Bart Lootsma, Innsbruck

Out of the Wild is a research project by the chair for architectural theory of the University of Innsbruck. In the beginning, students and staff from the Platform History, Theory and Criticism of the Academy of Fine Arts in Vienna were involved as well and played a crucial role in its setup. Out of THE WILD tries to find continuities in architectural thinking that came out of the Viennese Settlers' movement after the First World War. It tries to figure out if and how these ideas spread and were developed further and if they have a potential for architecture and urbanism today and in the near future. The project centres around three Austrian-born architects and theoreticians: Otto Neurath (1882–1945), Friedrich Kiesler (1890–1965) and Christopher Alexander (born 1936) but also investigates personalities, ideas, projects, events and movements in their vicinity. An important tool in this research is a website, www.outofthewild.eu, which allows us to visualize both direct synchronous relationships between people and events as well as relationships and developments in time. The idea and structure for this website were developed by architecture students and staff of the Academy of Fine Arts in Vienna and the University of Innsbruck. Michæl Hofstädter from Ovos web design programmed it. The website consists of a database, a customized Content Management System (CMS) and a web interface, which not only allows to store and present events and contents in a range of different formats, but also to visualize the relationships between these different contents/events in history and between each other. This enables a new and more complex view of these relationships.

The project is called Out of the WILD as an inversion of the title of the 1996 non-fiction book by Jon Krakauer and the Sean Penn movie that was based on it from 2007, in which the young American Chris McCandless, probably influenced by the great Romantic American tradition of Henri David Thoreau and Jack London, leaves civilization behind to survive on his own in nature. At the end of the book, after having tried in vain to return to civilization and shortly before he dies from eating poisoned plants and starvation, the main protagonist writes down as a last entry in his diary that 'Happiness is only real when shared' (Krakauer 2007). This sentence seems almost an echo of Otto Neurath's dictum that 'The sum of world happiness is too small. It must be made bigger.' (Neurath, as quoted by Vossoughian, in a lecture at the University of Innsbruck, 2008) Out of THE WILD seeks a way to turn a tradition or urbanism that is based on liberal individualism, as it became heavily promoted from the nineteen seventies on, into forms of urbanism that seek synergies and also try to address shared needs and desires, without returning to classical collectivist examples.

Surveys

Scientific methods in architecture and urbanism became increasingly important in Europe after the First World War. They ranged from empirical æsthetics to functional analyses. Taylorism and Fordism left their traces from France to Russia, as Jean-Louis Cohen has demonstrated in Scenes of the World to Come (Cohen 1995). Of course, statistics have played an important role in Western Europe and its colonies for centuries. As Ian Hacking remarks, 'Every state, happy or unhappy, was statistical in its own way. [...] Visionaries, accountants and generals have planned censuses in many times and places.' (Hacking 1990, 16) However, with the explosive growth from cities to metropolises at the end of the nineteenth century, the survey became increasingly important for urbanism and soon became a crucial role in the planning and design process all over Europe. Therefore, it is no surprise that all key urban projects that were developed in the aftermath of the First World War were largely driven by statistics. These statistics tied projects, which were often presented as visionary and from the nineteen fifties on dismissed as 'utopian' to the everyday reality of the city. Le Corbusier, for example, presented his 'Contemporary City for Three Million Inhabitants' from 1922

in his *Œuvre Complete* (Le Corbusier 1964) accompanied by quantitative comparisons to other cities and four facsimile images of his sketchbook that were largely filled with statistical calculations. It was a city for three million inhabitants because Paris had 3.000.000 inhabitants in 1922. The program for Le Corbusiers 'Contemporary City' was distilled from extrapolations of the actual program of the city of Paris. In *Großstadtarchitektur* (Hilberseimer 1927) Ludwig Hilberseimer criticised Le Corbusiers 'Contemporary City' for not giving an adequate answer to the given numbers and continued in one breath with his proposal for a 'High Rise City' from 1924, that was developed as a remedy to cope with the increasing congestion in the centre of the city of Berlin.

Setting up a new department for city development in the nineteen twenties, advised by architect Cornelis van Eesteren, the social democratic aldermen of the city of Amsterdam decided for a scientific approach from the beginning. First, in 1928, Th. K. van Lohuizen, an urban planner specialized in surveys was hired and only after that the architect Cornelis van Eesteren. With their surveys they were able to prove that the inner city of Amsterdam could largely survive in the state they found it. After that, from 1929 on, they developed the AUP, the famous general extension plan of Amsterdam, which was realized with minor adaptations until the year 2000.

