

# The Problematic Nature Between Architectural Pleasure and Well-Being

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## Abstract:

**This paper focuses on the problematic relationship between architectural pleasure and well-being or happiness. It attempts to update the ancient philosophical debate on the conflict between the pleasures promoted by hedonism, and the pleasures and virtues of well-being promoted by eudemonia in terms of architectural design through the lens of today's positive psychology movement. This emerging field has identified, to a limited extent, when pleasure and well-being can conflict resulting in addiction, while at other times pleasure serves as a pump to the higher echelons of well-being, or what Aristotle calls eudaimonia. This paper attempts to identify the same for architecture. Since Vitruvius, architects have written on our preferences which appear to bring pleasure - some with empirical evidence. By taking stock of architectural writings and program elements that aim to deliver pleasure, this paper asks which of these resonate with philosophical and positive psychology findings on higher pleasures. Particularly relevant are the findings of psychologist Barbara Fredrickson's broaden and build theory of positive emotions which sheds light on how design delight may lead to positive psychology's promotion of higher forms of well-being such as: engagement, relationships or sense of community, meaning and achievement. The programming and design of Helsinki's new central library by ALA Architects illustrates virtuous pleasures that serve a higher purpose in a country and city that ranks first in Gallup's 2019 and 2020 World Happiness Reports.**

## BACKGROUND

Since 2006 several popular books and papers have outlined how architectural design can increase our sense of well-being or happiness. Most do not adequately address the academic context that influenced their ideas that emerged from the late 90's positive psychology movement. None adequately describe the problematic nature between pleasure and mental well-being that positive psychology has addressed. This relatively new discipline is said to have emerged when founder Dr. Martin Seligman announced in his 1998 inaugural speech as president

of the American Psychological Association that the profession needed to move beyond managing psychological disorders and focus more on conditions to bring about well-being or happiness. As a result, most universities now teach positive psychology related classes. Seligman outlines five pillars for the promotion of well-being that include: positive emotions and the pleasant life, engagement or flow, positive relationships (community), meaning, and achievement.<sup>1,2</sup> Underlying these pillars are the concepts of innate strengths and resilience. The problematic nature of his first pillar of positive or pleasurable emotions as it applies to architectural design towards helping or hindering the remaining four pillars will be the focus of this paper. Note that Seligman writes that the remaining four pillars are not necessarily pleasant in themselves, but may require significant effort and sacrifice for long-term life satisfaction.

Architects harbor similar motivations as food and web designers to design pleasant experiences. Since Vitruvius's call for delight, architects have written on appealing environments. Similarly, today's food engineers and web designers have amassed a substantial amount of data on what we like. Unfortunately our preferences for tasty treats can lead to obesity and related chronic diseases. As for internet preferences, its ability to distract can lead to mindless wandering that competes on what matters most in our lives. Architectural philosopher Karsten Harries has expressed similar concerns on the pursuit of architectural delight alone on what he identifies as the 'aesthetic approach' which may be detrimental to the higher functions of meaning and community.<sup>3</sup>

Martin Seligman points out that the first pillar of pleasure is problematic in that it is passive in nature and oftentimes uncontrolled. Positive emotions happen to us and are more happenstance; hence its association with happiness as a mere transitory phenomenon. On the other hand, the remaining four pillars require active effort.<sup>4</sup> Positive psychologist Barbara Fredrickson has found that the right kinds of pleasures can broaden and build our thinking and positively affect the other four pillars instead of hindering them.<sup>5</sup> In examining the relationship between pleasure and higher forms of well-being, a more than 2000-year-old debate exists between the concepts of hedonism and eudemonia.

### HEDONISM, EUDEMONIA AND EPICUREANISM

In ancient Greece, Aristippus and the Cyrenaics promoted hedonic bodily pleasures like tasty food, sex, etc. that lead to happiness.<sup>6</sup> Aristotle advocated for a eudemonic happiness based on virtuous behaviors and outcomes that require reason and effort. His *Nicomachean Ethics* concept of eudemonia is based on cultivating hard-won virtues such as temperance, excellence, friendships, wit etc.<sup>7</sup> A philosopher who appears to straddle both camps is Epicurus. Like the Cyreniads, Epicurus promotes good food and wine, but is restrained like Aristotle in his promotion of temperance in the consumption of simple foods, not in excess or gluttony, in the company of good friends. He strives for discriminating tastes in moderation. To be comfortable and free of pain striving for the calm pleasure of tranquility rather than excitement.<sup>8</sup>

The 19th century philosopher John Mill sheds further light on pleasure and eudemonia by distinguishing between high cognitive pleasures and low bodily pleasures. In *Utilitarianism*, he promoted high pleasures as more satisfying experiences, like reading fine literature, which increase future pleasurable experiences.<sup>9</sup> It appears that his higher pleasures are lower in intensity.

