

TIME AND TIMELESSNESS IN ALEXANDER'S SEARCH FOR BEAUTY

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Abstract

This paper explores Christopher Alexander's theory of architecture and urban planning through the lens of time and timelessness. In so doing it traces his development from early systems thinking to his later metaphysical conception of living structure. It situates his work within the context of 20th-century urban thought and highlights his critique of mechanistic planning in favour of adaptive, participatory, and generated structures. Central to Alexander's philosophy is the belief that beauty arises through processes which unfold over time; thereby aligning built form with human experience. By contrasting traditional and modern approaches to urbanism, the paper affirms Alexander's enduring relevance and calls for a renewed commitment to environments that grow over time with life, memory, and meaning.

Keywords:

Urban Complexity, Urban Design Theory, Natural Philosophy, Building Process, Pattern Language.

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1. Introduction

Christopher Alexander remains a seminal figure in architectural and urban theory, who is renowned for his insistence on the intrinsic connection between built form, life, and human well-being. Over the course of five decades, Alexander developed a profoundly integrative vision that challenges the dominant paradigms of modernist and postmodernist design. His intellectual evolution spans rigorous mathematical logic and human-centred pattern recognition, and culminated in a metaphysical synthesis of order, life, and beauty.

Alexander's early work emerged within a fertile intellectual milieu that included other visionary thinkers of the 1960s including, but not limited to: Herbert Simon, Jane Jacobs, Kevin Lynch, and William H. Whyte. Each in their own way challenged the top-down, technocratic models that dominated mid-century planning and design. Herbert Simon's concept of "bounded rationality" and his development of design as a science of problem-solving directly influenced Alexander's initial analytical approach in *Notes on the Synthesis of Form* (Simon, 1957; Simon, 1969). Similarly, Kevin Lynch's emphasis on the legibility of urban environments in *The Image of the City* (Lynch, 1960) paralleled Alexander's interest in how people perceive and relate to form. It also pioneered an empirical approach to urban planning, based on how people perceive cities. An approach that allows analysis of urban form on the basis of a particular value – that of legibility. Jane Jacobs, in *The Death and Life of Great American Cities* (Jacobs, 1961), emphasised the complexity and organic nature of urban life, and critiqued the sterility of modernist planning; an argument that closely resonates with Alexander's critique in *A City is Not a Tree*. Her description of how the street functions as a social environment which fosters recurring weak relationships that promote safety and civil behaviour, was a precursor to Alexander's idea of socio-spatial *Patterns* as the basis of the built environment (Alexander, 1979). In the last chapter of her book, she extensively cited Warren Weaver's seminal paper "Science and Complexity" (1948) and described the city as a complex problem that requires a different kind of approach from those used by city planners, engineers, and social scientists so far. William H. Whyte's observational studies of public space, especially in *The Social Life of Small Urban Spaces* (Whyte, 1980), further reinforced the importance of empirical engagement with human behaviour and showed clearly how environments encourage or discourage social behaviour.

These thinkers collectively fostered a shift from abstract and idealised models to empirical, participatory, and user-centred approaches in both architecture and planning. Alexander's work, while unique in its metaphysical depth, shared with them a commitment to uncovering the hidden logic that infuses life into environments. He extended their insights into a broader philosophical framework, and sought not just to describe how places function, but also to reveal the timeless principles that underlie their vitality.

Central to Alexander's thinking is the dynamic interplay which exists between time and timelessness. This interplay can be seen to emerge in multiple registers: the unfolding of design over time, the recurrence of successful spatial patterns across history, and the perception of enduring qualities that give environments their life. For Alexander, time is not merely a sequence of events but a dimension through which living structure emerges. Timelessness, then, is not the denial of time, but the expression of spatial and experiential qualities that transcend temporal fashion and are aligned with the fundamental nature of space and human engagement with place.

This essay traces the trajectory of Alexander's evolving thought by examining key milestones in his work: *Notes on the Synthesis of Form* (1964), *A City is Not a Tree* (1965), The theoretical, practical, and application in practice of the Pattern Language approach *The Timeless Way of Building* (1979), *A Pattern Language* (1977), *The Oregon Experiment* (1975) and *The Production of Houses* (1985) – and culminating in his Opus Magnum *The Nature of Order* (2002-2005). It aims to show how his concepts of form, pattern, life, and wholeness are inseparably linked to temporality, and how this relationship challenges prevailing mechanistic models of design and planning. In doing so, this paper also explores Alexander's critique of the modern built environment, his proposed alternative rooted in generating structures through participatory processes, and the philosophical implications of his theories.

Ultimately, this paper shows that Alexander's conception of time and timelessness offers not only a framework for understanding the failures of modern design, but also a hopeful path toward a more humane, adaptive, and living built environment. In the context of accelerating ecological degradation and increasing social alienation, Alexander's insights remain urgently relevant.

2. The Problem of Form: Early Thought

Alexander's early work in *Notes on the Synthesis of Form* (1964) is grounded in systems theory and operational logic; reflecting the influence of post-war scientific and engineering cultures. At the heart of his text lies a desire to bring methodological rigour to the design process; particularly by viewing design problems as sets of interacting variables that can be dissected, analysed, and optimised. In this text, Alexander already demonstrates that design problems are complex and inherently normative, and that a balancing of competing and often contradictory forces is required if a desired (or at least acceptable) fit is to be achieved. Alexander proposed a process whereby the interaction matrix of design variables was decomposed into strongly connected subsystems, with each being simple enough to be addressed intuitively, and thereafter synthesised into a coherent whole. This was a significant attempt to formalise architectural design thinking within the logic of computation and systems analysis.

Alexander began by assessing the failure of modern environments to support human life and well-being; in contrast to the vitality and ease that one can find in many traditional, vernacular environments. In these contexts, design and construction are not separate phases but part of a continuous, adaptive process. Form evolves through feedback from use, climate, social interaction, and material constraints. There is a direct connection between the user and the builder (who are often the same person). The physical and social contexts lead directly to decisions about built form. The vernacular process is inherently temporal: it unfolds incrementally; enabling corrections, accommodations, and layered meanings to accrue over time. Cultural stability is also shown to play a role by offering a shared reservoir of knowledge and patterns that can be passed down through generations.

