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

Homogeneous Network

Fixed Learning Procedure

Output

Input

Critics

Uses only one way to learn

Society of Agents

Learn-1 C-Brain Critic-1

Learn-2 B-Brain

Learn-3 A-Brain Critic 2

Learn new ways to learn
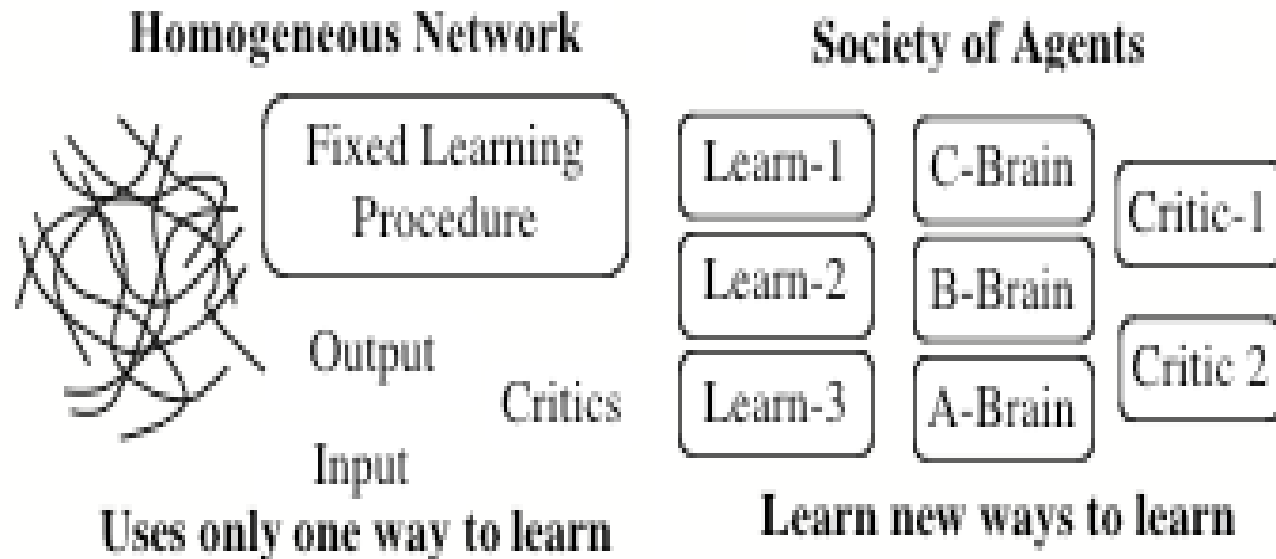
Figure. 7: Messy vs. Neat: Homostructural vs. Heterostructural

