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Everything is miscellaneous.

Everything seems miscellaneous because everything actually IS miscellaneous.

We assume that knowledge stops at the miscellaneous because it is assumed to be unable to be unclassifiable anymore. But we're beginning to see that knowledge begins with the miscellaneous.

Issues with digitalization.

In putting information online, we're starting to see that the methods we've used to order/categorize thus far were developed in the real world, and as such are limited by the real world.

= We're having to invent new principles that frequently invalidate the real world principles. But the old principles are deeply tied to the idea of what knowledge is, because basically knowledge is HOW we categorize it.

Knowledge is up a creek without a paddle.

Each new restructuring of knowledge creates cracks in knowledge and cracks in authority (because they are tied).

Jon Steward, a comedian, is possibly the best journalist on TV – crack in authority.

Encyclopedias have traditionally defined what knowledge is, what is worth knowing. But with Wikipedia, a bottom-up encyclopedia, anybody can create or alter an entry, ie can have an effect on knowledge. This is a big change in what constitutes the authority of knowledge.

The birth of the knowledges.

Knowledge began with the Greeks in the Agora. Anybody (any property owning adult white male) could stand up in the Agora and argue over what happened in the city-state. Birthplace of democracy.

The question of "what are beliefs are worthy of being believed?" started being asked. The idea of Knowledge began.

Plato said knowledge was justified true belief. This started a question about what is justified: basically it is stuff you can prove through logic, math, etc, all very rational. Now we have much of his attitude toward knowledge with us.

Aristotle said that knowledge has something to do with ordering and classifying. You can know what something is by seeing what its like and how its different from other things. Aristotle didn't foresee the form of the tree used in taxonomy, but 500 years later it was envisioned like that. Treelike thinking has stuck with us. So: that's basically a process of lumping and splitting. The premises of this line of thinking are that knowledge ends where miscellany begins and that knowledge and the world are essentially the same in how they're organized.

On to Dewey: He attempted to organize knowledge in such a way that libraries would have the same landscape as knowledge. (Dewey was just out of college! Highly naïve! Categories not properly reflective of the world!). Just another way to organize; no such thing as a universal taxonomy.

So what started as questions of concerned, embodied citizens got narrowed down, creating an anorexic view of knowledge. Specialists have authority over increasingly small slice of a discipline, and knowledge is increasingly removed from the human context.

Orders of Categorization of Knowledge.

First order: actually organize physical things.

Second order: card catalogues – take a physical representation of metadata. The advantage is that you can organize the catalogue differently than the shelves.

Third order is digitizing. As things are moved online, we can ask, now what can we do easily with digital information that the real world makes hard?

=Four different changes.

1. Basic act of lumping and splitting in real world forces you to make a decision – can't put a thing in two places or, therefore, two categories. On the web, the fundamental act of lumping and splitting is violated since you aren't limited by a physical object.
2. In the real world, you want neat classification schemes. On web, you want as much mess as possible – you want the object linked in the most places you can. It has the greatest chance of being found that way.
3. In the real world, the person who owns the information generally owns the organization of it. You can't reorganize a store based on your clothing size. But online you can and should. The owner of the information now longer owns the organization of the information. The store will reorganize itself around your needs and interests.
4. Not only do the users get to organize the information, but they can often contribute to it, and sometimes that's the only way to get the information at all. The idea of social tagging is to allow the public to tag information, like photos, which distributes the task among many people. As computers become more and more networked, information is getting richer as more and more people modify it.

Effects.

There's a switch from trying to build a single universal tree of categories into which everything will fit to an idea of ponds of rich information objects that have so many different ways of being found that people later will be able to still find what they want even though we don't know now what they'll be looking for. The idea is of a big map around each object of everything related to it. We want the information surrounding objects to be as rich as possible because people are increasingly searching and/or finding things non-linearly; they find things by looking at the stuff AROUND an object.

Blogs & The Internet.