In contrast, modern design, as Alexander observed, tends to isolate the act of design from its physical and social consequences. The long design phase is abstracted from lived experience and, once construction begins, it often follows a rigid plan that allows for little to no meaningful feedback. Mistakes are corrected only if they are glaring; subtle misalignments between form and use are typically ignored. Time, in this modern paradigm, becomes segmented and devalued: design is a one-time event, and construction is a mechanical execution of the same; with the postscript that is limited in its capacity to adapt to the built form as it emerges.

In response to these shortcomings, Alexander introduced an analytical phase that was intended to better map the complexity of design problems. However, this still retained the essential separation between analysis, synthesis, and execution. He came to realise that such a linear model, while perhaps useful in engineering, was ill-suited to the design of spaces that were meant to nurture human well-being. This recognition marked a turning point in his career, and prompted a shift from the reductive logic of systems analysis toward a more holistic and emergent view of form; a view that would continue to evolve over the subsequent decades.

In retrospect, *Notes on the Synthesis of Form* stands simultaneously as both a foundational text and a point of departure. It illuminates the limitations of a mechanistic worldview while setting the stage for Alexander's later embrace of patterns, process, and wholeness. By highlighting the temporal dimension of vernacular design and the deficiencies of modern abstraction, it began to articulate the core concern that would animate all his later work: how to make buildings and places that are truly alive.

3. Cities and Complexity: A City is Not a Tree

Published in 1965, Alexander's seminal essay *A City is Not a Tree* challenged prevalent models of urban planning that were rooted in hierarchical, and tree-like conceptual structures. It also offers a critique of his earlier work, and explains why it necessarily fails to create life in the built environment. In this essay, Alexander introduced a critical distinction between "tree" structures and "semi-lattices." Tree structures are presented as strictly hierarchical, with each subset belonging to only one larger set, while semi-lattices, although exhibiting hierarchy, also allow for overlapping subsets; thereby reflecting the complex, interrelated nature of real life (Alexander, 1965).

Alexander argued that modern city planning, dominated by zoning, hierarchical street networks, and monofunctional land use planning, tends to impose tree-like structures that inhibit the natural richness and overlap of human activities. Similarly, the graph produced by the analytic process in *Notes on the Synthesis of Form* was tree-like, and the weak links ignored in the analysis are exactly those that are crucial for the creation of living systems. Such planning results in sterile, lifeless urban environments because it fails to capture the genuine complexity of cities as they evolve over time. In contrast, traditional cities – such as the historic centres of towns throughout the world – naturally evolve as semi-lattices that have been and are shaped by countless individual decisions, local adaptations, and layered historical processes (Salingaros, 2005).

The implications of this essay extend far beyond urban form. It acts as a critique of reductionism in urban planning and design, and simultaneously presents a call to embrace complexity and diversity. Alexander's semi-lattice model mirrors developments in systems theory and network science. The semi-lattice is, fundamentally, a temporal construct – it is what emerges when urban form is allowed to grow organically over time through the accretion of uses and forms, rather than being pre-designed from above (Hakim, 2007).

In a deeper sense, *A City is Not a Tree* reaffirms the need for time-aware processes in urbanism. It recognises that the richness of a city cannot be planned but must unfold over time, in layers. This is an early and powerful expression of Alexander's evolving interest in generative processes as well as his shift from abstract systems design to participatory, situated making. The essay remains as a foundational critique of modernist planning and acts as a key bridge between Alexander's early analytical work and his later pattern-based and process-dominated thinking.

4. The Timeless Way of Building and Pattern Languages

After writing *A City is not a Tree*, Alexander began his search for design and building processes that could deal with complexity, make available the vast knowledge of built forms that support human wellbeing, and allow the recreation of the vernacular connection between users and built form in the contemporary world. This work combined research, seminars with graduate students, and the design of urban plans and built projects. The books describing this work began to come out in the second half of the 1970s. In *The Timeless Way of Building* (1979), Alexander shifted his focus from analytical methods to a more intuitive and experiential understanding of the built world. Central to this work is the concept of the "Quality Without a Name" (QWAN); an elusive yet recognisable quality that makes buildings and places feel alive, whole, and meaningful. Alexander argued that environments possessing the QWAN evoke a deep sense of harmony and belonging. This quality, while difficult to define in abstract terms is, according to Alexander (1979), something that humans can sense almost immediately through lived experience.

The title of the work may also be seen to signal Alexander's ambition to identify a mode of building that transcends historical epochs, stylistic movements, and technological change. The "timeless way" is not about replicating traditional forms but about recovering a way of making that is attuned to human life. It reflects a mode of practice that can be observed in vernacular architecture across cultures, and in which builders respond directly to context – climatic, material, social, and spiritual – without recourse to professionalised theory. In this approach, time is not a constraint to be overcome, but a medium through which form matures and deepens in response to functional, psychological, and social requirements.

Alexander's idea of pattern plays a crucial role in this conception. Patterns are recurring spatial configurations that address human problems and/or conflicts arising in particular contexts. These are not rigid templates but adaptable solutions, grounded in empirical observation and human needs. A single pattern, such as "Light on Two Sides of Every Room," may appear across cultures and eras because it reflects a basic human response to light in interior spaces (Alexander *et al.*, 1977). Patterns appear within larger-scale patterns, support similar-scale patterns, and are completed by smaller-scale patterns. Thus, they form hierarchical complex networks (semi-lattice) that cannot be predetermined. When combined into a coherent whole, these patterns form what Alexander calls a "pattern language."

A pattern language is both descriptive and generative: it records the wisdom embedded in successful environments and provides a toolkit for creating new ones that are equally life-affirming. This marked a revolutionary turn in architectural thinking. Instead of designing from scratch or imposing top-down visions, one could draw upon a repository of validated spatial practices, much like language users compose meaningful sentences from a shared grammar and vocabulary.

Time, in *The Timeless Way of Building*, is fundamental. The QWAN emerges over time through use, adaptation, and resonance with human activity. Alexander advocates building in ways that leave spaces open to growth and change; echoing traditional practices in which a structure might evolve gradually, in harmony with its inhabitants. This idea contrasts sharply with the modernist fixation on novelty, finality, and authorship. Alexander's approach instead encourages continuous transformation – a design ethos closer to gardening than engineering.

The use of a pattern language was also intended to democratise the design process. By making design knowledge accessible through clearly articulated and testable patterns, Alexander envisioned the emergence of a modern vernacular in which communities could shape their own environments without relying on professionals. In this sense, the timeless way is not anti-modern, but post-professional: it calls for reclaiming a collective and intuitive human capability that has been eroded by bureaucratic and technocratic models of planning.

