Many Paths

A new way to conduct, discuss, and communicate (meta-)research

Hans van Dijk Esther Maassen



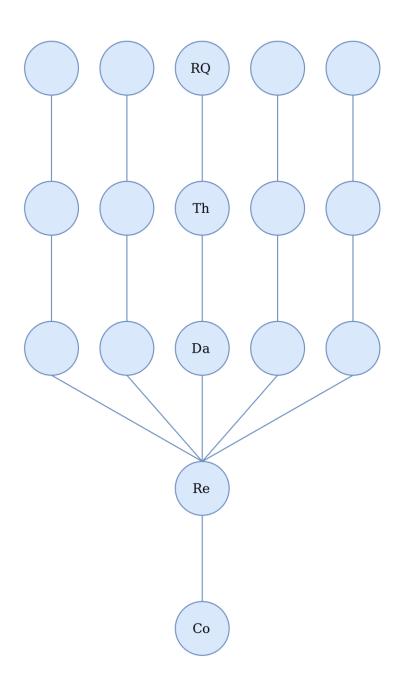
Many projects

Reproducibility Project: Psychology

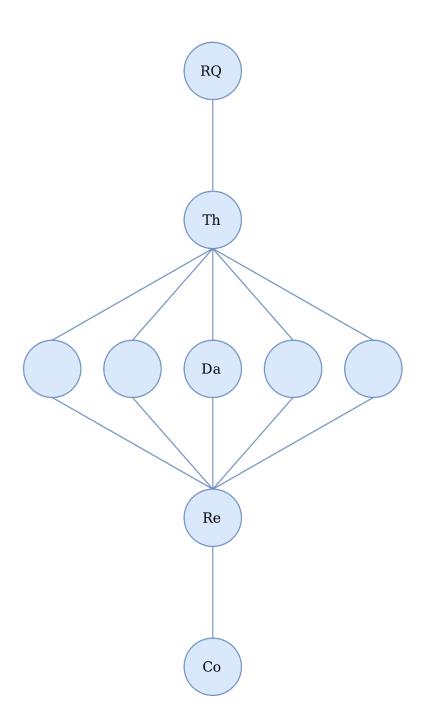
Many Labs

Many Analysts

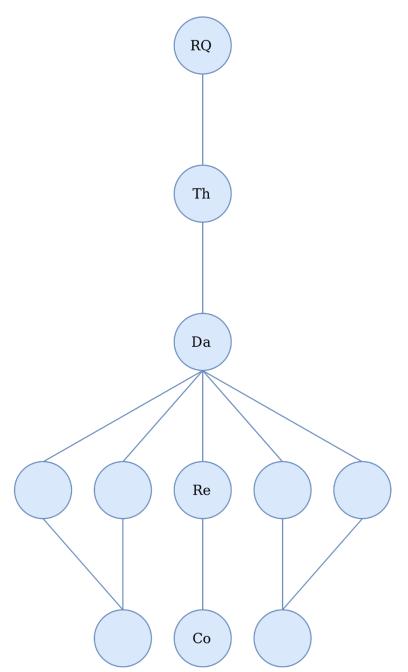
RPP



Many Labs

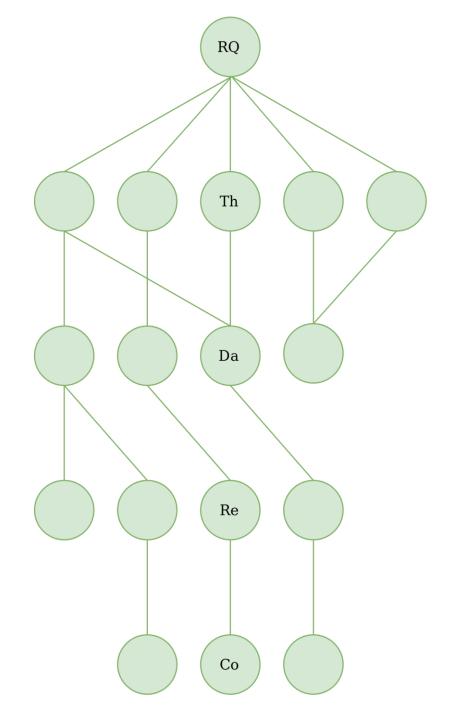


Many Analysts

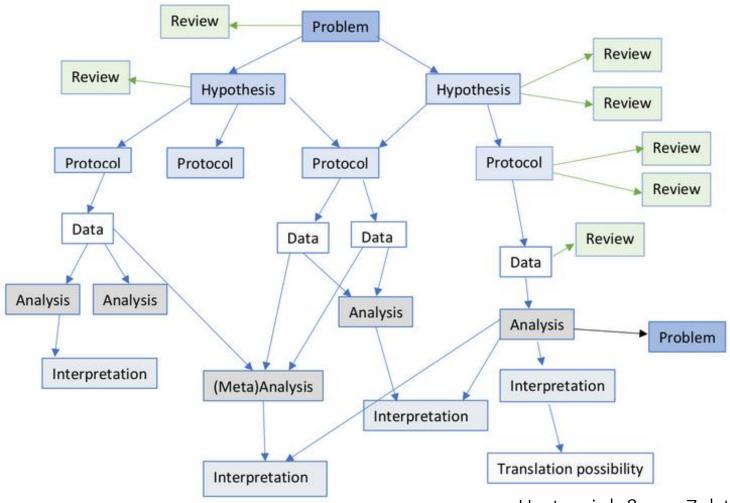


Many Paths: What?

Does power corrupt?

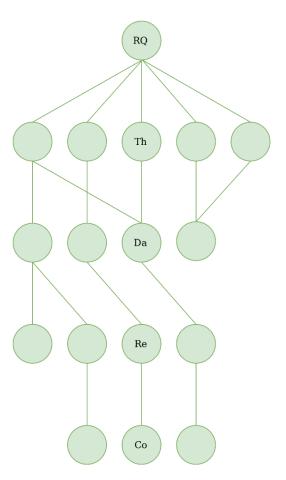


Hypergraph: as-you-go



Hartgerink & van Zelst (2018) "As-You-Go" instead of "After-the-Fact" Picture from the Octopus project - https://perma.cc/TA79-YPH9

Many Paths: Why?



THE LANCET.

248

THE REAL SIMON PURE.

Two or three weeks since, we promised to give a complete exposure of the piratical delinquency of Mr. Tyrrell, of "Hole and Corner" notoriety, by comparing some paragraphs from his volume of published Lectures with paragraphs from the previously published Lectures in the pages of this work. This we shall now proceed to do, and will take a passage from every tenth page of Simon's book, beginning at page 136, where is contained the snare into which the unconscious SIMON PURE so unwittingly fell.

their march; take, for example, the their march; take, for example, the psoas abscess to which we have al- psoas abscess to which we have al-Inded; it is often six months before luded; it is often six months before matter makes its appearance in that matter makes its appearance in that complaint. If a person applies to you complaint. If a person applies to you with a psoas abscess, and you ask how with a psoas abscess, and you ask how long he has had pain in his loins, he long he has had pain in his loins, he will tell you for four, five, or six will tell you for four, five, or six months months past .- Simon, p. 146.

