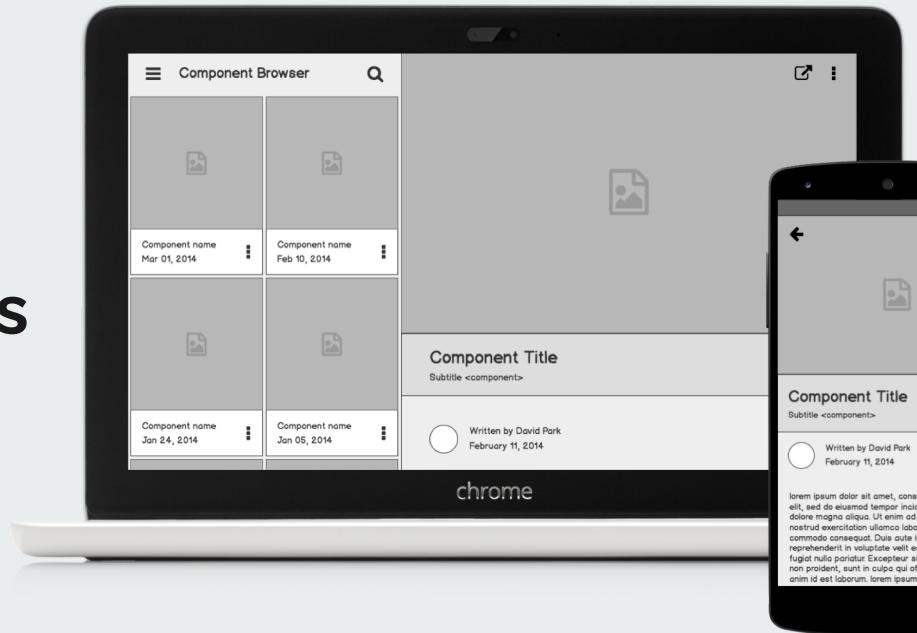

Understanding search & discovery using exploratory search tasks

Tools & Methods
MA Digital Humanities

Week 4
Dr. Sabrina Sauer
Iris Baas
Lisenka Bakker



Focus of the course

This course focuses on how particular tools and method allow us to know what we know

How people search for information plays a large role in research

For instance: which search engines do you use?

In the next 4 sessions, we focus on deepening our understanding of how search and research are interrelated, and how we can use particular methods to research search as a practice.

We pay specific attention to how tools allow us to have unforeseen - **serendipitous** - insights

The relationship between search and discovery

Figure *The Research Journey*

from: Hagedoorn, B. and Sauer, S., 2018. The Researcher as Storyteller: Using Digital Tools for Search and Storytelling with Audio-Visual Materials. *VIEW* <http://doi.org/10.18146/2213-0969.2018.jethc159>

