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Sense of Beauty and Creativity

Levan Torosian

Abstract

This chapter discusses the impact of natural beauty on the human consciousness and the ability to be creative. The stages of formation and the sequence of the abilities that allow for the emergence of a creative life path and the development of inventiveness are described. A vision of how the sense of beauty develops in the childhood period, as well as how this feeling affects the ability to be inventive in various ways, is discussed. The relationship between the sense of beauty and such human properties as contemplation, observation, and ingenuity is defined. An analysis is made of what impacts our ability to see beauty. Some ideas about how structural changes in technology influence a person's technical environment and his ability to see natural beauty are provided as well.

Keywords: nature, beauty, creativity, contemplation, observation, ingenuity, technology

1. Introduction

The sense of beauty, its development and improvement, depends on many factors. Modern human society is trying to make people's lives more beautiful, comfortable, and technological. The artificial beauty created by some people is presented in various forms and offered for understanding and acceptance by other people. There is the sphere in which a person is invited to understand the beauty and somehow transform this understanding into the environment of his life, in choosing those forms of beauty that will bring him the greatest joy and well-being. A modern person needs to develop a sense of beauty in himself. Professional activity often requires ingenuity which is connected with the sense of beauty also. The influence of the sense of beauty on ingenuity, on the ability to create beautiful things with one's intellect, is undeniable. Therefore, let us try to understand what factors determine the development of a sense of natural and artificial beauty and what can become the basis for a harmonious transition from the perception of the beautiful to the creation of the beautiful. Readers are invited to become familiar with the analysis of such human properties as contemplation and observation. The relationship of the factors that create a transition from the process of perception of the beautiful to the creative principle and ingenuity is also considered.

When I hear the word beauty I ask myself—what is it? Is this a certain feeling or is it a way of thinking or is it an algorithm for perceiving phenomena? Does beauty make a person move along a creative path? Are all people equally able to perceive different beauties? Does the sense of beauty affect the development of human ingenuity in the technical field? We will try to consider these issues in this chapter.

2. The sense of beauty and nature

When we raise our heads to the sky and see how a plane gracefully flies at a high altitude, it seems to us beautiful, majestic, and ingenious, especially from the point of view of what we can create with the human's mind and hands.

It happened in my life that I was lucky enough to be born and grew up in a very beautiful place. The nature was connected to mountains, valleys, the sea, and good and beautiful people. From my birth I have been surrounded by natural beauty and harmony of human life. This fact predetermined all my further perceptions of life and movement along it, as well as my attitude to beauty.

I became a technical specialist after graduation, and at a certain point of my life, my feelings of natural beauty and creativity began to combine inside me, including in the field of technical ingenuity.

There are many different opinions and scientific approaches to developing a person's ability to be creative and to invent.

Creativity as the ingenuity is given to any of us, but many lose it as adults. Further development of these abilities depends mainly on the atmosphere in which the person was raised. I think that nature has the primacy role in this environment. It is the natural harmony of power and energy that determine for a child the very sense of beauty that will accompany him throughout his life. This feeling will also allow a person the ability to create something beautiful, regardless of what people do in a professional sphere.

It is very important to observe the diversity of natural wealth in childhood such as mountain topography, sunset and sunrise, the elements of rain and thunderstorms, sea storms and calm, and so on. Observing such phenomena, the child learns to feel and analyze, which is an essential necessity for the further development of inventiveness [1]. Natural playscapes offer sensory stimulation and physical diversity which is critical for childhood experiences [2].

It is in natural phenomena that the foundations of human behavior and abilities are developed, and in childhood a feeling of enthusiasm is formed. However, at this age, this feeling is still specific, not completely formed, and differs from the enthusiasm of adults, who, as we know can be admired in different ways. For example, a 3-year-old child is more likely to enjoy some toy than a beautiful sunset. This happens because in childhood, the brain of the child still accumulates information and pictures of the world in order, to build subsequently on this basis, its own unique algorithm of perception and behavior in the world around it. Therefore, those pictures of the world that a child observed in the first 5–7 years of his life determine the development of human abilities, the level of his susceptibility. That is why we observe such a variety of degrees and levels of perception, the ability to see and create beauty around ourselves in adulthood among different people and nations [3, 4].

