This is followed by 'Conference tags: CCK08'. A paragraph states: '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](#).' Below this is a 'Contents [hide]' section with a numbered list of 11 items: 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). On the left side, there is a sidebar with the LTC logo (Learning Technologies Centre) and three sections: 'navigation' with links to Main Page, Recent changes, Random page, sandbox, and Help; 'ltc links' with links to LTC Website, Activities, Workshops and Resources, and Teaching with Technology; and 'um projects' with a link to Educational Psychology.

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

# Course Components

- Course Moodle Forum

The screenshot shows a Moodle course page for "Connectivism and Connective Knowledge". At the top right, it says "You are currently using guest access (Login)". The breadcrumb trail is "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 (green square) Course events (orange square)

**Connectivism Course Blog**

Comparing Connectivism

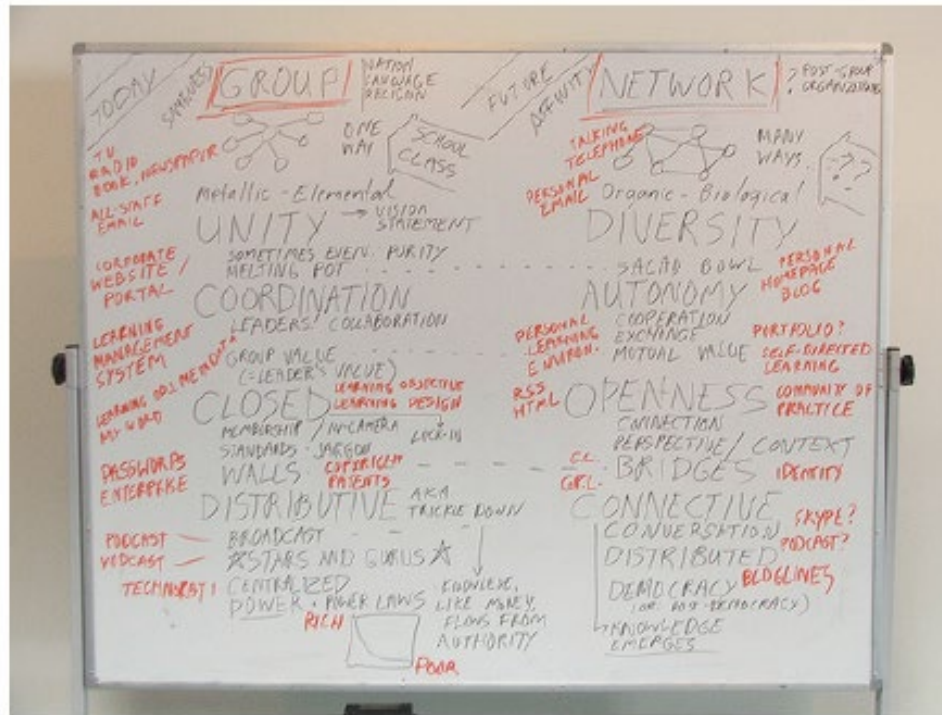
I've posted a comparison between different theories of learning. It's not a final word summary, but hopefully it can provide a bit of a starting point for discussing the attributes of different concepts. While