Critics have argued that a pattern language risks becoming overly prescriptive or aesthetically rigid. Some have suggested that its emphasis on precedent may stifle creativity, while others have challenged its imposition of a particular normative view (Dovey, 1990). Dawes & Ostwald (2017) conclude that most of the critiques object to Alexander's unique ontological and epistemological positions. His insistence on the objective nature of value in the built environment, and on the empirical nature of the patterns discovered by him and his colleagues. Alexander insisted that patterns were not invented or imposed rules but revealed regularities in the built environment, which were capable of infinite variation when grounded in real human experience. The patterns listed in the book were meant as hypotheses, to be tested and refined by the scientific and professional community. Unfortunately, few researchers have examined the validity of these patterns. One such study found that the presence of patterns was strongly correlated with affect and aesthetic appreciation, and was also associated with relaxation and low arousal (Iwanczak & Lewicka, 2020). Patterns were also not meant to be definitive. In fact, in almost all of Alexander's projects, specific patterns were created, together with the users, to encapsulate people's dreams and wishes for their environment (Neis, 2016); with other professionals and researchers having thereafter used them in similar ways (for example: Felstead and Thwaites, 2024; Hamid, Hanks and Wang, 2024; Zhang and Dimitrijevic, 2025). The structure of a pattern language made the information explicit and easy to understand and became the definition of a shared understanding of the project. Their "timelessness" lies in their ability to respond to recurring conditions of human life, not in their formal repetition (Alexander, 1979).

In sum, *The Timeless Way of Building* and *A Pattern Language* represent a philosophical and methodological pivot in Alexander's work. They reframe design as a participatory, iterative, and life-affirming practice which is embedded in time and open to change. The vernacular process remains the model and inspiration, but the emphasis is less on form and more on process. The idea is that large-scale patterns emerge from many small-scale projects, rather than being imposed by master plans or designs. Over time, pattern languages were written for specific plans and projects, allowing the "building culture" of an institution or place to emerge from the people involved in its writing. While the patterns were intended to be timeless universals, they also allow for infinite local variations in their detailed form. Ironically, though, the whole project was heavily influenced by the place and time in which it was conceived and developed – Berkeley of the late 1960s and early 70s which was a hotbed of the anti-establishment and civil rights movement; a spirit that animated the ideal of extreme decentralisation of government and community structures, and a somewhat utopian world view that prevails in these two books.²

2 See for example the first pattern: Independent Regions, which advocates a world constituted of independent regions each between 3-10 million people in population. This is justified on the need for governmental accessibility and accountability on one hand, and equity of power relations between regions on the other.

5. Applications and Experiments - the incompleteness of A Pattern Language

The theoretical foundations laid out in *The Timeless Way of Building* and *A Pattern Language* were not merely abstract speculations for Alexander; they were intended to be implemented, tested, and refined through practice. Alexander strongly believed that the proof of a theory in architecture lies in its capacity to generate living environments. Consequently, his ideas were tested in real-world contexts; most notably described in *The Oregon Experiment* and *The Production of Houses in Mexicali*.

The *Oregon Experiment* (Alexander et al., 1975) served as an early institutional-scale application of Alexander's principles. The University of Oregon adopted a planning process that prioritised user participation, incremental development, and the use of pattern languages in shaping the built environment. The experiment's guiding principles included six major tenets: organic order, participation, piecemeal growth, pattern languages, diagnosis, and coordination. These principles reflected a break from conventional top-down campus planning, and instead emphasised the lived experiences and mandated participation of users; the adaptation of spaces over time; and the need for design to be an ongoing, evolutionary process.

One of the most notable aspects of the Oregon Experiment was its embrace of "piecemeal growth." Rather than executing large-scale projects that replaced entire sections of the campus in one stroke, the process focused on small, incremental improvements which were informed by direct user input. This approach highlighted time as a medium for achieving organic coherence – order emerged not from a master plan but through successive small interventions that responded to actual use. In this sense, the Oregon campus served as a living laboratory for Alexander's ideas, with timeless principles unfolded across temporal scales. However, not all the principles were maintained in the building of the campus, or retained in the update of the campus plan that occurred during the early 2000s. The level of adherence to the patterns in large building projects also depended on architects' willingness to follow them.³ Nevertheless, the most recent update to the plan (University of Oregon Campus Planning, 2025) still acknowledges the original plan as the foundation of campus planning and its principles, and details the process for adapting it to how university projects are usually administered. It is remarkable that the original plan is still guiding the planning process of the university 50 years after the publication of the original book.

Another important application was *The Production of Houses* (Alexander et al., 1985); a housing project undertaken in Mexicali, Mexico. In this project, local families were empowered to design and build their own homes using a pattern language tailored to their needs and cultural context. Alexander and his team provided technical support and organisational structure, but the design decisions were taken by the residents themselves. The process exemplified Alexander's commitment to democratizing architecture and reviving the tradition of user-generated environments. However, the Mexicali project also exposed limitations and unresolved questions.⁴ The development of a unique building technology, foreign to the local building culture, made it difficult for families to extend their homes, and the buildings stand out in the surrounding self-built context. In addition, the broader idea of establishing a local building yard to provide advice and guidance to families in the surrounding area was not carried through by the housing agency that financed the project, and it remains unused.

These experimental projects illustrate both the strengths and challenges of applying Alexander's theories in practice. On the one hand, they demonstrate that participatory, incremental, and pattern-based design could produce environments more responsive to specific human needs. On the other hand, they reveal the difficulty of capturing the nuanced, often ineffable qualities of traditional architecture without the cultural, material, and temporal contexts that originally shaped them.

In both cases, time played a crucial role – not only in the unfolding of the projects themselves but in the nature of the outcomes. The Oregon Experiment succeeded in large part because it embraced a slow, cumulative process in which feedback loops could operate. In contrast, the Mexicali project, highlights how the absence of cultural continuity and inherited aesthetic knowledge can limit the success of participatory processes, even when guided by pattern languages.

3 For an interesting evaluation of the Oregon Experiment after 20 years see: Bryant (1991).

4 For a review of the houses seven years after their construction see Fromm & Bosselman (1984)

Ultimately, these applications served as crucibles for Alexander's evolving thought. They tested his commitment to living structure against the practicalities of construction, user participation, and institutional inertia. The lessons learned reinforced the central insight that design is not a one-time act but an ongoing, temporally extended process—one that requires sensitivity, adaptability, and a deep understanding of how form and life co-evolve.

