

Positive Psychology as a New Lens for Architecture

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Since 2006, four books claim architecture's ability to increase our happiness or well-being: *The Architecture of Happiness* in 2006, *Happy City* in 2013, *The Blue Zones of Happiness* in 2017, and *A Place to be Happy* in 2018. One is written by a philosopher and one by an architect practitioner, but none by academic architectural theorists or environmental psychologists. None of these books meaningfully reference key concepts of happiness found in the history of philosophy. What is missing from these books, and the architectural profession's writings about well-being, is a more rigorous academic framework drawn from Positive Psychology's findings on well-being/happiness. In particular, the conditions laid out by the movement's founder, Martin Seligman of Penn, who between 2002-2011 laid out five pillars of well-being and flourishing: Positive Emotions, Engagement/Flow, Relationships, Meaning/Purpose, and Achievement. These conditions along with other psychological concepts such as Resilience and Strengths appear to resonate well with classic architectural texts. This paper takes stock of architectural texts since the 1800's that claim that architecture can deliver pleasure, happiness, meaning, etc. The paper also takes stock of the limited evidence that supports their assertions. Here the writings of Ruskin, Le Corbusier, Norberg Schultz, Alexander, and Pallasmaa among others are examined for how well they resonate with Positive Psychology's findings and principles.

BACKGROUND

Architecture is the art which so disposes and adorns the edifices raised by man for whatsoever uses, that the sight of them contribute to his mental health, power, and pleasure

—John Ruskin, *The Seven Lamps of Architecture*

Can architecture meaningfully contribute to what Aristotle and subsequent philosophers claim as the ultimate end...happiness? Today's evidence-based design provides limited proof that architecture can contribute to our quality of our life. Beyond this, can design that is engaging, community oriented, innovative,

sustainable and beautiful meaningfully contribute towards human flourishing or happiness as philosophers, positive psychologists and sociologists advocate?

Since 2006, four books claim that architecture can increase our sense of wellbeing, or happiness... The first in 2006, *The Architecture of Happiness* by philosopher Alain Botton;¹ second in 2013, *Happy City* by journalist Charles Montgomery;² third in 2017, *The Blue Zones of Happiness* by adventurer and community promoter, Dan Buettner,³ and fourth in 2018, *A Place to be Happy: Linking Architecture and Positive Psychology* by Chicago architect Chuck First.⁴ None of these authors are psychologists, scientists for architecture theorists. However, the most recent, *The Blue Zones*, and *A Place to be Happy*, do reference today's ideas found in the Positive Psychology movement which is the leading academic voice in Well-Being and Happiness today. All authors address what many philosophers since Aristotle claim as the ultimate teleological and ethical end... that of securing "Happiness." These recent architecture books didn't happen in a vacuum. Since the late 1990s the field of Positive Psychology rapidly emerged and has found empirical evidence towards the achievement of individual and community well-being.

It should be noted that Positive Psychologists typically use the words flourish, well-being and happiness interchangeably. Some will downplay the word happiness due to its Pollyannaish connotations. In addition to psychologists, key players in this movement consist of: behavioral economists, policy makers, physicians and planners. Even before Positive Psychology's founding in the late 90's, the topic of happiness was discussed by Enlightenment era philosophers and politicians like Thomas Jefferson and John Locke. Before the Enlightenment, the western concept of happiness was tethered to Christianity's notion that eternal happiness only existed in heaven, and not on earth as St. Augustine detailed in his, *The City of God Against the Pagans*. Before this, ancient Greeks such as Plato, Aristotle, Epicurus and to some extent, the Greco-Roman Stoics promoted earthy happiness.⁵ Aristotle's *Nicomachean Ethics* is significant in that he most comprehensively discusses

eudemonic happiness (as opposed to hedonic or pleasure) in depth which focuses on virtues and meaning.⁶

Ancient and Enlightenment thinking on happiness is foundational in the thinking of Positive Psychology founder Martin Seligman (a philosophy undergrad at Princeton) who is Professor of Psychology at the University of Pennsylvania. At his 1998 inaugural president's speech at the American Psychological Association convention he expressed the need to focus less on the pathological view of psychology, and more on healthy models. Since this time, Positive Psychology classes, university programs, and conferences have emerged. This is coupled with the annual World Happiness Report that statistically ranks the happiness levels of citizens in over 150 countries. Ranking highest are Scandinavian countries, Canada and Costa Rica; all who regularly score high in life satisfaction measures to include: Gross Domestic Product, (GDP), social support, healthcare, life expectancy and social freedom.

