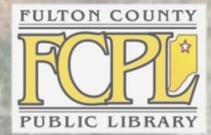


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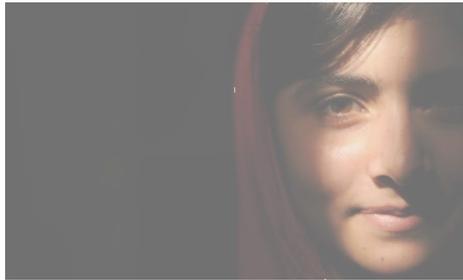
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It is my belief that words, and pens,
and books are more powerful than
guns, and governments, and wars.

-Malala Yousafzai



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A Teacher, a Pen, and a Book



I truly couldn't imagine being unable to read. Truly, take a moment and think of the worlds opened up to us through reading, studying, and writing. Contemplate the affects that words have had over, not only the history of the world, even one's own psyche. There is persuasion in language. Often, I have contemplated that all is language, or what the Greek philosophers termed logos. Gun's are a language of power, governments as well. War is the inevitable affect of a lack of relational communication; a frontier where the language is simply justified violence.

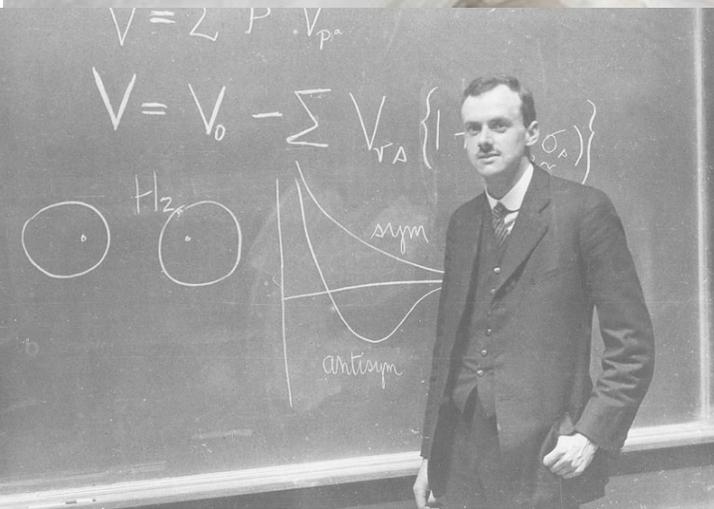
Nature has a language, animals have a language, time has a language, even space has its own deep structure and syntax. When all has been cleared away, what remains is language. All disciplines, all degrees, in fact all learning is simply the learning of a language, even computers have a language. The memorization of the lexicon for each discipline is all that is required for any certificate or degree.

There is only one element that remains a constant, teacher's and teaching. "I don't mind if I have to sit on the floor at school. All I want is education and then I am afraid of no one," revolutionizes Malala Yousafzai. This spirit was given to her... from her parents maybe, or a teacher, or even just someone she admired. She saw in them courage in the midst of fear and properly understood that learning is true courage, not war, not fighting one's own will to pride, but the simple spirit of learning is the narrow path to freedom. It is learning that bridges what seem insurmountable obstacles.

"A teacher, a pen, and a book, alongside passing on the spirit to know and understand is the algorithm where true power resides," she asks us to contemplate. Without a "language" to learn, or the desire to define one, energy takes the form of incessantly proving itself and finds that it must create a situation of intimidation and/or obsessing over those who have defined their language. When I see this attitude in individuals, it is apparent to me they haven't defined a language to study, nor made it very far in any discipline, subsequently they become narcissistic.

"Wise people need not prove their point, and those who need prove their point aren't wise," the immortal Lao Tzu reminds us. He continues, "The mark of a learned person is freedom from their own ideas. Tolerant like the sky, all-pervading like sunlight, firm like a mountain, supple like a tree in the wind, no destination in view, making use of anything life happens to bring." The question is simple... What language do you wish to learn?

Paul Dirac and the Religion of Mathematical Beauty



Apart from Einstein, Paul Dirac was probably the greatest theoretical physicist of the twentieth century. Dirac, co-inventor of the most revolutionary theory for 150 years 'quantum mechanics' is now best known for conceiving of anti-matter in his head and also for his deeply eccentric behavior. For him, the most important attribute of a fundamental theory was its mathematical beauty, an idea that he said was “almost a religion” to him.

Often called the “theorist’s theorist,” Dirac was one of science’s archetypal loners, shy and taciturn. Late in his life, when physicists cold-called him to ask if he would care to chat about some ideas that had appeared in his papers, he would cut them off firmly saying, “I think people should work on their own ideas,” before hanging up.

Dirac is most famous for his contributions to the development of quantum mechanics when he was just 23. Among the early papers on the theory Dirac’s stands out as one scholar has noted, “His discoveries were like exquisitely carved marble statues falling out of the sky, one after another.” Dirac was admired in his time, albeit feared as a scientific magician. Many physicists found his language impenetrable and he was often referred to as “the strangest man on earth.” Even Albert Einstein was quoted to have said, “I have trouble with Dirac. This balancing on the dizzying path between genius and madman is awful.”

Dirac was known among his colleagues for his precise and taciturn nature. His colleagues in Cambridge jokingly defined a unit called a "dirac", which was one word per hour. When Niels Bohr complained that he did not know how to finish a sentence in a scientific article he was writing, Dirac replied, "I was taught at school never to start a sentence without knowing the end of it."

Quantum mechanics has had enormous success in explaining many elements of our universe. The theory in practical application has been used to invent the laser, the transistor (and thus the microchip), the electron microscope, magnetic resonance imaging (MRI), computers, cellular phones, and numerous other technologies.

*“Patience is a beautiful thing.
You leave it in the hands of
Allah and if it’s meant to be, it
will be.”*

- Her Blank Canvas



Pick a flower on Earth and
you move the farthest star

Paul A.M. Dirac