Today, Dr. Robert Lustig, a pediatrician from UC San Francisco has a similar dichotomy of the role of hedonic pleasure and eudemonia. He associates pleasure and happiness with two classes of brain neurotransmitters: dopamine and serotonin. Dopamine is pleasurable in that it is reward seeking and if not controlled can lead to addiction. Serotonin associates with his notion of happiness aligning more with Epicurean tranquility and contentment. Serotonin is the neurotransmitter targeted most by today's anti-depressant drugs like Zoloft. Unfortunately these two neurotransmitters compete with each other for the same brain neuropathway where excitatory dopamine often crowds out serotonin to activate the frontal cortex where our more deliberate rational planning mind exists.<sup>10</sup> When dopamine is less present, then serotonin can over take it and properly affect the frontal cortex and reach beyond into more refined sensorial parts of the brain known as the neocortex where dopamine appears not to penetrate. He calls this the 'contentment pathway.'<sup>11</sup>

### LOW INTENSITY VS. HIGH INTENSITY PLEASURES

Pleasure via dopamine according to Lustig is more intense, short lived and may have undesirable long-term consequences like addiction. Cocaine and gambling addictions are commonly associated with high dopamine levels. As a pediatrician who researches and treats childhood diabetes, he claims that since the 1960's the rise of cheap tasty, highly engineered processed food that contains high amounts of sugar and refined carbohydrates that are known to jack-up our dopamine levels, has led to the rise in obesity, diabetes and other chronic diseases. If high intensity dopamine related pleasures are left unchecked, the results can lead to food addictions. In contrast, he claims

that happiness via serotonin is lower in intensity, longer term and leads to a greater sense of contentment. To cultivate his notion of serotonin happiness, he recommends contact with nature, building friendships and eating cooked unprocessed food with friends... similar to Epicureanism.

Instead of distinguishing between pleasure and happiness, Dr. Martin Seligman (like J.S. Mill) distinguishes between the bodily low pleasures and more cognitive high pleasures. However, both can lead to cravings and addictions. Seligman's cure is to spread-out the pleasures by savoring them slowly.<sup>12</sup> Could the same toxic relationship exist between architectural elements that produce short term pleasures and those that produce longer-term well-being? Could architects who strive to design via Harries 'Aesthetic Approach,' be designing Hansel and Gretel gingerbread houses? Or, like Mary Poppins 'spoon full of sugar,' can pleasurable designs facilitate eudemonic well-being? Could aesthetics act as a type of pump to facilitate well-being?

### THE USE OF BEAUTY FOR NOBLE AIMS

Contrary to the addictive quality of dopamine, in the context of learning, research shows that it can play a vital role in motivation, meaningful goal setting and learning<sup>13</sup> which can conceivably act as a pump that facilitates Seligman's more eudemonic, hard-won pillars of well-being: engagement, positive relationships (community) meaning and achievement. Historically, the role of pleasurable beauty as an educational tool was used by the Medieval priest Abbot Sugar who first used stained glass in the Gothic cathedral Saint-Denis. Here he claimed that the pleasure of colored glass " ... actively prompts the user to the next level of exegetical interpretation, the tropological, and so leads that person to act on the moral meaning inherent in the scriptural source."<sup>14</sup> Renaissance philosopher Marsilio Ficino's view is similar in that beauty functions as a type of bait that entices us to come closer to the divine through beautiful art that " ... seizes and occupies him as he approaches, and compels him both to venerate such splendor as the divinity beyond all others, and to strive for nothing else but to lay aside his former nature and to become the splendor itself."<sup>15</sup>

In examining Martin Seligman's list of 14 positive emotions: contentment, serenity, calm, satisfaction, fulfillment, trust, optimism, hope, faith, pride, joy, ecstasy, ebullience, and zest,<sup>16</sup> his pleasures fit into three energy levels: low, moderate and high. Here there is a higher ratio of lower intensity pleasures like contentment, (similar to Lustig's serotonin happiness) than high-intensity ones like ecstasy. Seligman enthusiastically promotes UNC Professor Barbara Fredrickson's broaden and build theory where her lab studies demonstrate how positive emotions can broaden and expand our thinking. She found that positive pleasures heighten our thinking and give us the ability to see the world from a larger viewpoint helping us to be more tolerant and accepting of the world's inherent contradictions. Her list of 10 mind expanding pleasures including gratitude,

serenity, interest, pride, amusement, hope, love, joy, inspiration and awe, which are similar to Seligman's but show a higher proportion of higher intensity emotions.<sup>17</sup> One of her environmental research studies reinforces biophilia findings in that the mere act of being outside in a natural setting when the weather is comfortable for 20 minutes or more, increases positive emotions, improves working memory, and broadens thinking.<sup>18</sup>