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

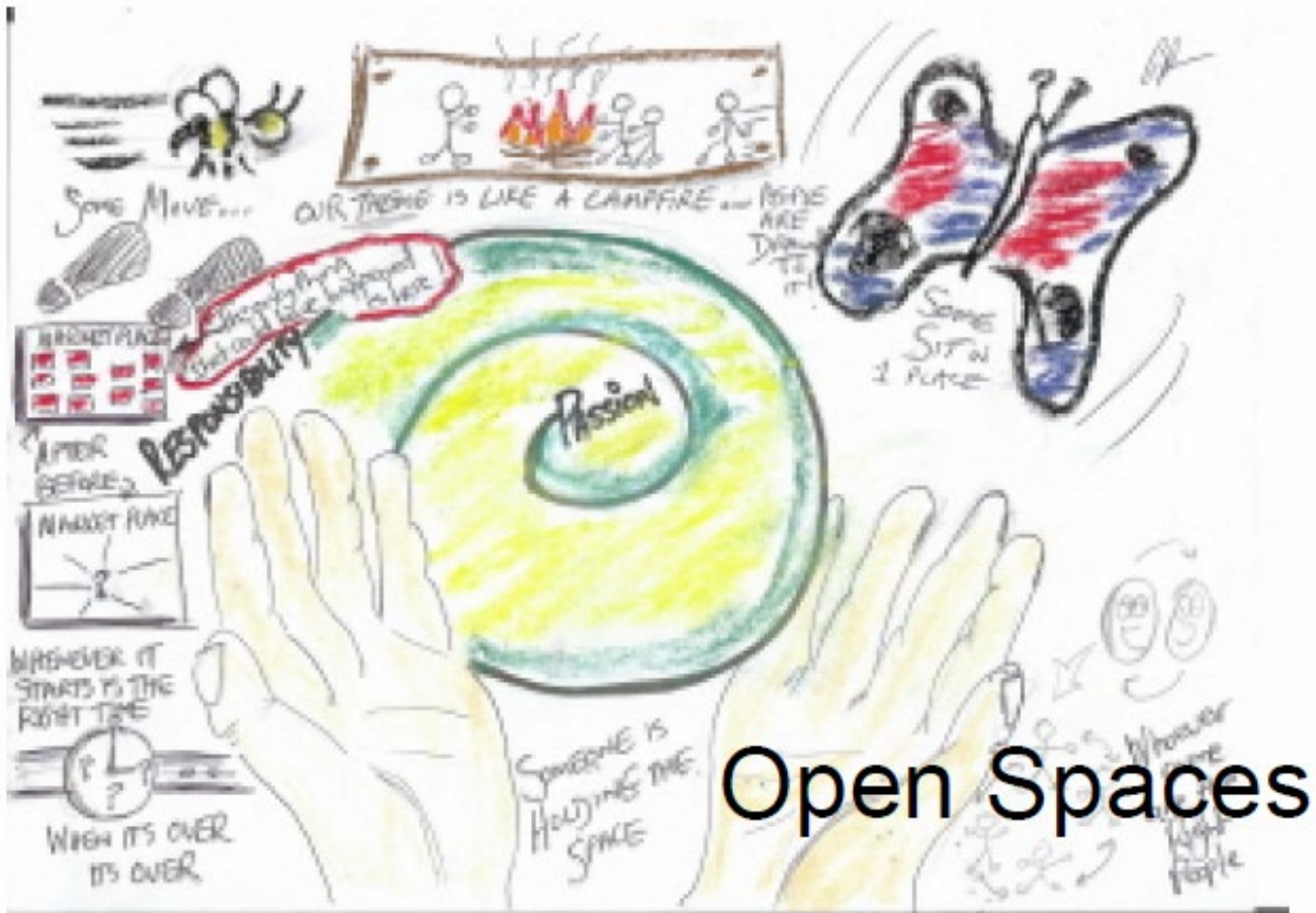


# Third Theme

## 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

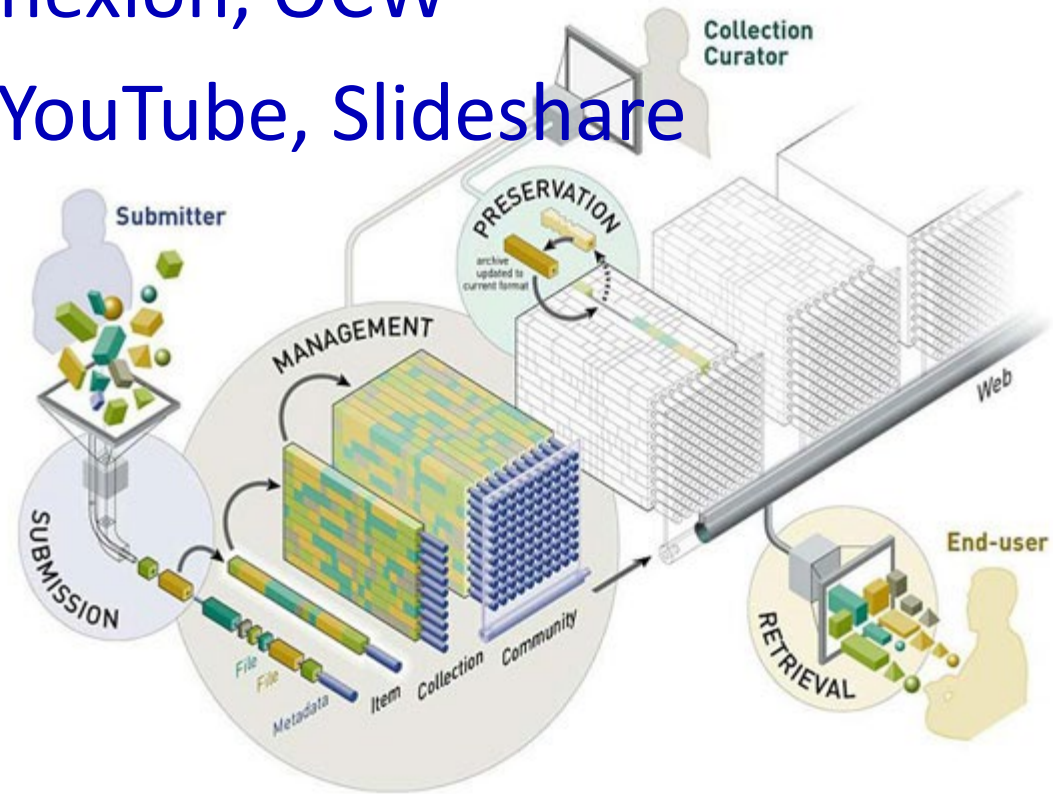
- Academic - OAI-PMH, Dspace, Fedora, Eprints, SWORD, Connexion, OCW
- Web - Flickr, YouTube, Slideshare

