The Relation between Beauty and Goodness-Historical and Cognitive-Scientific Approach

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Abstract: *The main aim of the study is to analyze the relation between attractiveness and goodness. The study is focused on historical analysis of the beauty-goodness relation in Schillerian philosophy and on the scientific research of the relation in cognitive science and game theory. The main argument is focused on similarities of their origin in reward system mechanism.*

Keywords: Beauty, goodness, reward, correlation.

1. Introduction

A classic example of the association of beauty is its connection to good. Per several studies [1], [2] beautiful people are also often considered as good. From a logical point of view, however, we understand that beauty and good have no causal relationship. There is even a logically justifiable counter-thesis relying on personal experience that may encourage us to believe that outwardly attractive persons are not good, but, on the contrary, they are more likely evil, because we often naively trust them and they easily abuse their beauty. Several psychological studies have proven that facial attractiveness helps in obtaining better job positions [3], as well as a better evaluation of achieved results [4] to the extent that there are attempts to legally address the issue of lookism (an attitude or outlook which measures a person's non-aesthetic qualities based on aesthetic) and appearance-based discrimination [5], [6]. To date there have been no adequate legal measures.

2. The Relation Between Beauty and Goodness

Immanuel Kant, in his three *Critiques*, consistently demanded the distinction between truth, beauty, and goodness – at least in search criteria for what is moral, or for the possibility of formulating a purely aesthetic judgment. Kant demanded this so that only such conduct that is solely governed by a motive to comply with the moral law (categorical imperative) within us (to obey it) for its own sake (in deference to it) be defined as morally good, and not for other related reasons (love, reward, fear of punishment, etc.). So, if we help or rescue someone because we love them or their relatives (e.g.: the mother of a drowning child), or because we love the subject, our conduct is indeed in compliance with moral law, but not in its spirit, and therefore, it is not purely moral. Moreover, if we like an object not only because its form of effectiveness is so constructed – i.e. it spontaneously generates a feeling of affection by its very appearance – but also because we have some emotional (possessive) ties to it, or even because the object/subject is good (morally or purposefully), our judgement would not be aesthetical, although it may be in compliance with the aesthetical judgment of other individuals, or it may even lead us to the same result if we were led by a purely aesthetical judgement. Kant thus took a stance on finding a pure and unquestionable criterion for morality or pure aesthetic judgements to prevent their interchange, or contamination by something that would make it impossible to claim the general and inevitable validity (not all of us must consider the same person as good or beautiful and therefore the outcome of our judgement would not rely on the same basis) of this judgement. Beauty and good should be isolated from one another and beautiful things are beautiful just because we (our sensuality and, in the case of the arts, partly our intellect) are fond of them. Good is only good within the limits of pure practical reason, independently of other motives.

Kant's thesis regarding the strict distinction of good from beauty has been met from the very beginning with misunderstanding and disfavor. Friedrich Schiller, one of Kant's most immediate students, in his treatise *On Grace and Dignity*, argues with his teacher and points out that Kant's strict distinction and separation of each quality is incorrect and goes against the personable nature of his teacher. Schiller assumed that Kant made such a statement for mainly historical and methodological reasons. Schiller argues that demanding that a person not help his/her friend, because he/she is fond of them, is inhuman, and that helping people that we have regard for should not be considered immoral. Kant's distinction between reason and affection was, in Schiller's view, an antisensualistic philosophy rendered with such hardness that it is impossible to sympathize with it. Its main negative differentiation was the exclusion of any (even aesthetic) enjoyment of morality and the principle of good and purposefulness of aesthetics. Therefore, reason must be opposed to affection, and feelings opposed to reason.

