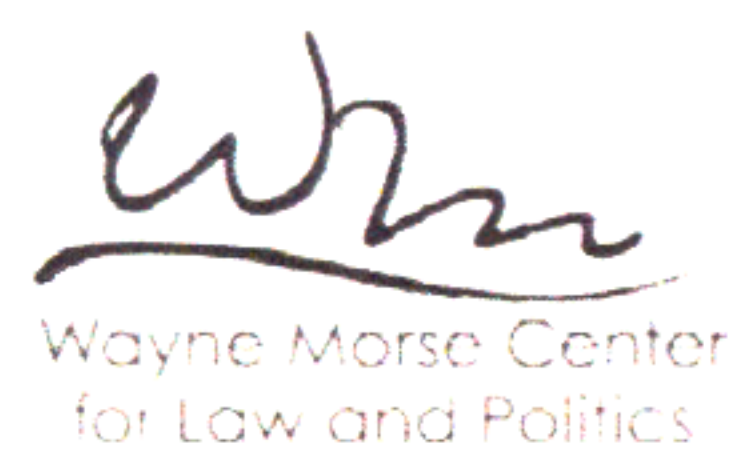
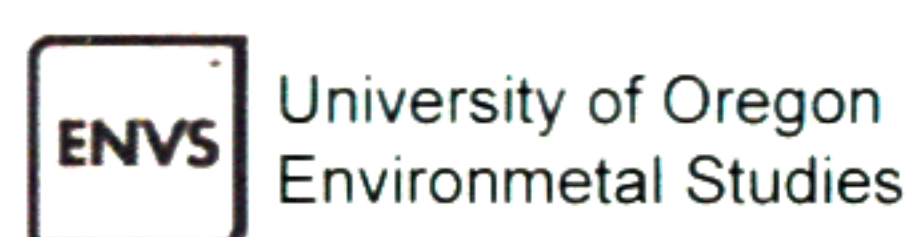


PUARL 2018

**MIGRATION, REFUGEES, AND PATTERNS
THE FUTURE OF PATTERN LANGUAGE**

PORTLAND URBAN ARCHITECTURE RESEARCH LAB
10 YEAR ANNIVERSARY CONFERENCE





PUARL 's notes

The Portland Urban Architecture Research Laboratory, PUARL, is devoted to the study of urban architecture and urban design locally in Portland, regionally in cities of the Northwest and the Pacific Coast of the United States as well as internationally, specifically in Europe and Asia. The main purpose of PUARL is to conduct and promote activities in urban architecture research and urban design research that help to improve the quality of buildings and the city: We attempt to integrate wholeness and sustainability into the architectural and urban design process by conducting basic and applied research throughout the Portland region (and also other parts of the nation and the world) in urban morphologies, urban building typologies, and urban processes for civic groups, public agencies, professional firms, and development interests. The Portland Urban Architecture Research Lab (PUARL) is part of the architecture department and the College of Design at the University of Oregon in Eugene and Portland.

URBAN MORPHOLOGY AND URBAN PATTERNS

We investigate urban morphological structures and patterns that enhance sustainability and environmental quality at the urban scale, including street networks, block and neighborhood layouts, transportation and land use systems, and urban landscapes.

URBAN BUILDING TYPOLOGIES AND PATTERNS

We investigate building types and patterns that contribute to greater densities and decreased vehicle use with a focus on urban housing, mixed- use buildings, and other typologies located in the central city, inner city neighborhoods, and at the urban/rural boundary.

URBAN PROCESS AND GENERATIVE PROCESSES

We investigate processes that enhance our understanding of the emerging structure of the city and help us create urban places in an incremental and participatory manner in support of wholeness and urban sustainability.

URBAN ECOLOGY AND URBAN LANDSCAPES

We investigate landscape and ecological systems and processes, and ways in which these can inform and enhance urban structure, and function, at the building or site, neighborhood and city scale.

PUARL started as a research arm of the Portland Urban Architecture Program in 2007. With the opening of the new building facilities in the Portland Whitestag Block in 2008, the School of Architecture and Allied Arts A&AA intended to broaden and expand research activities in Portland. The PUARL currently provides design assistance and consulting services to community organizations and municipalities in Portland and the region. Projects include the Portland Urban Architecture Atlas, and the two successfully concluded Tigard Center and Corridor urban design research projects. PUARL includes Portland architecture faculty as well as faculty members from Eugene and outside researchers including Dr. Hajo Neis (director), Howard Davis, Jim Pettinari, Don Genasci, Gabriel Brown, Christine Theodoropoulos, Frances Bronet, Lloyd Lindley, and others. Every two years PUARL conducts an International Conference that focuses on issues of wholeness and sustainability in cities and urban buildings. For the last two conferences we focused on city and urban development and on new developments in the overall Pattern Language Approach.

Director of PUARL

Dr. Hajo Neis, Associate Professor

BOARD OF ADVISORS:

Christopher Alexander

Sara Ishikawa

Murray Silverstein

Max Jacobson

Ingrid King

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**MIGRATION, REFUGEES,
AND PATTERNS**

Alexander's Wholeness as the Scientific Foundation of Urban Design and Planning

Bin Jiang

What can be a measure or criterion of success for a complex system? If a self-respecting scientist was to tackle the problem of giving structure to the world, in the large – and that is essentially the problem of architecture – then regardless of what shibboleths may say, there must be a shared criterion of success. If science, as presently conceived, does not have one that is useful for architecture, then, regardless, we must, of course, find one. And for it to be shared, we need to find one which is essentially universal, yet capable of being shared by people of different faiths, cultures, and opinions.

Christopher Alexander (2003)

As Christopher Alexander conceived and defined through his magnum opus – The Nature of Order –wholeness is a recursive structure that recurs in space and matter and is reflected in human minds and cognition. Based on the definition of wholeness, a mathematical model of wholeness, together with its topological representation, has been developed, and it is able to address not only why a structure is beautiful, but also how much beauty the structure has. This paper argues for the wholeness as the scientific foundation of urban design, with the help of the mathematical model and topological representation. We start by introducing the wholeness as a mathematical and physical structure that pervasively exists in our surroundings, along with two fundamental laws – scaling law and Tobler's law – that characterize living structure. We present the mathematical model of wholeness and show how beauty or life can be objectively or structurally computed. In line with two laws, there are design principles – differentiation and adaptation – that help transform a space or structure into a living structure. These two laws and two design principles are what underlie the 15 geometric and transformation properties of the wholeness. We further discuss several other urban design theories and argue how they can be justified and be placed within the theory of wholeness. With the wholeness as the scientific foundation, urban design can turn into a rigorous science with creation of living structures as the primary aim.

