Paper Writing Workshop

with Laura DeCarli

Workshops Plan

- **Today, with Laura:** Research Questions
- **22nd of September, with Mike:** Game Research Methods
- **October, with Laura:** The basic structure of a paper
- **3rd of November, with Mike:** Literature Reviews and writing a paper

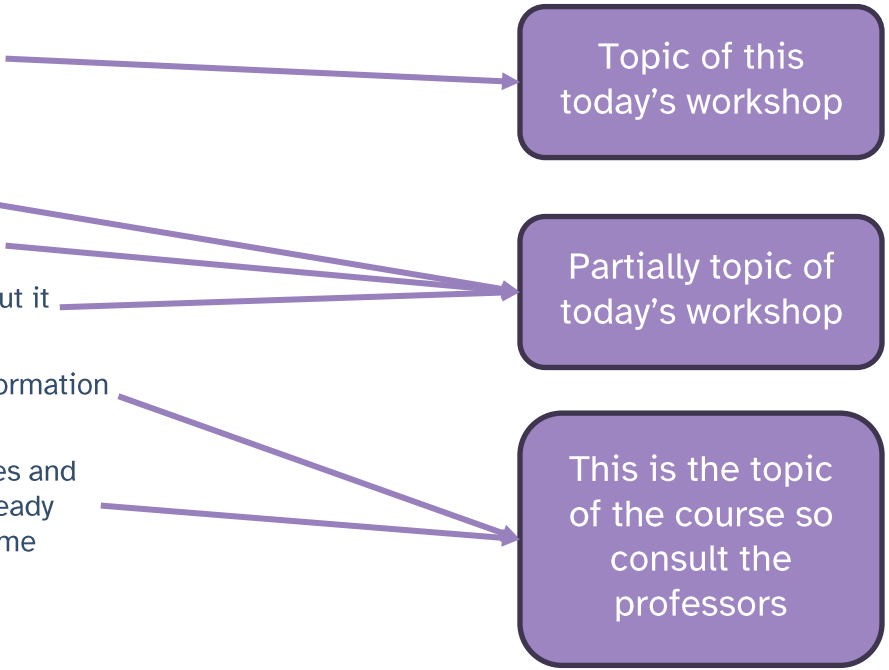
The workshop is about what you said you'd like to look into (regarding research questions)

About research questions:

- "How to scope a research question"

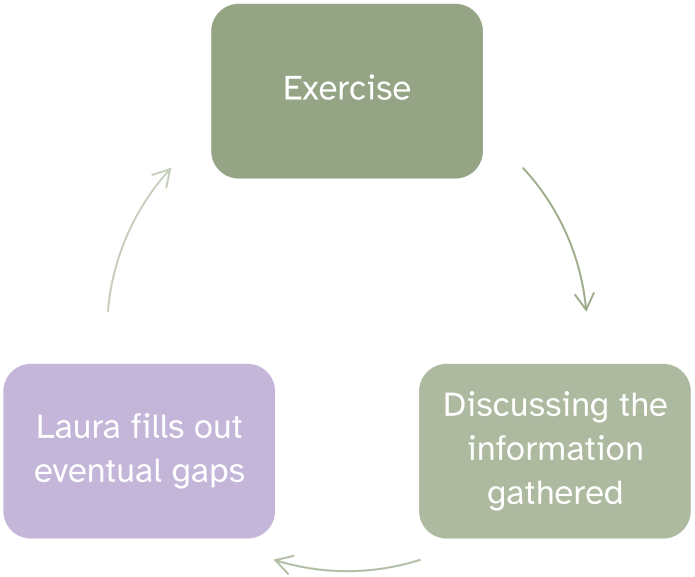
More in general:

- "Planning that involves scoping"
- "What not to do/Common mistakes"
- "How to use academic sources without it feeling like patchwork"
- "How to Research. How to collect information and make it a new thing"
- How to engage with academic sources and build an argument on top of what already exists. How do you deep dive into game studies?



How this workshop works

This is not a talk or a lecture, it is a participatory activity:



Exercise 1

You are now a research group and your goal is to investigate the following topic:

How to formulate a good research question and how to scope it well?

This problem needs to be broken down into smaller questions (I'd say at least four), tell me how would you break it down:

- What is a good research question?
- How to evaluate the scope?
- How do we formulate a good research question?
- What is a good scope?

