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## Landscape metropolis #4

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#### **EDITORIAL**

# The Vicissitudes of Criticism in the Landscape Metropolis

In the field of the arts, criticism often plays a key role in situating artistic production and instigating debate, but especially in propelling theory and practice. As Dave Hickey suggests "Criticism, at its most serious, tries to channel change." However, in the domains of landscape architecture, architecture, and urban design, criticism seems to have a more distanced role from reflection and design. Besides a few notable examples, such as the influence of the critical writings of Reyner Banham and Alan Colquhoun on a generation of British architects and urban designers in the 1960s, criticism seems to hold a marginal position in these fields.

Given that the objects of criticism –the urban landscapes and buildings that surround us— are very complex and layered realities, criticism seems to have a kaleidoscope of possibilities from which to start: the value frames (formal, social, cultural, political, aesthetic) are multiple and a panoply of methods is at the disposition of the critic. This broad scope of possibilities seems to paralyse the critical activity in the design disciplines. In-depth criticism seems to be a rare phenomenon and, if profound critical investigations are undertaken, they too often are rallied to the pages of very specialised academic and artistic journals that remain largely distant from design practice.

Against this background, the editors of this themed issue of SPOOL place the discussion on the possibilities and impossibilities of criticism within the field of the design disciplines at centre stage. We are especially interested in how criticism can make an active contribution to taking a position vis-à-vis what we have called, in earlier issues of SPOOL, the contemporary condition of 'the landscape metropolis'. Criticism is an important means of reflection on the creative processes and interventions that are part and parcel of this landscape metropolis. It throws light on particular projects by describing and explaining them, but also by evaluating and generalising these reflections in relation to an entire discipline, be it landscape architecture, architecture, or urban design. As Miriam Gusevitch sharply notices: "Criticism is riskier than commentary. It is willing to judge and to condemn, to stake out and substantiate a particular position. Serious criticism is the careful and thoughtful disclosure of dimensions that might otherwise elude us..."

Out of this perspective, criticism can come to inspire us to visit a place in the landscape metropolis, to question our understanding of places and interventions, to make potential comparisons, to discover certain dimensions, to perceive the larger importance of a single place or project. In other words, criticism invites us to take a position and get into a dialogue (with the critic and with others) on the aims, the instruments, and the future of the design disciplines operating in the landscape metropolis. It also fosters a debate on what designers

produce and how it relates to societal needs, expectations, and responses. Terry Eagleton has pointed out that this is the main 'function of criticism': it moves the evaluation of design projects and processes out of the realm of 'single opinions' and situates it in a sphere of public debate, discussion, and evaluation.

Criticism seems very suited for publication in journals. The journal and its editorial board offer credibility to criticism. They guarantee that it is not merely an opinion by offering guidelines, by editing the article, and by applying a process of peer review. However, this is only part of the story. In the fields of architecture, urban design, and landscape architecture, criticism can take many forms that go beyond the article and can be uttered on many more platforms than the journal. To some extent, today's world allows anyone to position him- or herself as a 'critic', offering critical opinions without playing by the rules of a journal. However, one could ask whether this can still be considered as a 'grounded evaluation', in the way that the American philosopher Noel Carroll defines it, in his book *On Criticism. Thinking in Action* (2009). Within the rainfall of fast messages and instant opinions that characterise our contemporary world, criticism seems to be in search of a new future, and for a new definition of its relevance. What would happen, for instance, if the slow practice of criticism were to be considered as a particular form of academic research, which would be positioned at the field of encounter between academia and practice?

Establishing a forum for critical reflection at the crossroads of academia and practice has historical precedents, such as f.ex. the non-profit Institute for Architecture and Urban Studies (IAUS), founded by Peter Eisenman in 1967, which assembled a core group of young architects to start the initiative - including, among others, Diana Agrest, Kenneth Frampton, and Anthony Vidler, and which also involved fellows such as Rem Koolhaas, and Aldo Rossi. Together they sought alternatives to traditional forms of education and practice, trying to set up a platform for debate, criticism, multidisciplinary experimentation, progressive education, improvisation, and applied theory. The original Institute was motivated by concerns related to research, education, and development in architecture and urbanism. It ran until 1985. Who is following up, who is nurturing the practice of criticism today? There are few initiatives to counter the absence of debate and constructive critical thinking within the design professions, probably because of their inclination towards competitive rather than collaborative business. However, if designers want to matter in society, sooner rather than later they must go beyond each professional's legitimate, but limiting, concern of fighting in favour of his or her own business, ultimately teaming up with others and critically acknowledging their own productions. Even if professional associations foster co-existence among professionals, they do not encourage critical thinking about engrained professional habits, which is the first step in advancing the profession with a view to becoming relevant players in larger societal issues. Constructive criticism instead of competition is hard to actualise in professional arenas. Could academics play a role in nurturing the practice of criticism today? Even though, in the design disciplines, the scientific inclination to objectivity is not at all an epistemological obligation, there are few scholars practicing criticism as a form of academic writing, and even fewer journals are interested in dedicating pages to this genre. In fact, both parties shy away from what seems an unfamiliar enterprise. Design scholars would well write ABOUT criticism but very seldom ENGAGE IN criticism - be it as to criticise a design project, a group of works, or an epoch of particular designerly convictions. This is what we experienced when we called for contributions to this issue of SPOOL, and it confirms our wish to further encourage academics to make this arena theirs, to develop criticism as an academic commitment to practice, a field of encounter with practice, as reflective practice per se.

## The subject of criticism

For us, SPOOL editors, criticism is a way of engaging with the project itself. The key operation of criticism is based on physical contact with the project or actual site, through visits, observation, and intuition. But what is described, as well as why and how, is a matter of deciphering the what, and is handled through a dialogic interaction between survey and interpretation that eventually unfolds reflection anchored in space, in its structures, usage, form, memories, atmospheres, ecologies. As Roland Barthes explains in his seminal essay 'What is Criticism,' "Criticism should reflect both on the work of art as on the process of criticism itself. Criticism should not reveal or discover meaning in a work, it should rather expose the process how meaning is generated."

Criticism is, in this sense, never only about a particular object. Following a specific line of questioning – a red thread – that determines how the critic examines and 're-presents' the design project under scrutiny, the critic points also to its broader relevance. The critic reveals how the singular design concept relates to the direct context of the wider metropolitan landscape, but also to the larger disciplinary context of theoretical concepts and design approaches. Out of this perspective criticism is always simultaneously about heteronomous and autonomous concerns, about the position within the metropolitan landscape and within the disciplines of architecture, urban design, and landscape architecture. Within the spectre between heteronomous and autonomous concerns, many approaches and methods are possible. We have received abstracts that suggest that there are as many practices of criticism as there are works of design and angles to evaluate them.

## <u>Discussing</u> critique

A series of essays in this issue address the very figure of the critic, as well as the character, tools, and roles of criticism within the design disciplines. When people think about criticism they tend to hold rather stereotypical images of who the critic is, and what his or her work modes are. The first articles in this issue start to correct that image and suggest alternative vantage points. Opening with a photo essay by Kirstine Autzen on Copenhagen's much debated open urban space of Superkilen, we introduce Noël van Dooren's position paper on criticism in the field of landscape architecture - synthesising his research and practical experiences as a scholar and former editor for the critique section of JoLA, Journal of Landscape Architecture. He illustrates his thoughts by referring to concrete design projects, among them contested ones as Superkilen, suggesting that there should be much more than one critique written, and much more than one form of criticism developed in order to understand the scope of landscape architectural design and to advance professional work in this field. Belonging to an adjacent field, architecture, our author Per-Johan Dahl, both scholar and practitioner, analyses how his firm designed a building according to, but also in criticism of, the guidelines for historical preservation in a small Swedish town - his critique intermingles practice and discussion of criticism. Piero Medici, an architecture scholar, scrutinises architectural magazines as a tool to critically apprehend technical innovation as part of sustainable technology and/ or advanced architectural space - he takes us into criticism on a discursive level.

## Practicing critique

The second group of contributions to this issue of SPOOL gathers authors who place themselves within the field of scholarly criticism - they very concretely scrutinise landscape architectural, architectural, and urban design projects in the metropolitan landscape. Very often these critical studies take the design intentions as their point of departure and critically explore the projects on their ability to realise these. An important insight: criticism can be formulated in great depth no matter whether the project is drawn or built - this means that criticism as grounded evaluation becomes a valuable instrument to both reflect upon projects before they are built, and to observe them after physical realisation. Our authors and researchers Ann-Charlott Eriksen and Svava Riesto criticise as yet unbuilt design work and investigate the outcome of an urban design competition in a medium-sized Danish city that aimed to become 'greener'. The author collective, consisting of the scholars Greet De Block, Nitay Lehrer, Koenraad Danneels, and Bruno Notteboom, likewise criticise the entries to a metropolitan scale design competition for Brussels and scrutinise the inherent landscape architectural claims relying on ecological arguments while obscuring democratic frameworks. Landscape researcher Tadej Bevk's critique engages with built work - he studies three urban design interventions in a small Slovenian town to understand their implications for the larger strategic urban development. Finally, action researcher and landscape scholar Anne Wagner criticises yet another project, and another category of design work: built, but temporary. She writes from her position as the critic of a concrete community-driven project, while at the same time developing a discussion about appropriate forms of criticism for projects that escape conventional procedures and belong to the realm of co-design.

