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Does This Look Relevant to You? Using Insights from Information Retrieval Studies to Facilitate Student Source Selection, Reading, and Use

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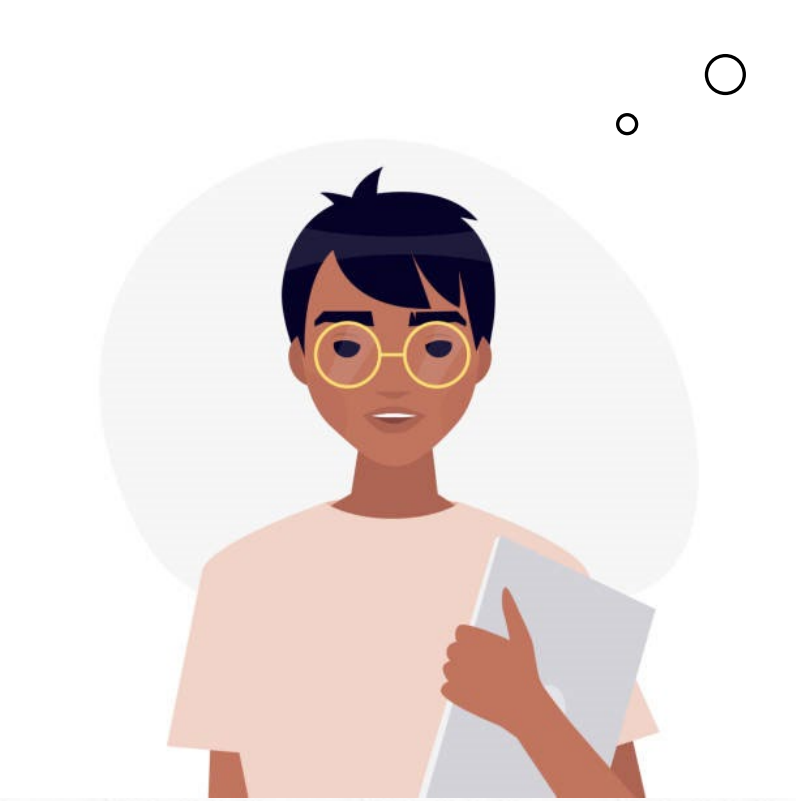
Using insights from information retrieval studies to facilitate student source selection, reading, and use

Anne Jumonville Graf (Trinity University)

Presentation at the Innovative Library Classroom, Williamsburg, VA, 6/2/23

There aren't any articles on my topic



Presentation outline

- ✓ Relevance in practice
- Definition
- Information retrieval studies
- Relevance and information literacy teaching & learning
- Insights & applications (5)
- Conclusions and questions

relevance noun

rel·e·vance ˈre-lə-vən(t)s

Synonyms of *relevance* ›

1 **a** : relation to the matter at hand

b : practical and especially social applicability : **PERTINENCE**

giving *relevance* to college courses

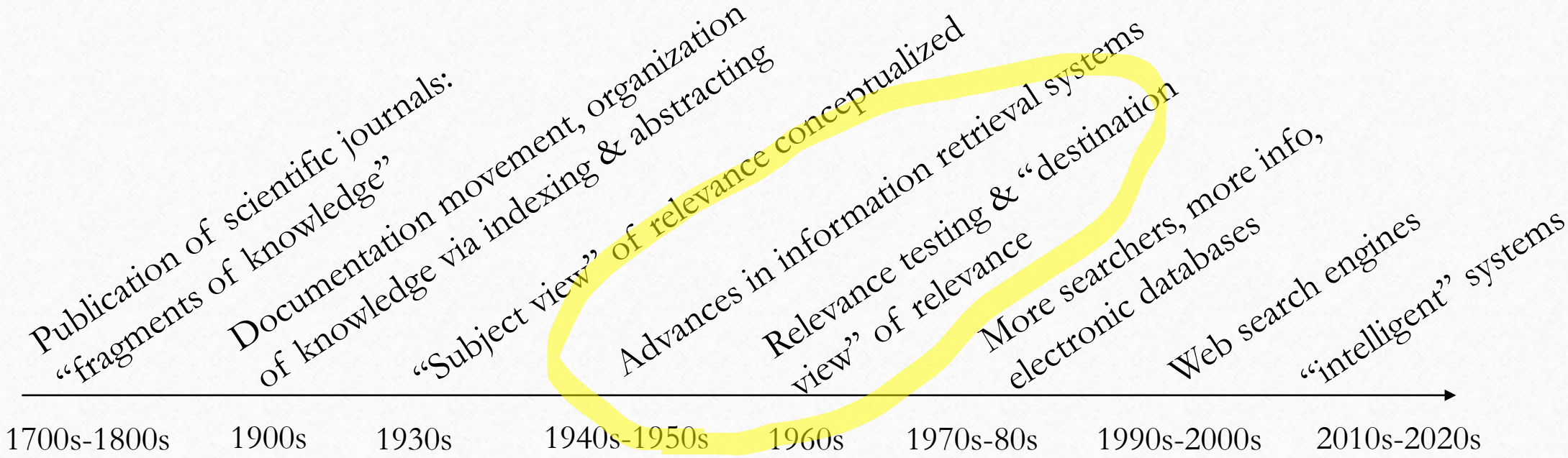
2 : the ability (as of an information retrieval system) to retrieve material that satisfies the needs of the user