The goal of Workshop 1

You are now a research group and your goal is to investigate the following topic:

How to formulate a good research question and how to scope it well?

The problem needs to be broken down into smaller component, here is Laura's take:

1. What is a research question?
2. What is the process of formulating a research question?
3. How do we evaluate if a research question is good or not?
4. How do we evaluate if a research question is scoped well or not?

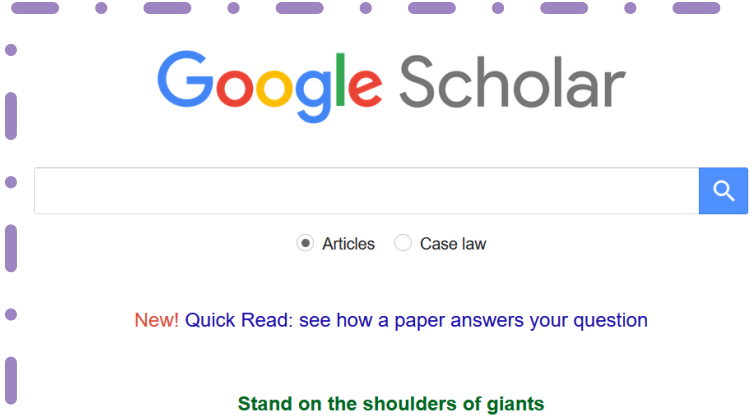
Exercise 2

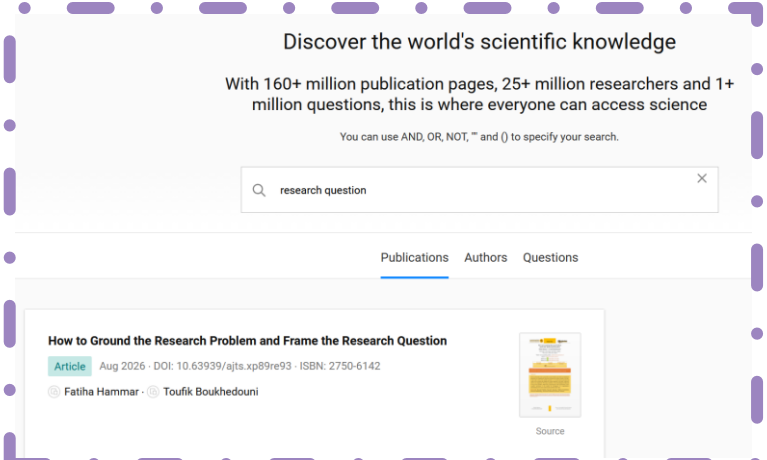
How do we find out the information we need?

Research group's initial answers / intuitions:

- Google scholar
- Literature from the courses
- Bibliography of the literature
- Game Lab library
- Royal Library of Copenhagen

First thing: look up literature on the topic





- https://scholar.google.com/
- https://www.researchgate.net/

But Laura, I cannot access the paper

Sometimes, you cannot just download a paper, but you might be able to:

1) “Access through your institution” if ITU is on the list, or ask your WAYF to do that for you
2) Try to find it on ITU’s Library or the Royal Danish Library
3) Write to the author
4) Ask someone you know (including professors) if they have it
5) Use your browser of choice to see if you can find the PDF elsewhere
6) Research finds a way ;)