Throughout the years of development and publishing of *A Pattern Language*, many buildings were built by owners designing their own homes in the San Francisco Bay Area; many followed its principles. Although the resulting houses reflected the practical needs of their users, and the fact that they were often designed and built by the users themselves proved the book's usability and applicability, Alexander became increasingly dissatisfied with their geometry and spatial coherence. He felt that, despite the use of pattern languages, the resulting structures lacked the deep sense of life and wholeness which he had observed in traditional buildings. This realisation led Alexander to investigate more deeply the nature of geometry and the intrinsic structure of living spaces—an inquiry that culminated in the publication of *The Nature of Order* (2002-05).

6. The Nature of Order: Wholeness, Centres, and Life

With *The Nature of Order*, Alexander culminated decades of inquiry into a comprehensive theory of living structure. This four-volume work builds upon his earlier ideas but shifts from pattern-based design toward a deeper, more formal understanding of spatial order. One which is grounded in the concepts of *wholeness* and *centres*. Alexander sought to identify and define the structures that consistently generate feelings of life, harmony, and beauty across cultures and historical periods. His basic insight was that these structures share similar geometric order; they exhibit both roughness and perfection; they are non-mechanical in the way they are put together; and they have a certain innocence and simplicity. These structures are pervasive throughout the world and include all levels of life: inanimate, organic, systemic, and human. Moreover, these are not just words or metaphors but identifiable physical qualities that can be clearly described and demonstrated in terms of their structure (Jiang, 2019).

At the heart of *The Nature of Order* is the idea of *wholeness*; a field-like property of space where coherent entities, or *centres*, emerge and reinforce one another. A centre is not a fixed object, but a spatial configuration that draws our attention and strengthens the unity of the whole. These centres exist across scales, from the details of a column's base to the layout of an entire city block. According to Alexander, the degree of life in any given environment is proportional to the density, strength, and mutual support of these centres (Alexander, 2002-1).

Alexander identifies 15 *properties* that tend to appear in environments, places or objects with strong wholeness (Figure 1). These include features such as: "levels of scale," "strong centres," "boundaries," "local symmetries," "positive space," and "roughness." Importantly, these properties are not aesthetic rules or stylistic directives, but structural indicators of life in space. They describe how space organises itself when it becomes alive – not in a biological sense, but in a phenomenological one, in which observers experience a sense of their own selves being more alive; whether that be a sense of belonging, stillness, or vitality.

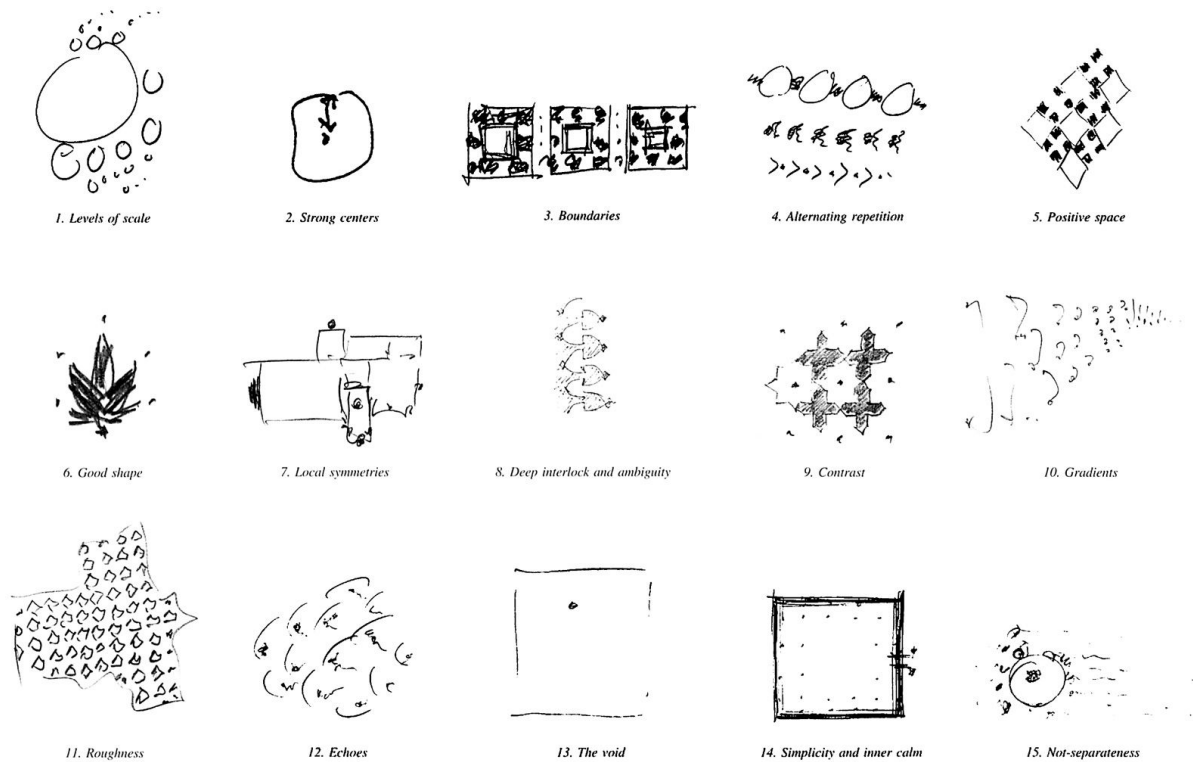


Figure 1: Alexander's original drawings illustrating the 15 properties (Alexander 2002-1, pp. 239-241)

Time plays a critical role in this formulation. A space that feels alive does so because it resonates with lived time; past, present, and anticipated future. Moreover, the creation of a living structure requires time-dependent processes. The centres and their configurations must unfold gradually, with sensitivity to context and feedback. This stands in stark contrast to industrial building processes, which often prioritise efficiency over subtlety and impose form in a single temporal burst, rather than letting it evolve.

Alexander's focus on centres and wholeness also addresses a profound ontological question: how can design be both universal and particular? His answer lies in the recursive nature of centres. While the 15 properties may appear across cultures and periods, their specific configurations vary endlessly. This allows both for rootedness in local contexts and participation in a universal order. His approach resonates with traditions in systems thinking, phenomenology, and even sacred geometry, which emphasise the emergent, relational, and holistic qualities of form (Salingaros, 2006; Johnson, 2018).

