

Architecture is Made for People: A Holistic-Phenomenological Approach to Architecture Case Study: Residential Building in Tel Aviv

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Abstract

The aim of this article is to present my interpretation of the holistic-phenomenological worldview in theory and in practice. I will demonstrate how this approach, as well as the planning process I follow – a process fundamentally different from conventional ones, were implemented in a residential building I designed and built in the city of Tel-Aviv. A process that forms a coherent representation of a complete worldview - a humanistic worldview that I have adopted and been trying to implement for over 45 years of work in projects I designed, at all levels of scale. Hopefully, we will be raising a discussion and a challenge to 21st-century architecture as to how we should intervene in a moral and **human** way within an existing environment, whether urban or natural when integrating within it a new contemporary building.

Keywords

Holistic, Phenomenology, Human Architecture, Residential building, Urban design

Introduction - Architecture is made for people.

The holistic-phenomenological worldview in theory and in practice has stood in recent years at the forefront of the scientific discourse as a whole in disciplines like cosmology, neurobiology, psychology, particle physics, brain sciences, recent theories of complexity as well as being in convergence with the fundamentals of Buddhist philosophy that my work is associated with. The purpose of architecture, as I see it, is first and foremost to create a **human environment for human beings**. Yet, modern society has lost the value of man and thus created a feeling of alienation between man and the environment. Buildings affect our lives and the fate of the physical environment in which we live over the course of many years, therefore, their real test is the test of time. The great buildings, villages and temples in which man feels ‘**at home**’ – the ones we want to return to again and again and thus have **timeless relevance**, are the ones that touch our hearts and have the power to cre-



Figure 1. The villages we want to return to again and again, The Island of Paros, Greece

ate a deep **emotional** experience. (Figure.1)

An apartment building is much beyond shelter. This residential project designed by me in Tel-Aviv was built on a site assigned for an ordinary apartment building. As opposed to the common apartment buildings being built today, relies on existing copy paste models which normally create an anonymous and uniform environment, here a fundamentally different approach was made. The intention was: first, to create a place where the tenants will feel **at home** and a sense of belonging from the moment, they enter the site until they reach their private apartment (Figure.2;3;4). Secondly, to create a building that will contribute significantly to the public space-the street of which its boundaries it defines (Figure.5). As in any organic system, each building has its own uniqueness and power, but at the same time always functions as part of a larger environment for which its existence and wholeness it is **responsible for**.

There are different ways to describe buildings that have this timeless quality, buildings that convey an inherent spiritual experience. Frank Lloyd Wright called them “the ones which take you beyond words.”

Quoted Christopher Alexander by Stephen Grabow in his book: “The buildings that have spiritual value are a diagram of the inner universe or the picture of the inner soul.” (Grabow 1983)

H.H The Dalai Lama calls this timeless quality “The great self” or the “nature of reality.” (H.H the Dalai Lama, 1997).



Figure 2(left), 3, 4. N. Portugali, From the entrance to the site to the private apartment.

Although this timeless quality exists in buildings rooted in different cultures and traditions (Fig. 6;7;8), the **emotional** experience they generate is common to all people, no matter where or from what culture they come from. Thus, Christopher Alexander's basic assumption was that behind human architecture there are universal codes, and that beauty and harmony in architecture and in man-made works of art are objective properties inherent within the structure itself, reflecting the "innate patterns" (used by Noam Chomsky's terminology in reference to the spoken language) which are already structured in our mind from the outset, thus common to us all as human beings.

My personal experience of creating in multidisciplinary fields of the arts, allows me to state confidently that there is no essential difference between designing a town square, a building, a chair, a layout of a book or in creating a film.

The same set of rules which determines the correct relationship between the parts and the whole and gives a sense of unity and beauty in architecture, applies in its abstract definition to anything consisting of matter, form and color, at



Figure 5. N. Portugali, Simulation, front-view to the street

any level of scale. The difference lies in the content, the components, and the level of complexity.