Certainly the formation of matter Certainly the formation of matter will be attended with a slight fever, will be attended with a slight fever. but not of the hectic kind; the tongue but not of the hectic kind; the tongue will be clean, the pulse very little af- will be clean, the pulse very little affected, and the person very slightly fected, and the person very slightly deranged, but after an opening is made deranged, but after an opening is into the part, constitutional irritation made into the part, constitutional irricomes on, and life is then endangered. tation sometimes comes on, and life -SIMON, p. 156.

I had, myself, occasion, lately to I had, myself, occasion, lately to perform an operation for a scirrhous perform an operation for a scirrhous breast, to which arsenic had been ap- breast, to which arsenic had been applied. I asked the woman which gave plied. I asked the woman which gave her the most pain, the application of her the most pain, the application of the arsenical preparation, or the ope- the arsenical preparation, or the operation. She replied, that the pain of ration. She replied, that the pain of the operation was not greater than the operation was not greater than that of the application, and that the that of the application, and that the arsenic had been applied ten or eleven arsenic had been applied ten or eleven times.-SIMON, p. 166.

Now some of you might be induced Now, said Sir Astley, in looking at to exclaim, How abominably inatten- a case like this, some of you might be tive must the medical man have been, induced to exclaim, How abominably who had the care of this patient; for inattentive must the medical manhave all these consequences might have been who had the care of this patient; been prevented. If you said this, for all these consequences might have your censure would be culpable; you been prevented. If you said this, have no right to say so; for it is a case your censure would be culpable; you which might happen to any of you, have no right to say this; for it is a Deformities of this kind generally case which might happen to any of arise after the process of healing is you. Deformities of this kind genecompleted; they are the effects of the rally arise after the process of healing contraction of the cicatrices. - Simon, is completed; they are the effects of page 176.