Crucially, Alexander asserts that the experience of life and beauty – what he had earlier called the “Quality Without a Name” – is not merely subjective. It can be discussed rationally and empirically in terms of the presence or absence of centres and their properties. This is a radical proposition in an intellectual world often sceptical of universal claims about value. Yet Alexander argues that our inner sense of life in a place, or of contemplating or using an object, is a reliable guide to its coherence. Beauty, in this view, is a measure of a structure's alignment with the living order of the world.

7. Living vs Mechanistic Processes

One of the central dichotomies in Alexander's later work, particularly in *The Nature of Order*, is between mechanistic and living processes. This contrast is not merely a matter of construction techniques, but represents fundamentally different ways of understanding the world and our place within it. Mechanistic processes are linear, goal-oriented, and external to the entities they shape. They belong to a Cartesian paradigm that treats buildings – and, by extension, cities and societies – as machines to be engineered and controlled. In contrast, living processes are open-ended, adaptive, and internally generated. They view built environments as evolving systems whose coherence arises from their capacity to unfold naturally over time (Table 2).

Table 1: Mechanistic process vs Living process

<i>Mechanistic Process</i>	<i>Living Process</i>
Closed	Open
Goal oriented	Not goal oriented - continuous
Designed	Unfolding
Linear	Adaptive
Assembled/Fabricated	Generated
Parts form the whole	Whole governs the parts

Alexander distinguishes between fabricated structures, which are assembled from pre-determined parts, and generated structures, which evolve through recursive acts of differentiation and adaptation (Figure 2). In a fabricated approach, form is imposed from the outside and often lacks contextual sensitivity. Mistakes are common, because there is neither room for feedback nor correction during the process. In contrast, a generated structure grows step by step, with each phase responding not only what has come before but also being guided by the evolving wholeness of the space (Alexander, 2002-2).

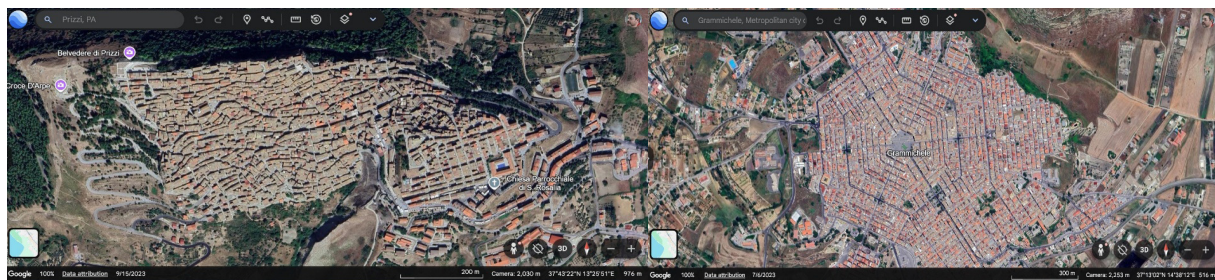


Figure 2: Generated vs Fabricated Structure. The towns of Prizzi (left) and Grammichele (right) in Sicily (Google Earth). Both plans show that the distinction between the two is not clear-cut, as it is obvious that Prizzi contains a planned, fabricated part, while the growth of Grammichele has been gradual and generated at a smaller scale, and its urban extensions have broken the ideal city plan, despite maintaining its latent structure.

This distinction has profound implications for building and development. In mechanistic processes, the design and construction phases are artificially separated, and feedback from use is rarely incorporated into future development. The emphasis is on efficiency, standardisation, and predictability – values that are often at odds with the creation of living environments. Living process, however, requires an entirely different mindset: one that welcomes uncertainty, embraces iteration, and prioritises relationships over parts (Ettlinger, 2023). They mirror natural systems, such as the growth of a tree or the formation of a coral reef, where the whole governs the parts, and form emerges through interactions over time (Hester, 2006).

The key to understanding how the living process operates is the concept of *structure-preserving transformations*. At any given moment, the wholeness of a space contains latent centres; potential structures that have not yet fully emerged. A structure-preserving transformation enhances these latent centres, making them more visible and reinforcing the coherence of the whole. Such transformations are not arbitrary; they are guided by the 15 properties of living structure – now understood as the 15 transformations by which centres can help each other to come to life – and, in the case of human artefacts, by the judgment of those engaged in the process, who use their own feeling of wholeness, self, or life to evaluate and choose between options. Importantly, these transformations are only possible in a temporal framework: they depend on time for their discovery, articulation, and refinement.

Living process operates at two timescales: individual and accretive. Individual processes involve the design and construction of a single, coherent centre such as a room, a house, or a public plaza. Accretive processes, by contrast, describe how larger wholes, such as neighbourhoods or cities, emerge over longer periods through the accumulation of many individual interventions. The distinction between these scales is not hierarchical but temporal. Accretive processes require a culture of continuity and memory, in which each new act of building honours and extends what came before.

This model stands in stark contrast to modern urban development, which often involves abrupt, large-scale interventions that erase historical continuity and suppress local character. In contrast, the living process model aligns with vernacular traditions in which buildings are gradually transformed in response to shifting needs, social dynamics, and environmental conditions. It also resonates with contemporary movements in regenerative design, permaculture, and ecological urbanism, which advocate for systems that evolve in harmony with their surroundings (Mang & Haggard, 2016).

The Nature of Order thus completes Alexander's theoretical arc by integrating scientific observation, aesthetic judgment, and metaphysical speculation into a unified theory of order in nature and human artefacts. It affirms that time and timelessness are not opposites but co-constitutive. Timelessness arises when form resonates with the deep structure of order; a structure that can only emerge over time, through processes attuned to the particularities of place, use, and perception.

Alexander's notion of living process redefines what it means to plan, design and build. It is no longer a matter of achieving a static ideal but of participating in an ongoing dialogue with context, time, and life itself. The goal is not perfection but coherence—the emergence of forms that feel whole, alive, and deeply connected to us and their settings. This orientation requires patience, humility, and a willingness to let go of ego and control. At the same times, it holds the promise of built environments that are not only more beautiful but also more resilient, meaningful, and humane.

In attempting to create a theory of architecture and urban form, Alexander found himself dealing with the nature of order of the universe (Galle, 2020). To counter some of the ontological critiques against his theory of patterns, he shows that the structures he defines as centres exist in the natural world across all scales, and in human artefacts from diverse cultures. Their presence is universal, except in much of the modern world's built environment. Furthermore, he describes a class of processes capable of creating life in space. These processes are inherent in natural processes, and were prevalent in traditional cultures, but have broken down in modernity because of our mechanistic view of the world, and its pervasive impact on most of our social and economic processes. This theme is taken up in his last published book (Alexander *et al.*, 2012).

