

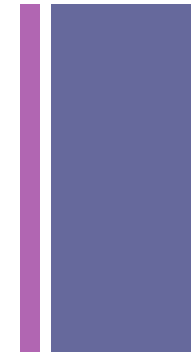


Forskningsprojekt og akademisk formidling 2

Om at vælge forskningsemne

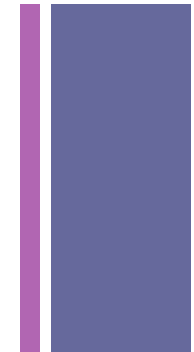
+ Læringsmål

- Få indblik i forskerkulturer
- Forstå forskellige kategorier af forskningsopgaver/-artikler
- Forstå hvorfor det vigtigt at have et tydeligt forskningsemne
- Genkende de hovedproblemer/faldgruber som er årsag til at man ikke kan afgrænse sit emne
- Finde løsninger på afgrænsningsproblemer



+ Indhold

- Forskerkulturer
- Kategorier af forskningsopgaver/-artikler (Sørensen)
- Pause
- Om at vælge forskningsemne (Silverman)
- Intro til pitchingsession og gruppedannelse



A woman with dark hair, wearing a black jacket, is lying on her side on a blue, textured surface. She is looking towards the camera with a slight smile. The text 'Forskningskulturer' is overlaid in a large, orange, sans-serif font, slanted across the image from the bottom left to the top right.

Forskningskulturer

Hvorfor skriver vi artikler? - publicerer

- Personlige grunde?
- Refleksion / formidling?
- Idealistiske grunde?
- Forskeren i elfenbenstårnet ...
- Grundforskning / anvendt forskning

- (Samfunds-)økonomiske grunde?
- Hvem bestemmer hvad der skal forskes i?
- Fra forskning til faktura ...

+ Om at vælge forskningsemne

- ... vi har snydt lidt og forberedt nogle emner for jer
- I starter ikke helt fra scratch (... men gør man nogensinde det?)
- Forberedelse til at træffe et informeret valg:
 - Sørensen, C.(2005): “This is Not an Article – Just some Thoughts on How to Write One”
 - Silverman, D. (2010): “Selecting a Topic”, chapt. 6 in: “Doing Qualitative Research”
- Hvordan vil I karakterisere de to tekster?



This is Not an Article

Just Some Thoughts on How to Write One

Carsten Sørensen

London School of Economics and Political Science, United Kingdom

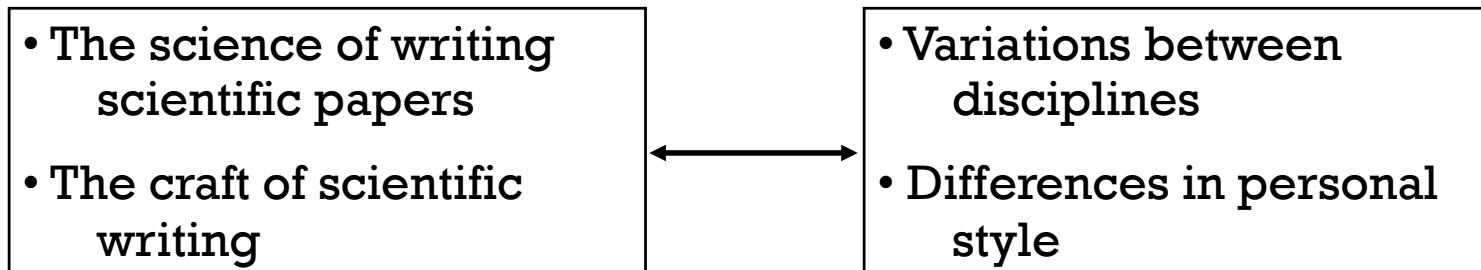
c.sorensen@lse.ac.uk

<http://mobility.lse.ac.uk/>

<http://personal.lse.ac.uk/sorensen/>



+ Designing and Writing an Account

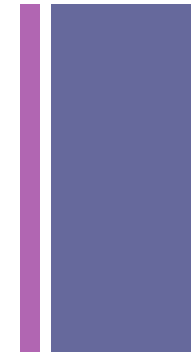


• Writing and reviewing

- Theoretical insight
- Practical exercises
- Attention shaping
- Inspiration

+ What is Research?

- Documented activity
- One should be held accountable
- Peer review
- Accumulation of results



+ Papers I do not want to read

Great idea: "I have just had this great idea! I do not know if anyone else has ever had the same idea, because I've not checked, and I'm rather new in this field. Anyway, my idea is brilliant, so I really would like to share it with you all."

