Introduction

Light and shadow of the seventeenth century. This metaphor is often used as an allusion to the contradictions of a century which was responsible not only for the burnings at the stake and forced denials of astronomical observations, but also for a meaningful, enlightening art, as commissioned by princes of the Church and powerful men, who were fascinated by the beauties of the very world they ruled.

Revolutionary thought caused condemnations to the stakes, but also paved the path to the creation of a totally new idea of art. More than ever before, in the seventeenth century, the way of thinking has been at the same time clear-headed and contradictory: in a word, dramatic.

In this century, philosophers, scientists, artists, religious and powerful men realized they were at a crucial crossroads: on the one side was the reassuring subordination of new discoveries to the references in the Holy Scriptures; and on the other side, loomed a complete reversal of a comprehensive view of the world and of human life. The background was constituted of progress, astronomical discoveries, Martin Luther's theses, Reformation and Counter-Reformation, which had paved the way to Science, as well as to a renewal of philosophic thought, which the Church sought to control and rule, in vain.

Galileo, for instance, kept saying that sensible experiences alone could interpret natural phenomena. However, if you want to reduce the conflict between Galileo and the Church to opposing factions, one right and the other wrong, you would be surprised. These kinds of surprises enrich the historical scene, thus giving particular shades to the drama, inasmuch as Galileo appears as a self-confident winner, just when he is about to give in.

In the background, we can see interesting characters, such as laymen, Jesuits, missionaries, who bring experiences from another world. These are remarkable men, who tend to take into consideration all scientific discoveries, and would like to discover something themselves, in order to show the grandeur of God and of the world, as framed in a perfect, pre-established order.

They were all thrilled by a sense of wonder.

Perhaps Galileo might easily have saved himself. After all, he was a man of faith as well, but he was even more convinced that Science could not obey the authority of the Holy Writ.

The Jesuit Athanasius Kircher was also an actor on this historical stage. He was a real master of lights and shadows, as well as an indefatigable researcher, an

inventor, who loved reality and played with it, who believed in God and in Science. He was certainly not a follower of Galileo, but rather a complementary character.

Galileo and Kircher, though different from each other, if taken together, help us understand a century which paved the way to contemporary knowledge.

We know almost everything about Galileo, if we may say so about such a complex scientist and thinker. His limpid, fascinating style, his clear demonstrations, and his ability to admit he could be wrong—all these elements well introduce his character to us. A few doubts are left about why he recanted his findings, as well as about other moments of his intellectual life.

These are doubts about faith and about what kind of human, abstract, or mathematical language the Creator would use. These are the doubts of a scientist who keeps searching, thinking, teaching, and talking with other philosophers. Galileo was also a man adored by one of his daughters, and almost ignored by the other. Light and shadow.

As far as Kircher is concerned, we know many strange, curious, incredible, and fascinating details of his life. He is a priest who entered the Society of Jesus and a peculiar scientist, who is in love with everything he sees and with everything he thinks he sees. He is obsessed with collections, and enjoys his own experiments. He is an inventor who, at times, believes so much in his own judgment that he considers an experimental check useless. If you really are a genius, can you allow yourself to do this? You certainly can, if the ultimate goal is the astonishment you feel for the miraculous, unquestionable proof of God's intelligence. This was probably what Athanasius Kircher was thinking as he organized his own museum, as he let himself down in the bowels of the Earth, as he recreated, measures ready, Noah's ark.

His life was full of journeys and unremitting studies, criticism and praise, pain and hard work. And yet, he had the pleasure of showing that God had thought about everything! The world was a marvel! Where God cannot be seen, He can be imagined, by reading the Holy Scriptures. Better still, the wonders of His creation can be painted in the beautiful illustrations of Kircher's books.

The universe has its own music, as well as its own language, endowed with rules, through which we can understand and interpret an unknown language. For instance, we can decipher Egyptian hieroglyphs, and read absent signs too. Kircher's fanciful interpretation of this mysterious writing tells us a lot about this Jesuit's culture and dreams. In Kircher's view, the marvels of the world are not only an object of devotion, but also of fetishism and enthusiasm.

While, on the one hand, both scientists and inventors often showed a dangerous heedlessness and effrontery, on the other hand the Church appeared very careful, and ready to welcome new, disruptive theses only if they agreed with the Holy Scriptures.

Since theology is not a superstition, but rather a line of reasoning, complete with proofs, none of the scholars of the Collegio Romano, though stubbornly defending the principles of faith as taken from the Holy Writ, felt capable of denying the evidence of new discoveries and the cogent value of scientific

disquisitions. This mood was common to Cristoforo Clavio, who had followed the path of Galileo since his youth in Pisa, as well as to Roberto Bellarmino, a tormented inquisitor, but also a careful investigator into the results of Galileo's research.

The general attitude was certainly not obscurantism or the opposition to enquiry or reform, but rather a defense of established faith, as well as worry for the handling of novelties in front of a mass of people who—then and even now—were asking certainties from faith, while offering devotion and obedience. On the other hand, the Science which originated in that century—as well as Galileo's discoveries—were caused by doubt, by the chance of bringing all up for discussion in order to obtain a proof.

We are still far from a management of Science subject to the needs of humankind, and from a redeeming philosophy. However, at the crossroads of the seventeenth century, this path had been opened, and the Church was well aware of it.

http://www.springer.com/978-3-319-00299-6

The Stars of Galileo Galilei and the Universal Knowledge of Athanasius Kircher

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2014, XIII, 178 p. 28 illus., Hardcover
ISBN: 978-3-319-00299-6