#### TOWARDS AN INTEGRAL ARCHITECTURE

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#### INTRODUCTION

"A great epoch has begun. There exists a new spirit." 1

In 1923, the prolific Swiss architect, Le Corbusier, published the seminal manifesto *Towards A New Architecture*. This heroic modernist agenda embraced the machine age and celebrated a new dawn for architecture. A clean canvas enticed a generation to shift their perspective.

It was apposite to revise Corbu's proclamation as the title for this paper not as a playful metaphor for a righteous platform, but as a sharp reminder of the tendency of movements to be bound in timelines. Both in their theoretical conception and dogmatic demise, they can be woefully transparent. Posthumously, the traps clearly point to elitism, the over formulaic and the plain misunderstood. Hence, in promoting the emergence of an integral architecture, it was paramount to hold the concepts of a flexible, adaptive, and inclusive framework that can seamlessly transition to its next evolutionary state.

In a discipline that is so often driven by visual sensibilities, it can be alluring to focus on the tangible product of architecture. However, it must be well understood that the breeding ground for a new framework of architecture resides in the intention, well before a single line is drawn on paper. Even prior to the multifaceted domain of the design process, it is imperative that gathering and sharing of knowledge takes place.

The following narrative is a simply woven story. The aim is that it should be digestable to the academic community. Beginning with the role of architecture in culture, pivotal moments in its history are explored. Then, the educational system of architecture is detailed at length. The final intent is to define an integral architecture while demonstrating how the application of integral theory filters into the realms of both architectural practice and pedagogy. The three main influencers of the design process: site, client and design professional, are analyzed using integral theory's current AQAL model to present a new architectural terrain.

In envisaging a future where the profession regains a pivotal foothold in the evolution of both community and culture, the integrally informed architect will need to embrace the role of guardian through the design and building processes, promoting a connective, collaborative and holistic approach throughout. The tenets of an integral architecture will be founded on the guiding principles of respect, responsibility and awareness, reflecting a multidisciplinary approach and a deep rooted commitment to sustainability. Through this framework, a set of conditions will be created that stimulate the natural growth process on all levels.

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<sup>&</sup>lt;sup>1</sup> Le Corbusier. <u>Vers une Architecture</u>, Editions Cres. 1923.

#### HISTORICAL PERSPECTIVES ON ARCHITECTURE

#### The Role of Architecture

Throughout history, the role of architecture has been both transparent and veiled, tapping into both the subconscious and conscious layers of our perception. The behaviour of architecture has been erratic, enslaved by its masters, the puppeteers of form, homo-sapiens. Moulded to their ever changing desires, the concepts of shelter have been manifesting since our first evolutionary steps on the planet. These early expressions of home ultimately derived from our innate mechanisms of self-preservation and a deep awareness of our environment. This understanding was both a spiritual and physical presence that culminated in years of knowledge being passed through generations.

"Architecture is the will of an epoch translated into space." <sup>2</sup>

The discipline has advanced from a basic need for shelter to a complex craft that can reflect the embodiment of a cultures shared values. Architecture has borne witness to it all. Unknowingly, this Mother of the Arts<sup>3</sup> has reflected the full human spectrum of splendor and naivete. It is both a tangible communication with the past and a fundamental asset to our future growth.

For those who understood its power, this ancient tool was a means of survival and subsequent evolution. For others, it was a spiritual pursuit and a manifestation for the gods. The diverse motives behind this giving of form allowed architecture a plasticity of character. The central roles of the profession have shifted, it is clear that architecture remains a necessity; without it, life cannot be supported at its higher levels.

## **Architecture without Architects**

Before the hand of the architect had emerged, architectural language was steered by its own intuitive path. It began as a natural extension of the land. Tribes used the contours of the site, climate and local materiality to define home. Now termed regionalism or vernacular architecture, these early concepts of architecture spoke of the local environment, history and culture. It emboddied an organic connectivity born without a blueprint.

Frank Lloyd Wright, the renowned American architect, understood vernacular architecture as "Folk building growing in response to actual needs, fitted into environment by people who knew no better than to fit them with native feeling".<sup>4</sup>

The evolution of this immutable form of architecture can still be witnessed in its implicit imperfection. The beauty of this architecture cannot be rejected as a primitive response to site; it is a powerful reminder of our sense of place,

<sup>&</sup>lt;sup>2</sup> Mies Van der Rohe. German born Modernist Architect, (1886-1969).