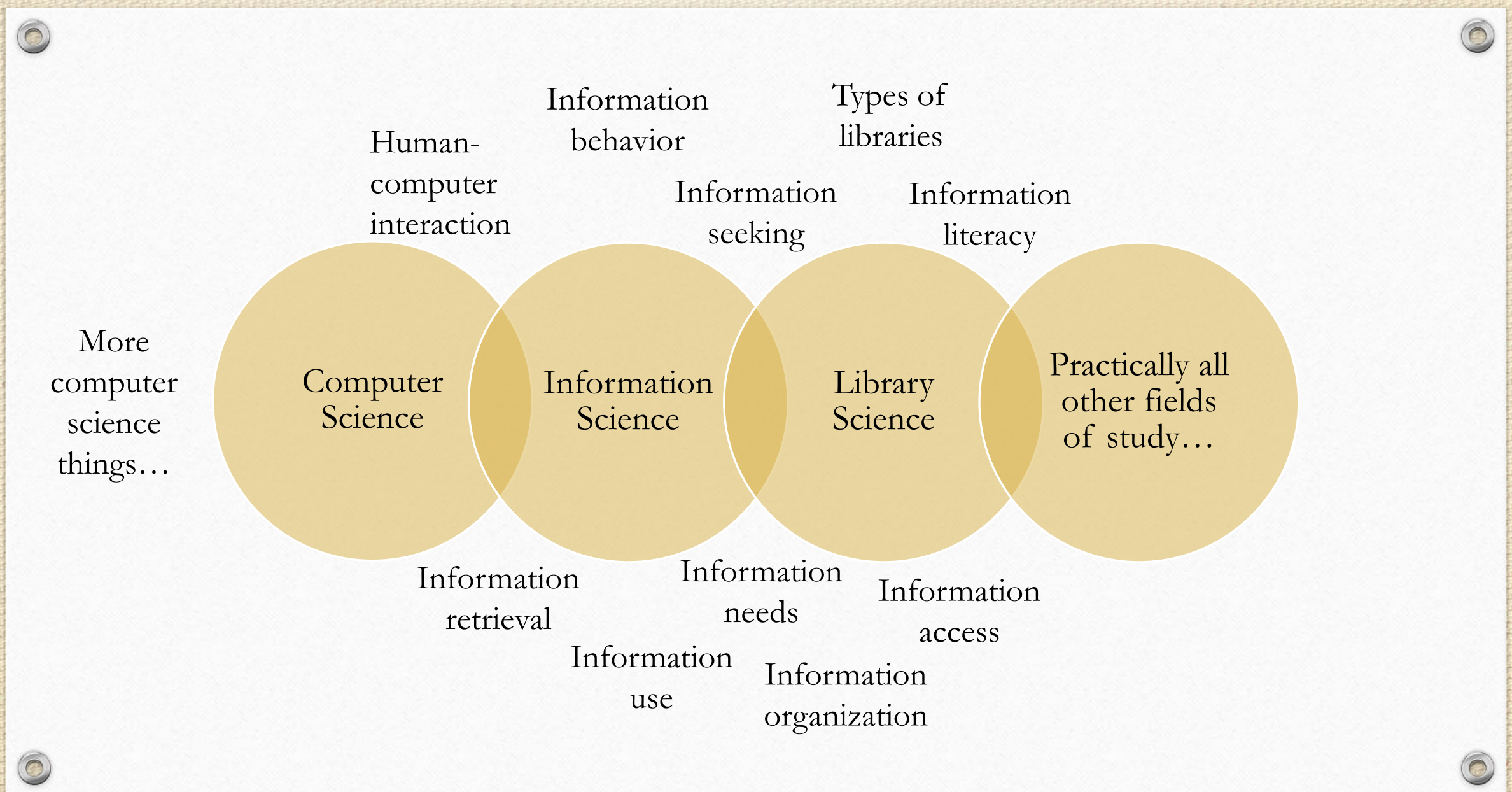
meriam-webster.com, n.d.