## The art of criticism

Because of its opinionated character, criticism in academia is often regarded with suspicion. However, upon closer scrutiny, the critic uses a transparent and convincing method, chooses a clear angle from which he or she discusses a design work, and makes sure that the evaluation goes beyond the particular project and tries to situate the findings within a wider field. As Miriam Gusevich points out, just like academic research, good criticism is, in this respect, "self-reflective, and takes the responsibility to substantiate its judgement."

It is through this understanding of criticism as a self-reflective and substantiated practice that its affinities with academic practice might reside. These affinities offer the possibility to engender a new field of academic research that is positioned at the field of encounter between research and practice, between critical distance and engaged nearness to the design process and project. Such a field might offer the possibility to create a new proximity between academia and practice, but above all it might install a much-needed domain for lengthy and in-depth reflection on the landscape metropolis.

Lisa Diedrich, Saskia de Wit, Tom Avermaete SPOOL issue editors



#### Kirstine Autzen

Copenhagen, Denmark

#### **Abstract**

Danish visual artist Kirstine Autzen (www.autzenvisual.com) portrayed Superkilen as it was in Summer 2017. For Autzen, photographing a public space means taking in impressions, and at the same time making images that convey these impressions in a strictly visual manner: grabbing the camera precisely when someone or something does something. Autzen states that photographing in itself is a kind of analysis. She traversed the area several times, waiting for the opportunity to photograph a specific situation with, for instance, the right light or passers-by, and in doing so, she starts to feel at home and to see the design as an underlying structure or intention. The choice of when and how to hit the shutter is to her, in essence, normative and ostensive: 'THIS I like'; 'THAT I don't like', pointing and pointing out through the photographic image. The images then speak of positive and negative experiences, and are a way of declaring 'authorship' and to indicate a norm for engaging with the world.

The images of Superkilen presented here were made with no client in mind. They are about the relationship between the Superkilen design and its surroundings, and the way people were using it. Autzen noted seeing people everywhere: going through on their bikes, hanging out informally, playing. Though feeling sad about the poor maintenance, the intense use by a wide variety of people was uplifting. Autzen sums up her experience: "Superkilen now feels like well-worn sneakers that lost their factory colours: worn out, but ready for real love."

#### Keywords

Superkilen; public space; photography

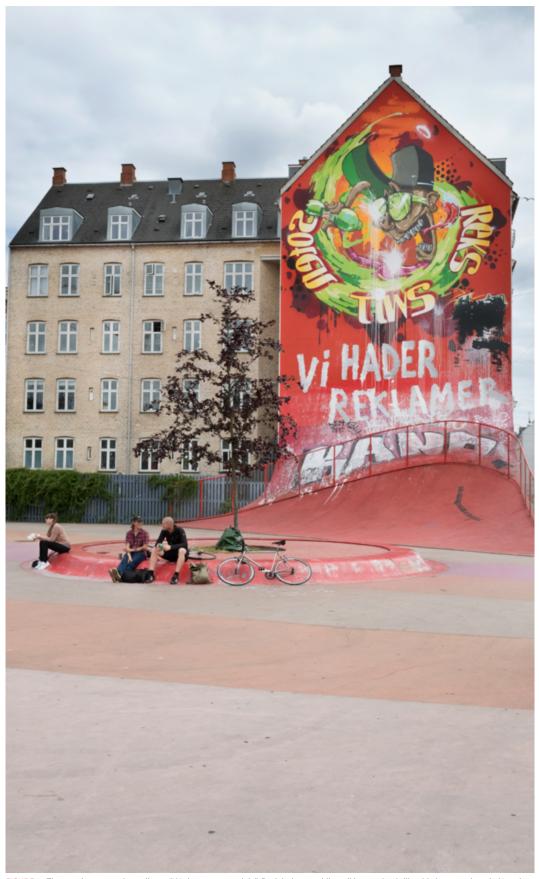


FIGURE 1 The grey letters on the wall say: "We hate commercials". Reclaiming a public wall by tagging it like this is everywhere in Nørrebro, the area of Superkilen.





FIGURE 2 The urban area near Superkilen is dominated by housing and lots of it. Coming to these vistas feels like coming from the forest to the river bed, where the sky is finally visible.



FIGURE 3 This very green image of Superkilen changes the perspective in scale as it provides a different experience.







FIGURE 4 The features of Superkilen function as an arena for expressing your image of yourself: It is a great place to not only do sports but also to be seen being sporty.

## The landscape of critique

## The state of critique in landscape architecture and its future challenges

#### Noel van Dooren

Van Hall Larenstein University of Applied Sciences Velp, the Netherlands

#### **Abstract**

This essay explores critique as a specific instrument to evaluate and discuss artistic products, and argues that the relatively young discipline of landscape architecture could profit from further developing criticism within this field. Based on the work of Carroll, a theory on critique is provided, focussing on the aspect of 'grounded evaluation'. An overview of the media in which criticism operates is given, including social media. Using examples from art and architecture, the role of criticism in landscape architecture is described. In so far as there is a 'recipe' for a critique, the main ingredients are given. The essay points at the difficulties for landscape architecture criticism due to the particularities of landscape and landscape architecture - the aspect of time is very important in this. As critique can be both an activity in the professional arena and an academic undertaking, the specific requirements of both options are considered. An agenda for future actions is given, including a list of projects that strongly asks for criticism, appealing to a shared feeling that these projects should be known, discussed, and visited.

#### Keywords

landscape architecture; writing; critique; design; practice; Superkilen; evaluation; theory; art

## Introduction

In the city of Copenhagen, Denmark, a remarkable new urban open space was opened to the public in 2012: Superkilen, designed by the Berlin-based landscape architecture office Topotek 1, in a team with BIG and Superflex. Should this space be called a park, or a square, or should we come up with a new typology? This is open for discussion, and is certainly not the only topic up for debate. The Topotek 1 design is provocative for its strong colours, its sampling of garden history, and its many references to global cultures. Therefore, it prompts very different reactions, varying from praise to rejection.¹ One of the obvious issues is how the design will develop over time. Its very graphic approach may be obsolete in a few years, but at the same time the strong gesture may help to brand the place as one of the main public spaces in the city (Fig. 1; see also the previous essay on Superkilen).

The project received prizes and was published many times. It makes an excellent candidate for a critique, on top of the existing (digital) publications that are generally more descriptive. Such a critique, and indeed a larger series of critiques, on pieces of landscape architecture, contributes to an emerging definition of what landscape architecture is today, and of what the discipline can offer to society. The Superkilen project is not only remarkable; it is also debatable in its intentions as well as its results. It represents concepts that can be understood in a generic way, both in the sense of design concepts for urban squares and theoretical concepts of how nature can be represented in a city. Critique can inspire us to visit a place like this, to sharpen our own opinion, reveal what was meant by the design, explain how we should understand it, propose potential comparisons, show by what criteria it could be evaluated, and indicate the larger lessons one can take from this evaluation. Such engagement would help a disciplinary exchange in which ideas are shared about the aims, the instruments, and the future of landscape architecture, but also support an understanding by the public of what designers produce, and how that relates to what clients ask or what users respond to.

Designers operate in the literal or metaphorical public domain – this may apply to designers in general, but is certainly true of designers of landscape. Their work touches the interest of people. It may solve a practical problem people have. It potentially answers a more ephemeral need for beautiful things. However, designer's work always locates itself in culture, be it a specific Danish culture of making and using urban open space, or the more abstract meaning given to landscape by today's postmodern society. As a consequence of being located in culture, opinions on designs can be formed by visitors, users, or people in general, and designs are discussed in many contexts - between peers or by experts specialised in the evaluation of design.

## On this essay

Criticism can be defined as the expert evaluation of (in this case) landscape architectural design, typically addressing a concrete built project. 'Expert' does not necessarily relate to title, study, or profession, but to the desire to support the critique with sound arguments. This essay traces the origins of critique, explores what it might be in today's context, indicates in what direction it may evolve, and demarcates the meaning of criticism in the particular context of landscape architecture, as different from architecture or the arts in general. It also takes up the specific challenge to speak about critique in an academic context.





FIGURE 1 Noël van Dooren invited the Danish visual artist Kirstine Autzen to portray Superkilen as it was in Summer 2017.



FIGURE 2 Critique and social media. Facebook recently introduced 'design critiques', in this case to discuss app design. The image is a screenshot taken from the article, displaying mocks for the app design. This app, designed by Jon Lee, concerns 'local workspace discovery'. (Facebook, July 2016. Author: Tanner Christensen; App mock: Jon Lee. Retrieved from https://medium.com/facebook-design/peek-inside-a-facebook-design-critique-c4833efda26e).



FIGURE 3 Critique and social media. Screenshot of tweet by Kristine Samson on Superkilen. It reacts on a critique by Brett Bloom in the Danish magazine *Kritik*. (Kritik, April 2014, Retrieved from https://twitter.com/perform\_city/status/325207094028562434).