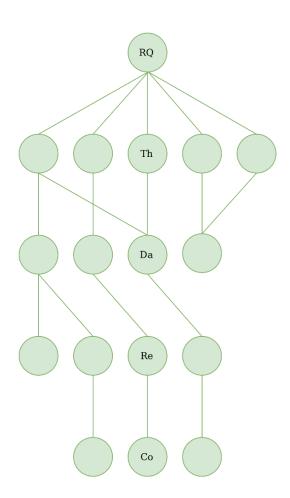
But chronic abscesses are slower in But chronic abscesses are slower in past .- THE LANCET, vol 1. p. 129.

> is then endangered .- THE LANCET, vol. 1. p. 196.

times .- THE LANCET, vol. I. p. 221.

the contraction of the cicatrices,-THE LANCET, vol. 1, p. 226.

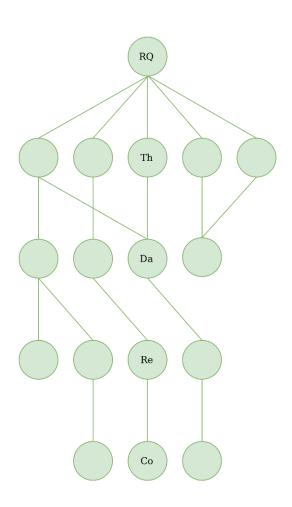
Many Paths: Why?



Because the current system

- 1) Stimulates hyper competition
- 2) Delays knowledge dissemination (after-the-fact)
- 3) Is elitist and exclusive
- 4) Relates to the health epidemic in academia

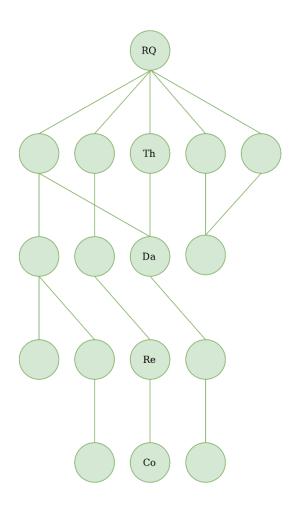
Many Paths: Why?



Hypergraph addresses those problems by

- 1) Stimulating collaboration
- 2) Instant dissemination of research
- 3) Being open and inclusive
- 4) Addressing health crisis through reduced competition and improved sense of meaning
- 5) Includes preregistration
- 6) Less risk of publication bias
- 7) Less management

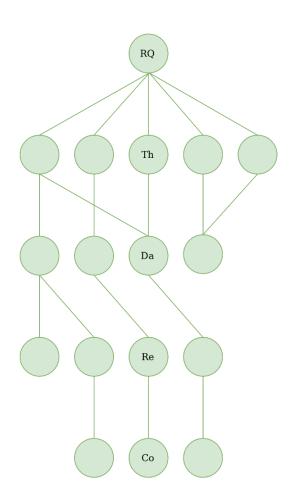
Many Paths: How?



Steps

- 1) Develop an appealing research question
 - Our pilot focuses on "Does power corrupt?"
 - Huge potential for multidisciplinary approaches
- 2) Develop a sampling strategy and timeframe
 - Personal contacts? Prominent researchers? Snowballing?
 - Timeframe helps set expectations and deadlines
- 3) Invite researchers with the relevant expertise
 - How to persuade those who don't know you?
 - WIIFT?
- 4) Have a clear starting date
 - If only to create a level playing field
- 5) Think about your own role during the process
 - What if the discussion stops?

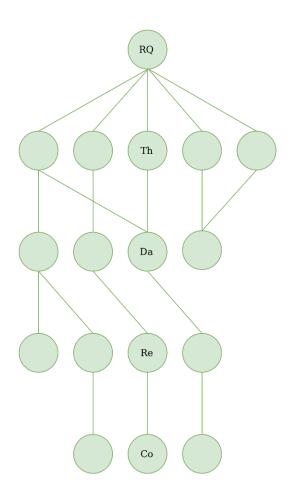
Many Paths: Promises for meta-research?



Various possibilities to examine

- How discussions evolve over time
- Reasons why some discussions explode and others don't even start
- Similarities and differences in how researchers from different disciplines approach topics
- Which disciplines tend to dominate conversations
- Can studies be performed more efficiently?
- Knowledge network on top of other networks

Many Paths: Get involved!



Different possibilities

- Participate in answering "Does power corrupt?"
- Start your own Many Paths project!
- Propose and help develop methods to (meta-)study many paths projects
- Spread the word

• ...

Questions / Suggestions?

Hans van Dijk: j.vandijk1@tilburguniversity.edu

Esther Maassen: e.maassen@tilburguniversity.edu

In collaboration with Liberate Science info@libscie.org

