Dynamic Personal Archives: Tracking How Ideas Progress Over Time

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Motivation

- Normally, libraries and archives organize resources by media type
- Instead, how can we connect these resources by the overarching keywords, people, objects, and ideas that they share?
- We want to be able to track the evolution/development of an idea

AUGMENTING HUMAN INTELLECT: A Conceptual Framework Or to ser 1962

a light pen. cen he pointed by the human at...the display, and the computer can automatically determine what the pen is pointing at

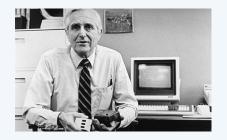
" 'more radical innovations' includes the digital computer as a tool for the personal use of an individual"





Problem

- Challenge: the ideas are develop over different times, come in different media forms, and are explained with changing terminology, examples, and frameworks
- We are working with the Douglas Engelbart Archives as a case study



About Douglas Engelbart

- Pioneer in interactive computing, introducing windows, video conferencing, and the mouse
- Archives provide over 147 videos (talks, lectures, workshops, etc.), over 26 publications, and handwritten documents and photos

Approach

1967

1973

- We want to identify when an idea:
 - Expands with more detail
 - Diverges into sub-ideas
 - Converges with other ideas
 - Formalizes into a key term
 - Changes how it is referred to
- AUGMENTING HUMAN INTELLECT (Document)
 Introduces the "light pen" to be used with computer



Mouse is incorporated into a greater system, the line processor

1986 Part of the realization of his oN-Line System (NLS), explained its development and usage in workshop

 NLP: automatically identify transitions in keywords, similarities in descriptions Crowdsourcing: allow visitors to contribute links between resources

Next Steps



- Allow users to share their path of exploration
- Mine visitors' natural paths of exploration to identify non-obvious connections
- Build and deploy tool, evaluate with experts using it to navigate through archives

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