<sup>&</sup>lt;sup>3</sup> Sir Bannister Fletcher. <u>A History of Architecture</u>, Chas Scribner's Sons, 1958.

<sup>&</sup>lt;sup>4</sup> Frank Lloyd Wright. *The Natural House*. Horizon Press Inc. New York. 1954.

our traditions, our ethnocentric foundations. These edifices are rich vessels of humble authenicity and sustainable practices.

#### **Man's Pursuit of Aesthetics**

Architecture's first deviation from a truly organic approach can be traced back to many of the ancient civilisations. In Asia, early Indian, Chinese and Japanese architecture, each possessing their own evolved idiosyncrasies, began to formalize accepted aesthetical formulae for their building types, specifically for sacred buildings. In Europe, the Greeks and Romans were pivotal to this metamorphosis of man and his manipulating of nature.

The Five Orders of Classical Architecture<sup>5</sup>, outlined by the Roman architect Vitruvius, was the beginning of a foray into a dogma of aesthetics that would ultimately change the course of architectural history forever. Although this post and beam language was conceived from regional timber construction, the subsequent evolution of these forms were now in the minds of men on a quest to represent the purist aesthetic of their time. It was a controlled transition, enhanced by society's desire to elevate the realm of architecture, specifically in the pride laden citizenship of civic architecture. As mankind slowly began to diverge from his innate perceptions of nature and the cosmos, so did his architecture lose its connection to its source.

From the foundation of Classicism, man's pursuit of beauty has remained at the forefront of the profession. It initiated a quest for eternal systems of form and proportion. Explorations into harmonics, the golden ratio, rhythm, light and texture reinforced the visual notions of architectural expression<sup>6</sup>. After the Dark Ages, with the flourishing of the Renaissance and the exuberance of the Baroque, the status of architecture was elevated to even higher levels of cultivation and aesthetic investigation. The noblest of professions<sup>7</sup> now had an exerted egoism that came with each building. With the onset of the industrial revolution, socioeconomic and cultural conditions opened up new challenges and opportunities abounded.

### The Modern and Post-Modern Movements

During the course of 20th century, the profession witnessed three major upheavels in architectural theory and practice. The modern movement was in fact a reactive force against a suffocation of the Victorian epoch and the traditions of enlightenment thinking. Rationalism, pragmatism and socialism were the new standards for the built environment. The mission firmly stated, "it is only from the present that our architectural work should be derived".<sup>8</sup> This international style was a crusade that lasted over 40 years. It was a streamlined aesthetic, ripped of the superfluous and pure to form and material. An intellectual avant garde adventure that was radical in thought but fell short in application; its visions of the urban fabric came under immense criticisms.

<sup>&</sup>lt;sup>5</sup> Scully, Vincent. Architecture. The Natural and the Manmade, St. Martin's Press, 1991.

<sup>&</sup>lt;sup>6</sup> Rasmussen, Steen Eiler. Experiencing Architecture, MIT, 1964.

<sup>&</sup>lt;sup>7</sup> Rand, Ayn. <u>The Fountainhead</u>, Plume, 1943.

<sup>&</sup>lt;sup>8</sup> Kostof, Spiro. A History of Architecture. Settings and Rituals, Oxford Press, 1995.

As the movement evolved, the framework of modernist architecture became too rigid with a set of principles that lacked an anchor to its context. Ironically, it was Le Corbusier's proclaimed *Five Points of Architecture*<sup>9</sup> that proved a catalyst to the ultimate downfall of the movement.

"Modern architecture had failed to remain credible partly because it didn't communicate effectively with its ultimate users ... and partly because it didn't make effective links with the city and history." <sup>10</sup>

Enter the post-modern reactionaries into the fray. Robert Venturi's controversal *Learning from Las Vegas*<sup>11</sup>, called for architects to be more receptive to the taste and values of the common people. Instead of a previous dominant modernist style, with its tendency to becoming a creed in itself, post-modern architecture offered a broad range of vocabularies and stylistic languages that could co-exist alongside one another. It paid tribute to the pluralism of form and symbolism. It favored the disturbed and the imperfect, respected the flexible individuality of the particular solution.

Post-modern architecture offered us a freedom of expression, a school of thought that acknowledged the validity of symbolism, ornament, the media and the perennial themes of architecture. However, the post-modern mindset left architectural theory in contrived fragments. It was not a humane approach reflecting our innate sense of being and place in the world.

