

■ In memoriam Christopher Alexander¹ Nikos Salingaros²

Architect and design theorist Christopher Alexander passed away on 17 March 2022 after six decades of efforts in deepening architectural thought and practice. He left behind a valuable legacy in both fields. The present text is by his close friend and colleague Nikos Salingaros, who has made it available to Sofeh for the Iranian Alexander aficionado.³



*Figure 1. Christopher Alexander and Nikos Salingaros, 1983, in the countryside outside Los Angeles. Editing *The Nature of Order* during the conference where Christopher Alexander had a public discussion with the physicist Professor David Bohm on the meaning of “wholeness”.*

1. The following works of Alexander have been translated to Persian:

- *Notes on the Synthesis of Form*,
- *A New Theory of Urban Design*,
- *The Timeless Way of Building*,
- *The Linz Café, A City is Not a Tree*,
- *A Pattern Language*,
- *The Nature of Order*.

2. The following works of Salingaros have been translated to Persian:

- *A Theory of Architecture*,
- *Anti-Architecture and Deconstruction*.

3. Sofeh would like to thank Dr Zoheir Motaki for communicating with Dr Salingaros.

■ **Christopher Alexander (1936–2022).**
Finding God Through Architecture.
By Nikos A. Salingaros

The visionary architect Christopher Alexander showed us how to reconnect to the world, and with the deep meaning that the universe contains, through architecture. He gave an antidote to our civilization's eager pursuit of self-annihilation.

The four volumes of his monumental book *The Nature of Order* (2001-2004) document geometrical qualities that we perceive unconsciously. Characteristics of what Alexander calls "living structure" in *The Phenomenon of Life* connect us viscerally to our surroundings. While his purpose was to derive a method for designing beautiful and health-giving environments, Alexander's investigations probed into the nature of matter itself.

Alexander worked strictly with empirical observations drawn from his own insights and his students' experience. It turns out that traditional and vernacular architecture, art, artifacts, buildings, and utilitarian objects all connect to their users in a healing manner. Alexander's design method describes how the human body benefits only from a very special type of complexity. Today, eye tracking, neuroscience experiments, and visual attention simulations confirm this phenomenon.

This important result explains what many deeply suspected: that the human mind instinctively creates things that are beautiful as well as utilitarian. There is no distinction between what we create to use, and the special qualities that give us joy in using them. Nevertheless, by validating traditional architecture and art, Alexander's work posed an existential threat to contemporary architecture, which denies historical practice and legitimizes itself through erasing what has gone on before. As a result, Alexander lost influence in architecture schools and with the practice of design in our times. Even today, his obituaries published in the mainstream architecture journals are half-hearted and deprecating!

I sensed a sadness in Christopher towards the end of his productive life. He saw further than anybody else, and what he saw was terrifying. He clearly discerned humanity's self-inflicted moral and sensory numbness leading to nihilism. Built structures, from urban complexes, to buildings, to rooms, to windows, to door handles, to furniture, propagate a cultish anti-life, inhuman aesthetic. The massive global economy derives its growth from generating dead, soulless objects, while at the same time wiping out natural ecosystems. Dominant culture had deliberately institutionalized the destruction of life and the generation of ugliness as something fervently desired. Christopher warned of the folly of losing the nourishing sense of beauty and the sacred, yet our media and educational systems urge our disconnection by promoting visual styles that suppress living structure.

Alexander's approach to designing the built environment diverges radically from the flashy world of egomaniacal Architects fueled by big money. His numerous buildings can often seem unremarkable in photographs, yet they offer an immensely enriching emotional and physical experience to those who are actually there. This is diametrically opposite from dominant iconic architecture, which photographs splendidly but which is more likely anxiety-inducing and oppressive when experienced in person. Some people mistakenly believe that Alexander's buildings follow a traditional style: that's not true; since all of them are highly innovative and do not simply copy the past.

Having to forgo one's ego is a precondition for connecting to a higher level of existence. The same rule is a prerequisite for putting the designer in a suitably sensitive state to design a healing environment or structure. Its opposite — an architect's arrogant and ego-filled mood of imposing "created" design — lies at the core of inhuman environments generated by decades of industrial modernism.