RSS

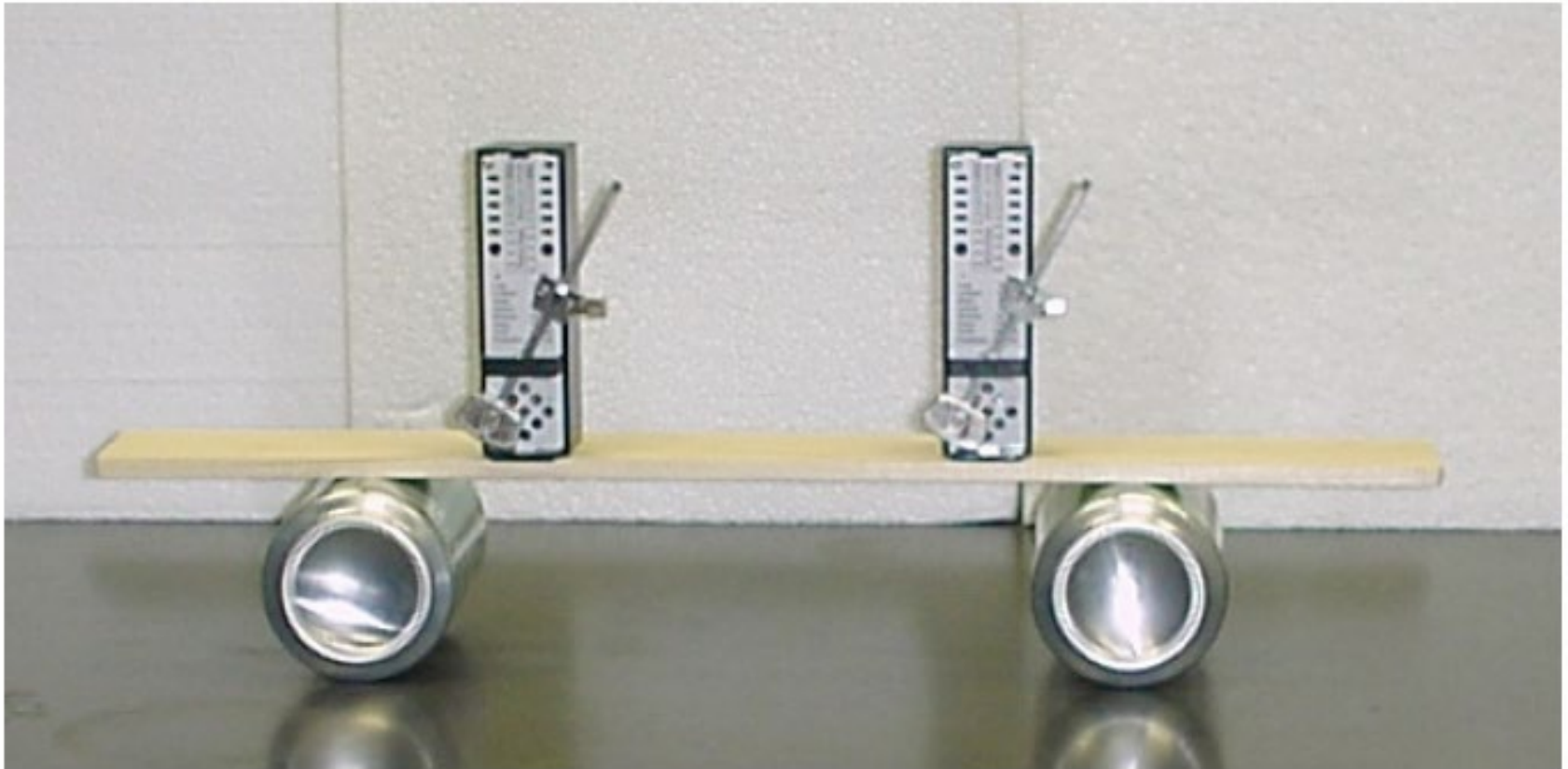
OAI

DC

Atom



# Self-organization - metronomes



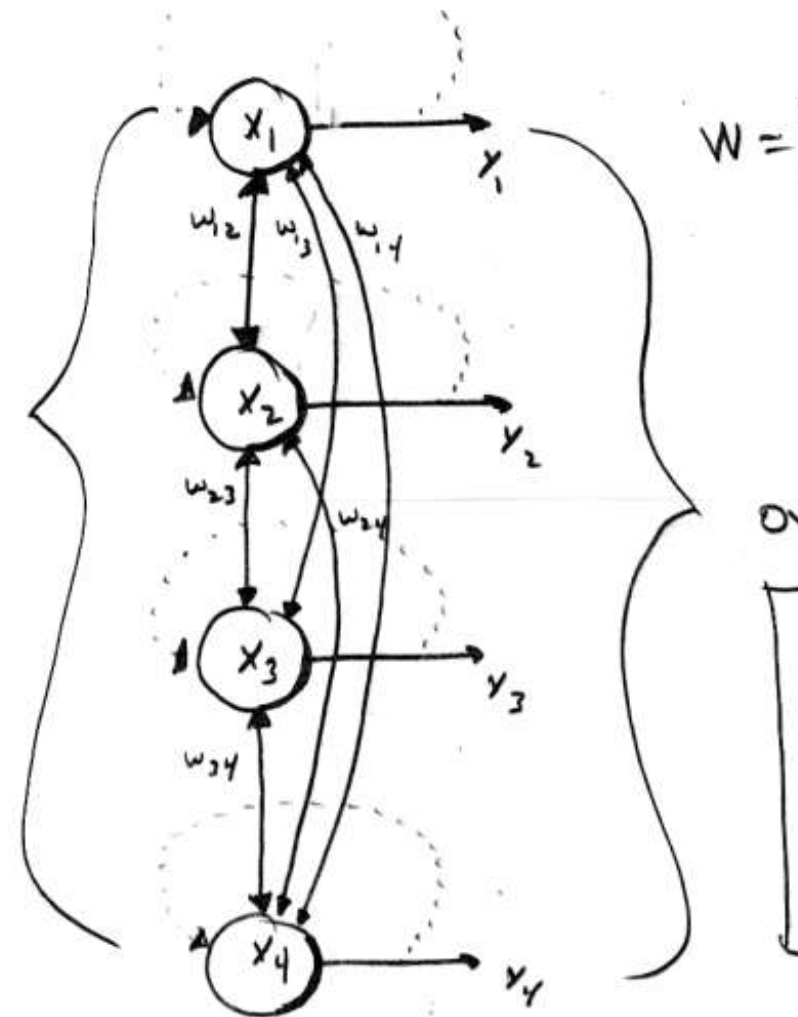
<http://sail.uak.ac.uk/dept/metro.html>

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

# Self Organization

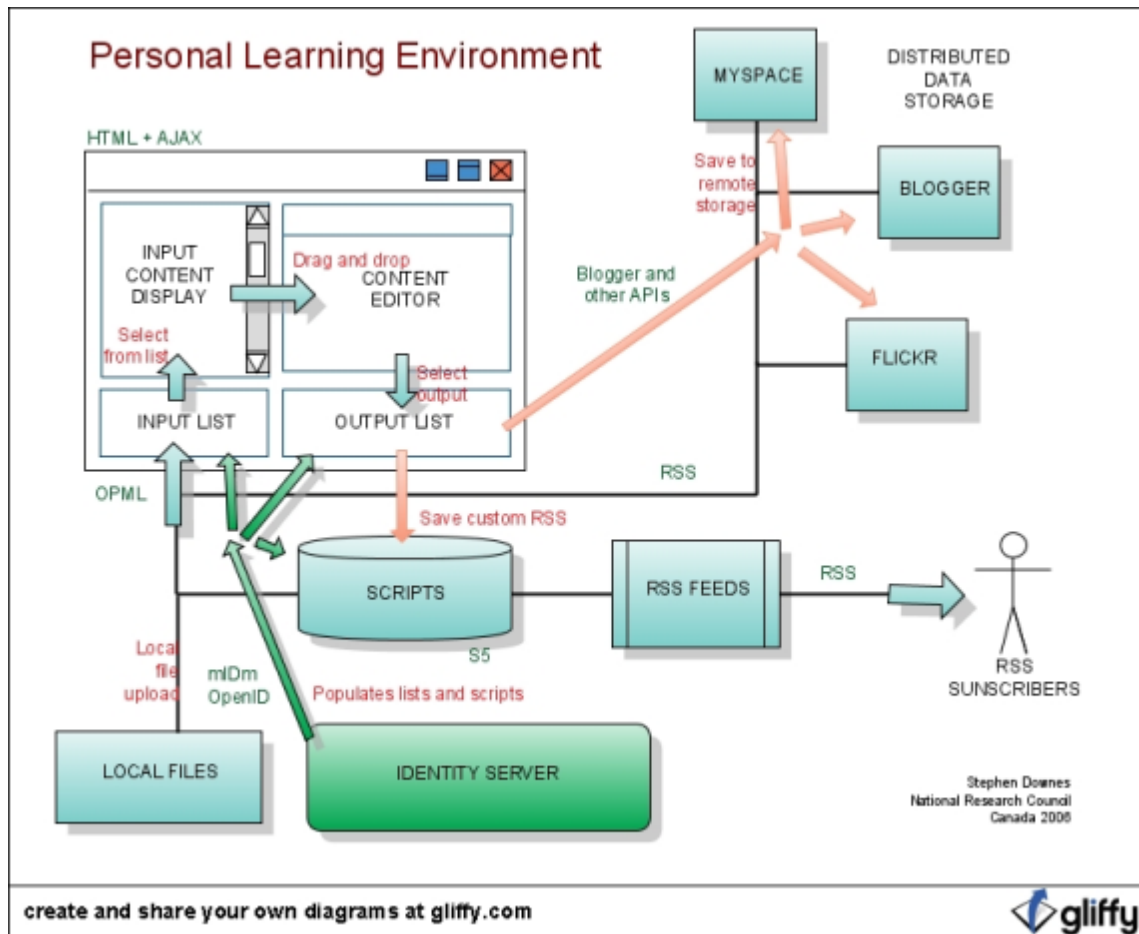
## Network Learning *Inputs*

- 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**

**[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](#)

[\[List Pages\]](#)  
[\[View Generated Version of Page\]](#)  
[\[Publish Page\]](#)  
[\[View Published Page\]](#)

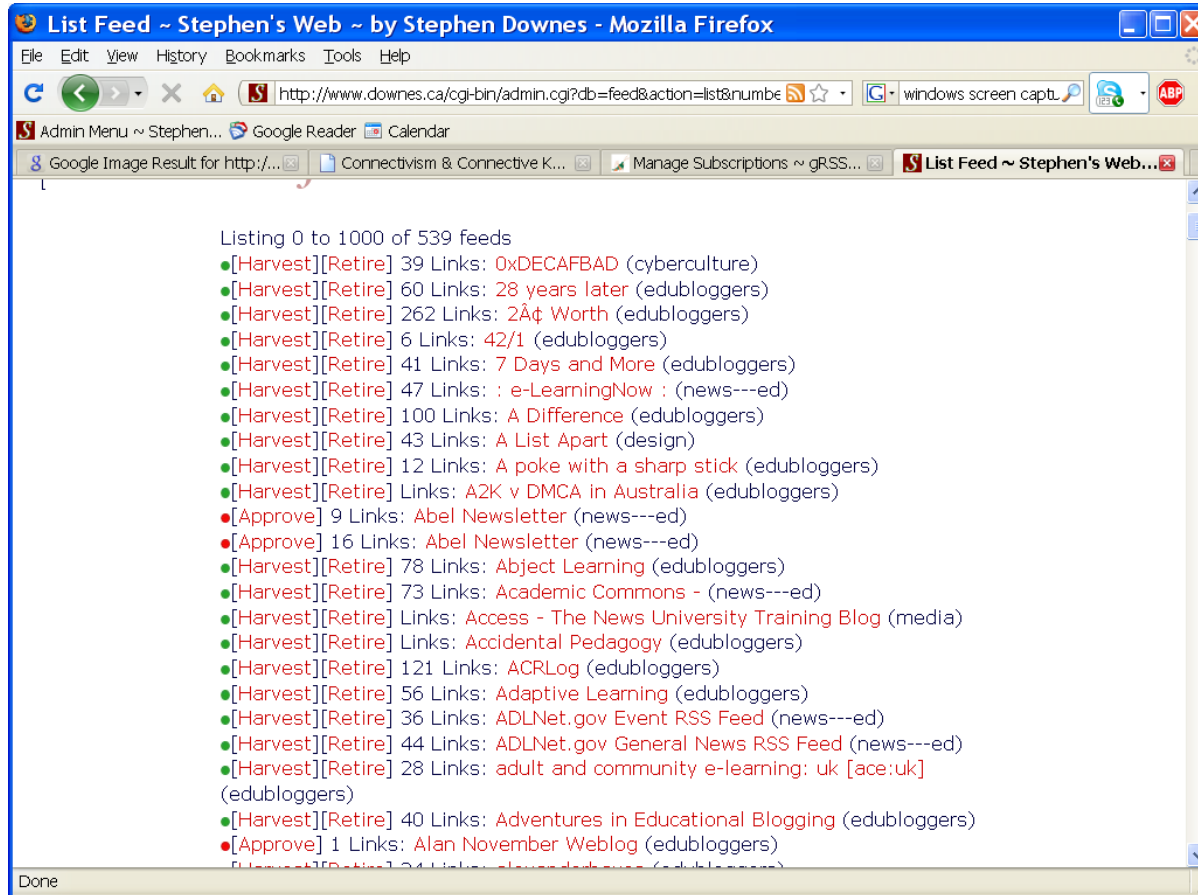
Title	OLDaily		
File	newsOLDaily.htm		
Header	email_html_header	Footer	email_html_footer
Feed			
Autopub	yes	Archive	yes
Sub	yes		
Days	Monday.Tuesday.Wednesday.Thursday.Friday.Saturday		
Type	email		

