

# Web 2.0, E-learning 2.0 and the new learning



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Learning Technologies Conference  
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# Web 2.0: The Learning Network

- The intersection between the worlds for education, work, and home
- Key requirement is easy-to-use tools and hosting services\*
- \*E.g. the “e-Portfolio-as-blog” approach

<http://www.cetis.ac.uk/members/scott/entries/20050523083528>

# Un...

As in, unorganized  
As in *not* managed  
Unconference



# Messy vs. Neat

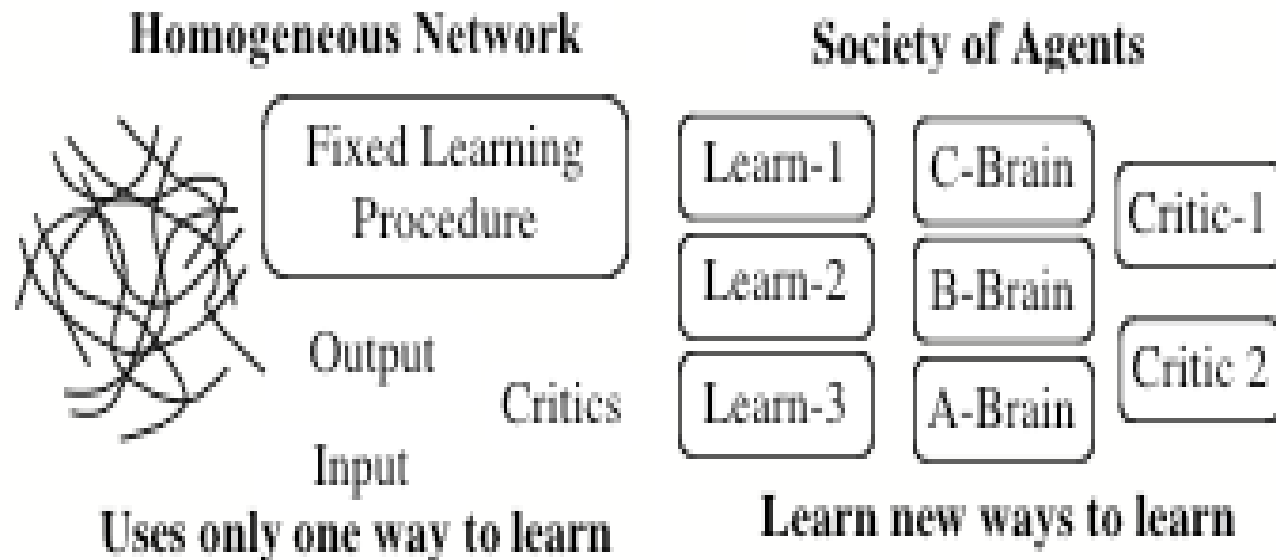
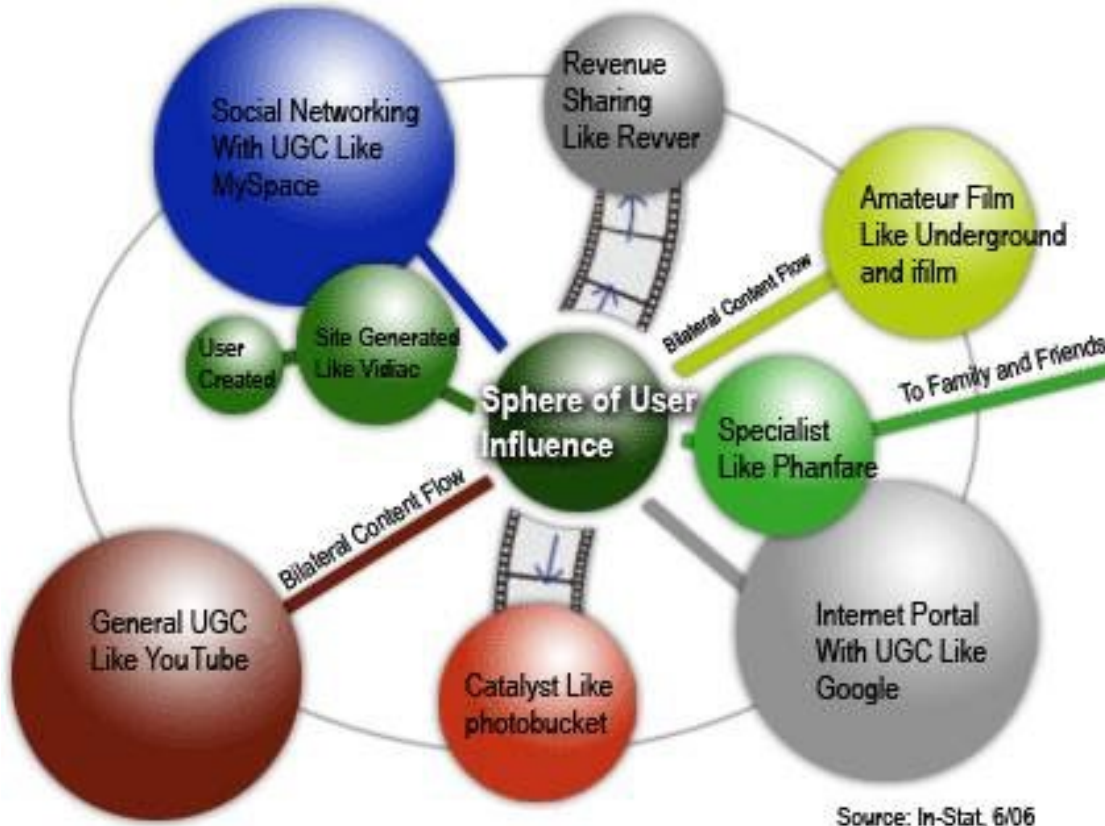


