Wisdom is not the product of schooling but the lifelong attempt to acquire it.
- Albert Einstein

Cultures of Participation

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Cultures and Media

- cultures are substantially defined by their **media and their tools** for thinking, working, learning, and collaborating

- **claim:** a large number of the new media are designed to see humans only as consumers
  - television is the most obvious medium that promotes this mindset and behavior
  - it contributes to the degeneration of humans into “couch potatoes” for whom a remote control is the most important instrument of their cognitive activities

- **consumer mindsets** are not limited to television
  - educational institutions: learners are often treated as consumers, creating a mindset of consumerism for the rest of their lives
  - Citizens often feel left out of the decisions by policy makers, denying them opportunities to take an active role
Cultures of Participation

—

Fundamental Challenge and Opportunity

culture of participation

focus: provide all people with the means to participate actively in personally meaningful problems

consumer cultures

focus: produce finished goods to be consumed passively
Comments about Cultures of Participation

- “The experience of having participated in a problem makes a difference to those who are affected by the solution. People are more likely to like a solution if they have been involved in its generation; even though it might not make sense otherwise” [Rittel, 1984].

- “I believe passionately in the idea that people should design buildings for themselves. In other words, not only that they should be involved in the buildings that are for them but that they should actually help design them” [Alexander, 1984].

- “We have only scratched the surface of what would be possible if end users could freely program their own applications. As has been shown time and again, no matter how much designers and programmers try to anticipate and provide for what users will need, the effort always falls short because it is impossible to know in advance what may be needed. End users should have the ability to create customizations, extensions, and applications” [Nardi, 1993].
Comments about Cultures of Participation

- “The hacker culture and its successes pose by example some fundamental questions about human motivation, the organization of work, the future of professionalism, and the shape of the firm” [Raymond & Young, 2001].

- “Users that innovate can develop exactly what they want, rather than relying on manufacturers to act as their (often very imperfect) agents” [von Hippel, 2005].

- “The networked environment makes possible a new modality of organizing production: radically decentralized, collaborative, and nonproprietary” [Benkler, 2006].

- “The opportunity to generate vibrant customer ecosystems where users help advance, implement, and even market new product features represents a largely untapped frontier for farsighted companies to exploit” [Tapscott & Williams, 2006]
Cultures of Participation: A Reality?


- **a recent study (2005):**
  - more than one-half of all teens have *created* media content
  - roughly one third of teens who use the Internet have *shared* content they produced

- **characteristics of cultures of participation**
  - relatively low barriers to artistic expression and civic engagement
  - strong support for creating and sharing one’s creations
  - informal mentorship whereby what is known by the most experienced is passed along to novices
  - members believe their contributions matter, and feel some degree of social connection with one another
Cultures of Participation: Potential Benefits

- peer-to-peer learning

- a changed attitude toward intellectual property

- the diversification of cultural expression

- the development of skills valued in the modern workplace

- shifts the focus of literacy from one of individual expression to community involvement

- more empowered conception of citizenship
The State of “Cultures of Participation” in the USA
Social Participation in **US** Politics

<table>
<thead>
<tr>
<th>Year</th>
<th>Voting-age population</th>
<th>Voter registration</th>
<th>Voter turnout</th>
<th>Turnout of voting-age population (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008*</td>
<td>231,229,580</td>
<td>NA</td>
<td>132,618,580*</td>
<td>56.8%</td>
</tr>
<tr>
<td>2006</td>
<td>220,600,000</td>
<td>135,889,600</td>
<td>80,588,000</td>
<td>37.1%</td>
</tr>
<tr>
<td>2004</td>
<td>221,256,931</td>
<td>174,800,000</td>
<td>122,294,978</td>
<td>55.3</td>
</tr>
<tr>
<td>2002</td>
<td>215,473,000</td>
<td>150,990,598</td>
<td>79,830,119</td>
<td>37.0</td>
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<tr>
<td>2000</td>
<td>205,815,000</td>
<td>156,421,311</td>
<td>105,586,274</td>
<td>51.3</td>
</tr>
<tr>
<td>1998</td>
<td>200,929,000</td>
<td>141,850,558</td>
<td>73,117,022</td>
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<td>1996</td>
<td>196,511,000</td>
<td>146,211,960</td>
<td>96,456,345</td>
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<tr>
<td>1994</td>
<td>193,650,000</td>
<td>130,292,822</td>
<td>75,105,860</td>
<td>38.8</td>
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<tr>
<td>1992</td>
<td>189,529,000</td>
<td>133,821,178</td>
<td>104,405,155</td>
<td>55.1</td>
</tr>
</tbody>
</table>
Social Participation in **German** Politics