Code

```
<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<br/>
#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>
```

Pages are created automatically from a database of content types



Feed  
Management

Content input comes from RSS  
feeds harvested by gRSShopper

[\[New\]](#) [\[List\]](#) [Author](#)    **title:A Day In The Life -> journal**  
[\[New\]](#) [\[List\]](#) [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	<a href="#">[Help]</a>
<input type="radio"/> Feed Fields	title	<a href="#">[Help]</a>
<input checked="" type="radio"/> Value Pair	title:A Day In The Life	<a href="#">[Help]</a>

**Destination**  
 Select a destination table: journal

link:

**Map Table Elements**

Source		Destination: journal
hits	--->	<input type="text"/>
cites	--->	<input type="text"/>

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 illuminate ([link here](#)). Sorry about this last minute change. If the time doesn't work for those in Australia and Asia, please let me know ([gziemens@elearnspace.org](mailto:gziemens@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

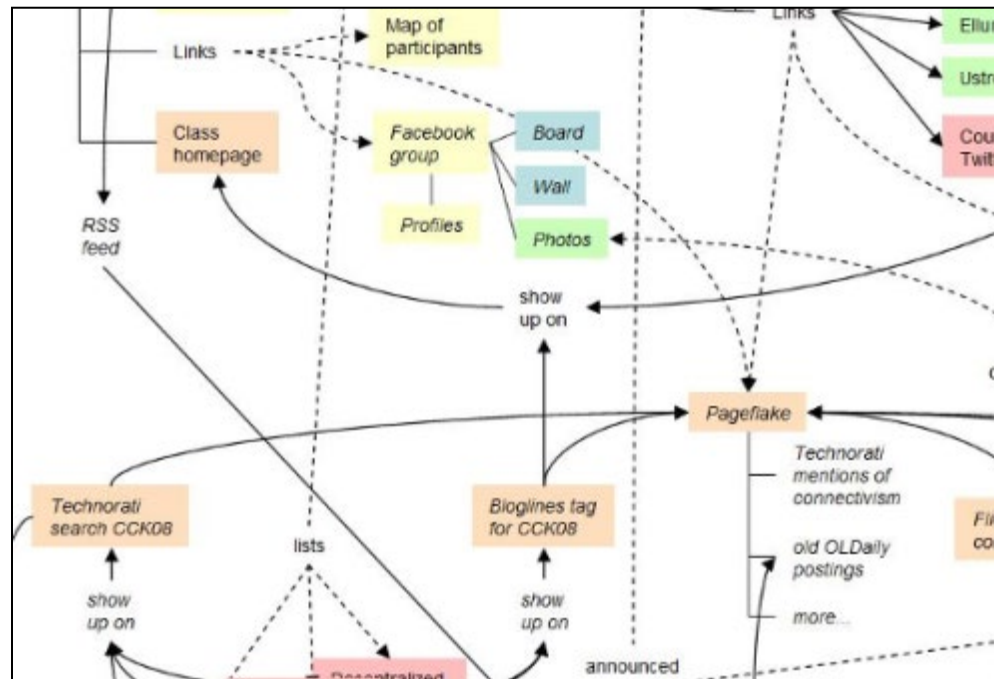
[ADMIN]

Listing 0 to 1000 of 106 feeds

[New] [List] Author	[Harvest] [Retire] Links: <a href="#">ActionsFLE en formation</a> (category)
[New] [List] Box	[Approve] Links: <a href="#">Aggregator Blog</a> (category)
[New] [List] Cite	[Approve] Links: <a href="#">Al d'Ala</a> (category)
[New] [List] Event	[Approve] Links: <a href="#">Alvin's Educational Technology Blog</a> (category)
[New] [List] Feed	[Approve] Links: <a href="#">An Education and Technology Blog</a> (category)
[New] [List] File	[Approve] Links: <a href="#">An Oxonian's Learning Journey</a> (category)
[New] [List] Journal	[Approve] Links: <a href="#">Beespace</a> (category)
[New] [List] Link	[Approve] Links: <a href="#">blog.puntopanto.it, bloggers she wrote</a> (category)
[New] [List] Optlist	[Approve] Links: <a href="#">Bradley Shoebottom Blog</a> (category)
[New] [List] Mapping	[Approve] Links: <a href="#">Brett Powell CCK</a> (category)
[New] [List] Page	[Approve] Links: <a href="#">Buthaina-Connect08</a> (category)
[New] [List] Person	[Approve] Links: <a href="#">CCK-No8</a> (category)
[New] [List] Post	[Approve] Links: <a href="#">cck08 - learning</a> (category)
[New] [List] Presentation	[Approve] Links: <a href="#">CCK08-Viplay Baxi</a> (category)
[New] [List] Publication	[Approve] Links: <a href="#">Classroomblogging.com</a> (category)
[New] [List] Project	[Approve] Links: <a href="#">Coalesce</a> (category)
[New] [List] Task	[Approve] Links: <a href="#">Concetta Gotlieb's Blog</a> (category)
[New] [List] Template	[Approve] Links: <a href="#">Connecting Online</a> (category)
[New] [List] Theme	[Approve] Links: <a href="#">Connective Knowledge Weblog</a> (category)
[New] [List] Topic	[Approve] Links: <a href="#">Connectivism &amp; Connective Knowledge</a> (edubloggers)
[New] [List] View	[Approve] Links: <a href="#">Connectivism and Connective Knowledge</a> (category)
	[Approve] Links: <a href="#">Connectivism by the Nile</a> (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