Figure. 7: Messy vs. Neat: Homostructural vs. Heterostructural

# User-Generated Content



<http://www.linuxelectrons.com/news/general/user-generated-web-content-will-grow-rapidly-through-2010>

# Flow

- IM and SMS expanded – Twitter
- Facebook ‘status’ updates – the now
- RSS, podcasting and other content feeds
- Mode – the idea of flow – how do you survive in a world of constant change?  
Stop thinking of things as static

# E-Learning 2.0

The idea is that learning is *not* based on *objects* and *contents* that are stored, as though in a library



Rather, the idea is that learning is like a utility - like water or electricity - that flows in a network or a grip, that we tap into when we want





# The Concept

- Learner centered

Learning is centered around the interests of the learner

Learning is *owned* by the learner

This implies learner choice of subjects, materials, learning styles

- Immersive learning

Learning by doing



- **Connected Learning**

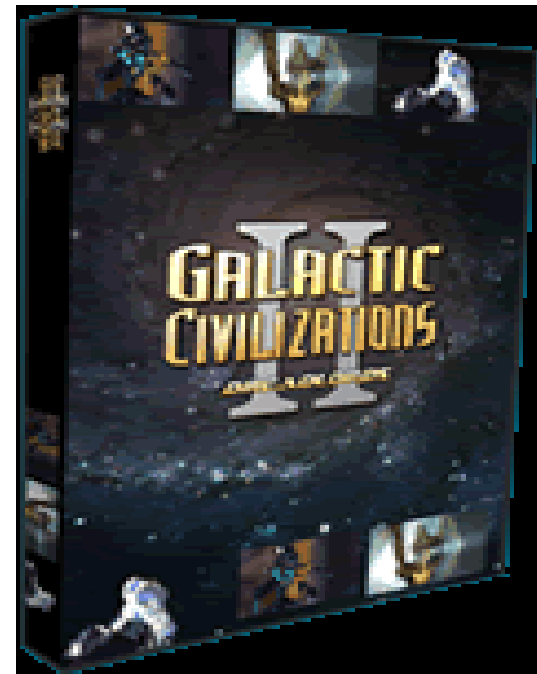
The computer connects the student to the rest of the world