Blogs offer "real knowledge," information that only emerges out of the human context, that commercial sites do not and that wouldn't be trustworthy on a commercial site. Blogs are believable because of the human voice (voice is a powerful authority in the new world), and because of the quantity of people in discussion. Authority in voice and authority in conversation. This is the opposite of the Greek form of knowledge! Voice and conversation are clearly important elements in the new world of knowledge.

Why is there so much interest in blogs?

Ultimately because they are places where we get to speak in our own voice about things that are important to us. And we can speak with persistence.

Blogs converse with other blogs, creating webs of knowledge. Blogs have value based on where they can send you: linking. This is the opposite of commercial sites, which try to keep you.

Also, blogs are written badly: speed is key to getting a blog published. So we get to see the blogger less formally and more personally. This creates a culture of forgiveness that is hugely important, and helps explain why blogs bring people together – forgiving is an act of intimacy – in a way that most published works don't.

All this means is that there's less separation of author and work, and the line between public and private is moving. The value of the contents of the writing is being pointed away from the author. Voice is connecting us. These things affect knowledge.

What's the shape of knowledge?

Trees are in trouble. The dream of a universal tree of knowledge is dead. Instead knowledge is beginning to look like a tangle, like a jungle, where value comes from the fact that it cannot be encapsulated. Aristotle said that the shape of knowledge is the shape of the world. This web is the best way of encapsulating that – this is what the world is like, looks like.

Q&A.

Digital environment doesn't answer all needs. People still want to see the original, the authentic, the physical. But trying to get to the actual thing has a lot of complications – not easy to access. We need to think of ways to reduce the difficulty to access the authentic object in the real world as we are in the digital.

In the multi-objectivity or poly-objectivity world that you were referring to, isn't the blog the first example of the image of a connected identity as opposed to the private identity?

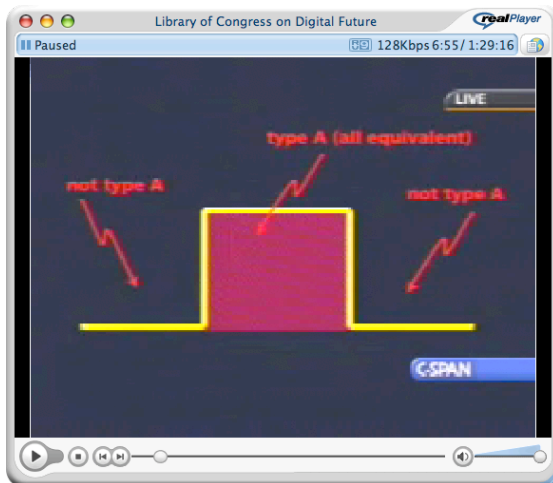
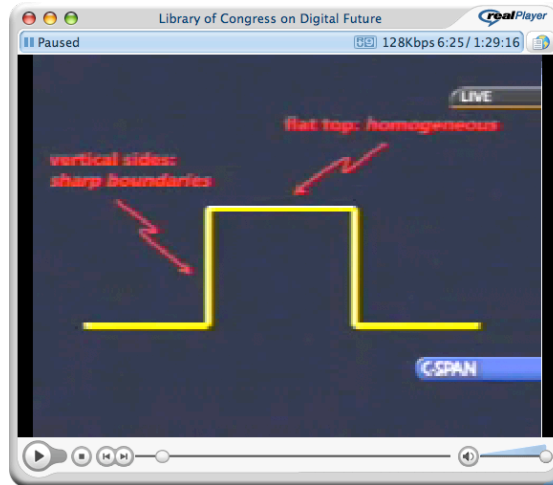
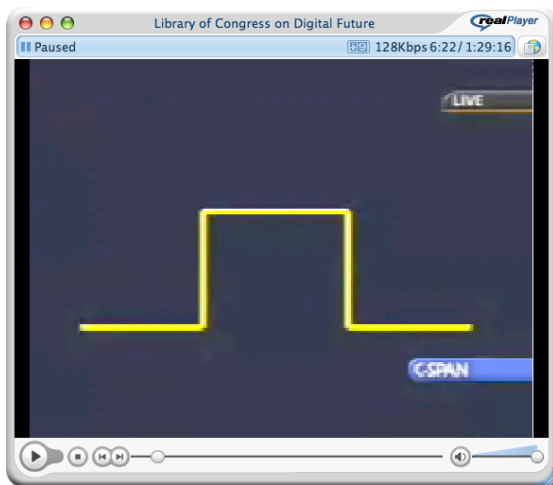
Identities have always been connected, have always been created in related to others. The illusory notion that selves exist independent of others cannot be sustained when you're on the web.