"In the very heart of the postmodern sensibility lay this severe perspectivism. All engage in the plasticity of existence and the perpetual change in reality. The post modern is a refusal, a rupture, a renouncement, much more than a simple change in direction." <sup>12</sup>

Without the authentic alignment and link to nature, many critics and architects looked elsewhere for answers. Some theorists sought the extension of the modern vocabulary to fuse with local vernacular. Perhaps one of the most evolutionary concepts was Kenneth Frampton's proposal that a critical regionalism "should adopt modern architecture, critically, for its universal progressive qualities but at the same time value should be placed on the geographical context of the building." <sup>13</sup>

This form of post-modernism gave modernists a chance at redemption and has proved to be a transitional precursor to the conception of an ecological approach to architecture.

## **Sustainable Architecture**

"The ultimate test of a moral society is the kind of world that it leaves to its children." 14

<sup>&</sup>lt;sup>9</sup> Le Corbusier. <u>Vers une Architecture</u>, Editions Cres, 1923.

<sup>&</sup>lt;sup>10</sup> Jencks, Charles. <u>The Language of Post-Modern Architecture</u>, Rizzoli, 1977.

<sup>&</sup>lt;sup>11</sup> Izenour, Steven and RobertVenturi. Learning from Las Vegas, MIT Press, 1977.

<sup>&</sup>lt;sup>12</sup> Jencks, Charles. The Language of Post-Modern Architecture, Rizzoli, 1977.

<sup>&</sup>lt;sup>13</sup> Frampton, Kenneth. Towards a Critical Regionalism, 1983.

<sup>&</sup>lt;sup>14</sup> Bonhoeffer, Dietrich, German theologian, (1906-1945).

With the post-modernist movement in motion, the motivations for sustainable architecture were put forward in E.F. Schumacher's 1973 book *Small is Beautiful*<sup>15</sup>. It questioned our growth in a finite system and redefined our attitudes towards progress and locality. It looked at economics through a humanistic and ethical lens. Along with James Lovelock's *Gaia Hypothesis* and Rachel Carson's *Silent Spring*, architects and planners such as Sim Van der Ryn, Paolo Soleri and Ian McHarg now had the necessary platform and audience to state their case for ecological design and a world-centric approach to the built environment. During the similar time in Europe, Bau-biologie, a building science for a healthier architecture, began to take roots in Germany and Holland. It should also be noted that the visionary Buckminister Fuller was creating energy efficient design systems and outlining his own version of the sustainable *Spaceship Earth*.

"You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete" <sup>16</sup>

There is no doubt that many sustainable practices have been lost through generations of builders and architects. Since the architect and his ego deviated on his quest to conquer aesthetics, so did our architectural link to nature dissipate on many levels. However, as we relearn these tools and practices once again, there is a new generation of architects that see these weighted responsibilities as expanding possibilities.<sup>17</sup> There is no sense of guilt, merely a sense of urgency to re-examine these forgotten processes and fuse them with the latest technological and design thinking advancements.

The last 20 years has seen exponential growth in the 'green' architecture movement across the world. A revised model of ecological design principles necessary for sustainability was exemplified by the "Hannover Principles" Reveloped by William McDonough Architects for EXPO 2000 that was held in Hannover, Germany. In 2002, McDonough and Braungart published *Cradle to Cradle* 19, a now seminal piece of sustainable literature that aimed to change our perspective on the process of making things.

"Waste equals food, whether it's food for the earth, or for a closed industrial cycle. We manufacture products that go from cradle to grave. We want to manufacture them from cradle to cradle."<sup>20</sup>

Though our current sustainable shift is welcome and has provoked us to relearn such precedence and re-examine our perspectives; the processes of the architectural industry are still fragmented and inadequately aligned to embrace architecture as a holistic endeavor. In essence, without the elevated shift in consciousness to a compassionate, world-centric level, the individual will never volunteer to the cause.

<sup>&</sup>lt;sup>15</sup> Schumacher, E.F. Small is beautiful, Harper Perennial, 1973.

<sup>&</sup>lt;sup>16</sup> Fuller, Buckminster. Philosopher, futurist and global thinker, (1895 - 1983).

<sup>&</sup>lt;sup>17</sup> Thackara, John. In the bubble – Designing in a complex world, MIT Press, 2006.

<sup>&</sup>lt;sup>18</sup> McDonough, William. Hannover Principles. Design for Sustainability, EXPO, 2000.

<sup>&</sup>lt;sup>19</sup> McDonough, William and Michael Braungart. Cradle to Cradle, North Point Press, 2002.