8. Time and Beauty

Alexander's pursuit of beauty is inseparable from his conception of time. In his work, beauty is not a stylistic feature or a matter of taste but a deep experiential resonance; a feeling of life, coherence, and rightness in space. It is what he originally called the "Quality Without a Name" (QWAN), a term deliberately chosen to resist reduction to conventional categories of aesthetic judgment. This quality, he contends, arises when a structure or environment aligns itself with the deeper order of the world and supports the unfolding of the human self in time.

Time, in this context, is not merely chronological but experiential. It encompasses the rhythms of daily life, the accumulation of memory, and the anticipatory structures of expectation and meaning. A beautiful place is one that welcomes and reflects the passage of time. It contains the potential for stories to be told, relationships to be forged, and lives to unfold. As Alexander writes, buildings and spaces with life invite participation; they adapt, endure, and grow richer through use.

This understanding of beauty stands in contrast to much of modern architecture, which often emphasises novelty, abstraction, and immediate visual impact over temporal depth. Modernist design, driven by innovation and image, tends to ignore or even resist the passage of time. Buildings are treated as finished products, frozen in the moment of completion, rather than as participants in an ongoing dialogue with their inhabitants and contexts. The result, Alexander argues, is often environments that feel sterile, impersonal, or even alienating.

Alexander's view aligns beauty with adaptability, modesty, and responsiveness. A beautiful place is not necessarily grand or formally perfect; it is one that makes people feel more alive, more whole. This effect is cumulative and interactive. A room bathed in soft, natural light; a bench worn smooth by generations of hands; a garden path shaped by countless feet – such elements gain their power through their embeddedness in time. They reflect a continuous interaction between people and place.

This emphasis on temporal experience also explains Alexander's reverence for traditional buildings. Whether a Japanese teahouse, an Italian courtyard, or a North African market street, these environments were not designed all at once by a single author. They evolved slowly, and have been shaped by feedback, adaptation, and collective memory. They support the continuity of culture and offer an architecture of presence rather than spectacle. Their beauty lies not in artistic genius but in their being attuned to the rhythms of life.

Consequently, timelessness is not timeless in the sense of being detached from time, but rather it deeply resonates with all times. It means creating places that feel as though they have always belonged and always will. Such places transcend the fashion of the moment by embodying enduring qualities; qualities that Alexander believes are perceptible and communicable, even if they are not easily measured or theorised in conventional terms.

Moreover, beauty, as Alexander defines it, is inherently democratic. It is not the exclusive province of elites or experts but accessible to all who are willing to observe carefully and respond authentically. Everyone has the capacity to sense when a place feels right, or when it nurtures and uplifts. In this way, beauty becomes a tool not of distinction but of connection; an invitation to participate in shaping environments that support life in all its complexity.

Ultimately, Alexander reclaims beauty from the realm of superficial aesthetics and repositions it as a vital criterion for creating meaningful, enduring environments. It is through beauty that we connect with place, with others, and with ourselves over time. And it is through the patient unfolding of the living process that such beauty comes into being.

Accordingly, in *The Nature of Order*, what Alexander provides is not only a theory of beauty but also an applicable methodology for creating beautiful places in practice. In a contemporary world that no longer takes the time to develop beauty over generations, Alexander provides an approach by which the kind of processes that used to be enabled by the surrounding culture can now be intentionally generated or simulated by building practitioners to arrive at results of an equivalent quality in a shorter span of time. The extent to which this succeeds is directly correlated with the extent to which a project's stakeholders choose to implement this method. Alexander provides a framework for reintroducing timeless qualities through procedures that honour time, and does so in a culture that conceives of time as a commodity and prioritises immediacy.

9. Influence on current urban planning, urban design theory, and practice

Christopher Alexander's influence on contemporary planning and urban design spans several major movements. His insistence on human-scaled environments, participation, and incremental growth offered an enduring alternative to technocratic, master-planned approaches.

The *Congress for New Urbanism* honoured Alexander with the Athena Medal as one of its inspirations. Alexander's focus on walkability, mixed use, and traditional neighbourhood form provided both inspiration and legitimisation for the movement. For example, the movement's *Smart Growth Manual* (Duany, Speck & Lydon, 2009) is structured around interconnected principles which are similar to Alexander's pattern language approach (Talen, 2005).

Placemaking. Alexander's emphasis on lived experience and community participation also influenced the advocacy of Project for Public Spaces, which counts him among its key inspirations. Their work helped elevate placemaking throughout the US and globally, and culminated in the inclusion of public space policy for the first time as an action item in the UN-Habitat Urban Agenda at Habitat III in Quito (2016) - echoing his idea of environments unfolding as living processes (Project for Public Spaces, 2000; Silberberg et al., 2013; UN-Habitat, 2016).

Incremental urbanism. An early, unrelated approach is the practice of urban acupuncture, which was championed by Jaime Lerner and applied in cities such as Barcelona, where small, precise interventions catalysed wider urban transformations (Lerner, 2014; Casellas, 2009; Neuman, 1998). Tactical urbanism likewise embodies Alexander's call for piecemeal, adaptive change that is guided by quick feedback and community response. Tactical urbanism practices such as parklets, pop-up plazas, and short-term interventions illustrate iterative change with long-term impact (Lydon & Garcia, 2015; Hamdi, 2004).

Alexander directly and indirectly influenced the understanding of *informal settlements* and the policy response to them. His own work in Lima (Alexander et al., 1969), Mexicali (discussed above), Santa Rosa, Colombia and Guasare New Town, Venezuela (Alexander, 2005) demonstrated how generative processes could enable community-led housing. This was taken up by others in South America (Salingaros et al., 2020). Dovey's studies of informal morphology reaffirm Alexander's vision of emergent, life-affirming form that is not an aberration, but rather the fundamental way in which people create their living space (Dovey, 2012; Dovey, 2015; Dovey & King, 2011), and Billig (2018) shows it in his analysis of Istanbul's informal settlements. More recent contributions extend this line of work to guide rapid urbanisation processes (Mehaffy et al. 2020, Angel 2012, The Prince's Foundation 2022).