## LITERATURE REVIEW OF ARCHITECTURAL PLEASURES SINCE THE 1970S

Writings on architectural induced pleasures from the 1970's onward will be examined in this paper for their relation to Seligman and Fredrickson's ideas. These include: "Architectural Pleasure" by Bernard Tschumi, *Origins of Architectural Pleasure* by Grant Hildebrand, and *Ecstatic Architecture* by Charles Jencks.

Bernard Tschumi's eleven fragments outlined in his 1977 essay "The Pleasure of Architecture" praises the works of designers and theorists who promote unpredictability and non-conformity. Here, lower intensity Apollonian orders of regular geometries and masks are downplayed for higher intensity Dionysian unpredictable qualities of bondage, excess and eroticism. He criticizes the lower intensity frozen pleasures inherent in classical ordering principles over the unpredictability found in surrealism, 18th century pleasure gardens and Piranesi's fantasy drawings.<sup>19</sup> Tschumi refers to the experience of, and production of architecture as a game where rules can be accepted or rejected. Like many poststructuralist observations, ambiguity is celebrated. Breaking architectural rules most resonates with positive psychology's notion of engagement. Tschumi points-out that manipulating rules have the erotic significance of bondage. "...the more numerous and sophisticated the restraints, the greater the pleasure."<sup>20</sup> Conscious rule breaking requires active and mindful attention, not passive conformity. It engages us intensely in the moment in the difficulty of breaking free from paralyzing restraints. The experience of Tschumi's Parc de la Villette design (built after this essay) raises the question... does his design express his notion of pleasure, or does his design meaningfully activate our sense pleasure that broadens and builds our thinking? Additionally, does he actively take pleasure in challenging the bondage of classical rules in the same way the park visitor takes pleasure in experiencing his deconstructed cubic pavilions?

Grant Hildebrand of the Univ. of Washington identifies design pleasures in his *Origins of Architectural Pleasure* which appear to resonate with Seligman and Fredrickson's list of pleasurable positive emotions. Hildebrand's pleasures roughly fall into similar categories of low - high intensity. His argument is based primarily on empirical biophilic research that is rooted in methods of survival.<sup>21</sup> Hildebrand's lower intensity pleasures include prospect and refuge, comfort, coherence and categorization, whereas his higher intensity related pleasures include

enticement, exploration and peril. He highlights a variety of pre-modern styles as well as modern works (primarily Frank Lloyd Wright and Louis Kahn) whose expressions appear to resonate more with of Seligman and Fredrickson's lower intensity pleasures. His only example of deconstructive architecture an Eric Owen Moss's stair which serves to illustrate peril. As with Tschumi's pleasures, the question arises... does our direct experience of these designs express biophilic pleasure, or do these designs activate our sense of pleasure that may broaden and build our thinking?

Charles Jenck's excitatory pleasures in his book *Ecstatic Architecture* resonate more with higher-intensity pleasures such as: out of body experiences, bliss, peak experience, Freud's oceanic experience, Zen satori, Hindu Samadhi and holism. These are more spiritual and surreal than Hildebrand, Fredrickson and Seligman's pleasures where many examples consist of religious buildings followed by late 19th and 20th century surreal examples of nouveau, expressionism, post-modern, deconstruction and early parametric design.<sup>22</sup> The same question arises... does our direct experience of Jenck's examples express ecstatic pleasures, or like the intentions of Abbot Suger and Marsilio Ficino, do these buildings facilitate our sense of ecstasy that can then broaden and build our thinking? Perhaps Plato and Aristotle can shed some light.