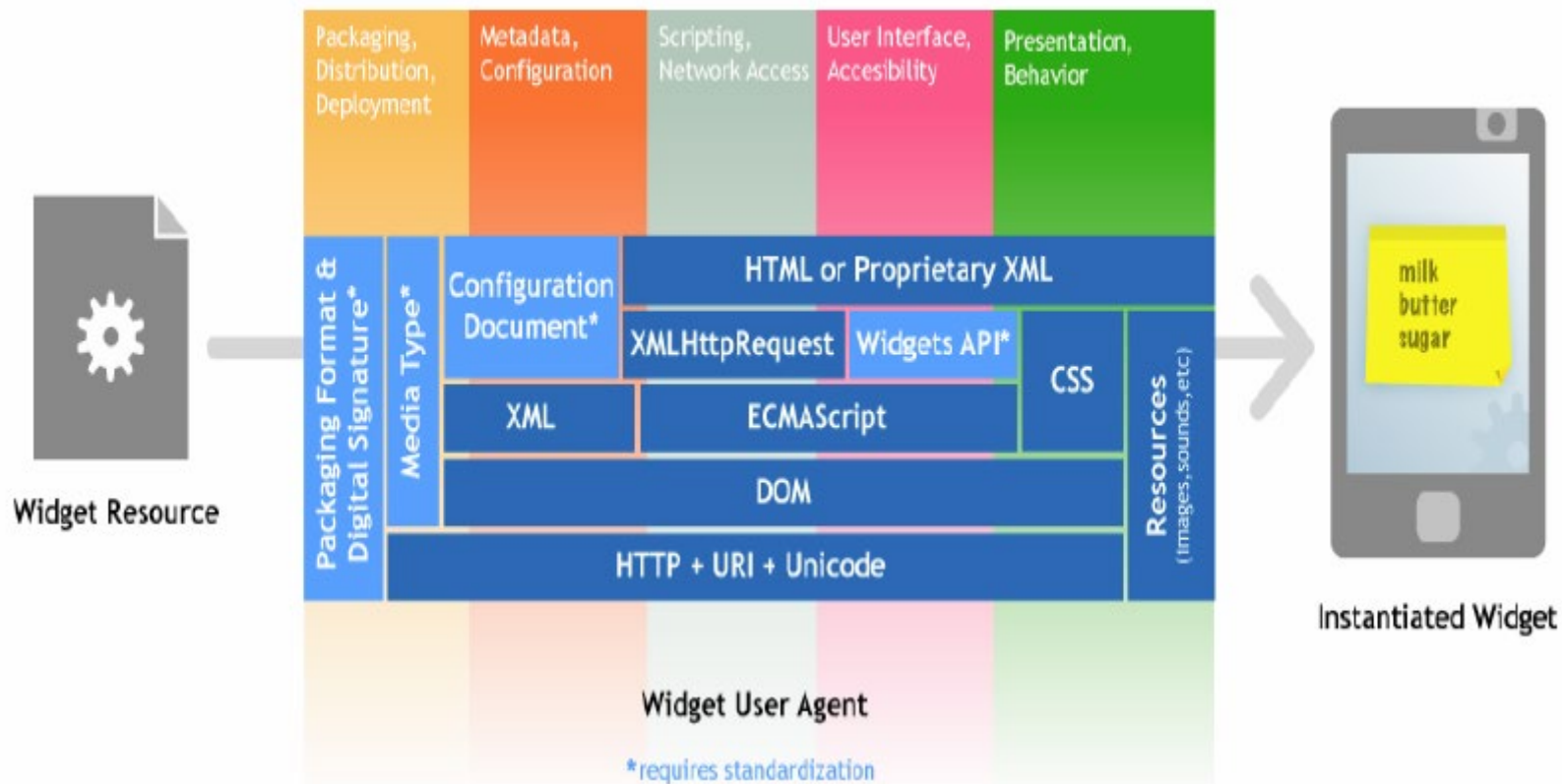
- Pageflakes Site

The screenshot shows a Pageflakes website layout for 'ltc's Pagecast'. The header includes the Pageflakes logo, a search bar, and navigation links like 'Watch this Pagecast', 'Copy', 'Send To a Friend', and 'Random Pagecast'. The main content area is divided into several widgets:

- Connectivism & Connective Knowledge (5)**: A widget titled 'Comparing Connectivism' with a sub-header 'I've posted a comparison between different theories of learning. It's not a final word summ...' and a list of links: 'Managing your Moodle Forums', 'Week 1: What is connectivism', 'So, Where are you from?', and 'Introduction to the course...'.
- Technorati Search for: CCK08 (5)**: A widget titled 'How to filter your CCK08 email (in Gmail)' with a sub-header 'How to filter your CCK08 email (in Gmail) September 9th, 2008 — general How to create a ...' and a list of links: 'Bill Kerr's Challenge to Connectivism', 'Connectivism & Connective Knowledge Course', 'Connectivism: Theory and Application', and 'Connectivism course: nifty (and a little sca...'.
- Sponsored Content**: A large advertisement for 'AIG Travel Guard travel insurance.' with a sun icon and the AIG Travel Guard logo.
- Weather**: A widget for 'Toronto, Canada' showing a 4-day forecast: Tuesday (17°/9°C), Wednesday (19°/12°C), Thursday (22°/15°C), and Friday (22°/14°C). It also includes 'Hourly Forecast | 10-Day Forecast' and is 'Powered by weather.com'.
- Winnipeg, Canada**: A widget titled 'Ellis resurfaces in Winnipeg - The Gazette (...)' with a sub-header 'CBC.caEllis resurfaces in WinnipegThe Gazette (Montreal), Canada - 22 hours ago-He was signed on Monday...' and a list of links: 'Winnipeg couple makes pot discovery - Winnip...', 'Rejigged Bombers-Ticats deal a go - Globe an...', 'Three Winnipeg men charged in drug busts - W...', and 'Grandmotherhood inspires Winnipeg publisher ...'.
- Events in Winnipeg, Canada**: A small widget at the bottom.
- Stephen's Web ~ by Stephen Downes ~**: A widget titled '[CCK08] First Impressions' with a sub-header 'Even if you're not registered in our giant Connectivism course (and most OLDaily readers ar...' and a link 'Does Learning Grow or Is It Built?' with a sub-header 'Interesting post from the Connectivism course'.

