

Why do humans create art

Jaden Chyan

Fusion Academy, Cupertino, USA

jaden.app@outlook.com

Abstract. Based on an anthropological and biological perspective, this analysis argues that humans are driven to create and consume art because it fulfills deep-seated biological and psychological needs. Drawing on Victor Turner's concept of liminality, it posits that art provides a transitional space that breaks social norms and fosters *communitas*, much like ritualistic hazing. Furthermore, neurological evidence demonstrates that art activates brain regions associated with pleasure and reward, suggesting it hijacks primal neural pathways to evoke intense emotional responses.

Keywords: artistic drive, ritualistic art, liminality, *communitas*

1. Introduction

From prehistoric cave paintings to modern digital installations, humans across cultures and centuries have displayed an insatiable drive to produce and engage with art. This persistent phenomenon suggests that art is not a mere luxury of advanced civilizations, but rather a universal feature of humanity [1]. Archaeological findings reveal that even early *Homo sapiens* invested significant time and energy in symbolic expression, often in environments where survival was precarious. The presence of handprints in caves, carved figurines, and ritualistic objects indicates that art was entwined with spiritual, social, and emotional aspects of early human communities. These artifacts demonstrate that the impulse to create art predates organized religion, written language, and even agriculture. In modern contexts, art has diversified into countless forms—painting, sculpture, music, dance, literature, film, and digital media—yet the motivations remain strikingly similar: art provides emotional release, fosters communal identity, and engages the neurological systems that govern reward and pleasure.

Hastedt and James, C. (2016) looked at whether or not drawing is capable of improving mood, and specifically what type of drawing in their article [2]. After experiencing a sad emotion, the participants draw over a period of 4 days. Some were told to draw to express their emotion, while others draw to distract themselves through imitation. The results find that surveyed life satisfaction rates were higher in those that drew to imitate, however they both increased. The researchers noted that these results are opposite to those found with expressive writing. This is a simple, easily understandable study that can be used to show the mood benefits of art. Although It does not provide biological reasoning, it can still be used in the argument to set the baseline of drawing having an impact on mood.

2. Critical analysis

By examining Victor Turner's (1920-1983) work *The Ritual Process: Structure and Anti-Structure* (1977) [3], we can examine why people are attracted to art through an anthropological perspective. Victor Turner's concept of "liminality" can explain the phenomenon of art. Turner defines liminality as being "betwixt and between the positions assigned and arrayed by law, custom, convention, and ceremonial." One ritual in our modern society that demonstrates a liminality can be found in college campuses. College fraternities often hold hazing rituals where potential members participate in humiliating and even dangerous activities. Some hazing practices force members to commit acts that would be considered unthinkable were it not for the excuse of member initiation. On page 106, Turner provides a list of social constructs that change during liminality. Some of these social distinctions can be found during hazing rituals, such as: "nakedness", "absence of status", "no distinctions of wealth", and "transition." One argument that Greek life members use to justify their dangerous hazing rituals is that it builds a strong bond. This aligns with Victor Turner's idea of "*communitas*." Bonds between fraternity members seem to reflect a sense of *communitas*, as many alumni members speak fondly of their experience. Alumni also commonly donate to their college fraternities, which shows that they developed a significant bond. Art can serve as a tool to invoke liminality and *communitas* in a similar way to hazing. Art provides a shared interest for people from diverse backgrounds to find common ground. Discussion and participation in art break

away from boundaries of normal society. Perhaps this is why people during teenage years are so drawn to different art forms. Many people recall a period in their teenage years where they were fans of certain musical artists. Questioning the boundaries and social norms of society, they turn to the liminal space that art provides. In this way, the music serves as a transitional period in one's life. Turner's framework also helps us understand why art often emerges most powerfully in transitional moments of life. Weddings, funerals, graduations, and revolutions all employ artistic elements—songs, symbols, costumes, or performances—to underscore the passage from one state of being to another. In these contexts, art functions not merely as decoration but as a catalyst for transformation. For example, national anthems and revolutionary music generate a sense of collective identity that binds strangers together in moments of uncertainty. Similarly, protest art and street murals provide visual cues of solidarity, marking liminal spaces where traditional authority is questioned and alternative futures are imagined. Art, therefore, is not an isolated activity but a medium through which societies navigate ambiguity and reimagine their values.