Seligman and his like-minded predecessor Abraham Maslow reacted against the gloom and doom of Nietzsche and Freud who conceded that suffering and tragedy were central to the human condition. They essentially dismissed the state of happiness as fleeting and delusional,⁷ and that the best psychiatrists, artists, and politicians could do was to offer temporary pain relief from our normal state of suffering. Nineteenth century concepts such as Darwin's "survival of the fittest" and the Second Law of Thermodynamics, or Entropy, gave scientific justification towards our continual state of suffering.⁸

Positive Psychology takes a more optimistic and complex approach in overcoming entropy by promoting a more nuanced view of factors and human strengths that can meaningfully transcend suffering, towards well-being. Here both hedonic and eudemonic theories of well-being are utilized. Hedonic well-being, or pleasure, is often sensual, more in the moment and temporal. It was first outlined by Socrates student Aristippus. Like the philosopher Jeremy Bentham's Utilitarianism, the goal in life is to maximize pleasure and minimize pain. In contrast, Eudemonic Happiness, as outlined by Aristotle in his *Nicomachean Ethics*, promotes ethical meaning and purpose; things that are worth doing that lead to excellence. Philosophical arguments since Socrates typically favored one over the other. Positive Psychology more pragmatically combines the two. Martin Seligman outlines five broad conditions for the flourishing of individuals, communities and societies. These include: 1. Positive Emotions which includes the pleasant life, 2. Engagement which includes being present, interest, task absorption, and the state of "Flow," 3. Positive Relationships which includes supportive interpersonal connections, 4. Meaning which includes living with purpose and direction, order, serving something bigger than the self and

transcendence, 5. Accomplishment which includes mastery, excellence, and achievement. All overlap and reinforce one another.^{9 10}

these five 'pillars' are essential for psychological well-being, then shouldn't the profession of architecture, which commonly incorporates psychological principles, also aim towards these same conditions? This paper finds that many historical architectural theories and projects resonate well with Positive Psychology and have unwittingly intended to incorporate Seligman's five conditions for well-being and happiness since Vitruvius's declaration of firmness, commodity and delight. With further research, some may meaningfully expand on Seligman's conditions.

POSITIVE EMOTION (THE PLEASANT LIFE)

Architecture that contributes to Positive Emotions aligns more with hedonic pleasure. This pleasure appears to take on different forms ranging from calm harmony to ecstatic bliss. Like music, pleasant encounters can distract us from the weight of our past and future obligations and bring us into the present moment. These pleasures may or may not be at odds with Eudemonic happiness which aligns more with the past and future in terms of meaning and achievement. Seligman considers positive emotion a "cornerstone" to well-being.¹¹

The Greek philosopher most associated with "the pleasant life" is Epicurus. Although he has been mistakenly associated with gluttony and sloth, his ideas on happiness advocates for fully engaging with simple essentials and turning away from burdensome luxuries that tie us down. He advocated sharing simple foods and living together with good friends in a communal setting. His enjoyment of simple pleasures with friends¹² aligns more with Seligman's third pillar of well-being, "Positive Relationships"¹³

Architectural design principles that provoke pleasurable emotional responses align with architecture's oldest recorded virtue; that of Vitruvian 'Delight.' From Vitruvius and Alberti, to Ruskin and Le Corbusier, harmonious visual design relationships are assumed to bring pleasure and delight.

In John Ruskin's *The Seven Lamps of Architecture*, pleasure and happiness are used interchangeably. In "The Lamp of Beauty" he advocates for elements of beauty that produce 'happy, joyful pleasures' that are based on forms imitative of nature. Here he advocates Romanesque architecture for literally incorporating natural forms which express a "happy arrangement of line."¹⁴ In contrast, he demonizes Classical Architecture for its incorporation of repetitive abstract non-representational forms. However, it is evident to many that the rhythms and proportions in Classical designs are at least as 'pleasant' in their

arrangement of line; and that both styles express ‘harmonious’ or ‘coherent’ arrangements. Aren’t classical design principles based on harmonious proportions and ratios (1-1.6 etc.), and rhythms also found in nature?

It is well known that emotional harmony can be found in historical writings from Pythagoras and Alberti to Wright and Le Corbusier. Harmony promotes a sense of perceptual coherence which presumes to have a calming effect and aligns more with the pleasurable feeling of ‘contentment’ or ‘serenity.’ In Le Corbusier’s *Towards a New Architecture*, the classical notion of arrangement is accomplished through the “Axis.” Here he claims that, “The axis is the regulator of architecture,” that ...“leads to an end.” If the termination is significant or meaningful, this aligns with Positive Psychology’s condition of ‘Meaning.’ Le Corbusier further contends that the axis is the “definition of harmony, a moment of accord which lies in man, and so with the laws of the universe... giving us a satisfying experience and unanimity.”¹⁵ Whether Le Corbusier’s ‘moment of accord’ or ‘unanimity’ can be proven or not, the axis is one of many compositional devices at the disposal of architects that are intended to bring a sense of unity and order to a project.

