Speech Engines

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Three theories of search
Google’s equivocation

“Google is constantly evaluating Web sites for standards and quality, which is entirely subjective.”

“… the algorithmic result of several objective factors, including the popularity of search terms.”
## Two theories of search

<table>
<thead>
<tr>
<th>Conduit</th>
<th>Editor</th>
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<tbody>
<tr>
<td>Common carrier</td>
<td>Newspaper</td>
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<tr>
<td>Passive</td>
<td>Active</td>
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<tr>
<td>Objective</td>
<td>Subjective</td>
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<tr>
<td>Websites’ speech</td>
<td>Google’s speech</td>
</tr>
</tbody>
</table>
The speech in search?

Conduit: Websites’ speech
Editor: Google’s speech

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The speech in search?

**Conduit:** Websites’ speech

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It takes three to search

1. Indexing

Provider ——> Search Engine

2. Query

Search Engine ——> User

3. Results

User ——> Search Engine

4. Content

Search Engine ——> Provider
What users want

- The Internet is unimaginably large
- Speakers and listeners need to find each other
- Search engines are a listener-directed matching technology
- Search users are *active listeners*
  - They use search engines to select among website speakers
  - Good for autonomy and individual development
  - And for equality, diversity, efficiency, etc.
A third theory

Provider: Conduit

Search Engine: Editor

User: Advisor
The advisor theory

- Three characteristics of an agency relationship:
  - Searchers need help
  - Searchers are diverse
  - Searchers know less than search engines do

- Consequences:
  - Access to search
  - Loyalty
Case study: search bias
A model of relevance

- Searchers have personal informational goals
- Queries express those goals imperfectly
- Search engines observe, extrapolate, and implement
- Rankings are opinions about websites’ relevance to users
- Search engines’ subjective approximations of objective characteristics of users’ subjective goals
- I.e., deductive opinions about evaluative opinions
Falsifiability

- How to prove a search ranking false?
- “This is relevant” is too vague to fail
- “[I believe] this is relevant” is false if dishonest
- (And if so, it’s uttered with actual malice)
- Cf. “This instrument deserves a AAA credit rating.”
- Google believes its own rankings, even if others disagree
Wu: “[N]onhuman or automated choices should not be granted the full protection of the First Amendment, and often should not be considered ‘speech’ at all.”

Human judgments are embedded in the choice of algorithm

It’s tempting to use the “algorithm” as a baseline …

… but it’s algorithms all the way down
Access and loyalty

- There is broad consensus about the “right” results for some searches—but these are not the searches in controversy.
- Interventions threaten access because courts understand less about relevance than either searchers or search engines do.
- Beware of the seen and the unseen (providers).
- It is a (contested) empirical question whether market forces suffice to ensure loyalty.
- Be sure that interventions are focused on searchers’ goals.
Thinking about search

- Understand any practice from search users’ point of view
- Mistrust both search engines and providers
- Access and loyalty are constraints on each other
- Access warns that regulators who enact their theories of relevance impose speech on users
- Loyalty recommends protecting users when they are unable to monitor the quality of search results
Discussion