

## Question 2: All art is the imitation of nature

Imitation is the act of trying to mimic the form, manner or characteristics of a subject, be that a person, an animal, an artwork or a concept. In most cases in the modern world, to imitate something is to mock it, to undermine its originality or simply to be derisive of its existence. Imitation, however, can be a powerful ally to the artist who wants their art to speak to its audience. Imitation of a theme or concept can evoke powerful emotions in a viewer; it can shock them, remind them, move them. What concept more powerful to imitate is there, than nature.

There is a large proportion of art as a whole devoted solely to the explicit imitation or reconstruction of nature. One thinks of intricate paintings of vast landscapes that stretch across museum walls across the world, huge fjords or mountain ranges or vast seas brought to life by paint and canvas. One thinks of photographs that tell an ancient, primal story of the power of Earth, or play out a dramatic scene of animals, whether that be hunting one another, fighting one another or loving one another, an incredible amount of visual art is dedicated to the image of Mother Nature, the most powerful force on this planet.

Not only in visual mediums can you see the influence of nature, but in poetry and myth, we are constantly being painted a – metaphorical in this case – picture of nature's beauty. From Wordsworth's description of the majesty of his homeland to ancient descriptions of the changing seasons. In the case of the Ancient Greeks especially, humanity has always been fixated on explaining the beginnings of all of nature's little nuances and cycles, which is what bore the popularity of aetiological myths among the Greeks, who created sculpture, poetry and myth about the causes for all the world's mechanisms, an example being Hades' kidnapping of Persephone, and her mother's sorrow during the time each year Persephone is forced to spend in the Underworld causing the change from warm, loving summer to cold, desolate winter, then her return causing the ice in her heart to melt once more into spring. Such powerful emotions, created in nature's name.

There is one mysterious and intriguing link between mathematics, art and nature: the Fibonacci sequence. To call Fibonacci its inventor or creator seems incorrect, for this was a pattern that had been residing in nature for longer than humans have walked the earth. It is a sequence of numbers, the first two terms being the number one, in which each term is the sum of the previous two: one, one, two, three, five, eight, thirteen etc. When drawn out with each number representing the length of one side of a square, the sequence creates a spiral, which begins tightly wound but very quickly spreads out into a vast orbit around its origin. It is given the name the Golden Ratio, but its use is more prevalent in art than in mathematics. For centuries, artists have been using the spiral to lay out the scenes they paint, the most famous example being Leonardo Da Vinci's Mona Lisa, in which the Ratio can be clearly observed in the composition of the painting. Da Vinci was predominately a mathematician, so his familiarity with the sequence is not surprising, but there is something about its curvature which expertly draws the eye of the viewer to the subject which the artist intended to be the work's point of focus. The Ratio has seen even more use since the dawn of photography as an art form, being used by photographers to just the same thing, drawing their audience into the photo itself. That is not the most surprising thing about the Golden Ratio, however. The most shocking use of the Ratio is not by definition a "use" at all. It is commonly present in nature, objects formed by earth and not mankind, in objects as mundane as broccoli. There is a vegetable in the broccoli family whose upper half shows the familiar spiral snaking around its body, ignorant to its mathematical or artistic significance. A more artistic example, perhaps, would be the position of petals around certain flowers, or branches around a tree. In just that way are art and mathematics formed in the image of nature.

One of the art forms most influenced by nature is the same one which plays through speakers and headphones across the world, a language more universal than picture or prose. Music is perhaps the most complex and perhaps the most beautiful form of art there is. It is much easier to move someone through sound than it is through oil and canvas. Many individual pieces of music are dedicated to nature, some more subtly than others. Examples include *The Lark Ascending*: birds were making music long before humans even learnt to stand upright, so it is only natural that a large proportion of music, if not in name, is inherently mimicking birdsong. *The Flight of the Bumblebee*: a curious and common creature, one used as a metaphor for the act of hurrying itself, imitated by the speed of a violinist's bow across the string. A more subtle example is *Morning* by Grieg: no animal in the title, but there is no event more natural than the transition from night into day. Despite its lack of an explicit link to any specific imagery, the thoughts of the composer are almost instantly transferred to the audience, without words, through merely vibrations in the air. It is impossible, during the rich crescendos that make the hairs on all listeners' necks stand erect, not to see in the mind's eye the sun rising above the peaks of the horizon and flooding the world with melodious sunlight. A picture painted with notes is more vivid than with paint or words.

Let us not forget also the very things with which music is made: stringed instruments, with bows pulled across strings to form notes, are created in the image of crickets and grasshoppers who do the same with their own legs; wind instruments, whose very name speaks for itself, mimic the flowing wind blowing over the landscape; even percussion in some ways mimics the crash of thunder or the fall of rain. Nature was performing symphonies long before stone-age man began to beat its drum.

There are of course cases in which art could be argued as separate from nature: photos and paintings of purely man-made, urban, unnatural and imagined scenes are indeed, on the surface, free from Mother Nature's grasp. It could be argued in response that the very oils the paint is made from, the wood in the pencils, the paper in the printer is all intrinsically linked back to nature, however it maybe that to search for some tenuous link between **all** art and nature is to undermine the value and beauty of that which is naturally linked.

In conclusion there will always be some physical or metaphorical link between art and nature, especially since we ourselves are part of nature, another species vying to survive, reproduce then die just as all living things do, but sometimes it is better not to force these things, but to reserve nature for those who truly seek its imitation.