

## Rethinking the "Pattern Language" by C. Alexander. Spatial prototypes for participatory urban design.

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### ABSTRACT

Cities are now home to more than half of the world's population and current trends indicate that this percentage will raise to 70% by 2050. Managing the city space and structure has become a complex task that has moved away from the Modernist visions of the 60's and 70's. Following that period, urban design emerged as a practice, proposing a method of bringing order to carefully delineated enclaves within the city. As a discipline, urban design blends architecture, landscape architecture, and city planning to make urban areas functional and attractive to city dwellers.

Cities play a crucial role as motors of sustainable development and economy, as places of connectivity, creativity and innovation. But cities are also places where problems such as unemployment, social inequality, poverty and environmental degradation appear. Planning and shaping a safe and vibrant urban public realm is a major objective related to the sustainable development goals of today's cities. Engaging local communities in strategic planning and designing processes has become a major goal for central and local governments aiming to support social cohesion and inclusiveness.

"A Pattern Language" by C. Alexander was published in 1977. It comprised a set of spatial patterns, referring to all scales of the built man made environment, in a form of prototypes. It was aiming at helping architects, and primarily non-architects, to participate in the design of their own environments by reflecting on their needs and the way they experience space.

The paper will investigate the eventual use of patterns in participatory urban design processes. Today information and communication technologies could help create and diffuse data bases including patterns, as prototypes of space, to facilitate and promote discussion and negotiation among wider sets of actors and the group of experts involved, in order to foster a shared and integrated understanding and vision while planning for the city.

**Keywords:** pattern languages, urban design, participatory design

### INTRODUCTION

In this paper we will try to demonstrate the eventual current use in participatory urban design of a seminal work, published in 1977 titled "A Pattern Language" by C. Alexander. First, we will briefly discuss the present urban condition in a rapidly changing world, where questions of environmental, social and economic parameters are critical for the wellbeing of the continuously rising urban population. We will focus particularly on the urban public space and the processes for managing and shaping the public realm while considering those parameters. We will present, also briefly, the commonly shared and proposed by a series of world organizations such as OECD, UN-Habitat and the EU, Sustainable Development Goals and the crucial role the quality of the urban space plays in achieving them. A common ground of all world organizations' priorities is the participation of relevant stakeholders in the decision making and shaping of cities' environments. Today academics and professionals research design methods that could facilitate the communication and contribution of all relevant parts for producing a commonly shared sustainable and economically feasible vision for the present and future image of the cities. We will then present the content, in terms of structure and proposed method of C. Alexander's book "A Pattern Language". We will focus on the time of its production, how it was received, criticized and used by architects and planners, as well as, computer scientists and why we think its eventual use in participatory urban design can be positive within the context of the sustainable development goals of today.

## 1. CITIES

Cities are now home to more than half of the world's population and current trends indicate that this percentage will rise to 70% by 2050. Cities play a crucial role as motors of sustainable development and economy, as places of connectivity, creativity and innovation. However, cities are also places where problems such as unemployment, social inequality, poverty and environmental degradation appear (EURP, 2011, pp12). Planning and shaping the present and future urban environment is a major objective related to the Sustainable Development Goals set out by the UN, OECD, and E.U. within the frame of urgent action for facing climate change and social inequality. We read in the EURP "Cities of Tomorrow Agenda" published in 2011, "To meet the challenges of tomorrow, cities have to overcome seemingly conflicting and contradictory objectives and move towards more holistic models of sustainable city development: economic growth has to be reconciled with the sustainable use of natural resources; global competitiveness must be inclusive and favor a local economy; green growth must not exclude marginalized groups; global attractiveness must not be built to the detriment of the socially disadvantaged groups." (pp86) Therefore, strategic and physical planning should also offer the possibility of wider participation of all relevant stakeholders for shaping a long-term common vision corresponding to sustainable and inclusive objectives. We read in the UN-Habitat World Cities Report 2016 (pp39), "11.3. By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries." And further on "11.b. By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels."