Schiller, on the other hand, presents the ideal of a beautiful soul that is harmonious and overcomes all unhealthy tension between reason and feelings. "One refers to a beautiful soul, when the ethical sense has at last so taken control of all a person's feelings that it can leave affect to guide the will without hesitation and is never in danger of standing in contradiction of its decisions…It is in a beautiful soul that sensuousness and reason, duty and inclination are in harmony, and grace is their expression as appearance" [7]. Beauty is therefore an expression of harmony, the opposite of tension and contradiction. In the essay, *On Grace*, Schiller emphasizes that beauty is associated with spontaneity and naturalness. While the form of matter itself, its arrangement and formation, defines architectonical beauty, with grace, he contemplates the learnt (transferable beauty – Venus' belt lent to the Graces), that is, moral movements, that appear beautiful independently of the architectural beauty. One may find rationality within a beautiful soul, but that is in full accord with emotions and feelings, nature, and affections. Therefore, walking and dancing (examples that Schiller uses to explain transferable beauty) are movements that are graceful only when they are guided by reason with such certainty and spontaneity that one no longer needs to focus on them. Walking and dancing – in Schiller's examples – are still motivated and coordinated by reason, but they are so natural and unstrained that they become second – or learnt – nature. Harmony and freedom thus become synonymous with Schiller's sense of beauty. Beauty for him, however, is also inherently associated with good. Nothing evil can surely be beautiful(!) For Schiller, good is *conditio* sine qua non with beauty (a beautiful soul), because it is given by ethical reason. If sense and rationality still get into a disagreement, reason again takes over the reins of conduct and becomes (or should become) dominative. For this reason, beauty and good cannot be separated from one another in the Schillerian concept, and if they are separated, then it is only for methodological reasons.

It was clear to Schiller that just as a person cannot be consistently (rational) good, he/she also cannot achieve a complete consistency of emotionality and reason. Schiller's ideal of the complete elimination of the tension between reason and emotions is therefore inapplicable. Nevertheless, in his philosophy, Schiller did not limit the question of beauty to the ideal – the question of human beauty – and he attempted to justify his theory of beauty in general in several ways. "The first builds on the claim that expressions of moral virtuousness have to please aesthetically because they please morally [8]. And although Schiller could not convincingly justify the causal context between good and beauty, the question remains: why is good so often associated with beauty?

One possible response that is readily available from our previous contemplations about the reward system, is that the perception of beauty and the assessment of moral and good conduct take their course in the same functional and neuroanatomic structures. Although the 'moral brain' consists of a large functional network, including both cortical and subcortical anatomical structures, many neuroethics studies prove that "Orbital and ventromedial prefrontal cortices are implicated in emotionally-driven moral decisions and have a critical role in encoding the emotional value of sensory stimuli" [9] – [11]. This has been implicated in the on-line representation of reward and punishment [12], [10]. The right medial OFC has been found to be activated during the passive viewing of moral stimuli compared with non-moral stimuli [13], while the activation of the left OFC has been related to the processing of emotionally salient statements with moral value [14]. It appears, therefore,

that in the assessment of the morality and propriety of conduct, our brains utilize identical components as in the perception and experience of beauty. It might be for this reason that we are fond of good behavior and good people and we often perceive the beautiful as good. It is not just about the figurativeness and metonymity of the language, or the misunderstanding of individual domains, but about the anatomical and functional identity of the parts of the processes involved in the assessment of beauty and moral judgement.

The reason both domains (moral and aesthetic) are functionally linked may be found in Pavlov's conditioning and the association theory of learning. It is also possible to consider a halo effect and thus a kind of social perception when an individual is influenced by their first impression of someone – whether positive or negative. If, for example, the first overall impression of a person is favorable (because that person is beautiful), we tend to apply positive assessments to that person's conduct and features. We assess the ones we love more benevolently. Those whom we like, we tend to perceive in a better light.

One possible Schillerian explanation is that beauty and good are associated with love as their possible consequence. What we perceive as good, we are for the most part fond of, much like the individual who is perceived as beautiful may inspire inflation and vice versa. Love, therefore, is the mechanism that unites both virtues and relates them with the utilization and increased activity of the same sphere of reward. The problem with Schiller's metaphysical understanding of beauty and good is substantionalisation. Schiller does not say that our ideas, or their formal organization or phenomenon that represents the other are beautiful, but that the other as object is beautiful. Thus, Schiller does not talk about the attributes of the experience, but about the object. However, we understand (or from experience we know) that even in this case a beautiful appearance does not guarantee a morally good character, and vice versa, that people who are not appealing may be and often are good.