User-Generated Content
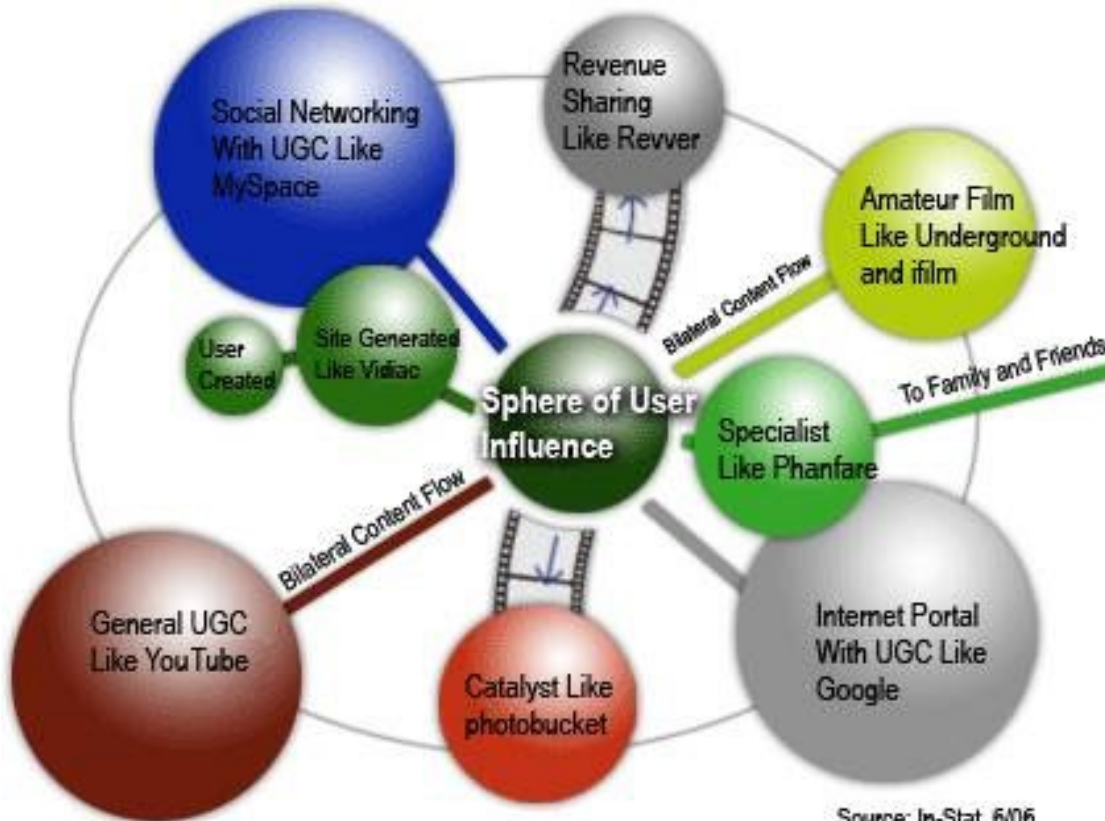
Flow

- 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
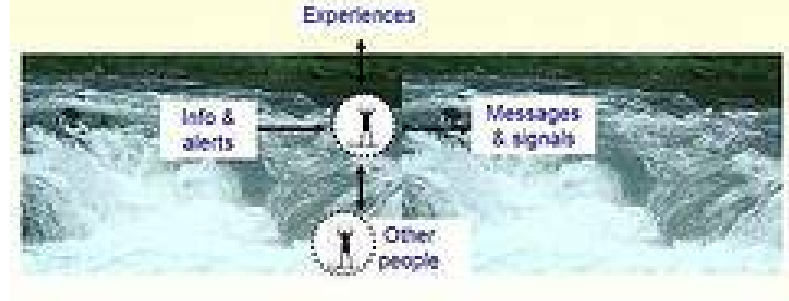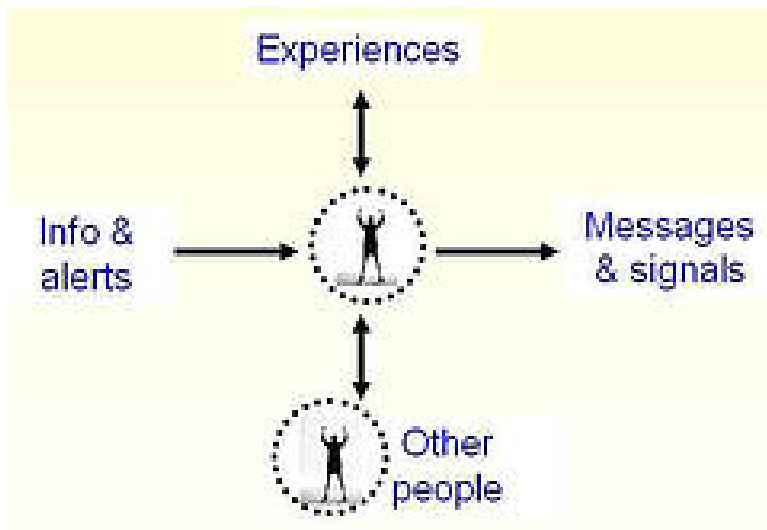
Examples

- 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 mesaging, field trips, resource capture (like this talk!)