Learning occurs through connections with other learners

Learning is based on conversation and interaction

# Examples

- Game-based learning

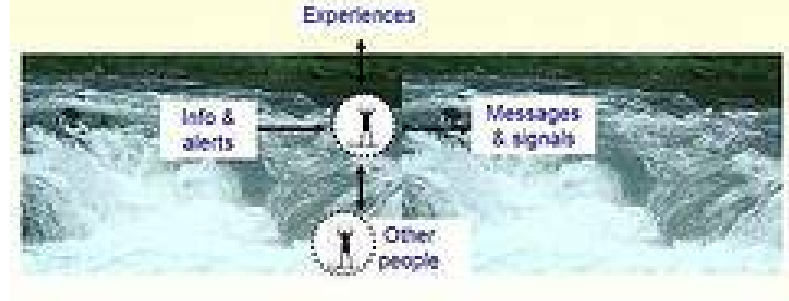
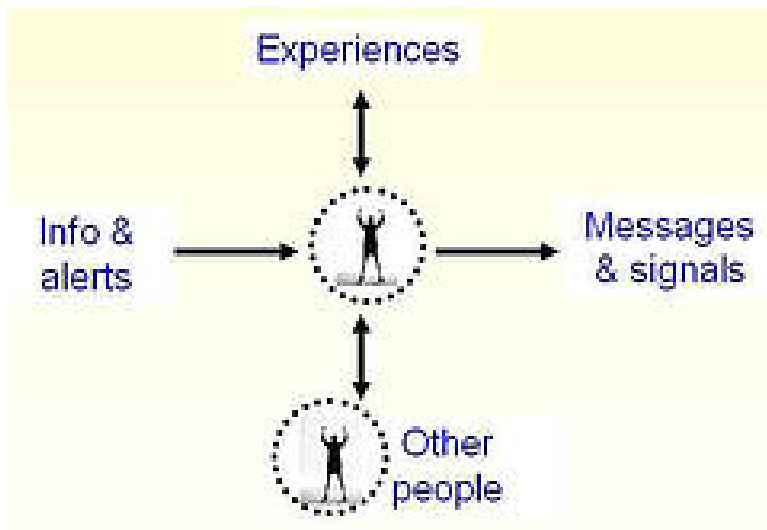


Types:

Branching, Spreadsheet, Quiz Game, Simulation Lab...

<http://www.downes.ca/post/11>

- Workflow (Informal) Learning



Types: EPSS, Community of Practice, Environment, Visualization...

<http://metatime.blogspot.com/>

- Mobile Learning



Examples:

Co-op learning, drill and flash-card,  
instant messaging, field trips,  
resource capture (like this talk!)

# First Iteration: User-Produced Media

- Blogs and Blogging
- Podcasting and Vodcasting
- Game mods and other multimedia