WAYF

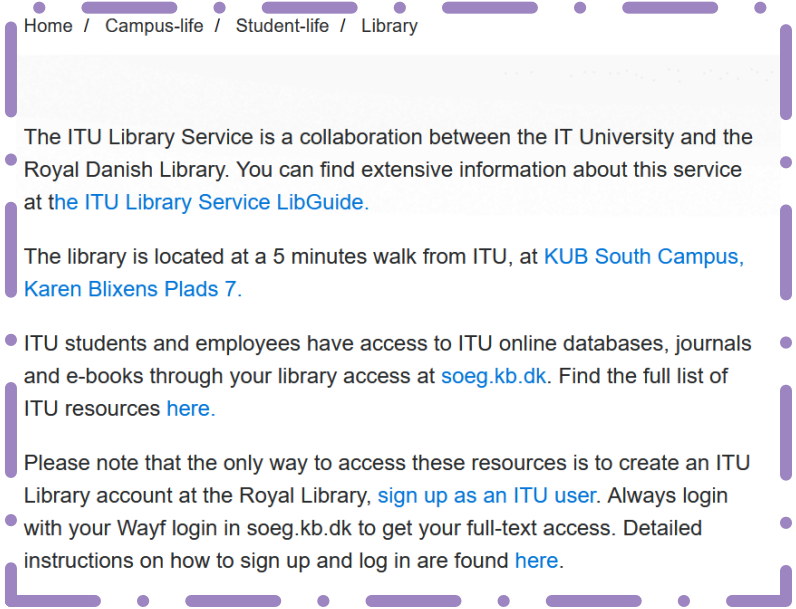
WAYF
Where are you from

COMPANY WITH
INFORMATION SECURITY
MANAGEMENT SYSTEM
CERTIFIED BY DNV
ISO/IEC 27001

Agency for Digital Government
NSIS-notified
— Substantial —

If you see the WAYF icon it means that you can access that resource with your ITU credentials.

First thing: look up literature on the topic



Home / Campus-life / Student-life / Library

The ITU Library Service is a collaboration between the IT University and the Royal Danish Library. You can find extensive information about this service at the ITU Library Service LibGuide.

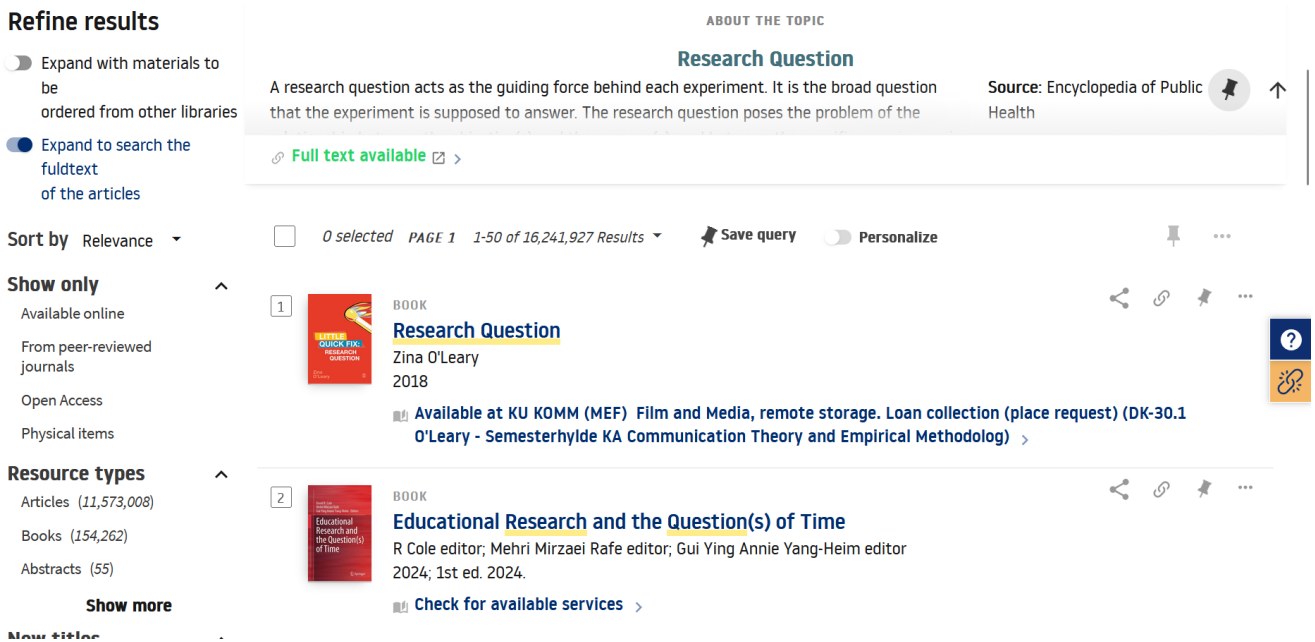
The library is located at a 5 minutes walk from ITU, at KUB South Campus, Karen Blixens Plads 7.

ITU students and employees have access to ITU online databases, journals and e-books through your library access at soeg.kb.dk. Find the full list of ITU resources here.

