

**A STUDY ON THE ROLE OF PAINTING ARTS IN VISION**

Dr Ramavtar Meena

Associate professor Drawing and painting

Govt college, tonk (Raj)

ABSTRACT

Since the 1970s, the (re)turn to ethnography has been thought to be something less than a paradigmatic transformation; nonetheless, it has in fact sparked a great deal of theoretical discussion in the highly under-theorized field of rock art study. Shamanism is here very simply defined as the causal relationship that academics make between shamanic rituals and rock art, and from which answers have been sought. This association is at the centre of the ethnographic turn, which has been primarily constructed around it. The application of this strategy has evolved over the course of time depending on 1) the archaeological context in which it was going to be applied, 2) the utilisation of additional sources of evidence (specifically, neuropsychology), and 3) the role of shamanism as either a hypothesis or as an established fact. It has been constructed as a theory by the utilisation of three distinct types of comparisons, namely ethnographic, formal, and uniformitarian analogies. This article discusses the changing role of shamanism in studies of South African and European Palaeolithic rock art. Its goal is to contribute, at least in some small way, to a more extensive discussion on the nature of analogous reasoning and its ramifications.

Keywords: *Painting Arts, Artwork*

INTRODUCTION

Even though there is a wealth of scientific activities, there is still a certain stigma associated with careers in science. This is because there is an inevitable concentration on narrow specialisations that are inaccessible to general understanding. As a result, science careers continue to be viewed negatively. The process of enhancing scientific learning is still a difficulty, particularly in the context of educational institutions such as schools. It is a well-known fact that the capacity to deeply absorb facts and concepts is greatly enhanced by placing them in a broader context of relevance to the issues of everyday life and to the larger goals of improvement of the quality of life and advancement to a more evolved society as a whole. Although it may appear that direct explanation is the best method to quickly learn any particular subject, it is also a well-known fact that this capacity can be greatly enhanced. If the sciences can be connected to many branches of creative effort, then it is possible that people may perceive them as more approachable and desirable fields of study. Since of this, there is a pressing need for study on the relationship between learning and experience in the arts because, even in economically developed countries, art education and scientific literacy remain at an inadequate level. The idea that inspiration is an essential component of the creative experience will serve as the primary focus of this analysis. This idea will be examined from the perspective of both the creator of the artwork and the person who views it. As an integrative response, inspiration involves not only the higher cortical circuitry but also its integration with the deep brain structures such as the limbic system and the medial frontal structures. These are the structures that are believed to mediate the experience of emotions, motivational rewards, and the appreciation of the aesthetic values of the impinging stimuli. In this way,

inspiration has the potential to transform virtually any career or job into a satisfying avocation that contributes to the accomplishment of one's life objectives. On the other hand, a lack of inspiration might make it difficult to maintain the drive necessary to grow, adapt, and succeed. Therefore, one could argue that inspiration is a significant component of the human experience that bridges the gap between art and science.

Ophthalmic Disorders in Historical Paintings

El Greco (1541–1614) is often regarded as one of the most remarkable painters to emerge from the Middle Ages. He was born on the island of Crete, which belonged to the Republic of Venice at the time of his birth. He went to Venice when he was 27 years old and spent the next three years there honing his painting skills. His teachers were Titian, Tintoretto, and Veronese, among others. He was an employee at the workshop of Tintoretto. In the year 1570, he relocated to Rome, where he became acquainted with the works of Michelangelo and Raphael. Around the year 1575, he uprooted his life in Rome and settled in Spain. It's conceivable that the plague pandemic, which also claimed Titian's life, was the reason why they left Rome. After that, he moved to Spain and settled in Toledo, which is close to Madrid. It was there that he was given the moniker El Greco, which literally translates to The Greek. In the majority of his paintings, he produced mysteriously religious scenes that had forms that were extended vertically. His style was revolutionary at that era. The consensus among ophthalmologists is that he was born with an uncorrected astigmatism. Even though there was no treatment for astigmatism at the time, he was able to achieve global notoriety because to his distinctive appearance and approach. The figures in his religious paintings had a curious tendency toward becoming even more elongated, as if they were floating upward toward paradise. No one knows for certain whether or not he really had astigmatism; nonetheless, it is extremely likely due to the fact that his paintings are very distinct from the style of his contemporaries, and it is not necessary to say that the outcome was startling for the public. Rembrandt van Rijn was a well-known Dutch painter who lived from 1606 to 1669. His name is nearly synonymous with the term "fine arts." Because of his latter works and his shift in aesthetic, critics and ophthalmologists came to the conclusion that he had acquired eye difficulties, probably including cataract and macular degeneration, although he did not survive for very long.