Participatory planning and design presents today a major challenge for facing urban development goals and has become a major objective for central and local governments aiming to support social cohesion and inclusiveness. In order to achieve these goals a common vision is needed to link up the various bodies involved in civic society management. And if the vision is to become reality, it must be well understood and owned by all the actors that determine the future of a city. Wider citizen involvement also generates a wider ownership of the proposed vision, of its results and of the territory.

This implies that new processes where communication among stakeholders at various levels of decision making should be established. Communication, not only verbal, will play a major role in this contemporary and new type of planning.

Managing the city space and structure has become a complex task that has moved away from the Modernist visions of the 60's and 70's. Following that period, urban design emerged as a practice, proposing a method of bringing order to carefully delineated enclaves within the city (Shane, 2005). As a discipline, urban design blends architecture, landscape architecture, and city planning to make urban areas functional and attractive to city dwellers. Urban design is the art of creating and shaping cities and towns involving the arrangement and design of buildings, public spaces, transport systems, services, and amenities. It is the process of giving form, shape, and character to groups of buildings, to whole neighbourhoods, and the city. It is a framework that orders the elements into a network of streets, squares, and blocks dealing specifically with the physical spatial design of an urban site. In doing so, like all design processes urban design sets its goals based on a series of good practices and precedents that have been used and tested by their application through time (EUKN, 2012).

We will focus here particularly on the scale of urban design within the contemporary city and discuss ways of promoting communication among experts or decision makers and local citizens in order to underpin a shared understanding and knowledge and create a frame of reference for specific strategies and design proposals. We will focus particularly on public space of cities and neighborhoods considered a critical parameter of a lively, safe and sustainable urban realm.

In 1987, in the work of Allan Jacobs and Donald Appleyard titled "Towards an Urban Design Manifesto" (Larice M., Macdonald E., 2007, pp98-108), the two professors at the University of California at Berkeley, both teaching urban design, attempted to express a criticism to Modernism urban visions that have been extensively applied in the American cities and suburbs especially after the 50s' and through the 70s'.

They stated as problems of the modernist city, "poor living environments, gigantism and lack of control of the urban environment, loss of public life and large-scale privatization, urban sprawl, placeness, destruction of valued places, injustice and rootless professionalism", Their goals for urban life included "livability, identity and control over the city by its inhabitants and users, access to opportunity, imagination and joy, authenticity and meaning of the urban environment, community and public life, urban self-reliance and finally an environment for all". More than 30 years after this manifesto was published, the problems they have stated have become even more serious, while its stated goals are widely accepted as critical in actual urban management and planning by experts and academics. Today the prevailing approach for managing the city is deeply concerned with sustainable and environmental priorities, while the livability, safety and quality of public realm form an unquestionable condition for the identity and economic development of any urban environment.

Having stated briefly all the above, concerning the present condition of cities, let us move on in presenting the work of C. Alexander and his ideas about the physical design of urban space.

## 2. C. ALEXANDER'S, "A PATTERN LANGUAGE"

C. Alexander was born in Vienna in 1936, and moved to England with his family at a very young age. He graduated from Cambridge University, where he studied Mathematics and Architecture. He obtained a Ph.D. in Architecture at Harvard University. For his Ph.D. Thesis, later published as the book "Notes on the synthesis of form", he was awarded the first Gold Medal for Research in Architecture by the American Institute of Architects. Since 1963, he had been Professor of Architecture at the University of California at Berkeley, and Director of his private practice the Center for Environmental Structure. Today he is professor emeritus of the University of California and lives in U.K.

During the early 60's, Alexander, being highly critical with the results of twentieth-century city-making and architecture, he turned his research for designing human environments, to the study of traditional design methods prior to the rise of professional expertise, being fascinated himself by great architecture and urban design of the past. Rejecting the conventional design processes, he believed that mainstream design professionals and their design methods are "overly reductionist and lacking the complexity that allows life, beauty and place-based harmonies to emerge". His work published in 1965 "A City is not a Tree", while attacking the sterility of modern planning, is suggesting that the complexity of cities should be viewed as a multi-layered latticework, rather than a branched diagram that separates and fragments functions and activities. Together with his colleagues at the "Center for Environmental Structure", he advocated a participatory and interactive design process in many experimental architectural and urban design projects he undertook. In order to communicate his ideas to future users of spaces he was called upon to design and interact with them all through the design process, he produced his two seminal works "The Timeless Way of Building" and "A Pattern Language" viewed by himself as two halves of the same work. In his words "*The Timeless Way of Building* describes the fundamental nature of the task of making towns and buildings" (Alexander, C., 1977, ppIX). The book "A Pattern Language" comprised a set of spatial patterns, referring to all scales of the built man made environment, in a form of prototypes. It was aiming at helping architects, and primarily non-architects, to participate in the design of their own environments by reflecting on their needs and the way they experience space.