First Iteration: User-Produced Media

- Blogs and Blogging

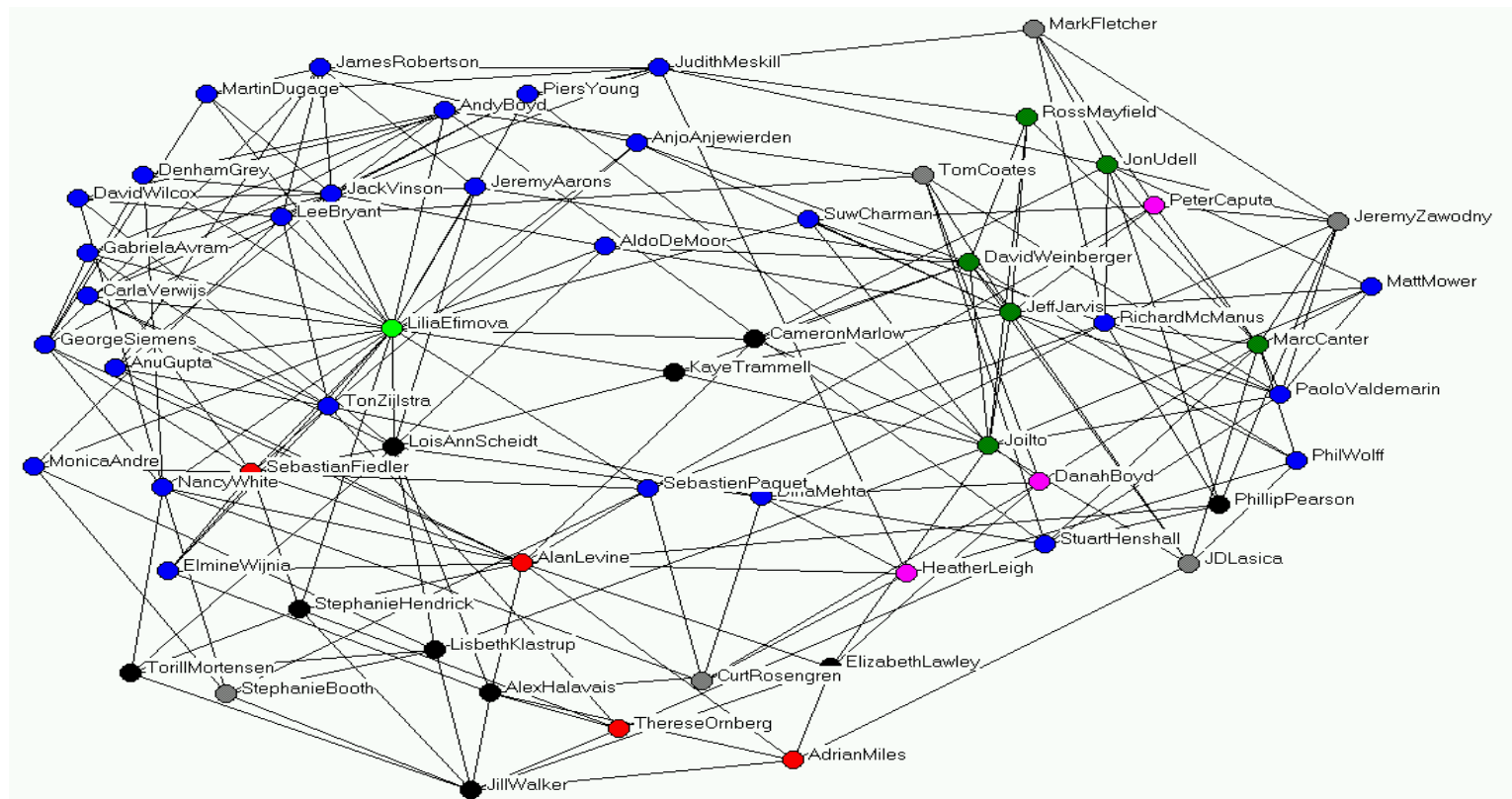- Podcasting and Vodcasting

- Game mods and other multimedia

Web 2.0 - Core Technologies