After beginning his work in Leiden, he relocated to Amsterdam, which is where he quickly rose to prominence and became well-known in the city. By 1640, he was living well in a big mansion in the middle of Amsterdam, was married to a beautiful aristocratic woman, and had a sizable number of pupils under his tutelage. Only one of his four children, a daughter, made it to adulthood after the death of his wife in 1642, presumably owing to TB. She had left him with four children. The plague struck Amsterdam in 1656, causing the deaths of 18,000 individuals that year. In the same year, Rembrandt was forced to declare bankruptcy; however, he maintained strong relationships with middle-class merchants and physicians, and he continued to receive orders from these wealthy people for the rest of his life. Rembrandt's career was sustained by the steady flow of commissions from these wealthy patrons. Around the age of 50, he began experiencing presbyopia, which was the first ailment to affect him. In a photo of the family, his mother can be seen wearing reading glasses, which were already commonplace throughout his lifetime. Because he was still capable to painting the minute details in his latter works, one may be certain that he had a presbyopic correction, which was unique for the time period in which he lived. Because it seems in his self-portraits that one eye may move a little outwards to a modest degree, several scholars hypothesised that he may have had strabismus; however, other authors questioned this result. It's possible that as he got older, he acquired a nuclear-type (central) cataract, which led to a little decline in his visual acuity and a shift in the way he differentiated

between colours. In comparison to the paintings he made when he was younger, the ones he does now are more darker. Rembrandt is a great example of someone who was able to continue creating art right up to the day he passed away, despite the fact that he may have suffered from some age-related eye difficulties throughout his lifetime. Even in his latter years, he was still capable of painting intricate details, despite the fact that the tonality of his paintings shifted with time.

Goya y Lucientes (1746–1828) is considered to be one of the most influential painters to come out of Spain. He suffered from an unidentified illness in the middle of his career. He suffered from a loss of vision and hearing, ringing in the ears, vertigo, and weakness on one side of his body. In addition, he felt malaise, stomach discomfort, and bewilderment. He made a full recovery over the subsequent couple of months, but the deafness lasted for the rest of his life. Because of his low visual acuity, he was unable to paint for many months, which naturally caused him sorrow. After that, he continued painting, but owing to his permanent loss of hearing, he was unable to converse with his pupils about the paintings. Based on the clinical indications and symptoms, such as loss of vision and hearing, motor impairment, and behavioural abnormalities, it was thought that he had contracted syphilis. It is speculated that it was a case of late-onset syphilis, which was very typical during that time period. In spite of the fact that he was diagnosed with syphilis, he lived a full life. In 1792, when he was 46 years old, he began experiencing symptoms, and he passed away in 1828, when he was 82 years old. Some believe that Goya's illness was an immunologic condition, such as the Vogt–Koyanagi–Harada syndrome. However, this theory is not universally accepted. Inflammation inside the eye, problems with hearing, and a loss of colour in the skin and hair are typical symptoms. There is no evidence to suggest that Goya had a loss of pigmentation in the skin or hair throughout his lifetime. The patient may have also been suffering from Cogan syndrome, which is characterised by inflammation of the cornea, vertigo, ringing noises in the ear, deafness, lethargy, and weight loss. Other probable causes include: It's possible that the hearing issue may be severe and ongoing. A further medical professional proposed an intriguing theory that Goya could have been suffering from lead poisoning. Lead poisoning may induce mental and physical issues, which is something that Goya also experienced. At the time of Goya, lead served as the foundation for most paints.