On the other hand, design principles that are more stimulating, joyful or surprising are pleasurable in their exaggerated harmonies or break from harmony. In many ways, they challenge our sense of coherence. More stimulating designs may utilize elements of exaggeration, supersensualism, juxtaposition, novelty, etc. Two books that outline this side of pleasure includes: Charles Jenks, *Ecstatic Architecture*, which describes forms that may lead to a blissful state.¹⁶ Former design director at IDEO, Ingrid Fetell Lee’s book *Joyful* outlines ways designers can inject more energy, surprise, and play into design.¹⁷ Calm or serene design is not covered in either of their books. Whether the design ideas outlined in these books measurably stimulate pleasure is yet to be proven beyond antidote and conjecture. However, their principles are abundantly evident in a variety of building types from the sacred and spiritual, to the profane and commercial.

As Nature commonly serves as a design model, design movements such as Biophilia aligns well with elements that bring a sense of complex harmony and pleasure. Roger Ulrich’s healing views of nature in hospitals,¹⁸ as well as Lisa Heschong’s productivity studies in schools and offices for exposure to daylight¹⁹ and scenes of nature,²⁰ provide strong evidence for an architecture to connect to natural settings. As a result of these and other empirical studies, Biophilia is now institutionalized as part of the Living Building Challenge and the WELL Building Certifications.²¹

The psychologist Barbara Fredrickson, who is the most authoritative voice on positive emotions’ ability to ‘broaden and build’ our thinking, also advocates exposure to natural settings. Her research team found that the mere act of being outside in a natural setting when the weather is nice for 20 minutes or more, increases positive emotions. Additionally, her team found that subjects working memory appears to improve and that thinking is broadened.²² Although her research was limited to the early spring and summer, it demonstrates the need to connect with natural settings, even if for limited times of the year.

ENGAGEMENT, POSITIVE RELATIONSHIPS, MEANING AND ACHIEVEMENT

Those who have a why, can endure any how.

—Friedrich Nietsch, *Twilight of the Idols*

It is important to note that Seligman’s next four conditions: Engagement, Positive Relationships, Meaning and Achievement, do not necessarily result in Positive Emotions. Nor do positive emotions necessarily lead to the remaining four. These conditions are challenging in themselves and can require sacrifices and significant effort.²³

ENGAGEMENT (INTEREST, TASK ABSORPTION)

Positive psychologists’ credit many of the initial ideas of Engagement to Mihaly Csikszentmihalyi’s state of ‘Flow.’ When someone is in a state of flow, they are engaged in the moment with something that is highly interesting and challenges their abilities. Losing track of time is common. Csikszentmihalyi writes “The best moments usually occur when a person’s body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile.... Such experiences are not necessarily pleasant at the time they occur.”²⁴ This resonates with Ruskin’s view of the craftsman. In the *Seven Lamps of Architecture*, Ruskin asks... “...was (the work) done with enjoyment...? It may be the hardest work possible, and the harder because so much pleasure was taken in it; but it must have been happy too, or it will not be living.”²⁵

Outside of the trades of design and building, can architects create conditions where engagement is possible in a work or learning setting? At first glance, the trend in the 70’s to eliminate distracting windows in work-places and schools in order to increase productivity (and energy efficiency) appears laudable. However, Lisa Heschong’s productivity studies in schools that expose occupants to daylight and scenes of nature,^{26, 27} provides strong evidence for connecting to natural settings that increases productivity, test scores, and conceivably a state of flow. Evidently some distraction appears acceptable.

It appears that architecture can encourage an aspect of flow that aligns with its cousin, 'mindfulness' which advocates for being present, and in the moment for the task at hand. The brain's default mode network, where the brain's activity commonly reverts when not fully engaged in the task at hand, (daydreaming) is a ruminative state that psychologists claim can lead to depression or anxiety from spending too much time thinking about the past or the future.²⁸ Can architecture help break this cycle? Historically, labyrinth paths are known to bring us into the present because of the need to pay attention to where we are stepping. Like meditation which requires participants to pay attention to simple acts like breathing, labyrinths have proven therapeutic value and are used in hospital designs today to reduce stress.²⁹ Ritualistic ambulatory paths in cathedrals, monasteries and Hindu temples, as well as the quiet intimacy of Asian temple designs appear to also encourage calming meditation. One could argue that a settled and content mind, (often experienced after meditation) is one that is ready to focus on the task at hand.

