Future of Web Archiving

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Agenda

- Web archiving problems and opportunities
- Memento tools
- WarcBase platform
- Assessing quality of archives
- Discussion

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Web archiving is important but (really) hard

- Why web archiving?

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Continuation of longstanding mission to collect, preserve, and provide access to the scholarly record and our cultural heritage

Publishing/dissemination platform of choice

- But … the web isn't the web anymore

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Web in transition

> A "web" of notes with links (like references) between them ..."
> – Tim Berners-Lee, March 1989

Document retrieval	➡	Programming environment
Document viewer	➡	Virtual machine
HTML	➡	JavaScript
Common	➡	Personalized
Desktop	➡	Mobile/handheld/wearable
Information	➡	Things

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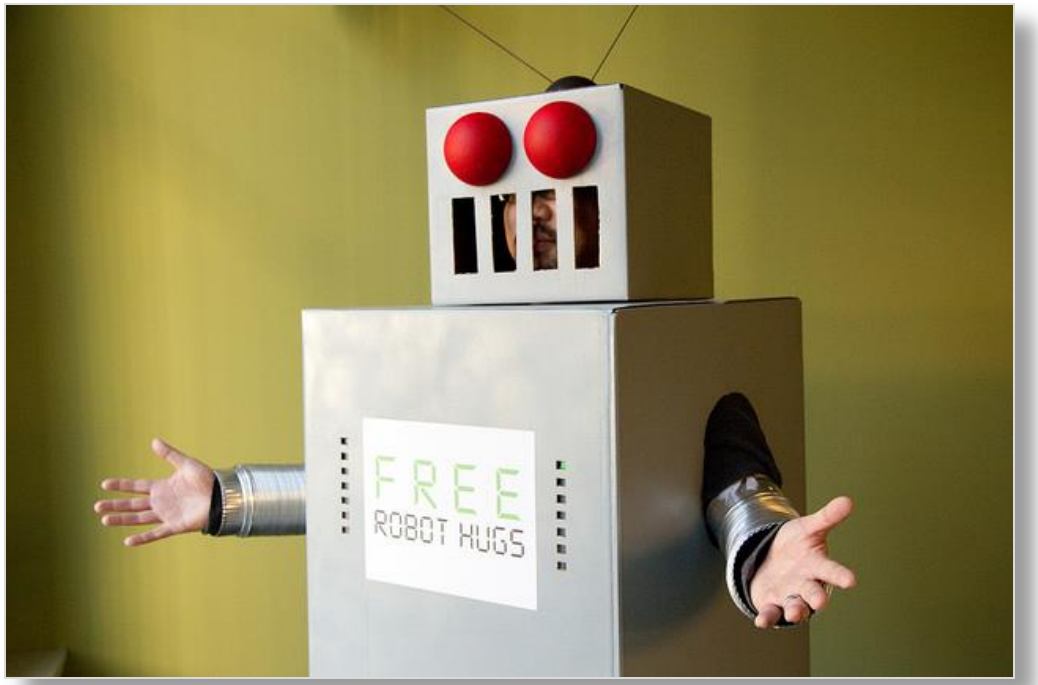
(Some) other issues

- Crawlers don't act like browsers
  - *Need robots that act more like people*



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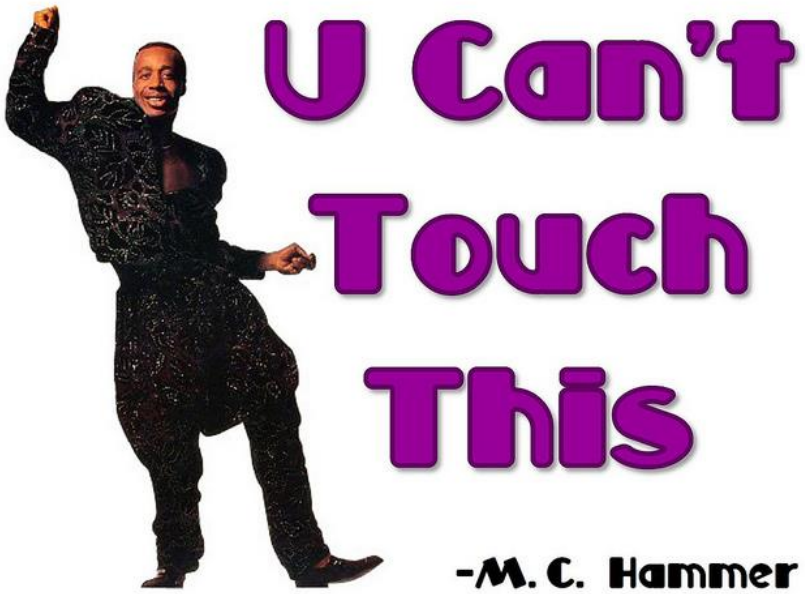
(Some) other issues

- Crawlers don't act like browsers
- Responsiveness to time-sensitive content
  - *Need to bypass v-e-r-y deliberate collection development procedures*

Gaurdian News and Media Limited

(Some) other issues

- Crawlers don't act like browsers
- Responsiveness to time-sensitive content
- Policies, rights, and permissions
  - *Need to overcome legal barriers that follow the monetization of content*



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(Some) other issues

- Crawlers don't act like browsers
- Responsiveness to time-sensitive content
- Policies, rights, and permissions
- Difficult integration into traditional management and discovery services
  - *Leading to …*

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(Some) other issues

- Crawlers don’t act like browsers
- Responsiveness to time-sensitive content
- Policies, rights, and permissions
- Difficult integration into traditional management and discovery services
- Siloed collections

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- Responsiveness to time-sensitive content
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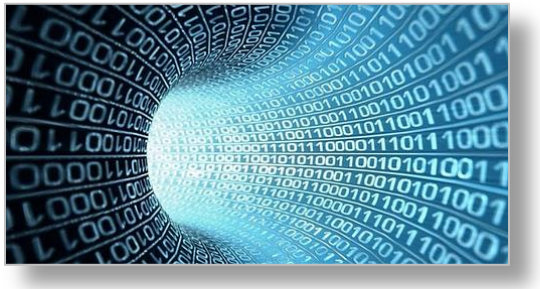
- Difficult integration into traditional management and discovery services
- Siloed collections
- Scale
  - *Storage capacity*
  - *Full-text indexing*
  - *De-duplication*
  - *Resources*

Raiders of the Lost Ark © Paramount Pictures

Supporting research

- Little awareness in the scholarly community
- Poorly understood use cases
- Few tools
- Traditional *find→download→manipulate locally* workflows may not be feasible at web scale
  - *Need APIs and business models for in situ analysis*

berkeley.edu/teach



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Technological opportunities

- Better capture mechanisms
  - *Headless browsers*
  - *API harvesters*
  - …

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- Better discovery modalities
  - *Browsing the past should be as simple and intuitive as the now*
  - …

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Cooperative opportunities

- Complementary collection development
- Coordinated infrastructure support and operation
  - *Or perhaps centralized – a HathiTrust for web archives?*
- Crowd sourcing selection, description, quality assurance

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And now …

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