Please note that the only way to access these resources is to create an ITU Library account at the Royal Library, sign up as an ITU user. Always login with your Wayf login in soeg.kb.dk to get your full-text access. Detailed instructions on how to sign up and log in are found here.

- https://itustudent.itu.dk/campus-life/student-life/library
- https://soeg.kb.dk/discovery/search?vid=45KBDK_KGL:KGL&lang=en
- https://kub.kb.dk/c.php?g=91657&p=591599

Royal Danish Library



Research group's initial intuitions

The research group discusses their initial intuitions and assumptions about the questions

Initial intuitions: what is a research question?

Research group's initial intuitions:

- A research question is a question that you use to do research
- A research question is something that you are interested to know more about
- A research question is the question that I have to write to my supervisor so that I can start to actually write the paper

Initial intuitions: what is the process of formulating a research question?

Research group's initial intuitions:

- Topic of interest -> find a detail that -> turn detail into a question that I can answer
- Question -> supervisor -> narrow -> go back and repeat
- Write as many questions as I can about the topic

Initial intuitions: how do we evaluate if a research question is good or not?

Research group's initial intuitions:

- If I can answer it with yes/no it's bad (we don't want absolute and close conclusions)
- I outsource the evaluation to the supervisor.
- If I have enough literature to support the research needed to answer the question I'm on a good track.

Initial intuitions: how do we evaluate if a research question is well scoped or not?

Research group's initial intuitions:

- The research question must be as specific as possible.
- I should not need 5+ different theories to answer the research question.
- I have rounds of feedback with the professor to narrow down the scope.
- I do a quick literature review -> the narrow down the research question based on that.
- Break down the research question into the smallest questions possible

Research group's literature review

Each researcher takes up a question and looks up the literature related to it

Literature review (10 minutes search each)

Question	Participants doing the literature review
What is a research question?	Christina
What is the process of formulating a research question?	Rebecca
How to evaluate if a research question is good or not?	Rebecca
How to evaluate if a research question is well scoped or not?	Christina

What is a research question?

Research group's findings:

- It is difficult cannot find a clear answer
- The focal point of inquiry within a study

Literature collected through this quick search:

- https://elearning.univ-mila.dz/a2026/pluginfile.php/110068/mod_resource/content/1/Research%20Questions%20%2C%20Aims%2C%20and%20Objectives%20%282%29%20%281%29.pdf
- https://www.hs-osnabrueck.de/fileadmin/HSOS/Homepages/LearningCenter/Dateien/Toolbox/TuE/Research_Questions_in_Academic_Texts.pdf
- https://www.tandfonline.com/doi/full/10.1080/13645570600655282#d1e202

What is a research question?

> A research question serves as the focal point of inquiry within a study, encapsulating the primary query that the research endeavors to address.

(Azzioui, 2023, p.1)

> The research question is viewed as a crucial early step that provides a point of orientation for an investigation. It helps to link the researcher's literature review to the kinds of data that will be collected.

(Bryman, 2017, p.1)

What is a research question?

> [...] you should be clear about the type of question you want to address [...]
>
> 1. Descriptive question
>
> Information: A descriptive question is about presenting an issue in its context, in such a way that it is free of interpretation and judgement.
>
> [...]
>
> 2. Explanatory question
>
> Information: An explanatory question focuses on presenting the causes of an issue or a situation.
>
> [...]
>
> 3. Evaluative question
>
> Information: An evaluative question aims to assess an issue or a situation using selected criteria.
>
> (Czech, translated by Chapula , 2016, p.1-2)

> 4. Forecast question
>
> Information: The purpose of a forecast question is to make well-founded statements about how an issue or situation will change in the future under certain conditions.
>
> [...]
>
> 5. Design Question
>
> Information: A design question is aimed at developing recommendations for action in order to change a situation or set of circumstances (positively) with regard to specific objectives.
>
> (Czech, translated by Chapula , 2016, p.2)

What is a research question?

> Put simply, a research question is a question that a research a research project sets out to answer. Most research questions will lead to a project that aims to generate new insights, but the target audience and the methodology will vary widely.