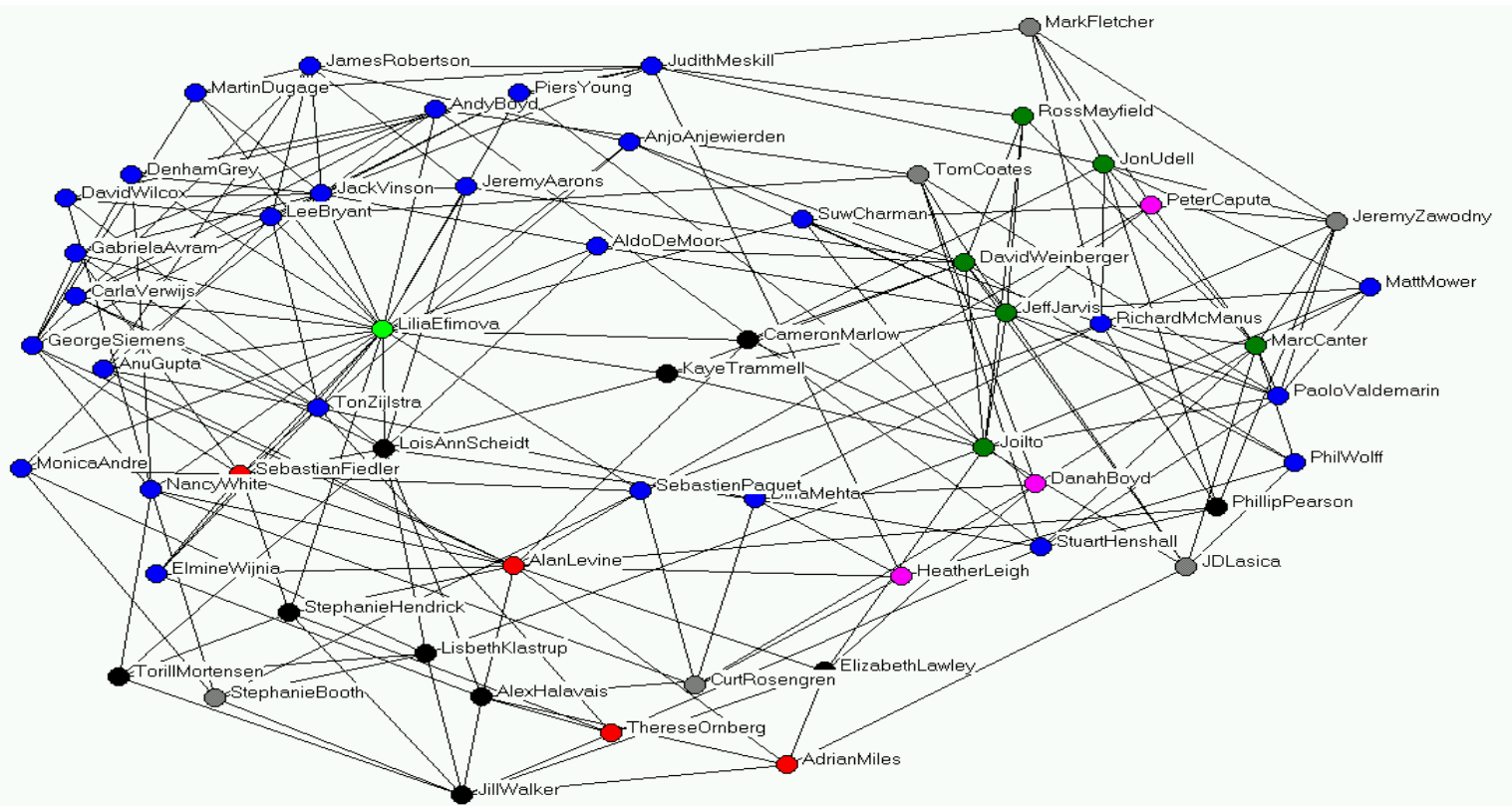
# Web 2.0 - Core Technologies



Tools for worldmaking...