Contemporary architecture and art sought to dissociate itself from the world of emotions and connect the design process to the world of **ideas**, thus creating a rational (intellectual) relation between building and man, devoid of any emotion. The basic argument presented here is that in order to change the feeling of the environment and create places and buildings we

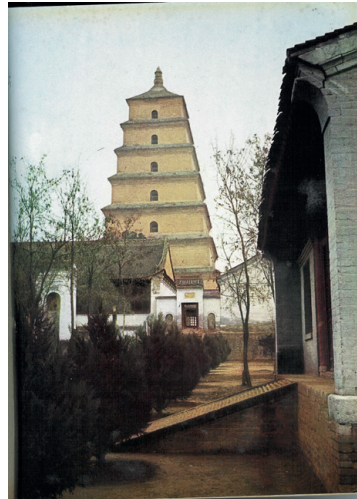


Figure 6 (left). The Tholos 4th century (Delphi, Greece), Figure 7. The Great Gander Pagoda 7th-8th century, (Hsi-an-Fu, China), Figure 8. Yosef Karo Synagogue, 16th century, (Safed, Israel)

really feel **'at home'**, what is needed is not a change of style or fashion, but a transformation of the mechanistic worldview underlying current thought and approaches to the **holistic** one.

1. Between two worldviews - the holistic approach Vs. the mechanistic approach

The relationship between the parts and the whole

The difference between the worldview which resulted in dissociating man from his environment and the worldview that considers man to be part of the physical world or part of nature we live in, emphasizes the difference between the holistic organic school of thought which I chose to adopt in my work, and the mechanistic-fragmentary worldview. These are **two different set of orders**.

The mechanistic worldview dominant in Western thinking and underlying most contemporary architecture separates elements, consequently creating a mechanically ordered environment of autonomous fragments, the result of which we witness for example in places like: Brasilia in Brazil, (Figure 10) Chandigarh in India, the satellite towns built in England built at the 60th and the diamond stock exchange district in Ramat Gan Israel (Figure.9) or for that matter, the new neighborhoods built in Jerusalem at the early 70th. Where in all of them the structured disconnection between the building and the street; the street and the neighborhood; the neighborhood and the city, arouses a feeling of detachment and alienation. The building appears to be a random collection of objects; the street appears to be a random collection (catalogue) of buildings that do not create together

a meaningful street. Often even prefabricated transported houses made in a factory than **superimposed** artificially on the site (Figure.11).

As opposed to these buildings are the ones designed by architects who are immersed in **the thing itself**, thinking about **us the users**, understanding the responsibility placed on the buildings they design first and foremost to the quality of the street - the boundaries of which they define. Understanding that urban design does not start and ends by doing arbitrary sketches on a scale of 1:1000 but with being constantly aware of the scale of the **human being** – the scale of **1:1**. In here just by example the experience and the dialogue created between the pedestrians and the building. By the sight of the decorated iron railings at the stairs and the balconies (figure.12) or the smell and sight of the fruit trees at the entrance courtyards to the flats (Figure.13).

This approach was not adopted by Le Corbusier, Oscar Niemeyer and others who were part of the mechanistic school of thought. The result of which their iconic architecture was no more than environmental installations, totally generated from an arbitrary vision of its creators. This school of thought was and is directly responsible for the disasters we are witnessing in the physical environmental in which we live in. The holistic-organic approach that has been for many years at the forefront of the scientific discourse in general was adopted and applied by Alexander (Center for Environmental Structure, Berkeley California) to the field of Architecture. As in any organic system where each element has its own uniqueness and power but always



Figure 9. Detachment and alienation, Diamond Exchange, (Ramat Gan, Israel.)



Figure 10. Brasilia, Brazil



Figure 11. Random assortment of units transported from the production plant, Modiin, Israel.

acts as part of a larger entity to which it belongs and which it complements (Figure. 14), the socio-physical environment at all levels of scale is a system - a dynamic whole the existence of which **depends** on the proper ever-changing interrelations between the parts.

