

Not All That Disrupts is Good, and Not All That is Good Disrupts

Are our best efforts to bring the electric vehicle to market having the right effect? It's important to remember that not all disruptive innovation is good, and not all good innovation is disruptive. Electric car maker Fisker Automotive just recalled all 2,400 of its plug-in hybrid cars; Electric Vehicle battery maker A123 is [being acquired](#) by Chinese parts supplier Wanxiang Group; Tesla's CEO says the [next six months will decide their fate](#). Are our best efforts to bring the electric vehicle to market having the right effect?



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People are obsessed with disruptive innovation these days - especially when going after the social and environmental challenges of sustainability. These problems are too big for regular innovation. Nope, they need disruptive innovation. Believe this, though, and you could go backwards as easily as forwards.

That's because not all disruptive innovation is good, and not all good innovation is disruptive.

As defined by Clayton Christensen, the Harvard Business School professor who coined the term, disruptive innovations have the ability to, well, disrupt. Think automobile to horse-and-carriage; electric light to gas lamp; transistor to vacuum tube. They overturn the existing industrial order, topple incumbents, and sweep aside old technologies.

Good innovations represent new ways of doing things that achieve our particular goals. Think cures for disease, food for famine. The goal for electric vehicles is reducing carbon emissions, which fights climate change.

Back to our obsession: Do we really need disruptive innovation to achieve our goals? Is it necessary to reduce carbon emissions by overturning the auto industry, toppling incumbents, and sweeping aside old technologies? Or, taking into account the stumbles of Fisker and others, is it even possible?



Answering that requires exploring how different an electric vehicle actually is from traditional internal combustion vehicles. Aside from the power train (swapping gas and engine for battery and motor, or both), the rest of the car barely changes. Same with how it gets built, how it gets sold and, as importantly, how it gets used.

So why are we funding upstart car makers? Is it to overthrow the existing industry (which, by the way, we just bailed out)? Dressing electric vehicles up like a disruptive innovation may cause more harm than good, since it distracts us from the policy choices that could raise mileage and emissions standards without disrupting much of anything.

The 1950's post-war dream of better living through science came with white knights looking like lab-coated corporate or NASA

scientists. That's been replaced by the dream of disruptive innovation and saviors looking like Silicon Valley entrepreneurs. In both cases, however, the dream lets us avoid the hard work of forging policies that could achieve our goals quickly and more effectively. Policies that would drive regular old innovation.

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