<sup>&</sup>lt;sup>20</sup> McDonough, William and Michael Braungart. Cradle to Cradle, North Point Press, 2002.

In 1993, Polish ecological philosopher Henryk Skolomowski, published *A Sacred place to Dwell*. It attacked modern analytical philosophy systems and attempted to lie out a detailed argument for a new *Ecological Departure*. He outlined a comprehensive metaphysics and articulated the features of a new holistic ecological consciousness. He perceived the notion of a participatory philosophy as our role as co-creator on the planet. He defined the philosophy as a "*realization that we create the universe in our own image*. *I participate*, *therefore I am*." Similarly, along these vertical lines of development, Daniel Goleman, in his recent publication, *Ecological Intelligence*<sup>22</sup>, illuminates inconsistencies in our response to the ecological crisis and guides us towards a true ecological transparency.

With full knowledge of the relevant historical precedence, it is an opportune moment to view these movements through the flexible integral lens of Dr. Don Beck's *Spiral Dynamics*. <sup>23</sup> *Fig. A* shows the path of architectural history and presents these fundamental transitions alongside the standard framework. There are obvious parallels that indicate the direct reflectivity of human development and architecture.

**Beyond:** Transitioning

**Yellow:** Living zero net Communities: Complex Wholes, Systems

**Green:** Green Design (in its simplest form - mere pieces of the greater whole)

**Orange:** Starchitects - Technological Developments - Skyscrapers

**Blue:** Modern Civilizations - Civic Architecture, Urban Developments -Architectural Dogma Established

**Red:** Early Civilizations - Castles, Forts, Temples,

**Purple:** Tribal Communities - Camps

**Beige:** Individual Families - Caves, Primitive Structures

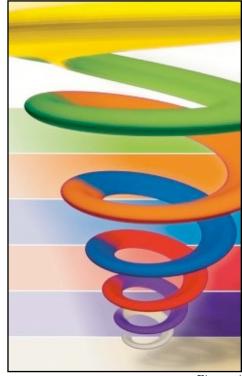


Figure A

<sup>&</sup>lt;sup>21</sup> Skolomowski, Henryk. A Sacred Place to Dwell, Element Press, 1993.

<sup>&</sup>lt;sup>22</sup> Goleman, Daniel. Ecological Intelligence, Broadway Business. 2009.

<sup>&</sup>lt;sup>23</sup> Beck, Don Edward and Christopher C. Cowen. <u>Spiral Dynamics: Mastering Values, Leadership, and Change,</u> Blackwell publishing, 1996.

## EDUCATION AND THE ARCHITECT

"Architecture is the thoughtful making of space" 24

Architects are called upon to shape the built environment. They are required to understand representation and building technologies; for hundreds of years this has been sufficient but as we have evolved so have our needs. It is desired that buildings consider a multitude of perspectives and possibilities, giving opportunity for affecting our direct experience and development. Affective spaces cannot be designed with a basic understanding of construction; it requires individuals who operate within a broad framework capable of connecting the most intricate details of large systems. As education shapes the student, it is paramount we explore the very process that shapes the architect.

#### **Development of a Profession**

Created out of a need for shelter, early architects developed their knowledge through trial and error. Passing down knowledge from master to pupil, the process was refined and formalized to last five or six years. This apprenticeship often included attendance at a local arts academy and foreign travel.<sup>25</sup> France developed the Academie de Beaux-Arts which was first to offer classes in architecture and went on to become the authority on architectural aesthetic. Those traveling to Paris for this instruction were immersed in a system of aesthetics that had no connection to their local traditions or culture. Leaving the school, students propagated this style to much celebration in their home countries, perpetuating a further disconnect of architect and place. By the end of the Nineteenth century, architects were looked upon as cultivated gentleman, often coming from families of elevated status; they were well versed in arts and culture, well traveled, and possessing a certain refinement. Licensing, whether controlled by the state or independent board, became prevalent and at no other time in history has the profession been as respected.

## **Architectural Education**

To be considered an architect, one must complete higher education within the field and obtain a certain amount of practical experience. Only with the successfully completion of these activities can the aspirant pursue the required testing for licensure. As a field that concerns public safety, this process is overseen by committees consisting of diverse body of architects and is regulated.

While education should be the beginning of a life-long process of inquiry all too often it is seen as a means to an end. <sup>26</sup> There is a system of professional development for those who have attained licensure but the majority of the offerings for professional development focus on advancements in building technologies and systems with no attention given to questioning the internal processes that inform their perspectives.

