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BEAUTY AS OUTCOME OF REASON AND EMOTION IN ARCHITECTURE

ABSTRACT: Our capacity to think affords us to be conscious of what we experience, learn, remember and judge. The results are understanding caused by reason and emotion, the latter being reaction to the former. In turn, remembered emotion may be the cause for seeking additional understanding. This dual aspect relates to the processes in which beauty, defined in this essay as positive aesthetic feeling, plays a role in the perception and development of architecture.¹ Sensation and instinct are addressed in search of how they influence our understanding beyond knowledge toward meaning through creativity and judgment. Before we get to that, however, it is necessary to look at the very foundation from which experience and thinking evolves. It is what we call reality, defined here in short, as form-matter unity. Built examples are analyzed regarding properties which let feelings of beauty arise.

KEYWORDS: architecture, beauty, reason, emotion, form, matter

¹ This essay is an elaboration of subchapters 5.1 and 5.2 in my book *Emotion and Reason in Architecture* (2023).

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FORM AND MATTER

Matter determines form. They together determine what is observable by us. Aristotle claims “For my definition of matter is just this—the primary substratum of each thing, from which it comes to be without qualification, and which persists in the result.”² Immanuel Kant writes “The effect of an object on the capacity for representation, so far as we are affected by it, is sensation. That intuition which is related to the object is called empirical. The not yet conceptualized object of an empirical intuition is called appearance. I call that in the appearance which corresponds to sensation its matter, but that which allows the manifold of appearance to be intuited as ordered in certain relations I call the form of appearance.”³

When we think and talk about objects, we always refer to them as far as we know them through what we call their forms, that is, through their observable properties, even when we have them in mind only. The latter we may relate to had experiences or to having been told about them. Because form is the observable part of an object, it is what we look for in trying to understand existing objects or to propose future ones. The properties of form are made possible by the fundamental nature of matter: conceptual and material. Therefore, we think about the matter, the substance, to which the form belongs in two possible directions: from materiality to conceptuality in the perception of existing objects, from conceptuality to materiality in the proposition of future ones.

As a young architect, I designed in 1965 a residence with a dental practice (figure 1). The first task was to understand the site and the client’s need to relate residence and place of work. The second task was to conceptualize propositions toward future materialization as the new object. This process of understanding and conceptualization toward the final result, usually through several iterations, has many partial manifestations of form along its development. Here, the result was a covered entry to a common hall between residence and practice.

Already around 1670 Baruch Spinoza had the fundamental insight that “The human mind is capable of perceiving a great many things, and this capacity will vary in proportion to the variety of states which its body can assume.” And very pointedly, “The human mind does not perceive

² Aristotle, *Physics*, in *The Complete Works of Aristotle*, ed. J. Barnes, Vol. 1, Princeton University Press, Princeton, 1995, 192a31–33, p. 328.

³ I. Kant, *Critique of Pure Reason*, Cambridge University Press, Cambridge, 1998, p. 155.



Figure 1. Clinic and Residence Wöhrl, Weil am Rhein, Germany, 1965. Photograph by Kurt Brandle.

any external body as actually existing except through the ideas of the affections of its own body.”⁴ In other words, our mind is impacted by external effects through the means our body has available to perceive them. In turn, these effects evoke reactions in us. They affect us. We think during perception in physical-to-mental direction which prompts us often to react in mental-to-physical direction. Likewise in design and building, which we refer to as creation in architecture.

The emotional and rational thinking underlies the process in two ways: (1) As mentioned, we are affected bodily by objects from outside via sensation. Nerve signals to the brain influence its present state. They prompt psychological influence, such as satisfaction, joy, enthusiasm, fondness, embarrassment, dissatisfaction, disgust, hate and fear, and often the occurrence of bodily responses, such as gesture, smile, outcry, fighting or fleeing. The etymology of the term *emotion* is derived from Latin: *ex* for out and *movere* for move. But here we need to associate more with emotion than this etymology indicates. Emotion is comprehensively engaged in activities of our body-mind unity. (2) We are influenced and guided by memories of concepts and feelings from earlier experiences, consciously and subconsciously. Emotion is rarely, if ever, experienced related to presently occurring sensation alone because memories, whether inherited from evolution or formed over our lifetime are always present and may play a role together with new information. In this category also belongs emotion aroused by dreaming alone, that is, without present external stimulation. A third aspect, not so much of interest for our concerns, is the fact that we are affected and react to internally caused bodily sensation, such as pain because of illness.

When a designer or a client asks for a stair to be made of wood or steel or concrete, he or she has forms with property characteristics in mind which these materials typically and advantageously provide. Not as raw material only but conceptually formed. So, matter includes purpose, synonymous in architecture with function, and materiality. In short, form represents function and materiality.

⁴ B. Spinoza, *Ethics*, Part II, Propositions 14 and 26, Hackett Publishing, Indianapolis, 1992, pp. 76, 82–83.

FEELINGS AND JUDGMENTS

From this position, the term ‘feeling’ refers to the psychological impact of emotional thinking, the activated state of mind, not the meaning of physical sensation from touch. When observing objects, we progress through neurological activity from sensation and perception to concepts and feelings, whereby the latter two are the mental products of which we humans and to a lesser extent other animals become aware. I consider feelings to be affects as initial, interim or final results on us in reaction to emotional and rational thinking. This view points to thinking as being the overall process of active understanding: the electrochemical motion in the network of the nerves in our body including the brain. What we call body and mind is more intertwined than we have traditionally assumed.