What these projects had in common was that, in the first place, they all sought remedies for the congestion of the cities centres, which was due to their explosive growth; and second, that these solutions departed from the assumption that it would be possible—among many other things—to realize large-scale infrastructural and industrially produced building projects by mobilizing large scale municipal, state or industrial investments. The way this capital could be mobilized and the internal organization of these projects differed from case to case, depending on the ideological view of the architects and politicians involved. The Saint Simonist Le Corbusier had the industrial elite dominating the centre; the socialist Hilberseimer sought to delimit the alienation of work by proposing neighbourhood units, in which dwelling was placed immediately on top of industry; and Van Eesteren and Van Lohuizen, working for the social democratic city council, distributed all functions as equally over the Amsterdam as they could.

Otto Neurath, as the 'architect' of the Viennese Settlement Movement, shared some essential characteristics with his notorious colleagues, in particular his belief in scientific methods and statistics. However, radically

different from them, statistics were not the immediate, unquestionable basis to produce a program for experts to produce an urban project but rather an educational tool for the masses, to help them shape their own individual lives and to understand what they voted for. Also, different from most of his colleagues at the time, Neurath departed from issues that played in the periphery of the city of Vienna – the centre having been organized before the First World War with the Ringstrasse and the large infrastructural works planned by Otto Wagner. Also, initially, Neurath had a very different take on the industrialization of the housing production, as he did not immediately depart from large, abstract quantities of housing and other functions needed, but from the smallest possible, concrete unit: the individual hut built by the settlers themselves. This was related to his belief to be able to continue after the collapse of the economical system during the war with an economy in kind, in which there was no money involved. Different from his colleagues in the rest of Europe, he sought therefore for a 'Converse Taylor System'. Different from most of his colleagues, Neurath did not propose to tear cities down or create artificial land to form a tabula rasa to build upon but worked with the situation he found, which he tried to improve in small steps, almost as in his famous metaphor in which the body of knowledge is compared to a boat that must be repaired at sea:

We are like sailors who on the open sea must reconstruct their ship but are never able to start afresh from the bottom. Where a beam is taken away a new one must at once be put there, and for this the rest of the ship is used as support. In this way, by using the old beams and driftwood the ship can be shaped entirely anew, but only by gradual reconstruction. (Neurath, in: 'Anti-Spengler' [1921] 1981, 184)

Whereas most modernist approaches to urbanism have increasingly become criticized from the nineteen fifties on just because of their abstract approach that tried to build cities from scratch, Neurath's contribution to urbanism, notwithstanding a revival over the last couple of years, has almost been forgotten. There are many reasons for this. Soon in the nineteen twenties, 'Red Vienna' also chose more collective approaches, because large-scale collective projects proved more efficient in solving the housing problem. After 1934 many people involved left Austria to live in exile. As the project Out of the Wild wants to show, this did not stop the theoretical impulse the ideas of

Otto Neurath and the Viennese Settlers Movement had given architectural and urban thinking in the work of notable other Austrian-born architects and theoreticians, such as Friedrich Kiesler and Christopher Alexander, to be developed further. Today, this tradition might have more potential than more established modernist approaches in architecture and urbanism.

Shantytowns

Today, we are confronted with new tasks and challenges for architecture and urbanism. The need for more sustainable lifestyles presents some of those. The way we analyze and calculate the ecological footprint of a house today reminds one of the way Otto Neurath unravelled the 'Rootstock of a Settlement House' (Vossoughian 2008, 56). Other tasks and challenges arise as consequences of the postcolonial era. Globalization does not just consist of increasing flows of people, data, money and goods all over the world. It also means that we cannot blend out the increasing percentage of settlements in the world that consist of shantytowns any longer. They are part—and with over fifty per cent of the world population living in them a large, an ever-increasing part it most certainly is—of the context of architecture. The way shantytowns are built, hut after hut by the people themselves, bears striking similarities to the situation in Vienna after the First World War. Therefore it is unavoidable that architecture and urbanism will have to rethink their roles in the world. putting themselves in the service of the people who live there. Large-scale modernist housing programmes, like they were still successful in Hong Kong and Singapore in the nineteen fifties and sixties, are not possible any more today because of the immense investments needed. Looking at the increasing amount of quasi temporary camps in our cities—the refugee centres, the homeless sleeping in tents in Paris and in the United States, the Roma in Italian cities, the victims of earthquakes in Italy and Turkey, the victims of Katrina in New Orleans; or looking at the explosive increase of informal settlements in Turkey and in the former Yugoslavian countries, etc., etc.—this context inevitably comes closer and closer. Retroactive legalisation of illegal and informal extensions of cities, as largely financed by institutions like the World Bank and the European Union, is an unavoidable task. It is however only the first step in the direction of another form of mental amnesty that will allow us to start working on these shantytowns in proactive ways.