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

# Widgets and Gadgets

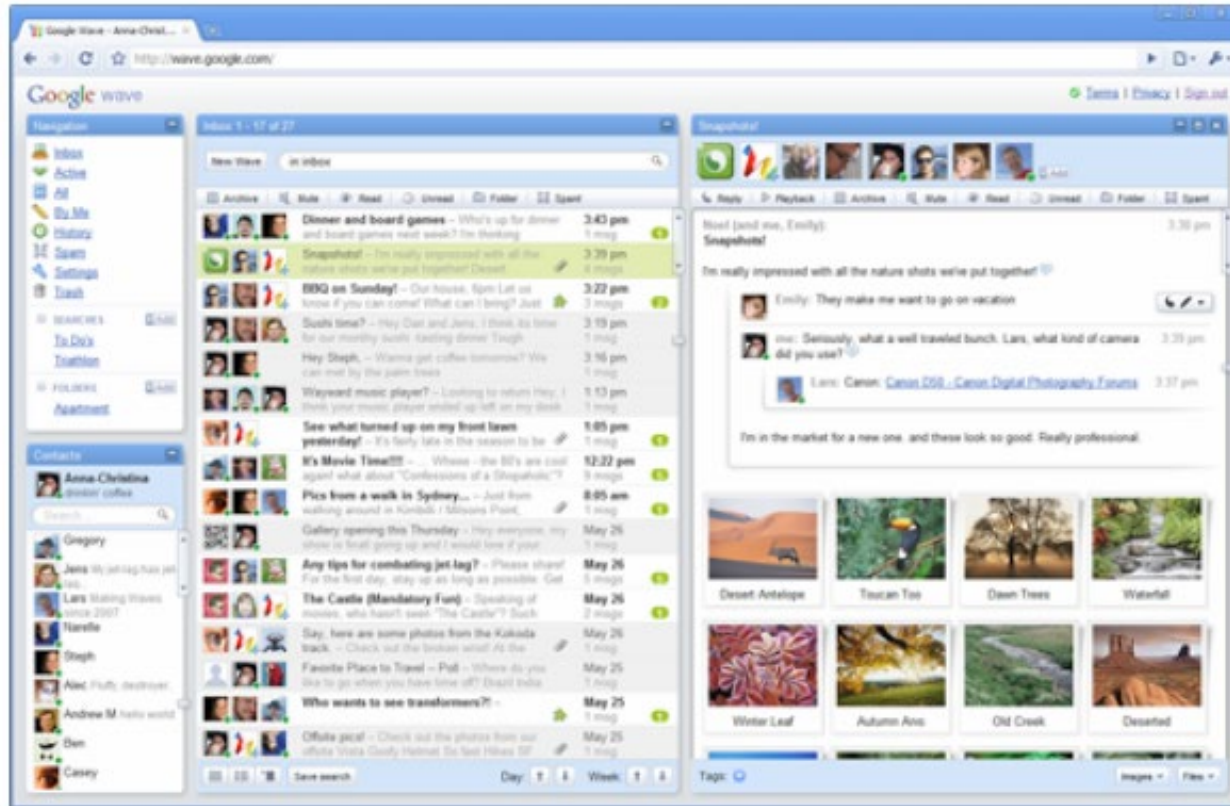


# Widget Landscape

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

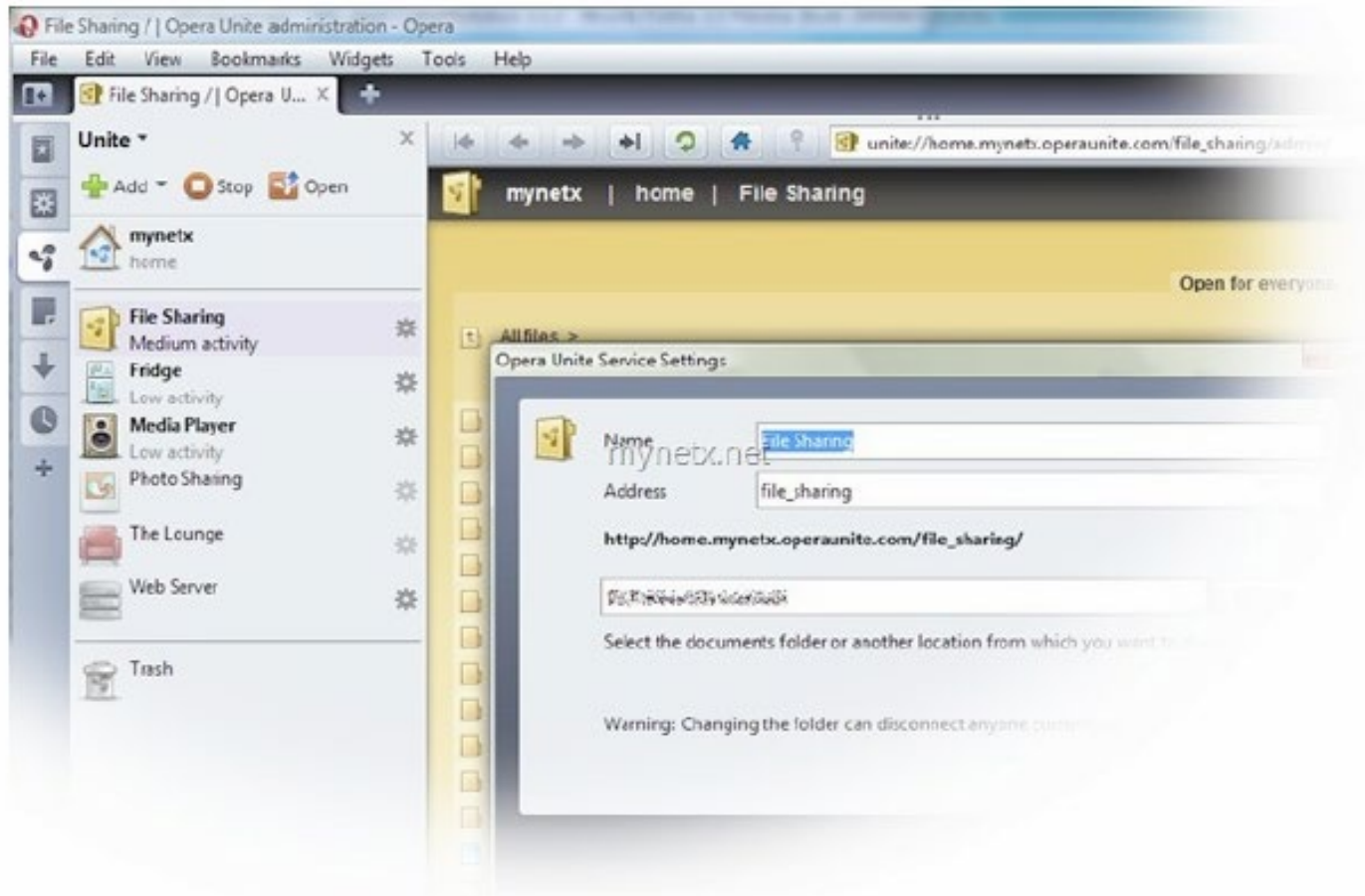
<http://www.w3.org/TR/widgets-land/>

# Google Wave



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

# Opera Unite



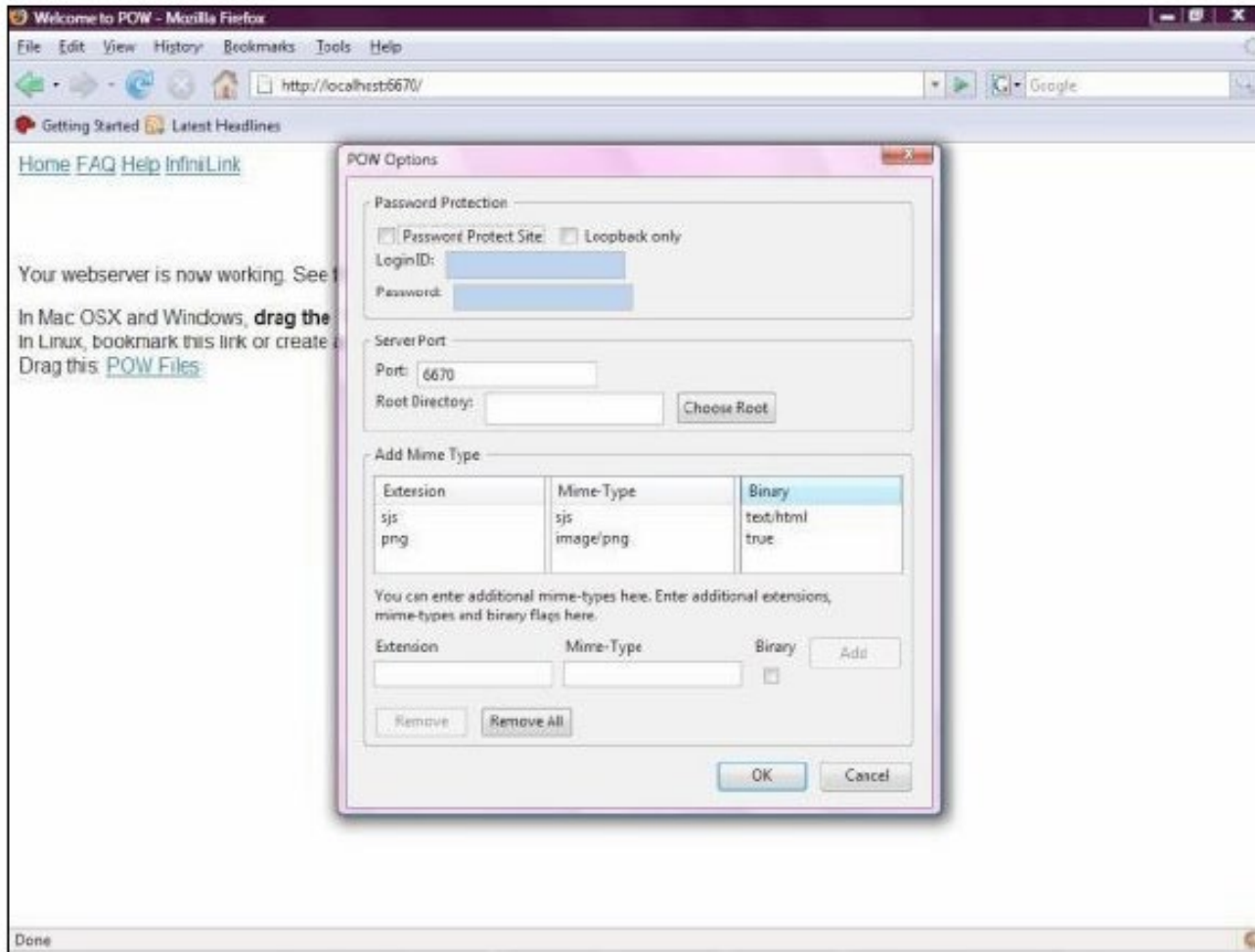
<http://blog.mynetx.net/windowslive/opera-unite-how-client-server-future-look-like/>