<sup>&</sup>lt;sup>24</sup> Kahn, Louis. World-renowned Architect, (1901-1974).

<sup>&</sup>lt;sup>25</sup> Stevens, Garry. <u>The Favored Circle</u>, MIT Press, 1998.

<sup>&</sup>lt;sup>26</sup> Cheng, Renee. Report on Integrative Practice: Suggestions for an Integrative Education, AIA, 2006

Schools vary widely in their course offerings, typically there are three main components of this education: architectural history/theory, design/rendering, and building technologies. Along with supplemental lectures, architectural education methodology has always focused on semester long inquires into various aspects of design known as *studios*. Through participation in these studios, students are to develop the skills and knowledge required of an architect. These studios demand long hours and near emersion with their peers to the exclusion of other interests. The studio-head actively seeks out students to provide criticism, and examination is public and by oral presentation.<sup>27</sup> There has been much research on the effects of this methodology linking it to the professions isolation, narcissism, difficulties with effective communication, over emphasis on technology assisted design, and lack of field development by means of research.

Communication, further exacerbated by its use of vague and elusive language, is promoted as a one-way conversation within the realm of architectural examination. The "crit", as it is called, spurs the student to present and defend their designs while a seated jury dispenses their criticism.

Cultivating refinement, studio focuses on face-to-face contact and immediate, personal experience. Subtle signs of body language, dress, demeanor, poise and linguistic fluency are used to distinguish the suitability of the students taste and cultivation rather than demonstrated skills. Those deemed successful prevail and the rise of singular greatness is perpetuated.

Profoundly isolated from the public by this system, the landmark Boyer report pointed towards the failure of the profession to understand and respond to the core concerns of American families, businesses, schools, communities, and society. <sup>28</sup> Architecture schools are conducted exclusively by architects, this withdraws any possible connection to external disciplines or community. The Boyer report goes on to say that architecture schools focus on credentials at the expense of preparing architects for their larger public-service role.

## **Emerging Solutions**

While architectural education clearly has its flaws there are several trends seeking to rectify its detachment from other disciplines, exclusive nature, and lack of real world experience.

Increasing complexities and intricacies of environments, buildings, services, and products call for a level of collaboration unparalleled in previous generations. Most schools have broadened their insular architecture schools into encompassing design programs including the areas of urban planning, architecture, and landscape architecture. The focus is often on the benefits derived from an "integrated design team" which brings together the construction and design team earlier in the design process. Through an initial intense charrette format, this collaborative group

<sup>28</sup> Boyer, Ernest L. and Lee D. Mitgang. <u>Building Community: A New Future for Architecture Education and Practice</u>, The Carnegie Foundation for the advancement of Teaching, 1996.

<sup>&</sup>lt;sup>27</sup> Stevens, Gerry. <u>The Favored Circle</u>, MIT Press, 1998.

often develops a more efficient design in terms of energy use, function, building materials, waste management, and overall cost. <sup>29</sup>

Human understanding in design evolves through a process of critiquing existing knowledge and consequently expanding the store of design knowledge. Critiquing is a dialogue in which the interjection of a reasoned opinion about a product or action triggers further reflection on or changes to the artifact being designed.<sup>30</sup> This process, known as design thinking, has swept American universities bringing what were previously the mysterious interior processes of a singular mind into the consciousness of the whole. Design thinking places a focus on empathy, calling for teams to look at things from multiple perspectives. This focus provides potential for design to affect environmental and social improvement.<sup>31</sup> Utilizing optimism and experimentalism as ways of moving towards positive outcomes with concrete solutions, design thinking requires collaboration from any relevant source.<sup>32</sup> It can be deployed in medicine, business, law, product development, and of course architecture.

Seeking out creative partnerships with local communities, competition opportunities, and providing access to workshops has rooted many classrooms in reality. UCLA's city lab has brought students into the field with several projects including the creation of urban gardens. The U.S. Department of Energy holds its Solar Decathlon each year that promotes the integrated design team and sees the most energy efficient homes constructed as prototypes. Most all schools have begun integrating technical shops so as to allow students hands-on building time. Individual professors make an impact with their selection of curriculum by incorporating real projects found within the surrounding community. Ultimately responsibility falls to the schools to make these connections a priority throughout the system.

Academic fields outside of the design schools are developing bodies of research that can be developed and used by architects in the future. Environmental psychology, neurology, philosophy and geosciences are currently producing fascinating work that can directly inform the work of architects.