Pattern Recognition As Bridge Building Across Disciplinary Boundaries

Jeremy Swartz & Hajo Neis

This presentation explores patterns to various modes of inquiry and applications across disciplinary boundaries. From communication, architecture/urban design, curation, and music, to philosophy, economics, politics, and medicine, Swartz and Neis investigate and apply generative and regenerative processes to problems. While the patterns and pattern language method was rather successful, an advanced approach needs to embrace a larger pattern perspective. Whether analogue or digital, continuous or discrete, the recovery, meliorism, and repair of systems in the twenty-first century is a priority that we can no longer afford to deny. By engaging in pattern recognition, possible futures emerge, not as static ends, but as "ends-in-view."

**Pattern Languages are
Particularly Well Suited for
Addressing Wicked Problems**
Douglas Schuler

This paper builds on ideas from the Liberating Voices project (Schuler 2008), including work on pattern workshops and games (Schuler, Gillgren, & O'Neil 2011) and pattern language for public problem-solving with 12 "seeds" for future pattern language development (Schuler 2014) including identifying "wicked problems" like "Migration, Refugees, and Patterns" as a public focus for pattern language development. It presents the case that patterns and pattern languages (PPLs) (Alexander 1977) are not only useful in addressing "wicked problems" (Rittel and Webber 1973) but are particularly well-suited for that challenge. So-called "wicked problems" are problems whose solution, methodology, and the problem itself aren't formally describable. Because any significant social or environmental problem could be considered "wicked," The paper focuses on the feasibility of using the PPL approach for wicked problems including under what conditions the PPL approach could be most effective and why it's more likely to succeed than others.

The paper first discusses features of wicked problems and the features of PPLs that make them appropriate tools. It explains why some conceptualizations of PPLs are more useful than others. The PPL should form a shared model of the relevant universe of the problem(s) and the solution(s) which is modifiable for local circumstances and promotes implicit and explicit coordination. Secondly it describes aspects of a general approach for the PPL use cycle (design, use, evaluate, etc.) that promote their maximum effectiveness. One critical focus is the connection to computer models and other communication tools. Another is making the approach useful to distributed and loosely-coordinated groups since groups are indispensable in this context. Meta-patterns (Schuler 2014) can promote coordination among diverse individuals; by describing how patterns are selected, created, modified, and used, a methodology is formed that addresses, guides, and orients the use of the [content] patterns throughout the process. Thirdly, the paper discusses barriers to the PPL approach (including coordination and incentives) and how to face them. Fourthly, the paper discusses the central theme of the conference based, if possible, on interviews with participants. The final section of the paper sums up the findings and discusses further opportunities for the PPL approach.

**Structures of Wholeness:
A Study of Carl Nyrén's Brahe
School Library, Visingsö,
Sweden Based on Christopher
Alexander's Fundamental
Geometric Properties**
Gary Coates

In his magisterial four volume set on *The Nature of Order* architect Christopher Alexander argues that the quality of "wholeness", which he sees as the source of coherence, order and life in the world, has an objective structure comprised of the spatial centers of which it is made. The greater the number, density and interconnectedness of coherent centers the greater the degree of wholeness and life. Moreover, Alexander proposes that all living centers, which are themselves built from and a part of other living centers, are characterized by a finite set of some fifteen fundamental geometric properties.

Drawing on extensive onsite research conducted for my book, *The Architecture of Carl Nyrén* (2007), this paper uses Alexander's theory of wholeness, and specifically his notion of centers and related geometric properties, to better describe and understand the experiential sense of wholeness and deeply healing order that can be found in Nyrén's Brahe School Library (1993). While it could be argued that all fifteen of Alexander's geometric properties are present in this building, five properties are analyzed: Strong Centers, Boundaries, Local Symmetries, The Void, Not-Separateness. It is concluded from this case study that Alexander's theory of the nature of order provides a practical tool, not only for analyzing and understanding the objective quality and experience of wholeness in a building, but also for generating that quality through a design process characterized by what he calls "structure preserving transformations."

**Bootstrap Language:
Grassroots CNC and the Urban
Housing Crisis**
Noah Ives

In keeping with the dual themes of this conference, this paper will examine the implications of pattern language for the contemporary urban housing crisis. It will first review the unique constraints of shelter architecture. It will then catalogue design strategies through the lens of shared grammar, syntax and design vocabulary. Finally, it will examine a case study project in Portland, Oregon generated through an evolutionary, user-informed process. If pattern languages govern the range of responses to a unique set of constraints, unpacking a project in these terms will reveal not only its origins but also alternatives and opportunities. This research will therefore benefit future efforts in public interest design by establishing a grammar to describe the unique material, technological, regulatory, and cultural context of houseless architecture, and illustrating its application in one particular scenario.

**Practicing Practice: From
Pattern-Seeing to Pattern-Acting**
Erik Hancock

Christopher Alexander's book, *A Pattern Language*, explores the notion of "invariant properties" that are shared by successful, living, spatial solutions to specific problems. Alexander also establishes the necessity of recursive, supporting relationships between these solutions. In his later four-volume work, *The Nature of Order*, the author identifies a group of fundamental invariant properties shared by all living systems and describes the processes and transformations that generate living structure.

Throughout his writing, Christopher Alexander describes natural, intuitive, and spontaneous response as a crucial component of living structure. He also refers to repetition, testing, and incremental improvement as the foundations of this living process. In contrast, Alexander describes the dead processes of a contemporary architect's office—a place informed by mechanistic or style-driven decision-making. For example, one of the most advanced design tools, Building Information Modeling (BIM), serves only to further remove opportunities for spontaneous and intuitive response to spatial conditions. The aggregation and mindless automation of stored practices in a database are replacing human mastery and craftsmanship.

In his writing, Alexander draws comparisons to living processes in woodcarving, weaving, pottery, and martial arts. We, as practitioners of architecture, see a significant gap in both Alexander's writing and architectural practice at large—this gap is the "practice" of practice. It is indeed strange that we refer to architecture as a practice, and yet we rarely, if ever, actually devote time to practicing it. Furthermore, the traditional arts that Alexander extols each invariably contain rich and well-developed patterns of practice. In fact, it is a fundamental principle in the arts—musical, martial, and otherwise—that rigorous and thoughtful practice is the only path to developing the freedom to be spontaneous, flexible, and intuitive at the moment of performance. Otherwise, the practitioner becomes bogged down in the technical problems or execution—or worse, panics, resorting to contingency strategies to protect the ego from embarrassment.

This paper proposes a framework for architectural practice, drawn from forms of practice in other arts, that will prepare the architect to engage—physically, mentally, and emotionally—with the task of unfolding living structure.