The level of the perfection and development of our life has reached today is interrelated from nature. People continue to learn from nature. We copy natural phenomena, creations, and even in such a form as “ourselves.” Natural beauty is in everything—these are colors and shapes; these are sequences of changing seasons, weather phenomena; these are life cycles; and so on. Thanks to the vision of this beauty, the human's brain is transformed through the process of observation, discovery, and development of new areas of science [5].

Technical devices that people created have allowed us to see a grandiose beauty that has been hidden until recently from humanity in the depths of space—the beauty of the universe and its breath [6]. So how wonderful it is that the perception of beauty on our own planet has expanded the scope of thinking and expanded the possibilities of seeing extraterrestrial beauty.

3. From the beauty to ingenuity

The study of human nature and world is associated with sequences and algorithms. From primitive actions to the highest complexity of engineering structures, a person in his thinking and behavior is based on algorithms and therefore on sequences. This ability has made it possible to create mathematics, physics, and other sciences that have become the basis of our prosperity. In all developmental processes, there is the beauty of discoveries, research, definitions, and relationships.

The development of a person's ingenuity is invariably associated with his observation, and the process of developing ingenuity can be presented as the following scheme:

Beauty → Contemplation → Observation → Creativity

From generation to generation, people pass on to each other knowledge, as perhaps the most precious legacy. The stratification of observations in different epochs during the existence of humanity has allowed us today to create very complex technical systems that surround us everywhere and give us a certain degree of freedom. Remember how many millennia people have watched the flight of birds, dreaming to rise in the sky and fly as well. Today, an airplane flying overhead seems to us to be the norm. However, in order to understand how to take off the earth and fly, humanity had to observe, observe, and observe.

How does the desire for observation appear? By the author's opinion, the natural beauty creates and develops in us this gift and ability to see the essence of beauty, since natural beauty was the first and natural call for a person to embark on a developmental path. When we meet natural phenomena or new places on our way where we are going, we sometimes cannot take our eyes off the beauty we see, and we want to look at it repeatedly. People do not get tired of natural beauty. Therefore, observation can be defined as the ability to learn from the beauties of nature.

In some discussions about the character of a person, his nature, one can trace the opinion that contemplation is a negative property. In some dictionaries, contemplative person is defined as a passive observer. Has someone ever considered how contemplation and beauty are connected? After all, if you analyze what a person is looking at more, then this is something beautiful, especially at a young age. So what is wrong with a person enjoying vision of beauty? Could it be the other way around? Those people who spend their life energy and time searching for something vital and do not have time to see the beauty of the world around them, their own beauty—maybe these people lose much more than contemplators do.

Of course, it is not impossible to be a one-sided person in the modern world, but a reasonable balance between the ability to contemplate and the ability to succeed in a profession can give a person more joy in life.

Creativity, as a way of self-expression of a person, is a companion for human society probably from the moment when people realized themselves. Nature has shown people the algorithms for the development of creativity. For example, there are algorithms of movements, algorithms of temperature and shape changes, algorithms of fire appearance, and so on. However, how could one know these algorithms without contemplation and observation? If we consider that contemplation is the ability to see for a long time and observation is the ability to see deeply, then these two properties become absolutely necessary for the development of inventiveness, as a process of manifestation of the abilities to create.

The invention of the wheel, which allowed humanity to race along the path of technological progress, was probably interrelated in nature from observations of

how stones or logs roll, and natural fires made it possible for people to feel the heat and the benefits of using it on an ongoing basis.

Observations of nature gave a person an understanding of how to use forms in mathematics, architecture and engineering [7], and various colors in almost all areas of production and life. The beauty of natural sounds is transformed by a man in musical instruments. Finally, we observe the endless desire of engineers to create beautiful designs.

At the beginning of engineering, ingenuity lies in functionality, but soon engineers also focused on the appearance of their creations. Of course, it often happens that the beauty of structures is determined immediately during their design, but in the long term, the substantial part of the appearance always strives for new beauties, those that can only be born in the human's mind.

