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Aesthetic Functionalism

Sven Ove Hansson

Abstract

According to the strongest version of aesthetic functionalism, aesthetic value is completely determined by and therefore reducible to practical function. According to the opposite view, function and aesthetic value are completely independent of each other. Both these views are shown to be untenable, and instead aesthetic dualism is defended. By this, I mean that some aesthetic judgments that can legitimately be made about an object refer to it under descriptions of its practical function, whereas others refer to it, for instance, under descriptions of its physical appearance. Since valuations of the former type are in most cases positively correlated with satisfaction of functional requirements, this amounts to a defense of a radically weakened version of aesthetic functionalism.

Key Words

aesthetic functionalism, aesthetic value, aesthetic dualism, aesthetic judgments

1. Introduction

In "pure art," artworks such as paintings, poems, plays and partitas are produced with the sole purpose of providing aesthetic experiences. In architecture and industrial design, objects are created with the intention to satisfy not only aesthetic criteria but also, primarily, criteria of utility and practical function. This combination gives rise to the crucial issue of how the two types of value relate to each other. Is practical function independent of aesthetics or are they in some way connected?

This was a central issue in the functionalist movement in architecture and design, one of the most influential artistic and cultural movements of the early twentieth century. The term 'functionalism' is ambiguous, not least since the functionalist movement contained diverse and partly contradictory artistic and social tendencies.^[1] Modernist architects and designers had a difficult time fighting against influential conservative enemies. They soon found that an efficient argumentative strategy was to emphasize that their constructions were more functional than traditional architecture and design. Hence, even if the architecture of a house was largely based on geometrical principles (and thus on "pure" aesthetic considerations), it was more expedient to represent it as based on principles of functionality. It is important, therefore, to distinguish between functionalism as an historical movement and the more limited "functionalist" viewpoint that the aesthetic properties of an object depend on its functionality. Here we will be concerned with the latter, but statements by members of the functionalist movement will be used to exemplify the positions analyzed.

Functionalism in this sense is much older than the functionalist movement. In Xenophon's *Symposium*, Critoboulus says that he can distinguish a beautiful object.

CRITOBULUS: I know, at any rate, that a shield is beautiful, as well as a sword and a spear.

SOCRATES: And how is it that, although none of these is similar to the other, they are all beautiful?

CRITOBULUS: If, by Zeus, they've all been wrought with a view to the tasks for which we acquire them, or if they've been well adapted by nature with a view to the things we need, then these are beautiful.^[2]

The most famous slogan of the functionalist movement was "form follows function," whose originator was the American architect Louis Sullivan. When introducing it, he made an analogy with the forms and functions one can find in nature. The form of the eagle's wing has been determined by its function, and the same applies to other objects in nature. "[F]orm ever follows function. This is the law. Shall we, then, daily violate this law in our art?"^[3]

2. The Reduction Thesis

The most far-reaching variant of functionalism can be called the "reduction thesis." It consists in the claim that there is nothing to aesthetics (beauty) in addition to what follows from function. This has also been called "austere functionalism;" it implies that aesthetic considerations are altogether unnecessary, since aesthetics will be automatically taken care of if function is dealt with adequately.^[4] This view was expressed by Wilhelm Wagenfeld in an article published in 1937. He described how he had developed a new lemon squeezer by carefully trying out different forms in his "artistic laboratory" until the most functional construction was found. This construction was then selected for mass production. The experiments performed on lemon squeezers were in his view an aesthetic activity. "Being useful also means being beautiful."^[5]

An even clearer statement of the reduction thesis was made by Herbert Read in 1941:

"We have produced a chair which is strong and comfortable, but is it a work of art?