Three outstanding points of Alexander's theoretical contributions may be summarized. First, he and his colleagues published a collection of practical design solutions as *A Pattern Language* (1977). Each pattern is a recurring socio-geometric solution (that is, a geometrical configuration that enables and even encourages stress-free human action) discovered at different times and in different locations around the world. Traditional builders evolved those solutions by trial-and-error over centuries.

Two examples of these geometrical configurations are: “light on two sides of every room” (where we mean natural sunlight), and “main entrance” (which stands out visually to attract people approaching the building). Readers can check the utility of these two patterns through the perceived dreariness and disorientation of situations when they are absent. Every doorway, entrance, garden, room, wall, window, and urban space that feels naturally comfortable and life-giving embodies several design patterns.

Second, Alexander attributed the overall feeling of belonging, of being in a life-enhancing environment, to the “Quality Without A Name” — the QWAN, introduced in his book *The Timeless Way of Building* (1979). Alexander later used the descriptor “living structure” for the same strongly-felt characteristic of environments that nourish us emotionally. Computer scientists adopted the term QWAN to denote complex software that works in an elegant and near natural fashion.

Third, we have the body of results presented later in *The Nature of Order*. Those include 15 geometrical properties recurring in all stable configurations in nature. The 15 properties link biologically-based aesthetics to structures explained by biology and physics, which have nothing to do with philosophy. An inescapable (and incendiary) conclusion is that beauty is not relative and subject to individual taste, but actually depends upon the structure of matter. A separate tool, the “Mirror of the Self” test, can be applied to judge the relative “life” between two similar objects or settings.

His work was appreciated, astonishingly enough, by the computer science and software community, which found in his analysis of complexity the appropriate tools needed to create the revolution in computing that resulted in Agile, the iPhone, Object-Oriented Programming, SimCity, and Wikipedia. Computer scientists provide easy-to-use interfaces to facilitate people’s lives; whereas the architecture-industrial complex is obsessed with imposing its limited abstract forms onto the world, regardless of whether people feel comfortable in them or not.

The process of writing *The Nature of Order* forced Alexander into spiritual explorations. His research into the ordering of matter and the process of connecting us in a deeply human sense revealed another unexpected set of rules. Those were more than the physical rules of

how matter is arranged to create stable complex structures, but which remain external to the human consciousness. Attachment and life made sense only when conceived as mechanisms acting in an engulfing field that includes our body and mind — and visceral human feelings — as part of the interactive environment. But, importantly, Christopher did not believe this to be a merely phenomenological or psychological effect (such as affordance), but a genuinely physical one. Trained as a physicist, he had come across surprising metaphysical explanations for the observed phenomena.

Christopher's mechanisms for connecting and ordering were uncannily reminiscent of, if not identical with, spiritual descriptions of similar phenomena in the world's great religions. He interpreted the discovered order in the physical world as evidence of metaphysical action that paradoxically combines the concrete with the mystical yet still has measurable consequences. His thought was not that belief opened up a divine order in the world; but rather that discovered order pointed towards belief in something beyond the self. "The best way to produce good architecture must somehow be linked to God—indeed, that valuable architecture was always about God." Spiritual exercises were developed throughout the ages for precisely this end: to connect the self to the universe.

On several occasions he told me that he was mystified and even frightened by what he was discovering, since he was trained as a scientist to use empirical methods of observation and rely on scientific proof. However, Alexander found that he could not ignore his own discoveries; therefore the scientifically honest thing was to acknowledge them and try to document them as faithfully as he could. He gave convincing explanations, which, however, remained incomplete from a logical point of view. And yet they were not fanciful inventions, but simply the best interpretations for what Christopher was seeing. There was also a serious problem with language, an appropriate vocabulary not being ready at hand to describe the phenomena.

As one of the editors, I encouraged him to bring some of the most unconventional ideas forward in volume four of *The Nature of Order*, entitled *The Luminous Ground*. There were intriguing concepts tucked away in the chapter footnotes of his early draft, yet those really helped to clarify and enrich the main text. Asking Christopher why he relegated this "way-out" material to the footnotes, he answered that he was afraid

readers would ridicule him for even writing this stuff down. I assured him that that the “hidden” material made much more sense in a central position. In fact, it lends a coherent meta-logic, even as it might alarm a reader who is bound by the conventional logical framework.

