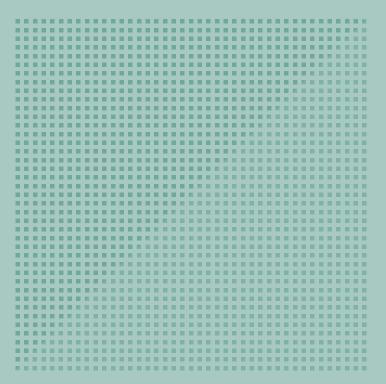
# Van Lohuizen & Van Eesteren Partners in Planning and Education at TH Delft



Inaugural Speeches in the Built Environment: Global and Contextualised



#### Van Lohuizen & Van Eesteren

#### TU Delft Open 2015



#### Van Lohuizen & Van Eesteren Partners in Planning and Education at TH Delft

Inaugural Speeches in the Built Environment: Global and Contextualised

#### Inaugural Speeches in the Built Environment: Global and Contextualised

Series Editors: Carola Hein and Herman van Bergeijk [Chair History of Architecture and Urban Planning, TU Delft]

#### ISSUE 1

#### Van Lohuizen & Van Eesteren Partners in Planning and Education at TH Delft

Guest Editor: Herman van Bergeijk Translation: UvA Talen Design: Sirene Ontwerpers

This small booklet contains the inaugural speeches of Th. K. van Lohuizen and Cor van Eesteren on their appointments as professors at the Technical College of Delft. The texts provide novel insights into their respective teaching programs, and appear here for the first time in English. An analytical reflection on their work by the architectural historian Herman van Bergeijk introduces them. The notes in the speeches are made by the editor.

Funding from the EFL Foundation made this publication possible.

© 2015 TU Delft Open ISBN 978-94-6186-495-6

## Inaugural Speeches in the Built Environment: Global and Contextualized

Inaugural speeches have long been unique moments in the careers of academics in many countries: they offer time to pause, to reflect, and to envision new approaches. Planners and architects in particular have used such speeches to tie together insights into design work and education and to offer a programmatic view on their own role in the academic community. Prepared with great care for university and general audiences, inaugural lectures also offer later researchers insight into the thoughts of these scholars at a specific moment in time. Material gathered for and notes written on the occasion of these lectures can help such researchers understand the work habits and thought processes of their authors, perhaps even their relationships with colleagues and students. This series presents inaugural lectures - translated into English and contextualized with scholarly introductions – to unlock information for comparative research and set the stage for new investigations. For example, scholars can use these works to explore educational activities in the built environment or to study the dissemination of planning and design ideas. The series starts with the words of two professors from Polytechnic in Delft (today's Delft University of Technology) who were highly influential in the Netherlands and beyond.

Carola Hein and Herman van Bergeijk

#### Contents

Herman		D		:1.
Herman	van	Kero	$e_{1}$	IК

Cultivated landscapes as new cathedrals 9

#### Th. K. van Lohuizen

The Unity of Town Planning 41

#### Cor van Eesteren

The Conception of our present-day Settlements and cultivated Landscapes, their Appearance and Expression 59

List of figures 93
On the Editors 95



 ${
m FIG.\,1}\;$  Drawing of the Westelijke Tuinsteden [Western Garden Cities] for the General Extension Plan of Amsterdam as conceived by Cor van Eesteren with the help of Th. K. van Lohuizen

### Cultivated landscapes as new cathedrals

I have the same idea with all my books: an attempt to come close to the core of reality, the structure of reality, as opposed to the merely superficial.

The realistic novel is remote from art. A novel should heighten life, should give one an illuminating experience; it shouldn't set out what you know already. I just muddle away at it. One gets flashes here and there, which help.

I am not a philosopher or an intellectual. Practically anything I have done of any worth I feel I have done through my intuition, not my mind – which the intellectuals disapprove of. $^{'1}$ 

In the mid-twentieth century, the Polytechnic of Delft (TH Delft, today's Delft University of Technology) appointed engineer and city planner Theodoor Karel van Lohuizen (1890-1956) and architect and city planner Cor van Eesteren (1897-1988) as *extraordinary professors*. Van Lohuizen, appointed in 1947, worked there until his death in 1956, and Van Eesteren, who started in 1948, taught until his retirement in 1967. Numerous scholarly publications by Vincent van Rossem, Kees Somer and others document their intensive collaboration before World War II on the extension plan of Amsterdam.<sup>2</sup> Their collective work after the war, with the help

P. White, Patrick White Speaks, p. 24.

<sup>2</sup> V. van Rossem, Het Algemeen Uitbreidingsplan; K. Somer, The functional city.

of students in Delft, is less known. And, as the writer Rein Blijstra stated as early as 1971 in his little monograph on Van Eesteren, 'the developments resulting from his educational work at Delft merit more attention'. Their work at TU Delft, separately and together, is of fundamental importance to the development of town planning in the Netherlands.

Both professors gave inaugural speeches when they came to the Polytechnic, Van Lohuizen on the 11<sup>th</sup> of February 1948 on the 'The Unity of Town Planning', and van Eesteren on the 28<sup>th</sup> of April of the same year on the 'The Conception of our Present-day Settlements and Cultivated Landscapes, Their Appearance and Expression'. These talks established town planning as a discipline in the Netherlands and beyond. The professors' overall work and methods, including statistics, formed the programmatic basis of the knowledge of many future town planners in this country. They acquainted students with two sides of the discipline: the scientific one and the more artistic one. Van Lohuizen focused on the first, Van Eesteren on the latter.

This article sheds light on a lesser-known period in these men's lives and contributes to the history of the school in Delft, particularly the history of the teaching of architecture and town planning. Both men studied various cities in Europe in depth and took study trips to many other locations. Van Eesteren also directed many students to work on small towns and villages in the Netherlands. In their work, we can see how he classified these settlements and how he thought about their relationship with the surrounding landscape, a theme upon which he touched in his inaugural speech. Indeed, Van Eesteren was dedicated to his teaching, although he refused to write his lessons down (as he wrote in a draft letter to

Blijstra, C. van Eesteren, p. 1004.

his colleague at Delft, professor J.L. Klein).4 Klein had sent him the resumes of his lectures on planning. Van Eesteren found these interesting but had a different educational method. He preferred to jot down some key words, avoid giving 'rules and formal systems' and leave much to the moment. He also refused to teach rules and key terms, as he believed that they would destroy the spontaneous creativity of students. Instead, he taught them to improvise. (In this sense he was the opposite of Van Lohuizen, who was both meticulous and mainly interested in teaching research skills based on a scientific approach.) His inaugural speech was one of the few texts on which he really worked intensively and that took him some time to prepare, as the material in his archive clearly shows. This does not mean that Van Eesteren took his educational work in Delft. lightly. On the contrary, his agendas and notebooks show just how seriously he took his encounters with students and how strictly he planned his time with them, sometimes even hour by hour.

The Archives of Van Lohuizen and Van Eesteren at the Het Nieuwe Instituut hold a vast amount of information on the teachings of both professors: lecture notes, student work, and other material from their time in Delft. It also holds English translations of their 1940s inaugural speeches, showing that both professors were interested in publishing their views for an international audience, even many years after the fact. The archives also give information on the genesis of the inaugural speeches and their effect on their students and friends. Colleagues and friends of these two professors appreciated their speeches, as the many letters of congratulations show. But the immediate impact of the speeches on the profession was less great. Nonetheless, through their teaching and their practice these scholars were able to effectively illustrate and disseminate their ideas.

The code (HNI, Archief van Eesteren, EEST VI 78) refers to the inventory of the archive of Van Eesteren, that is kept in Het Nieuwe Instituut in Rotterdam.

In the classroom, they advanced the position that town planning was not based on the work of the individual but relied on fruitful teamwork between researchers from the different urban disciplines. Outside the classroom, they worked with experts from economics, agriculture, landscaping, and so on, many of them from other institutions and universities. Town planning became teamwork. This idea of interdisciplinary collaboration in education and practice has currency today, as we witness planners' renewed interest in research and statistics as a creative means of dealing with the city and its problems.



FIG. 2 Van Eesteren in 1987. The contact sheets including this photo were rescued from the Van den Broek en Bakema faculty building after it was completely demolished by fire in 2008.

Instead of referring students to the traditional knowledge of the discipline, embedded in manuals, handbooks, history surveys, historical examples, etc., Van Lohuizen and Van Eesteren stressed the importance of gathering scientific facts and of coming into contact with the visual contemporary arts. Van Eesteren played an instrumental role in the history of urbanism education in the Netherlands, Scholars of Dutch architecture from J.J. Vriend to H. Ibelings regard him as a modernist, a counterpart and foil to the more traditionally oriented Marinus Jan Granpré Molière, who in his architecture was an enthusiastic advocate of the use of brick and who later was one of the main Roman Catholic architects in the Netherlands. Van Eesteren's expansion plans for Amsterdam earned him a good reputation before World War II; his postwar work focused on the IJsselmeer polders, but also involved modernizing urbanism education in Delft. Almost every Dutch post-war urban designer, whether urbanist or architect, was influenced greatly by the lessons of Van Eesteren. As architectural historian Auke van der Woud points out, Van Eesteren represented an 'artistic type of urban design', an attitude that might not have placed him at the heart of post-war dynamism in the field of urbanism, but that did ensure he was able to open the eyes of many students to changes in the fine arts.<sup>5</sup> Van Eesteren was greatly influenced by pre-war art movements and had friendships with many of the artists, including Theo van Doesburg.

Van Eesteren pioneered his new approach at an institution undergoing tremendous change. Education on architecture and the built environment at what was then the Polytechnic in of Delft (Technische Hogeschool Delft) needed a radical overhaul to adapt to new standards. The executive board of the Polytechnic (in which C.H. van der Leeuw, director of the Van Nelle factory,

<sup>5</sup> A. van der Woud, "Een toon van Hulde," p. 4-5.

was an influential figure) appointed many new staff and faculty members. The power of the old guard, whose most influential exponent was Granpré Molière, who had been Professor of Architecture since 1924, remained undiminished at first. But calls grew for modernization and for tailoring education to the needs of the time. Three new professors were brought in by special appointment by to teach architecture and urban design: Johannes Hendrik van den Broek, Van Eesteren, and Gerardus Hendricus Holt. In the weekly magazine De Groene Amsterdammer of 17 January 1948, the famous architect J.J.P. Oud welcomed this move towards modernism. As an advocate of a 'new art of construction', he saw the appointment of Van den Broek and Van Eesteren as a positive step towards improving the education on offer. (He had his reservations about Holt.) 'Het nieuwe bouwen [the modernist movement in Dutch architecture and construction] eschews preexisting forms. Rather, it bases itself on the needs and possibilities that arise from the practicalities of everyday life and enables these, as it were, to burst out to create a new form. It develops in an evolutionary way, continually recreating itself. The resulting form takes shape not at the start, but at the end of the design process. This very concept has hitherto been almost totally alien to the Delft program and the art Delft has presented to us previously has been visual in nature rather than functional. Giving students freedom is worthless when a view like that at Delft prevails. Just as in the old-style architecture program, so with the new art of construction the students must be guided according to principle and expertise. This new art of construction cannot be left for the students to solve of their own accord. This will lead to chaos or ... to the Delft School!'6

J. Oud, "Drie nieuwe Professoren Delft."



FIG. 3 Cor van Eesteren in a Sikorsky helicopter during his visit to Brazil in 1958

It is both striking and remarkable that Oud makes no reference to the appointment of van Lohuizen at the same institute, despite being well acquainted with his work. Some eight years earlier, he had offered his apologies to Van Lohuizen for being unable to attend his public appointment as lecturer at the University of Amsterdam. 'I am delighted that you have the opportunity to put your knowledge of and dedication to this field to good use in educating a new generation of urban designers.'

See letter from J.J.P. Oud to Van Lohuizen, dated 24 January 1940, in HNI, Archief Van Lohuizen.

On 11 February 1948, Van Lohuizen gave his inaugural address in Delft, as professor of urbanism research by special appointment. Around two months later, on 28 April, Van Eesteren gave his own speech to mark his acceptance of the post of professor of urbanism by special appointment. As was customary, both of these speeches were published. In addition, Van Lohuizen published his speech as an article in the journal Tijdschrift voor economische geografie [Review of Economic Geography].8 That journal had also, in 1940, published his public lesson on the subject of scientific research in urban design, 'Het wetenschappelijk onderzoek in den stedebouw' [Scientific Research in Town Planning]; he had originally given it as a speech to mark his appointment as private lecturer at Amsterdam University. He had sent a copy to the architect Willem van Tijen, who communicated in a letter how much he had enjoyed reading it. He wrote: 'It is characteristic of the way in which Urban Design is developing [...] I was very impressed by the quality of the articles on the subject in the journal V. & S. I was also particularly taken by the Slotermeer plan. If it succeeds, it will be a real achievement. Something like this engenders confidence, even in impatient and skeptical people like me.'9 Many years later, in 1982, Van Eesteren wrote to the architect J.P. Kloos that the three speeches - the one in Amsterdam and the one in Delft by Van Lohuizen in Amsterdam and his own - should be regarded as complementary.<sup>10</sup> Yet they never contemplated making a booklet out of all three speeches.

The speeches in Delft offered both professors an opportunity to present their thoughts to their future students, and also to bring their ideas to the attention of colleagues within and beyond the institute. It was not only a local but a national event. But there were few reactions to the factual content. Most people

Th. Van Lohuizen, "De Eenheid van Stedebouwkundige Werk," p. 401-407.

See letter, dated 13 February 1940 in Archief Van Lohuizen.

See letters in: HNI, Archief van Eesteren, EEST X 1026.

congratulated Van Eesteren but did not enter into the merits or defects of his text. Writer and friend Til Brugman did levy some stern criticism in a long letter: 'You take things as your basis and go from there to people. Whereas I go from people to things. [...] Ultimately all work starts for the sake of people. That point cannot be made clearly enough, especially to students. Perhaps you will find it strange that I place the emphasis in this way, because you will say: all construction - it cannot be clearer, because without people it itself does not exist - is based on people. But it also needs to be SAID.' She believed that he should take the human connection as his starting point. There was little feedback from further away. Because the addresses were given in the Dutch language, their effect was limited to the Dutchspeaking area. Van Eesteren saw this as a great disadvantage. He had an international reputation and was often invited to act as a consultant or speaker abroad. His archive includes an English translation of both his own speech and that of Van Lohuizen. (Van Eesteren's speech was translated in 1981 by Anneliese Nassuth-Broschmann. Her relatives, G.S. (Siegfried) Nassuth (1922-2005) and Götz A. Nassuth had been students of Van Eesteren in Delft. On the death of the master, Götz Nassuth had published some of his memories in Archis.)