Otto Neurath

More than any other historical example, Otto Neurath and the Viennese Settlement Movement from the period immediately after the First World War might help us to find new perspectives for dealing with this situation. In 1919, Vienna was in a desperate state and hundreds of thousands of families, both from outside the city and from the city itself, sought refuge around allotment gardens and in the periphery to avoid starvation by growing their own food.

For many observers of the city, these Zigeunersiedler or 'gypsy settlers' were the ideal citizen-planners in that they relied on know-how and instinct, utilizing everything around them, from urban refuse to trees and captured prey, in order to assure their survival. They illustrated the power of community as an agent of urban reform, and as a force that had the potential for improving life in the metropolis more broadly. (Vossoughian 2008, 17)

The governing Social Democratic Party accepted and supported this movement reluctantly, but still almost from the beginning, as it knew it could not afford any collective infrastructure and wanted to build upon the self-supporting energy of the settlers. For Neurath, who had been working on theories related to the socialization of economy in Vienna after becoming general secretary of the Research Institute for Gemeinwirtschaft in 1919, this was an ideal opportunity to put his ideas into practice. As a key player in the Austrian Settlement and Allotment Garden Association, the Public Utility Settlement and Building Material Corporation (GESIBA), the Settlement and the Housing and Construction Guild of Austria, Neurath looked for a 'Converse Taylor System', in which he tried to combine 'bottom up' and 'top down' strategies borrowed from industry (Vossoughian 2008, 29). In the diagram of the 'Rootstock of a Settlement House', Neurath dissected a settler's house in all its components and traced them back through different forms of production to their origins in the reigns of minerals, plants and animals. A diagram in similar style unravelled the organization of an industrial company, in which many did standardized work on raw materials to produce products, from which only a small part of the company profited financially. As long as Neurath could, he maintained an economy in kind, in which people paid for their houses by performing collective duties, for example building the houses, the roads and other necessary infrastructure. Architects like

Adolf Loos, Josef Frank, Margarethe Schütte-Lihotzky and many others were also involved in this ambitious and successful undertaking and developed new housing typologies and building systems that unskilled workers could deal with. Information and communication, in the form of newspapers and exhibitions were important aspects of Neurath's approach and became even more crucial to him after he left the Settlers Movement. From 1928 on, together with the artist and graphic designer Gerd Arntz he developed Isotype, a sign language that allowed communicating statistical data about the city—and later on about the world—in a simple and striking way, in order to make the citizens understand the complex organisation of their city.

Friedrich Kiesler

The Settlers Movement and Otto Neurath were deeply anchored and well known in the Viennese society in the nineteen twenties. Many young Austrian architects and thinkers more or less grew up with the movement and the ideas that belonged to it and tried to give them a place in their own work—even if they might also develop in other directions. One of them is Friedrich Kiesler, who might be an important link between the early theoreticians of the Settlement Movement and more contemporary thinkers.

Kiesler claims that he worked with Adolf Loos to assist on the Settlement Movement in 1920. This has never been confirmed and is unlikely, as Loos became Director of the Siedlungsamt only in 1921. Still, this claim shows that Kiesler was well aware of the Settlement Movement and keen on being associated with it. Kiesler left for New York to settle there already in 1926. According to an entry in the diary of his wife Stefi Kiesler at the Kiesler Foundation in Vienna, Kiesler met Otto Neurath there in 1933. A copy of Neurath's book *Modern Man in the Making* from 1939 can be found in Kiesler's private library in the Kiesler Foundation in Vienna. Although Kiesler has been associated with artistic movements from De Stijl to Surrealism, the esoteric and irrational overtones of which seem difficult to relate to the strict positivism of the Vienna Circle, the participatory aspects of the Settlement Movement or Loos' craftsman-inspired traditionalism, there is also a continuous more down-to-earth and strangely pragmatic tendency present in his work, notably in his theoretical writings. With his writings on Correalism and Biotechnique, Kiesler showed himself a strong defender of

multidisciplinary, scientific design approaches to avoid building design would 'continue to exist as a series of disparate, overspecialized, and unevenly distributed products' (Kiesler [1939] 1996, 92–120).

