

# Garden Thinking in Cities of Tomorrow

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## **Abstract**

Since the middle of the 19<sup>th</sup> century, when the term 'landscape architecture' began to replace the hitherto common term 'garden art', the garden as a work of art and gardening, understood as a predominantly decorative activity, stood in the critical discussion about the future of the metropolises. It was not only architects and urban planners who repeatedly questioned the value of ornamental gardens in the city. Against the background of the enormous growth of the cities in the industrial age and the accompanying social problems, leading European landscape architects in the 20<sup>th</sup> century like Leberecht Migge (1881-1935), Ernst Cramer (1898-1980), and Dieter Kienast (1945-1998) stated that gardening is neither artistic work nor scientific planning, neither modern nor progressive. Given the respective historical context as well as the particular conception of city and society, this criticism is comprehensible. In the 21<sup>st</sup> century though, the garden as a living component in the 'network metropolis', and gardening itself, especially 'urban gardening', were experiencing a remarkable renaissance. Against the background of today's rapid development of the 'Zwischenstadt', it turns out that the basic principles of garden thinking never really lost their relevance.

## **Keywords**

landscape architecture, urban gardening, modernism, functionalism, ecology, modern art

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## Introduction

Frederick Law Olmsted was apparently the first professional in the mid-19<sup>th</sup> century to use the term 'landscape architecture' in connection with his work on Central Park in New York. Given the huge urban planning task with which he had to struggle for more than two decades, in the end he no longer thought it was appropriate to speak of 'landscape gardening' or 'garden art', as these terms focus too much on the garden as a merely aesthetical institution. Instead, he coined the term 'landscape architecture' and henceforth used it in the letterhead of all his correspondence and in countless inscriptions and plans.

Central Park (Fig. 1), which covers an area of 340 hectares, was created as a democratic public park as a result of profound changes in the social fabric of the metropolis. It was among the world's most progressive and pioneering open space concepts of its day. The park is still cited as an example of progressive landscape architecture. As knowledge of this particular model has spread during the past 150 years, the term 'landscape architecture' became popular around the world. During the same time, and to the same degree, gardening was increasingly suspected of not being useful with regard to the development of today's constantly growing amalgam between landscape and city, called "Zwischenstadt" (in-between city) by Thomas Sieverts (Sieverts, 1997) or "network metropolis" by Saskia de Wit (de Wit, 2018, p. 356). Sieverts coined the term "Zwischenstadt" in 1997 to describe a living environment in which we can no longer clearly differentiate between the city and the country, because the compact cities lost their clear boundaries and dissolved, resulting in vast metropolitan landscapes which are thriving especially in the Global North. "The term 'Zwischenstadt' signifies that today's city is in an 'in between' state, a state between place and world, space and time, city and country." (Sieverts, 2002)

The landscape architecture of the 20<sup>th</sup> century, in view of large-scale, globally important tasks and growing challenges of industrial-based urban development, no longer accepted gardening as a helpful practical method for planning and design. Gardening was associated with a small-scale private context and with traditional perceptions of nature – a stark contrast to the modern belief in progress.

The future of humanity will no doubt be an urban future. And gardening, such as 'urban gardening', as one of the themes discussed in debates about the sustainability of the Zwischenstadt, about the future of the metropolitan landscape, is once again becoming a focus of interest. (Fig. 2) Is this trend pointing the way or is it just a fad related to the romantic notion of withdrawing from our rationally designed urban environment to the realm of beautiful gardens? In order to understand why the ornamental garden slipped out of the focus of metropolitan landscape architecture and why garden design was perceived with such scepticism, it is necessary to take a look at the history of landscape architecture during the past century.

Three landscape architects who coined the development of their profession throughout the 20<sup>th</sup> century in the German-speaking countries of Europe and beyond, clearly commented on the value of garden design and ornamental gardening, based on their visions of current and future metropolitan life. The German garden revolutionary Leberecht Migge (1881-1935), as well as the Swiss landscape architects Ernst Cramer (1898-1980) and Dieter Kienast (1945-1998), are the key witnesses in the following journey through the 20<sup>th</sup> century development history of garden design and garden thinking.



**FIGURE 1** When building Central Park in the 19<sup>th</sup> century, Frederick Law Olmsted no longer thought it was appropriate to speak of 'landscape gardening' or 'garden art'. (© Udo Weilacher).



**FIGURE 2** Beijing is growing fast, producing a highly complex system of spaces, a metropolitan landscape, challenging the current understanding of 'gardening'. (© Udo Weilacher).

## **Fighting for the Functional Garden**

At the beginning of the 20<sup>th</sup> century there was still a strong belief in the efficacy of gardening in pursuit of social progress, and 'green' was considered to be very modern. Leberecht Migge, born in 1881 in Danzig, is regarded as being the most important German garden reformer, and his work is still recognised around the world. Migge was firmly convinced that the future of industrial society could only be secured through the use of a new kind of garden culture. In his work, however, he vehemently refused to have any association with art and declared "as the first representative of his profession the death of garden art. The function of the garden has to be expressed [...] without any aesthetic considerations" (Wimmer, 1989, p. 368). Leberecht Migge opened his landscape architecture office in Hamburg-Blankenese in 1913 and in the same year wrote the book *Die Gartenkultur des 20. Jahrhunderts [The Garden Culture of the 20<sup>th</sup> century]*. Six years later he published *Jedermann Selbstversorger! Eine Lösung der Siedlungsfrage durch neuen Gartenbau [Everyman Self-Sufficient! A solution to settlement issues through new gardens]* (Migge, 1919). Both books are flaming manifestos about the need to think of gardens in new ways. They were written in the face of an impoverished working class in Europe before the First World War and as a result of dramatic food shortages during the post-war period. Working together with many well-known architects of his day, including Ernst May, Bruno Taut, and Martin Wagner, he contributed to the development of several exemplary urban planning projects in Berlin (e.g. *Hufeisensiedlung*) and Frankfurt (e.g. *Römerstadt*). In his practical applications he proved that garden culture and urban planning could complement each other extremely well. Urban living without gardens was unthinkable for Migge.