Alexander's criticism of modernism in the early 60's, coincided with a broader reaction to large scale urban development projects and the attempt to reform massively the character of historic neighborhoods and city centers. The work of Jane Jacobs, "The Life and Death of Great American Cities" published in 1961, celebrating the dynamic qualities of cities and urban life shocked the world of city planning. Jacobs was standing against the modernizing agenda of American large-scale urban renewal schemes and large freeway construction projects wiping out whole neighborhoods of historic urban centers. The result of such architectural destruction, however well intentioned, was a ripping away of urban fabrics and the neighborhoods that made cities live. Jacobs recommended an ad hoc, spontaneous approach to a more natural growth in contrast to urban planning that had paid no attention to the human life of cities (Larice M., Macdonald E., 2007, pp 81-92).

Criticism against the modernist practices of design continued to rise all through the late 60's and 70's. In 1966, Robert Venturi, Vincent Scully and Arthur Drexler's "Complexity and Contradiction in Architecture" foreshadowed the confused discourse that would follow. Venturi advocated a permissive architecture of the "both/and" (Adamson, 2015). He pointed out that great cities like Rome did not speak with one voice, but rather in historical layers and vivid juxtapositions. In 1972, *Learning from Las Vegas* was published. This work of Robert Venturi, his wife Denise Scott-Brown, and the late Steven Izenour, called attention to the vernacular landscape and insisted upon the importance of the surrounding environment to architecture. Venturi's preference for the ordinary and his attention to the world—the environment—surrounding the building stood in stark contrast to the stance of Modernist architecture, also called The International Style. Postmodernism formulated both theoretical and visual responses to Venturi and Scott Brown's contextualism. "The Language of Post-Modern Architecture", which Jencks published in 1977, popularized the term "Postmodernism". Walter Gropius' memorable phrase "starting from zero," was illustrating well the attitude of Modern architecture, while postmodernism reintroduced an awareness of the past (Rybczynski, W., 2011).

As we noted, Alexander's "A Pattern Language" was also published in 1977. However, his stance was quite opposite to the one advocated by Post-Modernists. Despite their common admiration for the past, their approaches to design methods and practices had little in common. Alexander believed in users' engagement in design, and tried to systematize his design method for achieving this by communicating his ideas in a well-illustrated, well-documented and straightforward way. He had a scientific background and he tried to work out his new architectural vocabulary very systematically, based on extensive analysis of exemplary spatial precedents, in order to create his "pattern language". It was an extensive research procedure that lasted almost a decade. His definition of a pattern was that "each pattern describes a problem which occurs over and over again in our environment, and then describes the core of the solution to that problem, in such a way that you can use this solution a million times over, without ever doing it the same way twice" (Alexander, C., 1977, pp X). His main goal was to produce spaces that would be alive, enhancing the well-being of their users and evoking the quality of space of great cities and buildings of the past. He considered such paradigms as corresponding utterly to real human needs. He was rejecting a design process that will produce a space, no matter its scale, without an organically evolving piecemeal growth procedure and without the active participation of its future users. In contrary to post-modernist architectural design approach where a morphological imitation of historic elements was implied, Alexander insisted on the interface between the geometry of spatial design solutions and the events that they could sustain. In his words, "A building or town is given its character, essentially, by those patterns of events that keep on happening there most often.... These patterns of events are always interlocked with certain geometric patterns in the space". (Alexander, C., 1977, pp XV). Linking architectural patterns and patterns of behavior in built space was one of his main goals.