The (re)search process as an iterative process





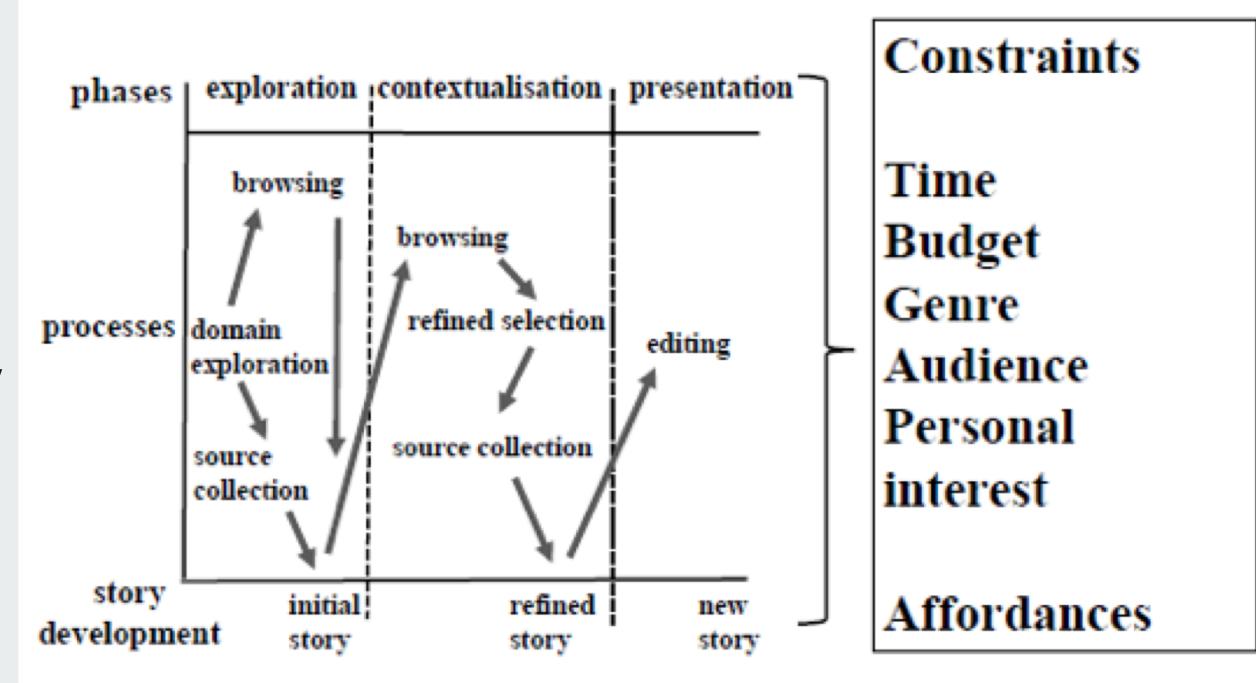
What is serendipity?

Serendipity can be defined as discoveries that are made - in scientific contexts and beyond - "at the intersection of chance and wisdom" [Copeland, 2019].

More than passive luck, serendipity is a category of good fortune that requires action and recognition from an agent. But serendipity results from an unforeseen idea or encounter and is often only retrospectively perceived as fortuitous. This is why understanding how serendipity occurs is quite a challenge (Sauer & Copeland, 2021).

Source: Sauer, S., & Copeland, S. (2021, September). Wa/ondering with data-or, Responsibly measuring socio-technical serendipity in the urban environment. In *2021 IEEE International Smart Cities Conference (ISC2)* (pp. 1-4). IEEE.

Search & serendipity strategies



Eliciting “lucky finds” depends on:

1. Technological affordances (system-oriented view)
2. Expert skills of users (user-engagement view)
3. And according to on the characteristics of users (notion of “super-encounters” (Erdelez, 2006))

Search process of media professionals working in television production.
Source: Sauer & De Rijke, 2017

The next 2 weeks

Today: Working with a specific tool set using exploratory search tasks

Tomorrow Analysing the affordances of the tool set using Tool Criticism

Next Tuesday: Setting up a user study with a use case

Next Wednesday/Thursday/Friday*: Doing a user study with exploratory search tasks and/or a think aloud protocol

Assessment

You will be assessed individually based on a number of assignments

- A recording of your explorations with the tool (pass/fail)
- A research diary of your explorations (pass/fail)
- A tool criticism report of your observations of the tool (pass/fail)
- A use case + user study reflection (pass/fail)
- A 5 minute presentation at a symposium: on the 31st of January (graded)

What you will learn and do in the next 2 weeks

- Think about search as a source of research
 - Explore the topic of serendipitous information encountering
 - Educate yourself for new work field (e.g. UX design, Tool criticism)
 - New empirical perspectives and approaches: doing user research
-

Today

Today: Working with a specific tool set using exploratory search tasks

- Introduction of the tool
- Exploring the tool by yourself, with a specific task
- Based on your explorations: come up with a task yourselves

What is the CLARIAH MediaSuite?

The CLARIAH Media Suite is intended primarily as a **research tool** for scholars interested in **data science** with media collections maintained at institutes in the Netherlands such as

- Netherlands Institute for Sound and Vision
- National Library, Eye Film Institute
- DANS
- Meertens Institute, etc.

The Media Suite provides specific tools for researchers to search, analyse and annotate these data collections.

