

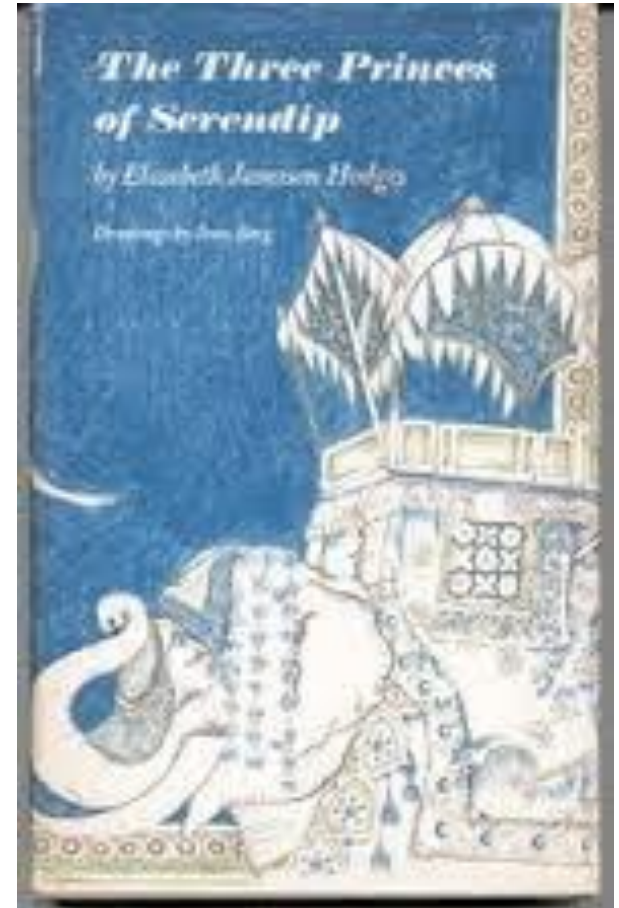
Serendipity in research and the threat of technology

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Serendipity



- 28th January 1754

Serendipity

- “Looking in a haystack for a needle ...



- and finding a farmer’s daughter”



- **“Unique and contingent mix of insight coupled with chance”** (Fine and Deegan, 1996)

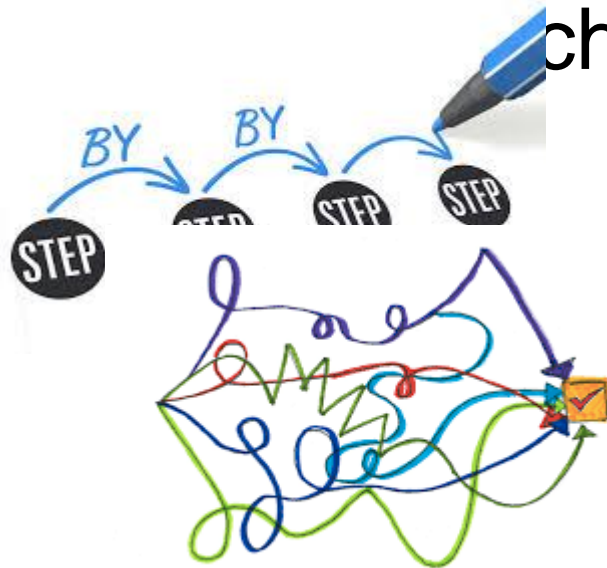
Serendipity in research

- Anomalous
- Strategic
- Unanticipated
- “Chance favours the prepared mind”



NO Serendipity in research

- Traditional model of research : The scientific method
- Thomas Edison's light bulb accident



Serendipity in research



Serendipity in research



Serendipity in research



Serendipity in applied linguistics

- Watson Todd (2011) Where do research ideas come from? DRAL Conference
- Well-known researchers report the source of their research ideas

Serendipity in applied linguistics

- Traditional scientific method
 - “I kept getting asked about which techniques were the best ones so I figured I needed to give a principled answer. I know of an earlier study but knew I had to have a more elaborate system. So, drawing on research that others had done and my own writing I figured out a new system.”

