Session1: Forskning, kommunikation, kilder og hvordan man finder dem?

Litteratursøgning og kildehåndtering - E2020

Roman Jurowetzki, roman@business.aau.dk

L&K?

- Hvad er forskning og hvem er forsker? (og hvad laver de?)
- Hvad er forsknings-output i dag?
- Hvad er en henvisning/reference?
- Hvordan kortlægger man et forskningsfelt?

Mere praktiske dele:

- Hvordan finder jeg relevante kilder?
- Hvordan laver jeg en god litteraturliste (uden at lave meget selv)?

Kursus opbygning

- Idag: Forskning, kildetyper, søgning
- Fredag: Mere søgning og Litteraturliste
- Uge42: Kildehåndtering (AUB)
- Peergrading 15/16-10

Om bøger og artikler

- Forsker som mig (Eunkyung, Pernille og andre) evalueres igennem publikationer
- DK's (Bibliometriske Forskningsindikator) BFI system: https://ufm.dk/forskning-og-innovation/statistik-og-analyser/den-bibliometriske-forskningsindikator/BFI-lister
- Bøger - monografier - (desværre) forældet og "low impact" (medmindre man er allerede berømt)
- Artikler i gode tidskrifter ⇒ opmærksomhed (læsere + referencer) ⇒ karriere som forsker
- Peer review som kvalitetsgaranti

Hvad er referencer?

- Dokumentation af "impact" - relevans af en ide / forskningsresultat
- Man behøver ikke at være enig
- Man bygger på andres arbejde (teori, empiri, metode)

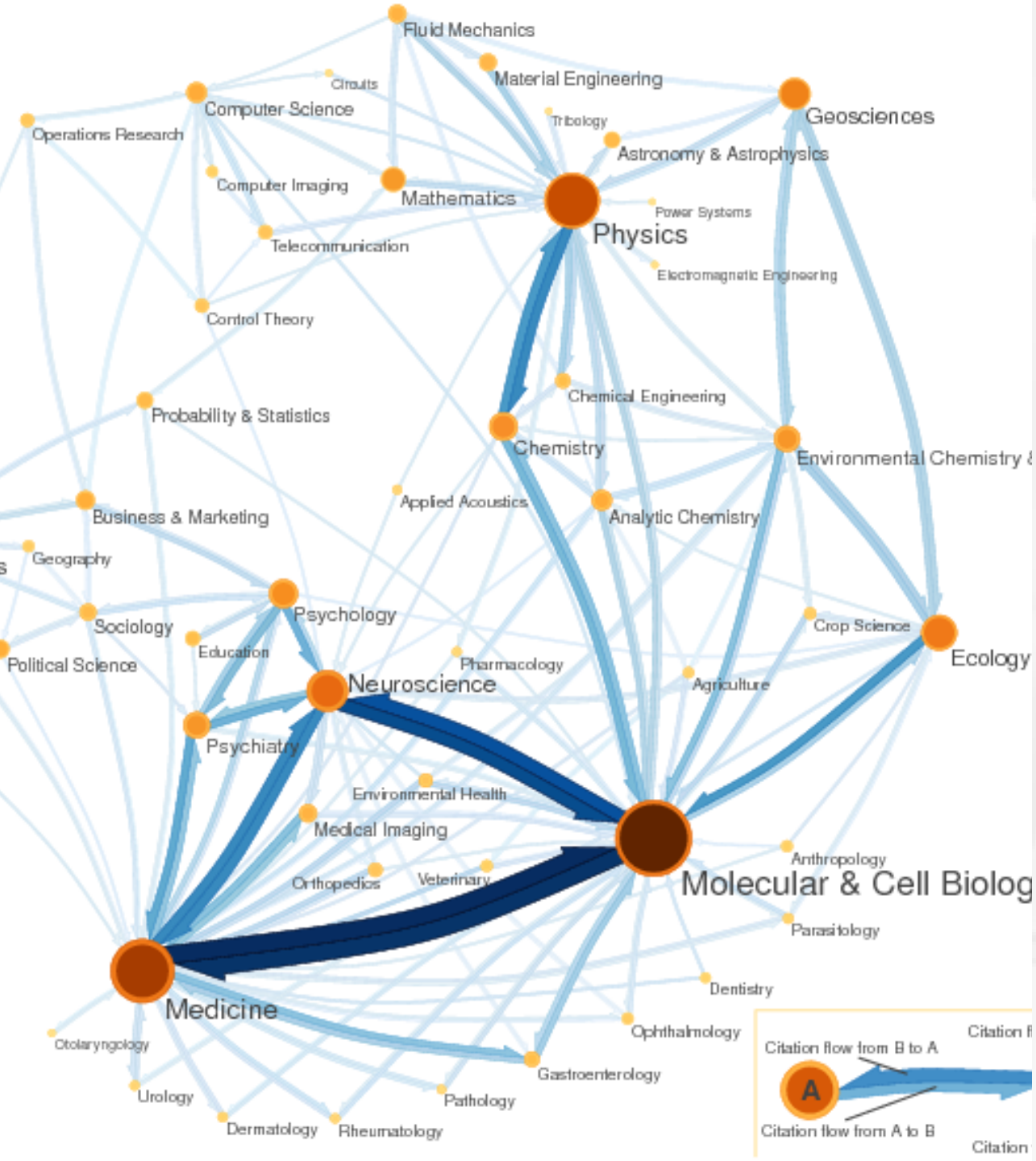
Flere referencer ⇒ større impact (?)