Relevance is the central concept in information science.

Saracevic, 2016

The development information retrieval studies




Information behavior
Types of libraries
Human-computer interaction
Information seeking
Information literacy
More computer science things…
Computer Science
Information Science
Library Science
Practically all other fields of study…
Information retrieval
Information needs
Information access
Information use
Information organization

“Relevance” and information literacy instruction

The relevance of relevance for teaching librarians

- Learning to make relevance judgements is a key component of **information literacy development**
- Paying attention to relevance judgements creates micro moments for **reflection, metacognition and conversation**

Relevance Dimensions
(Saracevic, 2016)

- Subject view (knowledge, literature)
- System/algorithmic
- Cognitive (“pertinence”)
- Situational (“utility”)
- Affective (“motivation”)

Application

For teachers

- What facet of relevance—subject, system, cognitive, situational, or affective—do you emphasize when you work with students to select sources? What do you de-emphasize?

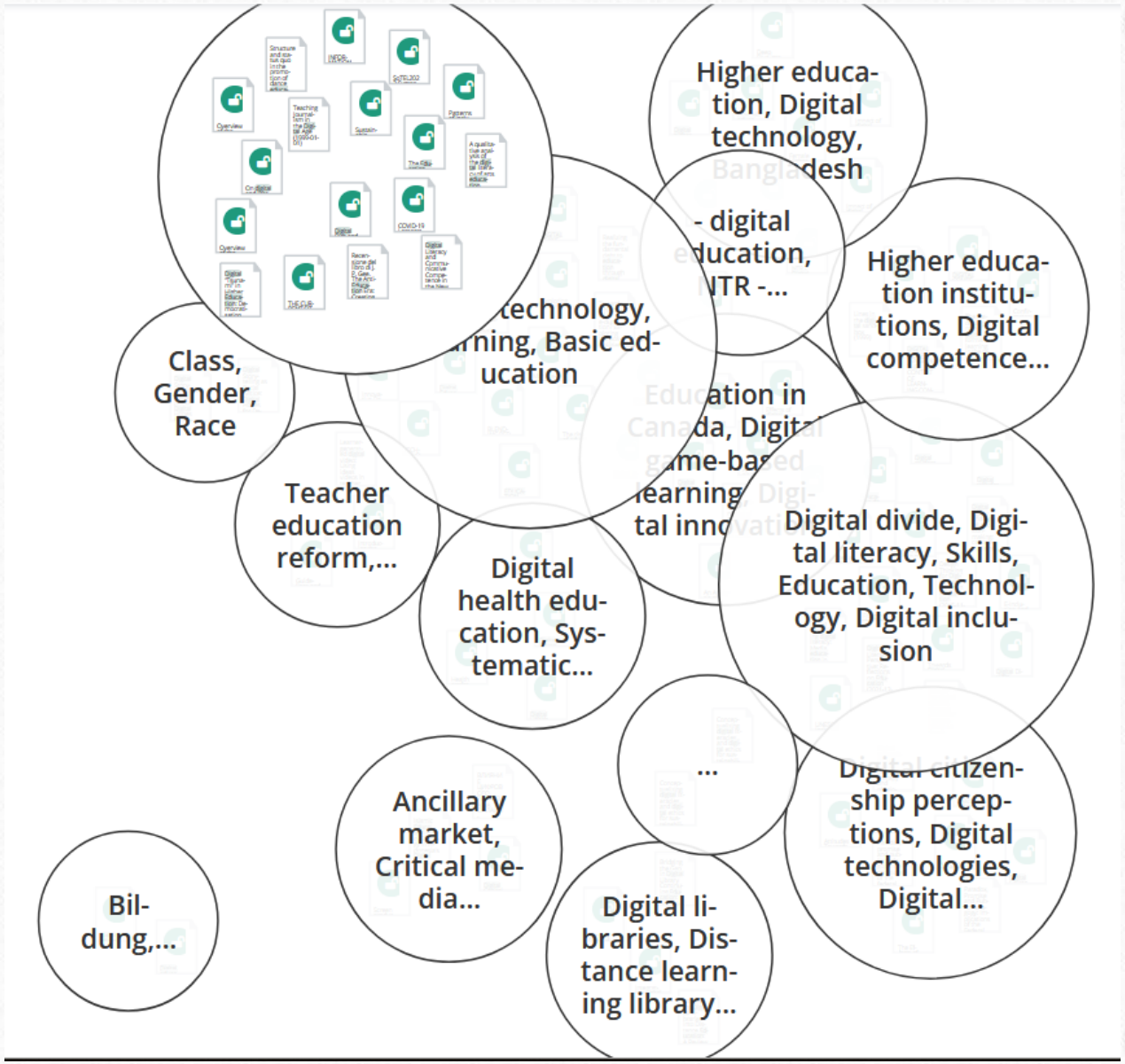
For students

- Are you seeing any differences in the way you understand your ideas and how you see them expressed by others? What about how they are represented by the information systems and platforms you are using?

Visual Application

The subject view

openknowledgemaps.org



“There seems to be a paradox in the user-based view: On the one hand, information needs and relevance criteria are seen as strongly individual and subjective. On the other hand, it is assumed that research about users may uncover some general principles that may be used to design information systems.”

Hjorland, 2010, p. 223

Variance in relevance judgments

Application

For teachers

- What assumptions of "user behavior" do you have about students? Hint: think about sequences and scripts you regard as the "best" way to do research or develop information literacy.

For students

- Ask students to compare their selection of a "most relevant result" on a particular topic with a classmate and explain their reasoning. What similarities or differences appear?

“…there can be a rich set of cognitive, affective and visceral outcomes happening as a result of resonance including **senses** of coherence, heightening or deepening of **emotions**, transcendence, alignment of **beliefs** and concrete **actions**.”

-Ruthven 2020, p. 562

The experience of relevance (“resonance”)

Application

For teachers

- How do you account for the affective dimensions of the information search process in a class context?

For students

- What about these results draws your attention? What do they make you want to do next?
- What are you uncertain about at this point? What do you feel intrigued by?

“The systems view is often described as “objective,” but it has been demonstrated that each element is subjective in one way or another. The issue is not whether they are subjective, but in what way they are subjective—and in what way they should be subjective, i.e., what activities, goals, and interests they are meant to support.”

