



# Digital Video Policy and Practice in Higher Education: From Gatekeeping to Viral Lectures

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# Two Points

Digital video as an emerging form of communication

Digital video in Education circa 2008



# Digital Video Status

- Digital video a burgeoning DL challenge: YouTube phenomenon (fall 2007: 65K new videos/day; 20TB/mo; 100M views/day)
- Substantial research activity on storage, retrieval from engineering perspective (see IEEE, ACM MM)
- Many large-scale DLs and services
  - InforMedia, Fischlar, ECHO, Internet Archive , Open Video, public.tv, researchchannel
- Most attention on system/collection building rather than services
- Commercial attention on system and management
  - IBM, MERL, Microsoft, Artesia, Virage, WFMY locally
- NIST TREC Video Track for retrieval evaluation
- Advances on capture, critical need for reuse tools
- Portability advances (e.g., wifi, iPhone)
- On the cusp of ‘natural’
- New educational promises



# Digital Video Drivers

- Baltimore Learning Community-1995-1998
- Open Video 1998-present
- VidArch 2005-present
- YouTube Information in Life and UNC Channel



# Theoretical View

- Digital video is crafted expression
  - Multiple channels (analog and digital)
  - Visceral as well as intellectual effects (analog and digital)
  - A descendant of film but with potential dynamics/behavior (digital)—changes over time, every time
- Digital Libraries are journeys (learning environments) rather than destinations for patrons and librarians
  - Beyond libraries as repositories to sharium
- Open Video deals with reusable (open) video objects
  - A journey toward new forms of expression and reflections on history
  - What do you do with 24/7 feeds of video from every street corner in Manhattan?
- → DV is also observation and free expression

