

Cognition and Aesthetics

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There is a strong inclination in Aesthetics to regard “real” art as that which is beautiful in *form* without regard to *cognition*. Terminology varies; for Immanuel Kant such artworks are “beautiful”, whereas Clive Bell describes them as having “significant form”. In either case concepts are not involved, and so I shall adhere to Kant’s usage of the word ‘*beautiful*’. The work of art as a thing of beauty lies in direct contrast to that which is appreciated cognitively (which I shall call *cognitively engaging*). These objects, as works of art, are typically seen as impure, being tainted by mundane concepts, and so are not “real” art, but are at best mere imitations. But is this correct? Certainly there are some things of the impure sort that we should want to call art (or at least, I shall argue that there are). If this is so, then the divide between the two may not be so large, and they might at least be equal in artistic value. However, in order to provide some comparison between them, there are two preliminary questions that must be answered: 1) What is it that makes a thing “beautiful”, and 2) What is it that makes a thing cognitively engaging?

Kant, in the *Analytic of the Beautiful*, gives several definitions of the “beautiful”, which can be summed up in the fourth: “The beautiful is that which, apart from a concept, is cognized as object of a necessary delight.” (Quoted from: Neill & Ridley, 294) Of course, Kant gives a characteristically convoluted explanation as to how such beauty is possible. To summarize, the mind is at play, busily synthesizing the manifold of sensation, without the use of any sort of concept. I think that this explanation, while psychologically primitive, is quite true. Furthermore,

I think that we can achieve a better, albeit less romantic, understanding of this process in terms of modern cognitive psychology.

Cognitive psychologists are undecided as to how it is that we recognize and classify objects, and have proposed several theories. One of the leading contenders is Geon theory. According to its progenitor, Irving Biederman, Geon theory is "...a theory of real-time human object recognition that posits that objects and scenes are represented as an arrangement of simple, viewpoint-invariant volumetric primitives, such as bricks, cylinders, wedges, and cones, termed geons." (n.d.) These representations are then compared to a sort of internal "database" of known objects, and are categorized accordingly. However, when no match is found, something interesting happens: neurons at various points along the ventral cortical visual pathway in the brain are stimulated, thereby releasing endorphins, which results in pleasurable sensations (Vessel & Biederman, 4). This peculiar fact of human neurology means that we are, as Vessel and Biederman put it, "infovores" (or, as I prefer to say, "informavores"); we naturally seek out the novel in order to experience these sensations (Vessel & Biederman, 2). Thus, certain arrangements of simple forms will lead to pleasurable sensations, without any sort of object recognition, and without any other cognitive associations. This, I think, is precisely the "modern" explanation of the beautiful that we are looking for, and a quite informative one at that. What we feel when looking at something beautiful is a *pleasurable sensation* caused by the release of endorphins. In other words, Kant was quite right. But this may also be interpreted as an emotional response, since felt emotions are often accompanied by pleasurable sensations. This could be what Bell calls the "aesthetic emotion".

The other preliminary question we must ask is, "What is it that makes a thing cognitively engaging?" Something engages us cognitively if a) it requires us to consider its function or

purpose, or b) its apprehension demands some level of rational thought, or c) it evokes certain emotions in us through consideration of it in relation to our own lives or the lives of others. This is a broad category, and there may be other factors that I have not considered. What binds them all together, however, is that to appreciate them, we must *think* about them — they involve some degree of cognition. This lies in direct contrast to those things that are beautiful, which are not appreciated through cognition, because there are no concepts involved. A great number of things that we normally call works of art involve cognitive engagement to some degree. Literary works are a great example, falling under both (b) and (c). Furthermore, the *ideas* presented in literary works (and motion pictures, among other medias), also involve (a). Other things (e.g. great works of engineering) also fall under (a), but are more problematic when considered as works of art, because they do not seem, *prima facie*, to involve (b) or (c) to any significant degree. First, we shall consider works that fall primarily under (a), such as great works of engineering, and then consider those that also involve (b) and/or (c), such as great literary works.