Art can also be seen from a biological level as opposed to subconscious. A study by Blood and Zatorre (2001) looked at brain activity in musicians while they listened to intensely pleasurable music [4]. Specifically, the researchers looked for the euphoric chills that certain songs would elicit from the participants. The tomography shows that the intensity of the chill would affect brain regions related to survival stimuli such as pleasure, arousal, and emotion. These brain regions are also activated by food, sex, and recreational drugs. Music seems to have taken advantage of certain neurological mechanisms in the amygdala to induce pleasure. It fulfills certain needs that the brain was evolved to crave. This study examines the brain's responses to music using emission tomography. The researchers specifically looked for the euphoric chills that certain songs would elicit from the participants. This could be useful when examining art's intertwining with human brain function. It demonstrates how art exploits the brain's wiring to induce pleasure. It gives a biological explanation for our seemingly mystical connection to music. The biological explanation of art's impact highlights how evolution may have inadvertently shaped humans to be receptive to aesthetic experiences. Beyond Blood and Zatorre's (2001) research on musical chills, additional studies suggest that rhythmic patterns in music align with heartbeat and respiratory cycles, which may explain why drumming and chanting are integral to rituals worldwide. Similarly, the appreciation of visual symmetry and color may have roots in evolutionary adaptations: symmetry often signals genetic fitness in potential mates, while bright colors could indicate edible, nutritious food sources. By co-opting these preexisting neural pathways, art manages to produce pleasure and meaning without directly contributing to survival. This paradox underscores art's unique role—it both hijacks evolutionary mechanisms and enriches human life beyond biological necessity.

Certain forms of art have the ability to influence how we interact with each other. Bal and Veltkamp test if reading fiction affects a participant's ability to empathize with others [5]. It is assumed that fiction trains the reader's social skills because it simulates social experiences. The results of the experiment show that people who were emotionally transported into the fiction story showed more empathy over the course of a week. Lack of emotional transportation resulted in lowered levels of empathy. This seems to suggest that fictional stories indeed have an impact on empathy. The fictional stories were able to give the reader insight into the perspective of others. Art can subconsciously train the viewer and change the way they think about the external world. This article is a great example of one of the many ways in which art shapes our perspective and, in turn, our actions. The psychological and social functions of art extend into everyday experiences of identity formation and moral development. Fictional narratives, for instance, allow readers to inhabit lives unlike their own, rehearsing complex moral dilemmas in a safe imaginative space. Films and theater performances create shared emotional journeys that can reduce prejudice by humanizing unfamiliar groups. Neuroscientific research on mirror neurons suggests that observing artistic performance, such as dance or acting, may activate the same neural pathways as performing the actions ourselves, thus deepening our empathic connection. In this way, art is not only a reflection of society but also a training ground for the social imagination, shaping how humans perceive and interact with one another.

3. Conclusion

In conclusion, the creation and appreciation of art cannot be reduced to mere ornamentation or cultural habit—it is deeply rooted in the very structure of human psychology and biology. From an anthropological perspective, art provides a liminal space where individuals step outside of social norms and encounter a sense of *communitas*, much like the bonding produced in ritualistic practices. At the same time, neuroscience reveals that art activates primal pleasure centers in the brain, hijacking evolutionary mechanisms designed for survival. Furthermore, the capacity of art—whether through drawing, music, or literature—to alter mood, foster empathy, and shape social understanding highlights its indispensable role in human development. Ultimately, art persists because it addresses fundamental human needs: the desire for connection, the search for meaning, and the pursuit of pleasure. This synthesis of biology, psychology, and anthropology underscores why art is not merely an accessory to human life, but a central, defining element of it.

