

The Ingenuity of Ignorance



Only Fools Rush in

It's said the association of the first day of April and April fool's day dates as back to 1392 in the cherished work *The Canterbury Tales.*

I often look back to April 1 2022, when I committed physically, mentally and all other '-ally' to my PhD project. In any rational way you see it, it's a fool's endeavour - I lacked the technical skills, conceptual sophistication, financial resources and breadth of perspectives to attack the problem I'm dealing with then. The problem of domesticating the human prefrontal cortex. Yet I wholeheartedly plunged into it. Was I a fool?

There is a long-standing tradition of amateurs experimenting their way into world changing discoveries, inventions and art. Too many to recount, and too sparse memories of the colorful accounts to display their journeys here, so I won't try. But I will exemplify four distinct examples across science, arts and entrepreneurship.

The Success of Ignorance

Otto Hirschman was a contrarian and insightful economist in every sense, but his most interesting observation pertains to a link between psychological belief and creative breakthroughs. Coined Hiding Hand¹, he noted individuals with high ignorance of a problem, (grossly underestimating the consequences lying in wait), seemingly adapt by devising incredibly creative solutions that could not have been predicted, had they knew the full repercussions of the problem(*The Principle of the Hiding Hand* / *National Affairs*, n.d.). That is, the kind of ignorance that when mixed with undermining one's skills, can lead to serious serendipitous outcomes.

This is, in many ways, the beating heart of the Kuhnian leaps that science takes. Consider the Nobel awarded to John O'Keefe, for discovering place cells in the human brain; arguably one of the most brilliant discoveries of our times. Like all scientists, he wanted to take on an ambitious task of single neuron recordings of the brainstem in freely moving rodents. This was exceptionally difficult to do in the 1970s. After a fruitless few years, he adapted the approach and instead recorded from the

¹ Otto Hirschman noticed this mostly in developing countries, whose plight he was empathetic to after having to survive (and rescue others) in Nazi occupied Europe during World War II

hippocampus, and the rest is history² (and citations)(*John O'Keefe – Biographical - NobelPrize.Org*, n.d.).

² O'Keefe originally thought he had the implants in the thalamus but mistakenly got detoured into the hippocampus. Happy errors, as they say.

The Don needs his Drugs

Francis Ford Coppola is a name that fills up movie amateurs and professionals both with extreme respect. Not only he directed one of the greatest movies, but he did it again and again. But since its hard to look 20 years into the future from past, it was to his dismay that he had to go through so much hardship to star the then novice, Al Pacino as the main star of the trilogy. Nobody knew Pacino then, and naturally the studio executives were skeptic. But they were met with resistance. The reason Coppola was stubborn? Pacino's amazing performance as a drug addict in a previous movie. That is a role most would accept was different from portraying a New York five family mob boss. Yet he acted the role with such ferocity and intimidation, it's still the de facto role to take inspiration of how a mob boss ought to be (sorry Tony). Besides being Italian, Pacino had absolutely nothing in his past that makes him the best suited one for this role. He had a drug abuse filled childhood, which may explain his earlier role's success. But not this one. Something about the human aspect is undefined here. Now let's stay here in Hollywood but go 20 years into the future.

Summer of 84

Boys and the Hood is the kind of movie, that cannot be made again now or ever simply because the culture (or subculture) that was once part of our world is now completely replaced by a more sinister variety. Imagine all the fondful memories with a school teacher only to know he's a child molester, 10 years later. This movie is about an event occuring in a family and neighborhood in black america in the 80s with themes of coming-of-age, violence and human relationships. Nothing in John Singleton singles him out as fit to write and direct such a movie, yet he made the plunge. It was his first movie, which started as a project that was used for an application for film school. If there was any movie that defined black culture, GTA San Andreas and arguably set the stage for Gangsta Rap, which produced households like Dr Dre, Snopp, Fitty, 2Pac it's this movie ; yet there is no mention of police brutality or music here (though Ice Cube was in it). It's the human element, specifically the innocently ignorant yet creatively gifted, that (as always) pushes the frontier.

Fruit of Passion

Somewhere nearby in California, around the same time, was two Steves who were wanting to start their computer company named as a fruit. One of them knew a computer inside out, the other wanted to know himself for years and went through trials and tribunals of his own. If one was to put a bet on his impact on culture and tech, nothing would guide the bettor; in fact everything was against this - petulant nature, disregard for classical business practices, product over profits, design over costs and so on. It's said the Steve Jobs didn't just change the computer industry but also animated movie and telecommunications sector just by being himself and putting his vision on full control. Nobody who has an innate talent for human experience would go to arts, drop out and start a computer company ; only aimless minds do it according to traditional societal values.

The point I'm trying to explain with these examples is this : sometimes a huge movement forms, comes and swallows up an entire period of culture. Often this is not spearheaded by the men and women one would expect, believed or even want to. They do make sense in hindsight. Most importantly, all of them are completely ignorant about the risks and benefits as well, like a proper race horse trained only to charge without looking back or sideways.

On a deeper level, one might find sparks of obviousness - Pacino's fiery talent, Singleton's unique way of integrating his childhood experiences into a story, Steve's extreme passion - and this might be the reason for this survivorship bias, but its always worth keeping in mind that Great Projects be it science, art or engineering are sometimes started by the ones most ignorant of the risks but only having the *right attribute at that particular time*. Rationally speaking, the right attribute was not the actor who was most famous, but the one who can channel the mob boss best. The right attribute was not the most prolific director, but who can write the most visceral story, which is also true, and bring it accurately onto the screen. The right attribute was not the most seasoned businessman, but a fresh mind to lead and direct a completely new industry without being shackled by how a business ought to be.

Perhaps there is some truth to when Steve said Stay Hungry, Stay *Foolish*