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Ars et Malum. The Fascination with Evil in Art in the Context of Evolutionary Psychology and Neuroscience

Abstract

The article refers to the problem of the aesthetics of evil. It presents empirical data suggesting that presenting bad acts in an aesthetically attractive way causes them to be evaluated more positively. An explanation of this phenomenon based on evolutionary psychology and neuroscience is provided. Based on the analyses, conclusions are formulated regarding the potential threats of the aestheticization of evil as a practice in art.

Keywords: art, morality, beauty, evil, imitation, evolutionary psychology, neuroscience

Sztuka i zło. Fascynacja złem w sztuce w kontekście psychologii ewolucyjnej i neuronauki

Streszczenie

Artykuł odnosi się do problemu estetyki zła. Przedstawiono w nim dane empiryczne świadczące o tym, że przedstawianie złych czynów w sposób atrakcyjny estetycznie sprawia, że są one oce- niane bardziej pozytywnie. Przedstawiono wyjaśnienie tego zjawiska sformułowane na gruncie psychologii ewolucyjnej i neuronauki. Na bazie dokonanych analiz sformułowano konkluzje odnośnie do potencjalnych zagrożeń związanych z estetyzacją zła jako praktyką w sztuce.

Słowa kluczowe: sztuka, moralność, piękno, zło, naśladowanie, psychologia ewolucyjna, neu- ronauka

Introduction

Beauty in philosophical literature is usually associated with goodness, at least since Plato made this connection in *The Symposium*. Within this convention, good deeds are often called beautiful, and what is beautiful is also considered as good. Beauty is difficult to separate from goodness. Slotkin (2017) believes that aesthetic patterns are prescriptive and may contain or imply moral components. Indeed, art has an impact on morality: there is a growing body of empirical data supporting this claim, as I will demonstrate.

Aesthetics is associated with experiences of a hedonic, emotional or cognitive nature (Florek, 2010). All these factors can influence the recipient of a work of art, motivating him or her - more or less openly - not only to act goodly, but also to act evilly. Sometimes it is not easy to notice this influence, but both art history and empirical aesthetics provide evidence that even purely formal features of an image,

Jheronymus Bosch's-Hertogenbosch, 1450 c. – 1516, *Cztery wizje zaświatów (1)*, Gallerie Academia Venezia.
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regardless of its content, can induce a positive affect (Ramachandran, Hirstein, 1999, Zeki, 1999). Evoking positive emotions may also cause more positive assessment of the content of the artwork.

Therefore, sometimes art that shows evil deeds may contribute to moral corruption. As Hospers (2018) notes, Plato expresses this belief in *The Republic* when, describing the method of educating future rulers, he forbids them to watch shows in which bad people win. In opposition to Plato there is also an approach that recognizes beauty as an autonomous value, which is completely independent of goodness. It is obvious that someone can be beautiful but commit evidently evil acts. It is interesting that in the Judeo-Christian tradition, Lucifer, the most evil of all angels, was supposed to be simultaneously the most beautiful one (Biel, 2016). It also seems evident that an evil act can take a beautiful form. In this sense, evil can be aesthetically fascinating, which – independently of the axiological independence of beauty and goodness – can have disturbing consequences.

Gołaszewska (1994) is probably the first philosopher in Poland who drew attention to the problem of the fascination with evil in literature and art. As an example, she refers to, among others: paintings by Hieronymus Bosch, or movies directed by Quentin Tarantino, in which scenes of bloody violence are presented in a way that evokes a positive aesthetic experience.

Evil was and is also interesting to writers and poets. Homer's poems are full of descriptions of immoral acts; similarly, as it is in contemporary literary works. In the case of some writers, moral evil is even the object of their fascination (Gołaszewska, 1994).