Other peoples ideas: "I have just read this great book that I really like a lot. I'll just give you a short resume of the interesting points in the book."

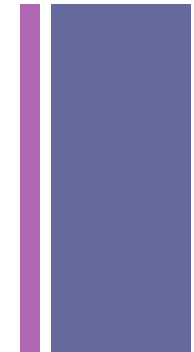
Software hacker: "I have just built this great computer system. It is not based on previous theories or empirical findings. I am not very theoretical myself, but the system has a lot of fantastic features, and the interface is really neat."

Theory hacker: "I have come up with this theory; conceptual framework; model. It is not related to other theories; conceptual frameworks; models, or any empirical data for that matter. Most of the concepts have been defined differently by all the big shots in the field, but I just do not like their categories so I have invented my own."

Multiple point : "I have just completed a major research effort where I did a lot of interesting things. I think that you could learn a lot by reading this paper describing all aspects of my work."

(Sørensen, 1994)

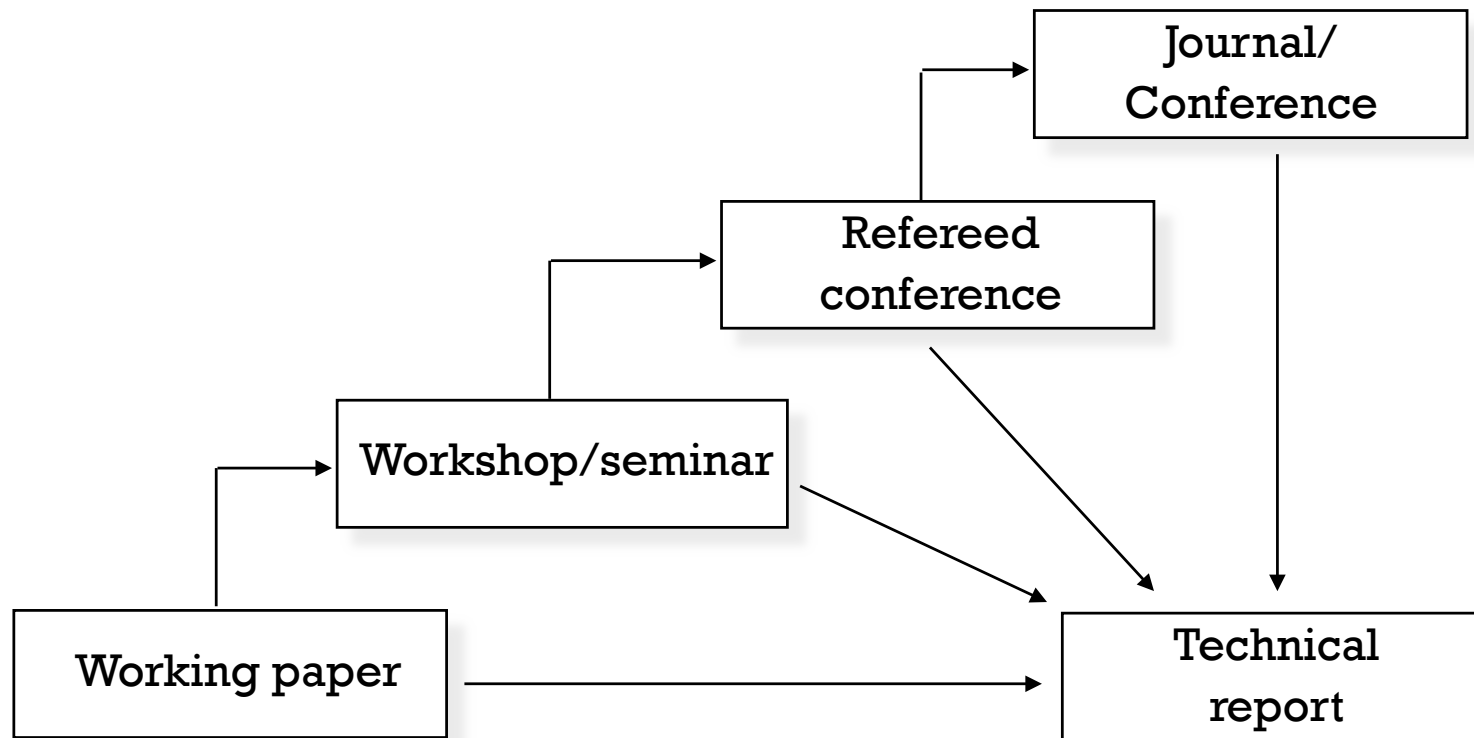
+ Deserve your Place on the Soap-Box



Theoretical approach	State-of-the-art survey, theory assessment	Theoretically based method, guidelines, framework, taxonomy, model, or prototype
Empirical approach	Case study, questionnaire survey, experiment	Empirically based method, guidelines, framework, taxonomy, model, or prototype
	Analytical result	Constructive result