Criticism operates in different environments. As, for example, Treib remarks, critique is an essential ingredient of the design studio, hence the word 'crit' for interim discussions of student work. (Treib, 2004) To some extent, if we look at criticism as evaluation in a system of peer review, competitions are also a specific milieu for criticism - in this case, obviously, with regard to projects that exist only on paper or on screen. In these instances, criticism is part of a larger operation. The main locus of critique being presented as critique is its written form, in design magazines, journals or websites, and blogs, which is what this essay concentrates on. We should also mention newspapers here. Although there is no strict demarcation, one could say that moving from design magazine to newspaper, the critique shifts its target from professionals to the larger public. These days, social media also presents itself as a channel to broadcast opinions on the world, on subjects that even include landscape design, and perhaps this will establish itself as a new, accessible, and public platform for critique. A recent example of this is a Facebook initiative, inviting people to participate in design critique, in this case related to app design (Fig. 2) (Tanner, 2016). However, this essay aims to speak about critique as something much more than a few harsh one-liners. It cannot be denied that social media are part of today's political discourse, and more so, are shaping the discourse. Perhaps in the future we will witness a lively and well-grounded critical culture adapted to 140 characters. (Fig. 3) What this would mean for a professional culture of critique in design magazines remains to be seen. Pessimists might argue that this would be the end of any well-educated criticism. In an optimistic view, interest in landscape design, and a debate on landscape design, broadens.

Critique has a long tradition in the arts, and in architecture. For landscape architecture, with the exception of a vibrant period in the seventies, critique has been largely absent from magazines and journals.<sup>2</sup> This has changed in the last two decades - see the scholarly Journal of Landscape Architecture, founded in 2006, with the section *Under the Sky* dedicated to criticism of built projects, or national initiatives such as the critique section in the Dutch professional magazine Blauwe Kamer since 1998 and the French Le Visiteur between 1995 and 2003. (Fig. 4) However, despite these and other initiatives, critique in landscape architecture is not currently an established genre. Only quite recently was the study of landscape architecture itself described as one of the branches of research.<sup>3</sup> This certainly supports the development of criticism as an independent genre of writing, and the critic as an independent specialist. This essay aims to stimulate criticism as an autonomous genre. Criticism is an important instrument that indicates innovation, transports design to non-professional worlds, and helps to shape the identity of the design disciplines. Words are important in this. In this context, Adrian Forty refers to John Evelyn, the 17th century English writer, who, in an essay on architecture, distinguished categories of persons involved in architecture, of which the last is the 'architectus verborum', or the man of words. As Forty remarks, 'Evelyn's personification of the parts of architecture expressed an important idea: that architecture consisted not just of one or two of these activities, but of all four of them in concert. Under these terms, the language through which a work of architecture is explored is no less important than the architectural idea itself'. (Forty, 2000, p. 11) In defining what critique is in general,

and more specifically in landscape architecture, and via an analysis of existing critiques, this essay aims to provide a basic argumentative scheme of a critique, and a discussion of the difficulties a critic may meet because of the particularities of the field of landscape architecture. With this, as researcher, practitioner, and as critic, I want to contribute to a culture of criticism in landscape architecture. For that reason, the essay ends with a tentative agenda. This essay supports a series of master classes on European landscape architecture schools under the title *Criticising practice, practising critique*.



FIGURE 4 In 2006, the newly founded academic journal started to publish critiques. Having written many critiques in the Dutch professional magazine Blauwe Kamer, publishing in the Journal of Landscape Architecture offered the chance to explore what criticising could mean in an academic context. (Journal of Landscape Architecture 1(2) page 54-55), graphic design Oliver Klein. Aerial photograph Bien + Giersch Projektagentur).

## On criticism

The word critique in the field of philosophy refers to a much wider set of meanings than those we generally think of when discussing critique in landscape architecture. Some may think of *Kritik der reinen Vernunft*, written by Immanuel Kant in 1781, translated as *Critique of pure reason*. Both 'critical thinking' and 'critical theory' equally describe an academic mode of reflection and an academic school of thinking that cover areas far larger than criticism in architecture. These larger areas are not under consideration here. Even if it is of interest to trace the origins of the word and how critique is embedded in broader intellectual concepts, my aim is much more instrumental, concentrating on landscape architecture criticism today. The widest circle that is useful for that aim is to take into consideration the philosophy of art. A major question explored by the philosophy of art is how pieces of art can be appreciated. That is the larger frame in which this essay operates. It uses a set of related words. I understand 'a critic' as a specialist in the evaluation of artworks. 'A critique' is the written or spoken argument of a critic in which pieces of art are evaluated. The verb related to this is 'to criticise', and 'criticism' is the culture of evaluating art. The adverb 'critical' is associated with this, but is used in much wider circles, both in academic terms as well as in daily life.



FIGURE 5 Cover of Noël Carroll's On Criticism.

My understanding of such words is grounded in the work of the American philosopher Noel Carroll and his book On criticism. Thinking in action (Carroll, 2009) (Fig. 5). Carroll described criticism as 'grounded evaluation' - a definition that is crucial for this essay. Therefore, his understanding is very different from 'the savagely ridiculizing of whatever is reviewed', which for some is the main association with critique, and there is certainly a tradition to do so - see the work of the Dutch writer Gerrit Komrij, a fierce critic of modern architecture. (Carroll, 2009, p. 24) <sup>7</sup> Komrij's tirades against 'sluttish' and 'mendacious' architects are hard to translate, as they explore the richness of Dutch language in a very creative way. His (very cynical) opinions, however, are perfectly transmitted by what we could call Komrij's 'law on architecture models': '1) If the model is ugly, the result will be ugly. 2) If the model is beautiful, the result will still be ugly.' 8 Carroll acknowledges that such intense attack can be part of critique, but he looks at it in a wider perspective. Critique is an activity that supports the reception of pieces of art, by us: the public and the users. Although Carroll might not have thought of landscape architecture, for the moment this discipline can also be considered to produce pieces of art. Carroll denies the idea that such pieces are unique and not comparable, comparison being a key aspect of criticising. In his eyes, that idea is romantic, or modernist, thinking. Artworks are parts of styles, groups, and movements, and 'as members of the relevant class or category, they can be placed and then assessed in terms of the ways in which they realise or fail to realise the points and purposes of the kinds of artworks they are'. (Carroll, 2009, p. 27) In speaking about criticism, it often seems that disagreement is central. However, for Carroll to rank artworks or to express negative appraisal is not the goal. The prime goal is an evaluation if 'the means put in action were appropriate and effective'. (Carroll, 2009, p. 39) This is a service to the public: 'Criticism is strong criticism insofar as it renders its evaluation intelligible to audiences in such a way that they are guided to the discovery of value on their own'. (Carroll, 2009, p. 45)

Carroll gives an interesting restriction for critique: 'We don't criticize rocks in nature - there's no point criticizing them. They won't listen anyway.' We can only evaluate rocks if they 'enter the circuit of human affairs'. (Carroll, 2009, p. 48) In the eyes of Carroll (2009, p. 58), the critic has a task, which is to 'inform the rest of us about where and how to look at the work of art in order to get the richest possible experience out of it'.





FIGURE 6 a) In 1995, the office of H+N+S landscape architects realised the *Molenley* project in Breda. The author was part of the design team. The reconstruction of a highway exit was combined with creating a flooding zone for the small Molenley stream. The photo was taken in 2011; in the background the in 2004 added piece of art can be seen. (Image H+N+S landscape architects.). b) In 2004, Atelier Van Lieshout was commissioned to create a piece of art for this particular site, resulting in *Big Funnelman*. H+N+S was not informed, and if Atelier Van Lieshout was aware of the H+N+S-design is unknown. Ironically, evaluating the site as it is now, the added piece of art fits perfectly, and even strengthens the earlier design. (Retrieved from https://kunstinbreda.wordpress.com/heusdenhout/. Image Victor Willemse.)

I understand this in two ways. First, it implies that a critique is able to really make a piece of art (or, for that matter, landscape architecture) accessible via an adequate description in text and drawings. Readers of a critique are generally not in the same location as the piece of art. A critic must first bring the reader to the piece of art metaphorically; otherwise, there is no shared ground. Second, it implies that the critic is a guide. A critic is not so much the one who states that a piece of art is fantastic or rubbish. He or she primarily shows what it is. More often, the words 'to read' or 'a reading' is used. To criticise is 'reading' a work of art, and this reading should enfold the particularities of it, the decisions that were taken, or the difficulties that were met. I propose that such criticism should be understood as emancipatory, in the sense that the readers should be enabled to disagree with the critic, not despite, but because of, the well-written argument.

Art works are, we can safely assume, made consciously. Conscious, here, is meant in a broad sense - for example, Pallasmaa spoke about 'the knowing hand', or, as suggested by others, 'tacit knowledge', guiding artists in conscious creating, even if there does not seem to be an immediate verbal explanation at hand. In the philosophy of art, this is described as the artist's intention. Should we know that intention when we use, visit, or enjoy buildings, landscapes and artworks? For some, engaging with the artist's intention distracts us from the reality of a piece of art. In 1954, Wimsatt and Beardsly introduced 'the intentional fallacy' to fight a belief at that time that one should know what the artist wanted.10 Authors that defend the idea that one should not know artist's intentions claim that such intentions are inaccessible and unimportant: only what has been achieved should be counted. A comparable argument is given by John Dixon Hunt in The Afterlife of Gardens. He states that the role of designers and their original intentions is overrated. (Hunt, 2004) During the lifetime of a garden, these intentions are often forgotten, or not known at all, and what remains is the experience of visitors and users for what it is at a certain moment: 'So we must give some credence and support to the argument that over the longue duree of its existence a great design can stimulate a whole cluster of meanings that were not intended or envisaged for the original designs.' (Hunt, 2004, p. 205) (Fig. 6ab) Carroll takes the other side. According to him, we should know the artist's intention: 'In order to assess what the artist has achieved, part of what the critic needs to do is to ascertain what the artist is up to.' (Carroll, 2009, p. 66) In fact, he states that only if we know the intentions are we able to judge the artwork - otherwise we have no point of reference. Additionally, intentions are accessible. He argues that any piece of art is part of a larger group or a category, and as such, artworks 'are underwritten by certain publicly acknowledged purposes'. (Carroll, 2009, p. 73) Therefore, knowledge on intentions can be derived from a category.