# Windows Live Mesh



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

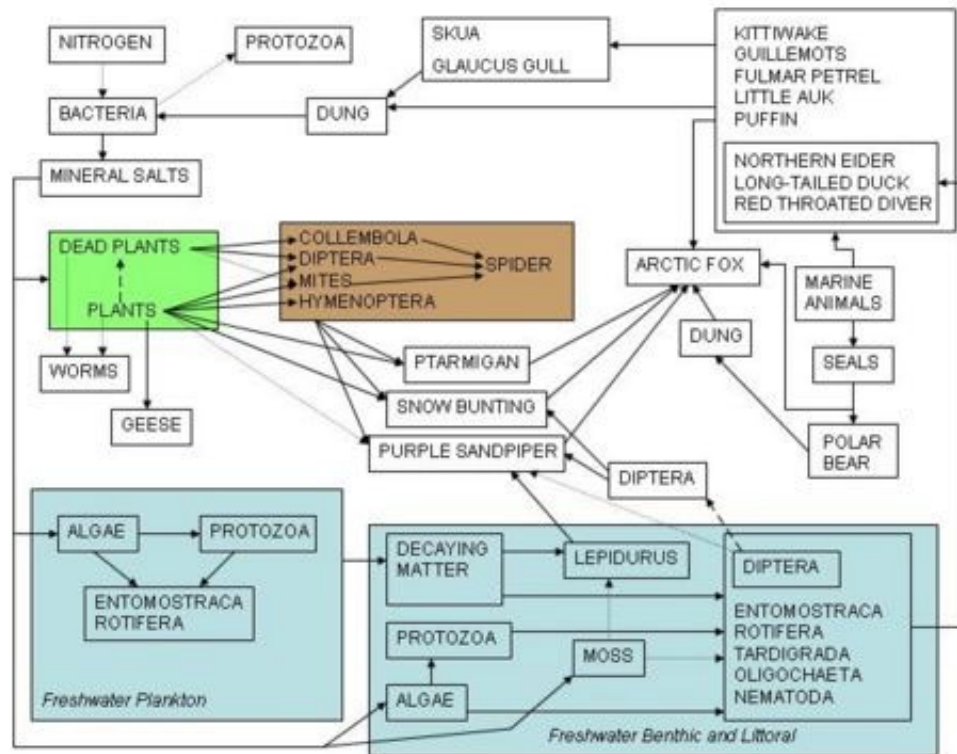
# Firefox Plain Old Web Server



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

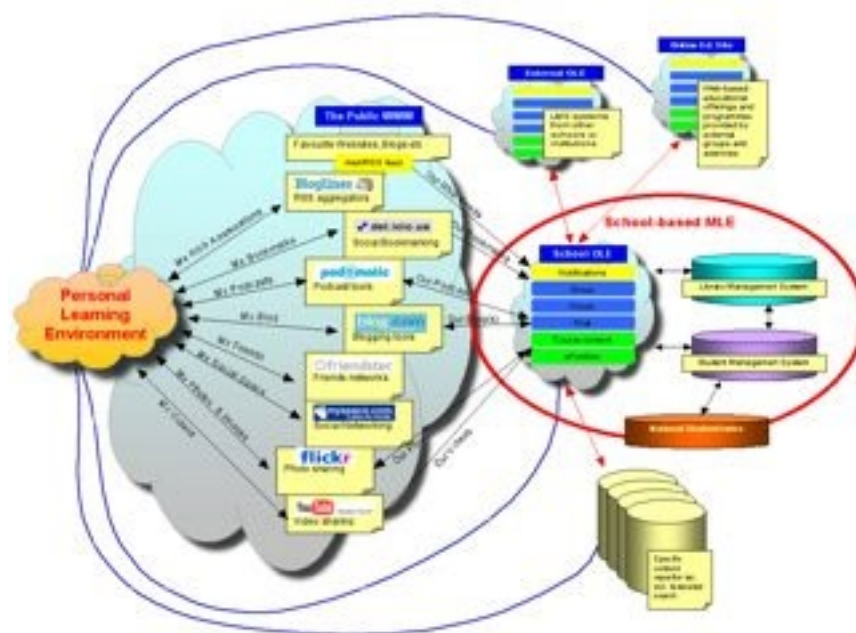


- Networks of interactions (aggregate, remix, repurpose, feed forward) – syndication



An ecology...