Schiller's argument about the abode of beauty in appearance and experience, and not directly in the object, is likely correct. Schiller contemplates in this manner in his treatise, *Kallias*. It appears, however, that the actual phenomenon/appearance (no matter how beautiful) does not allow us to properly reflect on morality and good. This is the case due to the fact that morality and good are not as easily and speedily available as the observation of beauty is for the senses. They even seem to be metaphysically different in nature. To determine that someone is good, we must move beyond his/her appearance – we need to know him/her internally – his/her intentions, motives, and thinking. We need to spend a relatively significant amount of time with the person, we need to know him/her, experience the person in ethically relevant situations, and know the motives of their conduct (because their conduct may be in accordance with morality, but with completely different, hidden, or not directly moral motives). Why, therefore, should we believe in the appearance of something that is essentially a phenomenon that reveals something that is principally appearance (intentions)? In the identification of beauty with good, is it possible that manifested beauty promises us something, for which it has no principled justification - (good)? It seems that even this reasoning of Shiller's does not directly lead to the justification of the identification of beauty with good. But is this the case?

If we look at the problem of decision-making and the anticipation of good conduct in the context of beautiful appearance through the instruments and mechanisms of game theory, we find that there are logical and rational reasons why the two qualities (beauty and good) may, under certain circumstances, be linked together. These circumstances are cases of decision-making under indeterminacy. As mentioned earlier, observing whether someone is beautiful or not is a relatively fast and automatic process. Moreover, due to an evolutionary predetermined mechanism, or constructed via education or individual experience, the error rate of our assessment is minimal (when we like something, we rarely discover later that we were wrong, that we do not like it). But with good, the situation is quite different. Not only do we need a lot of time and information to judge whether a person is good or not, even our perception of individual deeds or morality can often be re-evaluated if we become aware of new information and circumstances under which the individual events occurred. Our assessment of whether something is good or evil may be radically and abruptly altered, and we often do that. So, how are we to determine our attitudes toward people whose moral aspects we do not know, but towards whom

we must assume an attitude immediately? We could, in the spirit of ancient wisdom, demand a neutral attitude as per the quote sine ire et studio. The probability that someone unfamiliar is good or evil is not purely logical (50/50) or mathematical (Gauss), but rather derived from previous subjective (not statistically objective) experience (Bayesian). This means that our anticipation of the conduct of the other person is not entirely objective, but is based on subjective knowledge, and in the given situation, our cognitive apparatus looks for signs that may be relevant to decision-making on the conduct anticipations of the other person (and our reciprocal attitudes toward that person). Such signs are undoubtedly grace, friendliness (smile), direct eye contact, a revealed face, and uncovered gestures and attitudes, etc. Coincidentally, these are all signs that correlate with increased attractiveness (we are fond of nice people, eye contact is understood as a sign of interest, and a smile is a manifestation of openness, accommodation, and friendship – a certain common attunement and intellectual kinship, etc.). From a game theory point of view, we face the possible use of several very different strategies that in a situation with a relatively high degree of information available on some qualities of the other person (physical attractiveness), along with a high degree of indeterminacy regarding other equally important qualities (morality), may lead to a completely different sum of potential benefits and losses in cooperative and non-cooperative behaviour.