How do blogs get used differently in different places/cultures? With a society like that of Japan, where we assume identity is formed differently and ideas of the group are much stronger, what is the difference in blogging?

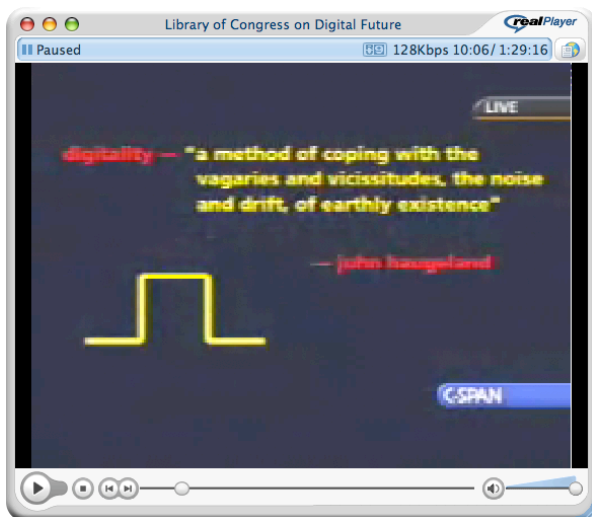
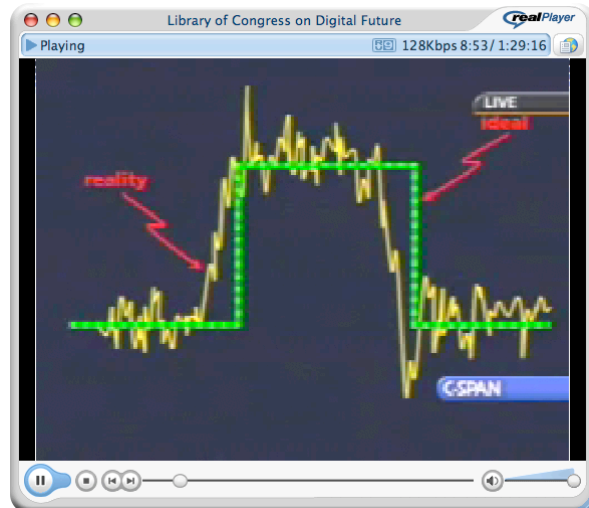
Seems like blogs would essentially be different in different cultures. Internet sociology is a field that is growing. But I have no answer.

[Brian Cantwell Smith](#), dean of the Faculty of Information Studies at the University of Toronto, defines his concept of "digitality" and discusses its impact on our notions of technology and the world around us. (January 31, 2005)

- › The invention of the digital computer
- › Notion of Digitality or Discreteness lies at the core of the computer
  - Digital Ideal, on or off.
  - Boundaries have to be sharp
  - Is or is not, no room for ambiguity
  - Entirely homogenous, absolute interchangeability



- › The real world is not so neat
  - The Digital computer's miracle renders irrelevant that the real world is messy though a digital abstraction
  - Computers work as if the green line of the ideal is the case
  - The discrepancy between reality and the idea has no effect in the computer
  - Digitality is about protection
  - By definition perfect (the ideal)



