

Can Digital Technology Open the Archives? — The Impact of “Japan Search” —

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Misinformation and Fact-Checking

▪ “How We Fact-Check in an Age of Misinformation”

[R. W. Stevenson, New York Times, July 30, 2019]

- Fact-checking organizations: Politifact, Factcheck.org

▪ “New AI fake text generator may be too dangerous to release, say creators”

[Alex Hern, The Guardian, Feb 14, 2019]

- The Elon Musk-backed nonprofit company OpenAI declines to release research publicly for fear of misuse.
- GPT2

Four Moves for Fact-Checking

[Michael A. Caulfield, “Web Literacy for Student Fact-Checkers”]

- Check for previous work: Look around to see if someone else has already fact-checked the claim or provided a synthesis of research.
- Go “upstream” to the source: Most web content is not original. Get to the original source to understand the trustworthiness of the information.
- Read laterally: Once you get to the source of a claim, read what other people say about the source (publication, author, etc.). The truth is in the network.
- Circle back: If you get lost, hit dead ends, or find yourself confused, back up and start over with what you know now.

Carl Sagan on using space to sell Teslas

[Reddit 2018]



Carl Sagan with Pioneer Plaque



Hidden Traps in Decision Making

[John S. Hammond, et al.1998]

- Anchoring: First impression can anchor our thinking.
- Confirmation: Evidences supporting our view tend to blind us to conflicting facts.
- Memorability: Becoming overly influenced by dramatic events, or when we receive similar information from different sources repetitively.
- Status quo: Finding it easy to accept the status quo.
- Sunk cost: Refusing to acknowledge the mistakes of the past, and sticking with the current position even if it is obviously wrong.

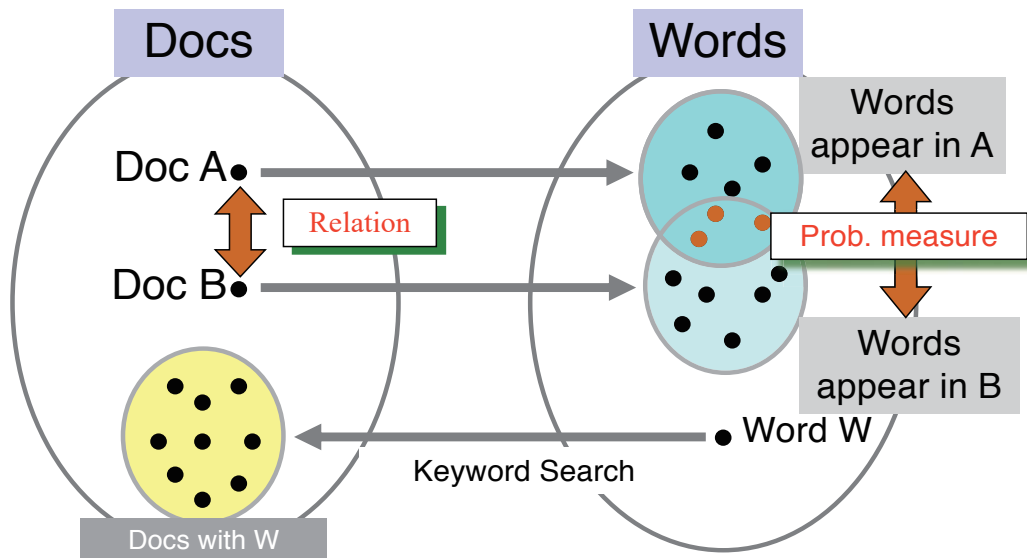
Avoiding these traps in the digital age

- Overview: Grasp the entirety of related information in a wider context and observe its nature.
- Reliability: Availability of the origin of the information, or traceability toward the source of the information.
- Summarize: Common features among collected information can be extracted automatically.
- Jump: The focused beam of interest can be widened to related islands of interest.
- Start over: Start over from any place in the process without feeling lost or in vain.