# **Education for the Future**

The educational system for architects is broken and the attempts to fix it are incomplete in their scope. The illusion of the singular genius behind our built environment needs to be dismantled and replaced with the stories of successful collaborative teams. These teams should include the various disciplines that surround the construction field but also expand to include outside fields as well. Professionals in the field need to participate to bring more

<sup>&</sup>lt;sup>29</sup> Larsson, Nils. <u>The Integrated Design Process</u>, International Initiative for a Sustainable Built Environment, 2004.

<sup>&</sup>lt;sup>30</sup> Fischer, et al. Embedding critics in design environments, The Knowledge Engineering Review, 1993

<sup>&</sup>lt;sup>31</sup> Vogel, Craig M. <u>Notes on the Evolution of Design Thinking: A Work in Progress</u>, Design Management Review, 2009.

<sup>&</sup>lt;sup>32</sup> Brown, Tim. Design Thinking, Harvard Business Review, 2009.

hands on experience into the schools. It is only through the retooling of the system and the reclaiming of the architects professional status within society that real change will be able to occur. It is the responsibility of the profession to challenge what is standard and to encourage discussion on every level.

### INTEGRAL ARCHITECTURE

"To appreciate the detail of architecture is easy when the whole is thus seen and known; otherwise, it is impossible."<sup>33</sup>

The term integral architecture is not new to the profession. As we have previously discussed, the concept of perceiving built space as a whole can be traced back to early civilizations. However, as we delve into architectural records and uncover the semantic of the term integral architecture, it was not until the latter half of the 20th century that architects began to use this term with more frequency. There is no question that Frank Lloyd Wright was the first architect to express this holistic idiom in detail. During his prolific career, Wright was a major proponent of an organic approach to architecture that echoed his understanding of man, nature and habitat.

"The house, then, aims to be a natural performance, one that is integral to site, integral to environment, integral to the life of the inhabitants. Into this new integrity, once there, those who live in it will take root and grow. Whether people are fully conscious of this or not, they actually derive countenance and sustenance from the 'atmosphere' of the things they live in or with."<sup>34</sup>

In the 1970's, Sim Var de Ryn, the forefather of ecological design, founded the Farallones Institute which helped to create national awareness of "ecologically integrated living design" with the Integral Urban House<sup>35</sup>. He also founded the non-profit Ecological Design Institute (EDI). Van der Ryn uses the term 'Integral' in a fluent manner and fully subscribes to philosopher Jean Gebser's notion that humankind has evolved through five stages of consciousness (Archaic, Magic, Mythic, Mental and Integral). He believes we are at the juncture whereby humanity has been left with a choice to either self-destruct or transition into a nature-centric ecological consciousness.

"Architecture is part of the process of re-membering – putting back together our collective dreams. The building should tell a story about place and people – and a pathway to understanding ourselves within nature." <sup>36</sup>

Mark DeKay, Director of Graduate Studies in Architecture at the University of Tennessee, in his inquiries into integral architecture has mapped the memes of architectural structures and overlaid the four-quadrant model on architecture. Questioning the educational system he recognizes the intricate link of all systems and calls for an expanded worldview.

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<sup>&</sup>lt;sup>33</sup> Sri Aurobindo. Philosopher and poet, (1872-1950).

<sup>&</sup>lt;sup>34</sup> Wright, Frank Lloyd. The Natural House, Bramhall House, 1954.

<sup>&</sup>lt;sup>35</sup> Farallones Institute. <u>Integral Urban House</u>, Random House, 1982.

<sup>&</sup>lt;sup>36</sup> Van der Ryn, Sim. Sustainable architecture pioneer, ( )

Species interdependence and human's role in shaping a sustainable future require new approaches that include, yet expand the current emphasis of sustainable design on scientific-objective measures.<sup>37</sup>

While referencing integral thinking, many of the ecologically centered design movements remain silent on the role of the individual experience. Buildings shelter people and to ignore this function and fundamental interaction is to miss the potentiality of creating spaces that act as a catalyst for human development.

"Buildings are meant for people - and this includes literate, illiterate, young, and old... Each individual, each community has its own preferences. Hence they should be allowed to express themselves symbolically. Form should not be finite but should be amorphous so that the experience within is loose, meandering and multiple." <sup>38</sup>

Achieving this through the consideration of the human experience, the symbolic context of buildings, connection to natural environment, and the form and function through which it embraces these elements. (Fig. B) Integrally informed architecture can nourish spirit, evolve perspectives, participate in harmony with its natural systems, and symbolically represent the whole.