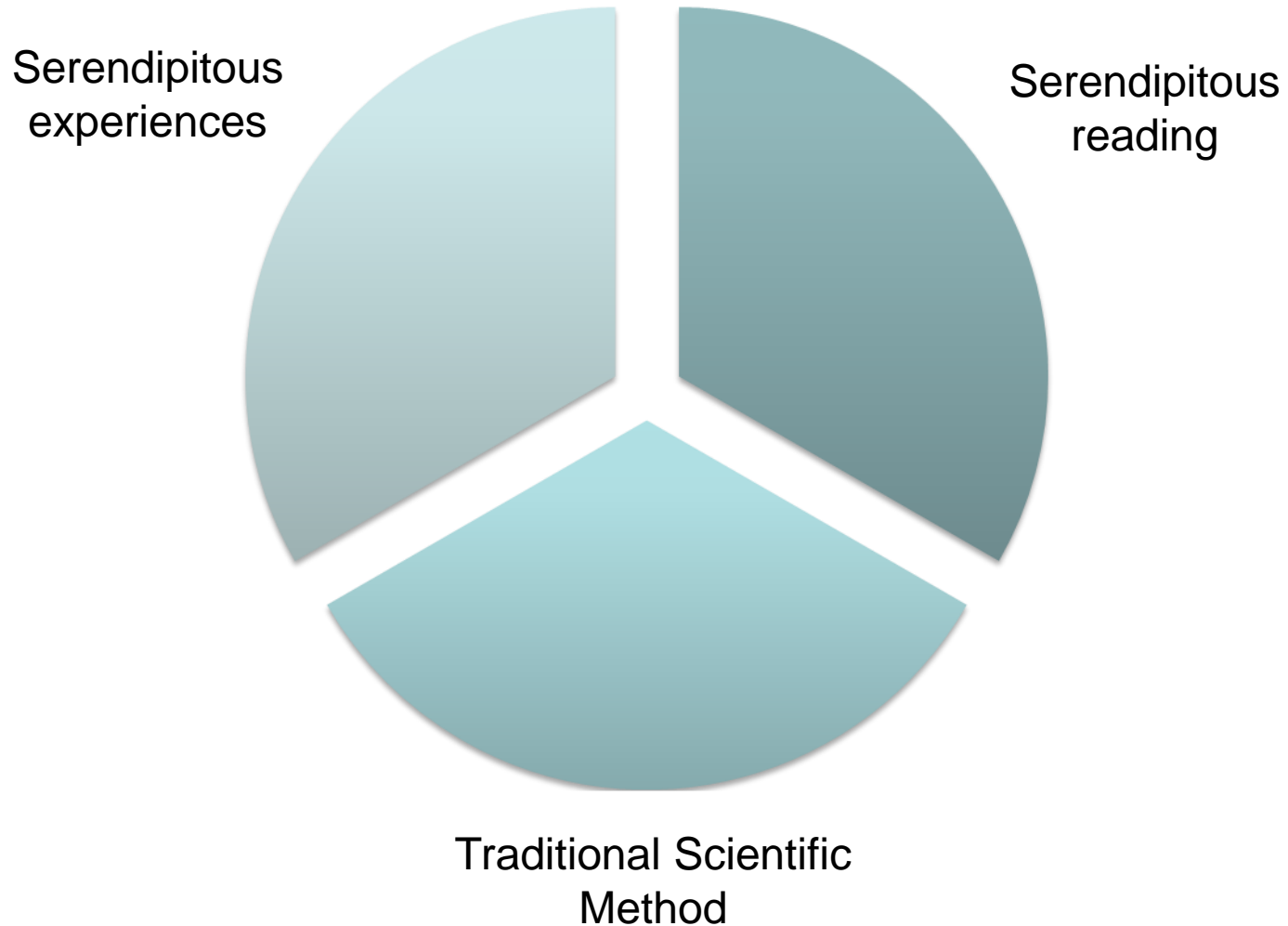
Serendipity in applied linguistics

- Serendipitous experiences
 - “This paper originally arose out of my anecdotal observations of the ways in which various language learners at my university were making use of the computer-based provisions in the language resource centres. It sought to find out what the practices and perceptions of learners [were] and to consider these in relation to current thinking on computer assisted language learning and learner autonomy.”