Inspired by his strong awareness of social reform, Migge not only extolled a new type of garden culture (Fig. 3) that, in theory, would suit the changed lifestyles of the modern industrial society. In 1920, he founded the *Intensive Settlement School* in Worpswede, where, on about 4.5 hectares of land, he taught his students the practice of productive garden culture, as well as about standardised housing development. He also developed technical innovations for the garden, such as the *Metroklo*, a toilet for the composting of faeces. "This so-called garden art", he emphasised in 1913, "is nothing more than the capricious and yet natural sister of architecture and spatial art, or better, of cultivated construction. I consider it to be part of the applied arts. As such, it shares the avocation of everything applied: to be partly dependent on purpose, situation and material. [...] Why am I talking about it at all when I actually wish to negate it? Because I want people to stop talking to those of us who create gardens about things that can only be created through work. You can see just how dangerous this is: By just trying to give those who work hard to survive the day-to-day struggle more freedom from the overwhelming aesthetic aspects of gardening, I have almost begun – horror of horrors! – to wax rhetoric myself" (Migge, 1913, p. 142).

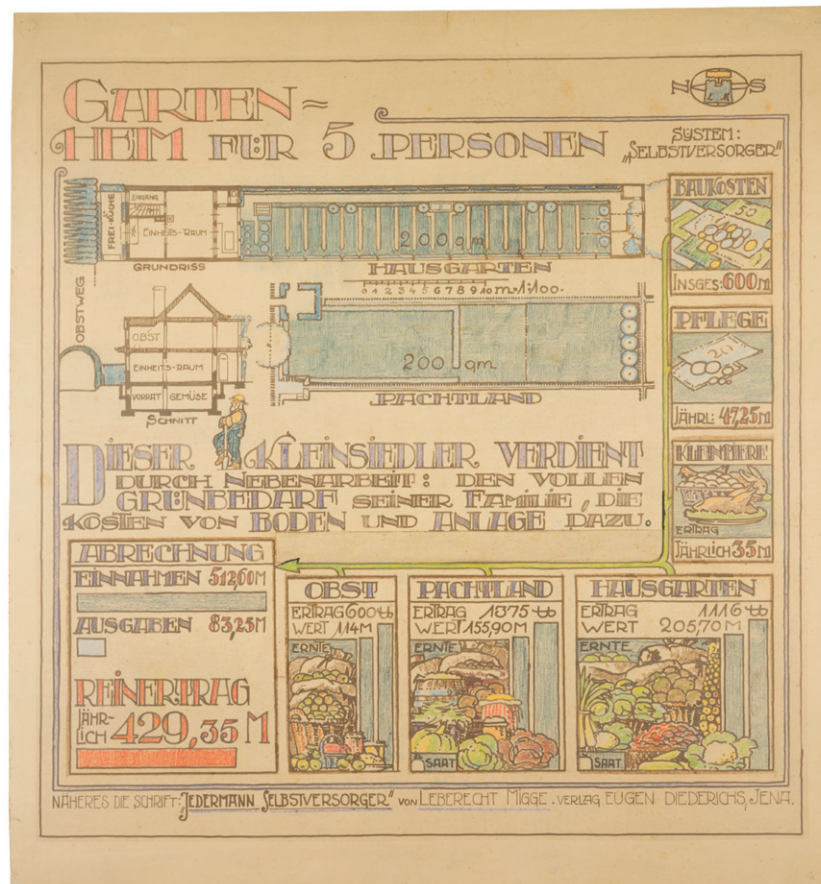


FIGURE 3 The German garden reformer Leberecht Migge believed in self-sufficiency and was convinced that new settlements should always be based on rational gardening principles. (© Archiv Schweizer Landschaftsarchitektur Rapperswil/ Switzerland).

For Leberecht Migge the garden of the future, “the prospective garden” (Migge, 1927, p. 64), could only be a fruit and vegetable garden (Fig. 4), which, in his opinion, did not have to be beautiful or of a particular garden style, as, if necessary, a style would develop by itself, “growing from the life of its own time” (Migge, 1927, p. 70). With regard to the design of the garden, however, Migge had very concrete ideas. “In order to make a good garden in the future, it will be necessary to leave aside some of the old tools that are today thought of as belonging to the art of beautiful gardens” wrote the garden architect in his chapter about basic design. He then explained that “there are always certain purposes that have to be served when establishing a garden, purposes that must be represented and shaped. But how? The architectural design of the garden is particularly essential for us because it is so simple. Because its elements are the easiest to handle and are inherently so economical, that in our time of mass problems they alone allow us to have some kind of broad effect: I desire the architectural garden for economic and social, for ethical reasons” (Migge, 1913, pp. 63-66). Interestingly, the self-proclaimed “Spartacus in green”, who announced the death of beautiful garden art, is now considered by followers of urban gardening to be “a kind of guiding spirit of gardening in the city” (Müller, 2011, p. 15). This is done with a complete disregard of the significant changes that have occurred with respect to economic, ecological, and social conditions occurring since the beginning of the 20<sup>th</sup> century. It now appears as if gardening, in a new context of urbanisation, is once again gaining attention and importance. First, however, it must be noted that Migge clearly rejected gardening as an activity that was influenced by art and thus greatly contributed to gardening’s loss of reputation, especially among landscape architects. Migge’s “innate tendency to have extreme views and revolutionary aspirations, and his predisposition for ruthlessness in his actions” (Gröning, 1997, p. 264) resulted in his being forbidden to practice his profession by the National Socialist regime in 1933. His progressive ideas were then slowly forgotten about for several decades. (Fig. 5)