![Bar Chart showing social participation in German politics from 1946 to 2006. The chart displays annual percentages: 78.5% in 1946, 86.0% in 1953, 87.8% in 1957, 87.7% in 1961, 86.8% in 1965, 86.7% in 1969, 91.1% in 1972, 90.7% in 1976, 88.6% in 1980, 89.1% in 1983, 84.3% in 1987, 77.8% in 1990, 79.0% in 1994, 82.2% in 1998, 79.1% in 2002, 71.7% in 2005, and 70.8% in 2006.](image-url)
Cultures of Participation — Application Domains

- while “Bowling communities” are on the decline → **new communities are forming**

- **examples of social media for communication:**
  - Facebook,
  - Twitter,
  - Flickr
  - YouTube

- **examples of Web 2.0 technologies to harness collective intelligence and social creativity**
  - Web 2.0
  - Learning 2.0 → **more in lecture on November 3**
  - President 2.0 / Government 2.0
  - Science 2.0
  - Digital Libraries 2.0
  - Electricity 2.0 (Smart Grids) → **more: Lecture on Sept 15, Nov 8, Nov 10**
  - Health 2.0
  - Crisis 2.0 (CNN versus Bloggers, Twitter, …….)
Tag Cloud for Web 2.0 Themes
President 2.0 / Government 2.0

- **basic idea:**
  - Instead of a one-way system in which government hands down laws and provides services to citizens
  - use the Internet to let citizens, corporations and civil organizations work together with elected officials to develop solutions

- **assumption:**
  - "An open system means more voices; more voices mean more discussion, which leads to a better decision"
Consumer Cultures

- As the size of the audience and its geographic and social dispersion increased, public discourse developed an increasingly one-way model

- Information and opinion that was widely known and formed the shared basis for political conversation and broad social relations flowed from ever more capital-intensive commercial and professional producers to passive, undifferentiated consumers

- a model easily adopted and amplified by radio, television, and later cable and satellite communications.
Fundamental Changes Based on the Internet

- the Internet presents the possibility of a radical reversal of the domination of broadcast media

- it is the first modern communications medium that expands its reach by decentralizing the capital structure of production and distribution of information, culture, and knowledge

- the Internet has fostered a new culture of sharing, one in which content is freely contributed and distributed with few restrictions or costs

- but: technology alone does not determine social structure → technology creates feasibility spaces for social practice
Cultures of Participation — Concepts

- prosumers (= producers + consumers)
- pro-ams (= professionals + amateurs)
- user-generated content
- wisdom of crowds
- crowd sourcing
- long tail

→ What is needed: a theoretical model to understand and foster cultures of participation
Some Enabling Conditions for Cultures of Participation

- the object of production is information or culture which keeps the costs of participation low for contributors

- tasks can be chunked out into bite-sized pieces that individuals can contribute in small increments and independently of other producers (i.e. entries in an encyclopedia or components of a software program)

- the costs of integrating those pieces into a finished end product, including the leadership and quality control mechanisms, must be low
Elements of an Analytic Model: Understanding **Strengths**

- to engage the **talent pool of the whole world**
- to put **owner of problems** in charge
- to make **all voices** heard
- to reach **extensive coverage**
- to expose artifacts to **public scrutiny**
Elements of an Analytic Model: Understanding Weaknesses