Although much has been written about the life and work of Van Eesteren and a monograph was published about Van Lohuizen, there has been little focus on their teaching. This is strange, because they significantly influenced teaching, and the archives of both professors include a wealth of information about their work at the Polytechnic. The most remarkable aspect of this information is

In a letter to Van Eesteren, dated 16 March 1981, Nassuth-Broschmann refers to the translation. We have used this translation and amended it only if there were obvious errors in the translation of the quotations. (HNI, Archief van Eesteren, EEST X 1026)

probably the inherent conflict it reveals in Van Eesteren's teaching between the freedom of art and the thoroughness of research. He peppered his lectures with references to works of art - poetry and literature and the like – but did not deny the importance of history and research into the facts that underlie the transformation of a city. He used all kinds of material to explain his approach: photographs, descriptions of places, cross-sections, historic maps, and other illustrations. He expected his students to do thorough research, including fieldwork, into the origin and development of the towns and cities that he discussed. While Van Eesteren made a plea for freedom from traditional ways of looking and applying town planning rules, Van Lohuizen was teaching the importance of facts and their interpretation. Avant-garde art played a major role because it set a different mind frame for the students, but the freedom that the art suggested was bound by the thoroughness of the research.

Both professors conceived of urban planning as a collaborative practice. Study groups in Van Eesteren's classes included students from his own department and also students from other disciplines and other universities. Urban design and planning were the two poles within these study groups. And thanks to their networks of contacts, close collaboration was guaranteed between the different disciplines, study groups, and municipalities of the cities used as case studies. Students closely studied many small towns and villages, their work forming the basis for extensive reports and expansion or development plans, complete with comments of all those involved. Many municipalities were very happy with the students' research and facilitated it in various ways. When a group of students issued a final report, they would often present it in the municipality concerned, accompanied by some festivities. It is interesting to note that the professors and students did not treat the major cities in this way. The focus was on the smaller cities and villages. The metropolitan areas were more likely to be

the subject of lectures or a popular destination for excursions. Along with major cities in the Netherlands, teams visited foreign cities with international appeal. These excursions were part of the curriculum.

Van Eesteren's address indicates that he was interested not only in urban settlements, but also in wider vistas. The title of his speech indicates this clearly. He focused primarily on the relationship between villages (or small towns) and the surrounding landscape. Town and country were inextricably linked. This approach seems connected with pre-war German scholarship that had focused on natural landscapes and their charm (Paul Schultze-Naumburg, Hans Bernhard Reichow, or Fritz Schumacher, for example), but Van Eesteren was primarily interested in landscapes shaped by humans, or cultural landscapes.

Whereas Van Eesteren traced in his speech a broad and lively picture of the world around him, the speech of Van Lohuizen was almost austere and to the point. In his inaugural address, Van Lohuizen did not quote anyone. He did not explore the history of his subject or the work of, for example, Robert E. Park or Ernest W. Burgess, who both emphasized the value of surveying for urbanists. Van Lohuizen merely touched on problem areas and tried to elucidate the objectives of his work. His approach was not directly scientific; rather, he intended to make the difficult subject understandable to his listeners. He pointed out that town planning had to integrate general research with local research; general knowledge and specific surveys should both form the foundation of the discipline.

Van Lohuizen made a strong argument for fieldwork and also for more comparative analyses between cities of a similar size. Van Eesteren adopted a different means of arriving at results. This was already clear in his inaugural speech. He referred here

to modern artists and art movements (he had little interest in traditional art); avant-garde art best expressed the new values of his own time. Most of his listeners were probably familiar with the names he mentioned: Arp, Mondrian, and Van Gogh were all respected artists, especially among the post-war generation. Georges Vantongerloo and Herman Kruyder may have been slightly less well-known, yet Van Eesteren deliberately uses these figures to demonstrate that knowledge of art is of great importance in students' development. He referred to the work of three urbanists in particular: Fritz Schumacher, Ludwig Hilberseimer, and Eliel Saarinen. Since the 1920s, Van Eesteren had been a great admirer of Fritz Schumacher, the Hamburg-based architect, urban designer and theorist whose plans for Cologne had earned great acclaim In the Netherlands. Van Eesteren had certainly read Schumacher's memoirs Stufen des Lebens [Steps of Life] published in 1935 and republished in 1949, but it is not known whether he was also familiar with Schumacher's extensive theoretical writings. Schumacher was an influential town planner and certainly had a broad perspective on his own profession as even his last books testify. At the beginning of his career Van Eesteren was very keen to work with Schumacher and asked him for advice on several occasions, in correspondence now in his archive.12 Schumacher explicitly advised him to focus on the organizational aspects of the profession. According to Van Eesteren, the new districts that Schumacher designed for Hamburg were similar to those that had been established in Amsterdam: 'They both had broadly the same virtues and shortcomings.' He did not give a more detailed specification.<sup>13</sup>

See letters in: HNI, Archief Van Eesteren, .EEST X 1046.

C. Van Eesteren, "In Memoriam Fritz Schumacher", p. 65.

Van Eesteren also cited Ludwig Hilberseimer, who had emigrated from Germany to the United States after the Nazis had come to power. His book The New City, published in 1944, proposed the gradual dissolution of cities and a new kind of relationship between landscape and human settlements. It starts with an excerpt from Walt Whitman's poem Leaves of Grass, which is followed by an introduction by Ludwig Mies van der Rohe, who wrote: 'He [Hilberseimer] knows that cities must serve life, that their validity is to be measured in terms of life, and that they must be planned for living. He understands that the forms of cities are the expression of existing modes of living, that they are inextricably bound up with these, and that they, with these, are subject to change. He realizes that the material and spiritual conditions of the problem are given, that he can exercise no influence on these factors in themselves, that they are rooted in the past and will be determined by objective tendencies for the future.'14 These words could almost have been written by Van Eesteren himself. He attempted to make the very same point in his inaugural speech. Just like Hilberseimer, Van Eesteren believed that urban designers of the early 20th century had become aware of their responsibility to society: 'Then the growing recognition of the forces shaping intellectual, social and economic and technical changes was definitely brought into the field of city planning to effect there significant and lasting concepts. City planning became a science. Man came to realize that, like any other science, it is rational and must be mastered in all its phases.<sup>15</sup> At times you could almost hear Hilberseimer's words echoing in Van Eesteren's speech. Hilberseimer's book ends with an allusion to the relationship to landscape, citing the examples of Versailles, Karlsruhe, and Bath; this would certainly have appealed to Van Eesteren.

<sup>14</sup> M. van der Rohe, Introduction to L. Hilberseimer, The New City. Principles of Planning, p. 15.

L. Hilberseimer, The New City. Principles of Planning, p. 190.

Indeed, it was one of the themes that he raised in his letters to Schumacher, who recommended that he visit some parks in England. Like Van Eesteren, Hilberseimer took an artistic approach to urban design: 'Only by mastering the technical means can the city planner realize his aims with artistic freedom. This freedom must be always linked with the useful and the necessary.' But for Van Eesteren, modern art in particular was an important factor in reaching this freedom. This was something he was particularly eager to impress on his students. He sought to perpetuate artistic influences to enable them to serve as symbols of a new reality. They sharpen our sensory perceptions. He left the more scientific approach to the surveyor and others.

In this, Van Eesteren was very similar to the third urban designer who interested him and to whom he referred in his speech: Eliel Saarinen. Saarinen wanted to draw a distinction between town planning and town design, favoring the latter. 'Town-planning', he wrote, 'has gradually become surrounded by an aura of insipidity due to the degrading effect of superficial practice. In our analysis, therefore, at least as far as the three-dimensional conception of the physical city is concerned, the word planning has been avoided in all cases where misunderstanding could have arisen. It is a word that implies a vapid dryness, just the same as does a stereotyped street map laid out on paper as a mere utilitarian pattern of intercommunication. Therefore, to avoid misunderstanding, the word design was preferred. It implies that civic organization must spring from wells deeper than the utilitarian purpose only.'' It is impossible to underestimate the

L. Hilberseimer, The New City. Principles of Planning, p. 191. Also see for Hilberseimer: S. Colman, "Promoting the New City: Ludwig Hilberseimer at the Art Institute of Chicago, 1944", in: R. Freestone/M. Amati [ed.], Exhibitions and the development of modern planning culture, p. 111-129.

E. Saarinen, The City, Its Growth, p. 354.

importance to Van Eesteren of Saarinen's sparsely illustrated book. Many of the ideas and concepts that Saarinen raised recur in Van Eesteren's speech. Though Saarinen ignored the connection with the other arts he emphasized what Van Eesteren saw as the problems of the modern city: the lack of leadership, or what Saarinen referred to as 'proper counsel'. Van Eesteren would certainly have agreed with his view that 'it is most important to understand more than has been so far understood, that past methods of town-building are not valid anymore, and that present and future methods must be based on entirely new premises. And these new premises can and must be found only in and through the existing difficulties'. 18

It is not surprising that Van Eesteren mentioned Sigfried Giedion in his inaugural speech. The two had been acquainted for many years and formed the active and organizational center of the C.I.A.M. (Congrès internationaux d'architecture moderne) for many years, Giedion as the secretary and Van Eesteren the president. They maintained a lively correspondence and had met each other on many occasions. Both were present at the C.I.A.M. conference in Bridgwater in 1947. Giedion's reputation was partly based on his publications, in which he promoted modern architecture. In 1938 and 1939, he was invited to give the Charles Eliot Norton lectures at Harvard in Cambridge in the United States. He published them in 1941 with the catchy title Space, Time, and Architecture. This book became an influential resource for understanding modern architecture and a standard work in architecture schools that wanted to teach a fresh look at history. Van Eesteren was probably eager to see this book used in Delft as he referred to it on several occasions.

E. Saarinen, The City, Its Growth, p. 143.

Giedion was and is considered to be 'a milestone in modern thought'. He saw history not as a collection of facts but as insight into the dynamic and ever-changing process of life. He sought to create a new tradition that would also include urban design: 'The virtues and defects of various types of cities – governmental centers, sea ports, factory towns – cannot be compared, simply because there has been no steady and unified research.' Giedion believed in progress, although the Second World War would dampen that belief to some extent. He celebrated the same developments of society and the dominant role of technology as Van Eesteren and similarly connected architecture, urban design, and the fine arts. Giedion acknowledged these resemblances, and would even devote a chapter to 'Van Eesteren's idea of the town planner'. Let

From the speeches it can be ascertained that Van Lohuizen and Van Eesteren worked successfully together. This is not surprising. They believed in the positive effects of teamwork and had already worked together on the Amsterdam General Expansion Plan [Algemeen Uitbreidingsplan van Amsterdam].<sup>22</sup> It was a lucky turn of events that both were appointed at Delft.

D. Mertins, Transparencies yet to Come. Also see: D. Mertins, "System and freedom. Sigfried Giedion, Emil Kaufmann and the constitution of architectural modernity," in: R.E. Somol [ed.], Autonomy and Ideology. Positioning an Avant-Garde in America, New York 1997, pp. 212-232, and Z. Ceylanli, Sigfried Giedion's "Space, time and architecture: an analysis of modern architectural historiography.", unpublished thesis Middle East Technical University, 2008.

<sup>20</sup> S. Giedion, Space, Time and Architecture, p. 9.

S. Giedion, Space, Time and Architecture, p. 816-817.

V. van Rossem, Het Algemeen Uitbreidingsplan. Also see: M. van Stralen, "Empirical urban analysis. The collaboration between Van Eesteren en Van Lohuizen." in: Daidalos, 1998, nr. 69/70, p. 60-67.

Their joint arrival in Delft laid the foundations for a new way of teaching, in which students attended lectures but worked primarily in study groups supervised by various professors.

But Van Eesteren was initially quite dissatisfied with the conditions of his appointment and its duration. Following some disagreement over terms with the director of the department, Granpré Molière, Van Eesteren finally announced his willingness to accept the appointment on 18 July 1947, although not all of his objections had yet been met. The main issue was that the department initially intended to offer him a temporary appointment for only five academic years, and he sought a more permanent position. Several professors of the architecture department in Delft - Herman Rosse, Ludwig Oswald Wenckebach, and Henry Tino Zwiers, none of them representatives of the most progressive movement - visited Van Eesteren and convinced him of the possibilities of expressing and teaching his own ideas. After their visit he wrote to the department arguing that the 'movement expressed in Nieuwe Bouwen [New Building] [...] must have such representation, that the potential that lies within Nieuwe Bouwen can effectively be brought out. Only then will it be possible to achieve a genuine interplay of insights and growth of ideas'. Van Lohuizen did not harbor similar objectives. As well as working at other universities, he had contributed to an urbanism course in 1942, for which he taught research methods (Jules Henri Froger was responsible for urban design at that time in Delft) and had found his niche, in which he was perfectly happy. His work did not represent a distinct direction with the discipline.

Van Eesteren, who had acquired teaching skills when he was professor of architecture and town planning in Weimar in 1926, began to give lectures in Delft in the autumn of 1948. On 5 November, he spoke of the 'use of moderation and scale in connection with the street plan' and a week later raised the issue of 'De Stedebouwkundige Ruimte' [Urban Design Space].

In the spring, he raised the subject of villages, using the report issued by urbanism consultancy 'Instituut Stad en Landschap van Zuid Holland' [Institute City and Landscape of the province South Holland] on the towns Alblasserdam, Hardinxveld, and Lekkerkerk. He also explored villages in the north-eastern polder, including Nagele and Nieuwe Tonge. An excursion to Schiphol was also included in the program. His choice of subjects was anything but random. Van Eesteren knew very well which areas to tackle and where future problems lay. The relationship between the village and landscape was a particularly frequent subject, not only in his lectures but also in his study groups. His arguments were often illustrated by personal experience. After taking a study trip to Copenhagen with Van Lohuizen, for example, where he met Flemming Teisen and other members of the Danish Town Planning Institute, he immediately incorporated his impressions in a lecture. For most of his lectures, he drew up a rough structure that he loosely fleshed out with an artistic argument. He would always leave room for interesting excursions. Images of paintings, pictures, and maps were always his main references and as he spoke he would constantly correct and re-correct himself as he searched for the right word to express what he wanted to say. As Blijstra recalls, his students dubbed him the great stammerer.<sup>23</sup>

Again, the multidisciplinary study groups were a particularly important innovation. These involved professors from within and beyond Delft meeting with students of various disciplines. In the academic year 1949/1950, the town of Gorkum was the subject. Van Eesteren noted that he had good experiences with this course; he intended the work not only to result in communications that could compiled in larger reports, but also in exhibitions, 'possibly to mark institute anniversaries'. He wished to address Leerdam or Breda in

R. Blijstra, C. van Eesteren, p. 15.

the following year, and indeed Breda was chosen as the next case study. In subsequent years, students and specialists scrutinized and discussed the towns and villages Apenberg, Goor/Rijssen, Markeloo, Bergen op Zoom, Weesp, Steenwijk, Purmerend, Kuilenberg, Hattem, Doesburg, and Hardewijk in many separate sessions.