- › What is digital?
- › Ideas can be digital or not digital too
  - Ideas that have discrete boundaries
  - Ideas that are homogenous
  - Digital idea EX: concept of Electron, a particle is or is not an electron, no half way, no in between, that's its discreteness. Every electron is as good as another, in fact is the same, that's the homogenous or interchangeable component

- Non digital idea EX: Arrogance, Is there a black and white fact of someone being arrogant? What about self-confident, superiority complex, aloof, all are shades of one idea. Arrogance is not interchangeable
- Ex: What about Sex and Gender? They seem digital, but is not. It's much more complex and full of details

› Are computers digital?

- Most people think that all computational properties are digital
- It forms the basis of people's intuition about how we believe that computers are intrinsically different than living things

› Digitizing something does not make it digital

- What about a mp3 file of a jazz song?
- What about a scanned postcard?
- Or someone's Voice over IP?



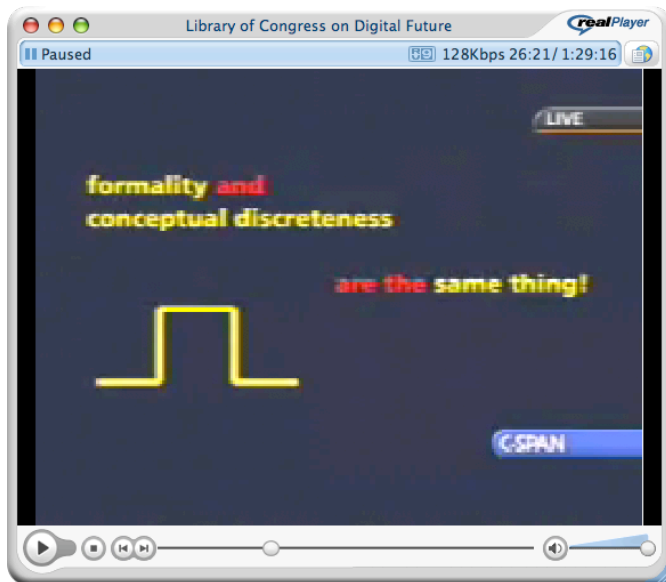
› It's a major conceptual falsehood to believe that the computational realm is digital

- It's going to take a whole new world view
- The difference between a system and its environment or subject/object distinction
- Computation in the wild, these distinctions are not sharp
- EX: Internet router, they inhabit the world as well as represent it. They mess around with the world, they tell you that you have the email and they have the email as well. If they say that you have new email you don't have email, even if I sent it to you.
- The things we build have consequences, they mess with the world
- Real world computation is starting to disrupt the sharpness of boundaries
- Software/Hardware, Mind/Body,

› You can encode things that are not digital on top of a digital substrate, there are actually 3 Levels

- Non-Discrete Layer (user)
- Digital Substrate (digital abstraction)
- Non-Discrete Electrons (physical)

- › Formality and Conceptual discreteness are the same thing
  - What is computation?
  - There is a myth that computer science is a formal field
  - Formality is discreteness run amok



- › Healing the gap between mater and mattering

#### Q&A

- › Not loss of edges, not loss of fuzziness, but a loss of detail
- › We need to recognize messiness
- › No commitment to any ideology, no commitment to an ideology of discreteness
- › Give the world priority, don't let the ideology outstrip the world, not apriori of how to go about creating a conception of the world. Have commitments, but not to arbitrary ideologies. Comes from your engagement in the world, not your engagement with a pre-conceived notion of the world.
- › Computer is the best understanding of how to construct systems
- › Technology and Computer science is combining, the ideas are merging
- › Biology is showing organic forms as computing systems
- › We might construct systems that grow
- › Growing and fabrication will separate
- › Obsession with computing/digital
- › Visually articulating ideas? A visual PH.D.
- › Discipline, Curators are Tyranny. Testing companies, assessment of knowledge and it's assessment