A specific park is always part of a group of parks - for the period in which they are made, for their style, for their approach - and in categorizing a park there is an opening in which to ask ourselves how this park is perceived amongst the other parks in the group. However, apart from that, the artist (or the landscape architect) probably gave his intentions - in a lecture, an article, or the explanatory text that accompanied the design. Now this type of explanation is questioned more often, and those supporting the idea of the intentional fallacy, in particular, consider such statements to be very subjective. Or even worse: they are simply a nicely made up story, because that's what designers do to sell their work, a point of view also held by Komrij. Even if we all know examples that confirm this statement, Carroll's argument is that we simply have the actual work, and this verifies what the designer tells us - or not. In combination with the group or category to which the work belongs, as well as the other works by the same artist, we have many points of reference by which to judge the validity of the designer's story. In some cases, this may lead us to the conviction that these were indeed mere stories told to sell the design, but in many other cases they allow insight into the thinking that guided the designer, and help us to judge what was achieved. (Fig. 8) I would rather take a position that embraces both views. In general, a well-grounded critique, in my view, takes into account the broader context, and that includes positioning the design in relation to other designs, the surroundings and the oeuvre of the designer. In that sense, one cannot escape intentions. At the same time, Hunt's realistic approach that visitors and users take the design for what it is, is equally relevant. A critic may aim to change the public's appreciation by providing them with information, including intentions, but a starting position that any design should be efficient and accessible without explanation makes also sense. In fact, it is one of the basic tasks of a critic to explicate in how far his or her critique takes intentions into account, or explicitly does not consider intentions. When taking this second road, I would expect an argument for what reason an insight into, and debate of, original intentions can be left aside.

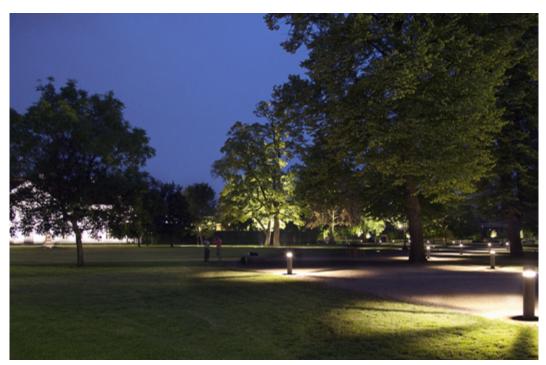


FIGURE 7 Photo of Kongens Have in Odense, Denmark as used by a critique in *Scape* 14/2014. As Noldus and Riesto state, Erik Brandt Dam's design 'talks to us in a soft voice'. (Image by Laura Starner, year unknown).

## State of affairs

In landscape architecture, we have few texts that are consciously presented as critiques. <sup>11</sup> Restricted to English texts, we could collect only a few dozen, all written in the last two decades. <sup>12</sup> But even if small in number, they mark a huge progression, and this collection establishes best practice, which enables us to learn how critique operates. Here I discuss two examples, and I refer to the critiques in the Dutch professional magazine *Blauwe Kamer*.

Scape 14/2014 presents a 'package' of three critiques with a thematic header: Parks and Heritage. An introduction underlines the relevance of the theme, pointing toward today's seeming evidence of taking into account the heritage of landscape, or in general, to care for 'what was before'. In a critique on Kongens Have in Odense, re-designed by Erik Brandt Dam, the authors start with a statement. (Noldus & Riesto, 2014) Many recent designs 'shout out loud' with spectacular design but turn out to be only of momentary quality. The reviewed design however 'talks to us in a soft voice, displaying a delicate intricacy'. (Noldus & Riesto, 2014, p. 123) (Fig. 7) To combine existing structures with modest interventions may increase the chances for the design to have a long lifespan. Putting it this way, the authors express a view on what is good design. The process by which the place became part of a design process is described, and the role of the municipal authority is addressed, positioning this place in the local fabric. Noldus and Riesto analyse Brand's stand towards history and the actual consequences for Kongens Have. They conclude with considerations on the general meaning of this: in how far this approach may be relevant for other places with a rich historic background.

Valois and Paradis discuss Place Émilie-Gamelin in Montréal in JoLA 2/2010. The subtitle of their critique - 'landscape narrative, meaning and the uses of public space'- immediately reveals a certain angle. First, the place as a designed space, its location, and its design history are described. Valois and Paradis state that the design was a turning point in Canadian landscape architecture and because of this was already an interesting example. The authors want to confront the initial intentions of the designers, the response in media, and the actual use. The overarching goal is to show that a narrative design approach allowed the design to evolve and to be used in unexpected ways. A background section describes the development of Montreal and the reconstruction of downtown Montreal, which frames this particular design process. An overview of the debate on the narrative approach is given, which supports an analysis of how the design 'realises' the narrative. A next section presents observations on who uses the space today. In a balanced way, the authors report on the intensive debate on the design: 'In the light of this controversy, one might wonder whether the manufacture of meaning in landscape design, especially in the instance of Place Émilie-Gamelin, serves simply as a key to justify choices and make the concept behind the form valid and therefore acceptable in the eyes of public authorities, experts and users. Both yes and no, in our opinion.' (Valois & Paradis, 2010, p. 80) In the conclusive section, the argument shifts from this particular place to a more general discussion: 'In other words, echoing Barnett (1997), the use of narrative to give meaning to a place must avoid being understood as a "goal to achieve" as if it were a universal thought structure. The designer's objectives must take the design's subsequent reception into account in all its affective, intellectual and sensory dimensions.' (Carroll, 2009, p. 81)

If one also takes *Blauwe Kamer* into account, differences and similarities can be noted. A striking difference is the text length. *Scape* critiques are very short - fewer than 1,000 words - but form part of a larger package. *Blauwe Kamer* critiques have a maximum of 1,500 words. A critique in *Journal of Landscape Architecture* is substantially longer - up to 5,000 words. Obviously this allows (and obliges!) an elaboration on the history of, the debate on, or the theoretical origins of a design. The Montreal example puts a narrative approach forward as an angle to do so. As a consequence, the argument is rooted in literature, and reveals a method of criticism, even if implicit. Critiques in *Scape* or *Blauwe Kamer* primarily present facts about the project in a journalistic way. An opinion on the project rests on the credibility of the authors.

This journalistic character also implies the convention to hear both sides, and enables the designers to comment on the critique before it is published. As designers in general are not happy with critical remarks in a public text, more often this opened a conversation on what *really* happened in the design process, pointing at an interesting difference between official design documents and informal accounts.<sup>13</sup> Very comparable is the representation of the project in images. The tradition in architecture is followed: plan, section, visualization and photographs present the design. A text box provides basic information on the client and the year of realization, for example. However, the most important similarity is the structure of the argument.





FIGURE 8 The 1996 Binnenrotte design by West 8. It was one of the designs for public space in Rotterdam that made the office of West 8, founded in 1987, famous, worldwide. Its novelty was 'empty' space, ready for the weekly market, but also as a stage for all that happens in cities. The design was heavily criticised for its emptiness. These days reconstruction in favour of a more diverse and green space is underway.

## Ingredients of a critique

The examples given in the preceding paragraph serve to list what seem to be the ingredients of a critique, and how these ingredients can be combined in an argument. Returning ingredients are description – analysis – interpretation, or evaluation. In addition, on the basis of my work in *Blauwe Kamer* and *Journal of Landscape Architecture*, I propose a basic argumentative scheme. That scheme consists of five steps, and it runs as follows:

- Come, look at this! In this step the author describes the design he or she wishes to draw to our attention, and motivates as to why, indeed, we should go on reading. Why is attaining knowledge of this particular design more important than for others of the same type? What is its novelty? What are the striking features? (Fig. 8ab)
- How did this come about? Any design is made in a landscape that existed before the designer came in. What was it before? Somebody wanted that landscape to change: the client or the contracting agency enters the scene. Often, the conception and the making of a design is not a straightforward narrative. Think of changes in the political constellation, new insights that require an update to the design, or a shifting appreciation of the public during the design or even during the construction process. How did this all influence the design, and does it end in a coherent final result?