Many students attended the courses, especially those who had a special interest in town planning. They came into close contact with the professors and often had a special relationship with them. An example are the Nassuth brothers, who participated in the Bergen op Zoom study group in 1952. This group was led by the professors Hendrik Gerrit van Beusekom, Froger, P.Ph. Jansen, Van Lohuizen and Van Eesteren.<sup>24</sup> Siegfried Nassuth served as Van Eesteren's assistant. His brother, Götz Nassuth, did not mention the study groups in his recollections but he did write that Van Eesteren's lectures made a great impression on him. Van Eesteren had a penchant for using visual illustrations. 'The images and associated text each formed an independent information link witshin a chain, whose cohesion was to be gleaned from the context of the lecture. An important factor that contributed to this approach was his express desire not to be a theoretician. This meant that, during the lectures, one needed to have the theory that formed the basis of the narrative to hand in order to be able to contextualize the flow of verbal and visual impressions and fully understand the result. All of this led to the fact that no lecture notes were ever published of Van Eesteren's work.'25

<sup>24</sup> H.G. van Beusekom (1893-1976) became professor of public housing by special appointment in 1947. J. H. Froger (1903-1976) started as a lecturer and was professor of urbanism from 1947. P.Ph. Jansen (1902-1982) was professor of hydraulic engineering.

<sup>25</sup> G. Nassuth, "Herinneringen aan Van Eesteren," p. 5.

De conceptue va let Redeboundendig pla. 1 Ons lock Our Westerine One Vinie Our Joans Beeldand vernage. De Redstomstandige activitail va one till in genicht op let geltel op en totalteit. My store van destrock on to en totalteit to tidete e or well in do lot a stort. Dit vellen de innelse drong va vele ion de steleto Het mand the level membergethall west dut let se tobalited an in home as ... bule de state leeft ee drang om de Nedebr met allee lij de bombe by to det, ook bij die, welke wid oonbreide op tedrick Elle grap betom take t av let overall alle of the property of the property of the general be welling to de greye drawn on the wall of all of all of all the time relieve on that let terein wome in balons. altroal. Porlonderook tunnochunlyggen etc. aplantie in Emplie i Complie che real by arbunding shotatie.

FIG. 4 Notes of Van Eesteren for a lecture

Yet the archive does contain a transcript of a lecture dating from February 1952, when Götz Nassuth was a student of Van Eesteren, on the subject of 'Design and recreation sites'. Van Eesteren had hung up maps and photographs on the walls and stated: 'Objects of recreation are examples of living matter. Everything is in motion [...] We need to experience it to the full.'

For fieldwork, the students could fall back on the teaching of Van Lohuizen. He covered such themes as residential district, population, traffic, and income sources, and he explained research methods. Though he was no lover of statistics, he accepted them as an invaluable resource: 'figures are the symbols of life itself. Statistics are not only an analysis of what exists, projection into the future is also possible as Van der Valk points out who examined van Lohuizen's education in more depth.'<sup>27</sup> He had the students examine the flow of traffic, counting pedestrians, bicycles, cars, trucks, and other road users. They would experience the city by being physically present during longer periods.

Van Lohuizen's teaching came to an abrupt end on 9 December 1956, when he died following a brief illness. Van Eesteren delivered a speech at his funeral, very much appreciated by the family because it was such a vibrant portrait of the deceased: 'At home, withdrawn, gentle and friendly and quietly thinking and working – here, the strong contours of creative work and human attachments.' The warm words were a testament to a close friendship. Van Eesteren summarized the importance of Van Lohuizen: 'You, the apparently exclusive and – as precise as possible – deliberative researcher, embodied for us the understanding of the rich wealth and plenitude of life in the city and in the countryside. Your probing mediation

<sup>26</sup> See: "Vormgeving en ontspanningsterreinen" in: HNI, Archief Van Eesteren, EEST VI-160.

<sup>27</sup> A. van der Valk, Het levenswerk van Th. K. van Lohuizen.

brought us an awareness of the nature, being, function etc. – characteristic and visible expressions of this life. His research did not have a 'cooling influence'. Quite the contrary, it was of enormous value: 'In the study groups that embodied your passion and came about above all at your initiative, interdisciplinary collaboration is spontaneously and continuously put into practice.' According to Van Eesteren, they approached their teaching 'like two brothers sharing the same trade'. Van Lohuizen attempted to make Hans Westerman his successor but he did not succeed. Westerman went on to make a name for himself in Australia, while H.G. van Beusekom would take on Van Lohuizen's lectures and students.

After Van Lohuizen's death, Van Eesteren continued to supervise the study groups. But he had lost a fellow traveler, and the atmosphere at the institute gradually began to change. He mainly had contact with students in his consultation hours, when he took extensive time to discuss their papers. He carefully updated his diary and assistance and assessment timetables. In December 1959, he gave lectures on the 'history and background of the C.I.A.M'.<sup>30</sup> Although he often referred back to comments from his inaugural speech and used them as a point of departure for his lectures, he had never devoted a separate lecture to the C.I.A.M. and to the importance that these had had for him in particular.

<sup>28</sup> Concept letter in: HNI, Archief Van Eesteren, EEST VI 78.

For Westerman, see: R. Freestone, "Hans Westerman and planning for options", in: R. Freestone [ed.], Cities. Urban planning, traffic and environmental management in the nineties, Annadale 1983, p. 1-14.

<sup>30</sup> See documents in: HNI, Archief Van Eesteren, EEST VI 179.

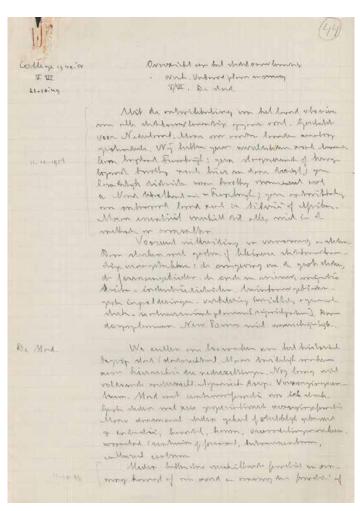


FIG. 5 Page of a lecture of Van Lohuizen

He did this now in response to the recently-published issue of the journal Forum, in which Aldo van Eyck had published his 'story of another idea'. Van Eesteren wanted to illustrate his own origins and emphasize the benefits of the C.I.A.M.; he argued that the views of Van Eyck and others failed to do justice to reality: 'The FORUM issue again addresses the matter intuitively. Now it is time for the reality. A city is something very real.' He felt that the students did not really grasp the importance of the C.I.A.M. and refused to see the benefits that these congresses had produced. In February 1960, the open-minded Van den Broek invited him to present a 'commentary lecture' [kommentaarkollege] to discuss and clarify his ideas. He faced quite a battle. Nic. Tummers, Jean Leering, and Pjotr Gonggrijp, all prominent students, turned against him, seeing him as stubborn and outdated. Van Eesteren did not understand their position and their protest. He defended himself by pointing out that 'analysis does not cause analytical settlements. The problem is not analysis itself, but becoming bogged down in it'. But in the subsequent commentary lectures, the fierceness of the attacks intensified. The attitude of Van Eesteren was described as being too clinical, too distanced from the people. Herman Hertzberger and Jelle Jelles also joined in the debate. The former argued: 'The madness starts when the individual and the collective are separated! Community cannot exist unless they come together. The meaning of the individual is lost in the new districts. FORUM has highlighted that there is something wrong here. The kasbah is cited as a possibility.' Van den Broek joined in: 'Our residential construction is like an off-the-peg industry. Individual people create their environments through paintings, furniture, color. The kasbah is something invented. Van Eesteren introduced the next session and spoke about the pre-parceling of land. He concluded: 'Architecture reaches up to the door knob: everything according to its nature and place in the community, but 'as an architect, one must not even begin building in a plan if one cannot engage with the vision of the urban designer.'

The debate continued afterwards, showing a conflict of generations. Yet many of the students that opposed Van Eesteren's views went with him on an excursion to Finland that was organized by the student association Stylos in 1961.

After the heated debate during the commentary lecture, Hertzberger, who had just graduated, felt the need to explain his views to Van Eesteren and wrote a long letter to do so. In it, he alluded to a 'grandiose misunderstanding'. 'It is (or has become) clear to me from the various reactions to what appears to have been dubbed the 'Forum idea' that, to use your own words, through the door that we have only placed on the latch, all kinds of unsavory individuals are attempting to enter, even trying to get a foot in the door; people who have never seen or felt anything, and are now claiming that they had always predicted this story, despite the fact they have no idea what they are talking about because they have hardly anything to say.' He admitted that he knew very little about the C.I.A.M.: 'But it is a pity that you are only now openly talking about this subject in Delft, when the ship is in peril or has even sunk.' Opinions polarized, with advocates of an autonomous architecture opposing the proponents of the Van Eyck 'story'. Hertzberger wrote bitterly: 'It is not only extremely difficult to shape and formulate your thoughts, but even harder to present things in such a way that they are not seized upon like prey by the wrong groups, making it almost impossible to discuss these things, because they cannot even talk, never mind engage in a discussion.'31 The letter from young Hertzberger signaled the changing climate in the department. Accord among the students - if it ever existed - had vanished and conflicts began to emerge.

31

See letter in: HNI, Archief Van Eesteren, EEST VI 90.

Van Eesteren remained a pivotal figure for many and was open to all directions. Even students who wanted to develop grand projects such as Henri Hulsbosch at the Weena in Rotterdam, or Frans van der Werf with his corridor city between Arnhem and Nijmegen could still turn to Van Eesteren. He also continued to invest a lot of energy into the study groups. In 1960, he supervised a study group that included Dirk H. Frieling, Jón Kristinsson, M.F.Th. Bax, Gerrit Smienk, Abel Cahen and several others. The object of their study was Papendrecht. Within such study groups, Van Eesteren was able to keep the peace. As long as he could continue his work in urbanism education, there were no problems. But the school was slowly phasing out this way of learning. Although the study groups had initially appeared to be successful, they came more and more under pressure in the 1960s. The cry for democratization began to take its toll and there were demands for different kind of consultation. The school replaced the study groups, in which every member still had his own responsibilities and was judged and criticized on these, with a less individual approach. Slowly the foundation was laid for the so-called 'vertical workshops' in which students from various years had to work together and deliver a collective result. But Van Eesteren had given opportunity to many students to discover their own views and arrive at a certain degree of emancipation.

Meanwhile, issues arose for Van Eesteren when he began to move outside his field of specialization and become involved in architecture. He sensed a lack of understanding on the part of architecture students. But he did not avoid confrontation and often reflected on the problems raised by students, for whom he had a great sympathy. This comes across most strongly in the frank letter that he wrote in January 1968 to Gonggrijp. Gonggrijp, who was an intriguing figure in Delft, had been part of the study group on the subject of the city Baarn and was about to graduate. Van Eesteren had already retired, but continued to supervise students' graduations. He wrote: 'My dear Gonggrijp.

I am captivated by your efforts and your work and repeatedly wonder what causes the anti-climax in our conversations. I think I can put this into words. You are looking for the form and structure of an occupation environment. Actually part of the western Netherlands. For that, you find frames of reference in the landscape: geological, historical or otherwise. You raise important psychological considerations. All of these are of a primary nature and significance. I am enthusiastic about the result with regard to these frames of reference. You then present your design sketches and - the enthusiasm disappears. [...] I wonder what could be causing this. Your method and working style? No, they are fine. So what could it be? In my opinion, the cause lies in the fact that you do not yet know about several co-determinant environmental factors, but still attempt to evoke a complete picture. You also need to explore and know about those factors, as you have about what I just mentioned. Things like traffic and transport, the way people live, production and services, physical cultures and relaxation. Urbanism enables all environmental factors to be integrated in order to achieve a maximum quality, both in terms of function and with regard to expression, atmosphere and so on, in other words as a work of art. Assuming that this is of interest to you, I would like to share ideas about it with you. As stated, I would like to find a not too challenging task in the western Netherlands where these as yet untreated factors will be easy to identify. I would like to do this partly in order to achieve your aim and also enable you to graduate in the near future.'32 Letters of this kind testify to the humanity and openness with which the professor engaged with others.33 He did not hide behind intellectualism or his status but was approachable. Overall he was much respected.

See letter in: HNI, Archief Van Eesteren, EEST X 855.

See letters in: HNI, Archief Van Eesteren, EEST VI 136.

This same kindness was expressed in a letter that he wrote in 1974 to the department secretary, Veraart, when she was leaving. He himself had left the department seven years before, but evidently had a good memory of her. Van Eesteren praised her energy and looked back on his own position within the department. It is interesting to note how he reflected on his colleagues and his past: 'I remember it as if it was yesterday - how you solved a furniturepurchasing problem simply by ordering factory furniture [...] I think it was because one or more professors who wanted to design their own had failed to deliver. [...] You simply believed that members of the department ultimately - it was around 1949 should simply be able to sit like normal people. I was one of the few professors who went along to the Gorkumse - Stylos - Hugo de Groot - Loevestein event; standing on a horse-drawn cart packed together and holding onto each other to avoid falling off we rode through crowds towards the town hall.'34 To attend, he had had to disappoint his friend Giedion, missing his lecture marking the anniversary of the study association of architectural students. He also explains how he ended up in Delft. 'My appointment was [...] not a straightforward matter in the department. Although when I entered, Molière said: "Van Eesteren, I opposed your appointment, but now you have been placed in our circle and accepted, you are zeen35 to me" - a comment that I of course appreciated and saw as positive. At the start, efforts were made to keep me confined to my remit, as a professor by special appointment. Van Lohuizen refused to play that game. He saw in me a partner who could realize his ideas and desires. Just think of his inaugural address on the unity of working in urbanism [De eenheid van het stedebouwkundig werk]. Our very first study group proved to be a success. With hindsight, this heralded a new phase of education. In fact, my significance for education and for

34

See letter in: HNI, Archief Van Eesteren, EEST X 1506.