Studies of Arts, Creativity, and Learning

In spite of the fact that the arts and sciences are quite different from one another, there is accumulating evidence in the form of quantitative study that shows that the learning of science may be facilitated by interactions with the arts. Drawing, visual aesthetics, and dance observation are all examples of activities that are now the focus of study that is starting to investigate explicit neuroscientific ideas on their impacts. Visual art learning is dependent on a complicated network of perceptual, higher cognitive, and motor skills; this suggests a similar brain substrate and a significant potential for cross-cognitive transfer in both learning and creativity. In only a few short weeks, for instance, human newborns are able to replicate an action such as sticking out the tongue in response to someone else sticking out their tongue at them. How does the child know exactly what motor action plans to follow based just on a visual input? There is a relationship between the visual arts and movement, just as there is a connection between the auditory arts and music.

This capacity may be explained by mirror neurons, which translate visual information into motor activity. Visual art has been a means of communication since prehistoric times; the act of experiencing art and aesthetic appreciation in the "receiver" also has the capacity to have a cross-cognitive influence at any moment throughout the process of an individual's growth. It has been shown that compositional universals

are the overarching principles that govern the creation of visual artworks throughout time and culture (Arnheim, 1988; Tyler, 1998, 2007; Ramachandran and Hirstein, 1999). A significant mental quality is the capacity to be open throughout the creative process to the possibility of ambiguity and uncertainty. Tolerance for ambiguity is also a crucial trait in the study of science in order to cope with the complexity and ambiguities of scientific information.

\This is because scientific knowledge is often rather complicated. In contrast to the common perception, science is full with ambiguities and inconsistencies, all of which need to be addressed before one can make any further progress in their education. Thinking that is allusive based just on appearance may add intuitive judgement to thoughts that are too logical and can lead to the discovery of metaphors that have significant significance (Tucker et al., 1982; Smolucha and Smolucha, 1985; Peterson, 1993). This way of thinking might be cultivated via the use of approaches that are centred on visual education, and its usefulness could be shown in a range of academic fields. Prior research on neurological patients has shown a conceptual link between drawing and language (Gainotti et al., 1983; Swindell et al., 1988; Kirk and Kertesz, 1989).

These researchers hypothesised that drawing may access the semantic system in a manner that improves cognitive access. This research is relevant to the practise of accessible art because it shows a conceptual link between drawing and language. Mechanisms that are used to process spatial representations in the visual modality are revealed to be shared with other modalities, such as the processing of pitch in music, according to research that investigated the question of whether or not different cognitive modalities share the same mechanisms (Douglas and Bilkey, 2007). These results have significance not just for educational practises in the scientific sphere, but also for educational practises in general, pedagogical principles, and general educational and social policies.

OBJECTIVES

1. To study painting art
2. To study role of painting arts in vision

THE NEED FOR LEARNING ENHANCEMENT

The improvement of learning is still a difficult task, especially within the context of an educational institution. It is a well-known fact that the capacity to absorb vast quantities of facts and ideas is greatly enhanced by placing them in a broader context of relevance to both the issues of the quality of everyday life and the larger goals of human advancement to a more evolved status of society as a whole. Despite the fact that direct explanation seems to be the best method for teaching any specific subject on the curriculum, it is also well-known that this capacity can be greatly enhanced. Because of these more expansive ambitions, there is a pressing need to do study into the connection that exists between artistic education and practise.

The need is very pressing due to the fact that the United States continues to have a poor level of arts education and scientific literacy, and educational solutions are woefully inadequate. It is possible that the natural sciences will be seen as more approachable and more desirable as a subject of study to the degree that they may be related with relevant fields of creative activity. In addition, there is a growing body of research in the field of neuroscience that lends credence to the concept of facilitating the transfer of learning skills gained in the arts to other areas of cognitive study. The arts are much too often undervalued in our nation's

educational institutions. In reaction to this marginalisation, educators have attempted to legitimise the arts by pointing to their instrumental importance in fostering critical thinking in non-arts courses that are perceived to be of a higher priority, such as reading or mathematics (Murfee, 1995). There has, however, been a paucity of evidence that is sufficiently persuasive to suggest that the study of the arts improves academic performance or raises standardised test results (Winner and Hetland, 2000).