- What is it now? Landscape changes and the demands of society change. Hardly any design, after being inaugurated, stays the same for years. Therefore, it must be clear at what moment the design is scrutinised, and how that relates to the original drawings. A crucial aspect of this step is: What is its use? How does it function? Is it appreciated? That must, as Carroll also suggests, link to what the design was expected to solve. It also points at the category the design is part of, which comes with a certain expected performance.
- So what should we think of it? Some critiques are very personal, others try to express a common belief, or to develop a more or less 'objective' argument. Nevertheless, independent of these different roads to follow, this is the step in which, for this particular design, 'grounded evaluation' is in action. Knowing what it was before, knowing what society or a client wanted, knowing the considerations of the designer, and knowing how it works, today, what should we think of it?
- And what is the larger perspective? If we accept that any design is part of a category, it follows easily that a well-chosen design object, when scrutinized, learns something about other, future design tasks of the same category, about the discipline of landscape architecture in general, or about the arts and its position in society. To some extent, this step is related to the first step, as the reason for taking a design in to account is often its implicit larger perspective. (Fig. 9ab)





FIGURE 9 Two photos of Parc de La Villette, 2014. They belong as images to a critique by Céline Baumann and Vesna Jovanovic published in *Journal of Landscape Architecture* 10(3). The critique discusses La Villette as a park -does it belong to such category? - and its development over time. (Images by Céline Baumann and Vesna Jovanovic, 2014).

Obviously, there are many smaller and larger variations on this scheme. For a certain scheme to be valid, one rule should always be respected, in my view. A critic has, to some extent, a powerful position, simply because he or she is invited at a more or less public stage. That comes with a responsibility to be transparent in the argument, and to care that any opinion is verifiable, in the sense that the reader is enabled to disagree. Inevitably, this involves methodical aspects. Did the critic visit the project, and did he or she do so only once, or more often? Were the designers or the client interviewed? Speaking for myself, I consider a site visit a necessary part of the process. Other critics defend the thought that the true value of architecture is to be found primarily in drawings and texts, and that the reality of a site only 'corrupts' the idea. Obviously, such viewpoints are essential and must be clear for the reader.

The above-presented argumentative scheme addresses critiques in general. The next section discusses the specific genre of scholarly critique. This comes with a slightly different argumentative scheme.

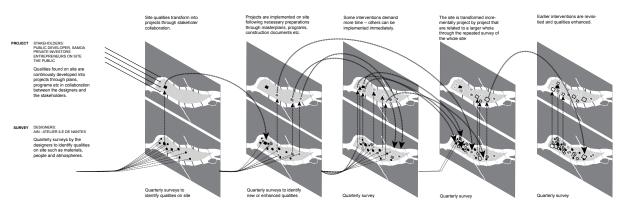


FIGURE 10 For their critique (Journal of Landscape Architecture 11(2)) on the Alexandre Chemetoff-design for Ile de Nantes the authors, Caroline Dahl and Lisa Diedrich, added analytical drawings to their verbal argument.

## Critique as an academic activity

There is no formally defined difference between an academic critique and any other. The difference is certainly gradual. However, what is necessary in an academic critique, and perhaps not in a professional critique, is that it is rooted in literature, has a clear method, and following from these two, an explicit angle or frame in which the design is questioned.

For those thinking of academic writing as objective, critique may be difficult to accept as a scholarly genre. Critique, by definition, puts weight on opinion. Different from other forms of scholarly writing, a sentence that starts with 'I' is rather at home here. Even if that may feel very uncomfortable for some, in the vibrant debate on what constitutes academia, this hurdle of, as I would call it, 'informed subjectivity' has already been taken. Critique is only one of the many different roads of scholarly writing, as long as critique is, indeed, 'grounded evaluation', to come back to Carroll. That is to say that the design under scrutiny is approached in a methodical way, that relevant literature informs the evaluation, and that we can check the reasoning of the critic via text, drawings and other images. For design disciplines, critique is of crucial importance. The relation between design and research, or the idea that design is research, is still controversial. Critique enables us to reflect on design in a scholarly way that matches the particularities of the domain of design, and perhaps does so by drawing. (Fig. 10) Therefore, scholarly critique as deployed in, for example, the Journal of Landscape Architecture is not only an option - it is of vital importance for the development of a strong theoretical foundation.

The academic nature of a critique certainly refers to its method. How did the critic read the design? What sources informed him? And what is the position of the critic in relation to the reader – to us all? Who is the critic anyway? In the arts, one can observe a long-lasting debate on the question who is entitled to criticise, and on what basis. A recent series of Dutch publications reflects on criticism in the arts. Schumacher et al, writing about art criticism as an exact field, want to put forward the art historian as the obvious critic, as opposed to a practitioner in the same discipline, or an outsider. (Schumacher, 2015) Essayist Gerrit Komrij, whom we met earlier in this essay, typically was such an outsider, claiming that it was crucial not to be an art historian. In his very personal style, Komrij states that 'never since the Big Bang an historian was able to even recognize a piece of art.' (Komrij, 1983) Anna Tilroe puts it in another way: Without 'the art historian load one is much more unbiased towards a piece of art.' (Tilroe in Schumacher, 2015) In Schumacher's eyes however, the art historian background is a valuable source as it helps to position the piece of art in a larger frame: From 'a wide-

angle perspective the academic critic tries to lift his interpretation above a matter of taste'. (Schumacher, 2015, p. 14) This comes close to Carroll's argument. Apart from a discussion on the role of specific disciplines, such as art history, this points to the role of expertise as such. For me, long before having any interest in criticism, Robert Pirsig's *Zen and the art of motorcycle maintenance* was a compelling reading experience. How to recognize quality? Pirsig suggests that less 'institutionalized expertise' and a keen eye are needed to see quality, and this is certainly a starting point for critique. In addition, Richard Sennet in *The Craftsman* wants to give credit to the public in general as being able to recognize quality to some extent. What the expert adds, in this perspective, is precision, context, and detail – an argument that starts with a well-defined question, and works its way towards a convincing and verifiable answer. For a small discipline such as landscape architecture, the question of who is entitled to criticise obviously has a specific interest. The discipline is rather small, and the number of specialized critics is even smaller. Perhaps that supports Pirsig and Sennet in stressing the importance of a keen eye - anybody who takes up the challenge should be welcomed. Nevertheless, the background argument on the nature of the critic does not lose its validity. One aim of this essay would be to also inspire and inform the interested non-expert to develop sound critical arguments, and by doing so broaden the circle of those participating in the activity of criticising and debating landscape architecture.

Swaffield and Deming in their reader on landscape architectural research put forward some thoughts on criticism. On the basis of literature, they work towards a tentative definition of critique in an academic context. Following McAvin they state that 'critique, or criticism in the academic sense implies a self-aware and systematic scrutiny of a situation or work from a particular perspective'. (Swaffield & Deming, 2011, p. 42) Referring to Bowring, an alternative approach is to speak about critique as 'the practice of evaluating design in an informed manner, based on an understanding of the content and the context of the work, and the design languages upon which it draws'. Swaffield and Deming (2011, p.42) distinguish three styles of critique in landscape architecture: descriptive, interpretative, and normative. The first provides 'a systematic and theoretically informed account of a work, the intentions of its creator, and its disciplinary and landscape context'. In an interpretive style, commentary can reveal 'new understandings and perspectives upon a work, and hence provide insight upon the wider discipline and society', by contrasting and comparing, using metaphor and analogy. Normative critique 'makes and communicates judgements upon designed works, performances or other creative acts such as writing. It evaluates the success or otherwise of a work, both on its own terms and in relation to wider disciplinary agendas and imperatives. It may also offer comment upon the appropriateness of its objectives and strategies'. As Swaffield and Deming indicate, in essence, these styles are based on different 'ways of thinking about the world', and this relates to different methods by which the critic investigates. As noted, it is probably one of the major differences between a professional and an academic critique: in the latter, one should be able to trace the method by which the critic arrives at his or her opinion. Swaffield and Deming list, for example, measurement and quantitative analysis methods under the header 'instrumental', aiming to know the 'what, where and how'. Observation, interviews and life histories fit in the 'interpretive' box and search for the 'who, when and why'. Deconstruction and creative intervention belong to the 'critical' category, interested in consequences or different options (Swaffield & Deming, 2011, p. 36). The Journal of Landscape Architecture, founded in 2006, is one of the only journals explicitly inviting critiques in an academic context. The editorial of 2013 throws some light on how critique may be understood in that environment. Under the Sky, the critique section, 'provides a platform for critical readings of landscape architecture projects (...)'. (Blanchon & Gill, 2013, p. 4) Blanchon and Gill position critique in terms of method as a form of case study, but understand that it is 'beyond mere description or illustration', referring to Clifford Geertz who spoke about 'thick description', adding many layers of cultural significance. (Geertz, 1973) 'Reading' here is meant as deciphering and appreciating 'the complex structures and processes that constitute a landscape. This starts with description, to be understood as an active. dialogic act 'between the world as reading (survey) and the world as writing (design)'. The critic has a role in this: 'Effective description derives from predetermined objectives, from formulated arguments and hypotheses, which themselves depend on the cultural horizon of the observer.'

Blanchon and Gill restrict critique to built projects, as a critique necessarily starts with 'physical contact with the actual site, through visits, observation and intuition'. Via a specific line of questioning, authors 'make the implicit discourse embedded in the space explicit'. (Blanchon & Gill, 2013, p. 4) I want to add that the restriction to built projects is debatable: in my eyes critique can, and perhaps even should, also address unbuilt plans, if only to improve these paper ideas on the road to reality.

Because of its opinionating character, critique may have a somewhat controversial existence in the context of academic critique, but as argued, critique fits perfectly well in such an environment, assuming that the critic uses a transparent and convincing method, chooses a clear angle from which he or she wants to discuss the project, and, very important, that the evaluation touches not only the studied design as a case, but tries to generalize the findings on a higher level, for example regarding the entire category to which the design belongs.