Antonio Damasio summarizes this understanding in 2003 in very accessible terms: “What do we gain considering the mind in the perspective of the body, as opposed to considering the mind in the perspective of just the brain? The answer is that we gain a rationale for the mind that we would not discover if we considered the mind only in the perspective of the brain. The mind exists for the body, is engaged in telling the story of the body’s multifarious events, and uses that story to optimize the life of the organism. [...] The brain’s body-furnished, body-minded mind is a servant of the whole body.”⁵ In order for our brain to process, our body as a whole is engaged. We think by emotion playing one part and reason playing another. How they relate to each other is of essence, including their sequencing of occurrence in particular situations. Earlier in his account, Damasio clearly differentiates emotion from feeling and gives emotion, not feeling, first place in the course of perception when he writes that “We have emotions first and feelings after because evolution came up with emotions first and feelings later. Emotions are built from simple reactions that easily promote the survival of an organism and thus could easily prevail in evolution.”⁶

This means that we are not starting with a blank slate as far as any of our present rational thinking and understanding is concerned. Emotion instinctively causes and influences how we reason. Feelings follow. Why? Because feelings respond to affects. They are part of our mind’s reactions to the bodily aspects of thinking. They are results of thinking

⁵ A. R. Damasio, *Looking for Spinoza: Joy, Sorrow, and the Feeling*, Harcourt Books, Orlando, Fl., 2003, p. 206.

⁶ *Ibid.*, 30. In my view, emotion is the affect from which feelings develop.

by our body-mind unity. Damasio writes more recently “The immediate causes of feelings include (a) the background flow of life processes in our organisms, which are experienced as spontaneous or homeostatic feelings; (b) the emotive responses triggered by processing myriad sensory stimuli such as tastes, smells, [...] (c) the emotive responses resulting from engaging drives (such as hunger or thirst) or motivations (such as lust and play), or emotions, in the more conventional sense [...] examples of emotions include joy, sadness, fear, anger, envy”⁷. There is a problem with considering and naming emotions as feelings. He comments “Of note, the felt experiences of emotions are unfortunately known by exactly the same name as the emotions themselves. This has helped perpetuate the false notion that emotions and feelings are one and the same phenomenon, although they are quite distinct.”⁸ Example: “Joy” is used for the process of positive emotion and for the response to the emotion. This is not a problem in general but in detailed discourse, as much literature on emotions and feelings shows. I believe the problem can be avoided by explicitly distinguishing between the processes of emotional and rational thinking, and their results of emotional and rational feeling. We should use the names like “joy,” only to refer to feelings as results of emotional thinking; emotion being the part of thought influencing reason toward judgment. This terminological clarification should be kept in mind regarding any use of the term “emotion.”

Emotional and rational thinking and related feelings occur in response to chains of events and are caused by externally caused sensation. They are usually modified by internally caused sense. We have memories of short term, long term and extremely long term; the latter inborn from evolution. The emotional aspects are in large part aesthetic, the central issue of our discussion. Remembered experiences, especially those acquired from evolution, enable instinct, the capacity of inborn responsiveness and impulse. We arrive at it subconsciously.⁹

⁷ A. R. Damasio, *The Strange Order of Things: Life, Feeling, and The Making of Cultures*, Pantheon Books, New York, 2018, pp. 99–100.

⁸ *Ibid.*, 100.

⁹ Part of this thinking goes back to the views of William James, “What Is an Emotion?” (1884), in *Collected Essays and Reviews*, Longmans, Green and Co., London, 1920, p. 247. See also Commentary on “What Is an Emotion?” in *Classics in the History of Psychology*, an internet resource developed by Christopher D. Green, <http://psychclassics.yorku.ca/James/emotion.htm>. See also J. E. LeDoux, *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*, New York: Simon & Schuster, 1996, pp. 42ff for a very helpful exposition of James’ view and theories which built on it.

Often, however, reason adjusts instinctive thinking. Richard and Bernice Lazarus emphasize in 1994 the crucial role of reason for emotion as twofold: “First, since emotions are aroused by an evaluative judgment—what we refer to as an appraisal—about the significance of what is happening for our well-being, we will never be able to understand how emotions come about without examining the reasoning behind them. Second, to view emotion as irrational is a way of denigrating emotions as not to be trusted when, in reality, emotion is an important resource that helps us survive and flourish. It is probably not going too far to say that reason may hold our emotions in check, but often in constructive ways the emotions hold reason in check. There is somewhat of a balance between them. If not, there lies madness.”¹⁰ I consider this to be true in general. What happens, however, is not symmetrical occurrence of the two. When we think about something, emotions from evolution or from other earlier experiences typically exist in our memory, come back into play and instinctively influence decision making on present reasoning. On the other hand, present reasoning often results in emotion which is strong enough to cancel this background emotion or modifies parts of it. Therefore, no simple either/or applies, but a kind of long or short term founded iteration with emotion and reason occurs and conditions our mind.