Let's take a look!

<https://mediasuite.clariah.nl/>



Please note: make an account via RUG!

NB: please note that you should immediately accept the privacy conditions when logging in for the first time with your RUG account.

Choose Your Institution

Institutions you used previously



University of Groningen



[Choose another](#)



Media Suite Collections (selection)

Audiovisual Collection

Nederlands Instituut voor Beeld en
Geluid (Various creators)



Newspaper Collection

National Library of the Netherlands
(KB) (Various creators)



Desmet Film Collection

EYE Filminstituut



Desmet Poster Collection

EYE Filminstituut



Oral History

DANS (Various creators)



Soundbites uit Vervlogen Tijden

Meertens Instituut



Exploring the features: Inspect

1. Go to “Tools” and click on “Inspect”
 2. Look at the overview: **how do the three collections (next slide) differ/overlap?**
 3. Use the “read more” button to inspect the collections
-
- For English for “Open Images”: <https://openbeelden.nl/about.en>
 - Tip: Use Google Translate add-on

🔧 Collection inspector

Selected collections ▲

Add collection +

✖ Open Images - Sound and Vision

[Read more](#) 

✖ Sound and Vision Archive

[Read more](#) 

✖ Sound and Vision Archive - Radio

[Read more](#) 



Exploring the features: Search

Again, go to “Tools”, click on “Search”, and click on:

Sound and Vision Archive

Nederlands Instituut voor Beeld en
Geluid



[Read more](#) ↗

MediaSuite as a Search Tool

Search

Radio Collection 405.526

bijlmer

CLEAR SEARCH SAVE QUERY

Select date field

+ ADD A NEW FACET

B Broadcaster

<input type="checkbox"/>	Search facet ... 69 terms
<input type="checkbox"/>	100% NL 11
<input type="checkbox"/>	3FM 5
<input type="checkbox"/>	AKN 25
<input type="checkbox"/>	ANP 55
<input type="checkbox"/>	AVRO 453
<input type="checkbox"/>	AVROTROS 75

SHOW MORE +

Results 7.077

1 2 3 4 5 6 7 8 9 NEXT LAST

WERELDWIJZER
in Indonesie al dan niet zinloos was; Joep Bijlmer (onderzoeker voedselhygiëne) over de welvaart in Indonesië; Mochtar Lubis (schrijver) over de corruptie van de president; F. Sumitro (generaal buiten dienst) over de opvolging van president Suharto in 1933; Ali

⌚ 27-12-1989 2 matches in archival metadata

IN GESPREK
voor de PvdA, over de problematiek van de Bijlmer. Onderwerpen van gesprek zijn de ondervertegenwoordiging van 'zwarten' (ethnische minderheden) in het stadsdeelbestuur, het beleid van positieve actie, de bevolkings samenstelling, enkele specifieke problemen die er leven, en het Zwart Beraad,

In-class activity: MediaSuite vs other search tools

User task 1: search for ‘development of news genres’ in MediaSuite and also in Google

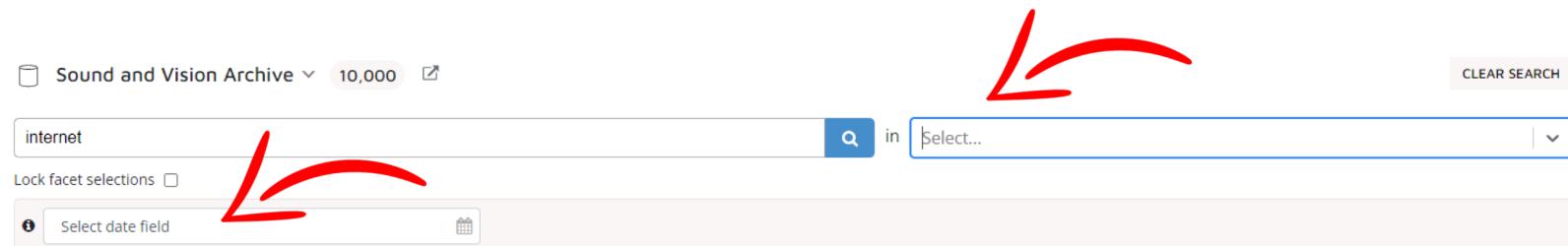
User task 2: search for ‘depiction of news over time’ in both search tools

Please make sure to screen record your search process! This will help with the development of your own exploratory search task!

