

Qualities of a Good Paradigm

Pascal Michailat
<https://pascalmichailat.org/c2/>

Thomas Kuhn. A paradigm is the lens through which a community of scientists looks at nature. Across scientific fields, good paradigms share 3 qualities.

- ① Be descriptive Provide an accurate, precise description of known facts & phenomena
- ② Be economical Be a compact summary of a vast amount of observations → Be an assistance to the scientist's memory
The paradigm must be simple enough to be committed to memory, & replace a long list of observations that can instead be derived from the model.
- ③ Be a guide to the unknown: Make accurate predictions about yet unobserved properties
Guide scientists in their exploration of the unknown tell them where to look & what to look for Be a fruitful guide for empirical research