(Mattick, Johnston, de la Croix, 2018, p.104)

> an inquiry that leads towards obtaining a solution through systematic and verifiable steps by the researcher

(Ibrahim, 2008, p.99)

> Research questions are not like ordinary questions. They are somewhat inquisitorial in that they expect an answer [...]

(Andrews, 2003, p.2)

What is a research question?

> A research question must be *answerable*. This means that it is not helpful in research to have a question that is so allembracing that it would be impossible to answer it within the confines of a research project, however large.
>
> (Andrews, 2003, p.2)

> By 'answerable' I mean that a research question must have the potential for being answered in the project to be undertaken.
>
> (Andrews, 2003, p.3)

What is a research question?

> It may well turn out that the question does not have a clear answer. Such an outcome is acceptable, because at least you have tried to answer it. Your results might be illuminating; they might suggest the question should have been re-framed in some way; [...]
>
> (Andrews, 2003, p.3)

> [...] your results might be 'negative' in that they don't turn out to be the way you expected or predicted they would turn out. All these possible outcomes are positive in research, because we will know more at the end of the research process that we did at the beginning about the substantial focus or process of the research.
>
> (Andrews, 2003, p.3)

What is a research question

A research question is:

- The question that leads your research and that you must answer in your paper. Your paper revolves around this question.
- A question that is answerable. Specifically, answerable through specific methods of research, analysis etc.
- A question of which the process of answering it leads to creating new knowledge (however small).
- A question that your research can answer.
    - The answer might not be a clear one, in that case, you must be able to explain why.

The process of formulating a research question

Research group's findings:

- Usually we find sources from medical research, which is different from our research are of humanistic research
- FINER method
- How to problematize things
- Find a gap in the literature

Literature collected through this quick search:

- https://doi.org/10.4102/td.v21i1.1526
- https://www.sciencedirect.com/science/article/pii/S1551741123003741?via%3Dihub
- https://journals.sagepub.com/doi/10.1177/1350508410372151
- https://journals.aom.org/doi/10.5465/amr.2009.0188
- https://www.sciencedirect.com/science/article/pii/S0142694X21000739

The process of formulating a research question

> [...] the formulation of research questions in the following ways:
>
> - to identify gaps in the existing corpus of knowledge aimed at expanding on or building new (grounded) theory
> - to obtain contextual information (e.g. background, statistics and applications) regarding a practical problem, especially in the applied social sciences
> - to expand on current research (body of evidence) on atopic or phenomenon
> - to refine and sharpen the research problem by identifying key variables, relationships and frameworks in previous studies that can inform the development of hypotheses and conceptual frameworks
>
> [...]
>
> (van der Waldt, 2025, pp.4-5)

> - to avoid duplication by ensuring that the research questions address new or underexplored areas, preventing redundancy in research
> - to identify suitable methodological approaches by reviewing how similar research questions have been addressed in previous research
> - to establish a theoretical foundation by anchoring the research within established theoretical frameworks
> - to highlight conflicting findings or debates by exploring differing perspectives or unresolved debates in the literature.
>
> (van der Waldt, 2025, p.5)

The process of formulating a research question

> Many researchers start with a question that is either too narrow or too broad. If a question is too narrow, it may limit the external validity of the study and broader interest in your results, generating difficulty when seeking publication and dissemination. Alternatively, if a question is too broad, it may impact the internal validity and the subsequent relevance of the results by rendering unclear conclusions.
>
> (Covvey, McClendon, Gionfriddo, 2024, pp.68)

> A second pitfall can occur when researchers poorly specify the in dividual components of their research question, which can lead to problems during the conduct of the study. Even when the research question is appropriately scoped at a high-level, each individual component needs to be specified to remove ambiguity.
>
> (Covvey, McClendon, Gionfriddo, 2024, pp.68)

The process of formulating a research question

> The most dominant way of constructing research questions in our empirical material was gap-spotting. [...] We identified three basic modes of gap-spotting, namely, confusion, neglect and application spotting.
>
> [...]
>
> Confusion spotting
>
> The main focus in this way of constructing research questions is to spot some kind of confusion in existing literature. Previous research on the topic exists, but available evidence is contradictory. The research question aims to sort out the identified confusion in the literature and to explain it. The main version of this mode of constructing research questions was to search for competing explanations in existing literature.
>
> (Sandberg, Alvesson, 2011, pp.27-29)