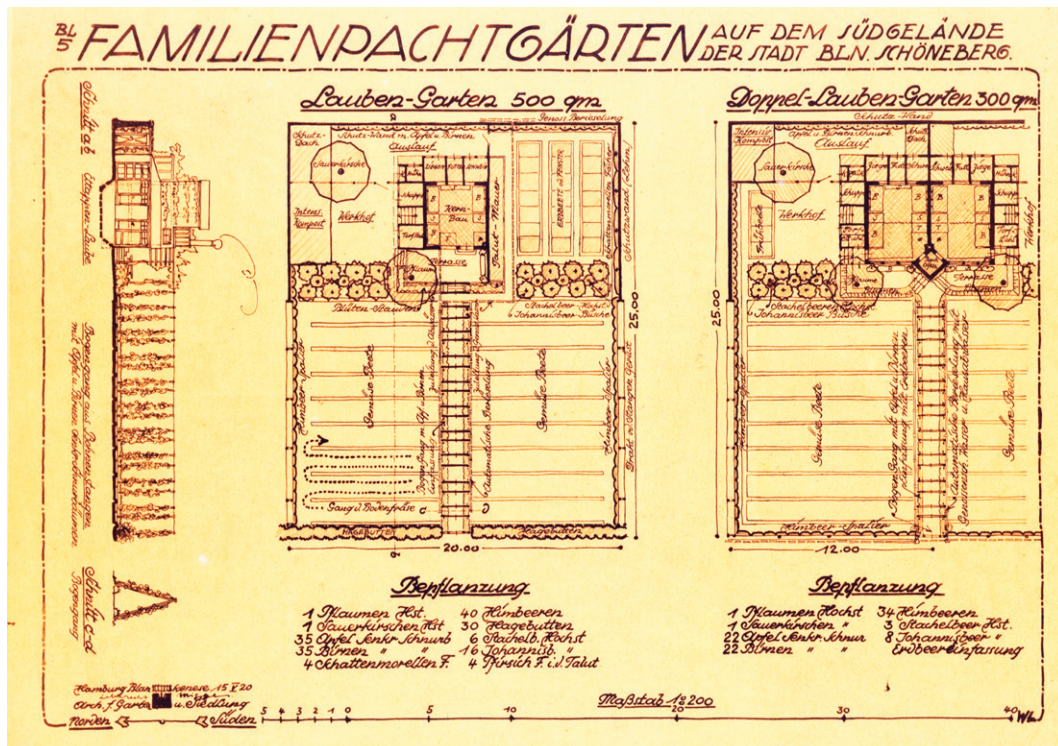


FIGURE 4 For many German cities, including Berlin-Schöneberg as shown here, Migge designed gardens for families to lease, paying close attention to the functionality and practicability of his design. (©Archiv Schweizer Landschaftsarchitektur Rapperswil/ Switzerland).



FIGURE 5 The functionalistic concept 'Palestine Settlement' by Leberecht Migge from the early 1920s strongly influenced the development of cooperative agricultural communities in Israel. (© Archiv Schweizer Landschaftsarchitektur Rapperswil/ Switzerland).

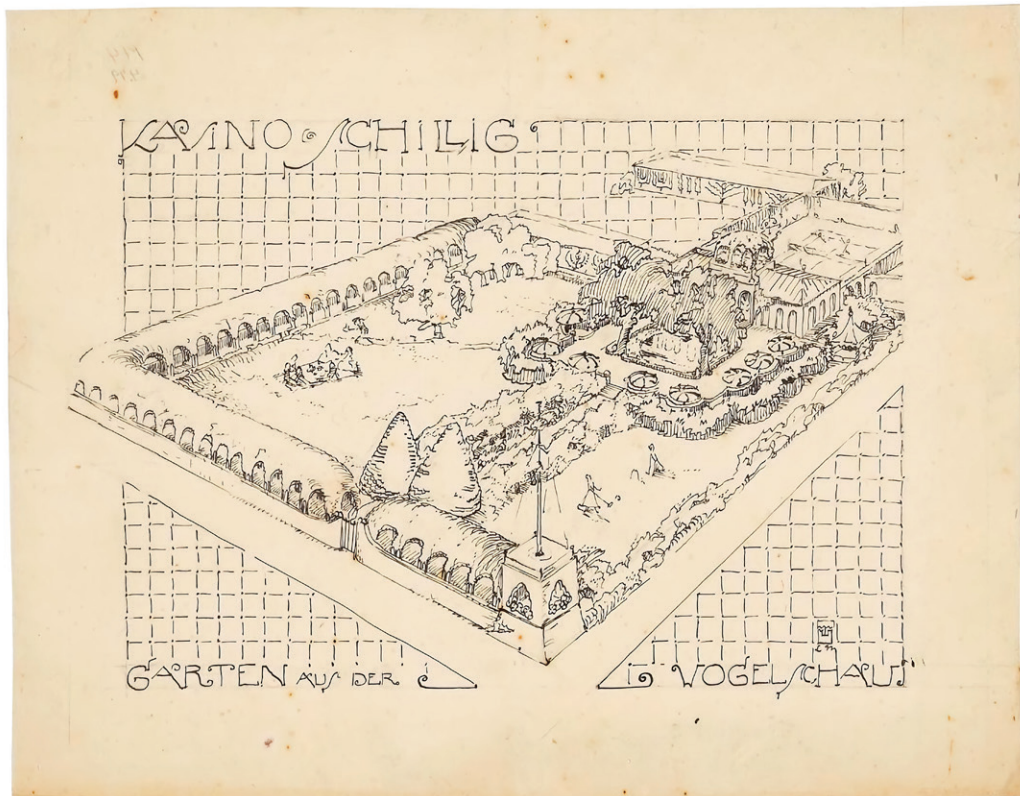


FIGURE 6 Restored original drawing by Leberecht Migge: Garden Casino Schillig (Archive for Swiss Landscape Architecture ASLA)

## Adapting to Modern Metropolitan Life

The modernist movement in Europe, especially the so-called avant-garde, was especially effective at eradicating traditional thinking about gardens from 20<sup>th</sup> century landscape architecture in the period between 1915 and 1932. While Olmsted's objections to the use of the term 'landscape gardening' were mostly functional, the pioneers of classical modernism had ideological and socio-critical reasons for fighting against anything that had to do with imitation, decoration, and historicism. Among the things they considered to be unacceptable was of course the imitation of nature, including classical garden art and traditional garden design. Piet Mondrian, one of the most influential exponents of modern painting, graphic arts, architecture, and design, demanded that in the sense of new design, truly modern artists choose abstraction, and that they should free themselves from the dictates of the natural and the individual: "The domain of truth is pure abstraction. New design is therefore abstract-real" (Wisner, 1985, p. 42). Modernists felt that a design discipline such as garden architecture, which traditionally felt itself closely connected to nature and that found its ultimate teacher in nature, could not be trusted.

