

**Why evolution is a theory about stability: constraint, causation, and  
ecology in technological change**

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**Abstract:** Evolution, like history, is ordinarily thought to be about change in time. Yet a surprising variety of “evolutionary” models across multiple domains are at least as much about stability, or at least secular stasis, as they are about change. Our narrative forms, as well as our likely evolutionarily produced disposition to attend to difference rather than to stasis, reflexively bias our perception of evolution itself. A sample technological narrative, and a constructed anti-narrative, together with an examination of the structure of engineering design processes (derived from Walter Vincenti), and some insights from actor-network theory, point to the complex causal interconnections between stable and innovative elements in technological change.