There are two more high intensity pleasures that Seligman, Fredrickson, Tschumi, Hildebrand, and Jenck do not adequately address: wonder and astonishment...particularly in relation to the joy of learning. Heidegger, Plato and Aristotle note that wonder and astonishment are moods proper to philosophy.<sup>23</sup>

Among other elements, these two high intensity emotions appear to be triggered by the power of the Enlightenment concept of the sublime which is not formally addressed by the authors above. As an overlooked romantic concept, the sublime is credited to the first century philosopher Pseudo-Longinus who wrote "...the sublime as an expression of grand and noble passions."<sup>24</sup> The concept was picked up later with enthusiasm during the Enlightenment which dialectically contradicted the period's rational aims for the control over nature. Philosophers like Kant and Burke wrote enthusiastically about the power of the sublime which is elegantly explained in Umberto Eco's interpretation of the large expanse of a starry night sky.

"Here we have the impression that what we see goes far beyond our sensibilities and we are thus induced to imagine more than we see. We are led to this because our reason (the faculty that leads us to conceive ideas such as God, the world, or freedom, which our intellect cannot demonstrate) induces us to postulate an infinity that is not only beyond the grasp of our senses but also beyond the reach of our imagination, which cannot manage to harness it to a single intuition."<sup>25</sup>



Contrary to Robert Lustig's claim that high intensity dopamine pleasures are incompatible with the pursuit of happiness, it appears that higher intensity pleasures, like staring up at a starry night sky, can prime us to broaden and expand our mind to serve our longer term goal of well-being. High intensity spiritual buildings not only express pleasure but appear to lead our imagination to Mill and Seligman's higher level of pleasure, Lustig's notion of happiness, and Aristotle's eudemonian virtues, all which resonate strongly with Martin Seligman's hard-won pillars of engagement, relationships (community) meaning and achievement.

### MODEL BUILDING TYPES FOR WELL-BEING

Barbra Fredrickson's broaden and build role of positive emotions to be baked into the design of many Catholic cathedrals. Here, the building's overwhelming beauty appears to serve as a pump to connect the mind to Seligman's more demanding pillars of engagement, positive relationships, meaning and achievement. The sheer amount of time, material resources and effort invested in producing a beautiful environment of biblical stories that intend to transport us closer to the promise of an ideal life after death, appears to have a meaningful cultural purpose. Karsten Harries book *The Ethical Function of Architecture* bemoans the fact that modern building types

don't come close to the cultural significance of the Medieval cathedral due to the fragmented complexity of modernity itself. However, he does list hopeful cathedral replacements such as the city hall, museum and theatre. The theatre approaches the cathedral in that as a spectacle it "delights, interests and instructs"<sup>26</sup>

Harries unfortunately does not include the library as a possible replacement. Like museums and cathedrals, libraries record a multitude of stories of deep concern in service for a future ideal life. Additionally, civic libraries are similar to city halls and cathedrals in that they serve to bring communities together towards the noble aim of education. The Helsinki Library is a recent example that equivalates with the power of meaning and well-being to that of the cathedral, museum and theatre combined.

### THE HELSINKI CENTRAL LIBRARY'S PROMOTION OF WELL-BEING

Helsinki has recently been recognized in Gallup's World Happiness Report as the world's happiest city in the world's happiest country.<sup>27</sup> Although not mentioned in the report, its recently completed central library by ALA Architects may play a significant part in the city's subjective well-being where its



Figure 1. Helsinki Central Library Restaurant,. Photo by Author.



sublime beauty and programming compliments and reflects on the hard-won virtues and values of Scandinavia. Like a Gothic cathedral, the Helsinki Central Library expresses Kant's high intensity wonder of the sublime in its formal aesthetics, while expressing Harries eudemonic sense of community and meaning in its programming. Its *placement* of virtuous elements in strategic locations lies at the heart of the library's promotion of learning and virtuous behavior. First, the building is located on Citizens Square facing Parliament House alongside Steven Holl's Contemporary Art Museum, Alvar Aalto's Finlandia, and the Helsinki Music Center. Its prominent placement among the arts, government and commerce meaningfully expresses Finland's high value on education and the pleasurable act of learning and making.

Upon entering the ground floor entrance, visitors are greeted with a restaurant on the left complete with a colorful healthy display of prepared food and salads; all made on-site where the cooks are on full display. (fig. 1) Similar to many Finnish grocery stores where salad bars and minimally processed food are commonly on display near the entrance, this placement encourages the virtue of eating healthy, not unhealthy processed or fast food. Compare this to the fast food options prominently displayed in American hospitals or the enormous

candy and chip displays near the entrances of American drug stores. This Hanzal and Gretel system of placing tempting snacks up front which can later lead to pain and chronic diseases is an unethical business model that necessitates buyers to purchase pain killers or medications for the management of chronic disease at the back of the store. Helsinki's library restaurant food presentation is pleasantly arranged smorgasbord style as it is in the front of many Finnish grocery stores.