## Difficulties of critique in landscape architecture

Writing a sound critique is no easy task, and in landscape architecture in particular one cannot find so many very convincing examples of critique. The argumentative scheme as presented in this essay may assist authors who take up the challenge. However, I also want to throw light on two specific difficulties that a critic might meet. The first is commissioned work, which is in fact not specific to landscape architecture, but shared with architecture, as different from the arts in general. The second is the specific character of landscape architecture.

#### **Commissioned work**

In the arts, one encounters a range from self-initiated works to commissioned products, but in general, works originate in a rather free setting. For buildings and pieces of landscape the standard situation is that they are commissioned. A client pays the designer to do a job, and more than that, the design in the making will be supervised by the contracting agency, future users, or local authorities. This is a crucial aspect in the assessment of landscape architectural work, and the consequences for developing critique are substantial. Designers have to fulfil many (legal) requirements, and the performance of the design has to be proven. For such reasons, and as landscape architecture designs often address large and complex tasks, design is teamwork. Nevertheless, even today, designs are often understood as an individual achievement. Ayn Rand's famous *The Fountainhead* is a case in point. Interestingly enough, offices are often perceived more as an individual in this respect, than as a team. Albena Yaneva, in an exploration of the work of OMA, points out the fact that many written accounts seem to suggest, by sheer exposure of the name and the person, that Rem Koolhaas is the one who conceived the work(Yaneva, 2009).

As anthropologist, Yaneva stayed for half a year in the office, speaking with the employees and exploring the office as a space of making, using established ethnographic research methods. This highlights architecture – in this case- as teamwork. A remarkable conclusion she draws is that many design inventions are rather coincidental, in the sense that they result from the traces of earlier design processes, like a model standing around in a corridor that, as a sudden realisation by one of the designers, can solve a design problem in a current project. It is even more important to realise that – in contrast to the arts - landscape architecture projects are seldom built because the designer woke up and felt the need to design a park. A contracting

agency, or a local authority, formulated an assignment, and the designer responded to it. This resembles what happens in the design studio. The tutor formulated an assignment, and the student is judged for the intelligence, creativity or beauty of the response to this assignment. Writing a good assignment is an art in itself. There are many examples of built designs for which the observed quality (or failure, for that matter) was not so much produced by the designer, but by the one who commissioned the design. The Amsterdam Museumplein, as designed by Sven-Ingvar Andersson, became part of a fierce debate. (Van Dooren, 1999) (Fig. 11). Opponents spoke about Andersson as 'a friendly garden gnome' and judged the design to be a park instead of a square - a debate that revealed the strong appreciation of architectonic and stony Barcelonean designs twenty years ago. However, it was the administration of Amsterdam that decided to opt for a space with a green and 'nordic' character, and to choose a Scandinavian designer. If the question were 'Did Andersson fulfil the requirements as given?' a critique cannot be other than be very positive: How well he did!



FIGURE 11 Photo of Museumplein, 2005. The image shows the heavily debated green character of the design, as opposed to a more 'Barcelonean' stony design.

However, if the question is if this particular design was relevant, at this place and in this time, the answer might be very negative. In a way, this is a variation on the artist's intention. Here, the critic must decide in how far the original assignment as given by the client is relevant for evaluating the design, and explicate his terms of evaluation. It is important to see that it also works the other way around: criticism may unravel the background of a design, and provide an explanation for what is perceived by the public as inadequate. In this particular case I could, as the critic, conclude that Andersson, even if the design may have had failures, certainly could not be held accountable for all perceived misfits.

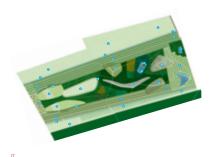






FIGURE 12 Plan, visualisation, and photograph of new estate *De Wilddobbe* in Grolloo, Drenthe. The photograph underlines the time aspect in landscape: drawings aim at a mature situation, to be reached after decades, as in this case. Designed 2008, completed 2009. Design by Strootman Landschapsarchitecten. (Image Strootman landschapsarchitecten, 2008).

#### The character of landscape architecture

For several reasons landscape architecture is its very own discipline. In particular, its relationship to nature poses difficulties for the critic. Many works designed by landscape architects could just as easily be understood as a part of landscape, as something which is simply there. Design, in that context, seems more a process of growth, as stated by Ingold. (Ingold, 1993; 2013) Therefore, although unintended, the statement by Carroll that we can only evaluate rocks if they 'enter the circuit of human affairs' seems to include landscape architecture. Critique in that sense is emancipatory: It tries to make us aware of the fact that landscape architectural pieces of art have an author. An important task for any critique is therefore to make clear what the piece of art is, in terms of authorship, in order to distinguish it from its surroundings and to understand it within the perspective of what it was before. This is not as evident as it may sound. A painting can be taken away. It is not so easy to take a piece of landscape architecture away as it was always preceded by a topography and a landscape. It is part of the critic's role to define exactly what the designed addition was, or perhaps even the invention, and how the history of the design has to be understood. The critic often has to evoke the 'before' and compare it to the piece of landscape architecture we see today. James Corner, in an important essay from the early nineties, pointed out the fact that landscape poses huge difficulties in its representation because of the particularities of landscape. (Corner, 1992) He mentioned spatiality, temporality and materiality. (Fig. 12abc)

With regard to temporality: Landscape evolves over time, one can only find an overview by moving around, and landscape can be experienced by more than just the eyes - it can be touched, smelled, or be windy and rainy. Landscape architecture operates in a medium that in many ways is dependent on time, and therefore changes over time. The chance of finding a landscape as designed is rather small. A recently finished building is often presented as 'the new kid in town'. A recently inaugurated piece of landscape design is different from what it is expected to become. In this sense, a critic must always be aware of what he or she is judging: the 'actuality' that Leatherbarrow speaks of, or what it was intended to be as judged by its text and drawings? (Leatherbarrow, 2009, p. 50) Some will choose the latter, with the argument that design in real life will be compromised for all sorts of banal reasons. By judging the design in terms of its drawings we restrict the evaluation to its abstract idea - to what it could have been. In my eyes, the intelligence of a designer to handle the banality of real life is under scrutiny in a critique. Many landscape architecture projects take years to be fully realised, and very often they are not recognised as pieces of art, so that changes are made without consulting the design. Building an argument that starts with the idea of the design can help to unravel this. In such cases, it is not done because reality is too banal, but to explain the tension between its actual state and its idea. These two difficulties meet each other in the question of what preceded the design, in terms of an assignment, the original landscape, or the history of a design

process. The reason to think that this is important is found in the claim that critique helps to improve the achievements of the discipline. By relating designed landscapes to the assignment they reacted to, and the landscape they originate from, successful approaches and promising ways of doing are detected.

## An agenda for criticism

Music and musicology, or art and art history, are independent and at the same time closely related fields. Art history reflects on art – on the making of it, the author's intention, or the position of an individual piece in the development of the arts as a whole. There is no such thing as 'landscape architecturology'. Obviously, today's academic landscape architecture programs also deploy research and reflection, supporting the theoretical foundation of landscape architecture, but still the study of the discipline and its products is meagre. Critique is a means to contribute to that. Critique, therefore, is a vital instrument for the development of the discipline. The forms of critique that aim to be part of a scholarly debate are especially interesting in this respect. Critique is not easily accepted as an academic activity, but I have shown that this should be turned around: critique *certainly* is a form of scholarly reflection, as long as it aims at grounded evaluation. For that reason, any agenda for critique in landscape architecture starts with the desire to expand criticism. This counts for all forms and styles of critique, but the academic form in particular needs to be invested in to become autonomous, indispensable, and convincing. Only by so doing can a body of knowledge and instructive examples be built up.

A first issue on the agenda, therefore, is strengthening the role of critique itself as part of a broader culture of reflection, credibility, and verification. Landscape architecture shares this aim with other disciplines that still can be considered young, and disciplines that strive to be acknowledged as also having academic qualities. In fact, studying such disciplines might help to better position particular aspects, such as how to relate the material thing to the intellectual idea, and the small but interesting differences between a book, a house, a piece of music or a landscape. A second issue would be to contribute to the identity of landscape architecture, whereas a third item would be much more practical: is there something like a list of landscape architecture designs that must be criticised as they are essential for the understanding of today's practice and its larger significance? Indeed, critique also explores what landscape architecture should be about. (Fig. 13) This question could be the subject of a large essay on the discipline, but even by criticising a small individual piece of the design the critic can set the agenda for the profession in general. As an example I refer to a student's critique from our critique masterclasses, in this case the 2015 Hochschule Weihenstephan Triesdorf masterclass. (Fig. 14) <sup>15</sup>



FIGURE 13 In some cases, interventions in public space are bewildering. From banal mistakes to wrong strategies, critique serves as an instrument to unravel failures, or to argue what should have been done, instead of the design as we find it.



FIGURE 14 In 2015 and 2016, several master classes were organized on critique writing: in Hannover, Alnarp and Weihenstephan. Several aspects of critique and critique writing were discussed. Very productive group discussions concerned preliminary titles of the critique.





FIGURE 15 Two images of the new extension of the botanical garden of Bordeaux, designed by landscape architect Catharine Mosbach. One of the 'striking features' of this design is that impressive pieces of French landscape are replaced by the botanical garden, including their soil strata, and that they are positioned so that we can see the soil strata, including their change over time.

