Antiexamples of the Baconian Linear Model

The Baconian Linear Model says that innovations happen first by some theoretical scientific breakthrough, second by applied science, and third reduction to practice. It is not that this never works, but more that this rarely works, and the few examples of innovations arrived at first by thought seems like such an attractive thing that we tend to think that everything happens this way, when in fact they are the exception rather than the rule.

It is helpful to remember that most innovations did not follow the BLMoSD, and below is a running list of antiexamples as I find them. I expect that most discoveries are antiexamples, so basically any topic that I delve into is likely to land on this list if I dig enough.

Age Hardening of Aluminum: Alfred Wilm made a batch of aluminum, then went sailing, and returned a day and a half later to find that the hardness of the aluminum actually increased.

Penicillin: Everyone knows the famous story of Alexander Fleming ... **Chemotherapy**: In WWII an allied ship carrying mustard gas was bombed by the Germans, and an attentive doctor noticed the effects on blood, and thought it might be helpful to treat blood cancers.

Washing Hands: The effect was discovered by in practice and twenty years later a theory developed.

Idoh Gersten © 2022-2025

RSS feed Email

Made with Montaigne and by anton