To the right of the entrance is a visitors' information area and a gallery where at the time of the author's visit, student city planning proposals were displayed. This exhibit was meaningful in that the proposals provide a vision for a more ideal life for the citizens of Helsinki and Finland. Placed nearby is visitor's center display which serves as a source of pride and meaning for Finland's citizens on the value of their country's historical sacrifices, meaningful attractions and accomplishments.

The stair journey to the second floor takes place on the double spiral stair (similar to a Leonardo da Vinci's sketch for a double helix stair) that directly leads to the maker space that takes up nearly half the second floor. ( Here the visitor is greeted by one of Finland's most popular crafts... sewing. On display are dozens of active sewing machines followed by 3D printers,



Figure 2. Maker Space,. Photo by Author.

poster printers and digital film making spaces. This maker space meaningfully expresses Scandinavian value of hands-on craftsmanship. It also resonates strongly with positive psychology's promotion of meaningful engagement. Craft engages the mind and body in a way that reading alone cannot. It is presumed that those who are sufficiently challenged and absorbed in their goal oriented work without regard to time reach a state of flow that Mihaly Csikszentmihalyi presents in his book *Flow: the Psychology of Optimal Experience*.<sup>28</sup> These well-used maker-spaces serve as a stage for serpentine bench steps populated by an audience of texting teens. As a windowless space with black ceiling punctuated by spotlighted Venidral Trusses, it feels like a surreal attic.

From the blackness of the maker space and double helix stair, one ascends to the light filled expanse of the top floor reading room. (fig. 3) In the classic reading room tradition, similar to a cathedral, its ceiling inspires one towards wonder and astonishment. The long span undulating floating white ceiling punctuated by softly rounded skylights is like an upside-down winter snowfield one may encounter in a Finnish countryside clearing. Others have described it as cloud-like. Even the windows meaningfully express the quality of light on a winter monochrome cloudy sky where the top portion of the

glass curtain wall is sandblasted serving to softly light-up the undulated ceiling. The translucent window top blends seamlessly into clear glass at the bottom allowing readers to gaze out towards the Parliament House and Citizen's Square. The floor playfully bends-up on either end mimicking the hilly glacial remains of the Finish landscape. One end slides up to the children's area while the other end, known as the Peak, ramps up to a reading area that allows pleasant prospective views across the entire space.

A strong sense of achievement must have been felt by the architects, engineers and contractors from the challenging nature of the design and construction of a long span undulating ceiling. Additionally, the sublime 70-foot entrance cantilever must have presented several logistical and engineering challenges. Its enormous curving gesture towards the Parliament House would inspire a sense of wonder to anyone connected to the building industry who is aware of the challenges known to construct it. On more pleasant days, the top of this cantilever serves as an outdoor deck which allows for fresh air, sunlight and prospective views of the entire square. High and low intensity pleasure elements of the library's design surely activate Barbra Fredrickson's broaden and build theory towards increasing positive emotions and the broadening of the mind.



Figure 3. Reading Room. Photo by Author.



## CONCLUSION

Aesthetic design for the sake of short-term pleasure alone that does not serve a larger purpose to broaden and build our thinking, appears pointless and may lead to a consumerist appetite for designs that lead to moral and monetary bankruptcy. Design with a noble purpose that elicits many lower intensity pleasures like serenity, comfort and calm, as well as higher intensity sublime pleasures that elicit a sense of wonder and astonishment, may serve as a pump that broadens and builds our thinking as well as facilitate more satisfying, more challenging aspects of well-being such as Aristotle's eudemonian virtues and Seligman's pillars of engagement, relationships (community), meaning and achievement. Building types that elicit (not just express) these pleasures, such as well-designed cathedrals, museums, theatres and libraries may further facilitate a higher state of well-being.

Further opportunities exist to investigate how design expression affects our sense of pleasure. What does an architectural expression need to more fully affect our positive emotions? Further research is also needed on the relationship between personal preferences and pleasure. In an interview, Grant Hildebrand mused that perhaps a better title for his book might have been: *The Origins of Architectural Preferences*.<sup>29</sup> Although all of his pleasures resonate well with Seligman's first pillar of pleasure, could his pleasures that require more active effort such as categorization and exploration, fit better with Seligman's second pillar of engagement? It is conceivable that for high achievers, architecture that requires a significant amount of effort to design and build might be preferable over a similar building that expresses pleasantly arranged biophilic patterns.

## ENDNOTES

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