**Rule Based Rapidly Deployed
Emergency Shelters and
Simulated Forces**
Earl Mark

The proposed paper describes a rule based design system created by the author that adapts the United Nations High Commission for Refugees site planning guideline for rapidly deployed shelters (UNHCR, 2011). The computer programmed rules encode true or false shelter placement criterion not unlike the binary scheme envisioned in Christopher Alexander's publication "Notes on the Synthesis of Form" (Alexander, 1964). The rules respond to 3D physics simulations of natural landforms, water drainage, and pedestrian circulation. They are presently being expanded to address solar access, vegetation, and security. The research builds upon an earlier project that integrated GIS and CAD for building footprint environmental analysis (Mark and Ulmann, 2016), but that relied more upon pre-recorded site data rather than upon simulation.

In his "Notes on the Synthesis of Form" Alexander calls attention to dynamic ways of thinking. For example, in referring to D'Arcy Thompson's publication "On Growth and Form", Alexander wrote "The context and the form are complimentary. This is what lies behind D'Arcy Thompson's "remark that the form is a diagram of forces" (Alexander, 1964, p. 21). One critic suggests that the full scope of Alexander's dynamic thinking is more evident in the comprehensive studies he undertook in later years (Mahaffy, 2016). For example, the first volume of the "Nature of Order" series discusses examples of growth and transformation (Alexander, 2002).

Pattern language and urban design, urban experimentation and living labs

Todor Stojanovski & Andrew Karvonen

"The New Theory of Urban Design" discusses underlying urban patterns such as incremental development, creation of centres, visions, etc. These urban patterns coincide with the assumptions behind urban experimentation and living labs. The new trend of living labs and urban experimentation embraces innovation and visions that have to be tested in almost lab conditions with living subjects. The living labs are based on the notion that development must come incrementally from small to large. The living labs become urban centres and physical and cultural patterns for new ways to design and live in cities. This paper discusses these similarities between pattern language and urban design, urban experimentation and living labs both as a joint future theoretical framework and as practical implications for architects and urban designers.

The Future of Pattern Language: Soft Social Infrastructure to Allow Freedom of Creation in the Creative Society

Takashi Iba

This paper presents the vision for the future of pattern language; that it will become a soft infrastructure which enables the initiation of creative activities in various domains.

For past two decades, pattern language has been developed as media for describing practical design knowledge in various domain including architecture, organization, education, learning, collaboration, presentation, dialogue, social innovation, project design, disaster prevention, social welfare, life transition, ways of living, cooking, cultural design, and policy design.

As such pattern languages continue to develop in various domains of society, what will the future society be like? This paper proposes a possibility in which pattern language, a media that supports creative activities in various domains and enables more people to participate in them, will function as a soft social infrastructure that provides a new kind of freedom in society.

In order to understand this vision, it is necessary to first recognize the concept of "capability", defined by the Nobel Prize winning developmental economist, Amartya Sen. Sen proposed that when evaluating well-being (i.e. defining the objective of a developmental aid), it must be done through measuring capability, instead of GDP. In this context, the term "capability" points to the probability of "being able to gain what one desires".

Sen's concept of capability also helps to gain understanding of a Creative Society in which pattern languages exist as a soft infrastructure. In such a Creative Society, "creation capability", which is the ability in which people can create things as they desire, would be an important indicator of well-being. Because pattern languages are able to support people's creative actions in creating various things, it has the potential to bring freedom to such creations.

This paper proposes and explores the future vision of society with pattern languages, based on concepts and theories from Amartya Sen, among other scholars in social sciences.

Christopher Alexander's pursuit of a coherence for our time

Richard Sickinger

One of the consequences of the pattern language approach, states Christopher Alexander, is that it has the capacity to create coherence, morphological coherence in the things which are made with it.

In the three seminal works of Christopher Alexander: "Notes on the Synthesis of Form", "A Timeless Way of Building" and "The Nature of Order" we can discover a consistent and progressing focus on defining, attaining and creating a new quality of coherence which, in Alexander's opinion, our epoch is of great need of.

Be it in the "Notes on the Synthesis of Form" to achieve "good fit", be it in "A Timeless Way of Building" to enable the quality of being "alive and whole" or be it in "The Nature of Order" to support a "living process" through "structure-preserving transformations".

A Pattern Language Shaping a Desirable Environment for the Elderly

Masaaki Yonesu & Io Kato

Benesse Style Care Co.,Ltd. has created a Pattern Language for creating a good living environment for elder people from practical knowledge of care based on its experience and practice over 20 years. It is operating more than 300 facilities which are categorized both senior living and nursing home and more than 15,000 elderly people are living there., More than 15,000 staff are providing care and living service on each facility. However the practical knowledge of care is possessed by each staff and not necessarily shared as an effective means for creating a good environment. In order to make use of our past experience and knowledge, we tried to generate common language that explains how the good living environment is created, and share it among the stakeholders in the company. The research method for this work is mainly based on interviews to the care workers in each facility. we had found out 65 patterns and they are classified to 12 groups. We made a book and cards that describes those patterns one by one to understand by the stakeholders. What are obtained as a result is, first, it becomes possible to support care workers to participate in the process of designing the space and environment as a leading actor. Second, it becomes possible to support for professional architect and planner to explain the design contents without using technical terms. We suggest that care service could be a creative work through using and discussing common language like a Pattern Language. We began using this common language. We did a workshop using cards with the care workers in a facility and thought about the whereabouts for residents. For example, with a workshop using a common language, I succeeded in languageization of a whereabouts for men, furthermore we have succeeded in designing space from this languageization as follows. We support a change from skilled care worker to artist of care

**Theory and Structure of Design
Patterns and their Application
to Master Planning and
Programming**

Gary Black

In 1977, Oxford University Press published Christopher Alexander et al. *A Pattern Language*. The AIA awarded him the first ever gold award for research. Nearly 20 years later Gamma et al. published *Design Patterns: Elements of Reusable Object-Oriented Software*, 1995. Both these seminal works have been initially embraced by leading members of their respective professions and later rebuffed by others. Alexander's book, forty years after its publication, is welcomed by building contractors and do-it-yourself homeowners, those lacking formal design education, but for the most part, rejected by academics for various reasons including the claim that it is outdated, focuses mainly on housing and anyway is not relevant to modern architectural theories. In both *A Pattern Language* and *Design Patterns*, the authors are seeking a common goal; to pre-qualify a set of patterns, which constitute a general reusable solution to a recurring problem within a given context... which a programmer can use to solve problems when designing a computer application system or an architect can use when laying out a town or designing a building.

This paper presents a departure from most previous texts on patterns and pattern languages. The focus is on using the theory behind and structure of a pattern to propose a unique planning and programming process, one that clearly addresses the needs and hopes of the participants and which produces a higher quality environment as reported in post occupancy evaluations, than other processes currently employed. In this process, the planner/programmer creates a project specific pattern language, unique to the requirements of the design committee, to the expertise of the design team, to current best practices, to the function of the building and its context... Once all stakeholders have reached agreement on a final design language the architect and planner/programmer use the document to produce a single focused schematic design.