"The answer, according to my philosophy of art, is Yes. If an object is made of appropriate materials to an appropriate design and perfectly fulfils its function, then we need not worry anymore about its aesthetic value: it is *automatically* a work of art. Fitness for function is the modern definition of the eternal quality we call beauty, and this fitness for function is the inevitable result of an economy directed to use and not to profit."^[6]

The reduction thesis may be appealingly simple, but it is fraught with difficulties. To begin with, it has problems in dealing with pure art. Consider two objects that are both made by the same glass-blower. One is a vase that is used to keep flowers in, and the other an artwork called "pillar" that cannot be used as a vase since it has a hole in its bottom. It so happens that the two objects are strikingly similar to each other. According to the reduction thesis, the aesthetic properties of the vase are entirely determined by its function

as a vase. The "pillar," however, has no function (or rather, no function that is prior to and independent of its aesthetic properties). Therefore its aesthetic properties cannot be derived in the same way as those of the vase. According to ordinary aesthetic intuitions, there is much in common between the aesthetic criteria that we apply to the vase and those that we apply to the "pillar." A line that we find graceful or elegant in one of them would probably be found to have the same property in the other. The reduction thesis makes it difficult to account for this, since it subsumes the aesthetic properties of the vase under its function, that is not at all shared by the "pillar."

Another problem for the reduction thesis is that practical function underdetermines form or, in other words, that objects that differ widely in their physical appearance can realize one and the same practical function with equal efficiency.^[7] Two soup-plates may be equally useful (functional) but yet look very different. According to the reduction thesis, they must then satisfy aesthetic demands to the same degree, which is implausible to say the least.^[8]

Finally, it is not difficult to find examples of objects that satisfy functionality to a high degree but yet would not be taken to possess beauty or other positive aesthetic qualities. Medical intubation devices are an example of this. In Xenophon's *Symposium*, mentioned above, Socrates ridiculed Critoboulus's functionalist account of beauty by showing how it implied that Socrates himself was an unusually beautiful person: his protruding eyes were better for seeing to the side and his thick lips were better for kissing than those of other people.

3. The Independence Thesis

Having found the reduction thesis untenable we can now turn to its opposite, that may be called the "independence thesis." According to this standpoint, aesthetic and practical values are completely independent of each other. This view was expressed very clearly by Immanuel Kant.^[9] Since aesthetic formalism requires the exclusion of practical value from aesthetic considerations, it implies the independence thesis. On the other hand, the independence thesis does not exclude, for instance, expressive and representational values from aesthetics, and therefore it does not imply aesthetic formalism.

In the early twentieth century, the independence thesis was defended by Hermann Muthesius in his attacks on the functionalist movement. Muthesius noted that the functionalist ideas coincided with "the artistic discovery of the works of engineers, in which a particular form of beauty was suddenly found, the 'beauty of purely useful form' as it was called."^[10] This he considered to be a fallacy. Engineering aimed at producing functional objects, and that activity did not in itself give rise to beauty.

"It is a mistaken idea to believe that it is fully sufficient for an engineer to see to it that that the house, instrument, or machine that he is constructing satisfies a purpose. It is even more mistaken to believe in the saying, so often heard nowadays, that if it fulfills a purpose then it is also beautiful.

Usefulness as such has nothing to do with beauty. Beauty is a matter of form and nothing else, usefulness is purely the matter of being serviceable."[\[11\]](#)

However, Muthesius was also eager to point out that beauty and function are not contradictory; it is possible to combine the two.[\[12\]](#) He even claimed that engineers who deny having any artistic ambitions in their work may nevertheless be unconsciously, instinctively, influenced by aesthetic criteria.

"It can however be assumed that even the engineer who claims not to aim at a pleasing design will be unconsciously influenced by the formal [= aesthetic] laws. He is after all a man like others. . . This is why there are beautiful civil engineering works, in addition to the ugly ones. The beautiful constructions have been made by engineers with taste, the ugly ones by engineers without taste."[\[13\]](#)

In more recent aesthetic discussions, the independence thesis has not often been expressed. The same applies to the reduction thesis. Apparently, although the relation between aesthetic value and practical function is no less important today than in the heyday of the functionalist movement, theorizing has mostly gone in other directions. However, in a discussion of the aesthetic appreciation of sport, David Best claimed that non-aesthetic purpose is irrelevant for aesthetic appreciation.[\[14\]](#)