Evolutionarily oriented cognitive neuropsychology provides arguments for the thesis that people not only can be motivated to imitate aesthetically attractive acts that are evidently evil, but also may be prone to judge them more positively. Unfortunately, surprisingly little has been written about the relationship between beauty and moral goodness from a scientific perspective. Much remains to be explained about psychological and neuropsychological processes that are responsible for the correlation between beauty and evil. Fortunately, recent findings in evolutionary psychology and neuropsychology have shed new light on this issue.

1. Evolutionary Context – Attention and Modeling

Evil and beauty often appear in horror films and novels. You may wonder why this type of fiction has its audience. Carroll (1990) argues that monsters fascinate us because they are disgusting and repulsive. He notices also that *In horror fictions, the emotions of audience are supposed to mirror those of positive human characters in certain, but not all, respects* (Carroll, 1990, p. 18). From an evolutionary perspective, we can say that what triggers emotions, especially negative ones, is important and cannot be neglected. Ignoring such things can lead to death because fear and disgust usually signal danger.

When it comes to stimuli evoking fear, they have cognitive priority. Omitting them may be the last mistake in life. For this reason, there are psychological mechanisms that evolve to trigger fear even if danger is only possible. Usually, a false alarm is better than the error of not noticing a real threat. This is probably why anxiety disorders and phobias are so common (Marx, Nesse, 1994).

Fear reactions to phylogenetically old threats develop more often than to much more dangerous ones which appeared later, as a result of the cultural revolution, such as electric cells, cars or firearms. This is because the first ones have been threatening our ancestors for time long enough for evolution of the brain mechanism responsible for protection against them. Human brains learn to respond with fear to these old threats much faster than to new ones; this phenomenon is called primed condition- ing (Mineka, 1992).

Similarly, the human brain has learned to effectively respond with positive affect to all stimuli that increase the chance of survival, including those which are deemed as good and beautiful. Differentiating whether a positive reaction is a response to beauty or to goodness was probably a much later development in evolution, associated with the development of conscious thinking. Because these processes are relatively new, from the phylogenetic perspective, they are more unreliable than old ones, what can cause *inter alia* grave mistakes in moral judgements.

We have to also remember that the modern brain faces the negative consequences of the phenomenon called evolutionary lag. Biological evolution is slower than cul- tural one and there are no ready-made neurobiological mechanisms responsible for appropriate responses to cultural phenomena. Works of art and many other artifacts have the ability to evoke a positive affective response to stimuli that are biologi- cally irrelevant or harmful. This is the case, among others, with paintings depicting landscapes, objects and bodies (e.g. pornography). However, these images are two- dimensional and have no biological value that real three-dimensional objects have. The brain, which is phylogenetically old, is quite easily fooled by these new cultural inventions.

A particularly interesting category of evolutionarily determined anxiety reactions are those that arise in response to dangerous persons and their evil deeds. Presenting such people or their acts, or even the situations and circumstances in which they may occur, not only causes fear, but also focuses attention. For these reasons they are attractive subjects for the media (Florek, 2011) and art. As a result, people become famous, and being famous is better for some people than being unnoticed, regardless of what makes them famous.

In evolutionary psychology there is a debate concerning adaptiveness of fiction. Tooby and Cosmides (2001) claim that it can be useful because it allows to spot and consider possible problems, which are rather rare in real life, and work out its solutions or learn how to deal with them from fictional characters. When we adapt the perspective of an epic figure we can imagine what we can do in a given situation. The ability to take perspective of another person and to identify with her or him is our innate ability. It can have beneficial and prosocial consequences if this person is a good one, but it can be also dangerous for society, if we adapt cognitive and emotional

perspective of a perpetrator. Indeed, there is data suggesting that people sometimes imitate evil characters depicted in movies or novels (Jarvis, 2007).

Viewing violent media or fiction has some influence on aggressive behavior. There is a lot of empirical data that proves the phenomenon of imitation of criminal behavior. In this context we talk about the *copycat effect*. Copycat crime is *crime inspired by another crime that has been publicized in the news media or fictionally or artistically represented whereby the offender incorporates aspects of the original offense into a new crime* (Helfgott, 2015, p. 47). Simpson (2003, p. 146) referring to copycat effect points out that *cultural obsession with real and imagined murder infiltrates the individual psyche like a particularly hardy strain of virus*. There are over one thousand movies about serial killers in The Internet Movie Database; the majority of them were made since 1990 (Jarvis, 2007).