However, he was quite alone in his approach and provoked heavy criticism from both modernists and post-modernists alike. The illustrative material that he used in his books, all black and white images of historic spaces and everyday life scenes, beautiful but full of nostalgia and tenderness towards the pre-modern world, was clearly implying that he had a historicist approach to architectural design (fig.1,2). He was claiming no intention of originality or willingness to participate in the debate of the different architectural avant-garde trends of his time.



Fig.1: Pattern 61. Small Public Squares – Fig.2: Pattern 115 Courtyards which Live

He was criticized for ignoring or rather not stating any references to the similar approaches of his view of architectural practice, by other professionals and thinkers, like J. Jacobs, B. Rudofsky, A. Rapoport, N.J.Habraken etc. His way of expressing his ideas, especially in "The Timeless way of Building", was accused of being bizarre, not objective, full of mystical and metaphysical ideas, while very partially documenting his thoughts from an academic and scientific point of view (Dawes M. J., Ostwald M. J., 2017). Extensive reference to his work "A Pattern Language" was merely acknowledging its existence and very rarely commenting on its actual content. This was also enhanced by the projects he designed. Alexander tried to apply his ideas in numerous projects he undertook, that were designed with the direct involvement of users all through the design project. He was not a great designer and the outcome of these projects many times, as stated by him afterwards, didn't even satisfied himself. But his theoretical work was far more pioneering than it was actually perceived during the time of its publication and this remains true until today.

The well documented design solutions he was describing in his Pattern Language were presented in a way that could be easily translated in today's communication technologies and social media networks as a valuable data base permitting the transmission of highly specialized urban design knowledge to layman, communicating ideas and design precedents to help participatory design, something that at the time Alexander was active as an architect was not possible to imagine. Pattern Language, as we have stated, were covering all levels of scale of man-made built environment. There are two reasons we refrain from discussing the entire body of these patterns and focus on those referring on the urban design scale. Today participatory design processes are sought after mainly in terms of the urban planning and urban design scale and that's what we are interested in here. Second, and most importantly, there are few stylistic implications in the presentation of these patterns and it was on this level that Alexander's work was mostly criticized and rejected. Patterns relevant to the scale of the city are archetypal and really timeless presented mainly through diagrams. A large part of his ideas concerning urban space are seen today as main goals of sustainable urban design. Mixed use spaces, social inclusivity, livability of the public realm, energy efficient solutions, public transportation, sustainable urban mobility, accessibility of public urban infrastructure, urban farming, mixed use neighborhoods, management of water and its use in the city, green spaces and human scale are critical elements of his view on urban design. Presently, there is no manual of sustainable urban design that its content and ideas are not included in Alexander's Pattern Language. Furthermore, the way patterns are presented give ample documentation of the issues they introduce, citing data from an interdisciplinary pool of knowledge and ideas. All of bibliographic material, he used for describing each pattern, was well integrated in its presentation. Documentation included demographic, social, economic, historical, climatic and foremost environmental and ecological parameters of design. Alexander working in Berkeley, where pioneering research concerning environmental and energy issues was undertaken since the early 70's was highly conscious of this critical parameter in spatial design. And it is primarily this element that makes his work actually valuable and pioneering.

Another field though, where his work was mostly and highly influential was computer science creating the design patterns movement (DEARDEN, A., FINLAY, J., ALLGAR, E. and MCMANUS, B., 2002). Alexander's philosophy of incremental organic, coherent design influenced the extreme programming movement, Human Computer Interface research and software engineering. The Wiki was invented to allow the hillside Group to work on programming design patterns. Wikipedia is designed according to this programming system, while the creator of the SimCity, Will Wright, admitted that a big part of his ideas were determined by and used Alexander's work "like the way Pattern Language formalized spatial relationships into a grammar for design".