# Social Networking



<http://staffdev.henrico.k12.va.us/parents/socnetwork.htm>

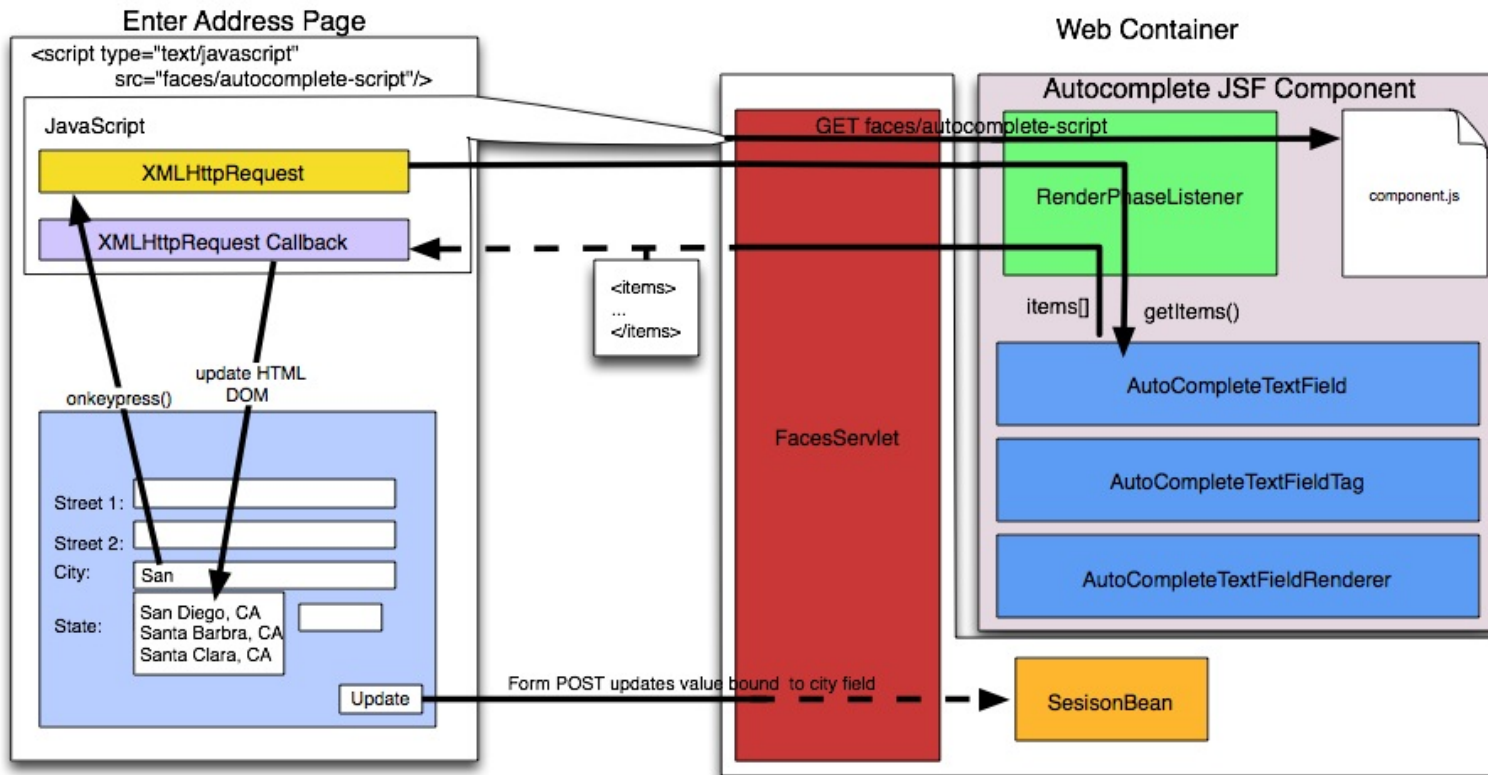
# Tagging

## Tagging

entrepreneurship publishing technology **design** medium b  
environment games **wireframe** sitemap user experience  
process flow **tagging** card sort **iasummit07** design  
on the box **information architecture** swimlanes rapid f  
**UX methods** digital ethnography analytics alignment m  
**interaction design** kano analysis **tagging** experience  
**faceted browse** page description diagram **facets links**  
miscellaneous **web 2.0** movies **adoption** emergence m

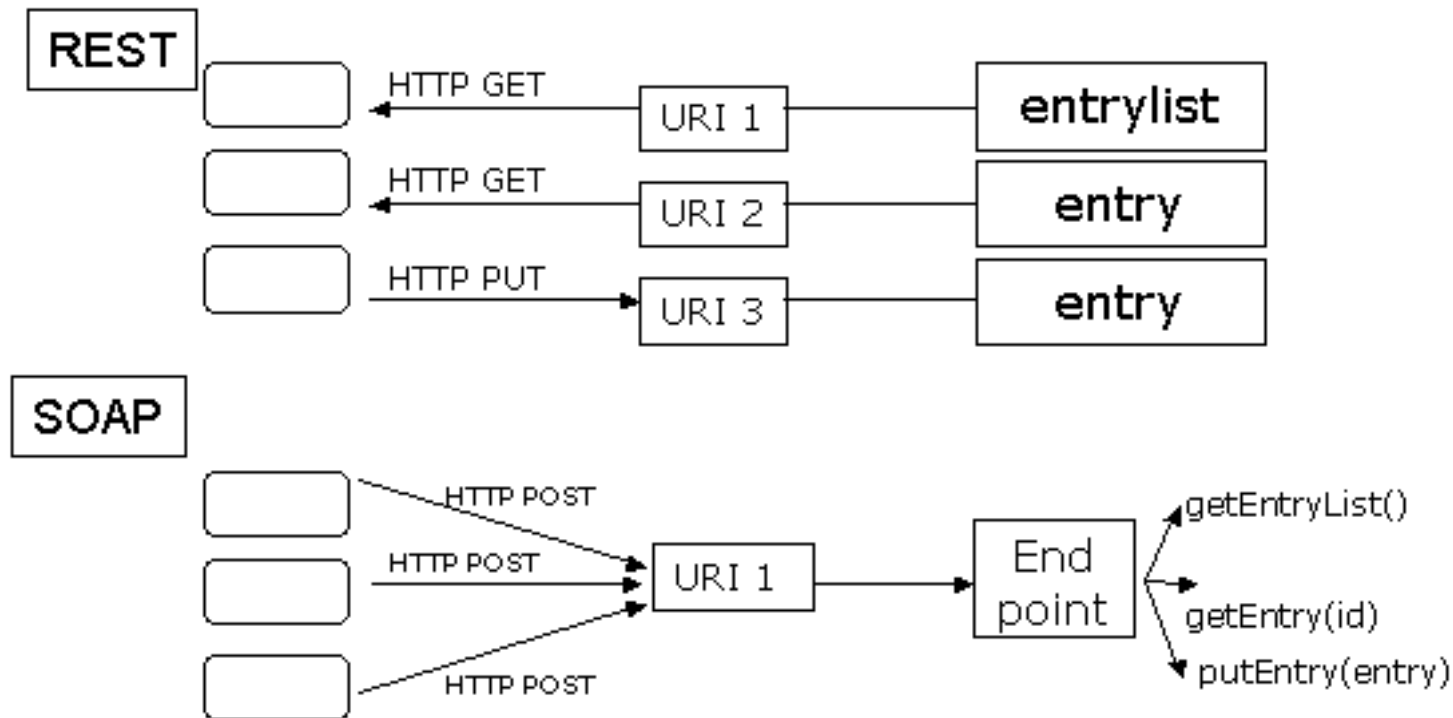
# Asynchronous Javascript and XML (AJAX)

Jesse James Garrett in February 2005.



