Research Should Promote Understanding

Manfred Diaz 1

Basically, I'm not interested in doing research and I never have been... I'm interested in understanding, which is quite a different thing. And often to understand something you have to work it out yourself (...).

- David Blackwell 1983

Abstract

1. Introduction

Every scientist, or aspiring scientist, is or should strive to be as curious as a seven years old (Gopnik, 1996). Science is the act of formally asking *why*. In this essay, we start asking *why* there is, at a fundamental level, a difference in reinforcement learning (RL) *research* and *understanding*. To many, this is a subtle, uninteresting, and almost philosophical difference: there exists plenty empirical and, in a particular sense, theoretical evidence that progress is being made.

David Blackwell

The question is how to remain curious in an environment where the incentives structures to do so (?). incentive structures in academia, life in general, that beat curiosity out

at

1.1. A Recurrent Dichotomy

"Every child is an artist. The problem is how to remain an artist once we grow up." – Picasso

"Every kid starts out as a natural-born scientist, and then we beat it out of them. A few trickle through the system with their wonder and enthusiasm for science intact." – Sagan

References

Gopnik, A. The scientist as child. *Philosophy of science*, 63 (4):485–514, 1996.