> Neglect spotting
>
> Spotting something neglected in existing literature is the most common mode of constructing research questions in our sample. [...] It is possible to distinguish three specific versions of neglect spotting, namely, spotting an overlooked area, an under-researched area and a lack of empirical support.
>
> Application spotting
>
> Spotting a new application in existing literature is a third basic mode of constructing research questions. [...] The research task is to provide an alternative perspective to further our understanding of the particular subject matter in question. Typically, advocates of application spotting claim that a specific body of literature needs to be extended or complemented in some way or another.
>
> (Sandberg, Alvesson, 2011, p.30-31)

The process of formulating a research question

“

FIGURE 1
The Problematization Methodology and Its Key Elements

Aim of the problematization methodology
Generating novel research questions through a dialectical interrogation of one's own familiar position, other stances, and the literature domain targeted for assumption challenging

A typology of assumptions open for problematization				
In-house: Assumptions that exist within a specific school of thought	*Root metaphor:* Broader images of a particular subject matter underlying existing literature	*Paradigm:* Ontological, epistemological, and methodological assumptions underlying existing literature	*Ideology:* Political-, moral-, and gender-related assumptions underlying existing literature	*Field:* Assumptions about a specific subject matter that are shared across different theoretical schools

Principles for identifying and challenging assumptions					
1. Identify a domain of literature: What main bodies of literature and key texts make up the domain?	*2. Identify and articulate assumptions:* What major assumptions underlie the literature within the identified domain?	*3. Evaluate articulated assumptions:* Are the identified assumptions worthy to be challenged?	*4. Develop alternative assumptions:* What alternative assumptions can be developed?	*5. Relate assumptions to audience:* What major audiences hold the challenged assumptions?	*6. Evaluate alternative assumptions:* Are the alternative assumptions likely to generate a theory that will be regarded as interesting by the audiences targeted?

”

(Sandberg, Alvesson, 2011, p.260)

The process of formulating a research question

> Research questions are grounded in current and historical design research. As such, a good research question must be presented within a demonstration of how it speaks to and develops current theoretical debates (as stressed by Philip Cash; see Cash, 2018; 2020), conceptualizations of design phenomena, lines of inquiry, methodological issues, or addresses empirical unknowns.
>
> [...]
>
> Research questions in design need to be conscious of the implications for methodological choices. A well-articulated research question must single out identifiable phenomena and relationships that are amenable to investigation.
>
> (Matthews, 2021, pp.15-16)

> Research questions need to be formulated in ways that do not just enable answers to be discovered through inquiry, but in ways that the answers (however they may turn out) offer benefits to the community of research.
>
> [...] an interesting research question will lead to a compelling story in the way the research is presented.
>
> (Matthews, 2021, pp.16-17)

The process of formulating a research question:

> “There are two prerequisites that graduate students require before developing their RQs. The first is, knowing the problem they intend to solve, and secondly, having completed substantial literature review in the area of their research interests.”
>
> (Ibrahim, 2008, p.99)

> “researchers are expected to continuously refine their main RQ and sub-RQs within the original intention of their main RQ constructs as their theses progress.”
>
> (Ibrahim, 2008, p.100)

The process of formulating a research question:

S. K. Ratan, T. Anand and J. Ratan (2018) explain how to develop a research question:

1. Identify the broader topic of interest
2. Do preliminary research on this general topic
3. Ask yourself what do you still need to know to answer the question after carrying out the preliminary research
4. And from there identify the implied questions from the gaps in the knowledge
5. Narrow the scope and focus your research

The process of formulating a research question:

> three major constructs in a thesis RQ: who, what, and how. They are:
>
> 1) WHO is the “element” that is being used or being impacted by the study.
>
> 2) WHAT is the “body of knowledge” that the researcher must know in order to solve the problem.
>
> (Ibrahim, 2008, p.100)

> 3) HOW is the “action” or “impact” that will occur on the “element” or the “body of knowledge” in the study.
>
> As a rule of thumb, there must be at least one of each construct for an acceptable Masters’ RQ.
>
> (Ibrahim, 2008, p.100)

Example of research question for WHO/WHAT/HOW

Coming from the field of architecture, Ibrahim (2008) provides the following example: “What are the exterior artificial lighting requirements [WHAT] for enhancing a building’s appearance [HOW] in the urban space at night [WHO]?”