How do the results differ/overlap? How could this influence your search approach?

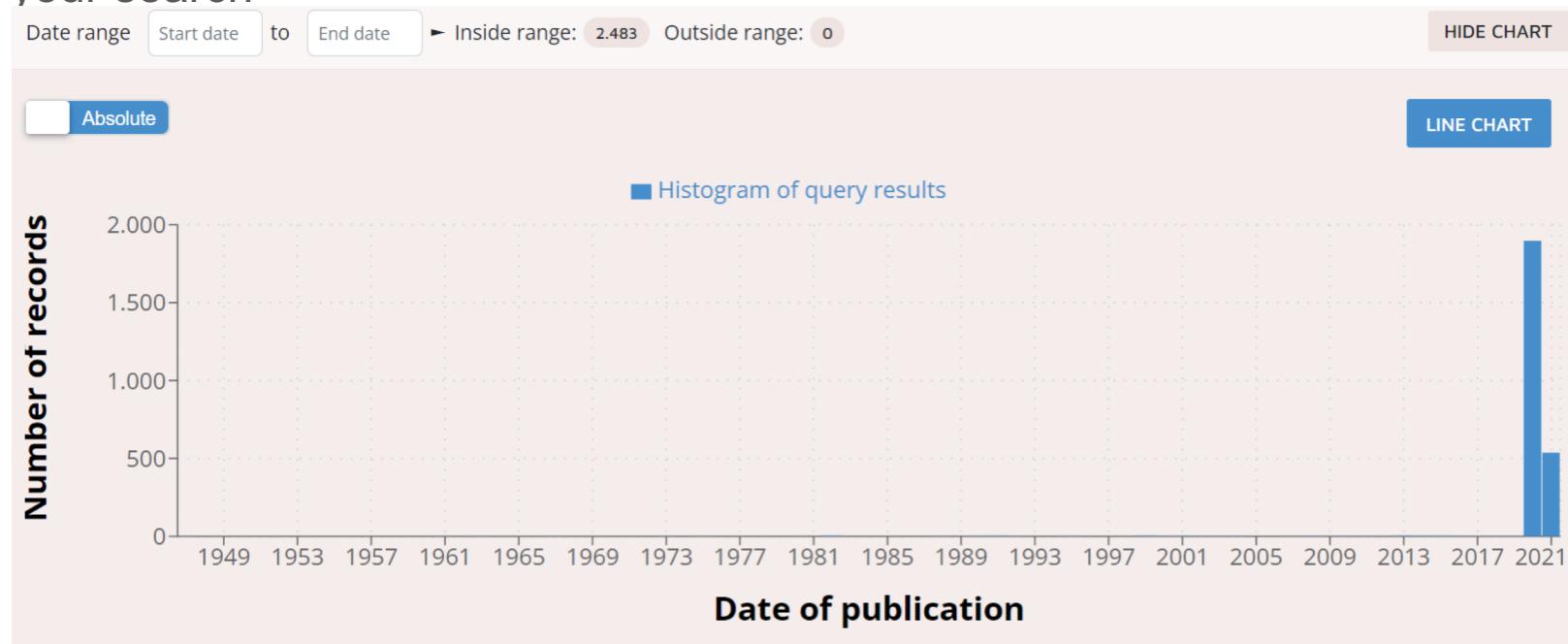
So... How do you search? (1)

Make your search **more systematic** using the “Select” and “Select date field” options



So... How do you search? (2)

Inspect the structure of the archive, so you can narrow down your search



So... How do you search (3)

Faceted search:

Results **628.480**

+ ADD A NEW FACET

mediaType	5 terms
Search facet ...	
Empty field	0
<input type="checkbox"/> audio	234480
<input type="checkbox"/> image	307
<input type="checkbox"/> text	182