So, the emotion-and-reason process is a dual faceted convergence and is continuously interactive with what we call memory. Some of the great discoveries in neurological research over the past decades have determined what is called the plasticity of the brain. The brain’s maturation and renewal process is not only developmental early life, but reconstructive during the entirety of our lifetime. We learn by adjustment of neurons in the brain and through changes in their connections. Such changes also take place in relation to our sensorimotor activities, a crucial aspect when we consider that most of our goal-oriented mental activities find expression in activities with physical output, be they work or leisure related. Our brain structure is in constant flux and it is well understood that frequent exposure to variation enhances brain plasticity and, with it, creativity.¹¹

On this basis we can easily grasp that there is no “emotional mode” as such with which the brain engages. When the brain is active, it is

¹⁰ R. S. Lazarus, B. N. Lazarus, *Passion and Reason: Making Sense of Our Emotions*, Oxford University Press, New York, 1994, p. 203.

¹¹ N. C. Andreasen, *The Creating Brain: The Neuroscience of Genius*, The Dana Press, New York, 2002.

reasoning influenced by emotion. Every change in mental state is a change of emotion and reason, and has mind-body consequences that may or may not be strong enough to be felt. In other words, much of this process is subconscious, especially so in the early stages of an episode and in quickly developing short episodes, many not remembered. Strong episodes, however, may leave strong feelings as remembrances, and can play a major role in living through and assessing later experiences.

Here is obviously not the space even to attempt discussion of the vast amount of research on the mind and the many positions taken contrasting emotion and reason.¹² Michel Cabana writes that “There is no consensus in the literature on a definition of emotion.”¹³ But because of our need to work with one, my own experience leads me to agree with his pragmatic view that “Emotion is any mental experience with [...] hedonic content (pleasure/displeasure).”¹⁴

How does emotional thinking and feeling relate to cognition, reason and understanding? There is no doubt that there are relations among the two kinds of thinking. But they are not just additive. The causes and processes of affect are too complex for this to happen. Further, I believe that present effects on us are more or less influenced by former ones we had. That implies that some emotions and feelings latently exist in us. Many emotions are instinctive and occur before conceptualization has completed its work. They include, for us of special interest, aesthetic feelings which arise as pleasure or displeasure while experiencing the evolving and final form of objects. The path to understanding is rarely, if ever, a single loop occurrence, although we are often led, because of its usually short duration, to assume this to be the case.

Figure 2 shows the chain of events in observation. It illustrates the path of thinking from sensation to overall comprehension and memory, the latter prompting consideration of instinctive and reflective comparisons as well as appraisals of earlier had experiences. The eventual results are understanding influenced by emotion, qualified in the sense of judged and selected understanding, that is, as meaning. We should also remember that we are, especially in the observation of physical objects, involved with many details of rather complicated wholes.

¹² For an extended annotated bibliography about discussions of emotion see L. Pessoa, “Cognition and emotion,” *Scholarpedia* 4.1. revision #91134, 2009, p. 4567.

¹³ M. Cabanac, “What is emotion?,” *Behavioural Processes*, 2002, 60, 2, 2001, p. 69 (in Abstract).

¹⁴ *Ibid.*, p. 80.

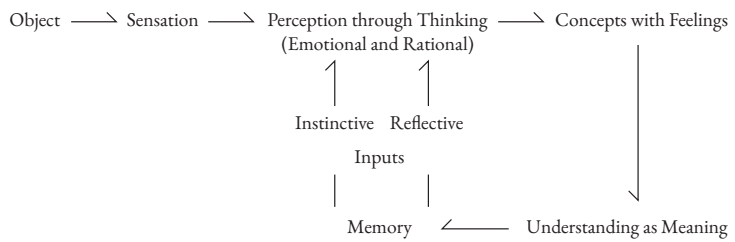


Figure 2. Emotional and rational thinking toward understanding as meaning.

The “through” of perception in figure 2 points to the constitutive nature of emotional and rational thinking during the entire process, although we may not be aware of this fact while it happens. Thinking about properties evokes affects from the process. There is no understanding without emotional affects: feelings. They influence the judgments about cognition and the motivation to seek further understanding, positively or negatively. Figure 2 agrees with what Jonathan Hale writes “The novelty of Merleau-Ponty’s approach was to propose a more primary form of awareness: a ‘bodily intentionality’ that provides our initial grasp or sense of a situation, allowing us to cope with the ongoing flow of experience.”¹⁵ The intentionality of our body-mind unity is ongoing as awareness through observation from initial sensations to judgments as meaning about the reality of the object.

When we are in the process of design (creation), rather than observation only, the object in figure 2 is the emerging design solution, that is, the result in successive stages of the design process. We observe while we create, then judge and make adjustments, then observe again and so on until we are satisfied, more or less. Based on an architectural program to be realized on a particular site with specific properties, inner sense from the memory of earlier experiences motivates rational and emotional thinking toward physical solutions. While we work on the design, we advance in understanding it. We make proposals, adjustments, judgments and decisions at many points along the path then stop at a final result. Many judgments emerge from rational demands and related emotional feelings while we contemplate the evolving concepts. Aesthetic feelings arise while we simulate and experience forms of their realization. As functions fundamentally determine forms, they inevitably influence feelings of beauty.

BEAUTY AS EMOTION

This is not the place to attempt a discussion of the wide-ranging issues about beauty and aesthetics in architecture. But I will provide my views regarding those I find most pertinent and I will feel free to quote sources without providing pro and counter argumentation, unless this seems relevant for the particular aspect at hand. I aim to provide sufficient background information, clarifying my key positions.