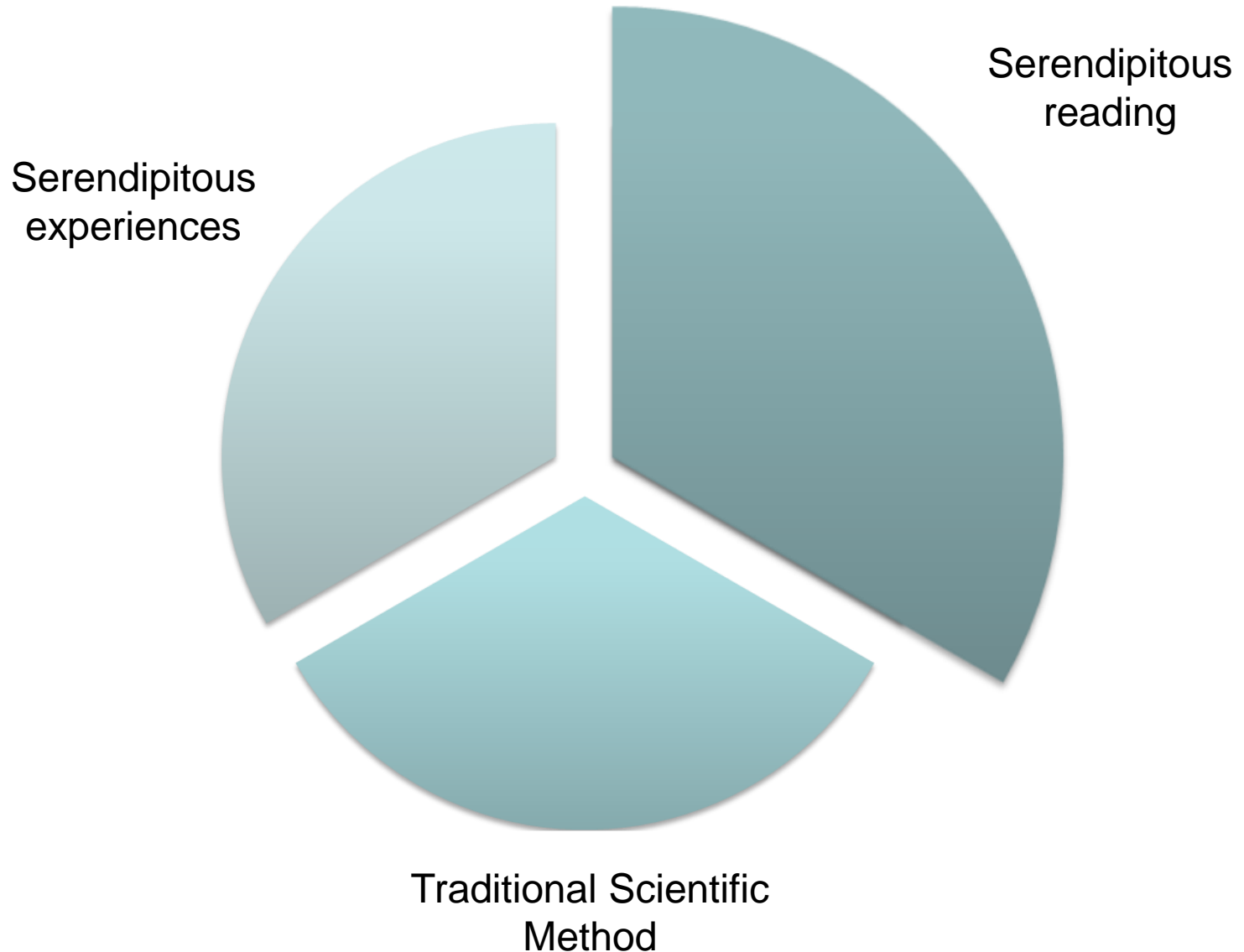
Serendipity in applied linguistics

- Serendipitous reading
 - “Some years before I had read James Gleick’s book *Chaos: The Making of a New Science*, and my understanding of language and its acquisition was transformed as a result. This book had nothing to do with language, but rather with complex, nonlinear, dynamic systems in nature. Nonetheless, it provided a much more satisfying way of dealing with issues of second language acquisition which I have been investigating for years.”