In practice, this single design approach as the goal, encapsulates the deep-seated functional and organizational needs and gives shape to a solution which all participants recognize as meeting their needs and related to the concerns and directions they voiced during the process of preparing the project pattern language. The connection is direct and visceral.

**The biology and pedagogy
of judgment**

Greg Bryant

The human faculty that allows people to judge living structure is innate. We need it to judge good shape, process, environmental and social quality, transformations, adaptation, unfolding, and the discovery and good application of good patterns. I would like to explain the state of the research to uncover the biology, and cognitive science, of this innate ability.

But this capacity is regularly disrupted by other mental faculties. People need special training, to become aware of it.

I'll present recent experiments, including the use of software and exercises, in two settings:

- 1) A seminar on unfolding gates at the Building Beauty school in Sorrento
- 2) An emerging program within the University of Oregon's Campus Planning division (CPFM), to train architects and users on using this ability to judge harmony, good morphology, and good pattern application. This is an attempt to update and reassert the original direction and intent of The Oregon Experiment.

Configuring patterns and pattern languages for systemic design

Helene Finidori

The proposed presentation builds upon the work on Fourth-Generation Pattern Languages (H. Finidori, Borghini, & Henfrey, 2015) presented at Purplsoc 2015 and Pattern Literacy in Support of Systems Literacy (H. Finidori & Tuddenham, 2017) presented at PLoP 2017.

The aim is to bring pattern thinking and systems thinking closer to each other, in order to further introduce pattern thinking and pattern language in the design, assessment and orientation of our socio-technological and socio-environmental systems, large or small, and better address the societal issues of our time.

In this presentation, I will examine ways in which patterns and pattern languages could be systemically configured in order to support systemic inquiry and design. In particular, I consider the act of design from an extended systemic perspective. In this perspective, patterns are not only involved as guides for design, best- or good-practices, or proven solutions to problems. They are recognized as recurrent forms or configurations of forces in the contexts which motivate a design, as well as in the processes and effects a design may generate in interaction with other designs, and the modifications of the initial contexts they entail. Patterns as manifestations of systemic activity must be assessed and monitored on an ongoing basis to ensure the systemic validity and fitness to purpose of a design, and its sustainability and evolution in time.

Looking at patterns and pattern language as tools for systemic inquiry and systemic orientation requires an extended definition of the role of patterns, and a reflection on the form and articulation of patterns and pattern languages within the extended act of design.

In the presentation, I will examine and propose possibilities of extended definitions and forms in the light of Alexander's work and the advanced results of the 'Mapping the Landscape of Patterns across Disciplines' survey, launched by the Systems Science and Pattern Literacy Research group of the Bertalanffy Center for the Study of Systems Science.

Time & Gravity: Two Universal Forces In Architecture

Duo Dickinson

In this presentation Duo Dickinson addresses a seminal reality in the design process, and thus in education of design. The passing of time is a universal force in design, but is largely misapplied. Like gravity, history is everywhere, all the time, and the effects of history are fully present in both the designer and the users of what has been designed. But unlike gravity, designers have absurd accommodations of history. Designers either imitate the past by designing true to a "style", or those who create our environments attempt to deny history in the cause of Modernism. History is not a Style. The passage of time is as undeniable as any other reality we design to. But the realities of history beyond style are neither taught nor part of the designer's thinking. It is axiomatic that if you copy, you are not creating. So if you deny context, you are blind. Other design criteria are central in education and practice. If your design denies climate, ultimately the project will be forced to deal with it. If you deny value and cost you will not build very much. But if you ignore history, it will never ignore you – designers and their work are part of it: everywhere, all the time – whether they like it or not. It is time architecture recognized that history is as fundamental as gravity in design.

Vision Budget

Alfred Bay

If we are to build upon the foundation laid by Christopher Alexander then we must let go of some of the idiosyncratic characteristics of his work, such as the habitual attitude of opposition, and work from the deep wisdom informing his foundation to develop new strategies for engaging our world as we find it. Over the last twenty years, I have developed just such a strategy: I call it the Vision Budget.

In this paper I offer a brief narrative of how the use of a Vision Budget contributed to the successful completion of a large-scale project, which was heavily encumbered with government strictures: Stevenson House, a complex of 110 apartments housing low-income seniors, in Palo Alto, California. The process began with the creation by the Stevenson Board of Directors of a short list of goals: fiscal, functional, and experiential (the domain of Alexander's concern). The clear written statement of each then became a Vision.

Our Board, Contractor and Developer, working together, then apportioned the available twenty-six million dollars between the twelve Visions. This narrative illustrates my proposition that Alexander's dichotomy of World View A Versus World View B is not necessary to his vision of Wholeness as a Mirror of the Self and its creation as a Gift to God, but instead will deter its wide-spread use in not only architecture and the building industry but in all realms of creative endeavor.

Beyond the mechanistic view: the wholeness and qualities in Whitehead, Bohm and Pirsig's thoughts - implications and the relationship to Alexander's approach for sustainable architecture

Ngoc Nguyen

This paper addresses the wholeness and quality and their implication in urban planning and architecture from the perspectives of Alfred North Whitehead, David Bohm, and Robert Pirsig. Whitehead proposes a new ontology based on "events" and processes. These events and therefore the whole world are always in the process of "becoming". The "building blocks" that make up the universe are not materials and consciousness but actual events. Whitehead says that actual entities are "the final real things in which the world is made, they are the droplets of experience, complex and interconnected". From the perspective of quantum physics, Bohm suggests that implicate orders are the foundation of the world. According to Bohm, all objects, entities, structures in the world we see are expressions, temporarily originated from an implicate order. Finally, the paper introduces the insights from Pirsig's metaphysics of quality. He argues "quality is the source and substance of everything". Reality is neither materials nor consciousness but quality. He explains that qualities include dynamic and static qualities. In Pirsig's thought, the quality is dynamic and "non-defined, formless, and unable to be described". The static quality can be patterned while the dynamic quality is unpatterned. Static quality is needed to avoid the collapse and chaotic of the world. But static qualities alone cannot bring goodness.

The concept of quality is closely relevant to architecture and urban planning. Cities need regulations and standards in architecture as frameworks to make them not become a chaotic environment, but they themselves never replace the dynamic quality in architecture and planning. In Whitehead's tradition, a building or a planning project must always be in the process of transformation and interrelated with each other and with other elements of the environment; a good city is the one that grows on its traditions over time toward more coherent. This line of thinking is parallel to Alexander's approach. The paper supports and enlarges Alexander's method by inviting a holistic approach to architecture. The well-known patterns in a pattern language are equivalent to Whitehead's events. The wholeness and quality without name are analogy to dynamic quality; fifteen architectural properties and other quantified indices are also introduced as a static quality of architecture. Finally, I propose the use of the coherent index as another quantitative method for measuring the coherence or wholeness of a building.