¹⁵ J. Hale, *Merleau-Ponty for Architects*, Routledge, Abington, 2017, p. 14.

In his views about taste, Anthony Cooper, the 3rd Earl of Shaftesbury, emphasized in 1711 the concept of internal sense when he writes that “No sooner the Eye opens upon Figures, the Ear to Sounds, than straight the Beautiful results, and Grace and Harmony are known and acknowledg’d. No sooner are Actions view’d, no sooner the human Affections and Passions discern’d (and they are most of ‘em as soon discern’d as felt) than straight an inward Eye distinguishes, and sees the Fair and Shapely, the Amiable and Admirable, apart from the Deform’d, the Foul, the Odious, or the Despicable.”¹⁶ This “inward eye”, not further defined but supposedly developed, is the ability to concern ourselves with matters of beauty and associated judgment. Francis Hutcheson concurs in 1729 by “Let it be observ’d, [...], the Word Beauty is taken for the Idea rais’d in us, and a Sense of Beauty for our Power of receiving this Idea.”¹⁷ He, like Shaftesbury, clearly places beauty as a result of sensation in our mind. David Hume writes in 1757 that “a thousand different sentiments, excited by the same object, are all right: Because no sentiment represents what is really in the object. It only marks a certain conformity or relation betwixt the object and the organs or faculties of the mind; and if that conformity did not really exist, the sentiment could never possibly have a being. Beauty is no quality in things themselves: It exists merely in the mind which contemplates them; and each mind perceives a different beauty.”¹⁸ I very much agree. Hume’s view implies a denying position in the questioning about whether there exist properties of beauty intrinsic to objects. Beauty and, more comprehensively, all aesthetic feelings we attribute because of pleasure or displeasure, are in our minds, not in objects. The folk wisdom “beauty is in the eye of the beholder” has it quite right, though we should adjust it and say *beauty and any other emotional thinking is in the mind of the beholder*. Our eyes are a sensory extension of the brain.

There are properties in the objects which are the ground for our aesthetic. But these properties are not aesthetic in any sense of intrinsic or permanent. This is why styles in architecture and sometimes whole cultures change based on changing desires of appearance. Hume writes that “The order and convenience of a palace are no less essential to its beauty, than its mere figure and appearance. [...] from considering that beauty

¹⁶ A. A. C. Shaftesbury, *Characteristicks of men, manners, opinions, times*, John Darby, London, 1711, Vol. 2, pp. 414–415.

¹⁷ F. Hutcheson, *An Inquiry Into the Original of Our Ideas of Beauty and Virtue*, Third Edition, J. and J. Knapton, J. Darby *et al.*, London, 1729, p. 7.

¹⁸ D. Hume, *Four Dissertations*, A. Millar, London, 1757, pp. 208–209.

like wit, cannot be defin'd, but is discern'd only by the taste or sensation, we may conclude, that beauty is nothing but a form, which produces pleasure"¹⁹. We must be very careful here: "form" is not whatever the physical realization of the object is which we at least in part can observe. He talks about the form of the felt experience during the sensory observation by our body-mind unity, being undefinable but occurring as subjective affect. It is here the influence of the object prompting pleasure, that is, beauty as feeling to arise where only it can, that is in our minded body.

Johann Wolfgang von Goethe expresses this fact in 1789 with enlightening poetic nuance in conversation with an imagined person searching for answers: "'Can you tell me what beauty might be?' he [the person] called out. 'Maybe not!' I uttered, 'but I can show you.'"²⁰ One may add *as far as you will appreciate*, as the answer points to the subjectively arrived nature of what we call beauty. In other words, beauty is not a property which we observe but an impact of a property which we feel.

An unfortunate development occurred over the past two and a half centuries by the increasing use of the word *aesthetic* without clear differentiation to the word *beauty*. This led over the whole history of recent aesthetics to confusion. It is also in part to blame for the push to locate the aesthetic of experience in the confines of art as institution rather than to take it as natural occurrence in the realm of everyday understanding and communication. It was Alexander Gottlieb Baumgarten who proposed *aesthetics* as a discipline of philosophy in terms of "a science of sensuous cognition" with a narrow focus on beauty. In other words, he tried to embed beauty as part of scientific understanding.²¹ The modern use of the term aesthetic has its origin mainly in his efforts. His *Aesthetica*, published in the 1750s, tries to establish an autonomy of aesthetics as a discipline with verifiable findings in a world which was increasingly dominated by the rational aspects of the emerging scientific and industrial revolution. He writes: "Aesthetics (as theory of the free arts, as logic of the lower level [primitive] cognitive faculties, as art of the beautiful thought and as art of the intuitive cognition equivalent to that of rational

¹⁹ D. Hume, *A Treatise of Human Nature* [1739], Book II, Clarendon Press, Oxford, 2007, p. 195.

²⁰ J. W. Goethe, „Der Sammler und die Seinigen,“ fünfter Brief, in *Schriften zu Kunst, Sämtliche Werke*, Vol. 13, Artemis-Verlag, Zürich, 1948, p. 286.