- collective is **not always** better

- loss of **individuality**

- accumulation of **irrelevant information**

- lack of **coherent voices**

- companies offload work to customers → **drawbacks** of “Do-It-Yourself Societies”

- customers **lack the experience** and the broad background knowledge to do tasks efficiently and effectively
Elements of an Analytic Model: Understanding and Analyzing Success and Failures Models

- Wikipedia = the Drosophila for “cultures of participation”

- Encyclopedia of Life = online reference source and database for every one of the 1.8 million species (with 6000 curators)

- Second Life

- Open Source

- Google-SketchUp + 3D Warehouse + Google Earth

- CreativeIT Wiki
Encyclopedia of Life

Oenothera humifusa Nutt.
Seabeach evening-primrose

Gnaphosa montana (L. Koch, 1866)

Cnephasia incertana
Treitschke 1835
Light grey tortrix

Cataulacus tenuis Emery, 1899
3D Warehouse (more in lecture on October 25)
Richer Ecologies of Participation:
Consumer → Contributor → Collaborator → Meta-Designer

<<more in Lecture on: October 11>>

**Level-0:** Consumers (without knowledge about 3D Warehouse)

**Level-1:** Consumers knowing about the 3D Warehouse

**Level-2:** Participants (being able to create a model in SketchUp)

**Level-3:** Curators organizing collections

**Level-4:** Meta-designers

Transitions:

- Becoming Aware
- Making Contributions
- Organizing Contributions
- Meta-Design
IKEA—Effect


- Ariely's "IKEA effect":
  - “Not only do we like things that we make more than similar things made by others— but we think other people should value them more as well.”
  - building a toy chest for his kids with Ikea material: “I worked a lot, it was not a particularly beautiful piece of furniture, but I was actually quite attached to it. And I think that’s kind of the interesting idea, is that when you put a lot of yourself into it, some sweat and energy and anger and maybe even frustration, you end up loving the end product a bit more.”

- short movie at: http://bigthink.com/ideas/20753
Consumer and Designers — Beyond Binary Choices

- **claims:**
  - there is nothing wrong about being a consumer (watching a tennis match, listening to a concert, ...)
  - the same person wants to be a consumer in some situations and in others a designer → consumer / designer is not an attribute of a person, but of a context
    \[
    \text{consumer / designer} \neq f\{\text{person}\} \Rightarrow f\{\text{context}\}
    \]

- **problems:**
  - someone wants to be a designer but is forced to be a consumer → personally meaningful activities
  - someone wants to be a consumer but is forced to be a designer → personally irrelevant activities
Research Challenges

- **models** for knowledge accumulation and sharing in different cultures

- “Long Tail” theory: making all voices heard
  → more in lecture on November 3
Model Authoritative underlying Consumer Cultures  
“filter and publish”

- Strong Input Filters, Small Information Repositories, Weak Output Filters
- **Limitation:** Making All Voices Heard
Model Democratic underlying Participation Cultures

“publish and filter”

- Weak Input Filters, Large Information Repositories, Strong Output Filters
- **Limitation**: Trust and Reliability of Information
Participation cannot be Enforced / Designed but only
Encouraged / Fostered / Supported

- “Built it and they will not come” (examples: Wiki, knowledge management, design rationale)

- “You can lead a horse to water but you can't make it drink”
Conclusions

- one of the most exciting innovations and transformations
  - past decades: digital media have provided new powers for the individual
  - future: the world's networks are providing enormous unexplored opportunities for groups and communities
  - cultures of participation → opportunities and challenges to provide all citizens with the means to become co-creators of new ideas, knowledge, and products in personally meaningful activities

- engage diverse audiences
  - in designing and building their own technologies in new cultural and material contexts, developing tools that democratize design.
  - inspire, shape, support participation with meta-design

- study cultures of participation
Relevant Perspectives for Cultures of Participation

- **open source** → Raymond, E. S., & Young, B. (2001): “The Cathedral and the Bazaar: Musings on Linux and Open Source by an Accidental Revolutionary”
References for Cultures of Participation (L3D)