Serendipity in applied linguistics



Serendipity in applied linguistics



Serendipitous reading

- Browsing



- Searching



- Exploratory
 - Situational
 - Systematic
 - Monitoring

- Retrieving specific predetermined information

- Capricious

Serendipity

The threat to serendipitous reading

- Serendipitous reading is “an imperiled phenomenon” (Carr, 2015)



- Technology promotes searching
 - Change from browsing to searching as basis for academics choosing what to read
 - Google Scholar is wonderful when writing up articles
 - Searching prohibits serendipitous discoveries
 - “By supplying answers with such ruthless efficiency, the internet cuts off a supply of an even more valuable commodity: productive frustration” (Greenman, 2010)

Other threats from technology

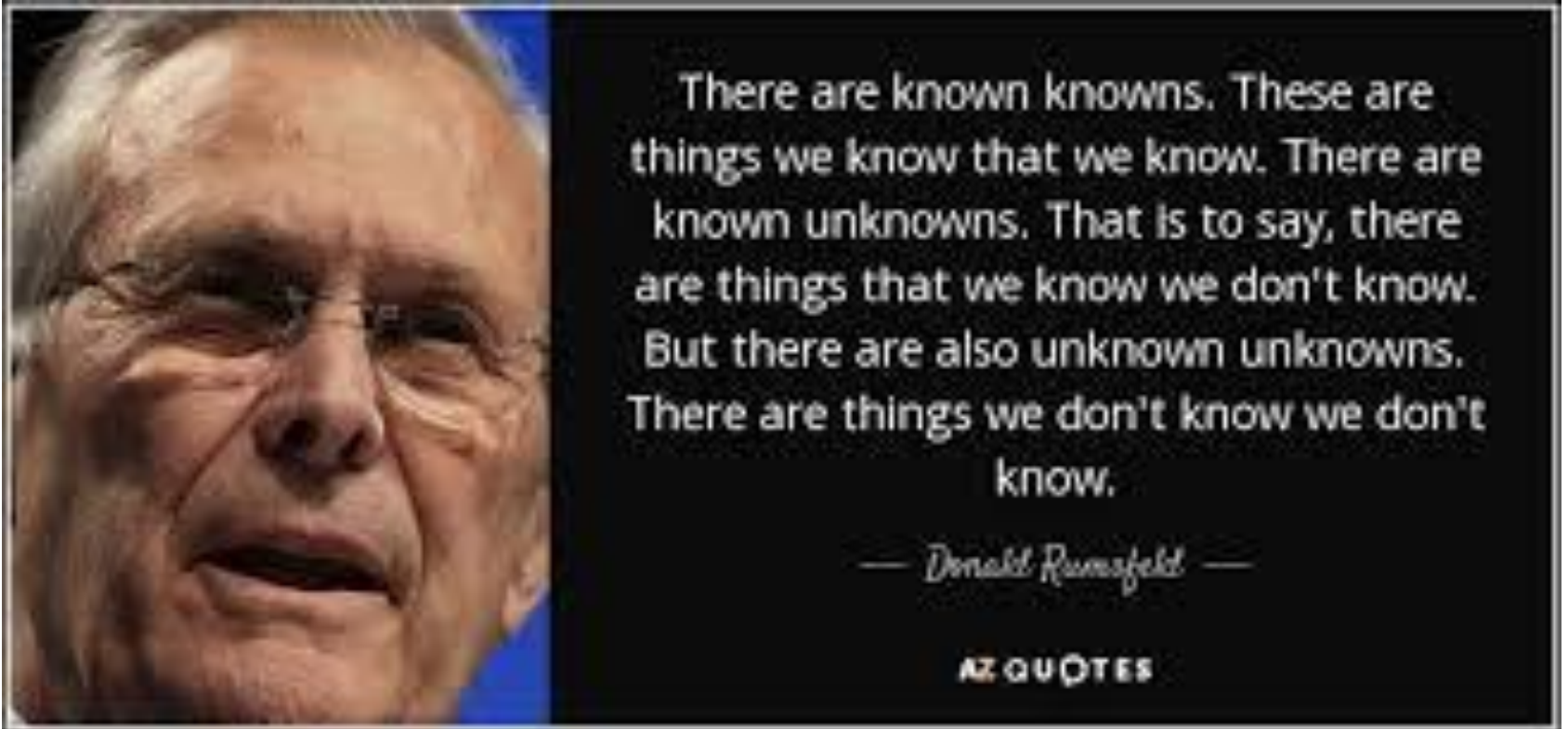
- Replacement of Internet directories by search engines