It is not difficult to use examples to show how the independence thesis goes too far in the direction opposite to that of the reduction thesis. Perhaps the clearest counterexamples are those that refer to the beauty of abstract objects, such as mathematical proofs. A mathematician who called a proof beautiful would almost certainly retract or at least moderate that statement if the proof turned out to contain irreparable mistakes. Similarly, someone who admires the beauty of a scientific experiment does this under the presumption that it actually works.[\[15\]](#) When a computer program is called beautiful, this is usually because of its power to accomplish a lot with surprisingly small means. This type of beauty was called "machine beauty" by David Gelernter.[\[16\]](#)

Examples can also easily be found that refer to concrete, technological objects. Few of us would admire the beauty of a bicycle with oval wheels or a chair that falls apart if one sits on it. Or rather, if we appreciate them aesthetically, then we appreciate them as non-functional works of art, not as a bicycle or chair. When we judge a chair aesthetically, we typically make assessments of it that relate to its function as a chair.[\[17\]](#) That an object is, for instance, a "beautiful chair" does not only mean that it is both beautiful and a chair. It means that it is beautiful *as* a chair.

4. The Thesis of Aesthetic Duality

This leads us to an intermediate standpoint between the reduction and the independence theses: When an object has a purpose or practical function, then some but not necessarily all the aesthetic judgments that can legitimately be made about the object refer to that function. We do not need to require, and will not require, that this categorization of the aesthetic judgments be known by the agent. An agent with a high

capability of introspective aesthetic reflection may, at least in principle, be able to distinguish between the two types of judgments by bracketing her knowledge of the object's practical function and judging it as a pure object of art. Other agents may not be able to do this, but can nevertheless be said to make both types of judgment.

The distinction between the two types of aesthetic judgment can be further clarified with the help of the theory of the dual nature of technological objects that has been developed by the philosophers of technology, Peter Kroes and Anthonie Meijers. They have shown that technological objects can be described in two ways. First, they can be described as physical objects (such and such an object of copper adjacent to such and such an object of polyethylene, etc.). Second, they can be described as functional objects with practical functions assigned to them by the humans who constructed them (nail, screwdriver, car, etc.).^[18] The implication for aesthetics is that aesthetic appraisals of such an object can refer to it either under a description of its physical appearance or under a description of its practical function. For a fully general account, other types of descriptions such as those indicating expressive or representational properties should be included, so that the final distinction will be between descriptions of the object that refer to its practical function and descriptions that refer to its other properties. The latter category includes descriptions of the object's physical, expressive and representational properties.^[19]

This distinction should not be treated as one between functional and non-functional properties. The reason for this is that non-practical functions of an object can be aesthetically relevant. The representational properties, for instance, of a portrait can be described in terms of its representational function. Indeed, art can in general be characterized by its function to provide aesthetic satisfaction.^[20] According to this approach, pure aesthetic judgments differ from judgments of practical function by referring to another type of function, namely aesthetic function. Currently, aesthetic functions are under debate from at least two points of view: whether works of art have aesthetic functions and whether the notion of art can be defined in terms of such functions.^[21] However, neither of these issues seems to have any direct bearing on the relation between practical function and aesthetic value. These are separate issues. For our present purposes, we can leave the issues concerning aesthetic function open.

It should now be clear why our aesthetic appraisal of a chair depends on our knowledge that it is a chair: we make aesthetic appraisals of it as an object with a practical function. However, it can also be seen from the above example with the vase and the pillar that an object with a practical function can have aesthetic properties that do not refer to its practical function. We can call this the aesthetic duality of objects with practical function.

This thesis of aesthetic duality, as we have presented it, allows practical function to influence aesthetic value but says nothing about the nature of that influence. A further thesis will therefore be added: the contributory thesis. It holds that aesthetic valuations that refer to a practical function are in

most cases positively correlated with satisfaction of that function. Hence, if two nutcrackers are equally nice to look at for someone who does not know what they are meant for, but only one of them is practically useful whereas the other breaks before the nut, then the former is aesthetically the most satisfying one. In this case and many others like it, the part of the aesthetic judgment that concerns practical function includes reference to the object from a dynamic point of view, i.e., to its movements when used for its intended practical purpose. The other part of the aesthetic judgment is, in typical cases, more focused on the object's static, or statuesque, properties.