In order to get an accurate comprehension of whether or not training in the arts may be transferred to improved academic achievement, we must first evaluate what is really learnt in the arts and then explain the processes that underpin a transfer hypothesis. Hetland et al. (2007) chose the visual arts as their point of origin in order to conduct their study, which was a qualitative and ethnographic meta-analysis of the many types of cognitive skills that are actually taught in art classrooms. In order to be able to establish a convincing theoretical transfer hypothesis, it was necessary to first get an understanding of what is being taught. It was determined that students in visual arts programmes are instructed in eight different "studio habits of thought." Students are taught the following skills: (1) to observe, which means to see with acuity; (2) to envision, which means to generate mental images and imagine; (3) to express, which means to find their own personal voice; (4) to reflect, which means to think meta-cognitively about their decisions, make critical and evaluative judgements, and justify them; (5) to engage and persist, which means to work through frustration; (6) to stretch and explore, which means to take risks, "muck around," and This piece of work is the first of its type to illustrate in an objective manner the sorts of cognitive abilities and methods of working that are covered in art schools. The group is now researching the notion that the capacity to visualise, which is taught in lessons on visual arts, may develop the student's ability to think geometrically.

LEARNING AND ACTIVE INVOLVEMENT IN THE ARTS

The increasing number of people who are interested in the study of how people learn pushes researchers to investigate the enlarged possibilities of conceptual interrelationships that are afforded by education in the arts. Training in the arts, or even just exposure to them, may be of special help to the arduous work of comprehending and efficiently boosting learning across different fields of study, ages, and cultural specificities, which is a major priority all over the globe.

Learning through creative activities including musical performance, drawing, visual aesthetics, and dance is thought to have an impact on other types of learning, which is why contemporary research is starting to investigate novel neuroscientific concepts in this area. Drawing shares cortical substrate with writing, access to the semantic system, memory, naming, imagery, constructional skills, and the capacity to estimate accurate spatial connections, as has begun to be shown by research using neuroimaging technology. In particular, learning in the field of visual art is dependent on an intricate network of perceptual, higher cognitive, and motor skills. This points to a similar brain substrate and a significant potential for cross-cognitive transfer in learning and creativity. For example, a case study conducted by Solso (2001) found significant processing differences between the brains of a professional artist and a novice artist while they were drawing in the scanner. The comparative analysis of the activation patterns suggested that the brain of the artist possessed a more efficient network of cognitive processing. On the basis of changes in alpha rhythm as a function of amount of artistic training, results that are congruent with some of these findings have also been published.

ARTS, LEARNING, AND INSPIRATION

The emotional motivation to be active in the learning process is another essential component that may be assisted by the arts. This is a fundamental feature of the learning process. An integrative mental function is one that is at the junction of (a) cognitive, (b) emotional, and (c) conative processes. Inspiration lies at this intersection. (Conative processes are those goal-directed functions that are related to the traditional third component of the mind championed by Kant in 1788 and McDougall in 1923, comprising the desire, ambition, and will.) As a result, inspiration is a component of mental experience that involves not only cortical circuitry but also its integration with the limbic system and medial frontal structures, which are believed to mediate the experience of emotional desires, motivational rewards, and the appreciation of the integrative aesthetic values of the impinging stimuli (Damásio, 1994). In this way, inspiration is an aspect of mental experience that involves not just the cortical circuitry but also its integration with the limbic system

This system goes beyond the traditional ideas of beauty to include the grace and dynamism of athletic performances, the economy and evocativeness of political addresses, the interconnected synergy of natural ecological systems, and an infinite number of other examples from across the spectrum of our world knowledge. In a way, inspiration may transform almost any career or job in life into a satisfying avocation that contributes to the accomplishment of one's life objectives. Individuals are motivated to study, to accomplish, and to pursue meaningful careers when they have the perception that they are a part of an organisation that is greater than themselves. On the other hand, when their employment is completing the same mundane tasks day in and day out, they lack the enthusiasm and desire necessary to grow, adapt, and ultimately succeed.