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Appendix: translation

Here is an attempt to translate selections of the classical Chinese texts *The History of Lenses (Jingshi)* into English, which was written by a young maker of lenses in Suzhou named Sun Yunqiu (1650? --after 1681). The classical Chinese texts *Jingshi* is included as the Appendix in Sun Chengsheng's article (Sun 2007; Szonyi 1998; Chun 2009) [6-8], who is affiliated with Institute for the History of Natural Science, Chinese Academy of Sciences. The historian of science Sun Chengsheng's discovery in 2007 of Sun Yunqiu's *The History of Lenses (Jingshi)* solved a problem in the history of the telescope in China. Chen Kaijun analyzes Sun Yunqiu's *Jingshi* in his article "Transcultural Lenses: Wrapping the Foreignness for Sale in the History of Lenses" (Chen 2008) [9].



Figure 1. Illustration “Through Pictures and Poetry: A History of Lenses (1681).” Rare manuscript, Shanghai Municipal Library

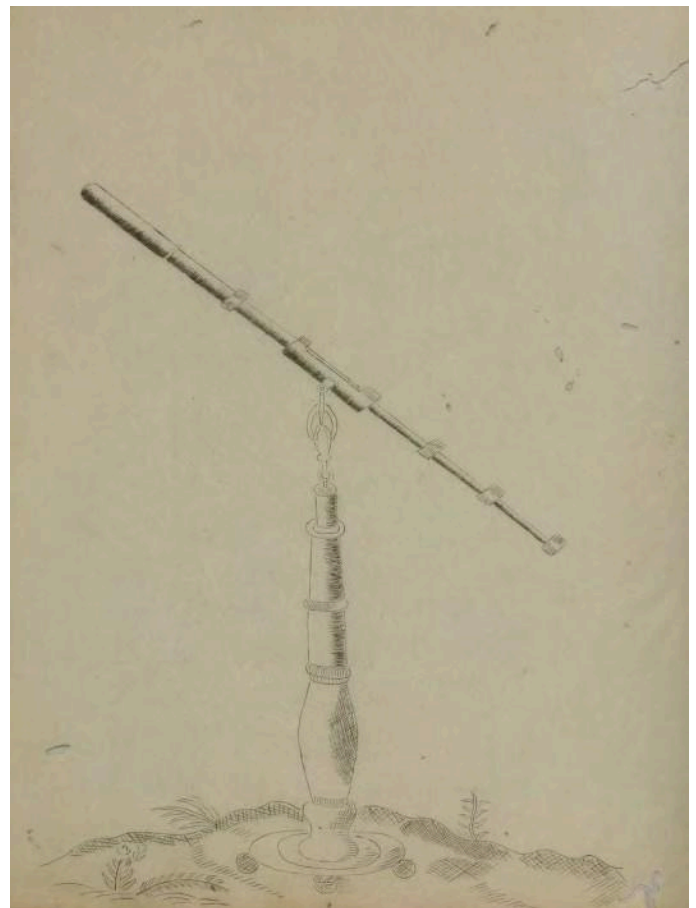


Figure 2. Illustration from *On the Telescope* by Tang Daowei’s [Adam Schall von Bell’s] /97[10]. Adam Schall von Bell, author of *On the Telescope*, 1626. He was recruited to serve the Jesuit mission in China by Nicholas Trigault. He arrived in China in July 1619. He was named director of the Imperial Bureau of Astronomy in 1645. Other texts mentioning the telescope published in China during the first decades of the seventeenth century include Manuel Dias’s (Yang Manuo) 1615 *Tian wen lue* (Problems of Astronomy)

This instrument (Figure 4) is suitable for use in high places like towers and platforms to look at mountains, rivers and lakes, forests and villages in the distance. They will be as if before your eyes. If something is several dozens of leagues away, or over a pace away, you can use it to look at people and observe objects. They will be even clearer than if they were before your eyes. There are many uses, which are all written in Tang Daowei’s [Adam Schall von Bell’s] *On the Telescope* (Yuanjing shuo), so I won’t list them here [11]. The pair of tubes can be extended and retracted. If the object is near, the tube must be extended; if the object is far, the tube must be retracted; if it is extended and retracted accordingly, stop adjusting when the image is clear. Adjusting for a distance of one or two leagues is rather the same as adjusting for a distance of 20 or 30 leagues, it’s only within one league that you will have to adjust it more frequently [11].