Directory vs. Search Engine Comparison

| Feature | Directories | Search Engines |
|--|---|--|
| • Entries are collected using what method? | Manually. Usually individuals or groups of individuals add the web sites that are included in directories | Search engine crawlers, spiders, and robots collect entries, and people never review those indexes until a |
| • How are web sites categorized? | | in search results. web site is categorized e keywords included |
| • How are results sorted? | | and in some cases, arity. |
| • Are there inclusion/exclusion criteria? | | can be included in as categories as the sites or. |
| • One differentiator? | Directories are browsable by subject or categories and subcategories. | Search engines search the full text of a web page, making the results much more comprehensive. |



Why is serendipitous reading important for research?



There are known knowns. These are things we know that we know. There are known unknowns. That is to say, there are things that we know we don't know. But there are also unknown unknowns. There are things we don't know we don't know.

— Donald Rumsfeld —

AZ QUOTES

Why is serendipitous reading important for research?

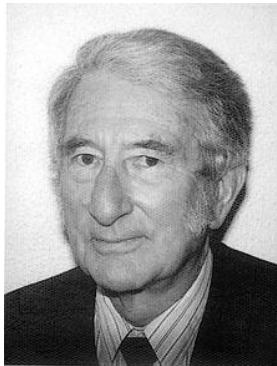
| | Knowns | Unknowns |
|---------|--|----------------------------|
| Known | Current accepted theories; knowledge base in applied linguistics | Gaps in the knowledge base |
| Unknown | Tacit knowledge | Major discoveries |

Why is serendipitous reading important for research?

| | Knowns | Unknowns |
|---------|--|--|
| Known | Searching to change personal known unknowns into known knowns | Conducting research to fill gaps following scientific method |
| Unknown | Raising awareness of assumptions | Discovering new ideas (through capricious browsing) |

Does serendipitous browsing lead to new discoveries?

- Evidence so far: anecdotal evidence from Watson Todd (2011)
- More tenuous evidence in applied linguistics:



Does serendipitous browsing lead to new discoveries?

- Field-leading applied linguists follow unusual publishing practices
 - Widdowson rarely conducts traditional research
 - Hoey has never published in a journal
 - Writing reads like an exploration of ideas more than research
 - Books by Halliday, Hoey and Widdowson have half the references of comparable books
 - Articles by Halliday, Swales and Widdowson have less than half the references of other articles in the same issue
 - Does low number of references imply a preference for browsing over searching?

Some caveats

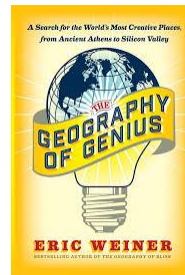
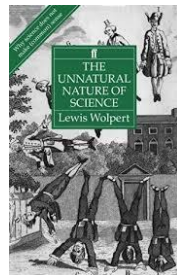
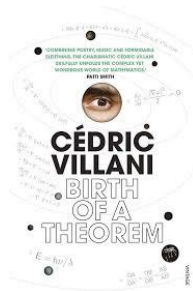
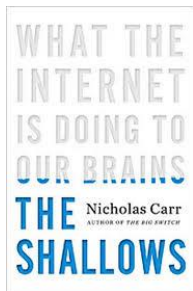
- Traditional research filling a gap (a known unknown) is necessary
- Searching can change personal known unknowns into known knowns
- Google Scholar searching is a godsend for academics
- Browsing can be a waste of time

Practices to promote serendipitous discoveries

- Engage in monitoring browsing



- Engage in capricious browsing



http://arts.kmutt.ac.th/crs/templates/about/Books_worth_reading.pdf

- Encourage your institution to promote wide reading

Serendipity in this presentation

- Read about the role of serendipity in human development in *The Geography of Genius* (reading for pleasure = capricious browsing)
- Monitoring browsing the *Journal of English for Academic Purposes*
- Read the editorial because it was by Ken Hyland (who I had just invited to this conference)
- Writing the paper: combining references to books from capricious browsing with articles from searching using Google Scholar