Broadcaster	127 terms
Search facet ...	
Empty field	104233
<input type="checkbox"/> 100% nl	163
<input type="checkbox"/> 3fm	88
<input type="checkbox"/> aboo	1

Genre (series)	115 terms
Search facet ...	
Empty field	34667
<input type="checkbox"/> actualiteiten	107356
<input type="checkbox"/> actuele informatie	2595
<input type="checkbox"/> amateuropname	52

Perhaps, this facet could be helpful later on



So... How do you search (4)

MediaType -> select only a specific medium

Collection -> search for terms within a specific collection.

Access rights -> useful if you are planning on requesting permission for files that have limited access

Creator -> select a collection owner to focus on

Results 628.480

+ ADD A NEW FACET

Etc.

mediaType	:
Search facet ...	5 terms
Empty field	0
<input type="checkbox"/> audio	234480
<input type="checkbox"/> image	307

Boolean operators (search expressions)

OR

ANY of your search terms can be present in the resulting records / Broaden your results

AND

ALL search terms must be present in the resulting records / Narrows your results

Example: internet AND Web -> Searches for the word 'internet' AND the word 'web' - but they do not have to be next to each other

NOT

Ignore concepts (words) that may be implied by your search terms

Wildcard: * and ?

Example 1: internet* -> internetcafe, internetbedrijf / web * -> world wide web

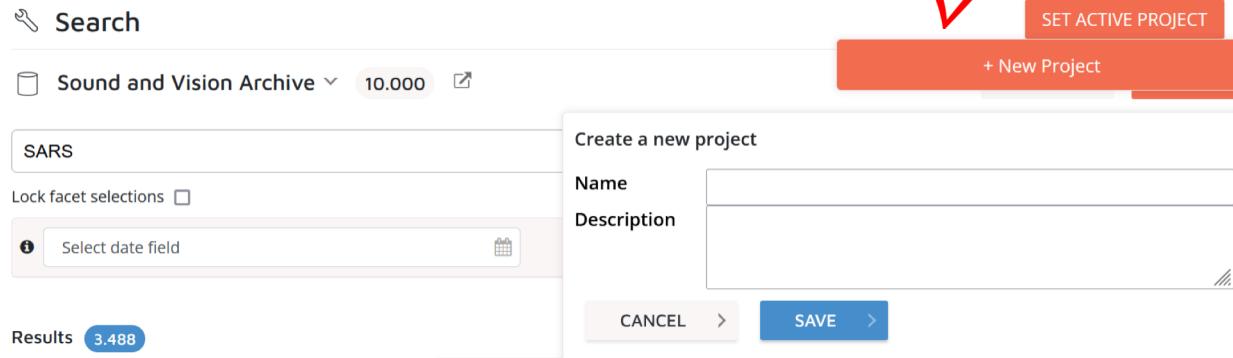
Example 2: vluchteling? -> vluchtelinge (keyword + one extra character)

Exact expression

Example: "world wide web" -> searches for the whole phrase

See for more: <https://mediasuite.clariah.nl/documentation/howtos/single-search#search-boolean>

Keeping track of your project



Search

Sound and Vision Archive 10.000

SARS

Lock facet selections

Select date field

Results 3.488

Create a new project

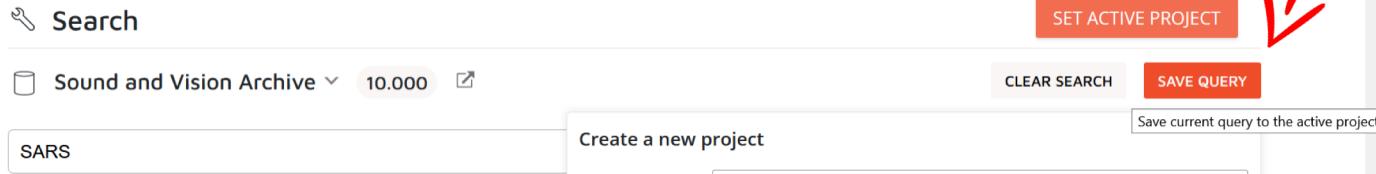
Name

Description

CANCEL > SAVE >

A red arrow points from the text "Create a 'new project'" to the "+ New Project" button in the dialog box.