Having adopted this concept, I do not regard urban design, architecture, interior design and landscape design as independent disciplines removed from each other, but as **one continuous organic system**. The building is not perceived as a collection of designed fragments, but as one hierarchical language, in which the street, the building and its interior is one continuous whole. (fig.2;3;4;5). The overall feeling of inner wholeness and unity whether in a building, in a street, in a neighborhood or in a city evolves from the proper interrelations between its parts. H.H the Dalai Lama claims that understanding these expressions of dependent arising; cause and condition, and cause and effect is a fundamental insight of Buddhist philosophy.

The Walk from the public street to the private apartment is through a continuous system of open spaces that opens one into another leading gradually from the: *"internal outdoor street"* helping in isolating the apartments from the busy street alongside the site (Figure.2) instead of the common alienated internal lobby, to the private entrance

courtyard (Figure.4) or to the private entrance balcony at the upper apartments. These balconies are connected to the open stairs that create a sense of connectedness to the ground. (Figure.13; 20)



Figure 12. N. Portugali, Decorated iron railings



Figure 13. N. Portugali, Fruit trees at the entrance courtyards



Figure 14. Organic System, interrelations between the parts and the whole

2. The beauty is in the details-

The detail is not ornamental for its own sake.

The secret concealed within the beauty of a building lies in its spatial order and in the nature of its details. Every design detail, at any level of scale, is derived from the larger whole to which it belongs, which it seeks to enhance and for whose existence it is responsible. I do not perceive the details of a building as a collection of designed elements but as a structural

segment derived from a hierarchical language in which the Outdoor, the building and the interior are regarded as one continuous system. Therefore, each detail down to the light fixture, the handle of the door or the choice of the color of the flowers in the entrance courtyard was an inseparable part of my planning process in the course of creating a the 'whole'.

In modern society, beauty has become a term of abuse as often associated with inefficiency, impracticality, lack of functionalism and high cost. That notion of beauty is true when it relates to details of a building as decorative elements and ornamentation for its own sake. The Shakers, a religious sect (mid-eighteenth century) that created an abundance of useful beautiful furniture and utensils, noted that the wholeness and beauty of a *form* are products of pure functionalism and that there is no room for beautiful forms that do not flow from a functional need. At the same time however, the Shakers did not interpret the term "pure functionalism" in the narrow sense of the word as did the modernists for whom the meaning of "form follows function" was semantically connected only to the physical body of the building. The Shakers understood "functionalism" by connecting it both to the physical and the **spiritual-emotional** experience that one feels in a building. Taking for example the iron decorated balustrades of the stairs and balconies (Fig.12;13) providing a melody of its own. When painted in gold, once the sunrays hit them, they create beautiful silhouettes on the various surfaces.

3. The generative language of the building – A pattern language

Beauty as an objective matter

Alexander's assumption, based on his empirical research conducted in the mid-60th at the *Center for Environmental Structure* in Berkeley was, that beauty and harmony are objective properties related to the geometrical properties inherent in the structure itself, and that feelings are an objective fact. Accordingly in his book *The Timeless Way of Building* he states that all places of organic order that may seem unplanned and disorderly are a clear expression of order on a deep and complex level. This order is based on absolute rules that have always determined the quality and beauty of a place and is the source of the **pleasant feeling** in it. In other words, there is a direct connection between the 'Pattern of Events' that occur in a place and the 'Patterns of Space' in his terminology that constitute it. His basic assumption was that just as every substance has a basic component called an atom, the man-made environment consists of 'atoms' which he called patterns. Each pattern is an archetype of a structure that repeats itself in an infinite variety, and although its form varies from place to place, there is an underlying structure - the archetype which remains the same. (Figure.15;16;17)

In other words, for example when we come across a tree we have never seen before, we do recognize it as a tree. The reason for that is that the entity we identify as a 'tree' is not the visible form, but the underlying structure-the relationship between the parts of a tree. And although



Figure 15. Arcade, Sehzade mosque Istanbul Turkey.



