**Portfolio I: Introduction to your project**

**Introduction to your project incl. ”what makes the problem a problem” (Pedersen 2008).**

The Nobel prize is one of the most prestigious prizes within the scientific community. Being awarded the Nobel prize is a huge seal of approval not only for the particular laureate but also for their field of research. It is a way of celebrating and putting attention to a particular knowledge production within the academic field, recognizing “[...] *those who, during the preceding year, have conferred the greatest benefit to humankind*”, as Albert Nobel willed it.

Winning the Nobel Prize is of undoubtable importance to a scientist’s career. As Kary Banks Mullis - Nobel Prize laureate in chemistry in 1993 - puts it: “*Nobody in the world doesn’t understand the weight of the Nobel Prize. Once you have it, there is not a single office in the world that you can’t go into. If I call them and say, I would like to talk to you about something, and I’m so-and-so, the Nobel laureate, they’ll see me at least once. It opens every door*” (Hanson 2018:487).

In this project, we wish to explore the characteristics of the Nobel laureates and their affiliated universities within the field of physics, chemistry, and medicine.

**Research question and possible working questions**

* What characterizes the Nobel prize laureates academic careers and do the laureates tend to cluster into communities? (Based on field, geographic location, maybe more?)

**Ideas for empirical material and methodology**

Our approach is by and large an exploratory one. We will explore the social organization of the Nobel laureates using social network analysis based on a dataset with information on the laureates’ institutional affiliation and their entire publication history. We have the publication records of nearly all the Nobel laureates in physics, chemistry, and medicine from 1901 to 2016 (92,4% of them). For each publication, we have both the year of publication, the current university affiliation of the Nobel laureate, and the journal in which the paper was published. As the Nobel prize is not awarded for a single paper, Li et al. (2018) have imputed which papers have contributed to the line of work that led the scientists to win the Nobel prize.

From Li et al., we have the following data-columns:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Laureate ID | Laureate name | Prize year | Title | Pub year | Paper ID | DOI | Journal | Affiliation | Is prize-winning paper | field |

Therefore, we have a unique insight into the academic careers of the “academic elite”, as Li et al. (2018) puts it. Furthermore, we will combine this data, with information on the laureates’ gender, nationality, and age, as well as characteristics, such as nationality, size, and accumulated Nobel prizes, of the universities with which the laureates are affiliated.

**Possible ideas for analytical framing of the study**

*Knowledge:*

* A broad view on knowledge. What is knowledge and why is it relevant to study? How does it legitimise decisions in society as a whole? Relevant texts for this could be: Jasanoff (2004), Swidler & Arditi (1994), McGoey (2012), Mannheim (1953).

*Organisation:*

* The organisation of the academic elite network / The Nobel Laureates.
* Haveman & Wetts (2019): 1) The microlevel demographic perspective concerning homophily in an organisation/the organisation of the academic elite network. 2) The microlevel of the relational perspective concerning a social capital network of the Nobel laureates.

*Politics:*

* Don’t know - We have not really looked into this yet?

**Disposition of paper**

*Introduction:*

* The Nobel Prize and academic elites.
  + Why is the Nobel Prize a relevant case? What does it mean to win the Nobel prize?
    - Could it be seen as a legitimization of a particular kind/area of knowledge production.
      * The only social science to be awarded the nobel prize is Economics: “*The Nobel Prize for economics, in one fell swoop, disenfranchises all other social sciences [...]*” (Horowitz 1983:2).
    - Or could it represent the overall best scientist within a field.
  + What is the academic ideal of the prize?

*Theoretical Framework / Literature Review:*

* What is knowledge
* Our theoretical understanding of the Nobel Prize + AKOP literature.

*Method:*

* The dataset
  + What is the dataset?
  + Data validation
* Social Network Analysis
  + Different kind of network measures
    - Homophily, Community detection, Centrality
  + Illustrations of the networks

*Analysis: (Maybe introduce a time perspective? So compare networks from different periods)*

* Descriptive analysis / Exploring the dataset
  + Nobel Laureates: Who has won a Nobel Prize (Gender, Age, Nationality)
    - Homophily within the Nobel Laureates’ characteristics?
    - Communities/Clustering
* Universities: Which universities are the Nobel laureates affiliated with before, during, and after the Nobel award (Nationality, size, accumulated wins?
  + Community detection and centrality.
* Discussion

*Conclusion*

* Findings
* Limitations
* Future Directions
* Impact

**Possible Literature**

* Li, Jichao, Yian Yin, Santo Fortunato, and Wang Dashun. 2018. “*A Dataset of Publication Records for Nobel Laureates.*”
* Hansson, Nils. 2018. “*What’s so special about the Nobel Prize?*”
* Horowitz, Irving Louis. 1983: *“*[*Toward a Nobel Prize for the Social Sciences*](https://soeg.kb.dk/discovery/fulldisplay?docid=cdi_proquest_journals_1308165976&context=PC&vid=45KBDK_KGL:KGL&lang=da&adaptor=Primo%20Central&tab=Everything&query=any%2Ccontains%2CToward%20a%20Nobel%20Prize%20for%20the%20Social%20Sciences&offset=0)*”*
* Hansson, Nils. [Schlich](https://scholar.google.com/citations?user=G3-vSD8AAAAJ&hl=da&oi=sra), Thomas. 2015. “Highly Qualified Loser”? Harvey Cushing and the Nobel Prize

Wagner, Caroline S., Edwin Horlings, Travis A. Whetsell, Pauline Mattsson, Katarina Nordqvist, 2015. *“Do Nobel Laureates Create Prize-Winning Networks? An Analysis of Collaborative Research in Physiology or Medicine”*

**Three questions, which you would like feedback on**

* We are unsure about the framing of our “problem” - what is the problem actually?
* Relevant KOP-literature?
* We are unsure about how to incorporate/avoid trouble regarding the time aspect of our data (spanning +100 years).

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