Life Lessons After Sixty Years

By Avi Loeb on January 24, 2022

On February 26, 2022, I will turn sixty years old. The journey had been long enough for me to realize how wrong I was throughout most of it, leading me to revise my initial misconceptions.

The new insights came after both my parents passed away a few years ago. The premature ending of their lives – which I so dearly cherished, implied that we better focus on substance and not on impressing each other. I stopped caring about the number of likes I get on Twitter, abiding by what Clark Gable <u>told</u> Vivien Leigh in 1939: "Frankly my dear, I don't give a damn." Let me explain that through an example.

The first interstellar object spotted near Earth in 2017, 'Oumuamua, did not look like any comet or asteroid seen before within the Solar system. This was agreed upon by all mainstream scientists who attended to its anomalies by suggesting that it might be an iceberg the size of a football field made of pure hydrogen, pure nitrogen, or a fluffy dust cloud. Given my experience in studies of the unknown nature of dark matter - which makes most of the matter in the Universe, it appeared appropriate for me to put all possibilities on the table without worrying about what other people might say. I therefore suggested that we consider an artificial origin from an extraterrestrial technological civilization as another category of "a type never seen before". Protests in social media and personal attacks were of little significance for me compared to the challenge of retrieving a high-resolution image of this weird object. Its nature was not an issue that should be settled by philosophical reasoning as some scholars wanted it to be. After all, the philosophers who knew that the Sun moves around the Earth four centuries ago and refused to look through Galileo Galilei's telescope, would have had a difficult time designing a rocket that would reach destinations in the Solar system because of their incorrect world model. Similarly, the nature of 'Oumuamua-like objects could be settled by a camera that snaps a high resolution photograph of them. Instead of arguing with "the adults in the room" who pretend to know the answer in advance, I established the *Galileo Project* to design the required space photography mission along with the experienced team member Alan Stern, who served as Principal Investigator of the *New Horizons* spacecraft.

Henry Thoreau <u>summarized</u> it well: "Our life is frittered away by detail. Simplify, simplify! I say, let your affairs be as two or three, and not a hundred or a thousand; instead of a million count half a dozen, and keep your accounts on your thumb-nail."

So here are my three most important lessons of life:

- (i) Focus on the time remaining to enjoy rather than on past accomplishments.
- (ii) Start each day from scratch without prejudice, arrogance, or privilege.
- (iii) Money is only helpful in buying freedom. Beyond this task, it is useless.

Before my parents passed away, I violated these guiding principles. My pride was rooted in past accomplishments, and so I was navigating a strategy that appeases the wishes of gatekeepers on selection committees for professional appointments, grants, honors and awards. The addiction to the related societal feedback loop provides a false sense of privilege or entitlement as soon as the desired reward is obtained. But it also takes away the thrill of innovation that often faces headwinds in mainstream opinions.

The freedom to think and act independently is the most precious commodity in life. Up to some level, modest amounts of money can buy this independence by removing concerns about food, clothing, health, basic appliances or housing. But beyond some threshold, having more money adds concerns about how to use it or maintain its value, issues that undermine Thoreau's "simplify" philosophy.

And then there is the biggest issue of them all. Any extraterrestrial equipment found by the *Galileo Project* could imply that we might not be the smartest kid on our block, as most kids realize on their first day at the kindergarten. Another way to put it is that Albert Einstein was not the smartest scientist to have ever lived since the Big Bang, 13.8 billion years ago. There might have been greater scientists on the $\underline{\text{sextillion}}$ (10²¹) habitable planets around stars that predated the Sun in the observable volume of the Universe.

Rather than use <u>Carl Sagan's standard</u>: "extraordinary claims require extraordinary evidence", we should entertain the non-extraordinary possibility that some interstellar objects left their home just like our own New Horizons spacecraft and could appear like 'Oumuamua. In fact, the <u>Pan STARRS</u> telescope which discovered 'Oumuamua in 2017 also discovered another object in 2020 which was pushed away from the Sun without a cometary tail - <u>2020 SO</u>, later identified as a rocket booster that NASA launched in 1966.

According to my second life lesson, it would be extraordinary for us to consider ourselves as unique or privileged. This is a lesson that <u>Nicolaus Copernicus</u> already taught <u>geocentric</u> thinkers of his time and that present-day egocentric thinkers tend to forget.

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