More recently, circulation elements found in Le Corbusier's *Towards a New Architecture*, Alexander's *Pattern Language*, and Bernard Tschumi's *Event Spaces* illustrate the potential to engage users more in the moment with architectural elements and other parts of the landscape. As previously mentioned, Le Corbusier claims that the "axis," can provide us with a "moment of accord" and gives us a satisfying experience and "unanimity."³⁰ Here circulation is at the heart of his plans, as opposed to the settled intimacy of Frank Lloyd Wright's anchoring hearth. Christopher Alexander's *Pattern Language* lists 22 circulation patterns that appear to provoke building engagement. Patterns like "Building Thoroughfare" and "Courtyards that Live" provide circulation strategies that activates buildings to possess what Alexander terms as the quality of being "Alive."^{31, 32} Likewise, the event spaces promoted by Bernard Tschumi may bring us more into the moment, like episodes in film where architecture more actively involves users with engaging elements and interesting program.³³ Whether episodic circulation acts as a positive distraction (like views of nature) or a negative distraction is yet to be determined.

POSITIVE RELATIONSHIPS (SUPPORTIVE INTERPERSONAL CONNECTIONS)

While thoughtfully designed buildings and urban designs cannot guarantee healthy relationships, it appears that design can encourage opportunities for more social engagements which may lead to a greater sense of belonging and community. The books *Happy City* and *The Blue Zones of Happiness* focus on interactive pedestrian friendly communities and urban designs.

^{34 35} Their examples would not have been possible without the principles laid down by Jane Jacobs, William Whyte, Christopher Alexander and founders of New Urbanism...to name a few. Many of Jane Jacobs principles in *The Death and Life of Great American Cities* contributed to the making of places where neighbors could look out for one another.³⁶ This combined with

the design principles found in William Whyte's *The Social Life of Small Urban Spaces*, as well as the complimentary patterns found in Christopher Alexander's *A Pattern Language* provide tools that can create the conditions for new relationships to form and continual social relationships to solidify.^{37 38}

Building circulation spaces that behave more like public streets and plazas appear to encourage chance meetings that lead to greater social connections. This was recently demonstrated in a preliminary study of Washington University's Brown School of Social Work designed by Moore Ruble Yudell. Completed in 2015, the new building incorporates generous circulation areas and interactive spaces. It was compared to the previous building's efficiently laid out double loaded corridors. Social scientist Dr. Amy Eyler and her team researched how social interactions increased in the new building. Her team found an 18% Increase in 'Stop & Talk' and a 48% Increase in Social Connections within the school.³⁹ When one compares the apparent lack of community found in buildings with circulation dedicated to maximizing efficiency and/or privacy, (ie. high rise buildings and isolating suburbs) one can argue that the socially oriented design principles laid down over 40 years ago by Jacobs, Whyte and Alexander appear to encourage the formation of positive relationships.

MEANING (LIVING WITH PURPOSE, ORDER, SERVING SOMETHING LARGER THAN THE SELF AND TRANSCENDENCE)

Aristotle's *Nicomachean Ethics* serves as a foundation for Positive Psychology's 'Meaning' for it advocates that a happy, or eudemonic life, as opposed to a pleasurable or hedonic life. Eudaimonia is based more meaningful virtuous deeds and behaviors that require discipline and significant effort.⁴⁰ As buildings and landscapes speak to us, if the message is meaningful, it associates with a virtue...preferably an ideal virtue. Juhani Pallasmaa states architecture's need to express our ideals metaphorically: "The timeless task of architecture is to create embodied lived-in existential metaphors that concretize and structure our being in the world. Architecture reflects materializes and externalizes ideas and images of ideal life.⁴¹

The philosopher Alain de Botton's 2006 book *The Architecture of Happiness* outlines a number of design virtues that includes: Order, Balance, Elegance, Coherence and Self Knowledge.⁴² Surprisingly he does not reference Aristotle's Eudemonic happiness and its complimentary virtues of Temperance, Wit, and Truthfulness.⁴³ Botton's virtue of 'Elegance' underscores the need for sacrifice and effort.