Let's examine briefly how "A Pattern Language" is organized. It comprises a set of 253 patterns, each one having a name/title indicating its content. They are ordered, beginning with those referring to the very largest for regions (i.e. THE DISTRIBUTION OF TOWNS, LACE OF COUNTRY STREETS, COUNTRY TOWNS etc), then the towns (i.e. MOSAIC OF SUBCULTURES, LOCAL TRANSPORT AREAS, COMMUNITY OF 7000, IDENTIFIABLE NEIGHBORHOOD etc), then working down through neighborhoods (i.e. WEB OF SHOPPING, MINI BUSES, ACCESS TO WATER, SACRED SITES, PARALLEL ROADS, PROMENADE, NIGHT LIFE etc), clusters of buildings (i.e. HOUSEHOLD MIX,

DEGREES OF PUBLICNESS, HOUSE CLUSTER, OLD PEOPLE EVERYWHERE, NECKLACE OF COMMUNITY PROJECTS etc), buildings (i.e. STREET CAFÉ, CORNER GROCERY, MAIN BUILDING, POSITIVE OUTDOOR SPACE, LONG THIN HOUSE etc), rooms (i.e. INDOOR SUNLIGHT, ENTRANCE ROOM, SLEEPING TO THE EAST, FLEXIBLE OFFICE SPACE, SEQUENCE OF SITTING SPACES etc), ending with details of construction for architectural and urban design projects (i.e. THICK WALLS, CLOSETS BETWEEN ROOMS, BUILT IN SEATS, CHILD CAVES, PAVING WITH CRACKS BETWEEN THE STONES, SITTING WALL etc). This sequence is essential to the way the patterns work since each pattern is connected to larger and smaller scale ones.

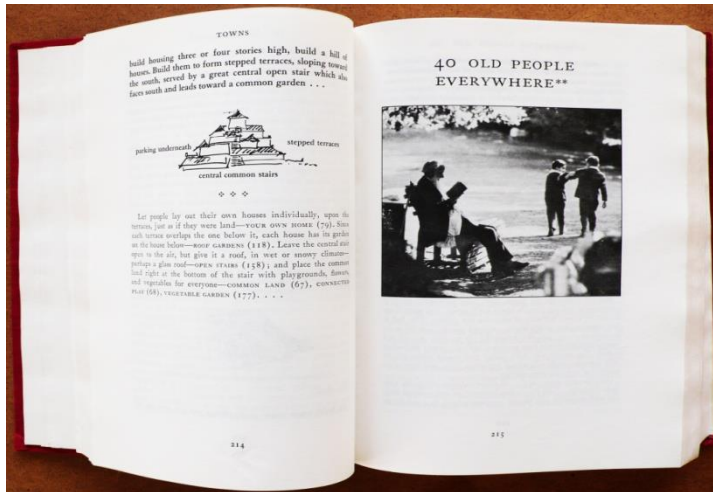


Fig.3: The book "A Pattern Language", "...for convenience and clarity, each pattern has the same format"

They are extracted from the observation and analysis of buildings and towns built mostly without the use of architects but by the inhabitants of these spaces themselves. In traditional societies people were commonly sharing spatial patterns of their built environment informed with social, cultural and environmental meanings that would serve best their everyday ways of living and survival. A common understanding, respect and appreciation of the natural context that surrounded these traditional communities had as a direct result the coherent, divert but homogenous, sustainable built spaces they have created. Alexander through his research tried empirically but systematically to sort out meaning and spatial qualities of such environments.

As he states in the introduction of his book "for convenience and clarity, each pattern has the same format". Typography style used and lay out of each pattern is the same. First there is a picture of an archetypal example of the pattern discussed and its title (fig.3). The introductory paragraph sets the context of the pattern, by explaining how it helps to complete patterns of a larger scale. Then the problem is stated in bold in a few phrases. The problem is then documented and described in detail with all needed bibliographic references. Then in bold again there is a short description of the proposed solution, in bold again, together with a diagram (fig.3,4). The final paragraph comprises the eventual patterns of a smaller scale which are needed to complete or enhance it.