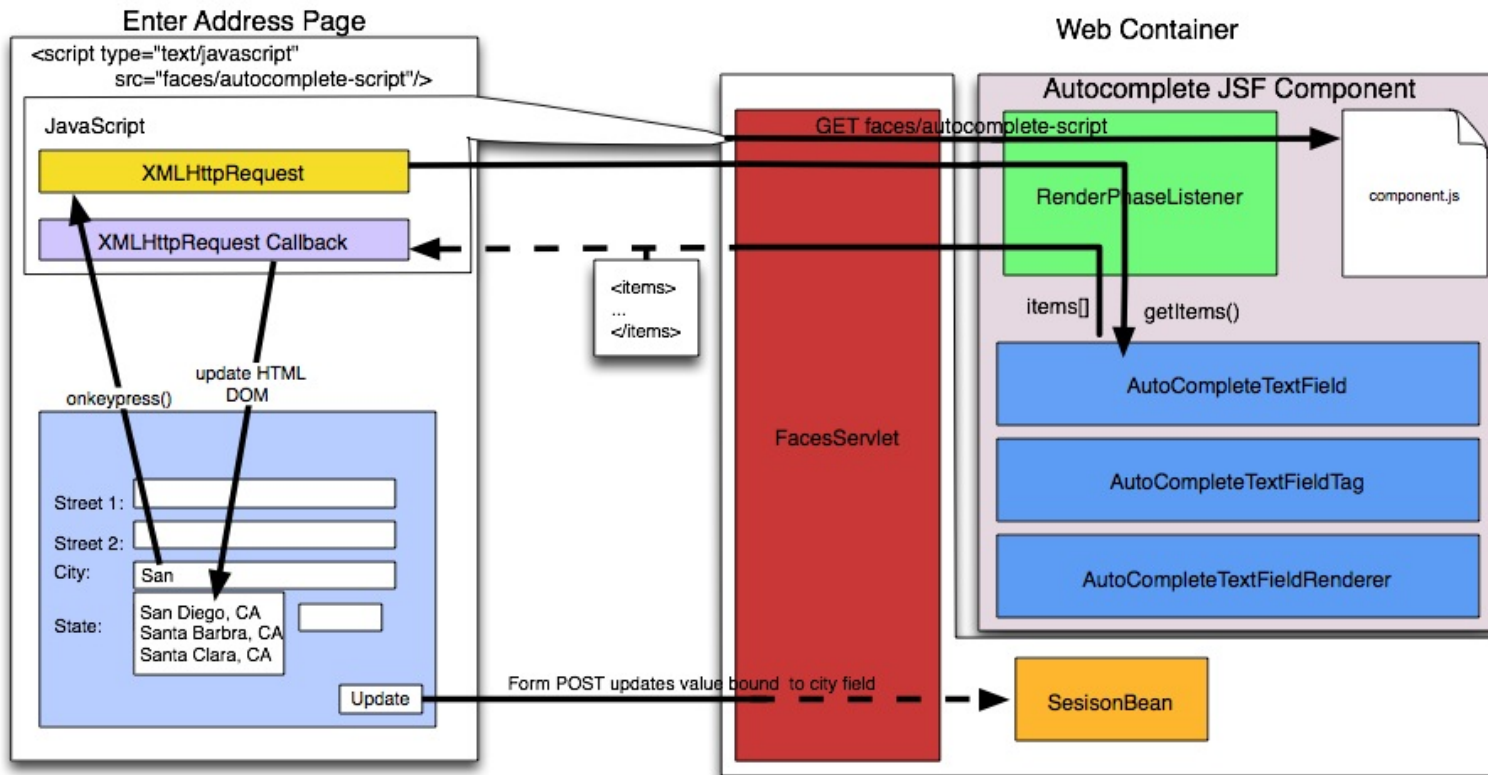

Tools for worldmaking…

Social Networking

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

Tagging