The argument by Carmen Lopez and Jacqueline Wagner was that our society, and thus designed public space, often caters for young people as the preferred public. By criticising this, the critic points at a shortcoming in current landscape design. This is not to say we are obliged to share this viewpoint – on the contrary, I would take it as an invitation for debate. Not so much one specific viewpoint, but debate itself, is the goal of critique. Obviously, critique must not necessarily be restricted to an individual design. Critique can also address the entire oeuvre of an office, or a style, as in 'criticizing Modernism'. Critique can put forward previously unseen perspectives, or highlight neglected phenomena.

Then there is the list of essential pieces of landscape architecture. I propose to simply complete the criticising of these works. This concerns known projects of which the importance is obvious. A recent issue of Journal of Landscape Architecture presented a critical reading of Parc de La Villette. (Jovanovic & Baumann, 2015) (see Fig. 9ab) It is a crucial example of twentieth century landscape architecture, and so important that it would be very interesting to have more critiques written on La Villette from different angles. More recent essential works could, for example, be Landschaftspark München-Riem by Latitude Nord, or Catherine Mosbach's Jardin Botanique in Bordeaux. (Fig. 15ab) Such a list refers to an emerging idea about what is essential. Obviously, this is debatable, but it is exactly this debate that helps to sharpen our idea of landscape architecture. For that reason, it is even more important that a critic present new and previously unknown projects, as a guide who wants to throw light on something we should know. In doing so, the critic helps to shape a shared understanding of what are canonical examples of landscape architecture. As the landscape architecture profession has very different faces in Europe, and even more worldwide, critique is also a means to compare approaches, both to cultivate regional differences and to harmonize ways of doing. Just as in architecture, critics must chase new projects to meet our desire to know what is going on. Particularly in landscape architecture, as argued, criticism should dissect projects that have been in use for some time - for example, 5 years. I consider this a major task for theoreticians in landscape architecture: how do original designs, their intentions and their drawings relate to the actuality over time?

In this essay I focussed on critique as a written genre that is mainly disseminated via journals, magazines, and websites. The larger frame is a culture of criticism, and such a culture can already be established in that specific educational form of the design disciplines: the design studio. It is in the design studio that newcomers in the discipline can be trained in receiving criticism, applying criticism in future work, and criticising fellow students to master the genre. Sadly enough, it may be the specific culture of the design studio that feeds the persisting idea of critique as unfair and harsh. I propose to stick to the maxim of Carroll that criticism is 'grounded evaluation'. It is especially in written critique, and more particularly in its academic form, that this grounded evaluation can be explored.

#### **Biography**

Noël van Dooren is a Wageningen trained landscape architect. He is an independent advisor, teacher, researcher and writer. From 1994 until 2002, he joined the *Blauwe Kamer* board and wrote about 40 critiques - in Dutch. From 2013 until 2016, he joined the editorial team of *Journal of Landscape Architecture* for the critique section *Under the Sky.* In early 2017 he defended his PhD *Drawing Time* at the University of Amsterdam. In 2004-2009 he headed the landscape architecture department of the Academy of Architecture Amsterdam. He currently holds the professorship *Sustainable foodscapes in urban regions* at Van Hall Larenstein Velp.

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#### **Bibliography**

Blanchon, B., & Gill, K. (2014). Editorial: Critical invention. Journal of Landscape Architecture 9(1), 4-5.

Carroll, N. (2008). On Criticism: Thinking in Action. Colchester, England: Routledge.

Christensen, T. (2017). Peek inside a facebook design critique. Retrieved from https://medium.com/facebook-design/peek-inside-a-face-book-design-critique-c4833efda26e

Corner, J. (1992). Representation and Landscape: Drawing and making in the landscape medium. Word and Image 8(3), 243-275.

Diedrich, L., & Dahl, C. (2016). Ile de Nantes 2000-2010: a method for the meantime? Journal of Landscape Architecture, 11(2), 72-83.

Deming, M. E., & Swaffield, S. (2011). Landscape architectural research: Inquiry, strategy, design. Hoboken, NJ: John Wiley & Sons.

Dooren, N. van (1998). De betekenis van een volwassen kritiektraditie. Blauwe Kamer, 1998(5), 16-23.

Dooren, N. van (1999). Museumplein of Achterveld. Blauwe Kamer, 1999(4), 17-21.

Dooren, N. van (1999). Klaar, maar niet af. Blauwe Kamer, 1999(6), 30-33.

Dooren, N. V. (2006). Thoughts on the relevance of landscape architecture: The Berlin Tilla-Durieux-Park and Spreebogenpark examined in the context of a unifying capital. *Journal of Landscape Architecture*, 1(2), 54-65.

Forty, A., & Forty, A. (2000). Words and buildings: a vocabulary of modern architecture (Vol. 268). London, England: Thames & Hudson.

Geertz, C. (1973). The Interpretation of Cultures: Selected essays. New York, NY: Basic Books.

Harsema, H., & Dooren, N. van (1999). De toets der kritiek: Een onderzoek naar de betekenis voor kritiek in landschapsarchitectuur en stedebouw. Wageningen, Netherlands: Blauwe Kamer.

Hunt, J. D. (2004). The Afterlife of Gardens. London, England: Reaktion Books.

Ingold, T. (2013). Making: Anthropology, Archaeology, Art and Architecture. Abingdon, England: Routledge.

Jovanovic, V., & Baumann, C. (2015). The 'versatile monument'question: Parc de la Villette as managed reality. Journal of Landscape Architecture, 10(3), 78-89.

Komrij, G. (1996). Het boze oog (3<sup>rd</sup> ed.). Amsterdam, Netherlands: De Arbeiderspers.

Kostof, S. (1977). The architect: Chapters in the history of the profession. Berkeley, CA: University of California Press.

Leatherbarrow, D. (2009). Architecture Oriented Otherwise. New York, NY: Princeton Architectural Press.

Noldus, B. V., & Riesto, S. (2014). Subtle, yet radical in Kongens Have, Odense (DK). Scape, The International Magazine for Landscape Architecture and Urbanism. 14. 120-127.

Preiser, W. F., Davis, A. T., Salama, A. M., & Hardy, A. (Eds.). (2014). Architecture beyond criticism: Expert judgment and performance evaluation. London, England: Routledge.

Rand, A. (1943). The Fountainhead. Indianapolis, IN: Bobbs Merril publishers.

Saint, A. (1983). The image of the architect. New Haven, CT: Yale University Press.

Schön, D. A. (1983). The Reflective Practicioner: How professionals think in action. New York, NY: Basic Books.

Schumacher, R. (2015). Kunstkritiek als exact vak: De kunsthistoricus als criticus. Rotterdam, Netherlands: NAi010 publishers.

Treib, M. (2004). Kritische Haltung zeigen [Being critical]. Topos 2004(49), 6-21.

Valois, N., & Paradis, J. (2010). Place Émilie-Gamelin in Montréal-landscape narrative, meaning and the uses of public space. *Journal of Landscape Architecture*, 5(2), 72-83.

Yaneva, A. (2009). Made by the Office for Metropolitan Architecture: An Ethnography of Design. Rotterdam, Netherlands: 010 publishers.

#### **Notes**

- [1] A selection of digital publications on Superkilen, as approached on 20-01-2016:

  - http://philosophiesresarc.net/2013/04/15/conceptual-cluster-9-ficto-criticism/
  - $https://www.google.nl/search?q=topotek26ie=utf-86oe=utf-86gws\_rd=cr6ei=ppmfVuPRDIrlUcnftKAJ\#q=superkilen+critique&start=20$
  - https://streetswithoutcars.wordpress.com/2014/08/25/superkilen/
  - http://dirt.asla.org/2013/03/14/superkilen-global-mash-up-of-a-park/
  - http://www.mythologicalquarter.net/s/SUPERKILEN\_Brett\_Bloom\_2013.pdf
  - https://twitter.com/perform\_city/status/325207094028562434
  - http://www.groupechronos.org/publications/blog/creativity-and-participation-as-a-social-tool-in-the-public-space-report-on-copen-hagen-s-superkilen#sthash.37wX8UAE.dpuf
- [2] In the Netherlands, this can be found back in the magazine Plan, but in this period broader phenomena of landscape were debated, more than particular built projects.
- [3] For an argument about research on landscape architecture see for example Lenzholzer, S., Duchhart, I. and Koh, J. (2013) 'Research through designing' in landscape architecture. Landscape and urban planning, 113, 120-127.
- [4] These masterclasses *Criticizing practice, practising critique* started in 2015 in Weihenstephan, Germany, followed by installments in Hannover, Germany (2015) and Alnarp, Sweden (2016). Next installments will follow, and a publication is in preparation.
- [5] See for example Kant, I. (2011) The critique of the pure reason. Translated version by J. Meiklejohn. Seattle: Pacific Publishing Studio.
- [6] An introduction on critical thinking or critical theory can be found at https://en.wikipedia.org/wiki/Critical\_thinking, or https://en.wikipedia.org/wiki/Critical\_theory
- [7] Gerrit Komrij wrote in 1983 Het boze oog, which could be translated as 'The evil eye'. There is no translation available.
- [8] This is my translation of Komrij 1983, 28. The original Dutch text is: 'Er bestaan twee maquettewetten: 1) is de maquette lelijk, dan is het resultaat later lelijk; 2) is de maquette mooi, dan is het resultaat later ook lelijk.'
- [9] See for example Blanchon and Gill, 2014
- [10] Wimsatt and Beardsley did so in *The Verbal Icon* (1954).
- [11] The word 'consciously' points at the fact that there are quite a number other texts that were not categorized as critique, but could or should be understood in that way.
- [12] Obviously, other languages expand the collection. Those who read Dutch would find another 50-100 examples.
- [13] This refers to my own practical experience in writing critiques for Blauwe Kamer.
- [14] As illustrated by Schön (1983).
- [15] Unpublished critique by TU München students Carmen Lopez and Jacqueline Wagner (2015) titled Even mermaids get old.