Zeen = a fibre, a sinew.

the students was purely that of a normal professor; even in terms of scope.' (Van Eesteren always had issues with the fact that he had been brought in 'by special appointment' and remained so.) However: 'All in all, my experience in the department was very positive, especially when I think of the teaching, the students, the staff and some colleagues, including, as I said, Van Lohuizen, but also Zwiers, Nicolaas Christiaan Kist, Cornelis Wegener Sleeswijk, Bram Hammacher and later some of the younger ones.' These recollections of his time in Delft were written seven years after he had left the department but they nevertheless still give a vivid picture of how Van Eesteren perceived the period that he was teaching at the university.

He gave his valedictory lecture on 9 June 1967. De Telegraaf newspaper reported that 'the man who gave Amsterdam its face' had taken his leave, but made no mention of his significance to Delft.<sup>37</sup> His last lecture had a more somber tone than that of his inaugural address. He believed that there needed to be a dramatic increase in student numbers in order to be able to tackle the problems.

Van Eesteren had educated countless students and often helped them find employment by writing testimonials.<sup>38</sup>

Besides the already mentioned Van Lohuizen and Zwiers, Nicolaas Christiaan Kist, Cornelis Wegener Sleeswijk and Bram Hammacher were professors in Delft. Hammacher was not an architect or a building engineer but an art historian.

<sup>&</sup>quot;De man die Amsterdam zijn aangezicht gaf". [The man who gave Amsterdam its face.] Prof. Van Eesteren takes his leave from the Polytechnic in Delft.

The newspaper Nieuwsblad van het Noorden published the same day an article with the title "Prof. C. van Eesteren: Stad is caricatuur van de menselijke nederzettingen" [Prof. C. van Eesteren, City is a caricature of human settlements].

<sup>38</sup> He not only wrote testimonials for students, but also for others. These occasionally included his own characteristic views. In a testimonial letter about Zwaantius Naber, urban designer in Emmen who was applying in 1951 to an engineering consultancy in Bandung, he wrote that Naber was highly competent, but also "niggling" and difficult to get along with. He obviously wanted Naber to remain in Emmen.

His valedictory lecture made hardly any reference to art or artists, but he quoted Lewis Mumford: 'The first step in a proper plan is to initiate an impartial investigation into what would be ideal. Once this is known, it needs to be realized within the structure of a large framework such as the urban district.' Van Eesteren added that this essential structure of landscapes and settlements had largely been destroyed. The task for the future was to enable a resurgence of these structures.<sup>39</sup> He had moved from an approach with a strong focus on art and art history to Mumford's more sociologically and philosophically shaped perspective, and stressed the importance of research based on fieldwork.<sup>40</sup> A year later, Van Eesteren was awarded the David Roëll prize by the Prince Bernhard Fund for his services to urban design.<sup>41</sup>

<sup>39</sup> See: "Afscheidscollege Professor van Eesteren".

<sup>40</sup> D. Miller, Lewis Mumford: A Life.

N. Tummers, "Cornelis van Eesteren". Also: R. Blijstra, "Van Eesteren ijverde al vroeg voor 'leefbare' stadswijken." [Van Eesteren already fought in early times for habitable neighbourhoods]. The same article was published on the same day in the Hαagse Courant. Blijstra had been a member of the judging panel.

### **Bibliography**

Blijstra, Reinder C. Van Eesteren. Beeldende Kunst En Bouwkunst in Nederland. Meulenhoff, 1971.

Bouw. "Afscheidscollege Prof. C. Van Eesteren." Bouw, no. 26 (1967): p. 1004.

"De Man Die Amsterdam Zijn Aangezicht Gaf. Prof Van Eesteren Neemt Afscheid Van De T.H. Delft." De Telegraaf, 10 june 1967.

Giedion, Siegfried. Space, Time and Architecture the Growth of a New Tradition. 3rd ed. Cambridge, Mass.: Harvard University Press, 1954.

Hilberseimer, L. The New City. Principles of Planning. Chicago: Theobald, 1944.

Mertins, D. "Transparencies Yet to Come: Sigfried Giedion and the Prehistory of Architectural Modernity." Princeton University, 1996.

Miller, D.L. Lewis Mumford: A Life. New York 1989.

Nassuth, G.A. "Herinneringen aan Van Eesteren." Archis no. 4 (1988): p. 5.

Oud, J.J.P. Drie Nieuwe Professoren in Delft. De Groene Amsterdammer, 1948.

Saarinen, E. The City. Its Growth, Its Decay, Its Future. New York: Reinhold, 1958.

Somer, Kees. The Functional City, Ciam and the Legacy of Van Eesteren. Rotterdam 2007.

Tummers, N. "Cornelis Van Eesteren. Bescheiden Figuur Met Veel Kwaliteiten." Cobouw (22 november 1968).

Van der Valk, Arnold. Het Levenswerk Van Th. K. Van Lohuizen 1890-1956 : De Eenheid Van Het Stedebouwkundige Werk. Delft: Delftse Universitaire Pers. 1990.

Van der Woud, Auke. "Een Toon Van Hulde." Archis No. 4 (1988): p. 4-5.

Van Eesteren, Cornelis. "In Memoriam Fritz Schumacher." Tijdschrift voor Volkshuisvesting en Stedebouw no. 4 (1948): p. 65.

Van Lohuizen, Th. K. "De Eenheid Van Het Stedebouwkundige Werk." Tijdschrift voor economische geografie No. 2/3 (1948): p. 401-07.

van Rossem, V. Het Algemeen Uitbreidingsplan Amsterdam. Geschiedenis En Ontwerp. Rotterdam 1993.

White, Patrick. Patrick White Speaks. London 1990.



FIG. 6 Portrait of Van Lohuizen

# The Unity of Town Planning

This English text of Van Lohuizen is identical with the one that is kept in the Archive of Van Eesteren in Het Nieuwe Instituut.

#### Ladies and Gentlemen,

Now that through the extension of the training in town planning to the Technological University, 42 the great diversity by which town planning is characterized today is also reflected in education, it is especially necessary to be aware of the inseparable unity of town planning, and of the interrelation between the many tasks which have to be performed in this field, therefore I think I could not do better than speak to you in this hour about 'The Unity of Town Planning'.

We shall have to face the necessity of this unity for town planning if workers of quite different nature and mental attitude are going to make their best endeavours. This unity will also have to materialize in the research work to be done by municipal, provincial, and governmental offices in behalf of the plans which will determine

The school in Delft was initially a Royal Academy [Koninklijke Academie], in 1864 it became a Polytechnical School [Polytechnische School)], in 1905 a Polytechnic [Technische Hoogeschool], in 1986 the name was changed in University of Technology [Technische Universiteit].

the picture our country will show after some decades, and form the basis of life of the Netherlands community.

Let us first consider the making of a somewhat important design, e.g. the design of a medium-size town, and let us imagine the whole planning to be concentrated in one person. Then this person will have to be fully aware of three things: he wants to create an externally beautiful town; this town must be of an inner harmony; in making his design he must make allowance for the topographic situation of the town and its environs. The structure of a town has an outer and an inner harmony; the beautiful form and the correspondence between size, situation, and character of each of the elements of the town, and the purpose for which they are used. It is not sufficient to say that the town must be equipped efficiently. We are not exaggerating when we state that each disproportion between a function of life and the element which is the embodiment of it will no doubt give a feeling of disharmony. Town planning should not only find expression in architectonic proportions, but also in the harmony between all the aspects of the life of its inhabitants, and the form in which these aspects are crystallized in the organism of the town. The surface of the industrial sites and the dock yards, and the size of the groups of the population to be employed there must be well proportioned. The same holds for the numbers of dwellings of various kinds, and the numbers of families of different size and social standing. The nature of the buildings needed will have to match the cultural properties of the population. The course and the capacity of the traffic arteries will have to be adapted to the density and the direction of the flows of traffic, which in their turn depend on the many relations existing between the inhabitants of the town. Ultimately there will have to be the indefinable harmony between the character of the population and the outward appearance of the town, which gives every town its own individuality.

Now how is the designer going to set about his task? It will be a gradual process, of searching for the answers. There will be no end of discussions with many authorities, with Heads of Services, with persons from all circles of municipal life. He will have to study and elaborate statistical figures, collect and elaborate various data, reconnoitre the surroundings, and inquire after technical requirements and the property of sites. But soon he will make the first sketches, partly to record and test ideas, partly to get an insight into the possibilities offered by the situation and to discover problems to be solved after a thorough investigation. He will plan the thoroughfares and the incoming and outgoing roads connected to them. He will record his ideas concerning the situation of living and working quarters, and parks and green verges. Numerous questions arise and determine the socio-economic and demographic survey. At the same time directives can be derived from the investigation. Sometimes they confirm the correctness of an idea; sometimes they show that the idea is not tenable or that it has to be modified according to the actual situation; sometimes they reveal quite new possibilities. In any case they precise the required size of the plan, give the desired ratio between surfaces, and the exact measurements required by the design.

There is a continuous interaction between intuition and knowledge, and the designer gets a constantly deeper insight into the matter. The plan is gradually maturing. There is a perpetual interplay between the reflection of what is observed and the creative power of the artist. Finally the endless variety of facts and circumstances, which determine the design, give birth to the beautiful synthesis, in which all aesthetic, technical, socio-economic, and psychological factors are combined into one harmonious organism.

In the meantime it will have become clear to you that all this work cannot possibly be done by one person. This is perfectly true. In reality it is done by a team of workers of different aptitude and mental attitude, the most important of whom are the designer, the surveyor, and engineers in various fields.

It is a matter of major importance to coordinate the knowledge, talents and insights of these individuals as if they were united in one person. For this purpose each co-operator should be able and willing to identify himself with the others, and to be fully appreciative of their work.

This will be applicable in particular to the co-operation between the designer and the surveyor, because of the close relationship between design and survey.

Now if you think of the manner in which a design is being established as I explained it just now, it will be clear to you that there must be the closest co-operation between these two people, and that they must continuously take part in each other's work. The development of this co-operation, and the share to be taken by each of them in the whole process depends on the manner in which their personalities have been formed, and above all on their individual aptitude. It would no doubt be wrong to make a clear separation between their fields of action. The more their tasks are interlinked the better for the unity of the work.

The more the surveyor is interested in the establishment of the plan the more he will be suitable for the town-planning survey. If he is the right man for the work entrusted to him, he should have great creative powers and be deeply interested in his task. He must be constantly aware of the knowledge required for the plan, and he should fully realize that the results of his study of the social structure of the town should lead up to directives

which are to be laid down in such a form that they can be used as guiding principles for the further procedure. To this end he will continuously elaborate his material to fit the purpose in view. He uses the methods of science in full objectivity and with a profound sense of truth. Just like the pursuer of pure science he will not be satisfied until he has studied his problem in the minutest particulars, but for him the object of his research is always the applicability. He will no doubt fail if he merely collects data. He must take in consideration that for every application of social survey it is necessary that the material (statistics, results of public enquiries and censuses) should be elaborated into a form in which it is comprehensible to the users and if possible shows the direction in which the survey leads.

But this sketch of the activities of the surveyor does not sufficiently show the part taken by both types of workers, the designer and the surveyor, in the establishment of the conception of the plan. Besides the creative talent of the artist this requires a certain insight, which is obtained through intuition and through knowledge. Now in obtaining their most important results both the designer and the surveyor will be led by their intuition.

The designer's conception does not only result from a vision concerning the appearance of the urban organism but also from the intuitive insight into the nature, the composition, the developmental possibilities, and the needs of the community. It will only be possible for the surveyor to comprehend the essence of the complicated structure of society, and to get a clear insight into its future tendencies, notwithstanding the almost overwhelming confusion of the phenomena in the world around him, if he is blessed with a keen intuition. By means of this faculty he also will be able to make his direct contributions to the ideas underlying the main principles on which the plan is to be based. The designer will materialize these ideas, and develop them into

the harmonious and beautiful picture determining the physical form of the town. Both the designer and the surveyor as well as some other people contribute to the realisation of this purpose.

However, besides intuition a profound knowledge is required. As to the surveyor he will no doubt feel the need of it because of his natural urge towards knowledge. But the designer will also have to be convinced to the fact that he must not rely on his intuition. There are a number of subjects which he can only master through insight and knowledge. He would run the risk of making serious mistakes if he would for instance fix the number of inhabitants for whom he is planning a town before studying the developmental possibilities of the town. How could he get a clear insight into the surfaces required for residential quarters and industrial areas, into the volume and course of future traffic, into the number and the kind of special buildings needed, without a previous study? In a rural area the landscape design will depend for a large part on the properties of the soil and on the use made of the soil. The designer will have to study these factors thoroughly before setting about his task. If he would neglect them his vision might turn out to be a mere illusion in the light of the bare facts, His mind must always be of a great flexibility, and he must be able to abandon ideas which he may have cherished for a long time. He has to bear in mind that there are always many possibilities, and that it is a beautiful task to try and find the typifying embodiment for a socially and technically fruitful conception, even if it is not his own conception. Not only the designer but the surveyor, too, must have a flexible mind, he, too, should realize that there are often several alternatives, and that often a satisfactory solution is the result of joint efforts and a close co-operation. He should not forget that it is rarely possible to give an absolutely definite opinion on social phenomena, that there are many gradations, and that it is often more a question of probability than of certainty. The surveyor should constantly realize the danger of caring too much about prevailing tendencies. He should account for

the fact the creative human mind is also able to influence the social development. The requirement of close co-operation does not hold only for the designer and the surveyor but for all those dealing with the plan. They will all have to be fully aware of the demands made by the plan, and each of them must have a clear idea of his responsibility and his abilities with respect to all the details. As soon as one of the details is considered as an independent unit or as a unit of primary importance it is no longer possible to realize a synthesis. There is an ideal co-operation, if after the completion of the plan none of the workers appears to have a clear idea of the part he has taken in it.