An example of the deep dilemma garden architects often got themselves into when they tried to meet the strict principles of classical modernism is the development of *Die gute Form* [Good Design] in Switzerland after the Second World War. *Die gute Form* was probably the most formative programmatic action of the Swiss Werkbund after 1945. It was intended to increase critical feelings of responsibility within the post-war society and to proclaim a new, aesthetically binding model for all areas of life. Swiss architect, artist, and designer Max Bill played a major role in this. As part of the MUBA trade fair in Basel in 1949, the Swiss Werkbund presented a special exhibition entitled *Die Gute Form* in order to demonstrate its post-war



educational and reformist goals. In addition, the competitiveness of Swiss consumer and durable goods, which had a high degree of “form-instilling, high-quality work”, was to be secured on the world market (Brogle, 1949, p. 259). Max Bill was tasked with the design and realisation of the exhibition, and in his keynote speech in October 1948 entitled “Beauty of Function and as Function” he underlined the need for the careful design of all aspects of life, “from the common pin to home furnishings, designed in a sense of beauty that is developed from function and that fulfils its own function through its beauty” (Bill, 1949, 274).

With the title *Die gute Form*, which was awarded annually as a prize for well-designed products, the Swiss Werkbund formulated a design-related and social reform-oriented claim by which its own members, including Swiss Garden architects Gustav Ammann (Stoffler, 2008) and Ernst Cramer (Weilacher, 2001) were to be judged for two decades. In 1949, Max Bill emphasised that “These somewhat crystalline-shaped design problems not only have to be dealt with when creating consumer goods, it is also a question of vital importance with regard to the development of architecture. If these questions are not dealt with – and not in the sense of architecture with wall paintings and sculptures as decorative elements – architecture, as well as consumer goods, will be seen as doing little more than gratifying basic needs or will get lost in historicist and artistic gimmickry” (Bill, 1949, p. 274). In saying this, he wished to set high standards concerning the quality of design for the modern environment in which we live.

The garden architects of the Werkbund inevitably raised the question of whether their projects would ever meet the criteria set by *Die gute Form* and free them of the dictates of nature. In 1948, Gustav Ammann, who was later general secretary of the International Federation of Landscape Architects (IFLA), said “When we try to take a closer look at gardening concepts in this materialistic era of rationalisation and expediency, we are extremely astonished that we do not see an expression of this in the concepts, but rather one of modern romance and freedom, and this contrast to our daily approach to life surprises us. It is as if modern man is looking for everything in the garden that he is unable to realise in his other daily activities; it is an escape from oneself and an expression of a ‘heavenly state’, if one may call it that. It would be quite wrong to accuse the designers of gardens that they are the ones that who want to live in a completely different world and force their ideas on the owners of gardens. They are only the instrument that makes the sounds that want to be heard” (Ammann, 1948, p. 292). This image of the garden designer, not acting as an active interpreter but rather as a passive instrument of the client, was a clear contradiction to the moral and aesthetic orientation that the Werkbund, the avant-garde of modernism, had formulated. This merely confirmed the opinion that many critics had, that gardening made neither a relevant contribution to contemporary art and architecture, nor to the progress of modern society.

About a decade after the first edition of *Die gute Form*, a landscape architect from Zurich succeeded in creating a garden that, for the first time, met the criteria of classical modernism in its conception of space, design, and geometric purity, and exceeded the limits of traditional gardening: the *Garten des Poeten*, in *English Poet’s Garden*, by Ernst Cramer at the first Swiss Horticultural Exhibition G59. Spurred on by discussions in the Werkbund and inspired by personal encounters with visionary modern architecture and visual arts in the years following the Second World War, Ernst Cramer took advantage of an opportunity in 1959 to create a bold, temporary experiment on the banks of Lake Zürich (Fig. 7). This project’s radical reduction would only be exceeded one time by Cramer, when he built his *Theatergarten (Theatre Garden)* in Hamburg in 1963 (Weilacher, 2001, pp. 151-161). In contrast to the usual decorative horticultural show programme of its time, the garden architect used the simplest of means to create a spatially non-hierarchical, abstract composition consisting of four grass-covered pyramids, a terraced cone and a right-angled expanse of water containing the abstract iron sculpture *Aggression*, created by the Swiss sculptor Bernhard Luginbühl. Cramer, an admirer of Mondrian’s neo-plastic painting, knew about the power of pure artistic abstraction and was aware that he had really created a landscape sculpture instead of garden. He was certain that his colleagues, who still preferred a more picturesque design of gardens that mimicked nature and the landscape, would vehemently protest against this garden.