The contributory thesis is not without exceptions. It holds true for objects with practical functions that are morally accepted, but not in general for objects with immoral practical functions. In other words, the satisfaction of immoral functional requirements does not necessarily add to an object's aesthetic value. A person who admires what she believes to be a surgical instrument may very well cease to see any beauty in it upon learning that it is in fact an unusually efficient instrument of torture. This is parallel to a well-known problem in the representational arts. To the extent that we aesthetically appreciate Leni Riefenstahl's (1902-2003) Nazi propaganda film *Triumph of the Will* (1935), this is a more guarded and restricted appreciation than our appreciation of a film with a less abhorrent message. Several accounts have been given of the dependence of aesthetics on ethics that is exhibited in cases like this.^[22] One plausible component of such explanations is that the message is so integrated in Riefenstahl's film that no judgment of the film, aesthetic or otherwise, can disregard it or abstract from it.^[23] Similarly, once we know the intended use of a torture instrument, it is part of what our aesthetic judgment of the instrument refers to. Our negative ethical appraisal of Riefenstahl's message, or of the intended use of the instrument, seems to block the formation of any unconditional aesthetic appraisal.^[24] The nature of this blockage is far from clear and deserves further study.

Aesthetic dualism, as outlined here, has an obvious similarity to Kant's distinction between free and dependent beauty.^[25] The latter notion is notoriously difficult to interpret.^[26] Some modern interpretations treat dependent beauty as a limited variant of free (pure) beauty; hence, according to one such account, our appreciation of a beautiful spoon differs from how we appreciate a beautiful statue: In the former case we appreciate the extra skill required in producing an aesthetically appealing object when it must at the same time have a specific non-aesthetic function. These limitations can force the artist to be more creative, and our knowledge of them may therefore enhance our appreciation of the object.^[27] (This is not unlike the restriction on representational art that it has to resemble a given object or represent it in some other way.^[28]) Our thesis of aesthetic duality differs from this interpretation of Kant's distinction, since the latter seems to preclude simultaneous appreciation of one and the same object in both ways. It may conform with other interpretations of Kant's distinction.

5. Conclusion

In summary, we have rejected two theses about the relationship between aesthetics and practical function, namely the reduction and independence theses. Aesthetic value is neither fully reducible to practical function nor completely independent of it. Instead we have defended a thesis of aesthetic duality, according to which objects with practical functions can be aesthetically appraised both under descriptions that refer to these practical functions and under descriptions not doing so. Finally, we have defended the contributory thesis according to which satisfaction of functional requirements in most cases contributes positively to aesthetic value. Hence, some support can be found for aesthetic functionalism, but only for a very weak form of it.

Endnotes

[1] Maurice Lagueux, "Reconfiguring four key '-isms' commonly used in architectural theory," *British Journal of Aesthetics* 39:179-188, 1999.

[2] Xenophon, *Symposium* v:3-4. P. 158 in Xenophon, *The Shorter Socratic Writings, Apology of Socrates to the Jury, Oeconomicus, and Symposium*, ed. Robert C Bartlett (Ithaca: Cornell University Press, 1996). - On Xenophon's *Symposium*, see Jeffrey Carr, "Two New Symposia," *Apeiron* 33:163-169, 2000.

[3] Louis Sullivan "The Tall Office Building Artistically Considered" [1896], reprinted in Louis H Sullivan *Kindergarten Chats (revised 1918) and other writings*, (New York: Wittenborn Art Books, 1947), pp. 202-213. Quotation from p. 208.

[4] Edward Winters, "Architecture," in Berys Gaut and Dominic McIver Lopes, *The Routledge Companion to Aesthetics* (Routledge, 2001), pp. 519-530. Quotation from pp. 524-525.

[5] Wilhelm Wagenfeld, "Glasfachsimplereien," 1937, reprinted in Wilhelm Wagenfeld, *Wesen und Gestalt der Dinge um uns*, [1948] 1990, pp. 59-64. The lemon-squeezer is depicted in Beate Manske, *Wilhelm Wagenfeld (1900-1990)* (Hatje Cantz Publishers, 2000).