- WHO: The urban space at night will be impacted by the results of the study.
- WHAT: The researcher needs to research exterior lighting requirements to answer the question.
- HOW: The urban space at night will be enhanced by applying the results of the study.

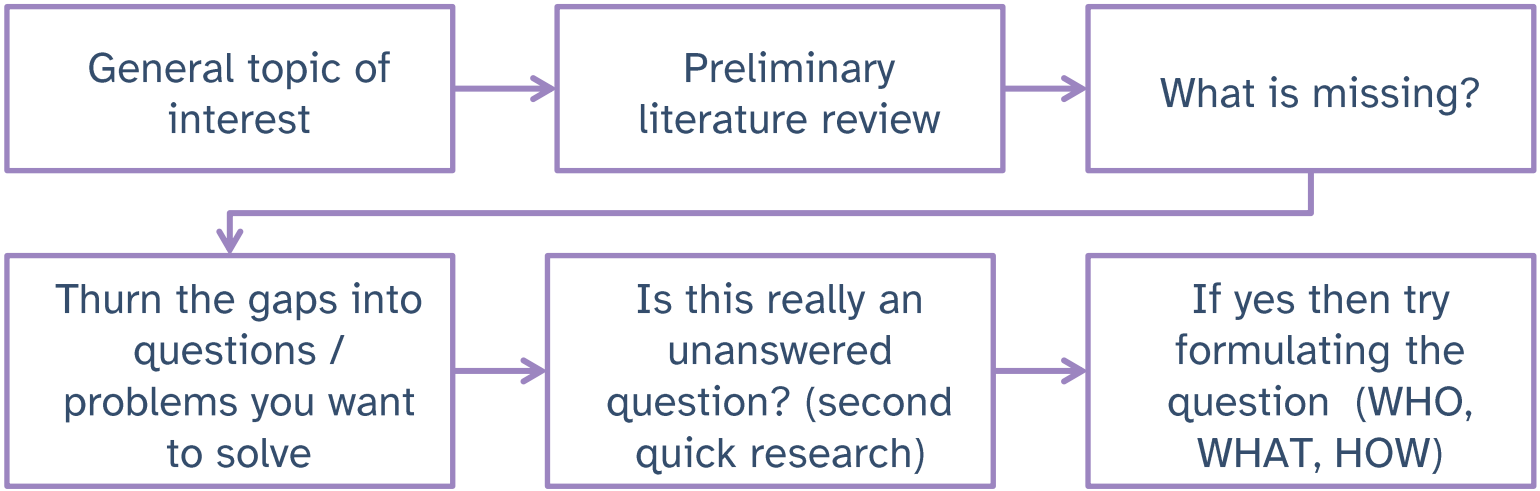
Example of research question for WHO/WHAT/HOW

But what about research questions related to game? Let's take Shrimp's MSc thesis as an example:

"This thesis investigates how aspiring game developers [WHO] can navigate the complex process of bringing a game from ideation to a prototype [WHAT] that is ready for both funding applications and pitching [HOW]." (Mikosz, Fernandes, Markussen, 2025)

- WHO: aspiring game developers.
- WHAT: the researchers will study the process of bringing a game from ideation to prototyping.
- HOW: aspiring game developers will know more about how to get a game ready for both founding applications and pitching.

The process of formulating a research question:



Evaluating if a research question is good

Research group's findings:

- I found the same articles that discuss how to formulate a research question.
- Most articles talk about the relevance of the research question.
- A lot of papers are about empirical research, which is not necessarily our focus (e.g. turning questions into testable hypothesis)

Literature collected through this quick search:

- https://doi.org/10.4102/td.v21i1.1526
- https://www.sciencedirect.com/science/article/pii/S1551741123003741?via%3Dihub
- https://journals.sagepub.com/doi/10.1177/13505084103721 51
- https://journals.aom.org/doi/10.5465/amr.2009.0188
- https://www.sciencedirect.com/science/article/pii/S0142694X21000739
- https://pmc.ncbi.nlm.nih.gov/articles/PMC2912019/

Evaluating a research question

> A good question can make people pause and see things in a different way, or can motivate them to learn more through discussion, an internet search or literature review.
>
> (Mattick, Johnston, de la Croix, 2018, p.105)