I have given an almost ideal picture of the relation between design and survey, and in general of the relations between the activities required for the plan. But just like any other ideal this ideal is difficult to realize. There are several reasons why it is so difficult to bring about a close co-operation between people who differ so much in aptitude, interests, education, and ways of thought. Now there is one happy circumstance. In the field of twin planning in the Netherlands we may call ourselves fortunate, because all those working in this domain are fully aware of the fact that together they have to perform one great task in a spirit of mutual toleration and appreciation. We may say that the workers have only one ambition: to give the best of themselves for the benefit of the whole. Even those entering this world more or less as strangers will soon be seized by the grandeur of the common task

So if the ideal is not always realized it is because it is in fact difficult – I should be inclined to say: never entirely possible – to form a true notion of the place we take with our work in the whole. It is difficult to see that the things of which we are so fully conscious, and which are so very important in our own opinion, are only one of the factors determining the plan, and that considerations which do not even occur to us are as determinative of the harmony of the whole as the items which are of primary importance to us.

However, difficulties of this kind can be overcome for the greater part. Where there is a will there is a way! This is first of all a question of attitude. Sometimes it is sufficient to consider the problem from the other party's point of view to realize the relative value of our own conceptions and the limitations of our own insight into the matter.

Still it is quite right, and even necessary to promote mutual understanding by external means. Thus we enter the field of practical considerations.

At this moment we think, of course, in the first place of the influence exercised by training. Already the institution of the Commission for Training in Town Planning, in which design and survey, the Departments of Architecture and Road an Hydraulic Engineering, urban and rural experience, education and practice, administration and legislation, technique and landscape designing were represented, showed that there was an awareness of the close coherence between all these aspects. And the working method of the Commission of which all who took part in it have the most agreeable memories, was an example of the spirit in which the training itself would have to be developed. Today the student of architecture, and the civil engineer who want to study town planning are being trained in the manner envisaged by the Commission, and the method applied supplies the existing deficiency in the forming of future town planners, i.e. it makes up for the lack of all-round knowledge. The chairs instituted now, and the plans to initiate the students through various lectures in more remote fields will cover all the aspects of town planning. So in whatever direction a student is going to specialize he will never run the risk of being too limited in his outlook on the whole. During their college years both the future designers and those who are going to apply themselves more to survey will through their own experience get into touch with the other field.

By working together the students will become acquainted with and appreciative of each other's methods, and through this experience they will come to the conclusion that a close cooperation will likewise be indispensable in practical work in the future.

Up to now the future engineers wishing to apply themselves to the survey have not been in a position to get informed of all the aspects. As to the students of geography and economics who are going to be employed in town planning, however, the difficulty is that their education does not enable them to experience the atmosphere of creative work and planning. As a matter of fact they do not get acquainted with the working method in which the economic, social, and cultural needs of the community are crystallized in terms of areas, and numbers, and in which after many sketches the conflicting demands are finally harmonized in a design that is so well balanced that nobody has the faintest idea of the many difficulties which had to be overcome.

Credit has to be given to Mr. ter Veen and the Economic Faculty of the Amsterdam University for taking the initiative to bring the future surveyors into touch with professional skill in town planning by attaching an external lecturer in this field to the University.<sup>43</sup> I am very grateful to them for enabling me in this manner to get an idea of the needs of these students, and it has been very difficult for me to abandon this task. It is a matter of satisfaction that the Economic University has enabled Mr. Angenot some time ago to do the same for the students of the Rotterdam University, and that Mr. Wieger Bruin has recently taken office as

Henri Nicolaas ter Veen (1883-1949) became professor in social and economic geography in Amsterdam in 1927. He held a inaugural speech with the title 'Van anthropogeografie tot sociografie' [From antropogeography to sociography].

Professor Extraordinary in Architecture and Town Planning in the Agricultural University at Wageningen.<sup>44</sup>

If a similar solution could be found for the other Universities where future workers in town planning research are educated, it would greatly facilitate acclimating them to the activities in practice. And would it not be most attractive to establish, already during the college years, contacts between the academically trained future surveyors and the Delft students of town planning so that they could get acquainted with each other's way of thinking in the free and easy manner which is the privilege of a student? Thus far about training. However complete the training may be, town planning in practice will require much care, devotion, understanding, and tact to co-ordinate the activities of the various kinds of co-operators in such a manner that the unity of the work will be safeguarded. This is in the first place the responsibility of each individual, who always has to be aware of what he can do to maintain contact with his colleagues. But often their nature and aptitude will prevent him from discerning where they fail in this respect. The designer can be so much absorbed in his formative work that he does not notice which essential data are actually lacking. The surveyor can be so deeply engrossed in studying the social structure of his area that he does not realize that much of what he is collecting is of no value for the plan. Then it is particularly the task of the directing staff to see to it that the interrelation between the various activities is maintained. On the whole it greatly depends on the attitude of the directing staff whether the co-operation is effected in the manner required by the work.

<sup>44</sup> Laurent Hubert Joseph Angenot (1901-1979) was appointed extraordinary professor for town planning research in Delft in 1963 and ordinary professor two years later. The topic of his inaugural speech was 'De uitbreidende en uitdijende stad' [The expanding and swelling city]. As town planner Wieger Bruin (1893-1971) was active in the development of various polders. In 1947 he became professor by special appointment in Wageningen, a position that he would hold till 1958.

It will be a good thing for the co-operators to be enabled to take continuous note of the progress of each other's work, both in a formal and an informal manner. There should be friendly and positive criticism, and the workers should not be averse to admitting each other to their various fields.

Is a special form of organization required for this purpose? I do not think so. There is no special form of organization which would always give the best results. It will have to differ according to the nature of the work and the persons available to do the work. However, I think it will be very difficult to maintain the unity of the work, if from an organization point of view surveying is separated from designing. The position of the various workers in the organization, and their share in the work will also depend on their capacities. Care will have to be taken to make them harmonize as much as possible.

For executive qualities, a full understanding of all the aspects of town planning, and, of course, the urge to create something will be the main points. These properties may be present in persons of any education, so that it is not necessary to give in principle preference to certain categories or to exclude some of them.

In particular regard to the place of the survey in practical work, some more remarks will have to be made. There has been a time when authorities and designers had very little confidence in the results social research could yield for the solution of town planning problems. Now there is a tendency here and there to assume the opposite. However, town planning research is no machine to which the problem is fed, and which is expected to supply the solution without any proviso, preferably within some days or weeks. Town planning research is first of all a process of maturing. Only gradually, after many efforts is the insight into the phenomena approached. It is necessary to collect many data, which have often to be processed, before they can be used.

It may appear that a particular method of approach does not yield the result expected, and that a new start has to be made. Not until the right insight has been gained will it be possible to determine, in consultation with the co-operators, the directives resulting from the research.

Because of the nature of the social phenomena the results are often a question of probability rather than of certainty. Mostly a minimum and a maximum estimate will have to be made, and it will be necessary to ascertain in careful joint consultation which of the various possibilities will have to be considered the most effective directive.

It should be borne in mind that the social sciences and particularly their application to practical life are still in an early developmental phase. Whoever wants to make use of their results to erect a building, is often faced with the task of having to collect the building materials and even sometimes of having to find the methods to make them.

We now come to the second example by means of which we would demonstrate the unity of town planning, and which particularly concerns the field of research. In the Netherlands we are experiencing an extremely important development of town planning. The estimate made by various experts concerning the number of the future population show that until 1970 we shall have to expect an increase of our population of two to three million people. Now the primary problem for the Netherlands town planning is: how is this increase going to be distributed over the various parts of the country and over each separate part: how is the increase to be distributed over the towns and villages of various size, and over the rural areas?

For these factors are decisive of the aspect of the country, of the agglomerations in which the population is going to live, of the

building and reconstruction plans of the various municipalities, and in fact, of the structure of each town and each village.

How is this distribution going to be realized, if it is left to free development as reflected in past and present tendencies? Will it give rise to undesirable social and town planning conditions? How can we get a distribution preventing wrong conditions and yet accounting sufficiently for the reality of economic and social life? The distribution of the population will depend firstly on the distribution of the rise of the birth-rate over the country and secondly on the distribution of the means of subsistence, which are ultimately decisive of the settlement of the population. If this distribution does not correspond with the natural increase of the population in the various areas, the population will have to migrate from areas with over-employment to areas with under-employment.

In any case it is the simple but solemn truth that the difference between the sum of the increases and the sum of decreases of the separate municipalities must be equal to the increase of the population of the whole country.

It will not be necessary to explain in this time that our country will have to industrialize on a much larger scale if it will be able to feed its future population. So the distribution of the population will for the greater part depend on the manner in which industries are to be distributed over the country, either planned or not, though the other means of subsistence will not have to be neglected. The attainable degree of decentralization of the population will be determined by the degree to which industry can be decentralized. The question whether it will be possible for a certain place to expend considerably or only to a limited degree, depends on its suitability for the establishment of new industries and the development of existing industries. Moreover, there are many sociological, cultural

and technical questions, and problems concerning landscape and town planning. Is not it quite possible that a strong increase of the population in the West of the country will be accompanied by too large an extension of the big towns, or such a growth of the dormitory areas that landscape has to be sacrificed to the dwellings of those who came to live there just for the beauty of nature? Is it right to cope with the surplus population of a certain area inside the area itself, and if so in what manner should it be done: by an equal extension of all municipalities or by a concentration in some central municipalities? Is it desirable to limit the growth of certain towns and to stimulate the growth of other towns; what size is to be aimed at in either case? Or does the distribution of the population of a certain size require a gradation in the size of the various settlements? What are the consequences of the growth of a village or town into a settlement of quite a different character for the psyche of the population, for its style of life, for social and cultural life? Is it sometimes better here and there to build new towns as Great Britain has done in so many places? Is it a possible to allot a certain future number of inhabitants to a particular town at random, or are there certain factors inherent in the character of the town or its surroundings which are determinative of the growth? It will be necessary to give a very concrete and clear answer to all these questions and many others, because the answer is materialized in the plans and it is a matter of great importance to know how this answer will be found, and who is to give it.

It will be quite clear now that the solution of these questions requires a strong central direction. Only those who are able to take a comprehensive view of the whole will be in a position to judge the coherence of the phenomena and guard against a disharmonious development. The axiom alone that the difference between the sum of the increases and the sum of the decreases must be equal to the total increase can be guaranteed only centrally. To be able to judge of a certain system of distributing the population we must be able

to make a comparison with another distribution, but we must also be able to find out whether a certain development in one part of the country can have bad consequences in another part of the country. It is also desirable to collect comparative material in order to get an insight into the properties and needs of settlements of different size and nature, and into the factors controlling the growth of towns.

But if the treatment of such problems is centralized too much there is a certain risk. Life and society are very complicated; each town, each village is a living organism with its own individuality and its own psyche. If we are in a position to compare the conditions of development of e.g. a number of medium-size Netherlands towns, we shall notice that they are different in each of them. These individual differences are one of the factors determining whether a development which may be desirable within the framework of the entire distribution of the population will really have a chance of success. However, it is also true that, except to a certain extent for the very big towns and for many villages, it is in fact not quite possible to forecast the future population for an individual town, considered as an independent unit, which would appear to hold in a plan for the distribution of the population all over the country.

And thus here, too, unity of town planning will be recognized, i.e. the unity of the general national research as the basis of a plan for the distribution of the population over the various areas and towns of the country and for the local and regional research in which the thorough knowledge of the separate communities will be devoted to the insight into the whole, in which full justice is done to the individuality of each town. The general research guarantees the maintenance of the coherence of the phenomena and their interdependence; the local research supplies useful material for this purpose, and maintains the direct contact with the multi-coloured reality of the life of the social organisms. Thus it may be prevented that a far-reaching schematization would

give rise to a development which would take insufficient account of reality, because it would not do full justice to the tendencies inherent in the local individuality. Moreover, the municipalities would be prevented from making plans which might appear to be mere illusions if considered with regard to the whole.

Co-operation in town planning is also desirable from another point of view. In the study concerning the plans of separate municipalities the need is constantly felt of making a comparison with other municipalities of the same character and the same size or of a size expected for the relevant municipality in the future.

However, usually it is difficult or impossible to get such comparative material, because analogous research was not, or at least not in comparable form, made in other municipalities, and usually it would be too much work to make a comparative research for one particular case.

So the surveys made would be more useful if a wider publicity would be given to them. What is even worse, many surveys are never made, because individual municipalities shrink from undertaking them. So it would be useful to find a method enabling municipalities to profit by their individual studies and providing the possibility of making surveys which might be useful for many municipalities together.

It will be difficult to realize the wishes expressed by me just now. For the time being much research work will have to remain undone because of a shortage of scientific workers. However, fortunately a number of medium-size municipalities have now made provisions for the socio-economic research concerning their population, and it is to be hoped that others will soon follow their example. So the awareness of the close coherence of all research concerning the phenomena determinative of town planning in the country

will contribute to making all parts of the Netherlands after some decades attractive to live in for all inhabitants.

We know that after all our happiness is not determined by our external circumstances, but on the other hand we know quite well that there is a strong relation between inner and outer life, and we feel the need of expressing in the world around us something of the harmony which is all in all to us in our best moments, and which is the profoundest essence of our being.



FIG. 7 Cor van Eesteren in his academic regalia after delivering his inaugural speech

## The Conception of our present-day Settlements and cultivated Landscapes, their Appearance and Expression

This English text is identical with the one that is kept in the Archive of Van Eesteren in Het Nieuwe Instituut.

'Cités! Vous êtes les monuments les plus sublimes de l'Art humain. Le mouvement indéfini de la marche humaine s'élève vers l'immobilité infinie. La lassitude fait souhaiter au monde le repos plein d'activité de la vie végétative. Des vagabonds s'arrêtent et, se tenant les uns près des autres comme les arbres dans la foret, ils plantent des racines artificielles, leurs maisons se dressent, la ville projette ses ombres. Et l'unité merveilleuse du nouvel établissement, avec ses tours et ses demeures, ses aqueducs et ses cloaques, ses architectes et ses pontifes, apparaît tout entière dans le nom de la cité. '45 [Apollinaire]

G. Apollinaire, La Femme Assise, p. 102.

#### Ladies and Gentlemen.

Just like the American poet Whitman, the French poet Apollinaire, who has had a great influence on painting and literature (to mention some names: on Picasso, Cocteau, and Aragon), who discovered the painter Rousseau for us, and who stimulated cubism, has been greatly fascinated by the concept of town.<sup>46</sup> This is clearly demonstrated by what he wrote about 1912:

'Cities, you are the most sublime monuments of the art of man. The indefinite motion of human pilgrimage rises to infinite immobility. Lassitude makes the world crave for the rest, full of activity of vegetative life. Wanderers stand still and, holding close together like trees in a wood, they plant artificial roots. Their abodes arise and the town casts its shadows. The marvellous unity of the new settlement with its towers, its dwellings, its aqueducts and sewers, its builders and its pontiffs appears in all its fullness in the name of the city.'