WORKSHOP

“Narrating Wholeness: Pattern Language Generating Semi-Lattice(s), System(s), and/or Holon(s)”

David Ing

Two complementary workshops are proposed for PLoP and PUARL, by David Ing. This abstract describes the PUARL workshop.

Does a pattern language generate into (a) whole(s)? This workshop will discuss the meaning of architecting a system, complemented with recent research from the systems sciences.

In 1967, at the formation for Center for Environmental Structure, Pattern Manual specified that (sub)systems are fewer in number (and implicitly larger) than patterns: The environmental pattern language will contain hundreds of subsystems and tens of thousands of individual patterns. Every conceivable kind of building, every part of every kind of building, and every piece of the larger environment will be specified by one or more subsystems of the environmental pattern language.

In summary: An environmental pattern language is a coordinated body of design solutions capable of generating the complete physical structure of a city. The language is designed to grow and improve continuously as a result of criticism and feedback from the field [Alexander, Ishikawa, Silverstein 1967, foreword p.3].

Does (and/or should) the pattern language community therefore be architecting and/or designing systems? To be clear, a subsystem is a system, with the additional property that it is contained within a larger whole.

The workshop will be conducted as a participatory session, with an intent to summarize findings for the proceedings. The workshop is organized as three steps:

- A. Communicative Framing
- B. Dialectical Sensemaking
- C. Narrative Synthesizing

WORKSHOP

Reality Sharing with Virtual Reality and Pattern Language: A New Approach Toward an Inclusive Society

Tomoki Kaneko, Tadamichi Shimogawara, Yuka Banno, Kazuki Toba, Takashi Iba

In this workshop, participants will engage in Reality Sharing, a new approach to experience other people’s reality through seeing, feeling, and understanding their daily life situations. This workshop particularly focuses on understanding the lives of people with dementia towards an inclusive society, and will use a Virtual Reality and a pattern language, both specialized in sharing the experiences of people with dementia.

For various issues around us, even if we think understand them, we often merely have an outsiders’ perspective and have difficulties thinking in other people’s point of view. In such cases, it is impossible to come up with ideas that actually help the people facing the issues.

Dementia is an emerging social issue (World Health Organization, 2017), which must be approached with an understanding of the perspectives of people with Dementia (Alzheimer’s Disease International, 2016). However, when people with different backgrounds come together to discuss such issue, each often has their own perspectives; making it difficult for them to establish a common understanding and engage in productive discussion.

Therefore, in this workshop, we propose a new approach of Reality Sharing, which shares the experiences of people with Dementia. Firstly, “VR DEMENTIA,” a Virtual Reality (developed by Tadamichi Shimogawara, one of this workshop facilitators, and SILVER WOOD CORP), will be used to invite participants to witness firsthand the reality of the people with Dementia. Thereafter, participants will engage in a dialogue workshop using “Words for a Journey,” a pattern language for living well with dementia (Iba and Okada, 2015) to generate new ideas for a more inclusive society.

Through this workshop, participants will experience the Reality Sharing approach, a method that enables anyone to gain deeper understanding of other people’s lives, which can also be used in domains other than dementia. The method enables participants to first gain a realistic understanding of issues people face through Virtual Reality, and secondly, learn about actions that should be taken to approach such issues, by reading the pattern language. These two exercises, enables people to hold a more productive discussion through establishing a common understanding.

WORKSHOP

Workshop for Designing a Living Workshop using the Wholeness Egg Approach

Konomi Munakata, Takashi Iba

This workshop introduces “Wholeness Egg” as an effective technique for designing “living” workshops. When designing a workshop, we are likely to set a specific goal, list up all the essential elements first and then simply integrate them together to make a program, to ensure that it can achieve the expected results. However, when it is designed and implemented just for pursuing the planners’ intended purpose, it is likely to fail in stimulating participants’ creative thinking and gaining “liveliness” in it. The feeling of “life” in design may sound very intuitive, and thus many people think that it is not something they can or should deal with when designing things or activities. But that is what the Austrian architect, Christopher Alexander has strengthened in his books about the beauty of buildings, “The Timeless Way of Building (1979)” and “The Nature of Order: An Essay of the Art of Building and the Nature of the Universe (2002)” after 27 years of research. He said, “All our work has to do with the creation of life and that the task, in any particular project, is to make the building (design) come to life as much as possible” (Alexander, 1979). Those two books explained what gives life, beauty and true functionality to our buildings and what must be done to create more life in our world. Taking his design theory to heart, how can we design a good workshop which is truly alive?

“This method was therefore developed based on the Christopher Alexander’s ideas of “the whole and parts” and “Fifteen Fundamental Geometrical Properties (Alexander, 2002)” described in his publications. This method is named “Wholeness Egg”, as it puts significant emphasis on the “wholeness” of a design. In particular, it aims to design the activity by grasping its wholeness first and subsequently differentiating it into parts, taking account of “Fifteen Fundamental Properties (Alexander, 2002)” to ensure the coherence and quality of the entire activity. In this workshop, participants can experience the technique of the Wholeness Egg in designing their own workshops, and will become able to apply this methodology in designing own creative activities.

The Invisible Land: Environmental Design Patterns of the African Diaspora in Amerika-World

Christopher Robin Andrew

There is a place all around us, that we cannot see, a place that nonetheless provides a poetic glimpse of our human future--“The Invisible Land”.

In this place hide the environmental design patterns of the African Diaspora, the world made by those who were forcibly removed from their ancestral land, in the “Maafa” (Swahili for the “Great Disaster”) and who now live in a state of persistent trauma, deep within Amerika-world, what Dr. Joy DeGruy Leary terms “Post Traumatic Slave Syndrome”. This invisible place is the world of the “Creole”.

Creole artistry and craft has been almost exclusively rooted in oral tradition, handed down parent to child, master to apprentice, as a powerful, yet secret, code. As an necessarily adaptive and dynamic amalgam of several typically distinct cultural lines, it is highly subject to individuated interpretation, and in the tension between the structurally dominant white cultures and the pervasive suppressed black culture it naturally takes on a subversive and often self-destructive aspect.

The full scope of the Creole thread has only been marginally documented on the scale of architecture and environmental development. Throughout the world, in Africa, in the Caribbean, in Central and South America, we see the most clearly articulated urban scale expression of the Creole in the Shanty Towns, the Bidonvilles, the Favelas, the “informal”, “popular” settlements.

In its to date most mature manifestation, the wild, exuberance of the Haitian Gingerbread houses, those woefully neglected masterpieces of African-American Architecture, the dynamic Creole tension is embodied at the scale of individual buildings. These are structures that presciently embody the unfulfilled promises of modern architecture, buildings that almost seem to be making themselves right in front of us. Right in front of our willfully blind eyes, these buildings exemplify living beings. Zombies. Transformers. Undead.