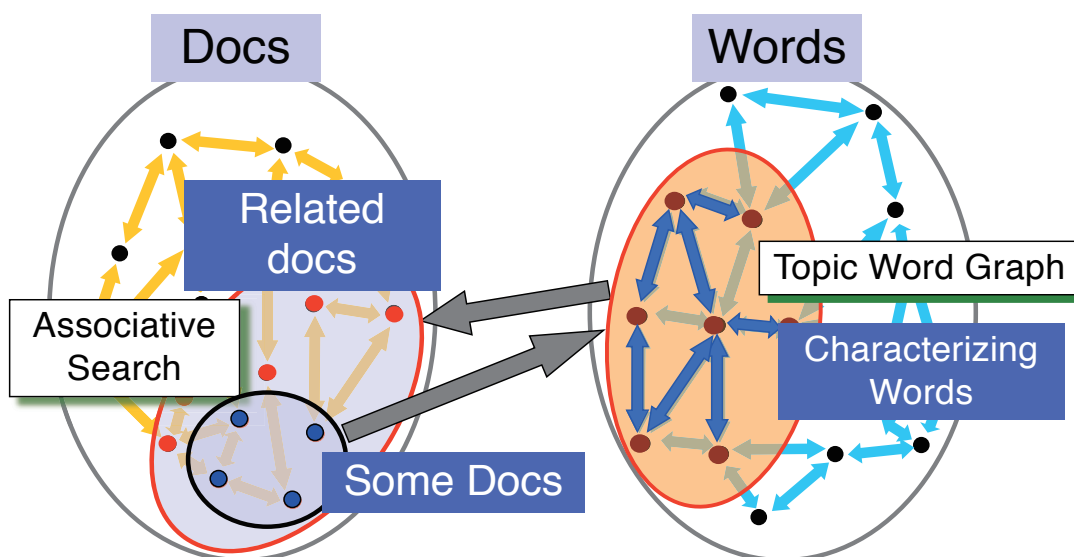
Manifesto: From Search to Association

- Keyword Search as Index Crunching (Link Crunch)
 - Association as Context Crunching (Content Crunch)
“Convert Quality of Information into Inspiration!”
- From “Water Service” to “Steam Engine”
 - Deliver information accumulated in one place to other places without changing.
 - Accumulated information (knowledge) can work to transform other information. “Steam Engine for Contents!”
- Creative Interaction between humans and cyberspace
 - Human brain: Unconscious Associative retrieval of memory
 - Cyberspace: Search, Analyze, Represent the related information
“Cyberspace could be our Second Brain!”

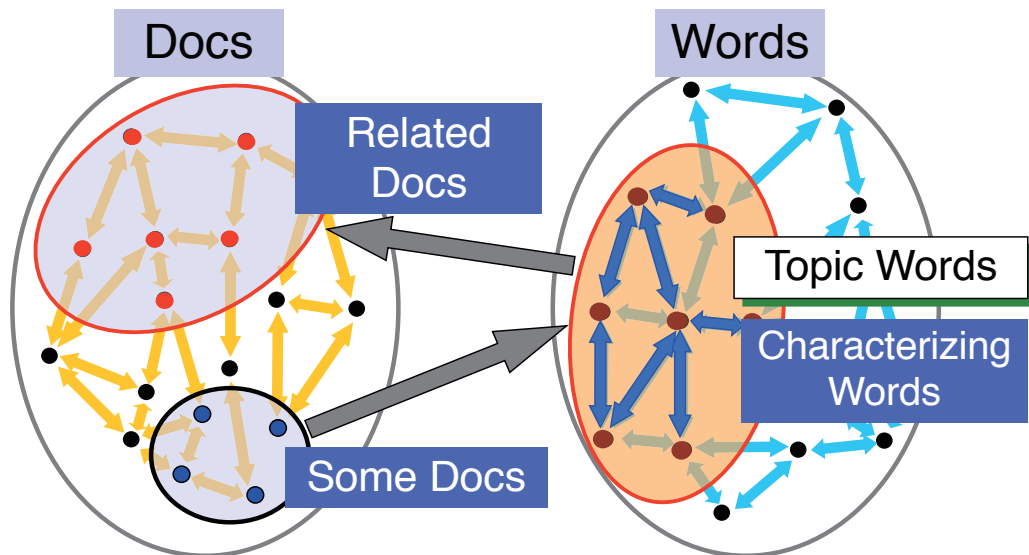
Duality between Doc space and Word space



Association: measuring “Relatedness”



Association relates Sources (Silos)



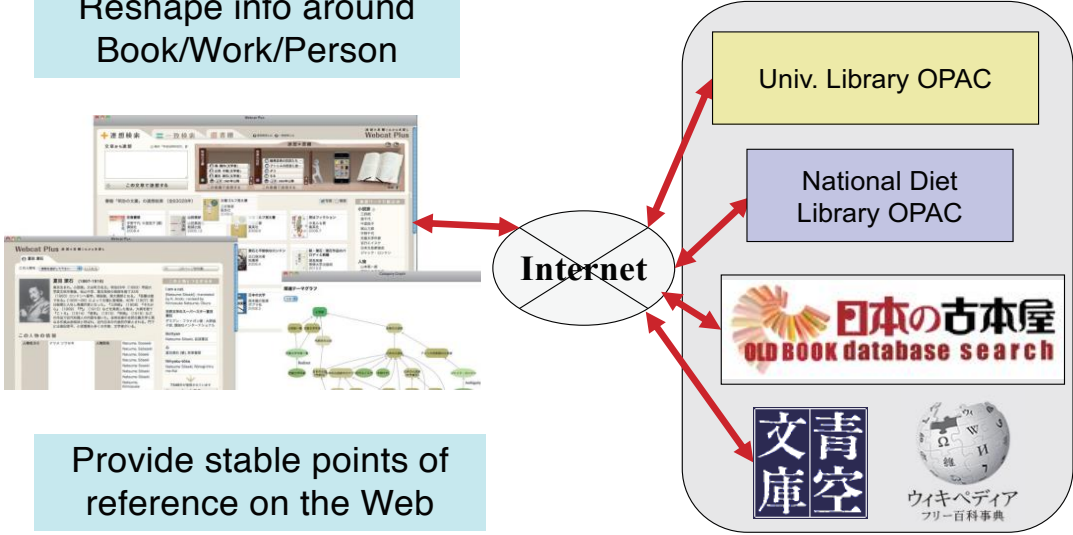
“Informatics of Association”

- GETA — Generic Engine for Transposable Association
 - **Compiles Content into Association**
 - Computes **virtual backlinks** by similarity
 - Interoperable web-services for association
- IMAGINE — Federated Association
 - **Dynamic Linker for Independent Associations**
 - **Relevance feedback** among distributed contents
 - Associations interact with each other

Webcat Plus: Associative Search for Book related knowledge

Reshape info around Book/Work/Person

Link-up various sources





Cultural Heritage Online in Japan

文化遺産 オンライン <http://bunka.nii.ac.jp/>

1005 museums, 263,515 items (Oct 21, 2019)