Perhaps Alexander's most significant contribution is to the discussion and debates on city complexity and the appropriate planning responses (Portugali 2024). By framing urban form as a semi-lattice rather than a tree, Alexander anticipated complexity theories of cities and inspired approaches that accept overlapping, adaptive structures. His novel conception of space as a system of centres emerging from the wholeness has informed new approaches to geographical and urban morphological analysis (Jiang, 2021; Dibble et al., 2017). The complexity of cities and the inability to foresee or control their future shapes have spurred growing interest in urban codes as generative frameworks to replace rigid master plans. European theorists have argued that codes, conceived as abstract relational rules, can guide self-organisation while preserving freedom and adaptability; an approach that closely resonates with Alexander's call for living, evolving urban order (Moroni, 2010; Moroni, 2015; Alfasi, 2018, Cozzolino & Moroni, 2024).

10. Conclusion

Christopher Alexander's life work is an invitation to reimagine the built environment as a living field of relationships in which wholeness, beauty, and life emerge over time in dynamic harmony. His theory challenges the mechanistic worldview that dominates much of modern planning and urban design, and instead offers a vision grounded in empathy, participation, and coherence. In Alexander's hands, urban planning and design are not merely a technical discipline or visual art but a moral and ontological endeavour: it is about making the world whole again, one centre at a time.

Throughout his intellectual journey, Alexander progressively deepened his understanding of how time and timelessness interact. From his early systems-based work in *Notes on the Synthesis of Form*, through the empirical richness of *A Pattern Language*, to the profound metaphysical framework of *The Nature of Order*, he argued that environments acquire life not through the imposition of abstract order, but through the sensitive unfolding of form in time. Timelessness, as he defined it, is achieved not by resisting time but by aligning with its deeper patterns; those that resonate with the core of human experience, including awareness of our brief time here on earth.

By emphasising participatory processes, structure-preserving transformations, and generative sequences, Alexander reorients the practice of planning, architecture and building from control to collaboration, from design to evolution. He encourages designers, builders, and users alike to trust their own sense of aliveness, to build with care and presence, and to honour the long arc of human continuity that unfolds through time in place.

In an era of rapid urbanisation, environmental crisis and cultural fragmentation, Alexander's ideas offer more than theoretical insights, they offer practical tools and ethical direction. His legacy prompts us to ask: what kinds of places will help us live more fully, more justly, and more beautifully? How can we restore a building culture that is both deeply rooted and widely shared?

Answering these questions requires us to embrace time not as a constraint, but as a co-creator. It asks us to cultivate beauty not as ornament, but as the measure of life. And it calls on us to recognise that the environments we shape are not separate from us but expressions of our values, our aspirations, and our shared humanity. In the end, Alexander's search for beauty is a search for truth, a timeless task that unfolds with each act of making, dwelling, and becoming.

References

- Alexander Christopher (1964) *Notes on the Synthesis of Form*, Harvard University Press.
- Alexander, Christopher (1965) A City is Not a Tree. *Architectural Forum*, 122(1), pp. 58–62 (Part I), 122(2) pp. 58–62 (Part II).
- Alexander, Christopher (1979). *The Timeless Way of Building*. New York: Oxford University Press.
- Alexander, Christopher; Sara Ishikawa and Murray Silverstein (1977) *A Pattern Language: Towns, Buildings, Construction*. New York: Oxford University Press.
- Alexander, Christopher; Murray Silverstein, Shlomo Angel, Sara Ishikawa and Denny Abrams (1975). *The Oregon Experiment*. New York: Oxford University Press.
- Alexander, Christopher; Howard Davis, Julio Martinez and Donald Corner (1985). *The Production of Houses*. New York: Oxford University Press.
- Alexander, Christopher (2002–2005). *The Nature of Order, Vols. 1–4*. Berkeley, CA: Centre for Environmental Structure. Includes:
- (2002-1) Book 1: The Phenomenon of Life.
 - (2002-2) Book 2: The Process of Creating Life
 - (2005) Book 3: A Vision of a Living World
 - (2004) Book 4: The Luminous Ground
- Alexander Christopher, Hans-Joachim Neis, Maggie Moore-Alexander (2012). *The Battle for the Life and Beauty of the Earth: A struggle between two world systems*. Oxford University Press. New York, NY.
- Alfasi, Nurit (2018). The coding turn in urban planning: Could it remedy the essential drawbacks of planning? *Planning Theory*, 17(3), 375–395. <https://doi.org/10.1177/1473095217716206>.
- Angel, Shlomo (2012) *Planet of Cities*. Cambridge, MA: Lincoln Institute of Land Policy.
- Billig, Noah (2018) *Istanbul: Informal settlements and generative urbanism*, Istanbul: Informal Settlements and Generative Urbanism. Taylor and Francis.
- Bryant, Greg (1991) "The Oregon Experiment after Twenty Years", *Rain Magazine*, XIV, 1. <https://www.rainmagazine.com/archive/1991-1/the-oregon-experiment-revisited> [Accessed 03/01/2025]
- Cozzolino, Stefano, and Stefano Moroni. *Action, property and beauty: Planning with and for emergent urban complexity*. Routledge, 2024.
- Dibble, Jacob, Alexios Prelorndjos, Ombretta Romice, Mattia Zanella, Emanuele Strano, Mark Pagel and Sergio Porta (2017). On the origin of spaces: Morphometric foundations of urban form evolution. *Environment and Planning B: Urban Analytics and City Science*, 46(4), 707–730. <https://doi.org/10.1177/2399808317725075> (Original work published 2019)
- Dovey, Kim (1990). The pattern language and its enemies. *Design Studies*, 11(1), 3–9. <http://www.scopus.com/inward/record.url?eid=2-s2.0-27144458802&partnerID=40&md5=af88c955df172c718630d43185f9cc67>
- Dovey, Kim (2012) 'Urban Design and Informal Settlements: Spatial Practice in the Favelas of Rio de Janeiro', *International Journal of Urban and Regional Research*, 36(1), pp. 241–257.