All of this inspires a series of questions paper will address, including the following:

1. What are the architectural and environmental design patterns that that emerge out of the African Diaspora in the Americas?
2. What can we learn from these patterns?
3. How do these patterns reflect and manifest themselves in other aspects of African-American culture?
4. How do these patterns manifest themselves in the Dominator culture?

A Refugee Pattern Language Chapter 4

*Lane Madich, Rachel Lozeau,
Angelo DeBlase, Hajo Neis*

In response to increasing world-wide urban crises, architects and urban designers are starting to find ways to contribute solutions to these problems at their level of expertise and competence. Architects are learning to see system connections at different levels of scale and propose solutions that are covering the smaller and the larger field. As part of this effort, the authors of this paper are developing 'A Pattern Language for Refugees' as a framework for dealing with planning and design issues for refugees.' The pattern method combines social and spatial aspects in a unique way and is used by numerous social disciplines as well as environmental disciplines and architecture. Originally devised by Alexander, Ishikawa, and others, the innovative book A Pattern Language APL comprises a collection of 253 patterns ranging in scale from large regions to cities and towns to construction details. The traditional use and idea of pattern is transformed into a modern system of problem-solving patterns that can be used by designers, planners and users as an innovative vehicle for today.

The paper will share the beginning of a draft pattern language for refugee life and integration that includes the following domains and sub-domains with about 5-7+ patterns each: 1. The Refugee Family (finished draft). 2. Welcome Country Arrival Place. (in work) 3. Arrival City – Urban Life and Infrastructure. 4. Housing, Living, and Live-Work; 5. Working and Socioeconomic Integration; 6. Learning; 7. Administrative Support; 8. Health; 9. Recreation and Clubs; 10. Culture and Religion; 11. Transportation and Communication. 12. Taking Care and Actual Personal Help.

Chapter or cluster four is addressing housing and living needs of refugees in an arrival country, including the prospect of working in a live-work format. Full working arrangements including an apprenticeship arrangement will be explored in the next cluster five. Specifically, cluster four will address the following patterns covering neighborhood and individual generic housing types:

Shelter Cluster

Gregory Crawford

In keeping with Christopher Alexander's original pattern language, we seek to analyze how a single pattern from a larger language can be applied and what the corresponding impacts are.

Within our Pattern Language for Refugee Settlements, SHELTER CLUSTER has been identified as a key acupuncture point, having profound impact on user experience, autonomy, and mental and physical health. We would like to analyze how shelters are commonly arranged within refugee camps and compare that with real world examples of shelter clusters akin to our pattern recommendation. We will track various cluster arrangements and the resulting impacts on social, economic, and environmental metrics. We will also explore if corresponding patterns are self-generated through the application of shelter clusters on overall settlement design and human interface. This case study will be used to support the larger pattern language, drawing upon existing best practices as a proof-of-concept. The intention is that by showing the validity of a single key pattern, the larger language may benefit.

WORKSHOP
Liberating Voices Pattern
Language Configurable
Workshop
Focus on Refugee / Migration
and/or Other Conference Themes
Douglas Schuler

The Liberating Voices Pattern Language project began in 2001 at a conference convened by Computer Professionals for Social Responsibility. The theme was broad: how can information and communication be used to help bring about positive social change? Since one objective was to help launch a pattern language project we issued a call for patterns instead of the usual call for papers or submissions. Over the next several years a small team worked with the initial patterns that were submitted online while others were submitted and developed (also online) after the original conference. This ultimately resulted in a book, *Liberating Voices* (MIT Press, 2008), an online repository, and sets of pattern cards, in which each card provides a succinct version of the longer pattern that is in the book and online. The latter are now available in Arabic, Chinese, Spanish, and Vietnamese and translations into several other languages are in work. The pattern cards are extremely useful for face-to-face workshops. We have convened workshops on the Liberating Voices cards with a variety of audiences with diverse community contexts, familiarity with pattern perspective, and workshop purposes. The most recent workshop took place earlier this year at Impact Hub Shanghai on the topic of the future of alternative education in China.

For PUARL 2018 I am also proposing a workshop that uses the Liberating Voices patterns. The basic model includes a small group browsing the pattern cards identifying patterns that are relevant to the issue or design challenge before them. They select a small number of patterns and develop a narrative that employs the patterns towards one or more objectives. There are also several worksheets that we have used to nudge groups closer to an actual plan. But although I could propose a fairly precise workshop here I'd like to propose a workshop for PUARL 2018 that could raise the likelihood of advancing the conference's aims. This would mean that I would need some guidance from the conference organizers to help me with the workshop design. The workshop could, for example, focus on identifying action plans to address issues specifically related to refugees and migration. It could, alternatively or additionally, address other focus areas such as developing the broader pattern language community or developing a collaborative project for our community. Also, the plans for the workshops we've convened at conferences are almost always finalized before the conference begins but this does not have to be the case. The plan could actually build on particular issues or conversations that occur during the conference, thus providing a more dynamic, relevant, and compelling result. For example, three (or so) scenarios or design challenges could be identified during the conference and a small group could be devoted to each of those using the same basic plan for the workshop. The workshop could be convened at any phase of the conference, including evening if that made sense. The patterns could also be used if other language groups were represented at the conference, as the Chinese ones were used at the Shanghai workshop.

Regenerative Thinking:
Addressing the Water Crisis in
the informal sector
Lacey M. Aley

Political and climate tensions are forcing a record number of people to move to new urban environments, causing the demand on resources such as food, water, and energy to increase rapidly. Cities today struggle to provide their new residents, who often reside in informal sectors, with these basic human rights.

This paper investigates the relationship between regenerative thinking and its role in providing the informal corners of the world with necessary resources such as clean drinking water, sanitary sewage systems, and flood control. It begins by defining the global water crisis, regenerative thinking, and formal versus informal cities. An examination of two cities with informal sectors - one historical and one modern - reveals the effects that urban design and planning can have upon the social, environmental and economic metabolism of a city.

The historical example looks at the positive and negative effects of Baron Georges-Eugene Haussmann's physical transformation of 19th Century Paris, France on both its past and current residents. Looking at Paris, France is an example of how a successful city of today came about after having a history of overcrowding and poverty. The modern example focuses on the physical and political interventions being made recently in the Favelas of Rio de Janeiro, Brazil and where they succeed or fail at alleviating the current struggle of these informal sectors. The Favelas of Rio de Janeiro represents the modern struggle often seen between the informal and formal sectors of a city.

The result of this paper negates the theory that the water crisis can be solved solely through the betterment of infrastructure and emphasizes the importance of understanding the social, political, and environmental complexities of an informal settlement in order to design and plan appropriate solutions that support social regeneration.