²¹ I use the term "sensuous" in correspondence with Baumgarten's terminology of "*scientia cognitionis sensitivae*." It catches the meaning of pleasurable better than 'sensory' which points more generally to the senses.

thought) is the science of sensuous cognition.”²² And, “The aim of Aesthetics is the perfection (the bringing of perfection) of sensuous cognition as such. With this, however, beauty is meant. Correspondingly, the imperfection of sensuous cognition as such, that is the ugliness, is to be avoided.”²³ He published the book in Latin and gave this theory “scientia cognitionis sensitivae” the name *Aesthetica*. He viewed sensuous cognition as “equivalent” to rational thought and believed that it could be perfected “as such.” Although he did not say that the term *aesthetic* is synonymous with the term *beautiful*, his way of explaining their close association has often been taken in this way.

Baumgarten brings cognition and objects together by claiming: “The beauty of sensuous cognition and the fineness of objects represent composed perfections, that is, such which are generally valid”.²⁴ He makes a distinction here between the cognitions in the mind (beauty) and qualities in the objects (fineness). But he also points to their connection and interdependence as “composed [composite] perfections.” He does not clearly explain how the sensuous and the rational cognitions are interrelated, though he must have been aware that this is an important issue. He gives sensuousness and its result, aesthetic, a more direct role in cognition than most others who enlighten us on the process and who view sensation as the basis for cognition but not as cognition itself. I believe that aesthetic experience contributes to overall cognition by, psychologically and at times often physiologically, influencing rational cognition as process and as result through instinctive or conscious feelings and judgments.

Baumgarten is quite aware of limitations which a “science” of aesthetics faced. He writes that some of the perfections and imperfections of sensuous cognition are “so hidden that they remain for us in the dark altogether or we can view them only in our thoughts”²⁵. He qualifies this view by writing “The sensuous cognition is [...] the whole of representation below the threshold of strictly logical distinction.”²⁶ This claim points to the view that the aesthetic part of representation of objects is rather hidden sensuous cognition followed by rational cognition, whereas in

²² A. G. Baumgarten, *Aesthetica*, § 1, *Ästhetik als Philosophie der sinnlichen Erkenntnis*, Schwabe & Co., Basel, 1973, p. 107, my translation from Latin and German.

²³ *Ibid.*, § 14, p. 115.

²⁴ *Ibid.*, § 24, p. 119.

²⁵ *Ibid.*, § 15, p. 115.

²⁶ *Ibid.*, § 17, p. 115.

my view it is the psychological effect on us from physiological sensation during the process of experiencing the form of objects.

Emotional thinking influences judgment and decision making all along the most often iterative process toward understanding. If at all, questions about form seem to play a minor role in his account. Still, Baumgarten has much to tell us. He runs into problems with his intention to develop for aesthetics a separate science of intuitive cognition, equivalent to that of rational thought, instead of clarifying the interdependence of the aesthetic and the conceptual as emotional and rational thinking followed by feelings.²⁷ While the emotional part of thinking is psychological and the rational part of thinking is conceptual, both are more or less influential through and influenced by feelings and judgments.

Robert Dixon blames Baumgarten for the supposedly poor state of discourse on aesthetics: “The Baumgarten corruption of aesthetic takes a matter-of-fact Greek descriptive label for an elemental distinction in human knowledge, and turns it into a buzz word for a system of belief that confuses the perception of beauty with the cultivation of art appreciation.”²⁸ And, “When Baumgarten corrupted this Greek word he inadvertently un-named the elementary idea of sensible and obscured it with the sticky questions of What is art? and What is beauty?”²⁹ Baumgarten used the meaning of the Greek term *aesthetic*, which points to general perception, to become “sensuous cognition” with the connotation of “beautiful thought” (§ 1) and for “the foundation in studies of the free arts.” (§ 3) Baumgarten’s views succeeded on this “corrupted” basis, as Dixon says. Dixon aims to make the case “(1) that the sensible and the reasonable are inextricably linked, and (2) that the cognitive role of the sensible is primary.”³⁰ There is no question in my mind that (1) is so and that in (2) sensation is primary, in the sense of being first, because it provides the foundation for all of perception. Sensuousness may result in more or less aesthetic feeling with likely influence on rational thinking. It is followed by judgment and perhaps decision making. Dixon’s further interest is to show that the confusion of the terms eventually resulted in the present situation of art as an institutional enterprise in contrast to art as broadly based, everyday activity of creating things and communicating through them.

²⁷ *Ibid.*, § 1, p. 107.

²⁸ R. Dixon, *The Baumgarten Corruption: From Sense to Nonsense in Art and Philosophy*, Pluto Press, London, 1995, 80.

²⁹ *Ibid.*, p. 152.

³⁰ *Ibid.*, p. 82.

In his *Critique of the Power of Judgment*, Immanuel Kant associates the aesthetic clearly with the appearance of things when he writes in its First Introduction: “The expression *an aesthetic kind of representation* is entirely unambiguous if we understand by it the relation of the representation to an object, as an appearance, for the cognition of the object; for then the expression of the ‘aesthetic’ signifies only that the form of sensibility (how the subject is affected) necessarily adheres to such a representation and that this is unavoidably carried over to the object (but only as a phenomenon).”³¹ The carrying “over to the object (but only as a phenomenon)” shows Kant’s view of the distinction between the aesthetic as impact on our mind by the perceived properties in things and the states of affairs, that is, the processes which produce the impact. In the first paragraph he writes: “In order to decide whether or not something is beautiful, we do not relate the representation by means of understanding to the object for cognition, but rather relate it by means of the imagination (perhaps combined with the understanding) to the subject and its feeling of pleasure or displeasure. The judgment of taste is therefore not a cognitive judgment, hence not a logical one, but is rather aesthetic, by which is understood one whose determining ground cannot be other than subjective. Any relation of representations, however, even that of sensation, can be objective (in which it signifies what is real in an empirical representation); but not the relation to the feeling of pleasure and displeasure, by means of which nothing at all in the object is designated, but in which the subject feels itself as it is affected by the representation.”³² I agree.

