or wrong, there are no interpretations in the Baconian system. I would like to come back to this a little later on.

The great opponent of Baconianism in the 17th century was the French philosopher, René Descartes, 1596 to 1650. Descartes was a rationalist. Descartes' argument was that the universe is a rational creation. In fact, his main point philosophically was that since the Universe had been created by God, and since God is the eminently rational being, and since man is created in the image of God, in this rational sense that is, to Descartes it was man's reason that participated in the Divine, there man's reason and God's reason are congruent. Therefore the universe is rational and man can understand it. Given this, the instrument for discovery, the instrument of research, is not the laboratory, not fiddling around with all these extraordinarily difficult experiments where you never have the same bit of water twice, or the same piece of steel twice; the way to go about scientific research is to think.

Descartes argued that when God created man He gave him certain innate ideas. It was from these innate ideas that were clear and God-given that Descartes drew his earliest thoughts on the Universe, defining matter, for example, as pure extension. This seemed to be obvious. From here you now explain natural phenomena in terms of the rational connections; a reasonable and logical argument is what led you to truth.

This may seem a little outside the mainstream of the modern world. After all, I doubt very much that many Nobel Prize winners would insist that their ideas came from God; that they would insist in any serious way that Cartesian rationalism was their method. Yet, it does exist today. It exists in the sense that the Cartesian system insists upon a rational explanation. In other words, if you have a series of phenomena, what you want, according to the Cartesians, is a reasonable explanation of these phenomena not necessarily drawn from empirical fact but just something that gives you some insight into the phenomena.

I will cite as perhaps the greatest modern example of Cartesian science, Freudian psychoanalysis, where what Freud gives you is a rational explanation of the working of the human psyche, given certain strange entities which seem not to be capable of experimental examination, the id the ego and the superego. These you cannot actually probe and find a little part of the brain that says,