Puerto Rico, The Colectivo, and the Earthship at TainaSoy Apiario: A Model of Regenerative Community Resilience in the Context of Environmental, Economic, and Social Disruption Capable of Guiding Future Urban Design Principles
Matthew Loudermilk

While researching regenerative design and strategies for creating a more resilient, ecologically-based urban form in the spring of 2018, I began exploring the idea of expanding the design principles, approaches, and aspirations of the Earthship building concept to fit the size and scale of urban design. While familiarising myself with Earthship systems and principles, I came across an opportunity to volunteer on an Earthship construction project located in the western mountains of Puerto Rico, near Aguadilla, in June 2018. The project, named the Earthship PR at TainaSoy Apiario (changed from Earthship VillaBonuco), is a community resilience center designed to serve as a focal point in the community by empowering local residents and providing disaster refuge and resilience. Earthship PR is the product of multiple organizations and individuals working towards the common vision of a more resilient and autonomous Puerto Rico; the Colectivo Verdolaga, a group of local residents and artisans devoted to creating a sustainable, regenerative community contacted Biotope Planet Earth and initiated the project; land was subsequently made available for the build at TainaSoy Apiario, a honey bee apiary and family farm run by Carlos and Noemi Chaparro and their family.

For this paper, I will focus on Earthship PR at TainaSoy Apiario as a basis for the expansion of the Earthship design approach and mindset to the urban design scale. While at the building scale, its focus on attracting and integrating community members into the project--so as to perpetuate skills and knowledge throughout the community--in addition to providing refuge and basic living needs during times of crisis, makes it an appropriate case study for considering how to grow the concept into an ever more intentional community framework.

After two weeks of working and engaging with the local groups--hearing about their visions of the future for Puerto Rico and listening to their stories from Hurricane Maria's devastating aftermath that inspired these inspiring recovery efforts--I managed to gain some insights into how regenerative communities can respond, heal, and prepare for the future following these incredible events, such as hurricanes or other natural disasters. In these times of crisis, a regenerative community is a working community; one that requires participation and engagement from a "community of workers" able to keep the community moving forward. A resilient "community of workers" consists of interchangeable members or parts that have varying degrees of overlapping skills or services, so a shifting demand can lead to a shifting response. This and many stories from Puerto Rico's recovery following Hurricanes Maria and Irma in September 2017 are inspiring examples of regenerative community resilience that has the potential to guide future urban resilience planning, recovery, and rebuilding efforts.

**Back to the Future:
Transition Design and the Need
for New Urban Patterns**
Robert Walsh

In recent years Climate Change has shifted from being a remote threat in the future to ushering in a new and volatile era of rising sea levels, rising temperatures and unpredictable climate shifts that threaten to disrupt food production, settlement patterns and entire ecosystems. Like it or not, it is here and it is going to get worse. And if this is not already bad enough, sooner or later, the oil is going to run out, as will other finite natural resources leaving us with diminished capacity to maintain the energy intensive lifestyles we have grown accustomed to enjoying. In some regions of the world we are already seeing famine and social unrest directly arising from these issues; meanwhile in the absence of better apparent options, suburban sprawl continues to be a preferred model of housing in many developing countries. This dual combination of increasing environmental instability and the reduction of non-renewable energy means that as problems get worse, our capacity to effectively respond may well be impeded.

What is to be done?

This presentation proposes an updated pattern strategy for addressing these issues, presented in three sections. The first section expands how we think about patterns and pattern languages, informed in substantial measure by the diverse ways that Patterns were first understood and explored prior to being adopted by Alexander and codified into the well-known book (*A Pattern Language*, Alexander et al. 1977). The second section briefly explores the concept of "Transition Design," an emerging agenda originating from Carnegie Mellon that is intended to directly face the emerging threat that Climate Change and Peak Oil together present. The third and final section proposes a variety of new patterns, focused on urban planning and design, patterns that are intended to facilitate further discussion and exploration of viable new solutions to emerging problems, presented as Urban Transition Patterns.

Although we are facing an unprecedented and rapidly evolving future, a humane, livable environment supporting healthy thriving communities should not be treated as a luxury available only to the affluent. In these changing times, to be effective, patterns can be approached as something more fluid, context driven, and subject to ongoing improvement, but they also must be affordable. By exploring early pattern proposals, which tended to focus on lower cost housing and higher density urban development, it will become apparent that the contextually grounded orientation of this presentation represents a renewal of essential pattern principles discernible in the earliest pattern based research. Consistent with these earliest works, the Urban Transition Pattern framework treats patterns and pattern languages as a medium for ongoing communication and collaboration that is open, dynamic, timely and context-driven. The biggest change that I am proposing in this presentation is that we can no longer afford to only look to the past, build only for the rich or search only for universal timeless rules; instead, as we contend with unprecedented and potentially hard to predict changes, we can also see Patterns and Pattern Languages as tools for renewing the environment by generating new typologies and new context-specific solutions.

Adult literacy, migration, refugees, and wholeness patterns

Ana Pinto

Illiteracy can no longer be seen as a matter restricted to underdeveloped and developing nations. Widespread migration movements are adding to the numbers of people struggling with language and literacy learning as increasing numbers of adults find themselves having to learn a second language, when some of them cannot read and write in their mother tongue. The work of Christopher Alexander, like that of educational philosopher Paulo Freire, carries the core idea that people need to work together to construct a world that is more beautiful and harmonious. This paper presents and illustrates the application of a new framework for educational design (pedagogy of wholeness) developed in reference to the emphasis on moral coherence that I take from the work of Alexander and Freire. Prompted by similarities in the work of these two great humanists, I suggest we need to pay more attention to the wholeness of the world, in particular to issues of unequal educational opportunities. Drawing on data from the otherwise neglected domain of adult literacy education, the paper discusses how the framework and resulting 'wholeness' patterns help to unveil the nested hierarchy of pattern language.

The Regenerative Toolkit for Settlement Design

Gregory Crawford

This project is a collaboration of humanitarian practitioners, systems thinkers, and refugees seeking to improve the design, performance, and livability of refugee camps and informal settlements for displaced people. With integrated frameworks derived from systems theory, regenerative design, and existing best practices we seek to preposition social, economic, and environmental regeneration.

The Regenerative Toolkit for Settlement Design consists of:
Design Principles specific to refugee camps and informal settlements
A Contradictions Model acknowledging the inherent complexity of these situations.
Regenerative Continuum providing contextualized solutions along 50 key-areas corresponding to existing humanitarian standards
Pattern Language facilitating the connections and placement of shelters, service centers, water, sanitation, and 28 other essential patterns.

Through acknowledging all facets of settlement design (built environment, economics, ecology, human rights, basic needs, well-being, access, meaning, empowerment, etc.) and its corresponding impact on people, a profound growth and resilience through systemic inter-connectivity can emerge for the world's most vulnerable people. The toolkit invites integrative design, offering recommendations towards more durable solutions.