It seems fair to say that some works of engineering are so utterly fantastic that we might, perhaps, refer to them as works of art. One example is the Great Pyramid of Giza. While I have never seen this pyramid in person, I can vividly imagine what it would be like. Such an enormous structure would indeed be impressive. Standing at its base, I could only speculate as to how it was constructed, given the primitive technology available to the builders. Considering its purpose, I might wonder about the life of the Pharaoh for whom it was built. Such a massive tomb, built to withstand the ages, and designed to thwart grave robbers, is indeed a cognitive delicacy. But this example brings us to an important consideration: that while conceptualizing the function of the pyramid falls under (a), one's mind begins to cognize other aspects of it (e.g. the life of the Pharaoh), which brings it under (b). Furthermore, such cognition will necessarily

bring about (c), as we consider the finality of death, and the glorification of life. This example, at least, involves all three categories of cognition.

Another example of fantastic engineering is the Great Wall of China. Again, I have not seen it, but I can imagine it stretching off into the distance atop rolling hills of green grass. I consider its purpose: to keep out the barbaric tribes to the west. I imagine what a great sense of security the wall must have brought to those who lived within its protective embrace, and the confidence of the soldiers who guarded it. I visualize the hard labor of those who built it, they who suffered and died and were finally entombed within it; their forced sacrifice allowed a nation to flourish. Here again, this example necessarily involves both (b) and (c). I am certain that *any* such great work of engineering will necessarily involve (b) and (c), in addition to (a). But while I have no deductive proof of this claim, I could offer a multitude of such examples, and I am sure that the thoughtful reader could conceive of many more of his/her own. And yet, it may still be that I am wrong. Perhaps, in order to fully explore the possibility that I am wrong, we should consider a more brutal example: the AK-47.

On two occasions I have held (but never fired) legal (i.e. semi-automatic) versions of the AK-47. One was Belgian-made, while the other was a Chinese model. This oft-reproduced weapon is solid and sturdy; it just *feels* trustworthy. If I was caught up in some set of horrific circumstances, there is absolutely no doubt in my mind as to which rifle I would choose. But consider the poetic description given by Yuri Orlov (played by Nicolas Cage) in the 2005 movie,

Lord of War:

Of all the weapons in the vast soviet arsenal, nothing was more profitable than Avtomat Kalashnikova model of 1947, more commonly known as the AK-47, or Kalashnikov. It's the world's most popular assault rifle. A weapon all fighters love. An elegantly simple 9 pound amalgamation of forged steel and plywood. It doesn't break, jam, or overheat. It'll shoot whether it's covered in mud or filled with sand. It's so easy, even a child can use it... and they do. The Soviets put the

gun on a coin. Mozambique put it on their flag. Since the end of the Cold War, the Kalashnikov has become the Russian people's greatest export. After that comes vodka, caviar and suicidal novelists. One thing is for sure... no one was lining up to buy their cars. (Niccol)

The AK-47 was designed for but one purpose: to kill. This is an ugly sort of business to be in, but when I contemplate the real-world circumstances involved, I cannot help but conceive of it as a source of hope for those who are otherwise lost. This weapon is relatively inexpensive, and easy to maintain, so it is the first choice of oppressed people everywhere. I can imagine some freedom-fighter in a far-away third world country, fighting to throw off the bonds of an oppressive tyrant. It calls to mind American's own struggle for independence, and the great sacrifices that were made. In cognizing the function of the AK-47, I cannot help but become involved, both rationally, and emotionally. I think that, above all others, this example makes my point: that no great work of engineering can fall under (a) alone, but must always involve both (b) and (c).

The reasons why this is so are certain to be complex. For starters, I think that anything worth devoting so much effort toward designing must have some profound significance to the human mind. Necessarily, there will be great emotional significance, and the interplay of such a thing in human life will provide for much in the way of rational speculation. And so it seems that a great work of engineering has much in common with a good novel (viz. (b) and (c)). Furthermore, I can see no good reason for ruling it out as a work of art just because it serves a purpose. But perhaps one may still resist the temptation to call these things art, because they involve the use of a concept. Let us turn then to those things that are not products of engineering, and yet involve concepts, so that we may determine this matter.