Figure 16. Arcade, cloister Capri island Italy.



Figure 17. Arcade, shitennojitemple-Osaka.

form repeats itself in an infinite variety, the pattern of relationship remains the same (Figure.18)



Figure 18. The pattern of relationship in both trees is the same.

The importance of these 250 patterns as listed in the book *A Pattern Language* lies in the fact that they constitute a system which generates an **entire language** at all levels of scale.

Each pattern in the language consists of other smaller patterns and at the same time part of a larger pattern. In other words, each pattern is a **pattern of relationships**. What generates the meaning to a sentence in the spoken language, creates in the *Pattern Language* a meaningful city, a street or a building - the syntax of the language.

But moreover, Alexander's assumption was that as people from different cultures share a similar experience in a place that produce a pleasant feeling of comfort, the patterns of that place is a reflection of **innate patterns** structured in our mind from the outset, thus common to us as all as **human beings**. No matter from what culture or place we come from.

The first step in the planning process was to determine the patterns of space that were relevant

for this residential project, patterns that grew out both from the location of the site (facing two main streets), the specific needs of the families and the basic **universal needs** common to us all as human beings. As for example *daylight* being essential for our mental and physical wellbeing, whether in Israel or in any other country, whether in a house, a Senior citizen's center, a kindergarten, or an office building. (Figure.19)



Figure 19. N. Portugali, The buildings were designed as "long wings of day light."

4. The Planning Process.

The planning process proposed here is fundamentally different from the common planning processes. Unlike the common ones, where planning first takes place in the office and is later transferred to the site, here the drawings were merely the recordings of the planning decisions taken on the site itself- being aware of the visible and hidden forces acting on the **site itself**.

In his book *The Joy of Living and Dying in Peace* H.H the Dalai lama writes: "*Things have a nat-*

ural and innate mode of existence.... Reality is not something that the mind has fabricated anew. Therefore, when we search for the meaning of truth, we are searching for reality, for the way things actually exist...."

Once I set the list of patterns for the project, all planning decisions concerning the physical structure of the building complex were literally taken on the site itself.

Unlike the common planning process where the shape of the building is predetermined with no relation to the site, and later superimposed on any site, here a dynamic process took place by which the plan of the building that was finally created was a structure of balance between the abstract *Pattern Language* chosen for this project and the **living reality of the site itself**.

The unpredictable conditions that are continuously developing on an actual site, create openings for new things. The order according to which the planning decisions were taken on the site was determined by the hierarchical order in which the patterns appeared on my list. Decisions are first made on issues that affect the larger scale we have to confront at any given moment along the development of the building plan, followed by other decisions generated from them. The planning process is not conceived as an additive process, but rather as a **differentiating** one. Each new element of the plan is **differentiated** gradually from the previous ones. Each decision taken on the site and marked on the ground changes the configuration of the site as a whole, forming the basis for the next decision towards the final plan.

The first decision made here was by applying the pattern 'Entrance Gate' - the location of the gate to the site - the threshold connecting the site and the street as a whole, that must be immediately visible once entering the street. (Figure.20;21)



Figure 20. N. Portugali, Entrance Gate- the threshold connecting the site and the street.



Figure 21. N. Portugali, Entrance Gate- the threshold connecting the site and the street.

The location of an *Entrance Gate* is a critical decision and not an obvious one. When keeping in mind common contemporary architecture in where pedestrians spend a lot of time looking for the main entrance to a building - they literally get lost. Experience has shown me that placing the *Entrance Gate* in a deviation of even 10 cm can violate all it is meant to achieve, thus the precise location of the gate can be ascertained only by being on the site itself.

Another decision made here was applying the pattern '*Entrance Transition*'- the sequence of transition spaces between the street and the site and between the *Internal Street* and the entrance door to the private apartment. (Figure.2;4). Following that in the sequence came the pattern '*Main Entrance Door*' to the apartment-

An important one in the evolution of the plan I placed it at a point where it can be seen immediately from the '*Internal Street*' (Figure. 13).