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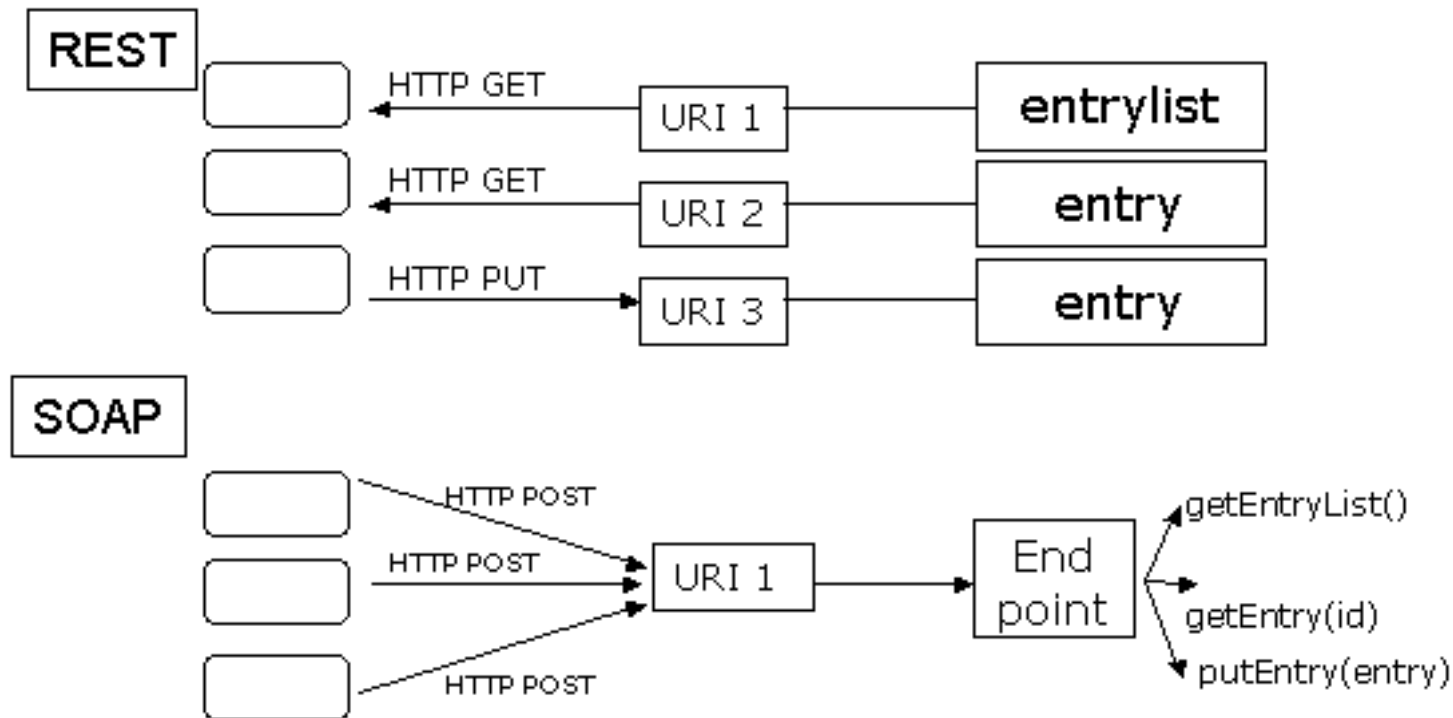
- principles that outline how resources are defined and addressed
- looser sense: domain-specific data over HTTP