The following is an abridgment, which conveys what is important for us in perhaps somewhat easier comprehensible language: When we decide about whether something is beautiful or ugly, we make a judgment about whether it gives us pleasure or displeasure related not to what it is and does overall, but to how it appears to us, that is, its form. This part of the judgment is not by conceptualization but by sensation, not logical but aesthetic, and therefore subjective. Aesthetics relates only to the question whether we are pleased or displeased about the experiential

³¹ I. Kant, *Critique of the Power of Judgment*, First Introduction, Cambridge University Press, Cambridge, 2000, p. 24. The “aesthetic kind of representation” is mental appearance with related feeling.

³² *Ibid.*, § 1, p. 89. Guyer and Matthews write that “The doctrine that the feeling of pleasure or displeasure reflects the relation of an object to the subject rather than the properties of the object by itself is one of Kant’s most entrenched views” (*ibid.*, note 5, p. 359).

appearance of something. It is the effect of the representation in the mind of the observer. In other words, the feeling of pleasure or displeasure which has its basis in the representation in our mind is not related directly to the object but to our feeling about it, that is, to us as subjects. The aesthetics of experience and judgment is not about anything aesthetic in objective properties, but about whether and how strongly feelings of pleasure and displeasure arise in us from the exposure to such properties. Therefore, we should avoid calling something “aesthetic properties.” There are only properties which affect our judgment aesthetically. This position may be called radically subjectivist.³³

An abundance of different positions, using the term *aesthetic*, have been taken since Kant. One thinker, central to our concerns, is John Dewey. As he put it in 1934, the aesthetics of experience is clearly within the context of all experiences: “the esthetic is no intruder in experience from without, whether by the way of idle luxury or transcendent ideality [...] it is the clarified and intensified development of traits that belong to every normally complete experience. This fact I take to be the only secure basis upon which esthetic theory can build.”³⁴ Every experience is derived from an object that prompts us to react aesthetically, although we may, because of its everydayness not be particularly aware of it. This is best understood from the commonness of nature’s beauty that we experience but of which we are not always aware. Experience of the aesthetic, to be felt, requires perception of an object. It is a psychological aspect and happens as a matter of course. It becomes part of our judgment process through its influence during our step from understanding of an object to understanding of its meaning for us. This is so in the process of observation but even more noticeable in design where we *mean* usually our best understanding for the realization of a project. We mean through design. Dewey called his pragmatic book on aesthetics *Art as Experience*. He could as well have called it the *Aesthetics of Every Experience* as he is right in pointing out that everything we encounter triggers in us more or less what we call the *aesthetic of experience* or simply the *aesthetic*.

Our discussion does not address art explicitly to any extent. To do so would go way beyond our context and would not add much to what our

³³ For extensive discussions of objectivist versus subjectivist positions in aesthetics see, for example, F. J. Kovach, *Philosophy of Beauty*, University of Oklahoma Press, Norman, 1974, pp. 55–93, and F. Sibley, *Approach to Aesthetics: Collected Papers on Philosophical Aesthetics*, Clarendon Press, Oxford, 2001, pp. 71–87.

³⁴ J. Dewey, *Art as Experience*, Capricorn Books, New York, 1958, p. 46.

immediate interest is regarding the aesthetic. Art today is in my view best understood as activities toward the creation of things which emphasize aesthetic experiences. In this sense art is implicitly addressed whenever we are involved with matters aesthetic. As aesthetic experiences are desirable regarding nearly everything we produce, art is part of our lives much more broadly than any institutionalization may show in museums, theaters, concert halls, educational settings, etc. Institutionalization often heightens our awareness for the aesthetic. On the other hand, there is no reason to believe that what we feel as the aesthetic of institutionalized art is different from the aesthetic that we feel from anything else. Architecture is art in bringing about aesthetic experience of its forms while providing shelter for our being and activities.³⁵

In *The Aesthetic Understanding*, Roger Scruton writes with regard to Kant and Hegel that “Both philosophers were convinced, [...] that aesthetic judgment is no arbitrary addendum to human capacities, but a consequence of rationality, a bridge between the sensuous and the intellectual, and an indispensable means of access to the world of ideas.”³⁶ This passage echoes an earlier, also introductory one in his *The Aesthetics of Architecture*, where he writes “I shall try to demonstrate that the division between practical reason and aesthetic understanding is in fact untenable, and that until the relation between the two is reestablished they must both remain impoverished.”³⁷ I don’t know of anybody who doubts that there is a relation between the emotional and the rational. But this must not mean that aesthetic judgment is a “consequence of rationality,” although, like everything mental, it is a consequence of thinking; thinking also being emotional activity. In this regard, my understanding of Kant and Hegel is different from Scruton’s. Aesthetic judgments are a consequence of feelings which are based on our sensation of an object’s form. Other judgments arise as a consequence of feelings which are based on rationality. Although every perception of an object triggers an aesthetic affect, as small as it may be and as little it may be felt, I avoid the terminology of “aesthetic understanding” as it could be taken to imply that there is also something like non-aesthetic understanding of objects.