Create a 'new project'



Search

Sound and Vision Archive 10.000

SARS

Create a new project

SET ACTIVE PROJECT

CLEAR SEARCH SAVE QUERY

Save current query to the active project

A red arrow points from the text "Save your query!" to the "SAVE QUERY" button in the interface.

Save your query!

WARNING

Return to previous page = delete your search query

So, save your queries!



Exploratory search using Media Suite

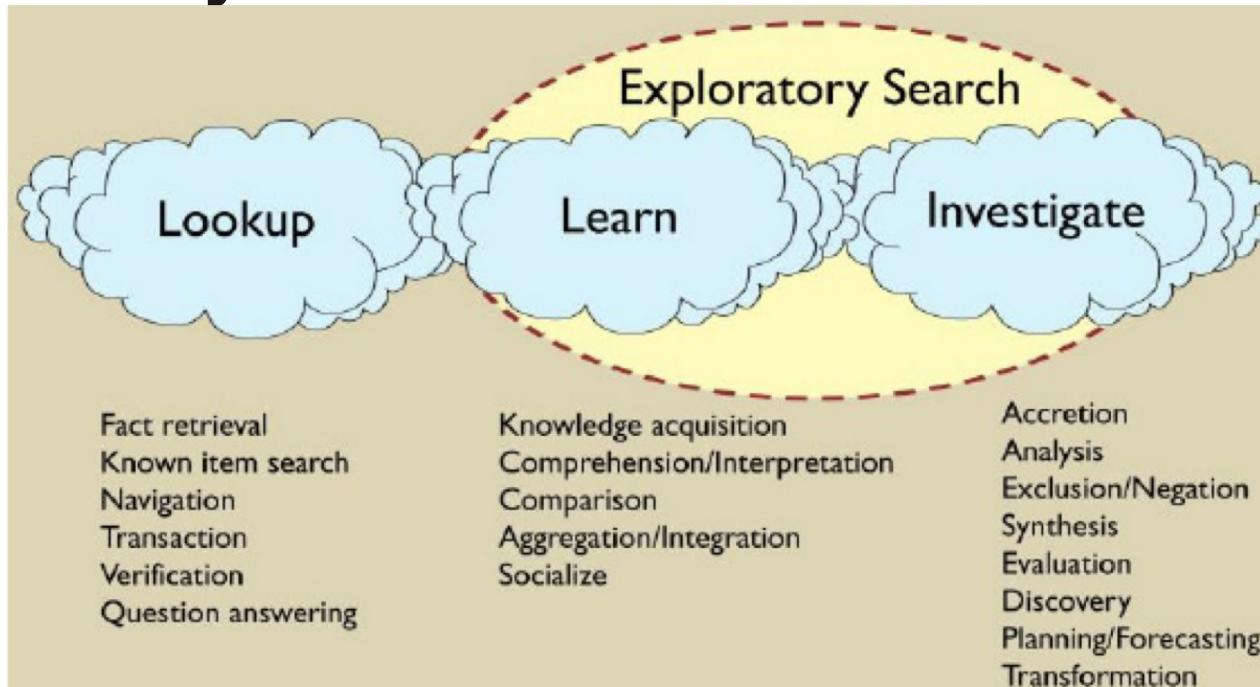
Considering the possibilities, affordances and functionalities of the tool as a mediating factor within the context of your research...

...the tool you use, can open empirical doors!

A new approach for different questions
(compared to Google)



Exploratory Search (Marchionini, 2006)



Wildemuth & Freund (2012): A definition of Exploratory search

“Exploratory search is a type of information seeking and a type of sense-making focused on the gathering and use of information to foster intellectual development”

Why do you think it is important to understand how people explore?