DISCUSSION

This article discussed a few eye illnesses, each one of which might have had an impact on the artistic direction taken by painters. The eyesight of an artist may be affected by a variety of conditions, including myopia, presbyopia, amblyopia, colour deficits, visual field defects, lenticular, and macular alterations. The cataract method that was utilised during the period of the impressionists may seem brutal and primitive to us now, yet it was common practise back then. It was often hard for the artists to continue their work because of thick lenses, which reduced their visual field, altered their colour discrimination, and created a large diopter difference between the operated and unoperated eyes. Today, we do a procedure that just takes one day, and our surgical method is flawless.

CONCLUSION

The patients will be able to resume their regular activities the next day. In the instance of Monet, it required a period of time equal to six months before he was able to work again. Additional eye disorders that may be treated include glaucoma and age-related macular degeneration (AMD). Glaucoma may be treated in a variety of ways, including eye drops and a variety of surgical procedures. Glaucoma is very distinct from cataract and retinal illnesses due to the fact that the progression of visual impairment is slow and painless (except for angle-closure glaucoma attack, which is very painful). Even at the most advanced stage of glaucoma, the core macular fibres continue to be present. Painters are able to operate with a limited visual field because they can adjust for the visual field defect by moving their heads. As a result, painters are able to work with a restricted visual field. Even while glaucoma is still known as the "thief of sight," early identification has made it possible to maintain eyesight for far longer periods of time than was possible only a few decades ago. Vitamins, in the case of dry macular degeneration, may be a helpful treatment for age-

related macular degeneration (AMD), which can be treated efficiently with intraocular injections of anti-vascular endothelial growth factor (VEGF). Laser therapy, vitrectomy, or cataract surgery are all viable treatment options for the ocular consequences of diabetes mellitus. We are now at a period when we are able to restore the visual acuity of a person who has had cataract surgery, and the optical outcome is that the individual sees as well as a 20-year-old would.

REFERENCES

1. Marmor MF, Ravin JG. *The Artist's Eyes: Vision and the History of Art*. London: Abrams; 2009.
2. Simunovic MP. "The El Greco fallacy" fallacy. *JAMA Ophthalmol*. 2014;132(4):491–94.
3. Trevor-Roper PD. *The World Through Blunted Sight*. 3rd ed. London: Souvenir Press; 1997.
4. Marmor MF. Vision, eye disease, and art: 2015 Keeler Lecture. *Eye (London)*. 2016;30(2):287–303.
5. Mondero NE, Crotty RJ, West RW. Was Rembrandt strabismic? *Optom Vis Sci*. 2013;90(9):970–79.
6. Marcus EL, Clarfield AM. Rembrandt's late self-portraits: psychological and medical aspects. *Int J Aging Hum Dev*. 2002;55(1):25–49.
7. Wisner I, Parnass AJ, Rachmiel R, Westreich M, Friedman T. Rembrandt's ocular pathologies. *Ophthalm Plast Reconstr Surg*. 2016;32(4):305–9.
8. Ravin JG, Ravin TB. What ailed Goya? *Surv Ophthalmol*. 1999;44(2):163–70.
9. Cawthorne T. Goya's illness. *Proc R Soc Med*. 1962;55:213–17.
10. Guijarro-Castro C. Could neurological illness have influenced Goya's pictorial style? *Neurosci Hist*. 2013;1(1):12–20.
11. Niederland WG. Goya's illness: a case of lead encephalopathy? *NY State J Med*. 1972;72(3):413–18.
12. Ravin JG. Monet's cataracts. *JAMA*. 1985;25(4):394–99.