<https://bpcatalog.dev.java.net/ajax/textfield-jsf/design.html>

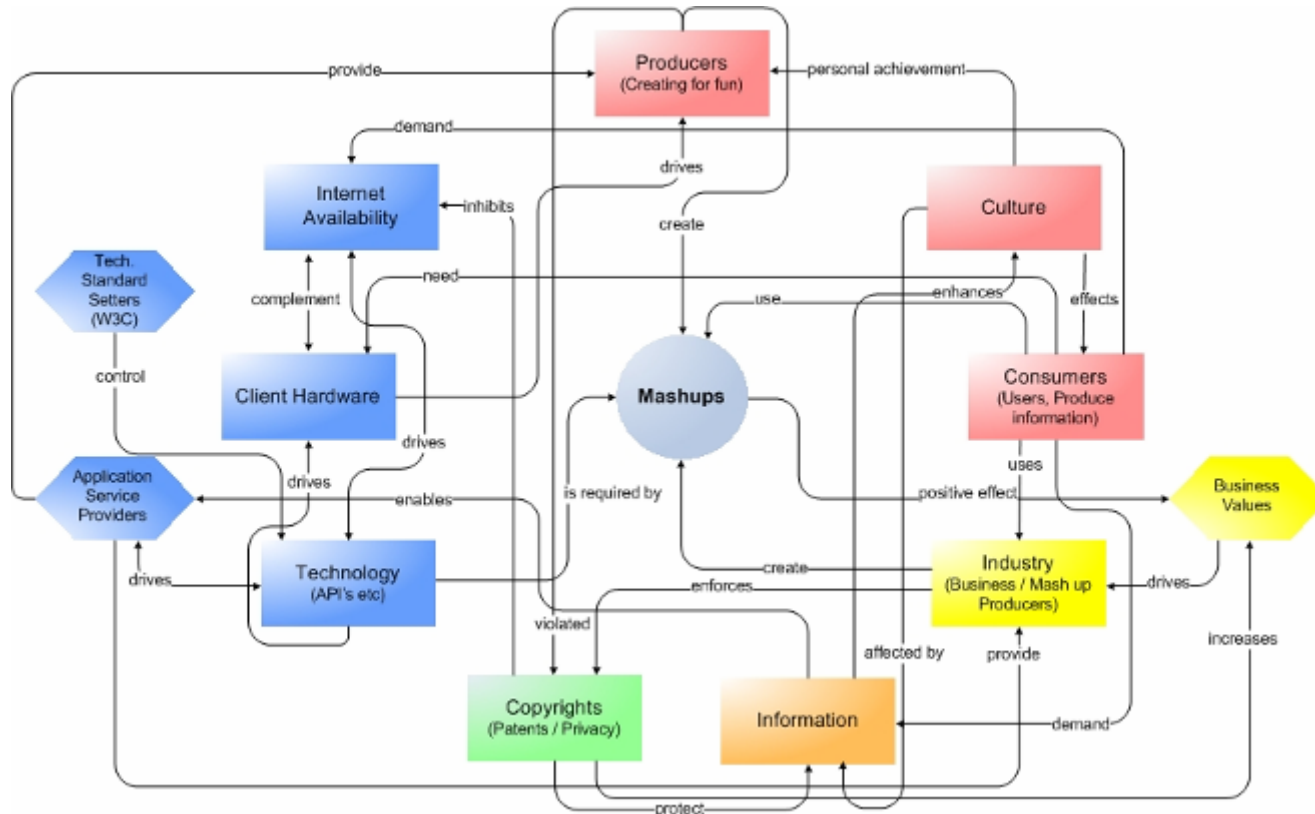
# Representational State Transfer (REST)



- principles that outline how resources are defined and addressed
- looser sense: domain-specific data over HTTP