http://en.wikipedia.org/wiki/Representational_State_Transfer
http://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
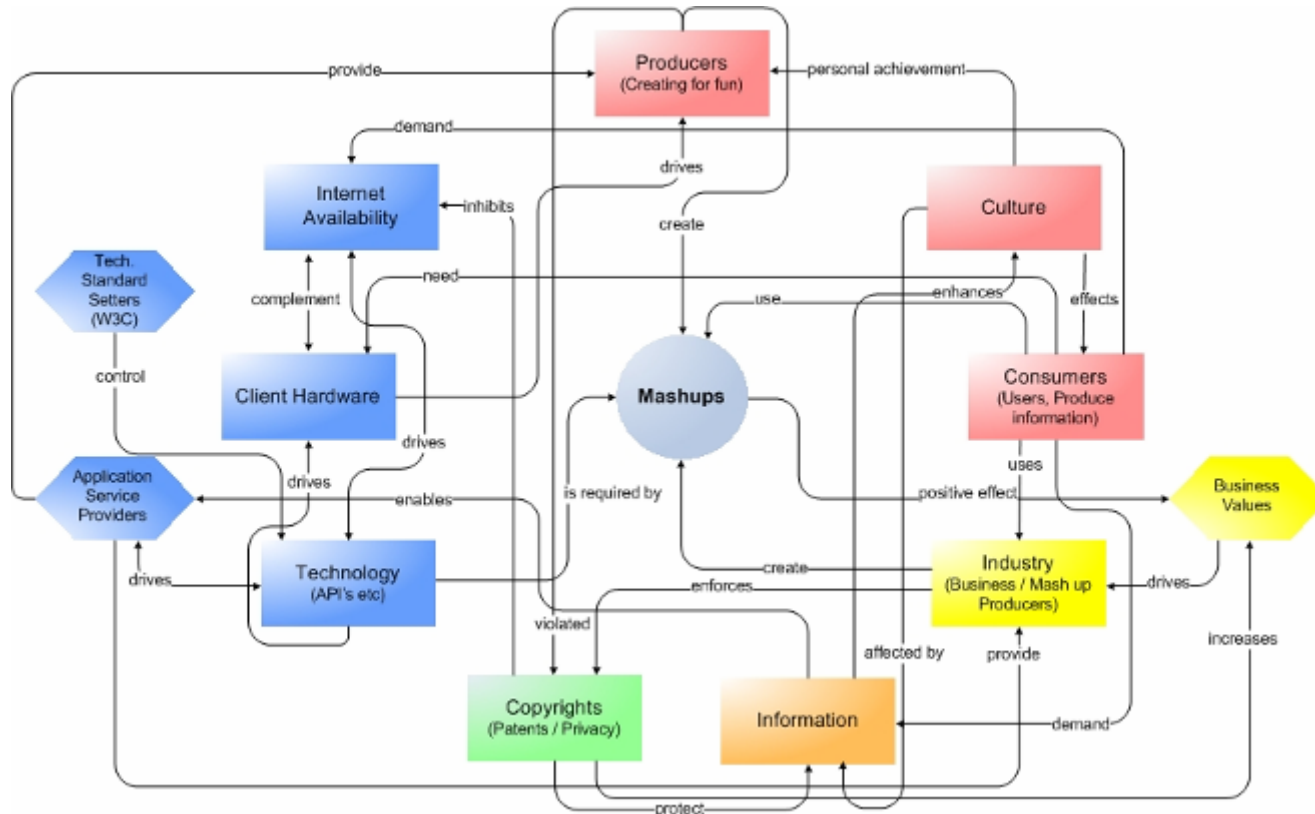
Javascript Object Notation (JSON)
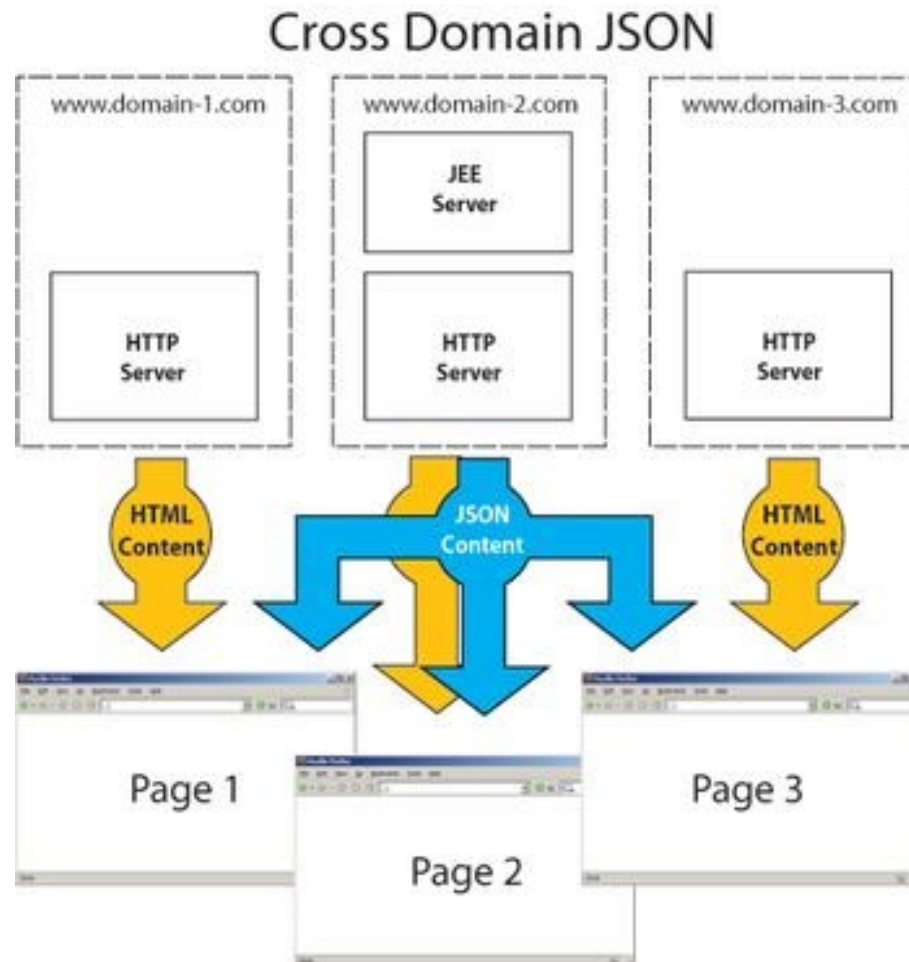