(Sørensen, 1994)

+ The Life of an Article



New article: new title and at least 30–50% "new stuff"

+ Five Important Questions



1. What is the problem domain?
2. What is the problem?
3. What is the research approach?
4. What have others done?
5. What are the results?

(Sørensen, 1994)

+ Example

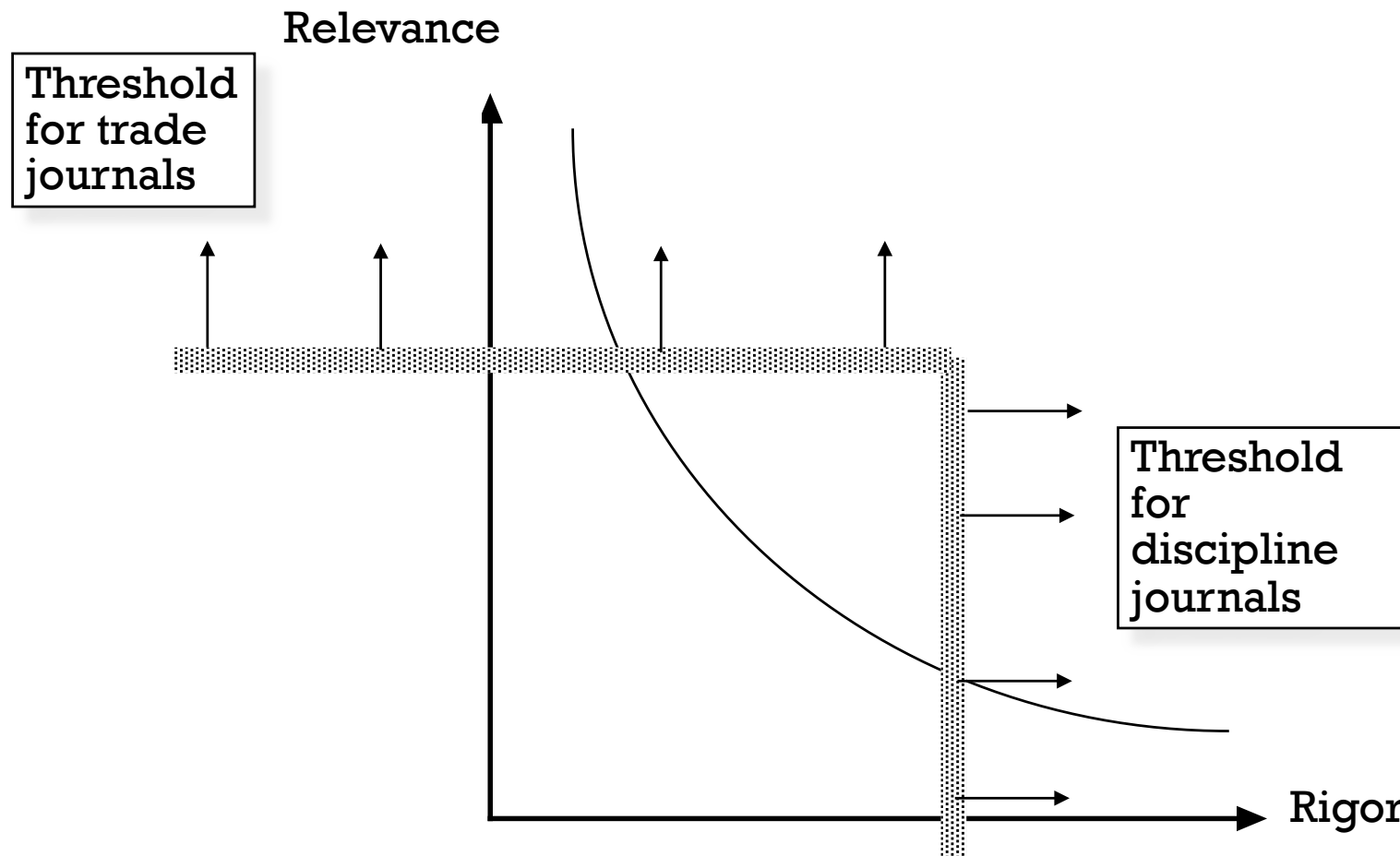
“Ray Tracing Jell-O Brand Gelatin” (Heckbert, 1987)

