

WELLNESS ARCHITECTURE INITIATIVE

The Wellness Architecture Initiative examines how humans interrelate with the environment, and inversely, how the environment impacts human well-being.

Exemplar Wellness Architecture Projects & Practices

compiled by Sarah McAllister, Wellness Architecture Initiative member

"The GWI is seeking to identify projects and practices that integrate health and wellbeing strategies into the built environment resulting in man-made places that become an active health and wellbeing tool"

This was the remit of a roundtable on June 27 2017 hosted by Steelcase and the GWI in Columbus Circle, New York entitled "The Future of Wellness within the AEC Industry" moderated by Veronica Schreibeis Smith and with expert presentations from Sally Augustin and Paula Baker LaPorte. During the roundtable, a questionnaire was distributed to participants in the audience, to seek their help in identifying inspiring & innovative examples of wellness architecture from all corners of the globe, both well-known and obscure. This paper is a summary of the information provided in those questionnaires and a discussion about how people actually measure and identify with a 'wellbeing' environment.

Let's look at the simple two part questionnaire :-

- A. From the definitions we have come up with today, [See Appendix B] please list the top 5 projects that come to mind as examples of Wellness Architecture. We are looking for global examples that may be ancient or contemporary. You may include examples that are holistic or excel in a specific area (i.e. technology, architecture, interior design, integration of nature, engineering etc.)
- B. Please list any standard or practices requiring the built environment to enhance human health and wellbeing. These may be locally adopted ordinances and codes, national standards or codes imposed by regulating bodies, a certification or accreditation process or a rating system promoting third party verification for achieving certain standards.

Most popular examples cited

The most popular building mentioned by 5 out of the 24 participants was **Falling Water** in Pennsylvania, USA, designed by Frank Lloyd Wright, closely followed by 4 mentions of **The Pantheon**, Rome, Italy. Falling Water was praised for its harmony with nature,

integration of water and acoustic impact of the water, whereas The Pantheon was repeatedly described as spiritual and up-lifting.

Falling Water	5	USA
Pantheon	4	Italy
Therme Vals	2	Switzerland
Machu Picchu	2	Peru
Central Park	2	USA
Calatrava buildings	2	Worldwide
Thorncrown Chapel	2	USA
Como Shambhala	2	Bali
Bullit Centre	2	USA

Type of Architecture Most Quoted as Creating Wellbeing

The type of architecture most commonly associated with wellbeing was **sustainable** / **eco sensitive** architecture. The vast majority of the comments made in this regard were about the *integration of the natural world and the harmony with the environment*. Far fewer referenced only the mechanics of sustainability like rain water harvesting, solar panels etc. This is encouraging because it shows that it is not just the factual data affecting carbon footprint that people care about, but the relationship with and respect for

Harmony/ Integration with Nature/Natural	12
Spiritual	10
Social/ Community	4
Relaxation	2
Serene	2
Safe/Comforting	2
Dynamic	1
Transformative	1
Buzzing	1
Fun	1
Retreat	1
Stressful	1
Fantasy	1
Sacred	1

the environment and building in a way that is eco-sensitive, uses local materials and expertise (indigenous architecture) and respects any tribal or local traditions.

Most commonly used adjectives

By far the most common adjectives used to describe a space were *natural* (including harmony & integration with nature) which had 12 references and *spiritual* which had 10 references. Interestingly, the terms wellbeing only had 3 mentions and relaxation only 2 mentions, which could possibly indicate that participants were considering more the 'how' of wellbeing ie. by appreciating natural environments with a spiritual dimension, rather than describing wellbeing itself. Also higher mentions were made about *social connection* (4), *relaxation* (2), *serenity* (2) and *safety/comfort* (2).

Emotions/Experiences

Interestingly, comments about how a building FEELS were not invited, but nevertheless many remarks were made. This points towards the clear fact that human beings are very often emotionally motivated and lends itself to a brief consideration of qualitative versus quantitive data and their uses. Some of the questionnaire participants felt that there were too many standards to adhere to, in order for a building to be considered a wellbeing architecture space.

Quantitive data

This usually focuses on metrics and physically visible aspects of a building or a process. It is usually very linear in thinking and relies a lot upon logical progression and factual, objective data. This is the 'how' of wellbeing architecture and is greatly helped by the various building standards increasingly being adopted by the design profession. See below.

Standards & Accreditations

Within our questionnaire sample group, the most widely recognised standards were **LEED** and **WELL**.