- # OpenID
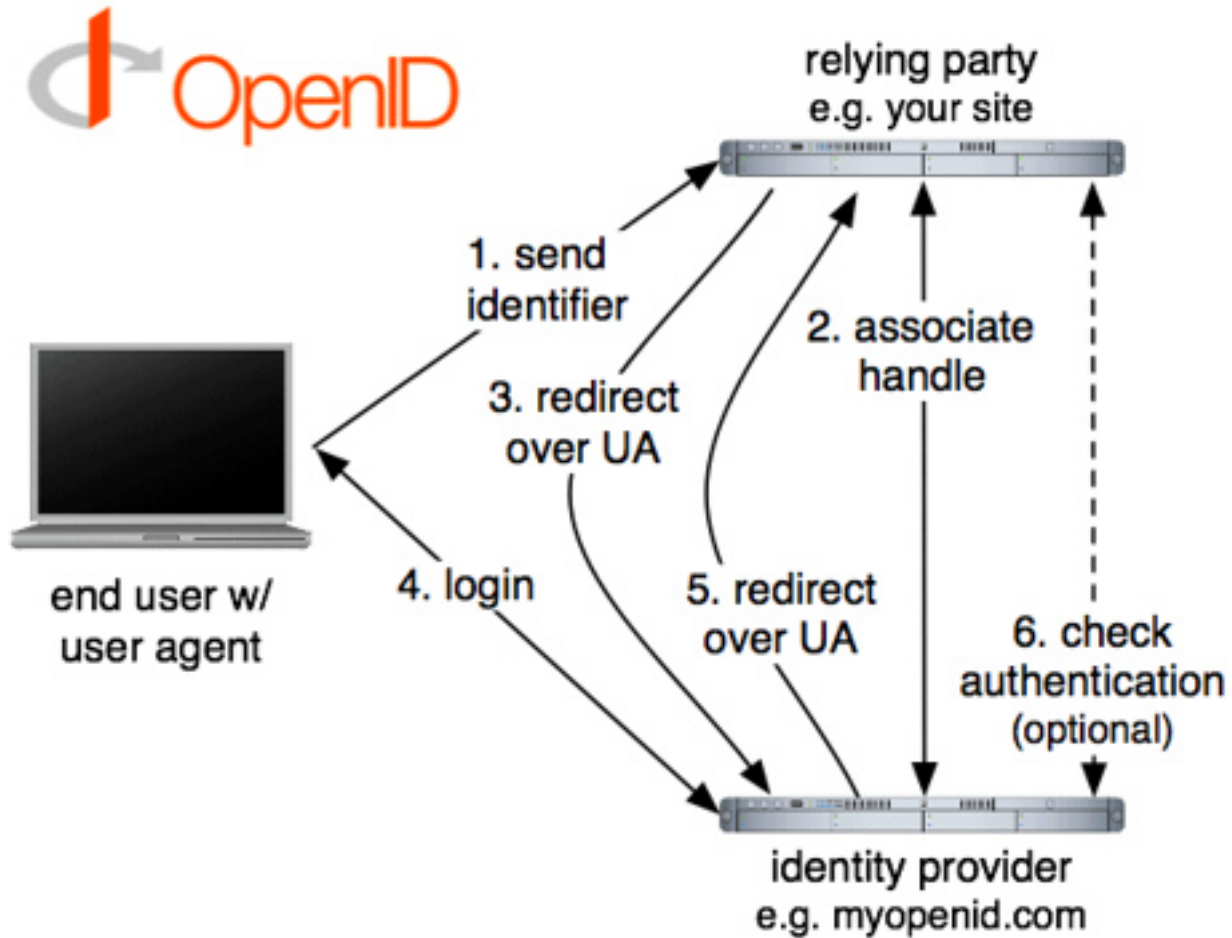
Identity

- 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://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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