³⁵ For discussions on aesthetics in everyday experiences see for example K. Mandoki, *Everyday Aesthetics: Prosaics, the Play of Culture and Social Identities*, Ashgate, Aldershot, 2007, and Y. Saito, *Everyday Aesthetics*, Oxford University Press, Oxford, 2007.

³⁶ R. Scruton, *The Aesthetic Understanding: Essays in the Philosophy of Art and Culture*, St. Augustines’s Press, South Bend, In., 1998, p. 3.

³⁷ R. Scruton, *The Aesthetics of Architecture*, Princeton University Press, Princeton, 2013, p. 1.

To affirm, there is no aesthetic understanding in the sense of rationality. There is aesthetic feeling, emotional response, in the sense of pleasure or displeasure from the process of perception. And, there is rational feeling in the sense of pleasure or displeasure because of contemplation about the concept of an object and its consequences. They arise together, often incrementally in a kind of dialog regarding judgment with multiple iterations of aesthetic and conceptual thinking. Examples: (1) That a building has a pleasant set of windows is an aesthetically perceived, emotionally effective asset. That these windows provide lighting during the day is a conceptually perceived, rationally affective asset. (2) High level noise in a restaurant is a nuisance. It is negatively aesthetic, as it interferes with the enjoyment of meals and the conversation with company. That many restaurant owners and many designers, do not recognize that noise is an aesthetic and conceptual insensitivity to many guests is unfortunate. (3) For a tired person an elevator is beneficial in a particular way. The person's minded-body responds with a positive aesthetic feeling; somaesthetically as some observers may call it. Richard Shusterman, who introduced the term, writes that "somaesthetics is a framework to promote and integrate the diverse range of theorizing, empirical research, and meliorative practical disciplines concerned with bodily perception, and presentation." And again, "By and large, [...], the term is immediately understood as relating to the aesthetics of embodiment (including embodied perception)"³⁸. Regarding the first quote, I would agree with him if the term aesthetic were not understood to involve our body, but probably few thinkers doubt that. The wide field of aesthetics is today understood to include work in all the areas he mentions. Regarding the second quote, I believe that the term emphasizes the involvement of the body, which should not be necessary as there is no other way but to experience through the body. The term 'somaesthetics' can be somewhat misleading if taken to indicate that there are other aesthetics beyond somaesthetics. I believe that the "soma" is redundant.

As emphasized, aesthetic feelings are psychological effects on the mind from physiological effects of sensation when observing form based on experiencing reality or memory. Aesthetic feelings may be strong or weak in giving us pleasure or displeasure. There are many instances in which we are not aware of them because many feelings occur subconsciously.

³⁸ R. Shusterman, *Thinking through the Body: Essays in Somaesthetics*, Cambridge University Press, Cambridge, 2012, pp. 8, 6.

Environmental circumstance of considered objects may be influential. A color of a wall, considered by itself, may have no or little influence on us aesthetically. But in contrast to other objects in the room, even a little influence may have an impact, whether we are aware of it or not.

Two further examples in visual detail confirm what we discussed and attest to how aesthetic issues contribute to the ongoing flux in architectural design and development: (1) A façade we look at has certain proportions because of its overall dimensions, the sizes of windows and the pieces of wall between them, etc. The proportions and the materials are physically existing properties and are part of objective experience. But whether we are pleased or displeased with the proportions is derived from subjective experience. Proportion, such as the Golden Section, has as such no aesthetic. An observer is required to experience and judge it to be so. Figure 3 shows the division of a window at left according to the Golden Ratio. The window at right has *a* increased by 15 percent within the same overall width. I prefer the proportion at right, *having more tension*, an aesthetically motivated experience, functionally, that is intentionally, realized by the change of *a* and *b*. The addition to the Staatliche Kunsthalle, Karlsruhe, designed by Heinz Mohl, shows great sensitivity in allocating proportion (figure 4). The windows in the older building have or are close to having Golden Ratio proportions in width. But this is not so in the new building. Still, a pleasant appearance of the whole is achieved in the new façade, not least also because of the full height enclosure in glass because of the full height enclosure in glass between the old and the new, helping to highlight the proportioning of the façades to appreciate on their own. (2) There is a recent development in the aesthetics of architecture with perhaps broader consequences than the movement away from the long tradition of emphasizing proportion. It is the formation of space and matter beyond orthogonality. Not that history is devoid of non-rectangular designs. Most have this feature in aesthetic rather than utilitarian motivation. But they have been, even during the time of the Baroque, rather exceptions within the large volume of building production. With good reason: accommodation, be it in the spatial organization or the choice of physical components, can be achieved usually more efficiently on the basis of orthogonality. The issue is brought up here not to advocate one way or the other, but to put the aesthetic firmly as a value into the mix of values; as a very important one among many even viewed in the direction of ‘beauty as function’, that is, properties chosen on the basis of knowledge that they produce a

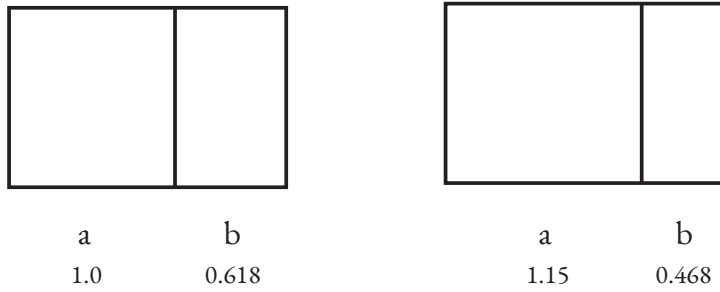


Figure 3. Golden ratio compared with other proportion.