Exploratory search tasks

Consist of tasks that are geared at investigation (= multiple iterations of search), at serendipitous information encountering (= for instance when people look at themes, use tactics such as querying with synonyms, misspelled words).

"Exploratory search makes us all pioneers and adventurers in a new world of information riches awaiting discovery along with new pitfalls and costs." (Marchionini)

Exploratory search task characteristics

- Geared at learning and investigating within a specific academic context
- More general than specific
- Open ended, and leads to multiple items
- Not structured, more dynamic and multi-faceted

“You've been given an assignment in class on racial profiling, and are expected to write a paper on it. You decide to begin by trying to understand what racial profiling is, and explore and examine the issues, organisations and laws concerning it.”

Assignment: develop your own exploratory search task

We gave you an example exploratory search task.
Based on the literature, can you formulate another exploratory search task?

Prepare for next week:

an exploratory search task to be executed by a Media Suite user

You will investigate how peers make use of the Media Suite as an exploratory search tool

- MA students of the course Forms and Formats (Media Studies: Media Creation and Innovation) who are working on researching how search and storytelling relate
- BA students of the course Digital Curation who are curating a virtual exhibition

Summary: steps to take to develop your exploratory search task

- Play with and **explore the Media Suite** and **come up with a task for peers** who are interested in multi-media. These peers are devising a visual story/narrative using the Media Suite for a visual exhibition
- As part of this: **review your own exploration by reflecting on your own exploratory search recording** and note down every step in your explorations in your **research diary**

Details screen recording

Screen recording: Using Screencast-O-Matic, record your explorations in the Media Suite, either created during class or in exploring by yourself to come up with an exploratory search task

Research diary:

Please hand in your research diary in Excel. The research diary should consist of a table logging the following:

1) search process: which specific steps did you take - NB: this needs to include formulating (a) research question(s), your focus on specific topics, and an overview of keywords used

2) your explorations: study the found sources and reflect on what type of results you found

3) expectations: how were your expectations met? How does an exploratory search tool like DIVE+ compare to Google for instance?

Please hand in your screen recording and your research diary on Nestor by 17 Dec.

Examples of research questions that these users could be using for their own research

- > How do crises (e.g. financial crises, COVID, climate change) impact the way in which news is depicted satirically?
- > How is news covered in a satirical manner by public service broadcasters?
- > Fake news or truth? Which satirical cues could indicate potentially misleading news? ([source](#))
- > Based on screen recordings in the Media Suite vs. on YouTube, which shows by the Dutch comic duo Kees van Kooten and Wim de Bie are available, and which aspects of the show's history do the two platforms respectively facilitate? ([source of this research](#))

Tutorials

Searching, finding and bookmarking:

<https://mediasuite.clariah.nl/learn/tool-tutorials/searching-and-bookmarking-for-television-history>

<https://mediasuite.clariah.nl/learn/tool-tutorials/finding-and-bookmarking-oral-history-interviews>

Workarounds for analyzing Dutch content in English:

<https://mediasuite.clariah.nl/learn/subject-tutorials/work-arounds-for-analyzing-dutch-content-in-english>

Desktop documentary

<https://mediasuite.clariah.nl/learn/desktop-documentary-for-television-history>

Let's discuss!

More questions? Come to our office hours!

Wednesday 10:00-11:00 (Digital Humanities Lab)

You can also email us:

i.m.baas@rug.nl

l.c.j.bakker@rug.nl

We aim to answer your questions within 2 working days



With thanks to the CLARIAH team



References

- S. M. Copeland. (2019). "On serendipity in science: discovery at the intersection of chance and wisdom." *Synthese*, vol. 196, no. 6, pp. 2385–2406
- Hagedoorn, B. and Sauer, S., 2018. The Researcher as Storyteller: Using Digital Tools for Search and Storytelling with Audio-Visual Materials. *VIEW* <http://doi.org/10.18146/2213-0969.2018.jethc159>
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- B.M. Wildemuth, & Freund, L. (2012, October). Assigning search tasks designed to elicit exploratory search behaviors. In *Proceedings of the symposium on human-computer interaction and information retrieval* (pp. 1-10)