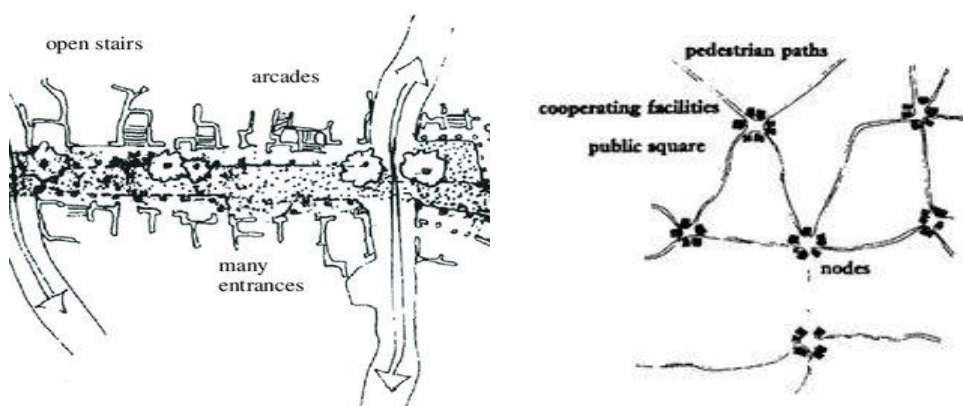


Fig.5: Pattern 100 "Pedestrian Street – Fig. 6: Pattern 30 "Activity nodes"

The reason for this graphic layout of the book is to make it more operational for users and give the opportunity to quickly go through the entire text while searching for the selection of the needed patterns for each design problem. The book comprises also, in the beginning, a summary of the language where all patterns' titles are presented, as an index in an ordered sequence and in groups starting with the larger and closing with smaller ones. A phrase before each group helps the reader to get an overview of the whole language. The sequence is also considered as a "base map" from which one can make a language for his own project, by choosing the ones which are most useful and leaving them more or less in the order that are found printed. It is clear that patterns are not isolated but should be perceived, selected and used in relation to larger and smaller scale ones.

All patterns are not considered by the authors to be equally valid, so patterns are ranked with one, two or none asterisks, next to their title. Alexander then states: "But of course, no matter what the asterisks say, patterns are still hypotheses, all 253 of them –and are therefore all tentative, all free to evolve under the impact of new experience and observation" (Alexander, C.,1977, pp XIV).

In fact, Alexander sees his formulated patterns only as a means to remind people of important issues in environmental design; once understood, the patterns have fulfilled their purpose and are, in the long run, no longer needed as a formal framework. Referring to the quality and character of spaces that patterns are aiming to, Alexander states:" Indeed this ageless character has nothing, in the end, to do with languages. The language, and the processes which stem from it, merely release the fundamental order which is native to us. They do not teach us, they only remind us of what we know already" [Alexander, 1979,p. 531).

### **3. REVIEWING "A PATTERN LANGUAGE" TODAY**

Among the criticism that Alexander has received over the years, following the publication of the Pattern Language and The Timeless Way of Building, concerned the conceptual foundations of his theory, its development and documentation, and its implementation and outcomes. His mystical sometimes language, cosmological antithesis with mainstream thinking, his idiosyncratic definition of science have provoked some particularly speculative comments on his work (Dawes M. J., Ostwald M. J., 2017). He, himself, had been critical of the two above mentioned works and proceeded later on to focus his research in the geometric qualities that are present in great works of art, urban spaces and buildings. Inspired by the order and harmony he recognized in natural and living forms, as well as human artifacts, his four volumes work, The Nature of Order, published in 2002, tries to relate human feelings and appreciation of art with structural and geometric properties present in artworks and nature. We do not intend to discuss any further this new stage of Alexander's research which is though, quite consistent with his research on the Pattern Language. Going back to the Pattern Language we would like to underline that, despite the fact that decades after its publication, this work is still one of the best-selling books on architecture, the content of this book is relatively poorly understood and many of the reasons it was so much criticized are not valid.

On the level of urban design and planning, Alexander was criticized for using as precedents of good practices, patterns present mostly in urban centers and towns of the past. It is generally no longer necessary to defend historic centres as any town's key development area, whether urban, economic, or cultural. In post war Europe the massive destruction of urban environments during the war, but mostly the transformation of cities by Modernist planning led to a rise in the appreciation of historic urban centers and the qualities present in their public realm and space. European historic centers constitute a valuable part of world heritage, while the qualities their built space present, namely mixed use areas, human scale and placeness, environmental conditions, cultural and social values, coherent architectural townscapes and streetscapes are considered magnets for the quality of life they provide. Particularly the attractiveness of the public realm in these cities define qualities of urban space that form part of the environmental agenda of current urban design. Well functioning and attractive public spaces and a generally aesthetic environment can act as symbols of a city and of living together, and may create a sense of ownership of the city by its population.