Figure 4. Art Museum, Karlsruhe. Photograph by Kurt Brandle.



Figures 5 and 6. Philharmonic Hall, Berlin.
Photographs by Kurt Brandle.

desired aesthetic affect. A prominent building with non-rectangularity throughout is the Berlin Philharmonic Hall, designed by Hans Scharoun in 1955 (figures 5 and 6).

The kinds of aesthetically influential choices offered by aspects such as willed proportion and non-rectangularity, belong essentially to the category of design freedom. This freedom is in architecture not as free as in other arts. For most building types it is severely constrained by rational thinking arising from utilitarian requirements. Louis Sullivan's dictum "Form follows Function" expresses this in masterful compactness. It implies that *aesthetic follows function*. But this is not necessarily all. As mentioned, we may also enjoy influencing a presently developing form by remembered pleasantness of similar forms which come to mind and their use may be categorized as *aesthetics as function*. The non-rectangularity of whole buildings, we just discussed, belongs to this impetus. But there are many possibilities of more subtle influences of *willed* beauty, designed into the object to be felt as such. Again, depictions of built examples can *explain* the effects better than long verbal elaborations can.

One of the first 'postmodern' buildings, the chapel of Notre Dame du Haut in Ronchamp, France, designed by Le Corbusier, provides functionally required space for worship inside and outside. Although the walls, towers and roofs serve obviously rationally derived functional needs, their properties are what they are to a large extent also influenced by strong functional aesthetics. This is probably nowhere more easily grasped than from the symbolically based, overly large thickness of the walls. Symbolism, rationally thought, wills emotional thought, at least some of it being aesthetic. The exaggeration is perhaps also beyond symbolism purely aesthetic.

The roof over the entry of the Culture and Convention Center in Lucerne, designed by Jean Nouvel, is extremely extended because of reasoning toward aesthetic impact. While providing at the same time an inviting cover for sitting along the lake, it is a stunning sign for motivation to visit the building.

The Seagram Building in New York has arguably one of the most well-proportioned exteriors in architecture. At the entry level, the choice of marble as base cover contrasts marvelously with the rhythm of the curtain wall above. There is no question, and various comments by Mies van der Rohe point in this direction, that much of his rational thoughts functioned to evoke emotional thought for aesthetic feelings as outcome. This is seeking and confirming *functional beauty*.



Figure 7 (above). Notre Dame du Haut, Ronchamp.
Photograph by Kurt Brandle. Figure 8 (below). Culture and
Convention Center, Lucerne. Photograph by Kurt Brandle.



Figure 9. Seagram Building, New York.
Photograph by Kurt Brandle.

The concept of functional beauty and its history are addressed more broadly in Glenn Parsons and Allen Carlson, *Functional Beauty* and in Kurt Brandle, *Emotion and Reason in Architecture*.

CONCLUSION

Thinking about observation and creation in design and building brings forward the relatedness of emotion and reason. Emotional thinking is a reaction to rational thinking. Its basis is reality, remembered or present. There is no emotion without reason. Part of emotion is aesthetic feeling. It arises in us psychologically while experiencing the properties of form in its unity with matter. If the feeling is positive, we call it “beauty” and associate it with objects. Immanuel Kant, from whom I learned more than from any other philosopher, described the foundations for this view already a quarter of a millennium ago. I can attest to its validity from innumerable encounters in research and practice.

But I cannot follow him, when he differentiates between *free* and *adherent* beauty.³⁹ There is only one kind of beauty: it is all adherent. We can describe it only with inadequate words. It is the positive feeling about properties of form, whether the form belongs to a natural or an artificial object and whether the object is purposive or not. Beauty is not by itself. It occurs in us in relation to something else. We cannot create it as such. We must observe the given form of an object or remember one in memory to feel beauty or ugliness, an aesthetic come into being.

In search of another example in architecture which makes the dependence of aesthetic and form abundantly clear, I remember the feelings of beauty and the sense of symbolism arising from many aspects at the Salk Institute, La Jolla, designed by Louis I. Kahn. One of them is from the glistening of water flowing through the court between the two building wings, then splashing down into basins and on toward the ocean. The other is the human scale of the cuboid offices arranged around the courtyard. Here, art meets science. The result is emotional and rational embodiment. More general, when we create something, be it in architecture, in poetry, in dance, in cooking, in singing, in painting—beyond rational understanding. If we are successful, it is, beyond being informative, also beautiful.

³⁹ I. Kant, *Critique of the Power of Judgment*, § 16, pp. 114–115.



Figure 10. Salk Institute, La Jolla, at west end of court.
Photograph by Kurt Brandle.



Figure 11. Salk Institute, La Jolla, looking west into court towards the ocean. Photograph by Kurt Brandle.

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