

THE WORLD WE LIVE IN

BREAD AND CIRCUSES

One author's view of the balance between science and art, and how it influences us

Many people view science as a cold, precise activity, one that is limited in its scope and that is ultimately dehumanizing. It's suggested that new scientific discoveries negate previous discoveries, giving the impression that science is one long, endless journey, accompanied by milestones of human error, wandering and imperfection. On the contrary, in art - with all its changes in perceiving the world and its new ways of expressing these changes - previous works have a permanent significance, representing humanity at a given time and place. Despite this, art is seen as something running along a continuum, while science is believed to advance by steps and jumps, with much empty space in-between.

This point of view might be valid, if we focus only on short periods in history. But the long-term perspective reveals that movements in both science and art follow definite paths of progress. Science and art share not only similar modes of creation, but also common roots in history, since the early philosophers dealt with both interchangeably. With the discoveries of the natural sciences, the two became divided. The emerging "philosophers of nature" gave rise to what would become natural science, creating a split between philosophy and science, which we feel to this day.

This has led us to view the role of art and science in society differently. We could briefly characterize art's function as "the creation of the integrated individual," since many people also see artists as playing a key role in the formation of society, stemming from their perceived ability to understand and express human consciousness, with its sundry needs and ideals. In many countries, those active in the arts are considered as "intellectuals." At the same time, their art can be, and has been, misused to support and enforce a variety of social and political opinions, and group interests.

On the other hand, though science is looked at as something necessary for improving the quality of life, its practitioners aren't viewed as people who necessarily shape the social environment. Their influence has been primarily expressed through the technological development of society. But though new technologies are automatically adopted, their authors frequently remain anonymous. Though creativity is one of the most important preconditions for scientific and artistic undertakings - the ability to wonder, to see things around us as if for the first time - it is often considered to be the purview of mainly artists, one of the many misconceptions that artificially separates science from art.

Artists often put together what appear to be inharmonious materials and forms, creating a unified whole that allows us to see the world in a new light. Scientists meanwhile build theories from particular experiments, where observed

phenomena are reduced to verifiable principles and often assembled into a scientific law. But here the creative process is no less important. As Poincaré has said: "Science is facts; just as houses are made of stones, so is science made of facts; but a pile of stones is not a house and a collection of facts is not necessarily science."

Nevertheless, the situation in the last several years has changed. The reason is the focus of creative efforts on the so-called "new economy," an economy based on knowledge and the discoveries of science. Meanwhile, culture has lagged behind in the dramatic, quantitative change, and even technology's application to media and culture has not brought anything truly new.

The truth is, that only in science do we find something really new. Current art has more or less returned to the predictable, proven patterns of the past. Society has been broken down into target groups for specific cultural products, which lower the consumer to the mass average. Art today thrusts people into the maddening crowd, rather

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than liberating them as individuals. We're returning to the "bread and circuses" of antiquity, where the hero is the film star, TV personality, and rock musician.

Nevertheless, scientists can be partially to blame for their unfavorable social standing. Thanks to the need for specialization, their language has become incomprehensible to the average person. Meanwhile a wide range of specialized publications lets them communicate with each other and nurture the idea that they are exceptional, understanding mysteries that baffle others. Although we can see a similar isolation of the scientific community in the west, efforts have been taken there to form associations of the brightest minds in the sciences and the arts. There is an effort to bridge the communication gap that still exists between the two. This has helped generate a "third culture," which unites the two streams of art and science that once flowed together. With today's technological advances creating both hope and anxiety, more than ever we need to rethink the links between these two spheres, which have so profoundly affected our human existence.

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