The toolkit is designed to function with, and build upon, existing SPHERE standards and the widely adopted Core Humanitarian Standards in order to facilitate integration by existing humanitarian organizations. The frameworks are applicable as generative tools for settlement design and allow for contextualized solutions that are culturally and climatically relevant. Additionally, the tools can be used as an evaluative process for decision makers to assist in identifying acupuncture points for intervention.

Welcome City: Refugees in Three German Cities

Hans Joachim Neis, Briana Meier, & Tomoki Furukawazono

Since late 2015, the authors have studied the refugee crisis in Europe. In this article, we analyze local factors that are significant for urban planning to include in an integration plan through case studies in three cities in Germany. We have chosen to study Germany because of the country's touted Willkommen Kultur (welcome culture), which was prompted in large part by Chancellor Angela Merkel's "Flüchtlinge Willkommen" ("refugees welcome") stance. Now, three years after Chancellor Merkel's declaration to the world, although international and national policies set many parameters for refugee integration, responses to the uncertainty of the situation are fundamentally informed by local contexts. Germany has adopted a policy of distributing refugees to communities throughout the country according to the so-called "Königstein Key", which sets quotas for each state according to economic capacity. We have selected case study cities and a county that are at different scales and regions: Borken in Hessen (13,500 people), Kassel County (200,000), and Essen, a larger city (600,000). Here we investigate the ways in which German citizens and refugees interact and integrate, with a focus on the social-spatial aspects of refugee experiences and the impacts on urban planning policy, urban morphology, building typology, and pattern language formation. Beyond crisis, we are looking at how refugees can and will try to integrate into their host countries, cities, and neighborhoods and start a new life and how host communities respond to refugee arrival. Urban architecture projects for housing and work opportunities that help the process of integration are part of this study. Particularly, in this article, we investigate the reality on the ground of the positive Willkommen Kultur and the high expectations and implied promises that were set in 2015 by Chancellor Angela Merkel and German society.

In this paper, we reconsider Christopher Alexander's thought from the perspective of Eastern philosophy, and present a discussion of what a pattern language aims to achieve.

In his books including "The Timeless Way of Building" (1979), it is obvious that his thought has been influenced by Eastern philosophy. In fact, he read eastern literatures such as "I Ching" (Book of Changes, an ancient Chinese text) very thoroughly in 1970s (S. Ishikawa, personal communication, 2013). We, authors, also could empathize with his thought as Japanese spirit, and thus we believe that we can reveal the hidden connection between Alexander's theory and Eastern philosophy which has not yet been deeply discussed.

This paper mainly focus on the philosophy of a Japanese philosopher, Kitaro Nishida (1870-1945), who proposed the concept of "Pure Experience". Pure experience is an exact experience without clearly distinguishing its subject and object. For example, experiencing the feeling of "what a beautiful flower!" should happen before the understanding of "I (as subject) am looking at this flower (as object), which is beautiful". In other words, when experiencing something, it is always beyond the dichotomy of subject and object.

We see that this concept can be seen in a pattern language as well. A pattern language can be defined as a set of descriptions of pure experiences of designing, enabling a design to be generated, without explicitly identifying who did it. We think that that is what Alexander wanted to say.

Alexander actually discussed "Egoless" creation in "The Timeless Way of Building". He criticized the strong existence of a subject (master mind) in the designing process, and then emphasize the importance to through away such an ego. It can be said that this is still considered from the standing point of modern ways of thinking. The people thinking from the Eastern point of view must consider in a different way. Note that, in Buddhism, the term "egoless" describes that there is no "ego" in this world from the beginning, therefore ego is just illusion. According to Buddhism interpretation of the world, there is no need to start from focusing on master mind as "ego" to explain egoless creation.

Thus, in this paper, we discuss Alexander's thought in relation to the concepts in Eastern philosophy.

Christopher Alexander's Thought and Eastern Philosophy: Zen, Mindfulness and Egoless Creation with a Pattern Language

Takashi Iba & Konomi Munakata

Pattern Language 3.0 as Sociological Functional Method

Norihiko Kimura & Takashi Iba

In this paper, reviewing methodological significance of pattern language approach based on the sociological functionalism, we attempt to present a perspective to see Pattern Language 3.0 as a part of social science method. The method of pattern language has been spread in various field of human and social activities, that is, Pattern Language 3.0: according to this spreading, in order to justify the approach to human activities with pattern language as social research, there has been need to discuss the position of pattern language method in the context of social science. This paper tackle the issue through comparison with sociological functionalism.

Functionalism is one of the prevailing concept in sociology; the method is refined by three sociologists of the 20th century, T. Parsons, R. K. Merton, and N. Luhmann. Through various formulations and criticism, the inherent significance of the functionalism has been reformulated as heuristic method that relates individual activities to an abstract viewpoint, and allow us to see the possibility of other equivalent activities based on the point of view. Through functional analysis, we can investigate and discover unknown factors or relations, and get deep insight about social phenomena.

Based on this concept, we can regard the Pattern Language 3.0 as sociological method; that is, Pattern Language 3.0 approach as functional analysis that relates individual actions to an abstract viewpoint (= the problem and solution of a pattern), and allow us to see the possibility of other equivalent actions based on the point of view. Like as functionalism, patterns give us abstract viewpoints that allow us to investigate and discover possible equivalent ideas or factors for designing activities.

Understanding the method of pattern language in such context, this paper present the hypothesis that Pattern Language 3.0 is one of the effective approach of social science that gives us deep insights about human activities and social phenomena.

A Refugee Pattern Language: Chapter 2

Hajo Neis, Kevin Neuman, & Tomoki Furukawazono

PUARL is developing A Pattern Language for Refugees in Europe and beyond as a framework for dealing with planning and designing for refugees. The pattern method combines social and spatial aspects in a unique way and is used by numerous social disciplines as well as environmental disciplines and architecture. Originally written by Alexander, Ishikawa, Silverstein, and others, the original book A Pattern Language comprises a collection of 253 patterns that range in scale and mode from large regions to cities and towns to construction details. In this book, the traditional use and idea of patterns has been transformed into a modern system that can be used by designers, planners and builders today.

The paper will share a draft pattern language for refugee life and integration (starting with the example of the refugee family) and will include the following domains and sub-domains with about 5-7 patterns each: 1. The Refugee Family (finished draft). 2. Welcome Country Arrival Place. 3. Arrival City – Urban Life and Infrastructure. 4. Housing, Living, and Live-Work; 5. Working and Socioeconomic Integration; 6. Learning; 7. Administrative Support; 8. Health; 9. Recreation and Clubs; 10. Culture and Religion; 11. Transportation and Communication. 12. Taking Care and Actual Personal Help.

Chapter or cluster two is dealing with the escape and often Odyssee of refugees from their home place in search of a new country, city and place to start a new life, thereby often affecting and modifying the urban and neighborhood structure of an arrival place and welcoming city in a new country