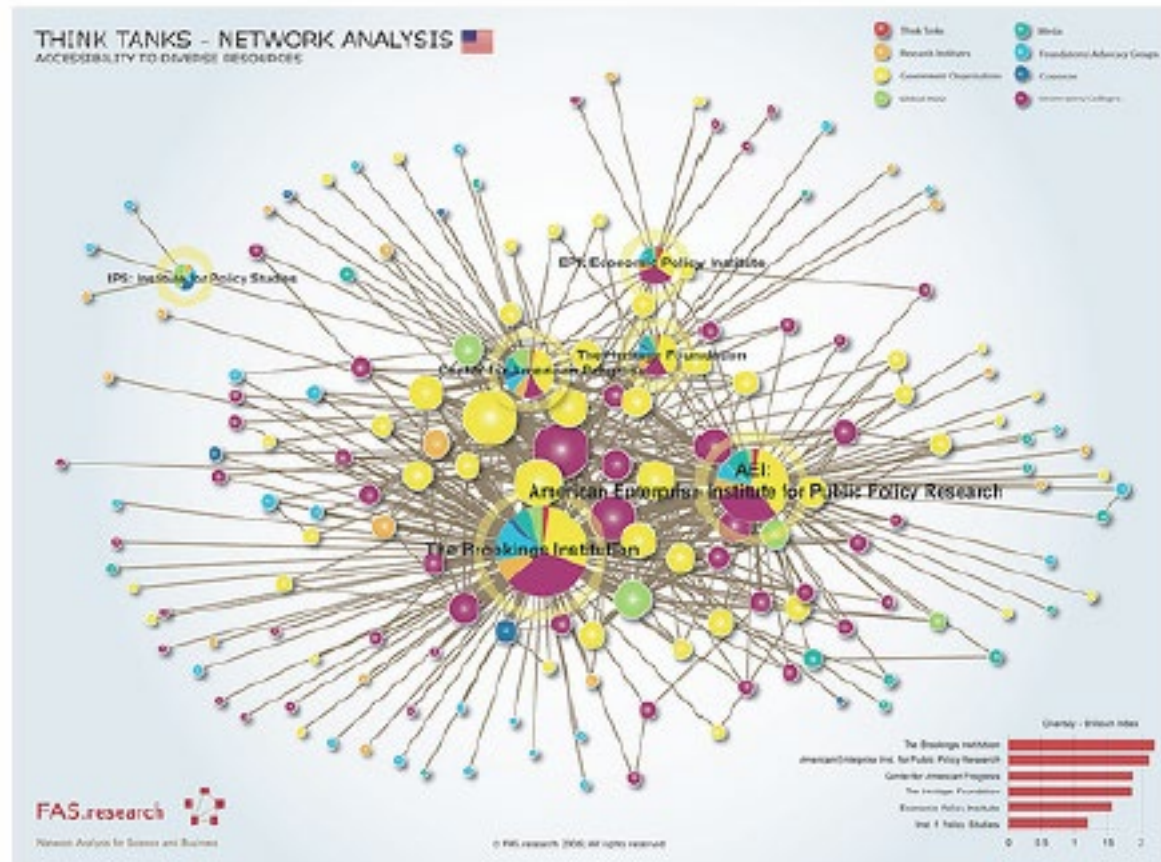
- The *personal* learning centre



*Autonomy*

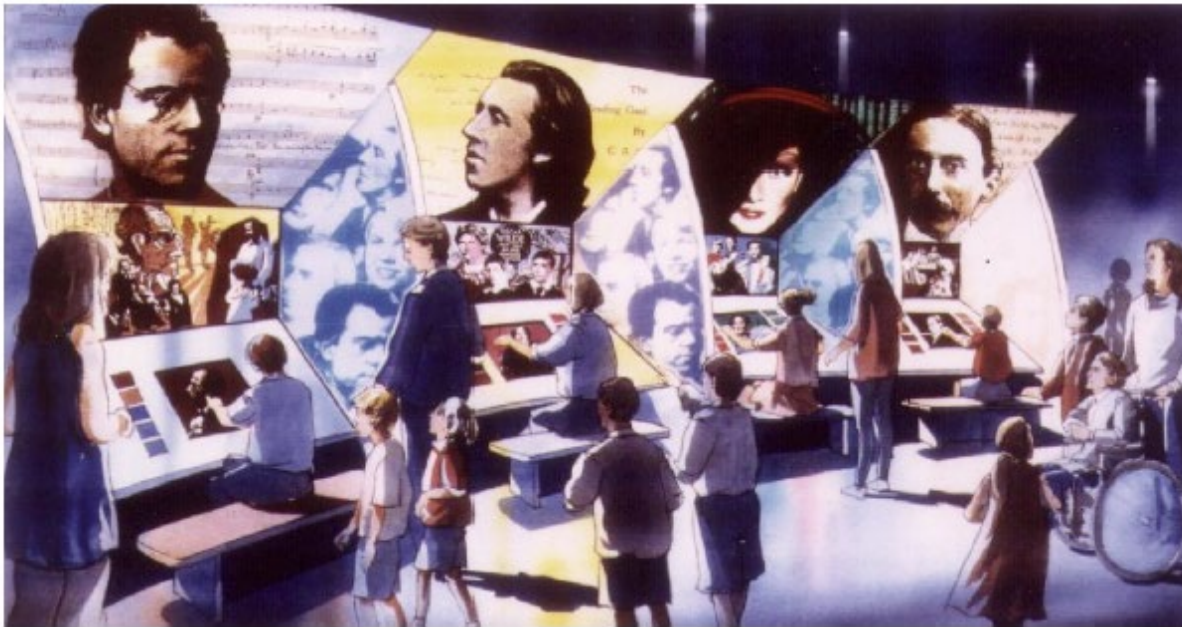
[http://blog.core-ed.net/derek/2006/11/more\\_on\\_mles\\_and\\_ples.html](http://blog.core-ed.net/derek/2006/11/more_on_mles_and_ples.html)

- The Network is Diverse – multiple views, multiple technologies



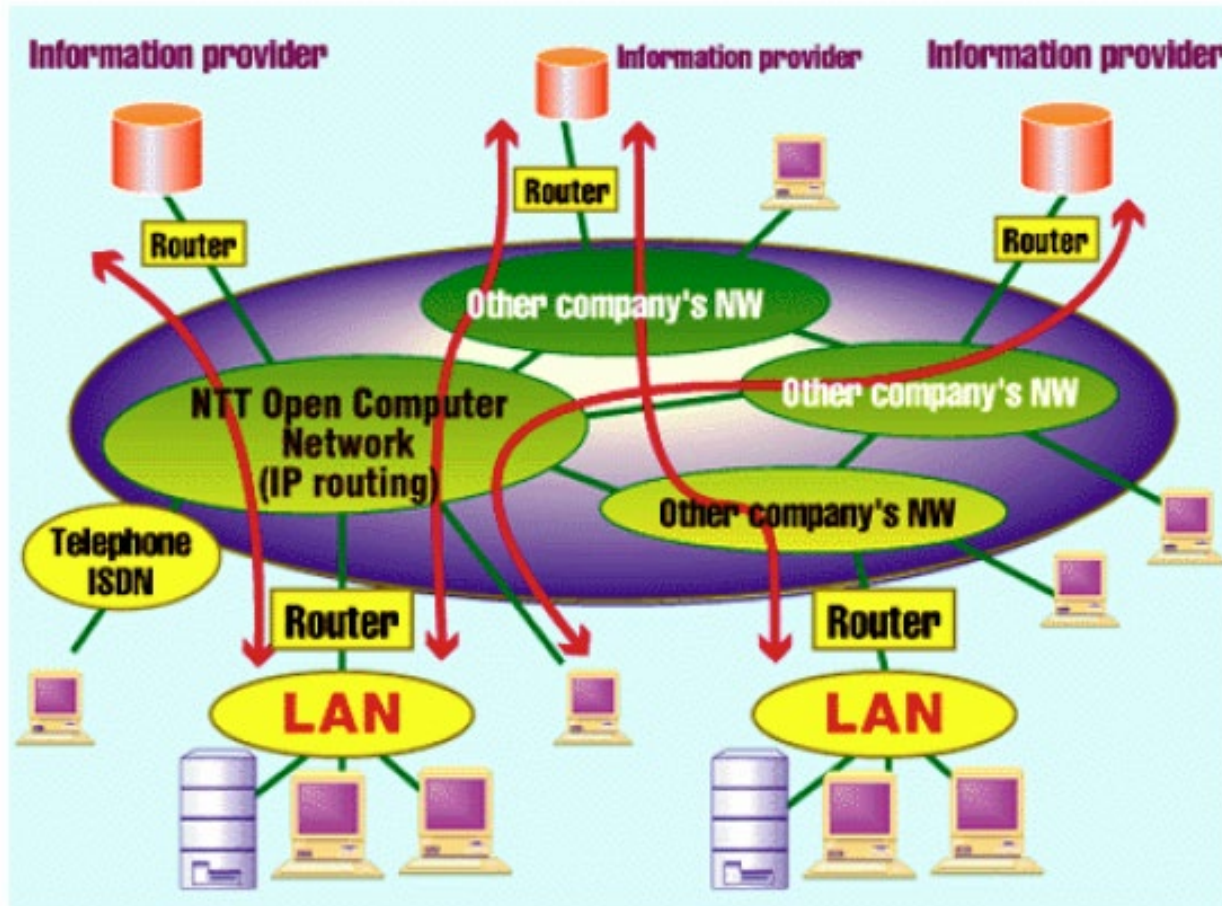
<http://flickr.com/photos/11242012@N07/1363575474>

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



<http://www.biography.org.uk/real.htm>

- The Network is *open*



[http://park.org/Japan/NTT/DM/html\\_f4/F4\\_10600\\_e.html](http://park.org/Japan/NTT/DM/html_f4/F4_10600_e.html)

Stephen Downes

<http://www.downes.ca>