When you look through the telescope, just use one eye, and your eyesight will then be at its full powers. Even though people’s eyes are the same, their powers of sight are unequal, so that the distance established by person A will not be suitable for person B. One must take the draws and extend and retract them; the slightest change is enough. Bo Zijue advised that one must ordinarily practice seeing through the telescope for a number of days, going from the obvious to the minute, from the near to the far, extending and retracting the draws; gradually becoming familiar, then later if you happen on occasion to take a look through it, you will be able to see. If you are just a hair off, the light will be diminished, and this is the fault of the instrument [10].

People who are farsighted should stand behind the telescope and extend the tube; people who are nearsighted should stand behind the telescope and retract the tube. No two people’s eyesight will be alike, so everyone must adjust it. One must put the telescope on a stand, and then it won’t wobble. If you want to see far away, hold the stand, and adjust it left and right, and do it in

a serene and unhurried manner. Don't allow the front of the telescope to face the sun; the sun's rays will dazzle your eyes, and the reflection in the telescope will make you nauseous. If you must look at an image facing the sun, install the base of the telescope in a dark place.

Do not touch the lenses with sweaty hands and soil them. If they get dusty, use a clean cloth to wipe them lightly, and the strength of the lenses will be as before. Don't rub them with silk. One should avoid doing so with all lenses.'

此鏡宜於樓臺高處用之，遠視山川河海、樹木村落，如在目前。若十數裏之內、千百步之外，取以觀人鑒物，較之觀面，更覺分明。利用種種，具載湯道未先生《遠鏡說》中，茲不贅列。筒筒相套者，取其可伸可縮也。物形彌近，筒須伸長；物形彌遠，筒須收短；逐分伸縮，象顯即止。若收至一二裏，與二三十裏略同，惟一裏以內，收放頗多。鏡必置架，方不搖動。視欲開廣，挪動鏡床，左右上下，宜緩勿急。前鏡勿對日光，日光眩目，鏡光反昏。若必需對日視象，須於暗處置架。視鏡止用一目，目力乃專。人目雖同，其光萬有不齊，如甲所定之分寸，乙視之則不合。須以筒進退之，極微為得。薄子珏云，須平時習視數日，由顯之微，自近至遠，轉移進退，久久馴熟，然後臨時舉目便知。倘一毫未合，光明必減，奚鏡之咎。衰目人後鏡略伸，短視人後鏡略縮，目光亦萬不能同，自調為得。鏡面勿沾手澤。倘蒙塵垢，以淨布輕輕拂拭，即復光明。勿用綢絹揩摩。諸鏡仿此。

Figure 3. Original Chinese text

The mirror is small as a coin, and can be used to examine one's countenance, to ensure that one's beard and eyebrows are all in order. Since it is not as cumbersome as a bronze mirror, one can avoid having one's robe and cap out of order. It's even more convenient for the beauty, and can hang from her fan, or be tied into the corner of her handkerchief, so that she can smooth her hair at any time, or prettify her countenance on the spot, looking at her image and becoming more charming. It is a rare treasure for the fragrant boudoir.

鏡小如錢，用以鑒形，須眉畢備。既不如銅鏡之累墜，可免衣冠不飾之譏。更與美女相宜，懸之扇頭，系諸帕角，隨時掠鬢，在處修容，顧影生妍，香閨異寶。

Figure 4. Original Chinese text