> Ask yourself what will happen if this research is not done - does it really matter? Who will benefit from it?
>
> (Mattick, Johnston, de la Croix, 2018, p.105)

Evaluating a research question

You will also remember that Hajo in the Games&Culture course told you that a good research question is:

“ **clear**: specific enough so that the reader easily understands the purpose of the study

focused: narrow enough to be answered thoroughly in the available space

concise: no longer than necessary

complex: no “yes/no” answer; requires sources, analysis, and an argument synthesizing ideas and findings

arguable: potential answers are open to debate rather than accepted facts ”

Evaluating a research question

What Hajo mentions is also something that S. K. Ratan, T. Anand and J. Ratan (2018) bring up:

“
- Is RQ clear? With so much research available on any given topic, RQs must be as clear as possible in order to be effective in helping the writer direct his or her research
- Is the RQ focused? RQs must be specific enough to be well covered in the space available
- Is the RQ complex? RQs should not be answerable with a simple “yes” or “no” or by easily found facts. They should, instead, require both research and analysis on the part of the writer
- Is the RQ one that is of interest to the researcher and potentially useful to others? Is it a new issue or problem that needs to be solved or is it attempting to shed light on previously researched topic
- Is the RQ researchable? Consider the available time frame and the required resources. Is the methodology to conduct the research feasible?
- Is the RQ measurable and will the process produce data that can be supported or contradicted?
- Is the RQ too broad or too narrow?

”

Evaluating a research question

Things to consider to evaluate if a research question is “good” are:

- Does the research question clearly guide you in your writing and research?
- Is it narrow enough that answering it fits your paper’s scope (more on that next)?
- Does it require you to actually do an analysis?
- Is it useful, relevant or interesting to others (researchers, practitioners, etc)?
- Is it feasible for you to investigate it in your paper’s scope (more on that next)?
- Is it going to produce new knowledge, data, etc.?
- Can the answers you produced be debated / can the data you produce be supported or contradicted?
- Can the reader understand what is the point of answering the question?
- Is it concise or too convoluted?

Evaluating a research question

Your research question does not need to be perfect, but if you can reflect on these things and refine it your results will improve.

Evaluating the scope of a research question

Research group's findings:

- Found papers on the field of management -> typing just "scope" can lead to papers from unrelated fields and topics
- "A well-defined scope ensures that research objectives remain focused and attainable by considering existing knowledge, its gaps, and potential novel contributions to the field."
- The scope should be defined and controlled and what are the major factors of mismanagement of the paper
- Found papers defining scope

Literature collected through this quick search:

- https://www.sciencedirect.com/science/article/pii/S221201731300234X
- https://www.igi-global.com/chapter/identifying-scope-and-research-question/401723

The scope of a research question

> 1. *The topic should reflect your previous studies and experience*. It should be related to your completed courses; your other research; and your political, cultural, or religious experience.
> 2. *The necessary sources should be materially acc*essible. You should be near enough to the sources for convenient access, and you should have the permission you need to access them.
> 3. *The necessary sources should be manageable*. In other words, you should have the ability, experience, and background knowledge needed to understand the sources.
> 4. *You should have some experience with the methodological framework that you will use in the thesis*. For example, if your thesis topic requires you to analyze a Bach violin sonata, you should be versed in music theory and analysis.
>
> Put this way, these four rules seem banal. We could summarize them in this single rule: "You must write a thesis that you are able to write".

(Eco, translated by C. M. Farina and G. Farina, 2015, p.27)

Scope of the research question:

Eco's "Four Obvious Rules for Choosing a Thesis Topic" are especially useful when

- You don't have a lot of experience with researching new topics.
- You have tight time constraints (e.g.: the paper is a 7,5 ETCS exam, you have other courses and possibly have a job/children/other important commitments/other constraints).

For example, for a 7,5 ECTS paper:

- If in 3-5 hours I cannot fully access a helpful preliminary bibliography that provides me with an analytical framework, I will not pursue the research question because it means that I need to construct a new analytical framework.
- And I will not spend time deciphering a paper that I cannot understand at the second read.

So, if you were to formulate a new research question based on this preliminary literature review, what would it be?