Let us imagine that we face the question of courting a potential partner that is attractive at first glance, but we do not know if he/she is also good. And let us admit that both criteria (beauty and good) are equally valuable to us at this stage. If we are supporters of an optimistic approach to the problem, and therefore the maximax decision strategy, we will assume that there is a certain (realistic) possibility that a beautiful partner will eventually also prove to be very good. The practitioner of such a strategy therefore adapts all his/her accommodating behavior to win the jackpot – not only a beautiful, but also a good partner, and hence the best of the best. If successful, he/she will obtain the maximum reward. However, it is equally possible that his/her assumptions about the good nature of his/her partner will be eventually completely or partially unfulfilled. The partner may prove to be less than the best, or in the severest case, as the worst of all possible choices. In this case, the supporter of an optimistic strategy will be disappointed, his/her reward is not maximized, but only somewhere in the interval between the maximum sum of both variables and their minimum sum, but he/she is still "profitable". The reward is a lesser degree of good and, in the severest case, merely the beauty of the partner (if the partner is the worst of all possible). Thus, the total reward is greater than or equal to half of the maximum possible profit – that is, it is very positive.

The opposite approach represents a pessimistic – maximin – strategy. This "supposes greater occurrence of risks than profits and which manifests itself in a greater aversion to risk. Maximin strategy (Wald's criterion) ranks strategies based on their worst–case outcomes (based on their minimum utility) and chooses one that best eliminates losses (the level of minimums is at its maximum). With this strategy, we are not trying to maximize our profits but minimize possible losses, which can be a way of reaching total gains" [15]. The pessimist does not assume that the partner will be good, but on the contrary, his/her assumption is that beauty and good do not come together. Therefore, he/she expects the immorality of a beautiful being. If, however, he/she decides to cooperate with the potential partner, he/she cannot be fundamentally disappointed. In the severest case, his/her assumption is confirmed and that person is not good. But that was what was assumed. The reward in such a situation will be the beauty of the partner that he/she expects (if it turns out that they are not good, the benefit is that he/she is at least beautiful). In all other cases, however, the pessimist cannot be disappointed, because all other scenarios bring greater benefits than he/she originally hoped for. So, in this case, the pessimist is even more profitable. The total sum of his/her benefits, however, is equal to the optimistic strategy – either it is equal only to a half of the potential gains, or it reaches the potential maximum.

The maximax strategy is therefore based on a vision of the maximum possible reward and the maximization of enjoyment intensity. However, its non-fulfillment still provides sufficient enjoyment. The pessimistic approach avoids losses, but as it does not lead to great expectations, it is rewarded with more enjoyment than

expected. In either case, it is "more advantageous" to associate our faith in the interrelation of beauty and good, because it leads to some form of desirable reward.

If, in fact, we believe in the validity of the antithesis, and therefore the belief that beautiful people are evil and the ugly are good, then an optimistic strategy may lead to a reward if our ugly partner turns out to be good after all. The enjoyment of such a discovery may compensate for the absence of aesthetic pleasure, but the sum of possible rewards is significantly lower (equal at the very most) than the sum of the rewards in the worst case of the optimist's approach (where beautiful people are also good). Likewise, the pessimistic strategy does not assume that ugly people must at least be good. Therefore, the pessimist rather envisages the worst possible scenario (ugly is evil). The sum of possible rewards for such an assumption is zero. If the assumption is not fulfilled, the amount of rewards is higher, but still significantly less or at least the same as in the case of the pessimistic strategy of the interrelation of beauty and good. From the above analysis, the assumption that beautiful people are good also leads to a considerably higher degree of rewards than any other scenario, independently of the strategy used (maximin or maximax). Similarly, this is also the case for other combinations (beautiful – intelligent, etc.).

In real life, of course, the weights of the individual qualities – good and beauty – do not represent a complete balance, not only depending on the differences of the evaluator, his/her intentions (if the intent is only the procreation of offspring, the question of partner co-existence is irrelevant; in the case of co-existence, the question of good appears to be key), but also in view of the broader decision-making process. One person may prefer the moral qualities of a partner, while the other may only focus on beauty, and indeed, there are those who do not address the criteria very much. We also know the different strategies of choosing a partner, considering the competitive environment and the effect of potential success probability (Keynesian beauty contest, Nash equilibrium), considering the resignation to the size of the possible recompense to maximize the probability of their occurrence (in other words, not the most beautiful, but one of those who is quite nice – less competition, less risk of disappointment).