Consider what Kant had to say about works that involve concepts:

Now the delight in the manifold of a thing, in reference to the internal end that determines its possibility, is a delight based on a concept, whereas delight in the beautiful is such as does not presuppose any concept, but is immediately coupled with the representation through which the object is given (not through which it is thought). If, now, the judgement of taste in respect of the latter delight is made dependent upon the end involved in the former delight as a judgement of reason, and is thus placed under a restriction, *then it is no longer a free and pure judgement of taste.* (Neill & Ridley, 287, *emphasis mine*)

The sorts of works that I speak of are those where the objects of cognition do not exist (otherwise they would be works of engineering). Instead, we must *imagine* that they exist; we must imaginatively enter into a fictional world wherein the people, places, things, and events described in the work do exist. As Eva Dadlez states, “The states of affairs in a fictional world correspond to the propositions that are true in that world.” (Dadlez, 142) In other words, the only cognitive separation between fictional worlds and the actual world is that we must *imagine* the former, whereas we can directly experience the latter. As such, the degree of separation between the two is insignificant to our considerations here, and if we are to count one sort of work as being art (e.g. literature), so to must we count the other (e.g. great works of engineering).

One question remains: how is it that we enjoy that which is cognitively engaging? Certainly, we can imagine ourselves thinking about something without deriving any pleasure from the activity. But given that novel inputs in the ventral cortical visual pathway result in pleasurable sensations, I wonder if the cognition of novel *ideas* would have a similar effect in the frontal lobes. The most reasonable hypothesis seems to be that they would. I suggest, therefore, that the pleasurable sensations had from looking at things of beauty can also be had by thinking about that which is cognitively engaging. Furthermore, we should note that even those things that serve a purpose must also have a form, and that this form, being suited for some particular purpose, can quite often be beautiful when considered in and of itself. The examples I gave above, of the Great Pyramid of Giza, the Great Wall of China, and even the AK-47, are all

remarkable pleasant to look at. The explanation for this peculiar fact is bound to be a metaphysical one, tying together both form and function in a necessary way; but that is another topic for another time.

Every work must have form (otherwise it wouldn't exist), and it seems to go without saying that many of these will contain *some* amount of beauty within them, even if they also serve some purpose (imaginary or otherwise). Regarding the co-occurrence of beauty and cognitive engagement, Kant says:

Taste, it is true, stands to gain by this combination of intellectual delight with the aesthetic. For it becomes fixed, and, while not universal, it enables rules to be prescribed for it in respect of certain definite final Objects. But these rules are then not rules of taste, but merely rules for establishing a union of taste with reason, i.e. of the beautiful with the good—rules by which the former becomes available as an intentional instrument in respect of the latter, for the purpose of bringing that temper of the mind which is self-sustaining and of subjective universal validity to the support and maintenance of that mode of thought which, while possessing objective universal validity, can only be preserved by a resolute effort. (Quoted from: Neill & Ridley, 287-8)

So, it may be that these really are two fundamentally different sorts of objects (i.e. the beautiful and the cognitively engaging). However, I can find no good reason to prefer one over the other, nor to call one “art” and the other “not art”. Kant goes on to say that:

But, strictly speaking, perfection neither gains by beauty, nor beauty by perfection. The truth is rather this, when we compare the representation through which an object is given to us with the Object (in respect of what it is meant to be) by means of a concept, we cannot help reviewing it also in respect of the sensation in the Subject. Hence there results a gain to the *entire faculty* of our representative power when harmony prevails between both states of mind. (Quoted from: Neill & Ridley, 288, author's emphasis)

I think Kant would agree with me that that which involves both beauty and cognitive engagement is the *best* sort of art, and that that which is cognitively engaging is certainly no less in *value* than things of pure beauty. Perhaps it is merely a matter of preference, but since the beautiful and the cognitively engaging share, on a great number of occasions, a common medium

(e.g. paintings, films, etc.), and frequently co-occur with one another in a necessary unification of form and function, then it seems most proper that they really do belong under one heading: art.

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