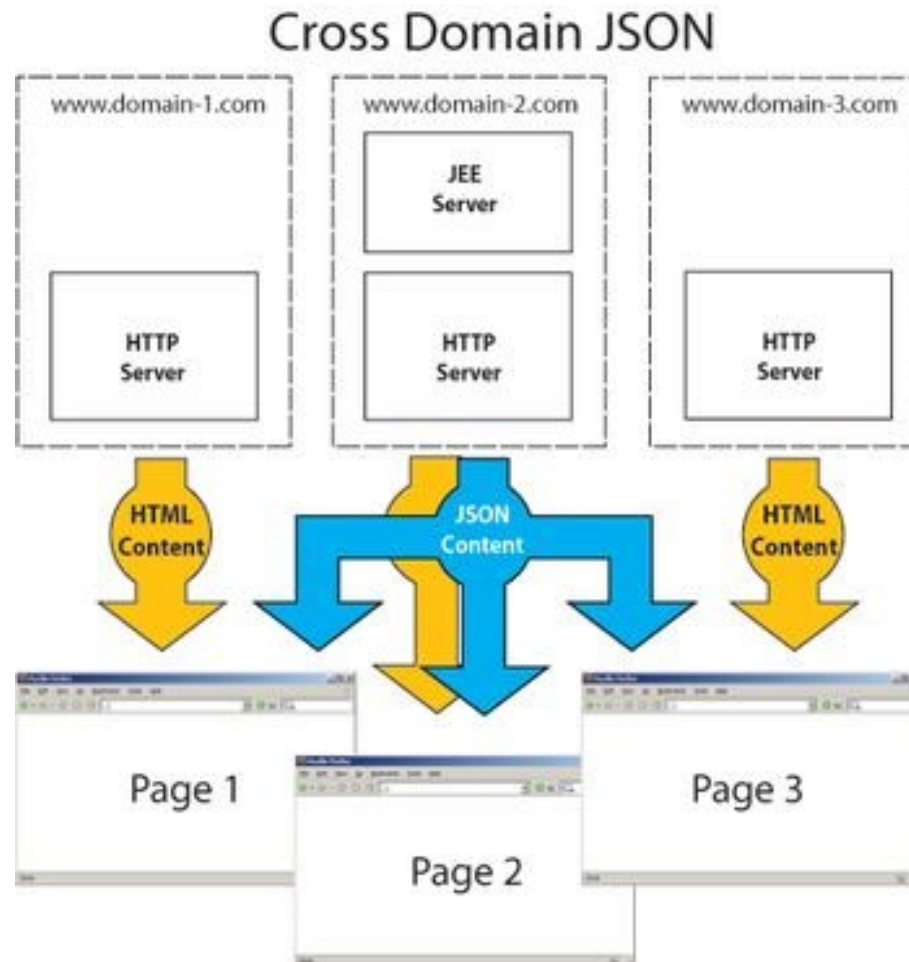
[http://en.wikipedia.org/wiki/Representational\\_State\\_Transfer](http://en.wikipedia.org/wiki/Representational_State_Transfer)  
<http://itpro.nikkeibp.co.jp/article/Watcher/20060315/232492/>