When we make a comparison between the towns and cultivated landscapes of today and those of the baroque or the mediaeval periods we see that there is a great difference. The Chinese towns of the seventeenth century had quite another appearance than the European towns of the same century. When a culture expands spatially, as e.g. the ancient Greek culture around the Mediterranean in the early part of our era, the forms characteristic of this culture influence the whole area.

Walt Whitman (American writer, 1819-1892), Guillaume Apollinaire (Italian-French writer, 1880-1918), Pablo Picasso (Spanish artist, 1881-1973), Jean Cocteau (French writer, 1889-1963), Louis Aragon (French writer, 1897-1982), Henri Rousseau (French artist, 1844-1910).

The towns built in the Stone Age had quite another expression than the Inca towns; the settlements of the still existing so-called primitive peoples are very diverse in appearance and expression. As soon as the influence of the Western world makes itself felt on the afore mentioned peoples their settlements assume the character of the twentieth century in the manner appropriate to them. On close consideration of these examples we come to the conclusion – and this is of particular importance for us at this moment – that all forms are different in expression. The differences in appearance and expression, so in style, mark a difference in purport, in vital principle.

In his book, *The City*, the Finnish architect Saarinen compared the human settlement with two phenomena of organic life: the existence of the individual cell in a living tissue, and in an organism.<sup>47</sup> 'The shape of a living organism' states Saarinen, 'is the materialization and the expression of its vital principle. The oak and the beech are forms of different vital principles in the vegetable world.'

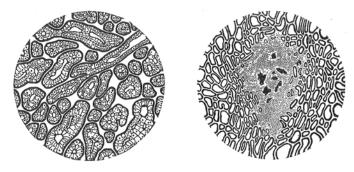


FIG. 8 Illustrations in the book The City of Eliel Saarinen (p. 10 and 16)

Eliel Saarinen (Finnish-American architect, 1873-1950).

<sup>48</sup> Van Eesteren probably quotes from memory. Eliel Saarinen does not speak of the oak and the beech but of the elm and the oak: E. Saarinen, The City, p.11.

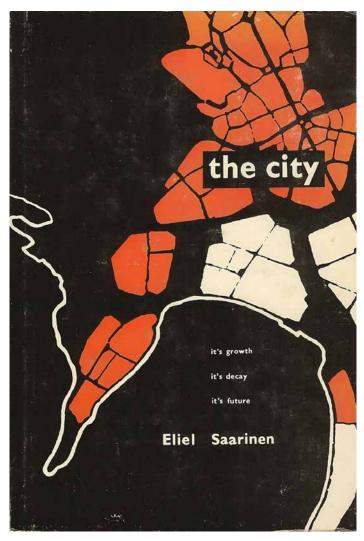


FIG. 9 Cover of the book The City of Eliel Saarinen

According to this point of view, which is correct in my opinion, towns are to be considered as materializations, thus, forms of vital principles in the social world; with the understanding that plants grow in nature, while towns are built by man who is responsible for their purport and appearance. Acceptance of this responsibility has led up to the development of town planning as a means to control the establishing and designing of landscapes, towns and villages. The development of town planning requires those dealing with it to study the essence and the influence of its appearance in order to enable designing to be effective in a continuous interaction of scientific and intuitive research. The town planners are exponents of the community whose desires they give a form only in the sense that harmonic designing and its realisation can be effective with the co-operation of the members of the community.

Today the renovation of the purport and form of society gives rise to many conflicts, much difference of opinion, and many quarrels about the designing, laying-out, and form of our cultivated landscapes and towns which are materializations of all aspects of society. The same struggle is carried on in architecture and related fields of the liberal arts, where it gives rise to trends and isms which are of a conservative or a renovating nature. The young town planner will want and must choose his position in this struggle. He will have a desire to know the causes of it and to be aware of the background of the difference in appearance and in expression of the various designs. It will be his intention to direct the development of his designing capacity in the best manner, and he will feel the need of a vision that is universal so that it can lead to a unity of conception which will attempt to give a unique form and expression to our cultivated landscapes and settlements. A cultivated landscape is understood to be a landscape made by man, as e.g. the Wieringermeerpolder in our country, which is the opposite of a natural landscape, let us say the jungle. When he has recognized and acquired this universal vision he will be able to practice unity of planning work,

a necessity which was advocated here some time ago. As to the natural elements affecting the appearance and the expression of our towns and cultivated landscapes, such as the nature of the soil and the geological structure of the landscape, man has very little if any control over them. It would undoubtedly be fascinating and instructive, particularly with regard to The Netherlands, to deal with the interaction between natural conditions (e.g. the fact that a large part of the Netherlands lies below sea-level) and the efforts made by man to continually obtain better control over the forces of nature in order to make them subservient to his welfare, but I must not digress from my subject: 'the conception of our settlements and cultivated landscapes, their appearance and expression'.

It is man himself who builds the towns and lays out the cultivated landscapes. As I have just said town planning resulted from the realisation of responsibility for the purport and forms of towns and landscapes. It is a social task. The town planner has to determine the right places and has to solve problems of an architectural, scientific, and technical nature in space and time. These problems are changing together with the social structure. The means through which the purposes of town planning are realised are also changeable. These means have always been dependent on the stage of science and technique. The present-day problems of town planning can be solved only with the means and methods of today. There is an interaction: new social needs confront us with new technical problems and new technical acquirements, as such, are accompanied by new social problems. In general we may say that the development of society runs a kind of race with technical progress; there is always leeway to make up. After the negative effects of a new exploration of the forces of nature have become apparent in society, it is investigated how they could be applied in a positive sense for humanity.

This still holds to a high degree for modern times. We witnessed a transformation of technical processes, and we have not yet learned how to acquire the positive values of this transformation. The nineteenth century produced two things which have changed society profoundly: the machine and the industrialization of production through the machine. At the same time, without being realized, creative visual instinct was lost just when it was so badly needed in a changing world. Machines and industries destroyed the essential structure of the landscapes and settlements. The spatial chaos in which we are living is an invertible consequence of a world which, as always but now at an extremely high speed, is changing noticeably. Yet, I am convinced that order will be able to come back. Then it will arise from the nature of things in its purest essence, which will have to be recognized, acknowledged, and fully appreciated in order that it may find expression in all aspects of human activity, including town planning.

Mr. Hilberseimer (the former teacher of town planning at the Bauhaus, and now professor in the United States) has written in his book The New City, 'if we are to help direct the forces which will bring order out of disorder, it is profoundly important that we understand the forces which, in the past and in the present, influence the origins and the developments of human settlements'. 49

'All human settlements depend, in their growth and in their decline, on social, spiritual, political, and economic forces. These forces are influenced by the status of technics, by the forms of production and consumption, and by the means of transportation available to the settlement builders. This interdependence of social and technological forces is expressed in all kinds of culture and varies only with the variations of the predominant elements.'

L. Hilberseimer, The New City. Principles of Planning, p. 18.

We need not be surprised at the difference in the forms of appearance, in expression – in style – particularly not if we bear in mind how different the material and immaterial conditions were in which these forms were created. The appearance of the towns and landscapes produced by human society is the expression of the spirit by which man and his society are inspired and of the creative forces of mankind. 'The rationalism of the eighteenth century paved the way for the predomination of natural science in the nineteenth century. The conception of evolution, which was characteristic of natural of science became the standard of all research.' Also for the research in the field of architecture and town planning both in various periods of history and with regard to the so-called primitive peoples living now. The communities of these periods and peoples are thus not considered as groups of peoples whose way of living is determined by surroundings and conditions but rather as stages of development which are interlinked without interruption. According to this theory the culture of Egypt is a primitive predecessor of the culture of Greece, and so on up to this time. Thus far Hilberseimer.<sup>50</sup>

Though he does not deny the value of the theory of evolution for our profession, he is of the opinion – and I think rightly so – that it has to be supplemented by the view expressed in the foregoing statement, which starts from a philosophy of life. If we study the effect of the interwoven spiritual, social, political and economic forces which have been active in the world throughout history and which are also influencing existing primitive peoples we shall obtain a better understanding of the appearance and expression of the settlements in which these forces are reflected.

Van Eesteren paraphrases and quotes Hilberseimer at the same time. In the English translation that was made the opinion of Hilberseimer has been forced even more in a certain direction. The translator did not cite from the original book.

However, this would be beyond the scope of my lecture. But it is a matter of importance to point out that it appears from such research that both settlements with an organic and settlements with a geometric structure occur simultaneously in the same periods in various places but under different circumstances. Think for instance of the early mediaeval towns of Rothenburg as an organic and Montpazier as a geometric structure. The same differences existed in other periods, e.g. in the Stone Age. The appearance and the expression of the said towns is of an early mediaeval character, though there is a difference in the pattern of the lay-out.

Now I would ask what will be the forms of our towns - with their greatly different patterns of lay-out - in order to guarantee that their expression will be the typical expression of the twentieth century. I cannot give a definite answer to this question, though I assume that presently we shall come to the conclusion that we have approached these forms somewhat closer and revealed some of them. Without discussing the why of the organic as compared with the geometric form of a town I should like to say that the trained observer can tell by the forms of the towns, under what circumstances they were built. In his close observations – and I want to emphasize this – he comes into contact with the emotional values which are expressed by the forms, and he states that curved and straight lines, rectangles, circles and other fundamental forms can be applied with a great difference in expression. He observes that the relation between materials and forms, between materials and colours and between lines and planes, and the interrelation of all these elements, as well as their application, differs in the various eras, and accordingly the expression differs too. It may be said that the expression is determined by the manner in which materials, technique, forms and colours are applied in their interrelation. After this I could ask whether lack of expression and character in e.g. our urban expansion and our rebuilt towns and villages may be attributable

to the application of technique, materials, forms and colours in disharmony with the emotional values of today. Presently we shall have to find out if and where the specific emotional values of our time find expression in the field of art.

One of the causes of the lack of expression of our new residential quarters and our rebuilt towns and villages is, partly for ideal reasons and partly because the line of least resistance was taken, the application of historical, dead architectural forms, which sometimes involved defects, one example of which is insufficient entrance of light into the dwellings.

The history of architecture and town planning of the nineteenth century shows us results of the application of old, and later dead forms. This leads up to an eclectic art, which was prepared already in the Renaissance and Baroque periods and which must be understood as the application of historical forms, which are no longer fit to express the feelings prevailing in the world of today, but which in the still existing truly ancient works of art appeal also to people of modern time.

The art historian, Giedion, who is one of the prominent people in the C.I.A.M., the International Congresses of Modern Architecture, and who is the author of Space, Time and Architecture (in which he deals particularly with architecture and town planning in the 19<sup>th</sup> and 20<sup>th</sup> century and demonstrates the development of a new tradition) has explained that towards the end of the eighteenth century when the artist was beginning to lose contact with man, the symbol lost its content. The content was the essence through which the observer came into contact with the forms and colours of his towns, villages, cultivated landscapes, buildings

S. Giedion, Space, Time and Architecture.

and objects. Giedion calls this disintegration 'the devaluation of the symbol'. According to him the development of industry and this loss of contact coincide. Since that time we have known the lack of creative visual power both in famous and respected living traditional artists and in the ordinary man, contradictory to the palmy days of civilization when the elected artists and the ordinary man, each according to his capability, possessed creative visual power. This breach dates back to the period of the Salons, of the gold medals, the Prix de Rome, of the routinists in art, and of the pursuit of eclectic art, also in town planning, which we partly witness today and which is characterized by a severe struggle between the so-called traditionalists and the so-called modernists.

Besides the fêted artists of the day there lived and there are still living – as Giedion rightly says – the artists (particularly painters, sculptors and authors) whose work was or will be recognized only after many decades. Only now are Van Gogh's works understood and appreciated. In the days of Van Gogh, Ebenezer Howard wrote his *Garden Cities* of *To-morrow*, functional, not romantic, units with an open centre, glass shopping arcades, etc. <sup>52</sup> A short time afterwards Tony Garnier designed his 'Cité Industrielle' near Lyon. For the greater part these artists to whom I am going to refer later on, lived and are living in a state of isolation. <sup>53</sup> In this connection I would mention Hilberseimer, Milyutin and even Le Corbusier although his name is on everybody's lips. <sup>54</sup>

52

E. Howard, Garden cities of To-morrow.

Tony Garnier (French architect, 1868-1949).

<sup>54</sup> Nikolay Milyutin (Russian planner, 1889-1942), Le Corbusier (Charles-Édouard Jeanneret, Swiss French architect and artist, 1887-1965).

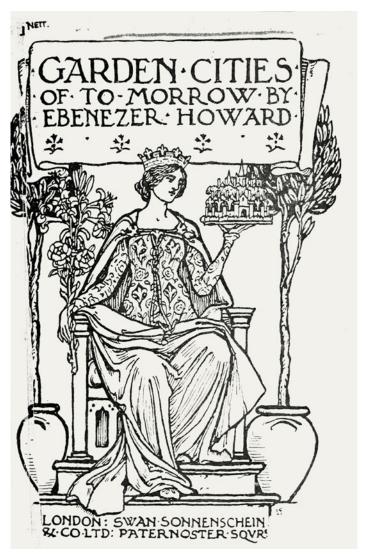


FIG. 10 Cover of the book Garden Cities of To-morrow of Ebenezer Howard

Thus, there came a type of artist whose way of working more and more approached that of the inventor, the investigator and the discoverer.

The less the artist tries to get into the good graces of the public, which has lost contact with art, the greater the chance of his getting in touch with the hidden sources from which the emotional content of the work of art is fed.