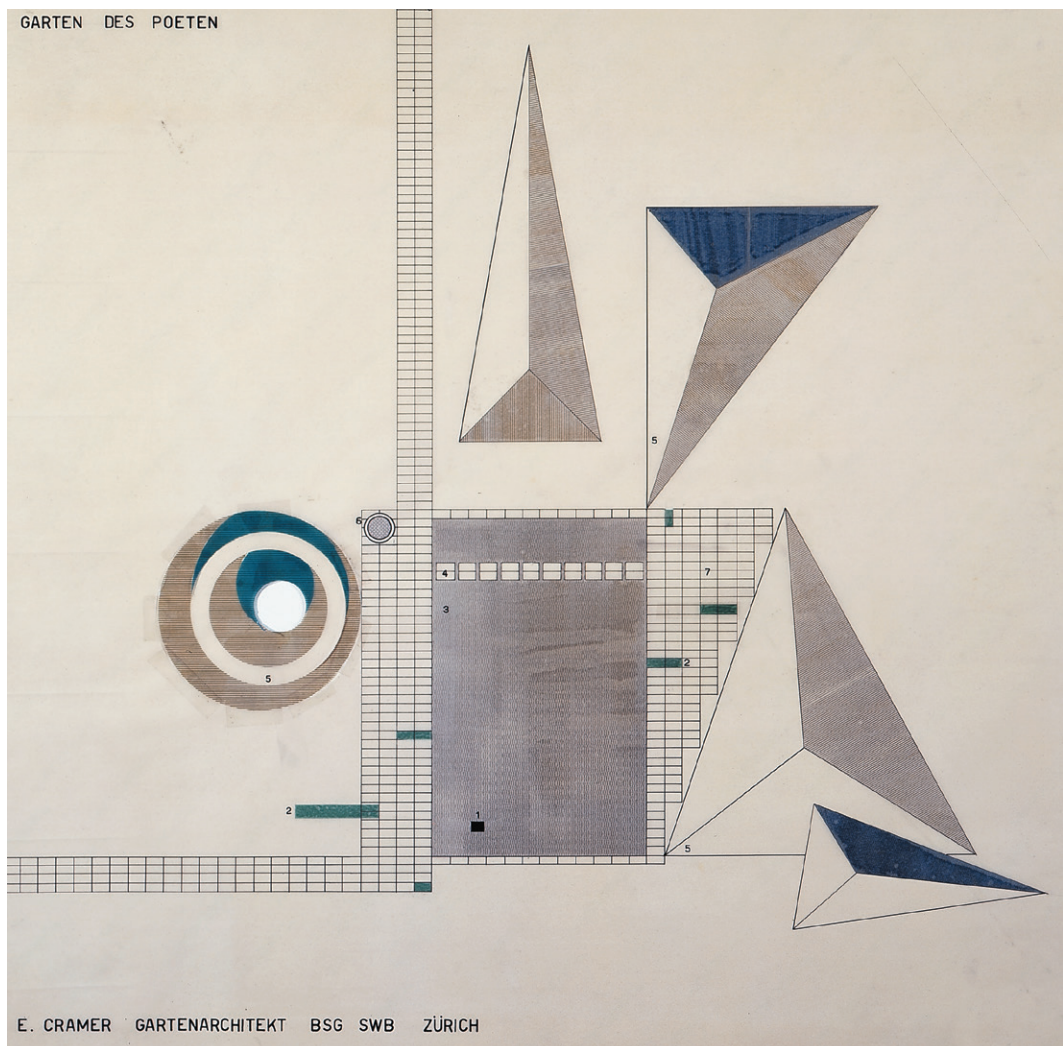


FIGURE 7 Plan of the Garten des Poeten (Garden of the Poet) at the first Swiss garden exhibition G59 in Zürich 1959. Size: 64 x 64 centimetres, coloured foil on transparent paper. (© Archiv Schweizer Landschaftsarchitektur Rapperswil/ Switzerland).

In addition to sharp criticism from the ranks of garden experts, there was also widespread recognition of the *Poet's Garden*. Much of this recognition, interestingly enough, was from those involved with the visual arts. (Fig. 8) Hans Fischli, himself a painter, architect, artist and, at that time, director of the School of Art and the Museum of Applied Arts in Zürich, was greatly impressed and wrote a personal letter to Cramer in which he described the garden architect's project as a landscape, "You[...] bring us a completely new landscape, which creates a sense of space I have never felt before in the open air. You prove that given an ingenious mind and a precise use of the craft, it is not absolutely necessary to use the valuable material soil the same way the forces of nature do. You do not create an imitation of a natural event, instead you create a work in a way that we abstract painters and sculptors have been trying to achieve by concrete means for years" (Fischli, 1959). The Museum of Modern Art in New York honoured the Poet's Garden in 1964 in the publication *Modern Gardens and the Landscape* (Kassler, 1964), which was the "first book to discuss the relationship between the modern garden and the natural landscape in terms of contemporary aesthetics..." (Museum of Modern Art, 1964). Elizabeth B. Kassler, renowned American art expert, curator at MOMA, and author, said "the garden was not so much a garden as a sculpture to walk through" (Kassler, 1964, p. 57). Ernst Cramer was convinced that classical gardening concerned itself far too much with the use of decorative plants and was still steeped in a traditionalism that is hostile to progress instead of formulating an adequate aesthetic response to modern architecture and modern metropolitan life.





**FIGURE 8** The Garten des Poeten with its abstract mountains at the shore of lake Zürich with a view to the real mountains in the background (© Archiv Schweizer Landschaftsarchitektur Rapperswil/ Switzerland).



**FIGURE 9** Probably one of the Burle Marx's first gardens from the early 1930s: The landscaping for the Ministry of Education and Health in Rio de Janeiro. (© Udo Weilacher).

## **Announcing the decade of environmental planning**

“Now it is the time for all good men to come to the aid of their planet.” This call from Time magazine in 1970 was used by American landscape architect Hubert B. Owens as an opportunity to announce in a Swiss journal that the coming ten years would be ‘The Big Decade’ for environmentalists” (Owens, 1970, p. 37). He predicted that in the 1970s a triumvirate of ecologists, regional planners, and landscape architects would take the lead in the design of open space – and this proved to be correct. Given the global environmental disasters and energy crises, landscape architecture and landscape planning had already begun to make a drastic paradigm shift in the late 1960s, which further upstaged traditional garden design and strengthened the demand for scientifically sound environmental planning.

As part of the ecology movement in the 1970s, ‘naturalness’ acquired the highest status in the eyes of a majority of garden designers, and it was considered pioneering to dispense with the artistic aesthetic in garden design in favour of ecology. Nature was a better designer anyway and would create an aesthetic quality in parks and gardens by itself. Dutch ecological pioneer Louis Le Roy became famous as the ‘wild garden man’ who did not agree with the design excesses of urban planning, which, in his eyes, made the environment increasingly monotonous, to a point where everything was austere, cold, and overly proper. In contrast to this, he tried to create structures that were as complex as possible (Le Roy, 1973). In the 1970s, he felt that it was high time to develop a new awareness of the environment in garden design, and thus he became involved in the international natural garden movement. The purpose of these predominantly private gardens lay in the preservation of a diverse, Arcadian nature that was able to defend itself against the excesses of rational, goal-oriented planning and against a landscape architecture that was focused on a professional, formal aesthetic. The paradigm shift in the 1970s resulted in enormous progress in landscape ecology as an interdisciplinary planning science and in a stronger consideration of environmental and conservation issues. This also had a clear impact on the design of gardens. The landscape architectural projects of this decade were characterised by an aesthetic whose form resisted the alleged cold orthogonality of classical modernism. Roberto Burle Marx was one of the most internationally renowned

landscape architects of the 1970s. His projects were characterised both by high artistic standards and, surprisingly, by a strong commitment to conservation. “To create gardens is a marvellous art – possibly one of the oldest manifestations of art”, wrote the Brazilian in 1991 while stressing, “We are living at a time in which the destruction of nature is so great that it has become a preoccupation of thoughtless and ambitious people. In our struggle against the destruction of a legacy, we need to understand that we live in a world where plants exist, not only for material reasons, but also because they depict birth, growth and death, emphasising the instability of nature” (Eliovson, 1991, p. 7).