Sexual stimuli have a similar force to those related to violence. Interest in sex was and still is a necessary condition for passing on one's genes to subsequent genera- tions. All ancestors of modern people must have had this interest to some extent. It is therefore not surprising that stimuli related to sex and violence can be used to attract attention.

This fact has been utilized not only by the media, but also by artists for centuries. In this article, I will omit issues related to sex, because they deserve a separate study. I will limit myself to stating that exposure to materials containing sex and violence is associated with dangerous consequences (Krahe, 2021). Theodor Bundy, one of the most famous and at the same time cruel sexual serial killers, argued, although it is difficult to assess how truly, that what led him to his crimes was fascination with pornography. Perhaps pornography is the phenomenon in which the most clearly an aesthetic and hedonic experience can alleviate the negative moral assessment of actions.

Visual arts and literature presenting immoral people and acts carry the risk of being followed. Especially if they are attractive in any way, also aesthetically. According to the classical social learning theory by Bandura (1969), there is a tendency to mimic the behavior of such people. The good example of this is Werther effect, when the suicide of a famous person inspires other people to kill themselves too. The phenomenon can occur also after watching the suicide of a fictional character in television (Schmidtke, Häfner, 1988).

It is also worth mentioning other psychological effects rooted in evolutionary adaptative mechanisms: desensitization and mere-exposure effect. Desensitization occurs *inter alia* when people often observe disturbing acts and are not harmed, what weakens negative emotional reaction. This mechanism, which is adaptive in the natural environment, loses its biological function in the fictional world of art. Because bad acts are presented in it so frequently, they evoke a weaker negative affec- tive response, which makes them more likely to be imitated.

The mere-exposure effect occurs when frequent appearance of a given stimulus causes that it is evaluated as more attractive. This is the case, for example, when you often watch something or listen to something. As engineer Mamoń says in the film *Cruise* (*Rejs*) directed by Marek Piwowski: *We like the songs we already know*. The

evolutionary logic behind this phenomenon is that since the stimulus has occurred repeatedly and nothing bad has happened, it makes sense to treat it as a signal of safety and to like it. Therefore it is reasonable to assume that after a frequent contact with depictions of evil acts in art, people tend to feel less negative about them than were before.

2. Neuroscientific Approach

The evolutionary reasons described above can explain why moral and aesthetic evaluations are correlated. For our ancestors some things which were connected with survival and reproduction, as for example beautiful faces or landscapes, were deemed as good and beautiful simultaneously. Even in the languages of the world terms beautiful and good are still often used as synonymous. In ancient times, e.g. in Plato's dialogues, it was even a common practice.

The logic of neurobiological correlations is as follows. When something is beautiful or morally right the same regions of the brain are activated. Empirical data suggest that positive evaluations of any kind are processed in the same regions in neocortex and the affect associated with them, in the same regions of the limbic system. Therefore, if the positive aesthetic experience is correlated with a human action its moral evaluation will be more positive and *vice versa,* positive moral judg- ment of something may have an impact on its aesthetic appraisal. Simply speaking, positive aesthetic evaluation and moral one can influence each other. Good examples of this correlation are Beauty-is-Good and Good-is Beauty stereotypes (Luo et al., 2019). These stereotypes cause that people with attractive faces are deemed good and righteous deeds of a given person cause that she or he is perceived as more beautiful. Studies in neuroscience provide rich data suggesting that the same neural struc- tures are involved in aesthetic and moral evaluation. Attractive faces elicit greater response in the medial orbitofrontal cortex (mOFC) in comparison with unattrac- tive ones (Kranz, Ishai, 2006). Similarly, the same region of the brain is more active in response to morally good actions than to evil deeds. Other studies showed that lesions in medial orbitofrontal cortex (OFC) are associated with deficits in moral reasoning and behavior (Knabb et al., 2009).