Alexander was also criticized for the lack of sound scientific basis and methodology of his research. As a comment to this criticism, he has stated in 2003: "it would have been possible to dress the 253 patterns in a pattern language, as anthropology – thus giving them the dressing of science, references, language and so on. It might have helped create an illusion of "hard" science. But it would not have changed the fact that we did genuinely work out, in part, how the environment supports human life in society. Of course not all 253 patterns are equally profound: but in nearly all of them something has been figured out about how the world works, and we knew more about it after the work was done than we did before. And because it is published in an available form, we know it for always – or until someone else goes further, and finds out more exactly, or more deeply, how those things work" (Alexander, C. 2003).

Today in a post –post modernist era, views on the qualities of the urban environment are freed from preconceptions of the modernist post war period. As M. Wigley in 2011, during the conference titled "Reconsidering Post Modernism", has stated "we are living in a multivalent time, a time in which architecture doesn't need straw men anymore and that younger architects are more concerned with the deeper issues of cities and building than with a particular style" (Shaw, M., 2011). Along the same lines, in 1998, more than 20 years after the Pattern Language was published, N.J. Habraken discussed in his book *The Structure of the Ordinary*, the nature of everyday built environments acknowledging them as the fertile common ground in which form- and place-making are rooted. Habraken is considered the initiator of the international "participation movement" in architectural design. His book *Supports: An Alternative to Mass Housing*, first published in 1961, is the manifesto and starting point of this movement. Habraken in *The Structure of the Ordinary*, recognizes that ordinary places, not designed by architects but by the people that have inhabited them, are the wellspring of urban design and formal architecture. He points out "our subject is not architecture but the built environment (Habraken, N.J., 1998). It is innately familiar. Anew, we observe what always has been with us –not to discover, much less to invent, but to recognize".

Alexander also notes in the "The Timeless way of Building", "Indeed this ageless character has nothing, in the end, to do with languages. The language, and the processes which stem from it, merely release the fundamental order which is native to us. They do not teach us, they only remind us of what we know already [ . . . ]" [Alexander, 1979,p. 53]

In an article published in 1990 under the title, "The Pattern Language and Its Enemies", Kimberley Dovey states "Many would not argue with the desirability of the pattern language approach but with its possibility, with its utopianism in the negative sense of "not of this world." One could argue that I have done little more in this paper than to add to the ranks of pessimists. However, I am not pessimistic and my aims are otherwise. One reason for optimism is that the aspects of Alexander's work that make it seem irrelevant to mainstream discourse and difficult to implement are precisely those that make it applicable to global environmental design problems. For instance one of the arguments used against Alexander is that he proposes an owner-built environment that is impractical in the current context. Alexander does not propose the necessity of such a process, only its possibility, in a global context of over a billion poorly housed people and massive unemployment. The pattern language is one of the few current architectural theories that offers a potential theoretical ground for a world faced with severe problems of physical and social ecology." And this is far more valid today than back in 1990 when this article was written.

### 3. CONCLUSIONS

In the present condition cities are faced with the need to address climate change, demographic change, sustainable mobility and construction, while ensuring greater coherence between territorial and urban issues and promoting a common understanding of an integrated approach to planning and urban design. Community involvement and mobilization of urban stakeholders towards achieving these goals has to find new ways of communicating ideas and knowledge about city planning. Information and communication policies need to render technical information comprehensible and accessible to wider groups and have to be complemented with participatory approaches to create a shared understanding of challenges and shared ownership of strategies. The work of C. Alexander "A Pattern Language" is a manual of urban and architectural design created for this purpose. Reviewing and researching its eventual use today in participatory urban design could facilitate and promote discussion and negotiation among wider sets of



actors and the group of experts involved, in order to foster a shared and integrated understanding and vision while planning for the city.

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