Burle Marx, whose career began in the 1930s, was both a garden artist and an ecologist and developed his distinctive “Burle Marx style”. “His landscapes are characterised by asymmetrical spatial rhythms that seem to reflect Brazilian culture, rooted in passion and *emotional* expressiveness, as well as the mysteries of the wild landscape, including the tropical Amazon, *coastal beaches*, and the east-central plain of Brasilia. Burle Marx’s artistry for garden design used modern art as a prototype within the matrix of living ecological systems” (MacMillan Johnson, 2001, p. 121). Among his most celebrated projects, which made him world famous, are *Flamengo Park* (1954) and the *Copacabana Beachfront* (1970) in Rio de Janeiro (Fig. 9). Most of his projects, however, are exquisitely designed private gardens, roof gardens and courtyards. The admiration for this Brazilian landscape artist was extremely large both nationally and internationally, and still is today. During “the big decade for environmentalists”, however, he seemed like a rare bird of paradise who vehemently defended his faith in the beautiful garden art that Leberecht Migge had profoundly shaken to the core.

The new ecologically conscious garden ideal in Europe was readily apparent in the second Swiss Horticultural Exhibition, *Grün 80*, in Basel. In this sensational exhibition, garden architects, architects, artists, sociologists, ecologists, and gardeners created an Arcadian, 46-hectare landscape that effectively reflected the missionary character of the new environmental awareness with its use of flowing contours, natural and flower gardens, lakes, biotopes, ruderal areas and vegetable beds. “In a time of reflection – A change from quantitative and qualitative growth – A search for new values and their goals” (*Grün 80*, 1980), the exhibition was intended to provide a forum for problems concerning man and nature and to make a contribution to improving the environment and the quality of life. Efforts to give *Grün 80* visitors information about the ecological problems of the future, however, usually ended in eye-catching models of superficial garden images that were of little educational use. The majority of visitors to the exhibition expected flowery attractions and did not – according to conclusions drawn by the managers of *Grün 80* – want to be reminded of looming environmental disasters by someone wagging an admonishing finger in their face (*Grün 80*, 1980). The public was really only interested in ‘beautiful nature’, i.e. the ideal image that seems completely untouched and that is dedicated to aesthetic enjoyment and relaxation. This is what the public wants to experience in the natural garden.



**FIGURE 10** With his small Garden in Zürich, built in 1996, Dieter Kienast shattered the stereotype image of ecological garden design by integrating natural processes in modern landscape architecture. (© Udo Weilacher).



**FIGURE 11** The ‘Mountain Garden’ in Graz, designed by Dieter Kienast in 2000 was a manifesto for contemporary landscape architecture inspired by the visual arts.

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## Criticising Restorative Thinking and Physiocentrism

Criticism of the popular 'eco-design' gradually grew within the profession, as it was felt that it only focused on the one-sided, idyllic imitation of nature, regardless of the actual environmental conditions of a site to be designed (Fig. 10). Among the most prominent critics of this tendency in the early 1980s were the Zürich landscape architect Dieter Kienast (Kienast, 1981, pp. 120-128) and the Basel planning sociologist Lucius Burckhardt (Burckhardt, 2015). At the time Kienast asked a question that is still important today: What is the social and cultural awareness that was actually concealed behind this new natural garden movement? "We come to an understanding that the progressiveness of natural gardening is associated with a proper amount of restorative ideas as well. We have a future-oriented attitude about social issues that is then confronted by a conservative stance marked by ignorance and uncritical reception concerning cultural issues", wrote the landscape architect (Kienast, 1990, p. 49). He began a vehement fight against a stylistic paralysis that was only interested in a superficial 'naturalness' or, as he called it, 'eco-design'. As early as 1981 he rejected "gardens against people" (Kienast, 1981) just as he was against a manipulation of the concept of nature towards physiocentrism. "Just imagine: at least there is peaceful coexistence among plants!" wrote Kienast in 1979 (p. 1122) in reaction to a demand made by natural gardeners that all foreign plants in gardens be banned. "I'm exasperated by those people who – on behalf of their fellow citizens – in a pastoral tone tell us what should and should not be done, what is good and what is bad, right and wrong, even with regard to gardens" (Kienast, 1979, p. 1122). (Fig. 11)

"Wither garden art?" asked Lucius Burckhardt and warned: "The crisis surrounding garden art exists because it loses meaning due to its constant use of all possible motives and its mixing of opposing elements, so that in the end the viewer is served nothing more than empty formulas. Such use of language elements regardless of their content is called academicism. Here's an example: At the Federal Horticulture Show in Mannheim [Germany 1975] there was an artificial pond whose banks were covered with natural elements – a flat area of sand and gravel gradually gave way to a botanically interesting planting filled with small-leaved species such as iris, etc.. In the pond, however, you could see the nozzle of a powerful fountain, whose artificial plume of water constantly contradicted the design of the pond. This false use of signifiers appears to be symptomatic of the state of our garden art" (Burckhardt, 1981, p. 258). Burckhardt referred to, among other things, the gardens of the French landscape architect and artist Bernhard Lassus, the Scottish artist Ian Hamilton Finlay and the Dutch gardener Louis Le Roy as examples of designs that could help return meaning to garden art and improve the perceptiveness and sensitivity of garden users. These kinds of progressive tendencies, however, tended not to prevail in middle-class garden design. Gardens remained predominantly a traditionally influenced, private refuge, even, or especially, in the urban environment.

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## The Importance of Gardens in the Metropolitan Landscape Today

The discussion of important episodes in European landscape architectural history of the 20<sup>th</sup> century illustrates the reasons why the garden as a work of art and gardening, understood as a predominantly decorative activity, became increasingly less important to the profession of landscape architecture. Gardening in general, and home gardening in particular, were not considered to be art or planning and the exclusive private garden was neither believed to be modern nor progressive. The current problems with which landscape architecture is confronted are simply too big and too complex, especially within the context of growing metropolises and the destruction of the global environment. There is no way that these problems can be solved through the use of conventional gardening methods or by protecting the garden microcosm as a luxurious private comfort zone. "I am (...) convinced that our work in public space is



now much more relevant than in the private. My profession is concerned with the question of how we can create a liveable environment for all of our citizens. I can achieve more when I build a good park for 100,000 urban dwellers than when I try to missionize 100,000 private gardeners. The big challenges today are urban densification and a consumption of the landscape of almost 90 hectares per da in (Germany). I teach landscape architecture here at the TU Munich in the belief that we must preserve and further develop, or rather rediscover existing open space in cities in order to create viable conditions in which we all can live – not only for those who can afford to buy their own piece of land” (Weilacher, 2013, p. 15). The image that garden designers and practical gardeners have had of themselves, and the thinking about gardens, have continually changed over the course of the last century. Fundamental questions, however, have remained the same: What characterises the relationship between nature and culture? How can beauty and utility be linked to one another? Gardens, especially the private ones, continue to symbolise the fundamental understanding that people, at a particular period in time, have for nature and the environment, and are bound to the prevailing social conditions of that time. In today’s Western consumer society, private gardens are the primary places of retreat from the hectic pace of modern day life and very individual places of refuge.