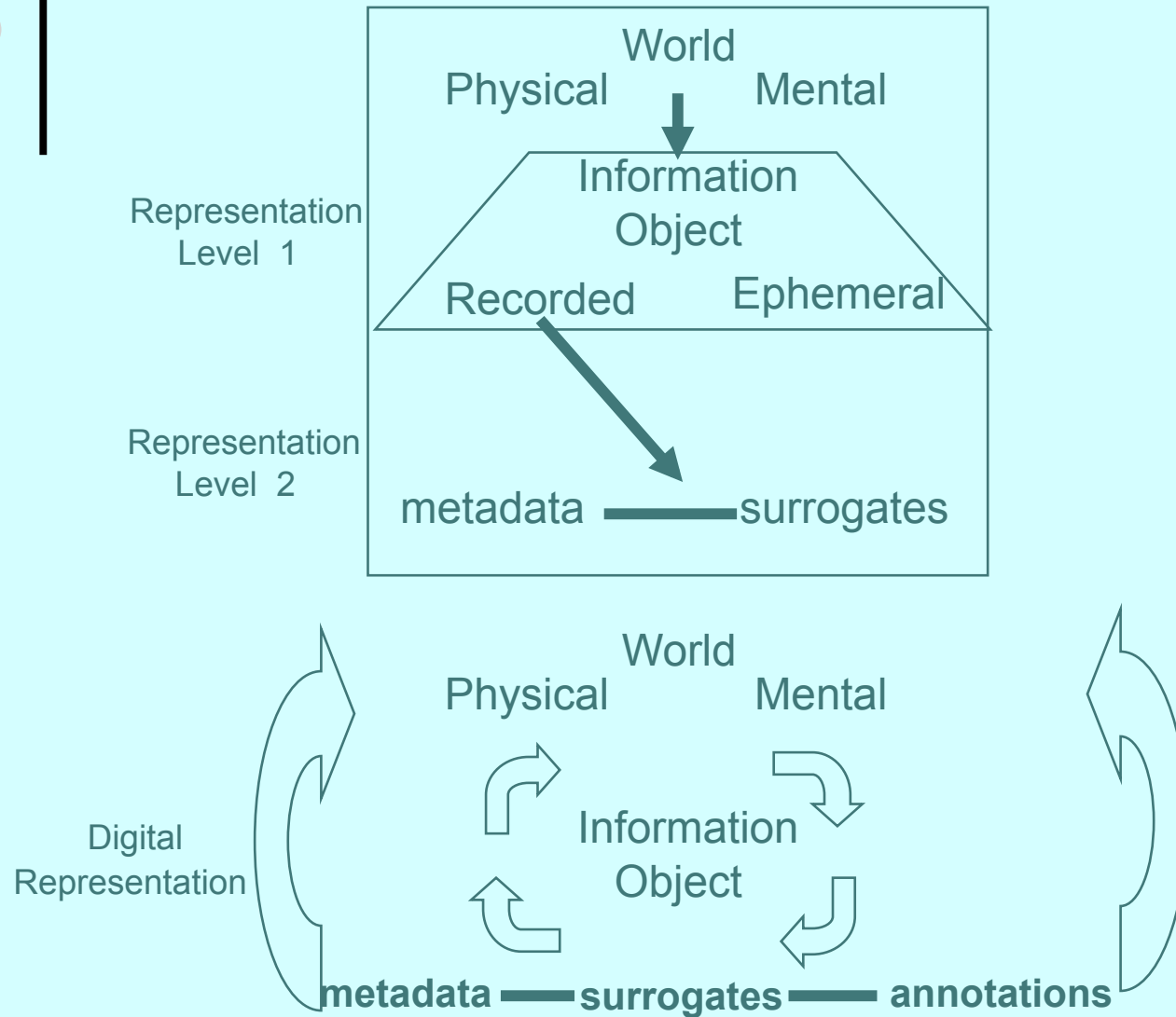


# The Blur

- The (relatively) Neat Past and the Very Scruffy Present
  - Blurring the ‘levels of representation’ model of information (primary-secondary-tertiary-n-ary)
- The metadata—surrogate continuum within the levels of representation continua
  - Metadata region mainly for retrieval
  - Metadata region mainly for and by machines (semantic web)
    - Automatic metadata generation advances
    - Implicit links and mining of interactions as metadata
  - Surrogate region mainly for sense making
  - Surrogate region mainly for and by people
    - Professional abstracting
    - Social tagging and annotations/links as surrogates



## Representation and the Digital Blur





# Sidebar 1: VIDARCH

Preserve Context (Use)





# Election 2008 Collecting Scenario

- Curator of Hillary Clinton's campaign.
- Direct feed of materials from Clinton's staff and Democratic Party.
  - Press releases, video, interviews, Face Book, etc.
- Wide variety of traditional media – newspapers, TV, radio.
- Now wide variety of bottom-up materials, including You Tube videos
  - “Official” CNN debate videos, reactions, etc.



# Video Harvesting from YouTube for Election 2008

- 57 queries (6 general and 51 names)
- Use YouTube APIs, screen scraping and other tools to collect videos and context
- Crawl everyday (almost) since May 07
- Get top 100 results for each query
- Collect more than 20 attributes (including all the comments)
- Download flash videos
- Compare to blog postings



# Overview of the collection (as of 04/17/2008)

- Crawls = 273
- Unique videos = 17,862
- Total videos = 19,570
- Video files = 181 GB
- Total views = 496,581,313
- Total comments = 3,017,625
- Total ratings = 2,847,427
- Total honors = 547

Capra, R., et al., (in press). Selection and Context Scoping for Digital Video Collections: An Investigation of YouTube and Blogs. ACM/IEEE Joint Conference on Digital Libraries (June 2008).

Also see <http://ils.unc.edu/vidarch>



# Implications to Date

- YouTube is as much a conversation as an information source
  - Comments and responses
    - Textual
    - Video
    - Removals!
- Layers of video representation that are strongly culture dependent
  - Video allusions (e.g., McCain's Obama girls, mama, etc.; Vote different)
- The Internet is not quite mainstream
  - Ron Paul in blogosphere and YouTube



# Educational Video Status

- Long tradition of broadcast video
  - From education to edutainment: Channel One, MEU, Continuing Education; Sesame Street, Discovery Channel, History Channel
    - ERIC search for “et” yields 11461 docs, 1926 oldest; “ev” yields 5998 docs, 1950 study of audio and visual channels the oldest
- Digital video to leverage the web: Redux?
  - ResearchChannel, public.tv, open-video; Open Courseware Consortium, Berkeley Webcast, iTubes U, YouTube education channels
    - Low cost production
    - Substantial reach



# UNC YouTube Channel

- <http://youtube.com/uncchappelhill>
- Content
  - Information in Life Series
    - Lectures (SILS, ibiblio, Public Health)
    - Interviews with UNC Faculty/staff
  - Carolina Week playlist
  - Global Health playlist
  - Global Health playlist



# Policy Issues

- Collection Development
  - Campus gatekeeping
  - Instructor ownership
- Intellectual Property and Reuse
  - CC
  - Incidentals
- Management
  - Content development
  - Channel freshness
  - Blowback

Marchionini, G. (in press). Digital Video Policy and Practice in Higher Education: From Gatekeeping to Viral Lectures. *Educational Technology*

<http://youtube.com/uncchappelhill>



# Campus Level Collection Development

- Genre
  - Lectures, special events, sports, news
- Production
  - Local vs central
  - Storage and documentation
- Approval and Branding
  - Authority, units and subunits
  - Logos, slogan





# Campus-Level-- continued

- Style templates and metadata
- IP policies
  - Lecturer and audience
  - Reuse
- Social participation
  - Comments and ratings
- Service Audience



# Instructor Policies and Practices

- Content
  - All, portions?
  - Slides and other materials?
  - Discussion?
- Time and Psyche
  - Comments? Postings?
  - Questions and requests
  - Who do you serve?



# Implications

- The Medium get attention, attention brings new requirements for response
  - Sturm's viral lecture on storytelling
  - Carson memorial comments
- New opportunities and challenges for teaching and learning



# Summary Implications:

- The beginning of an information and communication paradigm shift
  - Lots of content to reuse
    - Professional to web/security cam
  - Capture everything mentality
    - Public/private blur
  - Non-textual tags and annotations
    - Primary/n-ary blur
  - Conversation interjections
  - Create/find/share blur
  - DV is also observation and free expression



## Q&A

# Thanks for your attention

Thanks also to NSF, Library of Congress, NASA, Microsoft, IBM, and Google/YouTube for partial support of this work