- “Ray tracing has established itself in recent years as the most general image-synthesis algorithm [10]. Researchers have investigated ray-surface intersection calculations for a number of surface primitives. These have included checkerboards [Whitted 80]; chrome balls [Whitted 80]; robot arms [Barr 82]; blue abstract things [Hanrahan 82]; more glass balls [Watterberg 83]; mandrills [Watterberg 83]; more mandrills [Sweeney 83]; green fractal hills [Kajiya 83]; more glass balls [SEDIC 83]; aquatic blobby things [Kaw 83]; more chrome balls [Heckbert 83]; pool balls [Porter 84]; more glass balls [Kajiya 86].
- Unfortunately, *nobody* has ray traced any food. So far, the most realistic foods were Blinn’s classic orange and strawberry images, but these were created with a scanline algorithm [2]. *The Dessert Realism Project* at Pixar is addressing this problem. This article presents new technology for ray tracing a restricted class of dessert foods, in particular Jell-O®-brand gelatin. We believe this method may have application to other brands of gelatin and, perhaps, pudding as well.
- This article is divided into three parts: method for modeling static Jell-O, simulation of Jell-O motion using impressive mathematics, and ray-Jell-O intersection calculations”

+ Jell-O®-brand gelatin



+ Say Something Interesting... but Do It Properly!



(Mason 1989)

+ Hints

- 1 You need to do something in order to deserve to take the stand
- 2 It is a good idea to copy others when you begin writing articles
- 3 Keep to the standard format for papers, what ever the standard is
- 4 Aim at a top-down writing process and plan the process carefully
- 5 Focus focus focus focus
- 6 Only one point per paper
- 7 Only stick your neck into one guillotine
- 8 Use a lot of time on the "packaging", i.e. title, abstract, introduction, and conclusion
- 9 Acknowledgements are crucial (friends and finance)
- 10 Be open about who are authors and the sequence of authors
- 11 If English is not your first language, spend a LOT of time on linguistic improvements
- 12 Start out accumulating a bibliographic database. This way you avoid the tedious work of writing reference lists every time you write an article
- 13 Writing and reviewing are two sides of the same coin
- 14 Get your papers reviewed in order to get others to comment
- 15 Be ready to kill your darlings



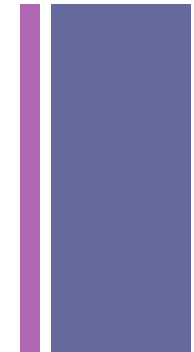
Extended IMRAD Template

Introduction – Methods/Material – Results – And – Discussion



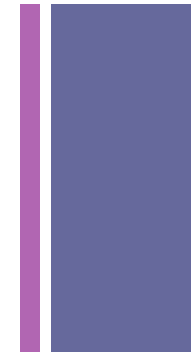
- 1 **Title:** Funny or informative?
- 2 **Author(s):** Alphabetic ordering or not?
- 3 **Affiliation**
- 4 **Abstract:** Contents-based or summary
- 5 **Introduction:** The five important questions. "Sell" the point
- 6 **Method**
- 7 **(Section)*:** Results
- 8 **Discussion**
- 9 **Conclusion:** Problem setting, summary, conclude, further research
- 10 **Acknowledgments:** Funding, help, reviewers, etc.
- 11 **(Appendix)**
- 12 **References**

+ Pause (10:45 – 10:55)



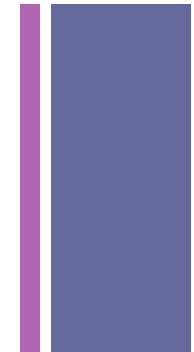
+ Silverman: Selecting a topic

- Udgangspunkt: Ikke en lineær og logisk proces, men afhænger af omstændigheder og personen (forskeren)
- Processen er grundlæggende dynamisk



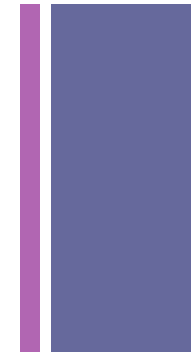
+ Fire steder at starte

- Sig selv
- Sociale/moralske forpligtelser – indignation
- Nysgerrighed
- Betalt forskning