The interaction between reality and symbols of feeling is as much in a state of flux as the interaction between acting and feeling. In town planning and in art in general the point is to give expression to a realm of feeling which our contemporaries identify to be theirs. Here we are faced with the difficulty that there is a time interval between the creation of a modern work of art, which expresses the realm of feeling of today, and recognition by the public. I need refer only to the delayed relation between the public and Van Gogh, Mondriaan, Van Doesburg, Van der Leck, Kruyder, Willink and many Others.<sup>55</sup> This element of delay can be demonstrated by the phenomenon that not until now has the public become appreciative of the works of art created in a rather remote past. This gap can only be bridged by putting the rising generations into touch with the achievements of contemporary art, painting, sculpture, architecture, music and literature. For this purpose we shall have to fall back on the schools and other media. In this connection I think for instance of the activities of the Museum of Modern Art in New York. If no such measures are taken, our generation will never be able to understand the essence and the emotional values of our settlements, cultivated landscapes and elements of modern life, such as articles resulting

Vincent van Gogh (1853-1890), Piet Mondriaan (1872-1944), Theo van Doesburg (1883-1931), Bart van der Leck (1876-1958), Herman Kruyder (1881-1935) and Carel Willink (1900-1983) are all Dutch modern artists.

from mass production, prefabricated houses, etc., because the man of today will only be able to appreciate the essence of these things if he has a feeling for the manner in which they are appreciated and expressed by modern art. I am quite convinced that thus our society will be able to cope with technical progress to the effect that conscious, present-day designing can be realized. What I mean is a manner of building and designing in which every member of society can truly be actively concerned. Thus we could avoid the risk that the best town planning schemes would be stultified by no end of papers and rules and regulations and that town planning should be drowned in a sea of instructions and prohibitions which are not understood by the man in the street.

Now it does not seem to be an easy thing to realize the idea I put before you. But if we enter into the realm of thinking and feeling which is covered by the term unity of town-planning work we see various potentialities and chances. The unity in the many aspects of town-planning conception by which this state is characterized will enable us to lay out more harmonious landscapes and towns. The harmony of appearance and expression will be more perfect according as there is a closer and more fruitful relationship between the individual and the community. But how must we visualize this unity of conception? As soon as we succeed in doing so, after having become aware of its content, we shall probably also succeed in picturing our present-day settlements and cultivated landscapes.

Those sharing in town-planning must have visionary power, knowledge and capability. This is true for the administrator, the investigator, the technical specialists and the designer. Each of them must be able to make, in his own field, reasonable suppositions about the future and to see the interrelation of details as well as the whole. Experience may be an advantage but yet a deep insight may even be a greater advantage. For, what is the case? Already in their developmental stage settlements and cultivated landscapes, even if

they are entirely new structures, are subject to changes. They are totally different from buildings, which are mostly erected within a limited time according to the plans. Especially when preparing large developmental plans, regional plans or reconstruction plans it is fully realized that town planning both projects the future in the present and inserts the present into the future.

It is an interesting though difficult task to meet the demands made by town planning today, but it is a most fascinating adventure to project the future in the present. The constructor of a building works with a more or less concrete programme of demands and of properties of materials. A town planner, moreover, works with tendencies, tendencies which should be realities for him. However, though these tendencies may or may not be crystalized in a later stage, they are subject to rules and regulations, and have to be mapped out immediately. These tendencies will be mostly discovered by town planning research people, who study them critically and determine a point of view with regard to them, after which the designer will embody them, together with the concrete points of the programme, in a set of drawings. In continuous consultation and collaboration with many persons and institutions concerned in the spiritual, social, political and economic aspects, the town planning staff will work on steadily trying to obtain justified results. The investigator and the other people concerned will submit their data, conclusions and suggestions to the designer; and the latter, on his part, will inform them of the development of the plan. It stands to reason that this picture is very incomplete and schematical. I use it only to point out that the collaboration of so many people - to whom will finally have to be added all those workers who in a following stage realize the plans, by e.g. the reclamation of land, the digging of canals and the construction of roads, bridges and buildings which are going to determine the appearance of part of the country or of the town - can be fruitful only if all are dominated by a unity of conception. This collaboration

can be realized in the period in which we are now living, in which notwithstanding or probably thanks to all the controversies we are witnessing, a collective conception of life is developing.

The architect Fritz Schumacher, who in 1924 designed a plan for the expansion of Cologne which has had an unmistakable influence on the development of town planning in the Netherlands, one day after an important decision had been made with regard to his plan, passed the famous cathedral of Cologne. <sup>56</sup> Still preoccupied with town planning the following association of ideas came to him: 'When the cathedral was created, its organism was a conglomeration of all the elements and forces dominant in those days. But today the situation is quite different Now not everything is concentrated in one unique building but in the big social organism of the whole settlement, in the design of which we have at last recognized the most important task: the task to find a new form for the living community. And again generations are going to build up the symbol of their existence.'<sup>57</sup>

The cathedral were often destroyed and new even more radiant monuments of beauty arose from their ruins.

How was it possible that the cathedrals were always rebuilt in a purer form? This could be done, because the development of the cathedral was based on unity of conception. Vision and unity of conception inspired by an elevated principle led the development of the cathedral on from the Roman basilica to the apogee of Gothic architecture in the late Middle Ages. Throughout many ages architects have tried to find the purest conception of the cathedral.

56

Fritz Schumacher (German architect and town planner, 1869-1947).

F. Schumacher, Stufen des Lebens, p. 345.

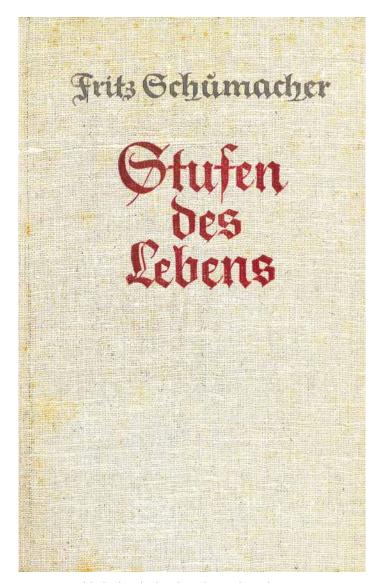


FIG. 11 Cover of the book Stufen des Lebens of Fritz Schumacher

A fascinating progress of creating a constantly purer conception developed in western and central Europe. The invisible community of architects was fully concerned with the conception of the cathedral without being aware of its ideal design beforehand and without having a vision of the technical completion of the monument. They were creating the reality of a communal conception which was essentially present in their deepest feelings and thoughts, a conception arising from the complex of the psychical, social, economic and political forces from the Middle Ages. This is not restricted to cathedrals or the Middle Ages, but is also found in the analogous developmental process of conception in other civilizations (China, Bali, Yukatan, Tibet, Ancient Egypt).

The way of working which is nowadays called team work is identical with the method applied by the builders of the cathedral. No working-group of town planners, which if it is a good team and represents the actual elements of the living community and directs its spiritual, social, political and economic forces to the town planning aim, will ever be able to finish an important scheme if it does not acknowledge a communal conception as point of departure. There will only be good results if in the subconsciousness of the community of town planners, specialists, investigators, etc. there is a preconception which urges towards consciousness. This is the inner conviction that a totality, which is jointly desired and also thought to be possible, must be aimed at and achieved. This conviction will reveal the image of landscape and settlement, just like the image of the cathedral was revealed gradually in the course of centuries; and it is this conviction which has to be the leading principle of the authorities, committees, designers, investigators and administrators who are preparing our spatial plans in national, regional, local and even international relationships and which has also to lead on those who have to realize these plans. Thus our settlements and cultivated landscapes, like formerly the cathedral, will attain their perfect form.

With regard to the habitation of the earth we distinguish three kinds of activities in a socio-economic and town planning sense: exploration, exploitation and occupation. Large parts of the earth, as the Antarctic regions, parts of Siberia, Africa, Canada, South America are still being explored while they are at the same time being more and more exploited and occupied. New towns are still being built there. Today exploitation follows exploration closely, and in fact is mostly premature exhaustion, though people are becoming more and more convinced that premature exhaustion is inadmissible and that efforts should be made to maintain the fertility of the soil. Shortage of goods and disorganization as results of World War II have a delaying effect on the transition from exploitation to occupation. The United States is in a stage of forced transition from forms of exploitation to forms of occupation. It is obliged to execute immense works in the fields of technology, forestry, and agriculture in order to stop or at least to mitigate the catastrophes in nature resulting from an unlimited exploitation of the soil and vegetation. In this connection I would mention the works in the Tennessee Valley. Today western Europe, including the Netherlands, is mainly in the stage of occupation, which involves that here, if we consider our town planning problems in broad outline, it is particularly the change of the forms of occupation which has to be considered. Nevertheless it would be incorrect to assume that in the Netherlands the situation is stable. The industrialization, mechanization and rationalization of the productions of raw materials and goods, as well as the changes in agriculture, horticulture and cattle-farming are being effected at an accelerated pace, which requires conscious action in the field of planning. The establishment of new and the extension of existing industries and, moreover, the large increase in population for which industry will have to provide new conditions of living, will bring about considerable changes in our towns and landscapes. The layout of our settlements has, for the greater part, become obsolete and asks for improvement. The change in the use of the soil and

the cultivation of the soil are accompanied by changes in the dimensions of the constituent parts of the landscape, its lay-out, its greenery, its farms. We are in need of recreation areas which enable the population to come into closer touch with plants and animals.

The purport, the object of all this is of vital importance. All those concerned in these radical changes in the various sectors of society must be gifted with imaginative power, the ability to design and unity of conception. Our main problem is whether in these changes the manifestations of contemporary life will be accepted in a positive sense and will be utilized creatively or whether they will be received reluctantly. Creative utilization involves that their value will have to be put to the test, after which it will be allowed to utilize them very carefully and only in the interest of the individual and the community.

But you will ask: 'What idea must we form of this acceptance and creative utilization?' In order to be able to give an answer to this question we shall have to deal with the specific emotional values which find expression in art and which I indicated just now.

Some time ago Vasalis wrote: 'Artists have this in common: they express what they have received, after something has happened to it beyond their consciousness.

The resulting creation by no means originates, as Roland Holst wrote in his My Own Backgrounds, from so-called thinking, but from life as it is experienced in contemplation.<sup>'58</sup>

M. Vasalis, Over den dichter.

Ladies and gentleman, I have quoted these words because we shall have to deal with these deeper moving's of life if we want to effect a closer approach to our contemporary conception. This holds particularly with regard to the coming town planners and the students of town planning, who in the near future will be called upon to assist in designing towns and landscapes and who will have to conduct an inner struggle: a struggle with the main issue of their creative power and the object of town and landscape designing.

Very much to the point Lao-Tse said in Tau Te Tsjing: 'Let your intellect be one with your intuition and let there be no inner conflict.'<sup>59</sup>

Well then, the technical shapes are the expression of our technological and organizational ability, which is great and rather simple so that these shapes are often quite clear. Therefore we may share Oud's expectation that 'the construction itself will have to transcend its material necessity to assume an aesthetic form'. 60 In my opinion this is going to happen if intellect and intuition are one and the designer has experienced the essence of his object in contemplation. The well-known bridges of Maillart in Switzerland and the concrete constructions of Le Freyssinet in France are examples of a wonderful amalgamation of technique and expression. 61 The realm of intuition finds expression in art and particularly in the liberal arts, whereas in technique it is the intellect which is preponderant. But, let there be no conflict...

<sup>59</sup> Lao Tse, Tau-te-tsjing.

<sup>60</sup> J.J.P. Oud (Dutch architect, 1890-1963).

<sup>61</sup> Robert Maillart (Swiss civil engineer, 1872-1940), Eugène Freyssinet (French structural engineer, 1879-1962).

Poincaré, the mathematician and philosopher, has written that 'we cannot fully cognize things but we can reveal something of their essence by observing their interrelations'.<sup>62</sup>

The artists who I just mentioned to you, and who in their way of working and living are coming closer and closer to the investigator, the discoverer and the inventor, in their isolation have observed the interrelations of things and men and have discovered something of it. After dealing with equilibrium and happiness Piet Mondriaan wrote in Art and Life: 'I build everything on observation; the fact that the art of painting comprises a whole culture involves that it is an ideal medium to demonstrate equilibrium and happiness.'<sup>63</sup>

In this connection I would refer to James Joyce, who in Ulysses integrally represents the interpretation of inner and outer life of his persons, and confronts their physical and psychical egos with each other in their environment.<sup>64</sup>

Moreover, I should like to mention in the same connection the poet and painter Hans Arp as well as Kandinsky, Klee, Braque, Calder, Vantongerloo.<sup>65</sup>

The cubists painted various projections of objects in shape and colour beside, over, and through each other in order to be able to represent in one image the simultaneity in experiencing the various

Henri Poincaré (French mathematician and philosopher of science, 1854-1912).

Poincaré was influencial for some artists and architects in the 1920s, in particular Theo van Doesburg. See: John G. Hatch, "Some Adaptations of Relativity."

<sup>63</sup> Probably Van Eesteren cites from memory and refers to: P. Mondrian, De nieuwe beelding schilderkunst.

James Joyce (Irish writer, 1882-1942).

Hans Arp (German-French artist, 1886-1966), Wassily Kandinsky (Russian-French artist, 1866-1944), Paul Klee (Swiss artist, 1879-1940), Georges Braque (French artist, 1882-1963), Alexander Calder (American artist, 1898-1976), Georges Vantongerloo (Belgium artist, 1886-1965).

aspects and properties of these objects. They started from the totality of the cognition of their subjects. The whole field of isms, such as futurism, which just like cubism represented movement and simultaneity in paintings and plastics; constructivism, which illustrated the possibility of equilibrium of spatial tensions; Dadaism, which expressed particularly the idea of relativity; tactilism, which demonstrated the emotional values of the properties, the structure and the skin of matter in connection with its being sensed by eye and hand; surrealism, which interrelates the unconscious, the subconscious, and reality – they are all aspects of an expanding new reality with which art has established emotional contact.

In this Apollinaire recognized an Esprit Nouveau, and wrote: 'Their investigations will be useful, they will lay the foundations of a new reality, which will probably not be inferior to the reality, so poetic and wise, of the ancient land of the Greeks.'

The Stijl-group and others in our country supported and are supporting this new reality, which is being recognized more and more.

Art is becoming multi-dimensional, and, as clearly observable in painting, sculpture and music, transcends the representation of the three-dimensional world, because it wants to express values which cannot be interpreted in any other manner. These modes of expression result from an inner urge irresistible to artists.

It is a little difficult to talk about these things without showing works of art. Still I cannot, but do so because I can explain the backgrounds of contemporary designing only in this manner. It is sometimes alleged that the isms should be a sign of disintegration and atomatization. But this is by no means true. In a wide sense they form together the contemporary unity of art and the various movements make the facets and motives of modern art manifest.