LEED	7	Leadership in Energy and Environmental Design
BREAM	1	Building Research Establishment Environmental Assessment Method
ASHRAE	2	American Society of Heating, Refrigerating and Air- Conditioning Engineers
USGBC	1	United States Green Building Council (LEED)
FitWel	3	Center for Active Design
Maharashi Vaastu Certification	1	

Indigeneous Building Techniques	2	
Biomimicy/Biophilia	3	
OSHA	1	
WELL	5	International Well Building Institute
CASBEE	1	Comprehensive Assessment System for Built Environment Efficiency
DELOS	1	Creators of WELL
EcoChi 180	1	
GreenKey Hospitality	1	
Vaastu Shastra	1	
Accessibility	1	
IGBC	1	Indian Green Building Council
Sacred Geometry	2	

Qualitative data

This is much more personal and takes into account the feelings of a person and their subjective world. From the feedback in the questionnaires, it is clear that the subjective experience of people visiting a space far is equally important, if not more so, than the mechanics of the design. Having said that, the qualitative experience of the end user is very much affected by the physical practices and technologies adopted by architects and engineers, whether the end user is knowledgeable about such methodologies or not. Nevertheless, this is a clear indication that designers need to really consider the feeling and connection to the environment of the finished space, not just the visual appeal.

References to Nature & Specific Natural Elements

By far the most quoted phrase was 'harmony with nature/natural world' (43 mentions) and the most quoted natural element was water (20 mentions), followed by trees/greenery (8 mentions) and lastly mountains/views (5 mentions).

User Experience - ongoing assessment post-build

Several respondents commented that it was important not just to consider the theoretical impact on wellbeing throughout the building process but to develop ways of measuring the results of such architecture by devising an assessment that gives a rating of how healthy the users/inhabitants are both physically and also subjectively. People suggested a Rotten Tomatoes or Tripadvisor style review system by both experts and consumers of the final product.

Minor Mentions

Several mentions were made about the quality of food, whether organic or grown on site and a few people mentioned the importance of the building being family friendly or family orientated. Curiously, fun and buzzing atmosphere was the least mentioned quality, with the vast majority associating wellbeing with relaxation, nature immersion and a sense of connection to the spiritual realm.

Ancient Practices of Building in 'harmony with nature'

While the words feng shui were not mentioned specifically, the concept of Feng Shui (aligning the human with nature via the built environment) was one of the most heavily appreciated concepts in the questionnaires. This equally applies to such practices as Vaastu Shastra and Sacred Geometry, both of which were mentioned twice.

Bias

It is possible that many, but not all, of the participants attending the conference/ Roundtable were already aware of or interested in wellbeing architecture, however, some were completely new to the concept. According to the moderator, the attendees were high-level professionals that had impressive track records in academic and business aspects.

Summary

Does this survey add criteria to our existing conditions that we feel need to be met for a project to be considered a WA project and active wellbeing tool? Which are a MUST and which are optional.

From the data gathered, we can see a very high value placed on spiritual connection and harmony with nature as being specifically related to wellbeing. Rather than critique the physical aspects of the space, the questionnaire respondents shared the feelings which are evoked by a space as being a measure of wellbeing. This indicates that the quality of a space and how it impacts the emotions and psyche are in fact higher priority (for the end user) than the engineering/technical/scientific aspects. Only 2 out of 24 respondents mentioned the engineering and physical structure.

Source: Sarah McAllister, GWI WAI

Sarah McAllister, Director, Feng Shui Agency Ltd, www.fengshuiagency.com

Appendix:

A: Full List of Properties cited as examples of Wellbeing Architecture

B: Definitions of Wellbeing Architecture

C: List of Contributors

APPENDIX A: Full List of Properties cited as examples of Wellbeing Architecture

Name of Building/Place	Location	Country
The Therme Vals	Grundbaden	Switzerland
Post Ranch Inn	Big Sur	USA
Grace Mayflower Inn	Washington, CT	USA
Schloss Elmau		Germany
Como Shambala		Bali
Spa at Faliing Waters	Ohio	USA
SALK Institute	San Diego	USA
buildings by Calatrava		worldwide
Hall of Remembrance - US Holocaust Museum	New York	USA
Pantheon	Rome	Italy
Thorncrown Chapel	Arkansas	USA
Vietnam War Memorial	Washington	USA
Any Beach		Worldwide
Nature		Worldwide
Red Mountain Resort	Utah	USA
The Therme Vals	Grundbaden	Switzerland
Amelia Island Plantation Resort	Florida	USA
Turning Stone Spa	Verona NY	USA
Positano Restaurant	Westpot	USA
McCall Vineyard	Cuthogue, NY	USA
Wyndham Halycon Resort	New Jersey	USA
Alure Southold	New York	USA
Salmela Sauna	Minnesota	USA
Thorncrown Chapel		USA