5. The association between my contemporary building and tradition

One of the assumptions that immediately arises regarding this new building (as well as with other new buildings I designed) is whether being a "reconstruction" of traditional buildings of the past. This assumption is based without any doubt on what we see in general around us: the iconic architecture which dissociate itself from its environment. Consequently, people assume that a building that provokes pleasant feeling and well-integrated in a natural way with its surroundings cannot possibly be a new building.

Let me be clear, I do not attempt or aim to reconstruct the past or to nostalgically trace this or that style. The similarity and the association created between the buildings I design and those we know from the past - the ones that do generate respect to the environment and a feeling of 'a home' to its users (obviously not all from the past), originate in my use of the same fundamental **Patterns of Space and a planning process** revived from the past which I adopted in my work.

The architectural approach which aims at fulfilling timeless values is by no means a reaction against the contemporary movement as one might think. On the contrary, it is a genuine attempt to fully use the potential inherited in modern technological society available today, but not as an aim or a value in itself, but as a tool to create a **human and friendly environment** that will satisfy the basic needs common to all of us as human beings.

The real challenge of current architectural practice is to make the best use of the potential inherent in our modern technological age. Nevertheless, the 'trademarks' we have become accustomed to, which are currently used such as 'sustainable development', 'green building', 'ecological environment' and the likes, are no more than a list of dogmatic names that refer to: the saving of energy; water; electricity and the recycling of material. Without reducing their importance surprisingly there is no reference at all in the list to what should be considered as the central No 1 environmental resource - the **human being**.

The terms "sustainable development" and "green building" thus require a broader definition than the one currently in use, as well as a change of priorities. It must call for the basic needs (body and soul) of the **human** being for whom the environment is being built. What is good for the human being will necessarily be good for the environment and consequently will save energy and reduce costs. For example the use of **natural daylight** for our physical and mental wellbeing. So as soon as **human experience** is brought to the front of the agenda, saving energy will inevitably follow. In the past these were the rules of thumb generated from the daily experience and respected. Adopting this uncommon approach to architecture by the developer, did not only responded to the users living in the project and a value to the environment, but was transformed into a **highly economic viability** for him. That, despite the fact that this project is located at a junction of two noisy busy streets.

Conclusion

It is my hope that a holistic worldview will prevail and lead us collectively to create **human** architecture: buildings, streets, neighborhoods, cities, and villages that we **really** want to live in. In any culture in any place and at any time. The ones we want to return to again and again that touch our hearts and have the power to create a deep **emotional** experience. The ones that take you "beyond words" as described by Frank Lloyd Wright.

That in my hypothesis by adopting Christopher Alexander's school of thought in which the foundation of all those places in which man

feels at home, are absolute 'physical patterns of space' that have always been responsible for the dialogue between man and environment.

Hopefully replacing the mechanistic conceptual approaches and architectural icons, that dissociate the human relationship between men and environment.

References

- [1] Alexander Christopher, Ishikawa Sara, Silverstein Murray, A Pattern Language, Oxford University Press, New York 1977.
- [2] Alexander Christopher, The Timeless Way of Building, Oxford University Press, New York 1979.
- [3] Alexander Christopher, The Nature of Order, Center for Environmental Studies, Berkeley 2002-2004.
- [4] Grabow Stephen, Christopher Alexander, The Search for a New Paradigm in Architecture, Oriel Press, Boston 1983.
- [5] Herrigel Eugen, Zen in the Art of Archery, McGraw-Hill Book Company, New York 1964.
- [6] His Holiness the Dalai Lama, The Joy of Living and Dying in Peace, Harper Collins, India 1997.
- [7] Portugali Nili, The Act of Creation and the Spirit of a Place / A Holistic-Phenomenological Approach to Architecture, Edition Axel Menges, Stuttgart / London 2006.