Under the title 'Magic Architecture'—a title that might be confusing in this context—over the years he produced a series of texts and manuscripts for books that try to root architecture and urbanism in the everyday. Taking a distance from mystical inspirations, according to Kielser 'Magic Architecture' was to be distinguished from 'Dream Architecture', he wrote already in 1936 'it is not an expression of escape into religious solitude (resignation)'. For Kiesler, Magic Architecture is the expression of the creativeness of man, but not in isolation. Instead,

[i]t is the emphasis on participation. [...] Magic architecture is not dream architecture, like that of temples or castles; it is the architecture of everyday, every-night reality. Magic architecture is a tool of realistic life. [...] Magic architecture is a generator. It can operate on any scale. Any cell of habitation is a nucleus for a power house of joyful living. Neither wealth of cash, nor that of building material, nor social power are needed to accomplishing the most with the least. [...] Magic architecture is of course, unthinkable without its sociological roots in a society of free will and sacrifice. (Kiesler 1996, 34)

In the nineteen fifties, Kiesler tried to turn the original short essay into a book, which never came beyond the stage of manuscript. In this manuscript, which finds itself in the archives of the Kiesler Foundation in Vienna, he tried to root architecture in the landscape and as an evolution of animal nests. The manuscript, which is richly illustrated with clippings from popular scientific magazines like National Geographic, shows many examples of anonymous architecture, preceding Bernard Rudofsky's—also a native Austrian—Architecture Without Architects, which was published in 1964 on the occasion of an exhibition under the same title in the Museum of Modern Art in New York (Rudofsky 1964). In the manuscript of a book he started working on in the nineteen fifties but which was left unfinished, Kiesler returned to the themes of 'Magic Architecture'. In this manuscript he struggled notably with the question where the animal function of shelter stops and architecture begins, but still tried to distinguish it from the Dream Architecture. Crucial is however that Architecture (written with a capital A) is not implemented from above but comes out of the everyday. Or, as Kiesler

formulates it in the unpublished manuscript that is equally titled 'Magic Architecture', a book he was working on in the nineteen fifties but was never published, as it finds itself in the Kiesler Foundation in Vienna: 'Architecture must wait.' The manuscript can not only be read as an attempt to continue the lessons from the Settlement Movement and the gradual improvements architects like Loos, Frank and Schütte-Lihotzky tried to make on the huts they found, but also somehow as an attempt to reconcile the collective architectural values as they were realized on a large scale in Europe in the nineteen fifties with American urbanism, which always departs from the individual house.

Christopher Alexander

Intuitively, we can immediately understand the work of Christopher Alexander as a continuation of certain aspects of the Settlement Movement, particularly if we think of the participatory tendencies, and of the analytical and philosophical work of Otto Neurath, if we think of Alexanders A Pattern Language as an encyclopædia consisting of architectural protocol sentences. In the tradition of the great architectural encyclopædias of the nineteenth century, like those of Eugène Emmanuel Viollet-le-Duc, it is also a handbook, a manual with which one can build his or her own house, neighbourhood or city. Also Alexander's fascination for diagrams recalls that of Neurath. Already in 'Notes on the Synthesis of Form', with which he took his PhD in Architecture from Harvard in 1964, Alexander dissected the design process by means of tree diagrams that recall Neurath's 'Rootstock of a Settlement House'. In the appendix 'A Worked Example', Alexander demonstrated the functioning of his interpretation of the design process by means of an Indian village, in other words by means of an example from vernacular architecture (Alexander, 1964). Alexander's patterns in A pattern Language, 1.166 numbered examples of architectural situations from the large scale of a region to the small scale of ornaments and building components like bricks, read as an even more ambitious dissection of a larger whole. Intriguing is that Alexander already reserves the idea that some of the patterns might be updated in the course of time, depending on the number of asterisks that are placed behind them in the header:

You see then that the patterns are very much alive and evolving. In Fact, if you like, each pattern may be looked upon as a hypothesis like one of the hypotheses of science. In this sense, each pattern represents our current best guess as to what arrangement of the physical environment will work to solve the problem presented. The empirical questions centre on the problem—does it occur and is it felt in the way we have described it?—and the solution—does the arrangement we propose in fact resolve the problem? And the asterisks represent our degree of faith in these hypotheses. But of course, no matter what the asterisks say, the 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 et al. 1977, XV).

As such, Alexander's thinking reminds us not just of Kiesler's evolutionary concept of Magic Architecture, it also recalls Neurath's ship metaphor once again. Still, even though Alexander was born in Vienna in 1936 and raised in England, where he studied Mathematics and Architecture at Cambridge University, he and Neurath never met and one will not be able to trace immediate references to either Neurath or the Settlement Movement in Alexander's work. References to other Viennese logical positivists, such as Ludwig Wittgenstein (Alexander 1964), do appear, just as to Friedrich Kiesler, notably to the 'Chart of Need-Evolution in Technology' that is related to Kiesler's theory of Correalism (Chermayeff and Alexander 1963). Alexander invested a great deal of his energy and ideas in building with unprivileged groups, such as in his Mexicali Project from 1975 in Baja California and the Previ project in Peru from 1976.