Segovia Historia		C ' -
Town		Spain
Falling Water		USA
Langham Hotel	Chicago	USA
NOLS	Lander	Wyoming
US Green Building Council HQ	Washington DC	USA
Eastgate Centre	Harare, Zimbabwe	Africa
Kansai Airport		Japan
National Gallery	Washington DC	USA
Eiffel Tower	Paris	France
Mesa Verde Cliff Dwellings	Arizona	USA
National Mall	Washington DC	USA
Igloos	Alaska	USA
Sagrada Familia	Barcelona	Spain
Pantheon	Rome	Italy
Mosque of Cordoba	Andalucia	Spain
Barcelona Pavillion	Barcelona	Spain
Calatrava Transportation Hub	nsportation NYC	
Adobes	New Mexico	USA
Vaastu Temples		India
Japans Temples		Japan
Central Park		USA
Falling Water		USA
Temple of Karnak	Luxor	Egypt
VossaHedron	Baja	USA
Machu Picchu		Peru
MIT Media Lab Expansion	Cambridge, MA	USA
New Apple Campus	Cupertino	USA
SCAD	Lacoste	France
Marina Bay Sands Hotel	Singapore	Singapore
Monastery atop Hu outside Xian	China	

Serenbe	Georgia	USA
Yad Vashem	Jerusalem	Israel
Hearst Building	NYC	USA
Sunrise Springs	Santa Fe	USA
Como Shambala	Bali	Bali
Canyon Ranch		USA
Ocean Beach Asbur	y Park	USA
Machu Picchu		Peru
Grand Central	NYC	USA
Guggenheim	NYC	USA
Seattle Public Library	Seattle	USA
AMNH	NYC	USA
Falling Water		USA
Pantheon		Italy
Central Park		USA
Two Bunch Palms		USA
questionaire writer's pool house!	NYC	USA
Chipolitas Hammam	Istanbul	Turkey
Central Park	NYC	USA
Pocket Parks	NYC	USA
Pantheon	Rome	Italy
Bullit Centre	Seattle	USA
Indus Valley Ayurveda Centre	Mysore	India
Orange County Resorts Hampi Replica of 15c Palace with Wellness Centre	Karnataka	India
MD Anderson Cancer Centre Indoor Park	Houston	Texas
Ecohotel	cohotel	
GoDaddy HQ Tempe		Arizona USA
	'Naan Village Had Nes	
C'Naan Village	Had Nes	Israel
C'Naan Village Mirabeau Spa	Skaneateles, NYC	USA

Calatrava Addition to Milwaukee Museum	Milwaukee	USA
Anyones Home :)		Worldwide
Gardens by the Bay		Singapore
San Miniato	Florence	Italy
Balinese Temple		Bali
Sustainable Living Centre Fairfield		Iowa
Bullit Centre	Seattle	USA
Falling Water		USA
Alhambra Palace	Seville	Spain
Disneyland	Anaheim	USA
MASS Design Hospital	Butaro	Africa
Anyones Home		Worldwide

APPENDIX B - Definitions of Wellbeing Architecture

The practice of architecture that relies on the art and science of designing built environments with socially conscious systems and materials to promote the harmonious balance between physical, emotional, cognitive and spiritual wellbeing while regenerating the natural environment. Human health, wellbeing and comfort are key design considerations that augment a foundation rooted in sustainable and regenerative design practices.

APPENDIX C: List of Contributors

Title	First Name	Last Name	Company Name	Job Title	
Mr.	Michael	Armstrong	NCARB	CEO	
Dr.	Sally	Augustin, PhD	Design with Science	Principal	
Mrs.	Paula	Baker-LaPorte	EcoNest Architecture, Inc.	President	
Mrs.	Wendy	Bosalavage	LIV unLtd.	President	
Mr.	James	Brewer	Steelcase	TSG Workplace Consultant	
Mr.	Ivan	Chow	School of Building Arts, SCAD	Dean	
Mrs.	Blair	Costello McGregor	Vera Iconica Architecture	Office Manager	
Mr.	Jim	Cramer	Chairman	Cramer Partners	
Ms.	Nancy	Davis	CCO & Executive Director	Global Wellness Institute	
Mr.	Anthony	DiGuiseppe	DiGuiseppe Architects	Principal	
Ms.	Nicole	Dosso	Skidmore, Owings & Merrill LLP	Director	
Mrs.	Debra	Duneier	EcoChi	Founder & President	
Mr.	Jason	Dunlop	Big-D Signature	Vice President	
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Mr.	James	May	NBBJ	New York Healthcare Director	
Mr.	James	Patten	Patten Studios	CEO & Founder	
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Ms.	Mim	Senft	Motivity Partners	President & CEO	
Mr.	Scott	Simpson	Greenway Group	Senior Principal	
Ms.	Anna	Sinclair	Your Legacy Lifestyle Blog	Founder	
Mr.	Brandon	Sinclair	Legacy Ranch	Founder	
Ms.	Linda	Sorrento	Sorrento Consulting, LLC	Principal Sustainable Practice	
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