

Models of scientific growth. (Trying to judge present ability)

- ① Assume constant effort.
 Accumulation of knowledge builds tools $\left\{ \begin{array}{l} \text{material} \\ \text{conceptual} \end{array} \right.$
 history of detected artefacts
 base of knowledge.
- If new horizons are unlimited, then the working capital should increase with new discovery. And this should follow a compound interest law!
- ② Base of knowledge is a maintainable fabric, i.e. it costs to keep pace. Upkeep of libraries; failure of memory and of understanding; transmission to another generation: constant distillation and reinterpretation as the rest of the world changes. Pioneer and ~~novice~~ pupil.
Usable base cannot enlarge very fast; its quality can improve.
 Each generation can forget selectively.
- ③ Output can only be measured as
1. Input of effort = cost of science (total)
 2. Volume of output = papers
(or # of paper-writers)
 3. Cost of output = investment in sci. commun.
 may be a fixed fraction of 1.
- [As publication gets relatively cheaper this arguments the floor].

4. May be relatively immaterial to the significance of the output.
Horizons may be
limited in a field
actively expanding in relation to our perceptions

Delay does imply that a specific area is relatively neglected.

∴ organizational efforts in availability of knowledge and attractiveness of problems.
Not a stochastic dispersion over possible targets.

First order model assumes this to illustrate the deviation.

"What's interesting" is a social question.
E.g. Tetanus problem. Literature on a toxic strain of *Salmonella*: needs for epidemiological training.
↳ 1893 —

names
of contemporaries