Apart from the fact that our accommodating behavior mostly results in the more frequent occurrence of accommodating behavior in others, and that in itself creates supportive conditions for confirming the thesis of the correlation of beauty and good (we are more likely to express accommodating behavior toward beautiful people, and as we are more accommodating – good – to them, they are also more accommodating – good – to us), from a purely logical point of view, the beauty and good of another person as his/her qualities are not related in any way. Beautiful people can be both evil and good. Finally, as Jonathan Haidt [16] shows, moral reasoning is often not a purely rational calculus, but more often it is guided by intuition and feeling than cold calculation – rational reasoning is rather a form of rationalization than real judgement. In matters of morality, we are driven more by feelings.

Nevertheless (or because of this), we interconnect both phenomena (beauty and good), and connect them in our feelings and expectations. This is probably because, as shown by Takashi Tsukiura and Roberto Cabeza, they are evaluated by the same neural system and represent the same type of reward. Scientists "scanned participants with functional magnetic resonance imaging while they made attractiveness judgments about faces and goodness judgments about hypothetical actions. The activity in the medial orbitofrontal cortex increased as a function of both attractiveness and goodness ratings, whereas activity in the insular cortex decreased with both attractiveness and goodness ratings. Within each of these regions, the activations elicited by attractiveness and goodness judgments were strongly correlated with each other, supporting the idea of similar contributions of each region to both judgments. Moreover, activations in orbitofrontal and insular cortices were negatively correlated with each other, suggesting an opposing relationship between these regions during attractiveness and goodness judgments. These findings have implications for understanding the neural mechanisms of the Beauty-is-Good stereotype" [17]. Similar results have also been achieved in several other studies [18], [19]. This means that moral evaluation is related to the activity of the left part of the mOFC, as is the case of aesthetic experience. In the same way, many other neuronal systems are also involved, particularly the reward system.

Certainly, it may be argued that the abovementioned connection of good and beauty is a generalization and over-simplification. Just as there are a whole pleiad of aesthetic feelings, it is also possible to distinguish between diverse ethical or moral emotions and sentiments, and their identification with the feeling of pleasure at beauty is not entirely in place. It is also not quite appropriate to identify the whole range of ethical feelings with the activity only in the mOFC or other areas of the reward system. Both systems also have many differences, therefore an identification of beauty with good only based on the activity in a certain part of brain is not proof of their interconnection. Such identification, however, was not the intention of this synopsis.

What I have tried to point out, rather, is the neurobiological relationship of beauty assessment and the neurophysiology of ethical feeling and judgement. It appears that both processes produce states in our minds that we perceive very similarly. Beauty is pleasant, as it is pleasant to perceive something good and moral. Sure, you can talk about whether beauty and good bring about the same enjoyment or something quite different. Moreover, both phenomena are associated with love or other affections they produce. Therefore, our reward system anticipates a certain enjoyment and its measure that both phenomena bring.

3. Conclusion

In the previous paragraphs, I have attempted to demonstrate why we tend to associate both (at the first sight different) domains of our sensation (the same reward system, the same rationality of reasoning), even though ancient thinkers already considered Truth, Beauty, and Good as interconnected ideas. Similarly, we may read Kant's *Critiques* (of pure reason, practical reason, and judgement) and three distinct, yet interconnected, dimensions of human reason seeking to find our own happiness in this world. There may be links between the two domains of sensation (beauty and good) and e.g. the reward system likely due to the fact that both (beauty and good) are important signals of survival efficiency – or, at least, a higher probability of survival for us and the genes we produce. We perceive beauty and good (pro socialism, empathy, altruism) like intelligence [20], [21], as positive values increasing the likelihood and quality of our survival. Not only do they enhance the quality of current experience, but they guide us toward the future. They are the promise of a more intense and enduring enjoyment – or the total sum of attainable enjoyment – and therefore they attune us to the nature of being itself.

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5. References

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