

My Digital Identity

Heidegger - Questioning

- Track one - these slides
- Track two - notes on identity
- Track Three - Montreal

Four slides on Technology

Swirling

- Gary Brown - “50 percent of the college population is "swirling" now; students are taking courses from multiple colleges and universities...”
- http://www.campustechnology.com/articles/58872_1/

The Web 2.0 e-Portfolio

- Gary Brown: “we should start thinking not so much in terms of an ePortfolio but, instead, in terms of a personal learning environment (PLE).”
- http://www.campustechnology.com/articles/58872_2/

Personal Learning Environments

- Web 2.0 (AJAX, REST) based
- Distributed Content
- Interactive / Collaborative

the nature of an enquiry

Personal Learning Environment

Identity

- <http://www.downes.ca/post/12>

Establishing Identity...

- Formerly - an ontological problem - produce the body and you have the identity
- Today - an epistemological problem - the internet has abstracted the body

The Nature of the Question:

- No longer ‘who am I?’
- But rather: ‘who goes there?’
- It has become the requirement to *prove* who you are
- There is no way to ‘step forward and be recognized’

Definitions

- *Identification* - the *assertion* that I am a certain person
- *Authentication* - the *verification* that I am who I say I am

Identification

- Requires a system of self-verification - memory
- My identification therefore includes the *history* of who I am
- Memory of self is central to identity - amnesiacs ask first “who am I?” and not “what is the capital of France?”

Naming

- A name is seldom sufficient to establish identity
- Presumption of *uniqueness*
- Need eg. Social Insurance Number
- Other ID, transient and permanent - school number, phone number, PIN

Tokens

- Physical entities carrying a record of my name (so I can remember it)
- Typically a combination - eg. Name, Credit Card Number, Expiry Date, Security Code
- Encodings in language, photo, magnetic stripe

Authentication

- Is impossible without identification
- There must be an answer to the question ‘who am I?’ before we can answer ‘Who are you?’

Identity Claims

- 'I am P' when I am P
- 'I am P' when I am not P

Presentation of Tokens

- Are typically the same tokens we use to self-identify
- Nothing *inherently in the token* presents false claims
- Eg. - false ID, borrowed PIN number, etc.

Claiming

- when you present your driver's license to the police officer, that's an identity claim. When the police officer compares the photo on the license with your face, that's authentication.
- Nothing in the *claim* prevents it from being a false claim

Authentication, Again

- No system of authentication succeeds
- by 'succeeds' we mean here 'proving beyond reasonable doubt that "I am P" is true.'
- 'Succeeds' vary - standard depends on the consequences

Testimony

- Authentication is usually the testimony of a third party
- Eg., a government, a bank, an employer, who attests that you say who you say you are
- Typically enforced through some tamper-proof token
- *But* this simply creates two problems - because, how does the *authority* know who you are?

The Token

- The problem of authentication thus resolves to this: the presentation of an artifact that is in some way knowably unique to the person and which also attests to the truth of the statement that "I am P."
- But there is no such token (other than the body)

Proxies

- ID-based authentication
- Device-based authentication - processor based, trusted computing
- Epistemological identification (answer questions)
- But: proxies work only if the owner *does not want to give up* the proxy (the credit card, the computer, etc)

Motivation

- Once upon a time, “a man’s word is his bond” - no more - there is no ‘word’
- The cost was diminished standing in the community
- Today the cost is... what, access to a bank account?
- Even *biometrics* relies on there being a cost

The True Nature of Trust

- self-identification can be trusted if it is in the interest of the self to self-identify accurately.
- When sufficiently motivated, I can prove my own identity to my own satisfaction.
- Logically, no authentication system is more secure than self-identification.

Privacy and Control

- The advantage of self-identification is that the control of my identity is in my own hands
- The question of privacy is a question of trust: can the user trust the service provider to respect the user's rights with respect to personal data?
- So: in fact the question of trust is the opposite *to what we assume it is*

Stealing data

- Governments and companies share data
- People also steal data
- This will happen so long as it is in their interest to do so

Ownership

- When the right to assert who you are is controlled by someone else, your identity is owned by someone else, and a person whose identity is owned does not own any of the attributes commonly associated with identity: attribution of authorship, ownership of houses, permission to drive, residency, citizenship, the right to vote, and more.

Identity, in the end...

- Needs to be understood from the perspective of *objectives*
- *Not* how do you prove who you are, but rather
- *How* do I maintain control over my own identity
- As Terry Anderson might say - how do I manage my own *presence*?

The ontology of being = presence in space and time

Self-identification Using OpenID

Your identity is a web address

You prove your identity by proving you
can modify the address

You choose your provider, your level of
security

It remains in your interest to secure your
site

Profiles

<http://www.downes.ca/post/41750>

Resources

What are resources? - the RDF answer
Data and Metadata

Describing Resources

Is essentially the ascription of having or not having a property

This requires a vocabulary of possible properties

The use of this vocabulary in turn presupposes not only a set of logical relations ('is a type of', 'contains') but also a specific vocabulary generally agreed upon by a linguistic community.

Being 'Right'

The expectation is that the description
will be 'right'

Can mean 'true', 'accurate' or even
'useful'

Multiple (Conflicting) Descriptions

Goodman: “Metatags, as many in the industry are aware, were an early victim, succumbing to the opportunism of web site owners.”

There is no guarantee inherent in the RSS format - or any XML format - that the information placed into the file will be accurate.

Categorizations will be needlessly broad.
'Interactivity' will always be 'high', even if the resource is a static web page.

Fundamental Concepts

Vocabularies - for different resource types

Authorship - attribution, multiple authors

Distribution - multiple sites

Identifiers

The premise of the Handle system

Why the system fails

Models

Uninstantiated descriptions of resources
(aka 'roles' in another world)

And inheritance... (a theory of types in
metadata)

Types of Metadata

Bibliographical

Technical

Classification

Evaluative

Educational

Sequencing & Relational

Interaction (Trackback, eg)

Rights

Three Types of Metadata

- First party - creator (I)
- Second Party - user (You)
- Third party - Other (It)

The Lifecycle of a Resource

Is like the lifecycle of a human

Generating Resource Profiles

The metadata distribution network -
Aggregators and harvesting

Partial 'views' of Networks

Layers of filtering

(Projected Metadata)

Harvesting vs Federation

Federation based on trust and authentication

Tightly integrated applications, not loose

Problems:

- Vulnerable to malfunction or attack

- Interoperability difficult, 'Plugfests' needed

- Limited range of data

- Single point of view

Interoperability

interoperability is not - and cannot be - a property of the resource.

With respect to the meanings of words, interoperability is a property of the reader (after all, a word such as 'cat' does not inherently contain its own denotation; it must be interpreted, and against a conceptual background, a denotation derived).

Conclusion?

Profiles - like identity - belong to the user

There is not and cannot be a single 'view'