Individual	Individual Response/Human Experience: Emotional Phenomenology Spatial Perceptions Aesthetics	terior	Exterior  Building Structure:  Components of Building: materiality, structure, spatial composition, typology  Construction Systems & Building Science  Building Maintenance
Collective		We	Its Visible Context of the Building:
	Invisible Context of the Building:		Programmatic Specifics
	Culture		Human Use & Patterns
	Symbolism		Connection to Ecological Systems
	Ethics		Connection to Environmental and Urban
	Morals		Context
			Social Systems

Figure B

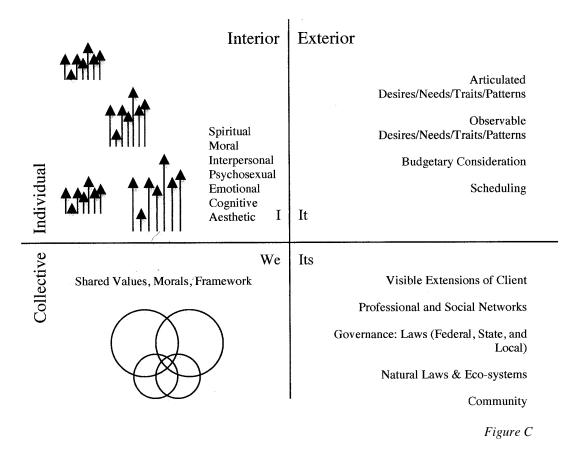
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<sup>&</sup>lt;sup>37</sup> De Kay, Mark and Mary Guzowski. <u>A Model for Integral Sustsinable Design Explored through Daylighting</u>, 2007 <sup>38</sup> Doshi, Balkrishna. Indian architect (1927- ).

## **Considerations of Client**

Each design project begins with a person desiring to build something new or to remodel an existing structure; this entity is known as the client. Typically, they come to engage with the architect because of a shared trait or vision. As form is a direct reflection of the process, the architect will frequently attract those that are on a similar stage of consciousness. These commonalities may embody aesthetics, philosophy and professionalism. Clients come to the design table with their own psychographs and programmatic needs (*Fig. C*).

With these pre-existing foundations in place, a trust and mutual respect can be built upon during the design process. Once established, the client can begin to withdraw and the architect fulfills his natural role as the client's representative and guardian of the process. At this critical juncture, the architect is entrusted with translating the vision.



\* A client is rarely a single entity thus the map has been constructed with consideration to a family of four.

The model above presents the same challenge to architects that it presents psychologists; deducing the upper left from the observable aspects in the upper and lower right. Through direct questioning, empathic listening, and skilled observation one can gain insight, however this is rarely a complete picture. Architects are particularly ill equipped for this task for many reasons, all of which are rooted in the ideology that understanding a client's inner motivations and values is outside their scope of work. The primary focus of architects, with respect to the upper-

right, has always been analyzing the programmatic needs of the client. This should be the moment where both parties are fully present in their awareness and a fully engaged dialogue can occur. However, these interactions remain basic, never inquiring into the logic behind the request or connecting underlying issues and motives.

When the "client" is a group of individuals, this increases the complexities of the task and considerations to be made. Typically one person acts as decision maker and primary communicator for the project; while this streamlines the process for the architect it does not necessarily take into consideration the diverse needs of individual members of the group.

While it would be unreasonable to require every architect to also become a psychologist it is possible through professional collaboration to bring these skills to the design table and begin to form a map for each client. This information can be used to see the connections behind their behaviors, requests and attitudes to form a more complimentary design tailored for the individual.

With the correct framework in place, an integrally informed team can open these doors of perception and a complete new set of design opportunities can emerge; the possibility to create spaces as both a reflection of the client today and a sanctuary for their evolving self.

#### **Considerations of Site**

Fig. D represents the unique scope of the site; this has long been the primary focus of ecological designers and remains equally as important to the client's scope.

Solutions grow out of knowing where you are. Look to local resources, skills, and knowledge for design solutions. Let the place and its inhabitants determine the whole context for design. <sup>39</sup>

The genius locus often acts as muse of the architect, informed by each locations rich history and complex natural systems. These systems are the greater universe to which humans are merely one component. They exist outside of human interpretation and interaction. Architects, as humans, are subject to them.