Universitet ≠ Skole

- Professor ≠ Lærer
- I skal lære videnskabelig arbejde (projekter)
- I skal placere jeres opgaver i en relevant videnskabelig kontekst / diskussion
- Hvordan finder man en diskussion? (Det kommer lige om lidt)

Opbygning af en artikel

- **Abstract** (kort sammenfatning af det hele)
- **Intro**: Hvad er problemet og kontekst og hvad kan man forvente som læser?
- **Teori**: Hvordan plejer folk (forsker) at forklare fænomenet og hvad er autorens bud.
- **Data/Metodologi** (hvis empirisk): Hvad laver man her?
- **Analyse/Results**: Hvad kan man observere?
- **Diskussion**: Hvordan interpretere vi det vi kan se?
- **Konklusion**: "So what?" - Hvad betyder det så?



Forskellige typer af referencer

- Kontekst (ofte aviser, statistiker, rapporter men også empiriske artikler)
- Teori (modeller, teorier, empirisk forskning)
- Metoder / Data

Forskellige typer af spørgsmål?

- Empiriske spørgsmål?
- Teoretiske spørgsmål?
- Hvor bredt er spørgsmålet?

Fænomen (vi ser/hører noget) → Corona giver Amazon vækst →
Hvorfor er Amazon så stort / har så meget succes?

Findes der allerede forskning om dette?

Problem: Hvordan søger man efter noget, der er relateret?
Hvad for en kilde har vi brug for og hvordan bruger vi den?

Hvor starter man?

- Gammeldags søgeord-søgning?
- Google / Google Scholar ?
- almindeligheds-fælden. Vores resultater er ikke specifikke fordi vores søgebegreber er meget uspecifikke.
- Man håber at finde noget på dansk?
- Bedre søgebegreber

Brug reference-strukturer

- Lærebog: Referencelister
- Andre henvisninger
- Byg på andres arbejde

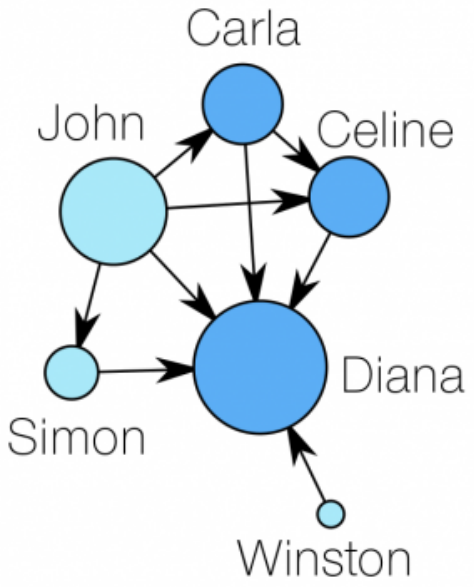
Kan vi gøre det i stor stil? YES!

Vi skal lige se på netværk og netværkanalyse
Geek Bonus

Netværk

- Nodes
- Edges / Links

Prøv at hente Gephi hvis du synes det er spændende
Tutorial: https://bit.ly/34uvx4p |
Youtube: https://youtu.be/FLiv3xnEepw



Nodes

Id,Label,Attribute
1,John,1
2,Carla,2
3,Simon,1
4,Celine,2
5,Winston,1
6,Diana,2

Edges

Source,Target
1,2
1,3
1,4
1,6
2,4
2,6
3,6
4,6
5,6

Netværk

2 accounts ligner hinanden når?