For most people, gardening is a sensitive private matter, and “when designing a garden they are longing for paradise. Anyone who plans a garden is designing his ideal world. He uses particular parts of nature – or something he finds in a garden centre – and makes them into his own ideal world. This might be a fruit and vegetable garden that makes him less dependent on industrial food production. It might be a representative garden, where, as in the baroque period, all of the axes emphasise the house where the ruler lives. At present, gardens tend to be well-furnished oases in which to escape one’s stressful day-to-day life” (Weilacher, 2013, p. 15).



**FIGURE 12** Gardeners directly experience what it means to assume personal responsibility for the flourishing of nature and the preservation of an intact urban environment, as shown here in Lisbon. (© Udo Weilacher.)



**FIGURE 13** Even in European cities, e.g. in Lisbon, gardening is often not a fashionable leisure activity but an ‘art of survival’ for those of low social status and minimal income. (© Udo Weilacher.)

During Leberecht Migge’s lifetime, gardens still fulfilled a central role in the lives of many people, as they were a guarantor of food security for an entire class of industrial workers. In 1930, however, only about 2 billion people inhabited the world. (Fig. 12) Today there are more than 7.7 billion people, and an efficient agro-food industry focused on maximising the harvest ensures the supply of food. This is linked to serious disadvantages for nature and the environment, however, and needs to be carefully observed. (Fig. 13) As long as gardens still had an essential function, gardening was thought of as an important key competence,

an 'art of survival' and the garden was considered a valuable, functional part of the complex metropolitan landscape fabric. Today, gardening in highly developed industrial nations is mainly a leisure activity and numerous amateur organisations, societies, associations, and clubs maintain the tradition of gardening for a variety of reasons. Maximising the harvest in gardens, however, no longer plays a crucial role in highly developed countries. Landscape architecture can no longer focus on small-scale garden design when it wants to create sustainable landscape structures, especially as the understanding and the concept of landscape have significantly changed in the past few decades. "A landscape is not a natural feature of the environment but a synthetic space, a man-made system of spaces superimposed on the face of the land, functioning and evolving not according to natural laws but to serve a community – for the collective character of the landscape is one thing that all generations and all points of view have agreed upon. A landscape is thus a space deliberately created to speed up or slow down the process of nature" (Jackson, 1984, p 8). This definition, written in 1984 by one of the founding fathers of American landscape studies, the historian and literary scholar John Brinckerhoff Jackson, is today considered to be ground-breaking by international experts, because it no longer differentiates between natural and artificial components, urban and rural landscapes. (Fig. 14)



**FIGURE 14** In the metropolitan landscape of Munich, the garden is only one of many components that cannot exist when disconnected from the life-supporting network of landscape structures. (© Udo Weilacher)

In the 'Age of Man', the Anthropocene, these traditional differentiations are pointless, because man has a direct or indirect influence on every part of the global environment. The metropolitan landscape, the "Zwischenstadt" as a wide-spread city-country continuum is just a particular form of the anthropogenic landscape complex and the garden is just one of many components that cannot exist when disconnected from the life-supporting network of landscape structures.

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## The Renaissance of the Metropolitan Garden

Is gardening still relevant in today's metropolises? If one draws consistent conclusions from the above gathered evidence of the 20<sup>th</sup> century, one would have to clearly say "No!". But it would be very risky indeed to be so quickly satisfied with this answer and to banish garden-thinking from today's landscape architecture. Garden-related thinking may actually give the profession of landscape architecture a strong impetus with regard to the creation of future-oriented environmental development strategies.

In 1983, the German zoologist and behavioural scientist Hubert Markl warned that all life on earth is based on an intact symbiosis of nature and culture. "Our responsibility for life must prove itself on the success of this symbiosis of nature and culture. An example of such a symbiosis we are all familiar with is the garden, which is a form of land use that is more than mere harvest-maximised biotechnology. With regard to our use of the earth, we need this thinking about gardens as a humanising addendum to the calculating rationalness of economic planning. Garden thinking means more than just squeezing everything we can out of the land. A garden is anything but unproductive, cultivated plants determine and dominate it. But it is never only a place of productive efficiency. It is always also a place of organic beauty and harmonious well-being, and although it requires incessant care, it can only be prepared and not produced, let alone forced. A beautiful garden thrives on the richness of its self-expression, from its order as well as its chaos, from intervention as well as from wilfulness, from planning as well as from self-design. It is not only order and is therefore more than a plantation; it is not only wilderness and is therefore also useful. A proper garden is a harmonious mixture of nature and culture. If we take responsibility for the existence of life seriously, then we must also want to have garden thinking and garden action [...] as the basic principle for all land use and design of the land" (Markl, 1983, pp. 25-35).

At the beginning of the 1990s, Dieter Kienast mentioned another aspect that underlines the significance of the garden and garden thinking in our lives today: The garden is the last luxury we have today, as it demands those things that have become the most rare and precious in our society, i.e. time, attention, and space. "It is a true reflection of nature in which, once again, we require spirit, knowledge and craftsmanship in the careful handling of the world and its microcosm, the garden. Changing social values are causing a garden renaissance" (Kienast 1990: 50). In light of current tendencies, referred to collectively as 'urban gardening', it is actually possible to speak of a garden renaissance. If vegetable gardens in cities were considered to be an anachronism or a sign of dislike for cities a decade ago, today they are thought of as being expressions of a progressive environmental consciousness, even if this isn't really true in all cases. As varied as the reasons for gardening in cities may be, from a desire to be self-sufficient to a way of resisting planning paternalism, or as an expression of a wish for intercultural communication, one thing is the same for everyone: "In the garden we learn how to deal with nature without having to deny the creative power within us. And thus, it becomes a model and a test case with regard to how we deal with the entire natural and built environment" (Kienast, 1994, p. 13).