The observed relations are experienced through the senses, just like the transfer of expression, which enables us to live the content and expressiveness of the works of art. And just as the urban objects and relations can be observed intellectually they can also be perceived by our senses.

Let us first say something about the objects and the relations themselves.

The functions and purposes of planning – and this is a sensory perception – are to be concretized in dwellings, public buildings, roads, canals, railways, factories, parks, farms, woods, sports grounds, etc. – so in objects. When the interrelations of functions of life aiming at spiritual, productive, cultural, industrial, agrarian, recreative and other objects are not well ordered the result will be a spatial chaos. In the great adventure of the living community the town planner is aiming at spatial order by making schemes, projecting the present in the future and the future in the present in a continuous interaction. The science of town planning makes us aware of functions and purposes, and the art of town planning enables us to group the objects I mentioned just now spatially together and with elements such as water, greenery, differences in altitude, etc. The manner in which this is dome determines the appearance and expression, the style, of the settlements and cultivated landscapes.

In the beginning of my lecture I have pointed out that the forms and the expression of towns and cultivated landscapes differed through the various epochs of civilization. I have quoted Hilberseimer, who makes the rise and decline of all settlements dependent on spiritual, social, political, and economic forces occurring in many combinations with changing dominant forces. Within this complex of forces, and affected by these forces, vision and conception of form and expression arise and become active

in the manner of art. Experiencing life in contemplation the liberal artists creates his works of art and in the same manner the urbanist arrives at a conception. Of course, it takes a long time before the creative process is started and it will be difficult to say when and where it is exactly started.

The numerous objects of the town planning schemes have no end of values and meanings. Mostly they have a practical purpose and at the same time they are symbols of the forces from which they originate.

In the one case the stress lies on the practical aspects and in the other case it lies on the symbolic aspects, mostly they are interwoven. The place of the stress depends on the dominance of one of the spiritual, social, political or economic forces active in the object. The form of an airplane is for instance based on the practical use; a war monument is an object of a symbolical nature. I would refer to the devaluation of the symbol in the nineteenth century, which was pointed out by Giedion, and to what I have said in this connection. I think I demonstrated just now that contemporary art involves a re-evaluation of the symbols, of the emotional values. The art of town planning is also concerned in this process. In this relation we shall now consider some urban objects.

A dwelling and a dwelling unit should not only give shelter to the occupants but also enable them to develop their personalities. Voluminous books have been written about the dwelling and the dwelling unit and about the urban objects and elements which will be briefly mentioned hereafter. The designer must know both their individual nature and the practical demands with regards to situation, etc., and to synthesize them together with the emotional values into a special form, after which he can include them as components in the scheme.

A school is a building which can have a character if it is a good school. Of course, the same holds true for any kind of building. For everybody the word school is related with a certain representation; for the town planner it has more facets than for the layman, but ultimately it culminates for him also in a summarizing representation of the object school.

For the town planner, roads, railways and canals are objects of traffic, along which movement takes place and man transports himself. In the landscape itself they are static elements but for the traveller they are lived dynamically so that there is a simultaneity of impressions. This is the simultaneity of the cubists and the futurists, just like the relativity which I am going to mention presently, was revealed to us by the Dadaists in the manner of art. The designer, when trying to find a track for a road, will doubtless include both aspects in his conception.

Agrarian landscapes serve for food production and they are at the same time residential regions. Owing to the rationalization and the mechanization of farming the dimensions of land property have become larger and much of the greenery has been cleared away. In making plans we have to account for the necessity to incorporate the human element which is important from the point of view of habitation in the landscape, and to maintain the biological equilibrium. Like in Joyce's prose, man is confronted in a present-day manner with the landscape.

Woods supply timber. However in densely populated regions like ours they are of great importance for recreation; they represent biological and climatological values as well. They bring man into contact with the intimacy of life, with plants and animals, their coming into existence and their perishing. On the other hand seas, lakes and pools give us a feeling of space. A combination of wooded areas and wide, open views provides ideal spots of recreation.

Such a landscape unites reality and subconsciousness and thus creates harmony within us. And as soon as we understand the essence of surrealism – the relation between subconsciousness and reality, of which life and death are the factors – we shall be able to give a better form to planning, as well as to landscapes for recreation.

Both for worshippers and others a church is not merely a building with some hundreds of seats from which divine service can be followed. Owing to many aspects of spiritual, cultural and social life, churches, schools, libraries and similar objects, from the point of view of town planning, belong to the atmosphere of relativity.

Apark, an office building, amonument, a garage, a hospital, a concert hall, a sports-field, a market, a cemetery, a harbour, a rubbish-dump, shunting-yards, an industrial complex, an allotment garden park, farms, horticulture gardens with their buildings, beaches, woods, mud flats, all these objects are perceived sensorily by the urban designer and experienced by him in contemplation.

So besides their practical properties and values the objects and elements of the town planning scheme – be it on a local, national or international level – also have an emotional content. In themselves and in their interrelation they are for the inspired man more than mere utility and matter. The interrelations of the objects and elements are greatly affected by the purport and intentions of the scheme. Purity in experiencing the creative forces will benefit the expression. Renovation of the fundamental values towards the elementary has a fructifying effect on town planning.

After what I have said I need not explain that the harmony of our settlements and cultivated landscapes depends on the harmony of social forces. Acknowledging and accepting struggle, decay and death as essential elements of life, which are also crystalized in the

forms of settlements and landscapes, I now come to the personal attitude and responsibility in life, which is actually a special subject in itself. But as I touched upon the various movements and spoke at the same time about collaboration, I cannot but tell you how I picture them to be in the practice of town planning and architecture.

The potential collaboration of the various movements in architecture and town planning is incorporated in the communal and reciprocal recognition and acknowledgment of the elementary values and principles determinative of the forms of the objects and the utilization of natural elements as parts and components of towns and landscapes. It must be possible for colleagues with different views of art and life and spiritual backgrounds to deal together in a positive sense with the essential things concerning the preparation of a design, e.g. of a church or an office building, in the interest of the town planning entity. I know from practice that if the members of a team are really of good will and sincerely try to understand each other's points of view, they will accept everybody's right to a different insight. Still success can be achieved only if consultation is held on a proper level both as to planning and human relations. There will undoubtedly be difficult moments at which the relativity of things can lead up to weak solutions. However, if the members of the team give each other the chances required for a good result with regard to both the separate parts and the entity, and acknowledge the priority of what is reasonable, the collaboration will be fruitful.

My own attitude in this collaboration is quite well known and I need not explain it to you.

In respect to education I would remark that contemporary art could favourably affect the designing capacity of the future town planners and building, projecting and constructing engineers. In saying so, I want to emphasize that contemporary art must also have its chances in our Technological University.

A minimum of equality of insight and effort is as much a requirement for success in education as in other fields of creative work. The same holds true when a group is working on a plan. The potentialities which a designer begins to see in a task at a certain moment, and the inspiration he finds in the working group stimulate his creative capacities. Then, unity of the conception of education can be prepared too, in which the set-up, the methods, the professorships, etc. are of great importance. If this does not happen, it will not develop afterwards in practice, and the promises of modern architecture cannot be fulfilled either. 66

We know the difference between good and evil, between right and wrong. Everybody has a sense of elementary human values, and education aims at enabling everybody to discern these values. Man has also an inborn sense of the elementary values of form, colour, and sound. More than hitherto, education at home and at school will have to contribute to the development of this sense and likewise to the development of the creative faculties. Then a general creative visual power will develop and the sense of being responsible for the architectural and urban forms will increase. Perhaps there may be a time when people will consider it to be contrary to the common good and will think it improper to create bad spatial solutions or to start building without regard to an approved town planning scheme.

With this Van Eesteren refers to the inaugural speech of Marinus Jan Granpré Molière with the title "De moderne bouwkunst en hare beloften." (Modern architecture and her promises), held in 1924.

As a result of their activities present-day town planners want to realize ethical values. They want to serve and promote the spiritual, moral, and material welfare of the occupants of the settlements and landscapes. In the reality of a society full of tensions between life and death they are aiming at a Cité du bon accord as Reclus called it characteristically. The degree to which the forms of our towns and landscapes will harmonize depends on the degree of purity of the social relationships; their appearance and expression – their style – on the degree to which we experience life in the entity of the forces.

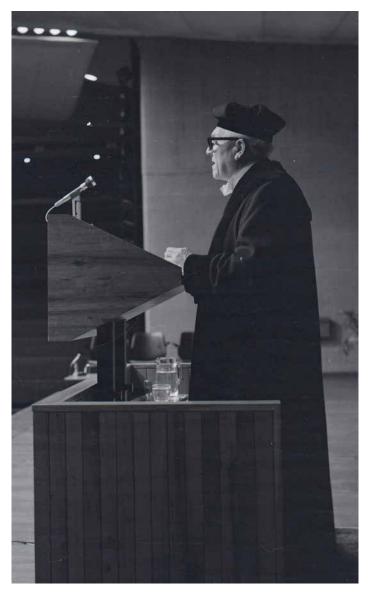


FIG. 12 Cor van Eesteren delivering his valedictory lecture in 1967

## **Bibliography**

Apollinaire, G. La Femme Assise. Paris 1920.

Giedion, S. Space, Time and Architecture the Growth of a New Tradition. 3<sup>rd</sup> ed. Cambridge, Mass.: Harvard University Press, 1954.

Hatch, John G. Some Adaptations of Relativity in the 1920s and the Birth of Abstract Architecture. Nexus Network Journal 12, no. 1 (2010).

Hilberseimer, L. The New City. Principles of Planning. Chicago: Theobald, 1944.

Howard, E. Garden Cities of to-Morrow. London 1902.

Mondrian, P. De Nieuwe Beelding in De Schilderkunst. De Stijl (1918).

Saarinen, E. The City. Its Growth, Its Decay, Its Future. New York: Reinhold, 1958.

Schumacher, F. Stufen des Lebens. Errinerungen Eines Baumeister (Steps of Life. Memoires of an Architect). Stuttgart/Berlin 1935.

Tse, Lao. Tau-Te-Tsjing. Het Boek Van Weg En Deugd. Arnhem 1942.

Vasalis, M. Over Den Dichter. A. Roland Holst. Amsterdam 1948.0

## List of figures

- FIG. 1 Cor van Eesteren, Drawing of the Westelijke Tuinsteden fort he General Extension Plan of Amsterdam. From: van Rossem, V. Het Algemeen Uitbreidingsplan Amsterdam. Geschiedenis En Ontwerp. Rotterdam 1993.
- FIG. 2 Author unkown, Van Eesteren in 1981. From: Beeldbank TU Delft.
- FIG. 3 Author Unkown, Cor van Eesteren in a Sikorsky Helicopter during his visit to Brazil in 1958. From: HNI. Archief Van Eesteren. EEST II-13.
- FIG. 4 Cor van Eesteren, Notes for a lecture. From: 'Vormgeving en ontspanningsterreinen', in: HNI, Archief Van Eesteren, EEST VI-160.
- FIG. 5 Van Lohuizen, Page of a lecture. From: HNI, Archief Van Eesteren, EEST VI-179.
- FIG. 6 Author unkown, Picture of Van Lohuizen, From: Trésor TU Delft.
- FIG. 7 Author unkown, Cor van Eesteren in his professor robe after delivering is inaugural speech. From: Beeldbank TU Delft.
- FIG. 8 Eliel Saarinen, Illustrations in the book The City, Page 10 and 16. From: Saarinen, E. The City. Its Growth, Its Decay, Its Future. New York: Reinhold, 1958.
- FIG. 9 Eliel Saarinen, Cover of the book The City. From: Saarinen, E. The City. Its Growth, Its Decay, Its Future. New York: Reinhold, 1958.
- FIG. 10 Howard Ebenezer, Cover of the book Garden Cities of To-morrow. From: Howard, Ebenezer. Garden Cities of To-morrow. London 1902.
- FIG. 11 Fritz Schumacher, Cover of the book Stufen des Lebens. From: Schumacher, F. Stufen des Lebens. Errinerungen Eines Baumeister (Steps of Life. Memoires of an Architect). Stuttgart/Berlin 1935.
- FIG. 12 Author unkown, Cor van Eesteren delivering his valedictory lecture in 1967. From: Beeldbank TU Delft.

## On the Editors

Carola Hein is Professor and Head, Chair History of Architecture and Urban Planning at TU Delft. She has published widely on topics in contemporary and historical architectural and urban planning - notably in Europe and Japan. Among other major grants, she received a Guggenheim Fellowship to pursue research on The Global Architecture of Oil and an Alexander von Humboldt fellowship to investigate large-scale urban transformation in Hamburg in international context between 1842 and 2008. Her current research interests include transmission of architectural and urban ideas along international networks, focusing specifically on port cities and the global architecture of oil. She serves as Editor for the Americas for the journal Planning Perspectives and as Asia book review editor for the Journal of Urban History. Her books include: The Capital of Europe. Architecture and Urban Planning for the European Union (2004), Port Cities: Dynamic Landscapes and Global Networks (2011), Brussels: Perspectives on a European Capital (2007), European Brussels. Whose capital? Whose city? (2006), Rebuilding Urban Japan after 1945 (2003), and Cities, Autonomy and Decentralisation in Japan. (2006), Hauptstadt Berlin 1957-58 (1991). She has also published numerous articles in peerreviewed journals, books, and magazines.

Herman van Bergeijk is an architectural historian who studied in the Netherlands (Groningen) and Italy (Venice). After working abroad and teaching at many universities in the United States, Germany, Italy and the Netherlands he obtained his Ph.D. in 1995 with a study into the work of the architect and town planner W.M. Dudok. In 1997 he was appointed at the University of Technology in Delft. Since 2004 he is an Associate Professor in Architectural History in Delft. He has curated many exhibitions and published extensively on 17th and 20th Dutch and Italian architecture. Recent publications are: Het handschrift van de architect. Schetsen van Nicolaas Lansdorp en tijdgenoten (together with Michiel Riedijk)(2014) and Aesthetic Economy. Objectivity in Dutch architecture (2014). A study into the work of the Dutch architect Jan Duiker will be published in 2016.

This small booklet contains the inaugural speeches of Th. K. van Lohuizen and Cor van Eastern given on the occasion of their appointments as professors at the Technical College of Delft. The speeches provide novel insights into their respective teaching programs, and appear here for the first time in English. An analytical reflection on their work by the architectural historian Herman van Bergeijk introduces them.