Conclusion

The way ideas and traditions travel in history is, particularly in a globalized world, not necessarily a linear process. They travel through literature and persons and often arrive at their final address only through a detour. They are taken up and congested, bend to different peoples' needs, only to be taken up and reworked again, only hoping to find themselves back as improved components in a new, more or less plausible whole. Out of the Wild might enable us to figure out how certain ideas as they were developed in the Viennese Settlement Movement travelled in time from one protago-

nist to another, maybe not always directly but maybe even through other Austrian-born protagonists that we hardly mentioned or did not even mention in this article yet: Josef Frank, Herbert Bayer, Karl Popper, Paul Feyerabend, Ludwig Wittgenstein and many others. The plausibility of the hypothesis that a continuity of thinking from Neurath to Alexander exists is high, because the migration of thoughts is traceable through the connections of the Austrians in exile. For now, the website www.outofthewild.eu is the only medium that allows us to map these complex relationships.

What we did discover until now, apart from the immediate relationships discussed above, is that the correspondences between Neurath, Kiesler and Alexander mainly revolve around themes that deal with conceptions of organization, wholeness, endlessness, participation and happiness. Different kinds of diagrams are important communicational tools in both analysis and design. All three are important predecessors and pioneers in the development of computer software, parametric design and the Internet. If we would be able to prove these continuities, would it be possible, maybe with the help of new computer technology, to once again transform the ideas of the Viennese Settlement movement into methods that have a better chance of success? Maybe that is too much to ask. But even if we will not be able to solve that problem, we might at least open doors to a different sensibility in thinking about architecture. Because apart from the quest for more sustainable, worthy living conditions for the largest part of the population, the question how architecture, Magic Architecture, as a more intelligent form or organisation develops out of the everyday reality of the built environment, remains the key question of what architecture is or could be—and thereby it might attract the attention of the profession.

References

- Alexander, Christopher. 1964. *Notes on the Synthesis of Form* (Cambridge, Mass./London: Harvard University Press).
- Alexander, Christopher, Sara Ishihama, Murray Sylvester, with Max Jacobson, Ingrid Fishdahl-King, Shlomo Angel. 1977. *A Pattern Language: Towns, Buildings, Constructions* (New York: Oxford University Press).
- Chermayeff, Serge, Christopher Alexander. 1963. *Community and Privacy* (New York: Doubleday & Company, Inc., Garden City.)
- Cohen, Jean-Louis. 1995. Scenes of the World to Come, European Architecture and the American Challenge (Paris/Montreal: Flammarion/CCA).
- Hacking, Ian. 1990. *The Taming of Chance* (Cambridge: Cambridge University Press). Hilberseimer, Ludwig. 1927. *Großstadtarchitektur* (Stuttgart: Hoffmann).
- Kiesler, Friedrich. 1996. 'Magic Architecture' in Frederick J. Kiesler, *Selected Writings* (Ostfildern: Hatje).
- Kiesler, Friedrich. [1949] 1997. 'Manifeste du Corréalisme'. Originally in L'Architecture d'Aujourd'hui 2, 2.6.1949, 80–105. Facsimile in: Dieter Bogner, Friedrich Kiesler, Inside the Endless House (Wien: Böhlau).
- Kiesler, Friedrich. 'Magic Architecture', unpublished manuscript, written in the 1950s (Archives of the Kiesler Foundation, Vienna).
- Krakauer, Jon. 1996. Into the Wild (New York: Villard).
- Le Corbusier. 1964. *Oeuvre Complète*. Volume 1, 1910–29 (Zürich: Les Editions d'Architecture/Artémis).
- Neurath, Otto. 'Anti-Spengler' [1921] 1981, in Otto Neurath. *Gesammelte Philosophische und methodologische Schriften*, vol 1, edited by Rudolph Haller und Heiner Rutte, (Wien: Hölder-Pichler-Tempsky) 139–196.
- Rudofsky, Bernard. 1964. Architecture without Architects (New York: MOMA, Doubleday & Company, Inc., Garden City).
- Vossoughian, Nader. 2008. Otto Neurath, The Language of the Global Polis (Rotterdam: NAi Publishers).
- Vossoughian, Nader. 2008. 'Otto Neurath, The language of the Global Polis'. Lecture, Univ. of Innsbruck, 20-05-2008, Podcast at www.architekturtheorie.eu, http://www.architekturtheorie.eu/?lang=DE&archive_id=175 or in iTunesU.