Moving in the realm of the sacred further contributed to Alexander’s ideological break with his architectural colleagues. His discussion of God in the context of the design process anchored in structural geometry promises to have immense future implications for re-awakening religious sentiment in human culture. This aspect of the Nature of Order is totally unexpected. Not pretending to be a spiritual guidebook on “finding oneself”, it is a grand theory for building a healing environment. The end result of successfully applying the design tools described therein is to connect oneself so profoundly with surrounding structures that one is healed. Medical research is verifying Christopher’s pioneering insights 20 years later. Yet the connecting and healing processes go far beyond physiological healing, into the transcendental.

Certain architectural achievements have spiritual power, and most of the world agrees with this assessment. People have experienced the life-changing connection to very special configurations of matter. It is only architects, trained in the goal of severing our connection with both healing environments and the sacred, who dismiss this process out of hand (since it delegitimizes their work). Christopher gave us the tools for switching the historical causality in building culture: “faith generates healing architecture” to “healing architecture can help to resurrect an extinct faith”. It is up to us to use these tools, or choose to ignore them.

Dear Dr. Zoheir Mottaki,

It's a pleasure to know that my Obituary note on Late Christopher Alexander is going to be published in Shahid Beheshti University (SBU) Journal of Architecture and Urban planning (SOFFEH). As you know, I began working with Christopher in 1982 or 1983 after I met him in Berkeley. I had known his work long before then and admired it greatly, considering his books Notes on the Synthesis of Form and A Pattern Language to be works of genius. He then asked me to help him edit The Nature of Order, and we worked on it for 20 years until it was published during 2001-2004. We had to organize the text after it kept expanding in size, since Christopher was continuously adding new concepts and sections, and so we decided to separate it into what eventually became the four volumes.

I am very happy to learn that SBU was the first academic hub to introduce Alexander thoughts and ideas in the last four decades starting with Prof. Razjouyan and Prof. Hadi Nadimi both of whom kindly wrote illuminating introduction to the Persian translation of my book "A theory of Architecture" which was elaborately translated by you and Saeid Zarrinmehr. I am sure that with the help of faculties and students like you have at SBU the battle 'The Battle for the Life and Beauty of the Earth' would attract more attention and dedication and auspicious outcomes.

Thank you and best wishes,

Nikos Salingaros

یادنامه کریستوفر الکساندر^۱

نیکوس سالینگاروس^۲

کریستوفر الکساندر، معمار و نظریه‌پرداز طراحی، پس از شش دهه تلاش در عمق بخشیدن به اندیشه و عمل معماری، در تاریخ ۲۶ اسفند ۱۴۰۰ / ۱۷ مارس ۲۰۲۲ چشم از جهان فرو بست و میراث ارزشمندی از خود، در هر دو حوزه نظر و عمل، به جا گذاشت. متنی که مطالعه می‌کنید نوشته دوست و همکار نزدیک او، نیکوس سالینگاروس، است، که آن را برای دوستداران ایرانی الکساندر در اختیار صفا قرار داده است.^۳



Figure 1 Christopher Alexander and Nikos Salingaros, 1983, in the countryside outside Los Angeles. Editing *The Nature of Order* during the conference where Christopher Alexander had a public discussion with the physicist Professor David Bohm on the meaning of "wholeness".

۱. از کریستوفر الکساندر، آثار زیر به فارسی ترجمه و منتشر شده است: *یادداشت‌هایی بر ترکیب فرم، تئوری جدید طراحی شهری، معماری و راز جاودانگی، کافه لیتنز، شهر درخت نیست، زبان الگو، سرشت نظم.*
۲. از نیکوس سالینگاروس آثار زیر به فارسی ترجمه و منتشر شده است: *یک نظریه معماری، ضد معماری و واسازی، مجموعه مقالات نیکوس سالینگاروس.*
۳. صفا از دکتر زهیر متکی بابت همکاری در برقراری ارتباط با دکتر سالینگاروس قدردانی می‌کند.

