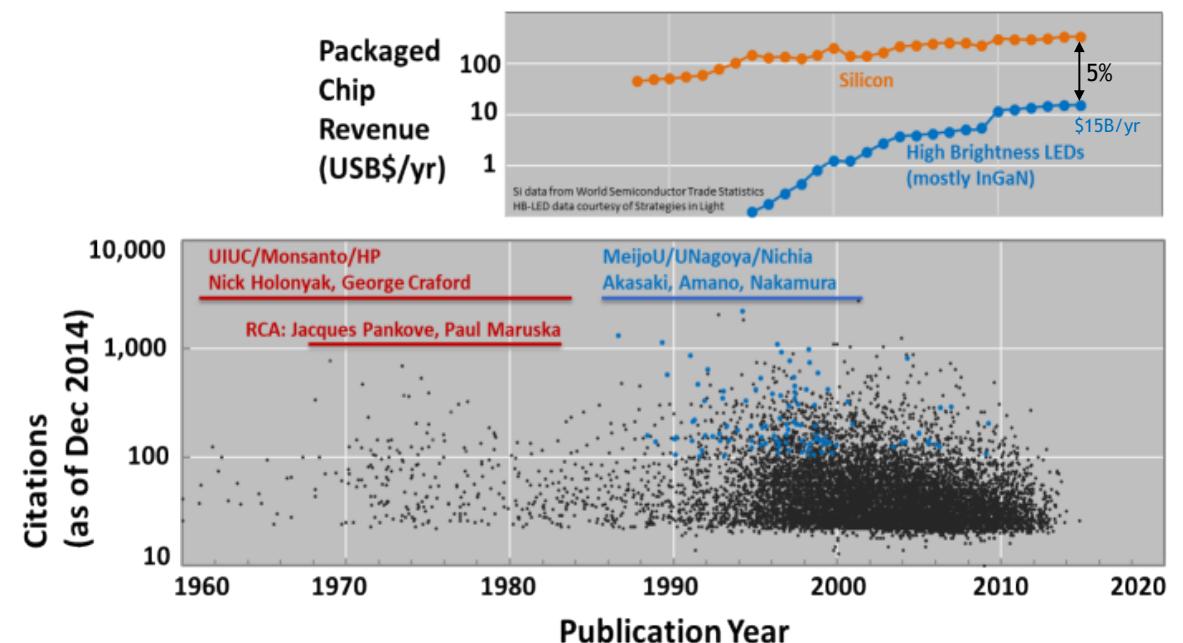




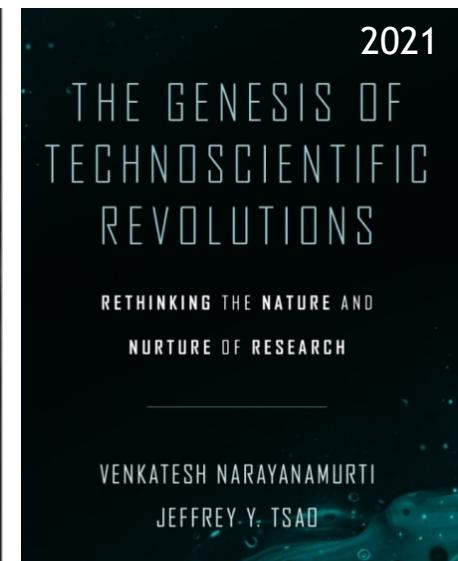
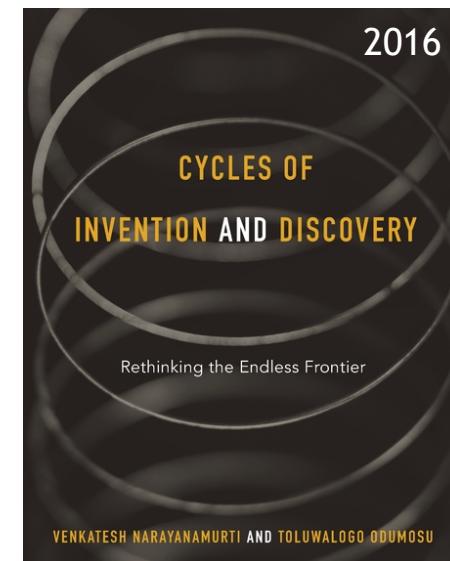
SOLID-STATE LIGHTING'S VIRTUOUS CYCLE