Recent studies using functional magnetic resonance imaging (fMRI) show that the appreciation of facial beauty as well as morally good acts activates the same regions in the brain, which are the middle occipital gyrus and medial orbitofrontal cortex (Luo et al., 2019). The medial orbitofrontal cortex, as other studies had proven, is activated when information concerning positive stimuli is presented, such as information about food, money, nice odors (O'Doherty, 2004) and moral goodness (Wang et al., 2014). However, the processing information concerning moral goodness is correlated with activation of larger-scale cortical network in the OFC than perception of facial beauty (Wang et al., 2014).

Medial occipital gyrus - specialized in analyzing visual information - is activated, when beautiful stimuli are presented (Luo et al., 2019). It is worth noting that when

Jheronymus Bosch's-Hertogenbosch, 1450 c. – 1516, *Cztery wizje zaświatów (4)*, Gallerie Academia Venezia.
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incongruent information (e.g. attractive face and evil act) is presented to the participants, the response in medial prefrontal cortex and the lingual gyrus is stronger than in case of congruent one.

The unattractive faces and immoral behavior both activate the insular cortex (Luo et al., 2019). The activity of insular cortex is smaller when incongruent information is processed although the mOFC is still responding (Luo et al., 2019). This is of the upmost interest, because it suggests that aestheticization of evil deeds may have detrimental consequences for the moral judgment. The neural network consisting of the insula, amygdala, anterior cingulate and lateral prefrontal cortex are involved in processing negative social information as well as in responding to disgusting and aversive stimuli (Krendl et al., 2006).

Taking into account all the data concerning neural correlates of beauty and evil it is reasonable to claim that when beauty and evil go hand in hand human brain is morally disoriented.

Conclusion

Evil is interesting to people and arouses strong emotions. The explanation for this fact from an evolutionary perspective is quite obvious. People who were not interested in stimuli related to moral evil, would probably become victims of violence relatively quickly and would not be able to have offspring. Paying attention to negative stimuli is much more important for survival than paying attention to the positive ones. This effect can be easily used by artists and in fact often is.

Evil deeds and evil people are often depicted in art and literature. They arouse fear and interest at the same time. They are memorable. They can cause not only moral disapproval, but also fascinate, especially if they are presented in an aesthetically at- tractive way. It seems that such representations of perpetrators and their evil deeds may be particularly dangerous if they lead to empathizing with them.

Art is a sphere of culture to which special positive value is commonly assigned. It is assumed that an artwork, regardless of its content, has positive value and deserves to be disseminated. In relation to art that aestheticizes evil, adopting such an attitude seems unjustified for the reasons presented above. The reaction to art that depicts immoral behavior depends crucially on the cognitive, emotional and moral maturity of the recipient. This is proven *inter alia* by the Werther effect mentioned above. For this reason, it is necessary to carefully consider to whom a given work of art can be presented without the risk of negative or even tragic consequences. Careful consideration of the potential effects of dissemination of art that shows evil is a moral obligation of those who create and propagate it.

The presence of wrong deeds in fine art makes evil seem to be not as ugly as it is. Showing evil in an aesthetically attractive way causes the brain to treat it more positively, because affect is transferred from an aesthetic sphere to the moral one. As a result, people may evaluate evil deeds less negatively and have stronger tendency to accept them and to do unmoral things more often. To put it somewhat metaphori-

cally, the aestheticization of evil may anaesthetize the moral sense and lead to wrong judgements and actions. Determining the extent to which this phenomenon occurs requires further empirical research.

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Correction from Editors:

In issue 1/2023 (6, p. 205) of "Eruditio et Ars" we incorrectly wrote that *Stefan Florek "has a PhD in philosophy and psychology"*. It should be written that *Stefan Florek "is a PhD in philosophy and psychologist"*

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