"For us to deem a work of architecture elegant, it is hence not enough that it look simple: we must feel that the simplicity it displays has been hard won, that it flows from the resolution of demanding technical or natural predicament... We deem a modern Swiss house elegant because we know how seamlessly its windows have been joined to their concrete walls, and how

neatly the usual clutter of construction has been resolved away. We admire starkly simple works that we intuit would, without immense effort, have appeared very complicated.”⁴⁴

Similarly, sacrifice and suffering are often required of us in troubling times. Monuments and memorials dedicated to troubling events like war and tragic events provide consolation and meaning to the suffering and sacrifice that accompanies tragedy. They express our collective resilience which is needed to recover and move-on from tragedy. Resilience is a key concern in Positive Psychology.^{45 46 47}

Norberg-Schultz’s concept that architecture provides an “Existential Foothold” in one sense implies that the act of dwelling is a proactive engaged state that acts as a buttress to make sense of, and transcend a troubling and entropic world.

“Existential foothold” and “dwelling” are synonyms, and “dwelling”, in an existential sense, is the purpose of architecture. Dwelling therefore implies something more than “shelter.” It implies that spaces where life occurs are places, in the true sense of the word.⁴⁸

Norberg-Schultz’s “spaces where ‘life’ occurs, addresses multiple concerns of architecture including our most looming existential threat, Global Warming. Those directly involved in addressing this threat are meaningfully contributing the most towards preserving life as we know it.

Norberg-Schultz’s statement also resonates with Charles Moore’s notion of ‘Human Energy’ which is the kind of proactive “...energy human beings possess to devote to the act of dwelling....”⁴⁹ Energy devoted to dwelling requires effort and sacrifice in order to create a desirable future. Also consider Juhani Pallasmaa’s idea of architecture’s intentions...“Architecture that acts to frame, allows the present to unfold whose intention is a compelling, engaging future.”⁵⁰ These statements go beyond mere passive survival or even “life” affirming, and suggest that dwelling and placemaking are proactive activities that enables us to meaningfully “flourish” in the present and future in spite of our entropic world. All three statements are optimistic and go beyond mere ‘problem solving.’

ACHIEVEMENT (MASTERY, EXCELLENCE, ACHIEVEMENT)

Architectural achievement aligns well with Aristotle’s Virtues of excellence and mastery.⁵¹ Achievement also aligns with meaning since both are driven by virtue and goals. Awards are not given for average work. Projects of significance require virtuous goals with dedicated craftsmen, planners and owners all striving towards an ideal. Architectural press that celebrates industry strengths through critical innovations and displays of excellence provides role models for the best of cultural achievement. This aligns with Positive Psychology’s promotion of individual and social ‘Character Strengths’^{52 53 54} However, this doesn’t

discount the essential role of academic scrutiny or the scientific method which are essential for identifying weaknesses and contradictions that can guide future solutions. The industry needs a healthy balance of both.

Architect Chuck First’s book *A Place to be Happy*, which is geared towards the design of offices, responds to the condition of achievement by recommending common spaces that display prominent accomplishments and awards.⁵⁵ If we enlarge this to the urban scale, memorials, monuments and museums celebrate role models, accomplishments, and resilience, that conceivably align with achievement. While museums and memorials often celebrate past cultural achievements, they also reveal the strength of resilience. Monuments, memorials and museums in capitols like Washington DC and Berlin are examples of both cultural resilience and achievement. From memorials that express the resilience needed for extreme sacrifice, or to survive senseless suffering, to monuments and museums that display enlightened role models and cultural accomplishments, the design of civic monuments demand excellent designers and craftsmen that take care to produce virtuous meaningful architecture. These designs, which are cultural achievements in themselves, tie together several of Seligman’s conditions and express the state of a nation’s flourishing.

CONCLUSION

Historically it is evident that the profession’s intentions have aimed towards creating an architecture that promotes human flourishing. Although many of the intentions laid out in the writings presented appear naïve or misdirected, a significant number of ideas resonate well with the principles promoted by Positive Psychology.

Of all the architectural writings presented, which are by no means comprehensive, it appears that Alexander’s *Pattern Language* covers the widest spectrum of Seligman’s five conditions for flourishing... in particular those of engagement, relationships, and positive emotions. It provides “ready-to-hand”⁵⁶ tools that can be reasonably implemented. However, since it was written over 40 years ago, the studies referenced, and patterns generated need to be updated or changed.

As this paper has taken a brief stock of architectural writings that today are considered “best practices,” the evidence for them is weak. There is much to prove so this paper is a call for action for more investigations that are guided by Positive Psychology. As research needs well defined hypothesis and questions, architectural theorists could play a vital role in questioning more existing theories and principles that resonate with Positive Psychology.

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