Hjorland, 2020, p. 220

Systems and Objectivity/Subjectivity

*There **aren't** any articles on my topic.*

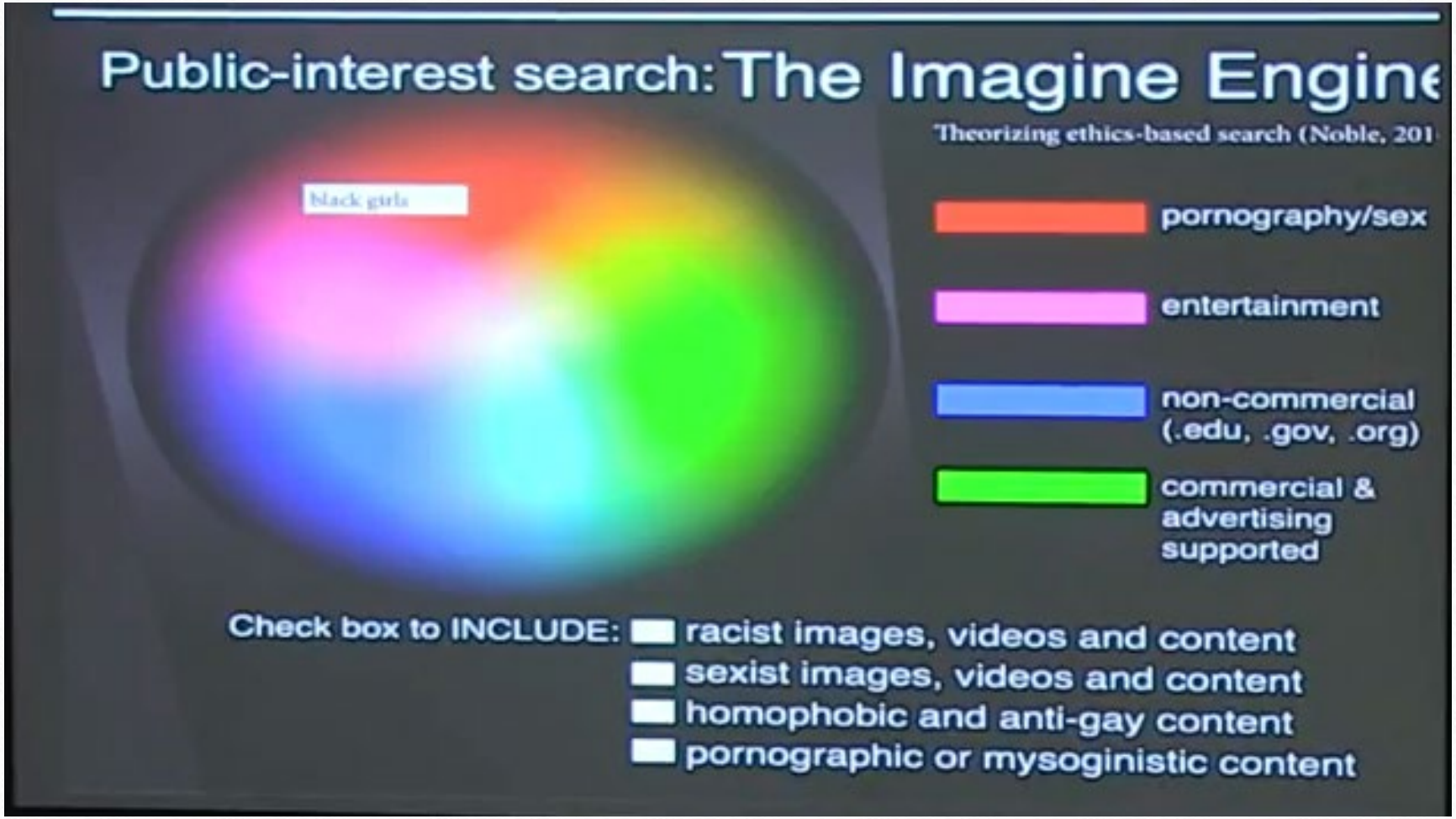
Application

For teachers

- How and when do you acknowledge systemic bias in information retrieval systems?
- How do you account for the affective dimensions of the information search process in a class context?

For students

- What's missing or surprising to you about your search results? What did you expect to find but haven't yet?



Noble, 2018, p. 180

“The IR (information retrieval) process is **dynamic** and the **users' relevance assessments change** in measurable ways as they progress through the ISP (information search process)”

-Taylor, Cool, Belkin, and Amadio, 2007, p. 1082

Relevance and search process

Yes, and how is information “seeking” changing?

My takeaways

- relevance as lens
- small set choices
- “satisfying the need of the user”

Thank you!

And special thanks to my Trinity University library colleagues Lacey, Colleen, and Audrey, who listened to an early version of this presentation and offered invaluable feedback.

Questions? Thoughts?

References

Anderson, T.D. "Relevance as process: Judgements in the context of scholarly research." *Information Research: An International Electronic Journal* 10.2 (2005): n2.

Bates, M. J. (1989). The design of browsing and berrypicking techniques for the online search interface. *Online review*, *13*(5), 407-424.

Hjørland, B. (2010). The foundation of the concept of relevance. *Journal of the american society for information science and technology*, *61*(2), 217-237.

