



## Reflections on Arts and Science

**Donato Kiniger-Passigli**

Vice President, World Academy of Art & Science

### Abstract

*Albert Einstein said that art and science are branches of the same tree. Indeed, there is no dichotomy between art and science: they are an integral part of the same nucleon. Art is the ability to create, which implies inspiration and learning. Liberal arts, from medieval tradition till date, include humanities and physical, biological, and social sciences. There is no dichotomy here but a knowledge that is inextricably interlinked. Dante Alighieri, the supreme poet, summoned future generations thus: "Consider well the seed that gave you birth: you were not made to live like brutes but to follow virtue and knowledge." Ars Cognoscendi cannot be better explained.*

Albert Einstein said that art and science are branches of the same tree. Indeed, there is no dichotomy between art and science: they are an integral part of the same nucleon; they are complementary like *yin* and *yang* in ancient Chinese philosophy. Einstein also said that imagination is much more relevant than knowledge, as knowledge has a very precise contour and dimension while imagination and creativity are boundless and surround everything else. Art is the ability to create, which implies inspiration and learning. It is made of intuition and capacity to transform material resources at hand. Art creates artifacts; through art we forge means for survival and we make tools for everyday life like Vulcan (the Greek Hephaestus), Roman god of fire and blacksmith, supreme manufacturer of art, jewels and armours.

---

*"Creativity without science would not produce any fruits and cannot elevate human values and consciousness. Art is abstract knowledge capable of transforming itself into concrete applications through a systemic, scientific approach."*

---

Artifacts, weapons, arms and beautiful ornaments are all expressions of a highly specialized form of knowledge aimed at the benefit of humankind. Creativity without science would not produce any fruits and cannot elevate human values and consciousness. Art is abstract knowledge capable of transforming itself into concrete applications through a systemic, scientific approach.

Let us be clear: This is not the sphere of "fine arts" of contemporary understanding; the etymology of the word, from Latin *ars* indicates the ability to create, to act, and implies

preparation and learning. Art is the mastery of celestial navigation, and some forms of traditional art extend to sports: boxing, for example, is a noble art since antiquity. A well celebrated 2000 years old Roman statue represents a boxer with his gloves sitting on a bench after a match, while controlling his breath, recovering, and contemplating how his own art impressed the public in the arena. That is an expression of the mind, which requires scientific preparation like forensics, art of poetry, art of living, statesmanship.

Craftsmanship, boxing and declamatory (rhetoric) skills have science in common. Science is the accumulation of knowledge, and art is the expression of science that begins with the contemplation of nature and inspiration. Leonardo da Vinci, the most celebrated artist and scientist, in his famous Vitruvian man, represented perfect proportions of the human body, which informed all his realizations, whether paintings, cannons or helicopters. He perfectly combined art and science and squared the circle, keeping humanity at the epicenter of his endless research.

Liberal arts, from medieval tradition till date, includes humanities and also physical, biological and social sciences. Again, there is no dichotomy here but a knowledge that is inextricably interlinked.

Dante Alighieri, in his epic poem “The Divine Comedy”, summoned future generations thus: “Consider well the seed that gave you birth: you were not made to live like brutes but to follow virtue and knowledge.”

*Ars Cognoscendi* cannot be better explained

*Author Contact Information*

Email: [kiniger@worldacademy.org](mailto:kiniger@worldacademy.org)