- lignende followers
- lignende following
- lignende #hashtags

Psychology and Scientific Research.
I. The Nature of Scientific Inquiry

Hadley Cantril, Adelbert Ames, Jr., Albert H. Hastorf, and William H. Ittelson

Princeton University, Princeton, New Jersey,
Hanover Institute, Hanover, New Hampshire, and
Dartmouth College, Hanover, New Hampshire

The traditional code of science—that is, the objectives sought and the methods of investigation—cannot satisfy the requirements of our critical times, and this is why science has failed to measure up to the opportunities and obligations before it. The generally accepted ideas of what natural science is and what it is for are out of date and need radical revision.—C. J. Herrick (*8*, V)

A FEELING OF URGENCY for a more adequate understanding of man and his social relations can be sensed in today's intellectual atmosphere. People are becoming more and more anxious about the ability of psychologists and social scientists to help solve the problems arising from our technological advances and from the swift social transitions they leave in their wake. But unfortunately what Herrick has said about the natural sciences applies especially to those sciences which deal with man—psychology and the social sciences in general. Moreover, in these sciences, in contrast to the physical sciences, there seems to be less agreement as to what constitutes significant research.

Obviously, an increase in our understanding of man can come about only as we extend our empirical knowledge and improve our formulations through research of demonstrated significance. And before that is possible, we must increase our understanding of the scientific process through which discoveries are made. But sometimes the scientist's interest in building up the content of his discipline sidetracks him from a consideration of the scientific process itself and creates a lag in the understanding and improvement of scientific tools. What follows is an attempt to clarify our thinking about the nature of scientific research in those fields which take upon themselves the primary responsibility of accounting for man's thoughts and behavior. Only then will such research accomplish what we have a right to expect of it.

We shall first consider the nature of scientific inquiry, trying to find out why man pursues scientific inquiry, anyway—what function it serves him, and what steps seem to be involved. We shall then distinguish between scientific inquiry and scientific method—a distinction which seems necessary to avoid certain pitfalls and to assure scientific progress. Then we shall try to point out some of the specific implications to be derived for psychology from a better understanding of the nature of scientific inquiry and the role of scientific method and we shall indicate to what degree science can be "objective." Finally, some suggestions will be made which might accelerate the kind of scientific research that will increase our understanding of man.

The apparent reason for scientific inquiry is essentially the reason for any inquiry—to solve a problem. Scientific inquiry can never be understood if it is somehow put on a pedestal and viewed as something remote and apart from man's everyday activities. "Science," says Conant, "emerges from the other progressive activities of man to the extent that new concepts arise from experiments and observations" (*1*, 24).

These activities of life are carried through in an environment which includes people, artifacts, the phenomena of nature. Man's only contact with this environment is through his senses. And the impressions man's senses give him are cryptograms in the sense that they have no meaning unless and until they become functionally related to man's purposive activities. The world man creates for himself through what Einstein has called the "rabble of the senses" is one that takes on a degree of order, system, and meaning as man builds up through tested experience a pattern of assumptions and expectancies on which he can base action.

Man builds up his assumptive or form world largely in an unconscious and nonintellectual way, in the process of adjustment and development as he goes about the business of life, that is, as he tries to act effectively to achieve his purposes. Man often uses many of his assumptions without being at all aware of them, such as those involved in reflex activity, habits, stereotypes, and a whole host of perceptual activities. Man is aware of other assumptions from time to time as they become relevant to the situation at hand, such as loyalties, expectancies, ideals. Still

Bibliometri

2 artikler ligner hinanden når?

- deler mange referencer (bibliometric coupling)
- bliver refereret til af andre samtidigt (co-citation)
- har lignende nøgleord

Connectedpapers

- Finder artikler
- Beregner og visualiserer et netværk (bibliographic coupling)
- Nem tool også mht workiing papers / ArXiv preprints

VOSViewer

- Software based
- Virker med data fra Web of Science / Scopus / MAG

Case

- Du vil gerne skrive om disruptive innovation men mangler kilder / inspiration
- What is disruptive innovation (Christensen, Raynor & McDonald, 2015)
- Google Scholar
- Connectedpapers