It must be emphasized that it is always through the lens of the architect that these markers are explored and interpreted. Often leaving indicators of the architect's own perspective. Viewing the site through this multi-faceted framework, it illuminates possibilities to imbed the project with the systems surrounding it.

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<sup>&</sup>lt;sup>39</sup> Van der Ryn, Sim. Sustainable architecture pioneer, ( ).

		Interior	Exterior
Individual	Genius Loci: Spirit of Place Essence of Site Inherent Energy	I	Solar Patterns, Lunar Patterns, Seasonality, Atmospheric Conditions, Wind Flow, Environmental Acoustics, Flora, Fauna, Topography, Terra Firma, Hydrology, Geology, Materiality (natural and man made), and Human Interactions
tive		We	Its
Collective	Site: Geological History Human History Culture		Site Systems:  Ecological Systems  Complexities & Interactions between Nature and Man  Governance: Local Codes & Ordinances

Figure D

An integrally aligned building thus creates not only a shelter in harmony with its site but acts as a regenerative source, actively participating in mutually beneficial relationship within both its time and space.

#### **Considerations of the Architect**

As the professional guardian to the realization of built structures, the architect is the lens through which the other design influencers are interpreted. Their perspective, therefore, becomes the most important component towards the improvement of the overall system's health.<sup>40</sup> Cultivating awareness and expanding perspectives brings forth a new breed of architect.

The integrally informed architect encompasses a broad map of skills and connections represented in *fig. E*. As a field, the interests of the architect unconsciously influence both tangible and formless aspects of their practice. An integral perspective brings awareness to this cross-pollination thus making it a tool for professional development.

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<sup>&</sup>lt;sup>40</sup> Wilber, Ken. A Theory of Everything: An Integral Vision for Business, Politics, Science, and Spirituality, Shambhala, 2001.

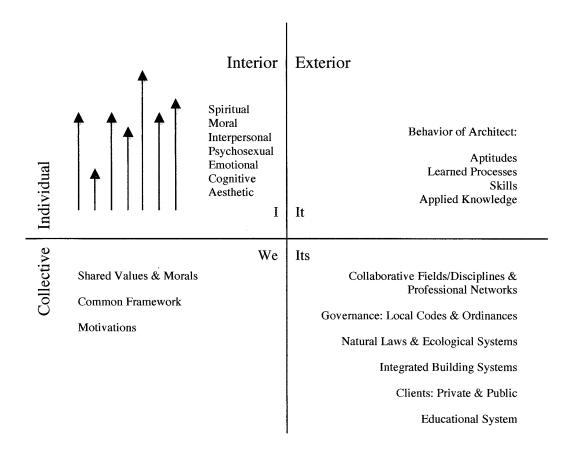


Figure E

With the promotion of the *integrated design team*, architects can strategically supplement their skills and knowledge with those both inside and outside of the building profession. As a business model, gathering like-minded professionals from varying fields of study provides a wealth of dialogue and insight for collaboration.

# CONCLUSION

Towards an integral architecture is a story of the evolutionary process of the built environment. We have articulated that architecture is a natural extension of humanity and will continue to reflect our shifting perspectives. Its role in society is deeply entrenched with our shared values and morals.

It has been articulated that the history of architecture echoes our muddled evolution. Working its way through the developmental spiral towards ever more inclusive versions of itself, this emergent, malleable discipline can resonate both an individual and collective consciousness. Architecture, as enduring structure, remains as a reminder of our shortcomings as well as our hope for its potential. We have learned that society has been blinded by the visual façade of architecture for many years, losing our sensual capacity for responding to our environments. The

dominance of aesthetical influence has been seen to disconnect our innate synthesis with nature. We are now relearning these lost tools and from the perspective of the whole, our respect for the environment is shifting to higher levels.

The educational system of architecture has been analyzed and revealed as broken. Lacking a seamless transition between pedagogy and practice; it is the responsibility of the profession to bridge this understanding and foster a generation of integrally informed architects. As we collaborate and evolve these concepts for an integral architecture, it is important to recognize that the architectural domain is a rigorous and intellectual pursuit. To attract current practitioners it cannot be concentrated solely on the dominance of ecological design but also demonstrate its encompassing capacity in all realms of existence.

An integral architecture deploys the trained architect, interpreting the complex systems of site and the multi-layered dimensions of the client, to use this emergent framework to construct new processes in the professional practice for the betterment of the entire spiral. Though an integral architectural map will bring us closer to a truth in our manifested environments, there is no question that our subjective interior response to architecture will long be a frontier of exploration.