- Dovey, Kim (2015). *Urban Design Thinking: A Conceptual Toolkit*. London: Bloomsbury.
- Dovey, Kim and King, Ross (2011) 'Forms of Informality: Morphology and Visibility of Informal Settlements', *Built Environment*, 37(1), pp. 11–29.
- Duany, Andrés; Speck, Jeff and Lydon, Mike (2009). *The Smart Growth Manual*. New York: McGraw-Hill.
- Ettlinger, Or (2023). The divided brain and ways of building the world: Parallels in the thought of Iain McGilchrist and Christopher Alexander. *Journal of architecture and urbanism*, 47(2), 183-189.
- Galle, Per (2020). Christopher Alexander's Battle for Beauty in a World Turning Ugly: The Inception of a Science of Architecture? *She Ji: The Journal of Design, Economics, and Innovation*, 6(3), 345–375. <https://doi.org/10.1016/J.SHEJI.2020.03.002>
- Felstead, Aimee and Kevin Thwaites (2024) "A grounded pattern language: testing a methodology for exploring cohousing residents' involvement in shared outdoor spaces," *CoDesign*, 20(4), pp. 531–547. <https://doi.org/10.1080/15710882.2023.2289028>.
- Fromm, Dorit & Peter Bosselmann (1984). *Seven Years Later [Mexicali Revisited]*. Places, 1(4).
- Hakim, Besim S. (2007). *Arabic-Islamic Cities: Building and Planning Principles*. London: Routledge.
- Hamdi, Nabeel (2004). *Small Change: About the Art of Practice and the Limits of Planning in Cities*. London: Earthscan.
- Hamid, Malath, Laura Hanks and Qi Wang (2024) "Extracting a local pattern language: a case study of Khartoum's City Centre," *URBAN DESIGN International*, 29(4), pp. 227–247. <https://doi.org/10.1057/s41289-022-00205-w>.
- Hester, Randolph (2006). *Design for Ecological Democracy*. Cambridge, MA: MIT Press.
- Jacobs, Jane (1961). *The Death and Life of Great American Cities*. New York: Random House.
- Jiang, Bin (2021) 'Geography as a science of the earth's surface founded on the third view of space', *Annals of GIS*, 28(1), pp. 31–43. doi: 10.1080/19475683.2021.1966502.
- Jiang, B. (2019). Living Structure Down to Earth and Up to Heaven: Christopher Alexander. *Urban Science*, 3(3), 96. <https://doi.org/10.3390/urbansci3030096>
- Johnson, Mark (2018). *The Aesthetics of Meaning and Thought*. Chicago: University of Chicago Press.
- Lerner, Jaime (2014) *Urban Acupuncture*. Washington, D.C.: Island Press.
- Lydon, Mike and Anthony Garcia (2015). *Tactical Urbanism: Short-term Action for Long-term Change*. Washington, D.C.: Island Press.
- Lynch, Kevin (1960). *The Image of the City*. Cambridge, MA: MIT Press.
- Mang, Pamela and Ben Haggard (2016). *Regenerative Development and Design: A Framework for Evolving Sustainability*. Hoboken, NJ: Wiley.
- Mehaffy, Michael W., Yulia Kryazheva, Andrew Rudd, Nikos A. Salingaros and Ana Gren (2020). *A New Pattern Language for Growing Regions: Places, Networks, Processes*. Sweden: Sustasis Foundation.
- Moroni, Stefano (2010) 'Rethinking the theory and practice of land-use regulation: Towards nomocracy', *Planning Theory*, 9(2), pp. 137–155.
- Moroni, Stefano (2015) 'Towards a general theory of rules in planning: Realism, idealism, and critical rationalism', *Planning Theory*, 14(2), pp. 174–195.
- Neis, Hans-Joachim (2016). From a Pattern Language to a Field of Centres and Beyond, in Kyriakos Pontikis and Yodan Rofé (Eds.). In *Pursuit of Living Architecture: Continuing Christopher Alexander's Quest for a Humane and Sustainable Building Culture*. Champaign, IL, Common Ground Press. Pp. 161-190.
- Neuman, Michael (1998) 'Does Planning Need the Plan?', *Journal of the American Planning Association*, 64(2), pp. 208–220. doi: 10.1080/01944369808975976.
- Portugali, Juval (2024). Bohm's theory of orders as a basis for a unified urban theory. *Dialogues in Urban Research*, 2(3), 267-289. <https://doi.org/10.1177/27541258241256972>.
- Project for Public Spaces (2000). *How to Turn a Place Around: A Handbook for Creating Successful Public Spaces*. New York: Project for Public Spaces.
- Salingaros, Nikos A. (2005). *Principles of Urban Structure*. Amsterdam: Techne Press.
- Salingaros, Nikos A. (2006) *A Theory of Architecture*. Solingen: Umbau-Verlag.
- Salingaros, Nikos A., David Brain, Andrés M. Duany, Michael W. Mehaffy y Ernesto Philibert-Petit (2020) *Socially-Organized Housing in Latin America: The Experience of Christopher Alexander* [La participación como principio básico en la vivienda social: cómo utilizar el trabajo de Christopher Alexander] 02 ago. 2020. ArchDaily. (Trans. Valencia, Nicolás) <https://www.archdaily.com/944291/socially-organized-housing-in-latin-america-the-experience-of-christopher-alexander> ISSN 0719-8884 Accessed 20/08/2025.
- Silberberg, Susan, Katherine Lorah, Rebecca Disbrow, and Anna Muessig (2013). *Places in the Making: How Placemaking Builds Places and Communities*. Cambridge, MA: MIT Press.

- Simon, Herbert A. (1957). *Models of Man: Social and Rational*. New York: Wiley.
- Simon, Herbert A. (1969). *The Sciences of the Artificial*. Cambridge, MA: MIT Press.
- Talen, Emily (2005) *New Urbanism and American Planning: The Conflict of Cultures*. New York: Routledge.
- The Prince's Foundation (2020) *Rapid Planning Toolkit: Building Better Cities, Faster*. London: The Prince's Foundation. <https://www.rapidplanningtoolkit.org/> Accessed [02/01/2026].
- Whyte, William H. (1980). *The Social Life of Small Urban Spaces*. Washington, D.C.: The Conservation Foundation.
- UN-Habitat (2016) *The New Urban Agenda*. Quito: United Nations. <https://habitat3.org/the-new-urban-agenda/> Accessed [02/01/2026].
- University of Oregon Campus Planning (2025) *Campus Plan 2025 Edition*. <https://cpfm.uoregon.edu/campus-plan> Accessed [02/01/2026]
- Weaver, Dennis (1948) "Science and Complexity," *American Scientist* 36, 536.
- Zhang, Yaozhong, and Branka Dimitrijevic (2025) "Decoding Socio-Cultural Spatial Patterns in Historic Chinese Neighborhoods: A Pattern Language Approach from Chengdu," *Land* 14(9), 1803. <https://doi.org/10.3390/LAND14091803>.