The Blue LED and its Repercussions

- Nobel Prize 2014
- 3-4% decrease in world energy consumption

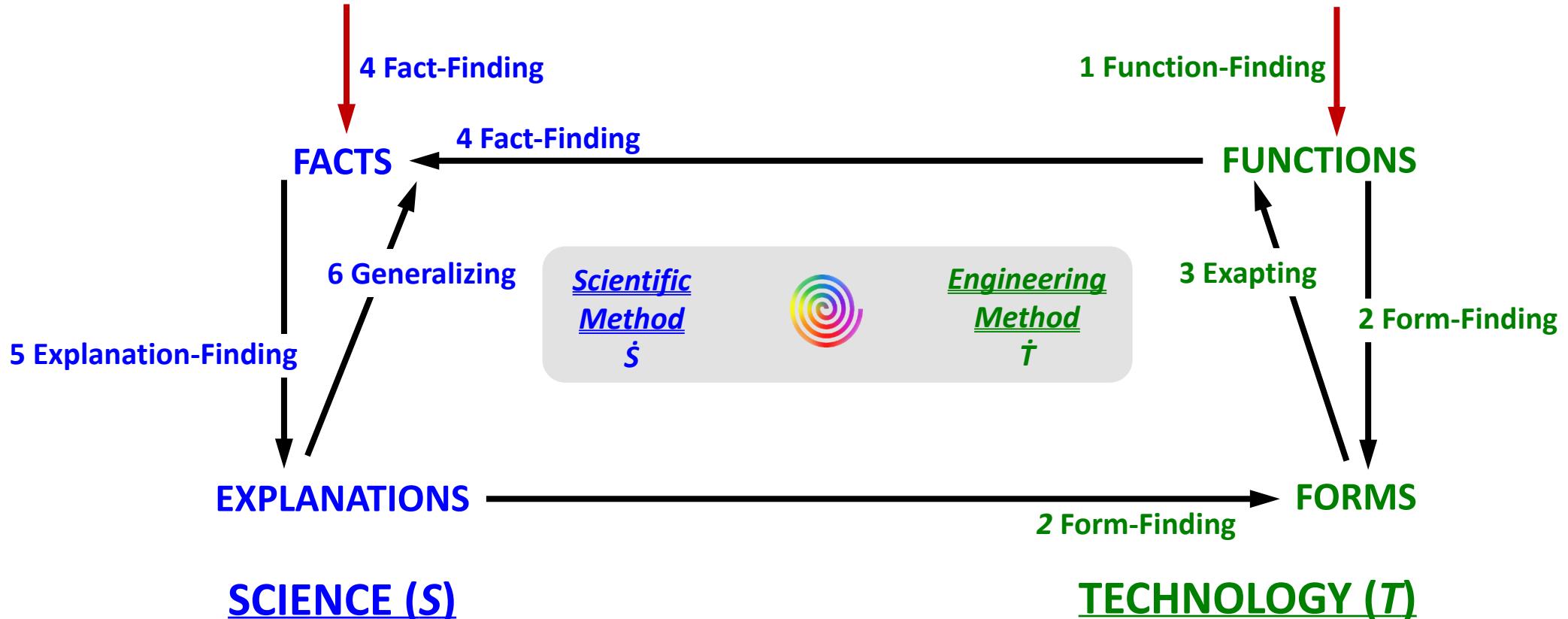


S&T Advance: It Takes an Ecosystem



1 The Technoscientific Method: *every mechanism necessary; and no additional mechanisms*

2/3



2 Solid-State Lighting: 1980s-2010s



- a *Exaptation was essential*
- b *Surprise and contrariness were essential*
- c *Engineering was essential (and led science)*