Merriam-Webster. (n.d.). Relevance. In *Merriam-Webster.com dictionary*. Retrieved May 25, 2023, from https://www.merriam-webster.com/dictionary/relevance

Noble, S. (2017, December 8). Algorithms of oppression: how search engines reinforce racism. [Presentation]. UCI Dept of Informatics. http://opentranscripts.org/transcript/algorithms-oppression-search-engines-reinforce-racism/

Ruthven, I. (2021). Resonance and the experience of relevance. *Journal of the Association for Information Science and Technology*, *72*(5), 554-569.

Saracevic, T. (1975). Relevance: A review of and a framework for the thinking on the notion in information science. *Journal of the American Society for information science*, *26*(6), 321-343.

Saracevic, T. (2016). Chapter 8 Relevance: In search of a theoretical foundation. In *Theory development in the information sciences* (pp. 141-163). University of Texas Press.

Steinerová, J. (2008). Seeking relevance in academic information use. *Information research*, *13*(4), 13-4.

Taylor, A. R., Cool, C., Belkin, N. J., & Amadio, W. J. (2007). Relationships between categories of relevance criteria and stage in task completion. *Information Processing & Management*, *43*(4), 1071-1084.

Information & Everyday Life syllabus

- In giving this presentation at The Innovative Library Classroom (2023) I mentioned a course I teach on information seeking in everyday life. In response to a request, I am adding a link to that syllabus here. Feel free to use or adapt the syllabus for your own learning and teaching purposes: **bit.ly/trinityGNED3321**

- Contact me at ajumonvi@trinity.edu if you have other questions!