[6] Herbert Read, "To hell with culture," 1941, in Herbert Read, *To Hell With Culture and Other Essays on Art and Society* (London: Routledge & Kegan Paul, 1963). Quotation from p. 18.

[7] Andreas Dorschel, *Gestaltung - Zur Ästhetik des Brauchbaren* (Heidelberg: Universitätsverlag C Winter, 2002), p. 75.

[8] The miniaturization of electronic components strengthens this argument. The physical appearance of a pocket calculator, a travel alarm clock or a camera is today primarily determined by the human-machine interface, for which there are often several functionally equivalent but physically quite different solutions.

[9] Immanuel Kant, *Kritik der Urteilskraft*, 1790, §15.

[10] Hermann Muthesius, "Zweck und Schönheit," *Der Kunstfreund. Zeitschrift der Vereinigung der Kunstfreunde*,

Berlin, November 1913, pp. 33-37. Quotation from p. 34.

[11] Hermann Muthesis, "Das Formproblem im Ingenieurbau," in *Die Kunst in Industrie und Handel* (Jena: Eugen Diederichs, 913), pp. 23-32. Quotation from pp. 27-28.

[12] "Das Formproblem im Ingenieurbau," p. 31.

[13] "Zweck und Schönheit," p. 36.

[14] David Best, "The Aesthetic in Sport," *British Journal of Aesthetics* 14: 197-213, 1974.

[15] Thomas H. Garver, "The engineer's art," *Invention and Technology* 7:20-26, Fall 1991.

[16] David Gelernter, *The Aesthetics of Computing* (London: Weidenfeld & Nicolson, 1998), pp. 2 and 8.

[17] Winters, "Architecture," pp. 524-425.

[18] *Techné*. Vol 6, no 2, special issue on the dual nature research programme.
(<http://scholar.lib.vt.edu/ejournals/SPT/v6n2>)

[19] Practical function should be interpreted broadly. Saving energy is arguably not one of the functions of a house, although it is a characteristic of how it functions. For our present purposes it should be included in the category of practical function.

[20] Oswald Hanfling, "Art, Artifact and Function," *Philosophical Investigations* 18(1): 31-48, 1995. F. E. Sparshott, *The Structure of Aesthetics*, (Toronto: Toronto University Press, 1963), p. 202.

[21] R. A. Stecker, "Historical Functionalism or the Four Factor Theory," *British Journal of Aesthetics* 34: 255-265, 1994; Nick Zangwill, "Aesthetic Functionalism," pp.123-148 in Emily Brady and Jerrold Levinson (eds.) *Aesthetic Concepts: Sibley and After* (Oxford: Oxford University Press, 2001).

[22] Jerrold Levinson (ed.), *Aesthetics and ethics. Essays at the intersection* (Cambridge: Cambridge University Press, 1998).

[23] Mary Devereaux, "Beauty and evil: the case of Leni Riefenstahl's *Triumph of the Will*" in Levinson (ed.), *Aesthetics and ethics. Essays at the intersection*, pp. 227-256.

[24] It would seem to block the previously mentioned ability to introspectively bracket other aspects of an object and judge it as a pure object of art.

[25] Immanuel Kant, *Kritik der Urteilskraft*, 1790,§16.

[26] Robert Stecker, "Free Beauty, Dependent Beauty, and Art," *Journal of Aesthetic Education* 21:89-99, 1987; Robert Wicks, "Dependent Beauty as the Appreciation of Teleological Style," *Journal of Aesthetics and Art Criticism* 55:387-400, 1997; Philip Mallaband, "Understanding Kant's Distinction Between Free and Dependent Beauty," *Philosophical Quarterly* 52:66-81, 2002; Paul Guyer, "Free and Adherent Beauty: A Modest Proposal," *British Journal of Aesthetics* 42:357-366,

2002.

[27] Marianne L Quinet, "Food as Art: The problem of function," *British Journal of Aesthetics* 21:159-171, 1981. See p. 169.

[28] Rudolf Arnheim, "Beauty as Suitability," *Journal of Aesthetics and Art Criticism* 54:251-253, 1996.

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