So why do not all people perceive the same phenomena equally and adults do not always associate beauty with the possibility of its subsequent transformation into ingenuity or creativity? Perhaps the reason lies in the ability to perceive beauty as a system of values.

If we look at what objects and natural phenomena surround us, then they will seem beautiful to us. Almost everyone agrees that we like beautiful landscapes, buildings, cars, ships, clothes, dishes, meal, paintings, music, and graceful movement. We love flowers, fruits of plants, natural stones, and in general, everything that can cause a feeling of delight. However, not everyone knows how to admire.

A person of a creative warehouse is able to see and hear beauty in almost everything as a rule. Persons, who do not have creativity, need additional environmental factors and perceptions of the world to delight them. Therefore, such people subconsciously strive to approach creative people to adopt the ability to admire from them [8]. In these cases, an additional responsibility lies with creative people—not to reject those who do not know how to create and be inventive and not to blame them for this but rather try to involve and teach them how to see true beauty, to be beautiful and enjoy beauty in life.

For many years, while working with students, I have observed how their worldview changes when they meet not only inventive teachers but also inventive students. The exchange of technical and cultural knowledge and skills during learning is the second stage in the formation of the ability to move from ingenuity to the perception of beauty, after the childhood period of life. It was during this period that the algorithms finally formed and what can make it possible to create something new on their basis.

When I was at school, my physics teacher read his poems to us in the classroom. Sometimes I wondered why he was doing this. However, when I began teaching students, I realized that many people could understand things that are difficult only if they have a broad outlook. Moreover, the expansion of our horizons is influenced by everything that carries a beautiful content—the sounds of music, poetry, travel, nature with its phenomena and riddles, the process of cognition, the discovery of oneself, and the creation of new ideas and objects with your brain. In addition, all this is interconnected.

It is not in vain, when something pleases us, especially something new, we enthusiastically pronounce the word “beauty”! But beauty requires thought [9].

The life of humanity is developing in such a way that more and more technical objects begin to surround us. Especially in modern big cities, people actually live in an industrial environment. On the one hand, this fact is a direct result of human ingenuity, and on the other hand, in recent decades, we are increasingly beginning to see beauty through a technical lens of perception.

A transformation occurs—the perception of beauty affects ingenuity, and vice versa, ingenuity affects the perception of beauty. Sometimes this transformation proceeds in a dangerous direction, for example, the creation of computer

technology more and more involves people in a virtual way of perceiving beauty. The time has come to find balance.

4. Harmony and structural elements in technology

The last century has shown how structural elements in technology affect the development and the life of all humanity. Many technical objects were invented over the entire twentieth century and the beginning of the current century. After the creation of internal combustion engines, people began to gladly produce on an industrial scale and use these devices to solve economic and other problems. However, when a certain level of development was achieved, humanity began to realize the danger that these devices carry in for the environment. So today, humanity is looking for ways to abandon internal combustion engines or, in any case, minimize their use. At the beginning of the twenty-first century with similar enthusiasm, computer technology was received. Seeing in these devices a new stage in the possibility of accelerating industrial and economic growth, we began to use them as extensively as internal combustion engines.

Calculations and organizational capabilities of computer technology, no doubt, allow you to create countless possible models, conduct research and analysis, and develop new programs. However, I like to ask—does the human brain need as much information as can be obtained by computer technology? Alternatively, being energized by computer technology, is our brain capable of harmoniously functioning, fulfilling its natural purpose?

Saturating our brain with a lot of information, there is a danger for people to lose the natural gift to see beauty [10]. Where is the border that technology impairs our ability to perceive and replicate natural beauty? In the author's opinion, computer technology with its extensive capabilities must first study and determine the possibility of a person losing the perception of natural harmony and beauty. Creating a virtual world around him and becoming more and more immersed in it, a person ceases to hear the birdsong and to notice the momentary subtleties of natural phenomena. This narrows his natural visual vision and finally stifles his creativity. A study at the University of Kansas found that young people who backpacked for 3 days showed higher creativity and cognitive abilities [11].

There is a saying that "beauty will save our world." I would add from myself that natural beauty might save the world.

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