# Application Program Interface (API) and Mash-Ups

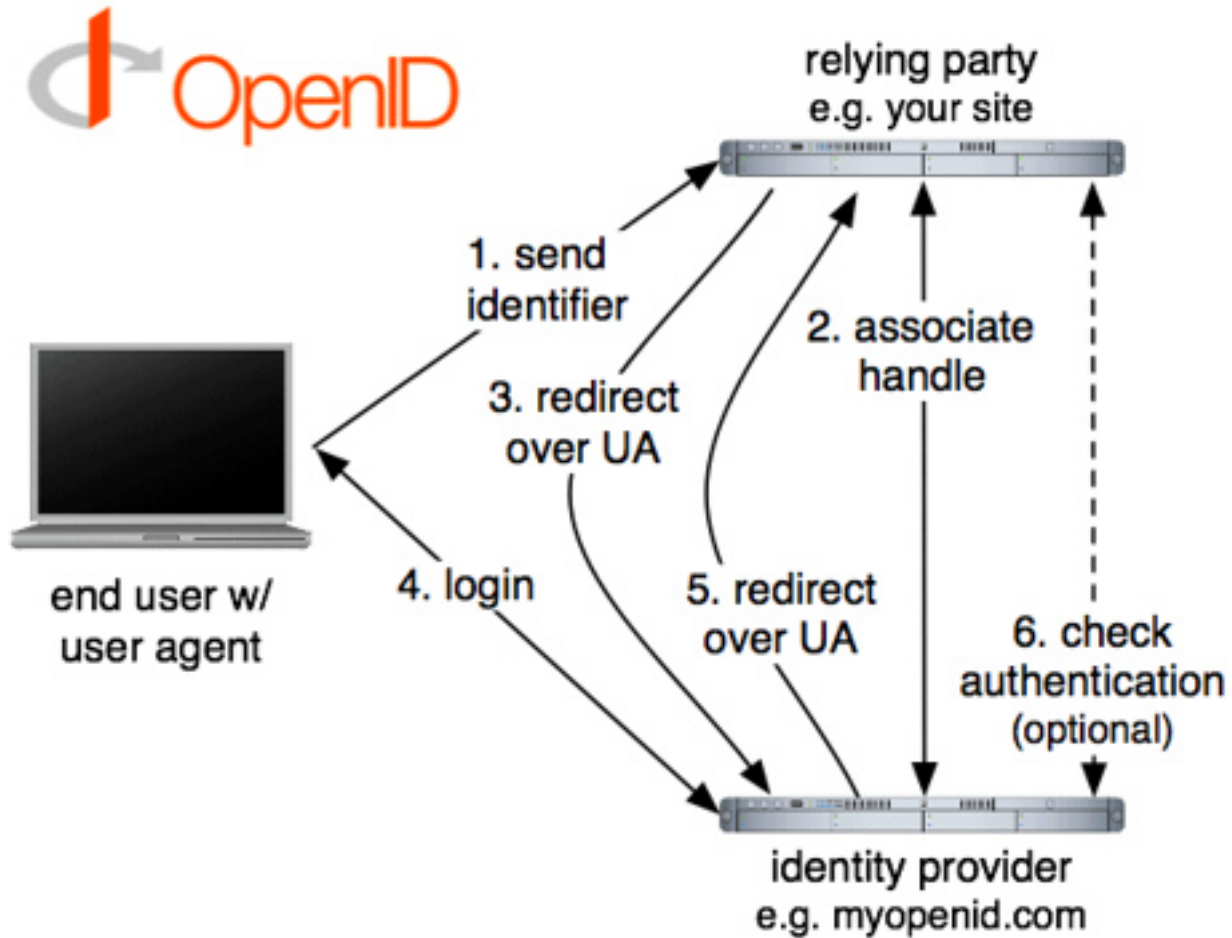


<http://scenariothinking.org/wiki/images/b/b6/MashUpSysDiagramV6.0.jpg>

# Javascript Object Notation (JSON)



- OpenID



# Identity

- The idea: identity as personal, not institutional
- You own your data
- Identity 2.0 – Dick Hardt  
[http://talk.talis.com/archives/2005/10/dick\\_hardt\\_on\\_i.html](http://talk.talis.com/archives/2005/10/dick_hardt_on_i.html)  
<http://identity20.com/media/OSCON2005/>
- OpenID <http://openid.net/>



# No More Walled Gardens

- Social and content networks distributed across services
- But also... importantly... the walls or institutions and corporations are also less important

Different Realities...

# Network Semantics



# Why Networks?

- **Nature of the knower:** humans are more like networks
- **Quality of the knowledge:** groups are limited by the capacity of the leader
- **Nature of the knowledge:** group knowledge is *transmitted* and *simple* (cause-effect, yes-no, etc) while network knowledge is *emergent* and *complex*

# Groups vs. Networks

- *A group* is a collection of entities or members according to their nature; what defines a group is the quality members possess and number
- *A network* is an association of entities or members via a set of connections; what defines a network is the extent and nature of this connectivity

# Groups, Schools, Classes

- A group, in other words, is a ***school*** (of thought, of fish...) or a ***class*** of some sort.
- Or: classes and schools are just groups. They are *defined* as groups.
- Can we even think of schools – and of learning – without thinking at the same time of the attributes of groups?

# A Group...

- A group is **elemental**, defined by mass and sameness – like an ingot of metal (Aside: democracy is a group phenomenon)



# A Network...

- A network is diverse and changing, defined by interactions – like an **ecosystem**

Can we achieve order, responsibility, identity in an ecosystem? Do we need the iron hand? (Aside: Solon, learning, justice)

# The Semantic Principle

- Groups require unity, networks require diversity
- Groups require coherence, networks require autonomy
- Groups require privacy or segregation, networks require openness
- Groups require focus of voice, networks require interaction

<http://www.downes.ca/cgi-bin/page.cgi?post=35839>



# Diversity

- Did the process involve the widest possible spectrum of points of view?
- Did people who interpret the matter one way, and from one set of background assumptions, interact with people who approach the matter from a different perspective?

# Autonomy

- Were the individual knowers contributing to the interaction of their own accord, according to their own knowledge, values and decisions,
- Or were they acting at the behest of some external agency seeking to magnify a certain point of view through quantity rather than reason and reflection?

# Openness

- Is there a mechanism that allows a given perspective to be entered into the system, to be heard and interacted with by others?

# Connectivity

- Is the knowledge being produced the product of an interaction between the members, or is it a (mere) aggregation of the members' perspectives?
- *A different* type of knowledge is produced one way as opposed to the other.

Thanks!

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<http://www.downes.ca>