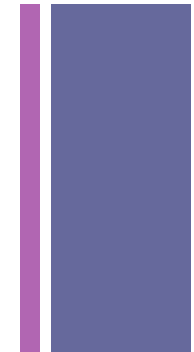
+ At være på udkig

- efter:
- “researchable issues, to take advantage of opportunities when they present themselves, and to be flexible”
- Man må være: engageret, impressionabel og interesseret
- Et eksempel ... <http://www.klastrup.dk/walgblog/?p=50>



+ Om forskningsspørgsmål

- They organize the project and give it direction and coherence
- They delimit the project, showing its boundaries
- They keep the researcher focused
- They provide a framework when you write up your research
- They point to the methods and data that will be needed



+ Udførbare forskningsspørgsmål - og nogle faldgruber ... og strategier til at undgå faldgruberne

- At gå ind i kvalitativ forskning kræver et stort commitment, derfor kan man fristes til at gå nemme veje / vælge lav-risiko strategier:
 - Simplistisk induktivisme
 - Køkkenvask-tilgang (kitchen sink gambit)
 - Den store teori

+ Simplistisk induktivisme

- Det er en myte at tro at vi bare ved at 'hænge ud' med dem vi vil studere, kan lave en tro repræsentation af subjekterne.
- Manglende fokus i forskningsdesign, vil betyde at *alt* ser interessant ud.
- Kvalitative studier er baseret på akkumuleret viden.
 - Brug begreber til at øge 'følsomhed'/opmærksomhed (undgå common sense)
 - Brug eksisterende forskning – ikke kun 'klassisk' litterature
 - Introducer en tredje variabel

+ Køkkenvask-tilgang (kitchen sink gambit)

- At prøve at få alle aspekter med
- God forskning er præget af dybde snarere end bredde – hellere sige *meget om lidt* end *lidt om meget*.
- Lav et flow chart; se forbindelser mellem begreber – og opdag hvor der ikke er forbindelser. Det gøres bedst grafisk.
- Tænk det som et puslespil
 - Udviklingspuslespil
 - Mekanisk puslespil
 - Kausalt puslespil
- Zoom – jo mere du vil have med i billedet, jo mere detalje må du ofre ...og omvendt. Vælg et håndterbart fokus (én person, én dag, én aktivitet ...)

+ Den store teori

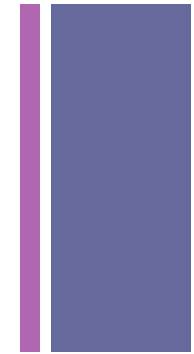


- Forskeren i sit Babelstårn får sin grad uden nogensinde at besøge virkeligheden
- Modeteorier
 - Styr udenom modeteorier
 - Besøg virkeligheden, om ikke andet så for at rykke ved dine teoretiske forestillinger

+ Generelle strategier

- Find et brugbart forskningsemne, som kan besvares (klart hvilke data som behøves, hvordan underspørgsmål er beslægtede, relevans)
- Anerkend 'feedback loops' mellem emne og datanalyse
- Anerkend at den kvalitative forskningsproces ikke bare forudsigelig lineær eller dialektisk, men grundlæggende risikabel og dynamisk...

+ Rustet til at vælge emne på tirsdag?



+ Pitchingsession og gruppedannelse

- Mødepligt på tirsdag 4/9 kl 10-14!
- Tre elementer i pitchingsession (10-11:40):
 - Præsentation af forskningsprojekter i Aud3
– 2 minutter pr projektholder
 - Pause
 - Samtale med forskere/spørgerunde i Atrium med ‘samtaleblad’
 - Matchmaking (gensidigt studerende/
forskningsprojekter) i Atrium
- Gruppedannelse (12:20-13:55)

+ Forløb for gruppedannelse

- 12:20-12:35 Studerende sætter 2 sedler (1. og 2. prioritering) på projekter med navn og prioritering.
- 12:35-12:45 Undervisere samler op og forhandler.
- 12:45-13:00 Studerende flytter rundt på sedler de steder, hvor projekter overfyldte.
- 13:00-13:15 Undervisere samler op og forhandler.
- 13:15-13:30 Studerende flytter rundt på sedler en sidste gang, hvis nødvendigt.
- 13:30-13:55 Den endelige gruppefordeling lægges fast ved at kursusundervisere flytter rundt på sedler og forhandler således at der er 14-16 projekter med min. 4 og max. 5 studerende i hver gruppe.

+ Frokost 11:40-12:20

- Mødes i AUD3 kl 12:20: Introduktion til øvelse