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## Basic Principles of Garden Thinking - Still Relevant

The current renaissance of garden thinking and urban gardening is so welcome because a multitude of people around the globe, especially those living in urban environments, disconnected from primary production processes, will single-handedly learn (or relearn) many strategies and concepts in their gardens that will be crucial for the protection of environmental quality in the future. Sustainable environmental development can only be achieved if people's awareness about the social and environmental quality of liveable outdoor spaces is increased around the world. Six selected aspects that make self-determined gardening and garden thinking so relevant, especially in the metropolitan context, are discussed here.



### **a) Reflection about the Complex Interrelationships**

Whoever works the soil, cultivates plants, waters, fertilises and maintains, and, ultimately, reaps the fruits of their labour, will begin to recognise the most fundamental principles of urban ecosystems. This trend is sometimes called 're-grounding'. Assuming that a garden – even in the metaphorical sense – cannot exist without nature, neither as an idealised image of pristine nature nor as a cultivated manifestation of domesticated nature, then change is inevitably one of the most important inherent properties of the garden. This understanding about complex changing interrelationships is especially relevant for a better comprehension of the complexity, dynamics, heterogeneity, entanglement and variety of the larger metropolitan landscape.

### **b) Patience when working with nature and the environment**

Both faith in rapid success and the demand for quick results dominate today's working world far too much, even in architecture, landscape design, or urban planning. A huge, mostly computer-controlled arsenal of technology is available in these fields and allows for greatly accelerated processes of design and decision-making. This speed, however, no longer adequately relates to the slow passage of real time in the built and natural environment. Nature does not 'function' like a machine, but rather has only one permanent feature: the permanence of change. This change, however, does not first become apparent during a sudden eruption of natural forces, but rather takes place in a very slow and harmonious fashion, easily experienced in a garden.

### **c) Personal Responsibility and Initiative**

People who create and maintain a garden must get physically involved. Personal responsibility and initiative on the part of citizens are important issues in metropolitan life, especially in face of increasingly insistent and expanding consumerism. For many people, it's a matter of course that they will be able to live in a well-designed environment made according to their wishes. Those who are actively involved in gardens directly experience, in the best sense of the word, what it means to assume responsibility for the flourishing of nature and for the preservation of an environment they have helped to shape. Planners owe much to the re-emergence of civic engagement and to many initiatives around the world that support the development of new urban space.

### **d) Sensitivity for the Various Qualities of the Environment**

With time, the practical exploration of nature and technology in a garden leads to a greater awareness of the environment and to a good sense of the fascinating interaction between nature and the artificial, quiescence and vigour, form and function, space and time. In the garden, these relationships convey, in a very direct and manageable way, those things that encourage a sharpening of the senses. In the future, planners, designers, and architects can only expect broad public acceptance for their work if they deal with a metropolitan public who is able to appreciate high-quality environmental design. Ideally, such appreciation would be cultivated through their own creative experience.

### **e) Personal Responsibility for the Environment and its Maintenance**

The increased sense of responsibility for the personal environment is a good foundation for the creation of new public spaces and the preservation of existing ones, especially as public resources for the maintenance of open space in cities are becoming increasingly scarce. If urban dwellers lose their sense of responsibility, public space in cities is inevitably threatened with being utterly neglected. Today's landscape and urban design projects often only have a chance of longevity if local residents are willing to take on a particular

degree of responsibility for the maintenance and care of open space they feel 'belongs' to them. All too often, this interaction, i.e. the meaningful cooperation between an individual and a public sense of responsibility, is neglected during the planning of new public open space.

Unfortunately, and this is a problematic aspect of the current urban gardening movement, many garden activists consciously describe themselves as autonomous amateurs and rigorously reject the efforts of professional landscape architects and urban planners to aesthetically improve inner-city open space. In doing so, there is an occasional reference to the radical positions of "the guiding spirit of gardening in the city" (Müller, 2011, p. 15), Leberecht Migge. "The aesthetic of the garden is improvised, playful. [...] The biggest and virtually contemptible enemies of this aesthetic, however, are functional and perfectionist materials; everything that seems to be large calibre and serious and – no matter how subtle it might be – demanding of authority, should be frowned upon and banned" (Werner, 2011, p. 71). As mentioned above, designing and managing a garden teaches that all activities in the 'system of spaces', the landscape, are somehow interrelated and should not be dealt with separately.

### **f) Inventiveness and Experimentation**

"The garden is the place where the great inventions of our time are made" said Bernard Lassus in 1996 (Weilacher, 1996, p. 109) in recollection of the gardens of the Renaissance, which were inspiring places of invention in their day. From sophisticated watering technologies to natural cooling systems – the inventiveness of gardens has always been unlimited. In all of the facets of today's metropolitan gardens there is an amazing love of invention and experimentation, be it the organisation of a water supply, the development of new types of planters, or the horticultural use and design of unusual urban space. Garden pioneers discover new garden niches in the city. In the highly complex metropolitan landscape, it is often in the undiscovered niches where new living environments can be discovered, developed, and qualified.

### **Conclusion**

At the beginning of the 21<sup>st</sup> century, gardens have once again gained importance as testing grounds for art, culture, and social interaction. Gardens created for interim use on unused sites and as catalysts for new metropolitan development concepts are driven by the eternal longing for paradise and the desire to transform the image of Arcadia into a vibrant and sensually perceptive space. In today's societies of mass consumption, which are suffering from social division and an increasing disconnect from natural environments and primary production processes, active gardening as an immediate experience and gardens as experiential and experimental spaces play a very important role. In contrast to the 20<sup>th</sup> century, garden design might no longer be the central focus of the professional urban planners and landscape architects of the 21<sup>st</sup> century, for comprehensible reasons. But those who work professionally in the development of today's "system of spaces", landscapes, living environments for man and nature, 'Zwischenstadt' or metropolitan landscapes should take garden thinking seriously. Neglecting to do so will run the great risk of not being able to contribute to the success of an intact symbiosis of nature and culture. In future metropolitan planning, garden thinking – not at all confined to an understanding of the term 'garden' in a literal sense - will play a much more crucial role than today.

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