## Indiscernibility and form

## The design of Unit C as a critical inquiry into the guidelines for historical preservation

#### Per-Johan Dahl

Politecnico di Torino Department of Architecture and Design Turin, Italy

#### **Abstract**

This article explores the intersection between the indiscernible forces of urbanisation and the materialisation of architectural form. Taking the design of architectural concept for an Accessory Dwelling Unit (ADU) at Råå in Sweden as an applied research project, the article argues that new techniques are needed to analyse interactions between artistic intentionality and indiscernible forces, and to critically evaluate their impact on the form of buildings and places. The ADU is an emergent building type. Dubbed Unit C at Råå, the ADU was designed to be attached to a neo-classical villa. Unit C did not comply with the single-family residential codes in the zoning plan, thus a zoning amendment was necessary. As Råå has been designated a heritage site, this article takes the guidelines for historical preservation of buildings implicit in the zoning plan as an agent of the indiscernible forces of urbanisation. Adhering to critical practice, the article proposes architectural theory to be utilised as a pragmatic tool in innovative design processes. When designing the architectural concept of Unit C, the architects encountered a space for experimentation and negotiation in the guidelines for historical preservation. By critically analysing this space through architectural theory, the architects clarified relationships between the visual characteristics and the cultural heritage at Råå, which served to usher the architectural concept through the zoning amendment.

#### **Key words**

Accessory Dwelling Unit; Emergent Building Type; Critical Practice; Zoning; Historical Preservation; Montage Theory; Design Research

## Background

The common understanding of the contemporary city arises from a mediated image, which illustrates urban form through a multifaceted composition of buildings and infrastructures. Even as city building has been understood as a process ever since Ildefons Cerdà published his plan for Barcelona in 1859, the pictorial representation of urban form provides an illusion concerning the complexity that characterises urbanisation (Choay, 1997). This is particularly true for the contemporary city, which cannot be described solely by its visual presence. Instead, it has to be comprehended as a process of merging what Paul Virilio refers to as "the two extreme poles of the *seen* and the *unseen*" (Virilio, 1991, p. 14). Indeed, the urban fabric that has been materialised into physical space, and which responds to social and tectonic interaction, has been constructed from a dynamic matrix of discernible and indiscernible forces. What makes this so compelling is that they constantly mutate and evaporate while they adopt new formations for incessant performance.

The fluctuation of forces includes zoning laws, economy, culture, and social attributes. These forces, as Mary McLeod clarifies, "typically play a stronger role in explaining the nature of a place and its evolution in time than the intentions of any designer" (McLeod, 1987, p. 5). Yet, the visual result cannot be divorced from this flow of forces, which call for a variety of analytic techniques. To elaborate on different categories and techniques relevant to the analysis of public places, McLeod asks if criticism should "deal with the object analysis as a static event, frozen in time, or should it consider the object *in time*, how it came to be?" Referring to this dichotomy, she differentiates between "explanatory criticism" and "operative criticism," arguing that the latter "attempts to affect, not simply to explain, the evolution of architecture" (McLeod, 1987, p. 4).

A common denominator in both techniques refers to issues of artistic intentionality. While explanatory criticism "bracket out issues of artistic intentionality," operative criticism "implies a selective historical [...] account of architecture, whose stages of evolution makes the historian's desired development the next logical step" (McLeod, 1987, pp. 4-5). But how do we deal with criticism when artistic intentionality draws on disciplinary attributes, such as geometry, type, and materiality, to intervene with, and amend, the constituting principles of forces? While the visual result – the house, the block, or the landscape – can be analysed objectively, the materialisation of design processes may depend on the designer's artistic ability to intervene and negotiate the intersections of fluctuating forces, as well as their impact on the shaping of fields and objects. Thus, techniques are needed to analyse interactions between artistic intentionality and indiscernible forces, and to critically evaluate their impact on the form of buildings and places.

To explore alternative techniques, this article takes the design of the architectural concept at Unit C as an applied research project to extrapolate intersections between architectural intervention and the sole indiscernible force of urbanisation, which is zoning. Unit C is an attached Accessory Dwelling Unit (ADU), designed by the Malmö-based architecture office, smog studio, for a neo-classical villa, built 1931 on a single-family lot in Råå, Sweden. The ADU encompasses an emergent building type, which encountered disciplinary grounds in the late 1970s, primarily in south Canada and the American West. Defined as an autonomous living unit and built as a complementary structure to the main building on a single-family residential lot, the ADU challenges universal zoning by adding density to suburbia (Dahl, 2014). The realisation of ADU architecture continues to be difficult due to the restrictions in single-family residential zoning, thus the emergent building type tends to encounter skepticism from the normative forces in culture and jurisdiction. This situation was repeated in Råå, where the architecture of Unit C didn't comply with the zoning plan.

While the author of this article is a co-founder of smog studio, the methodology adheres to design research which "can be described as the processes and outcomes of inquiries and investigations in which architects use the creation of projects [...] as the central constituent in a process which involves the more generalised research activities of thinking, writing, testing..." (Fraser, 2013). Producing new insight and knowledge through design practice, the article demonstrates that the design of the architectural concept at Unit C comprises a critical evaluation of the administrative forces that usher historical preservation. It draws on research in preservation codes and building type in order to steer negotiations between the design of architectural form and the logics of zoning. Utilising design to explore the divergences between these two practices, the project extrapolates the disciplinary boundaries of architecture to reflect on a specific contemporary suburban condition. By critically analysing negotiations between architectural practice and planning praxis, this article proposes the means with which to operate at the intersection between the indiscernible character of planning processes and the materiality of architectural form. Questions to be asked include: Are the disciplinary connections between regulation and place relevant for planning objectives in historical preservation? Can we use architectural design as a platform for negotiation within the indiscernible forces of urbanisation? How can we address the discrepancies between form and regulation in a historical single-family residential area?

## The context

Råå is a significant fishing village in the south-west of Sweden. While the designated name dates to 1405, Råå matured into its current setting during the eighteenth and nineteenth centuries. During the twentieth century, the village was incorporated as a suburb by the city of Helsingborg. Evolving primarily as a residential area, Råå is today dependant on the economic and administrative structures of Helsingborg.

Unit C is therefore contextualised in tendencies that often characterise the contemporary suburban condition in Sweden and elsewhere. The spatial premises of historical buildings, which have been developed in accordance with the twentieth century zoning tradition, fail to meet current expectations in comfort and performance. While the size of nuclear families remains similar to those in the mid-twentieth century, their daily routines and social behaviors have changed. More space is needed to support new requirements for solitude, flexibility, storage, rituals, and hygiene. Because the suburban form has evolved as a picturesque and spacious antithesis to urban life, correlation between expectation and space may be organised through incremental densification (Fishman, 1987).

In 2010, smog studio was commissioned to investigate the possibility of adding space to a single-family residential house in Råå through ADU architecture. Incremental densification of urban and suburban space is generally guided by the zoning plan, which regulates the size and use of buildings on a lot. For the lot on which Unit C was to be built, the zoning plan allowed for one main building for residential use, with a maximum of 90 sqm. It also allowed for supplementary buildings for storage use, with a total area of maximum 35 sqm. Since this lot was fully built, a zoning amendment was needed.

In Swedish jurisdiction, a zoning amendment comprises alteration, removal, and introduction of new regulations within a specified geographical area of the zoning plan (Boverket, 2016). As elsewhere, it stipulates that regulations can be updated without the provision of a new zoning plan. The zoning amendment is prepared by the Department of City Planning and adopted by the City Council. To calibrate the magnitude of modified regulations, the architectural design characteristics, such as plot distribution,

geometry, and building materials, must be verified by the Department of City Planning. Hence the architectural concept is implicit in the zoning amendment.



FIGURE 1 Plan drawing identifying buildings of great historic value at Råå. Excerpt from Bevaringsprogram för Råå, adopted by City Council 27 August 1991, Helsingborgs bevaringskommitté, Helsingborgs museum, Helsingborg, 1992. Copyright 1992 Helsingborgs museum. Reprinted with permission.

The architectural concept is established through protocols of practice. As zoning is grounded in empirical observations and data, it tends to "conceive the city as an end state object, rather than an ever-evolving organism" (Dahl, 2017). To explore transitions in the logics of zoning, a protocol of practice is needed feasible to prompt malleable solutions. Stan Allen's discourse on practice is useful when addressing such endeavor. Allen distinguishes between "conventional practice" and "critical practice," and argues that the two protocols operate with different relationships to the design of concept (Allen, 2009, p. XII). In conventional practice, Allen states that concept adheres "to a series of enabling codes, which themselves comprise a random sampling of the dialectics of professional practice." Drawing on the learned habits of normal design culture, "the unstated [theoretical] assumptions of conventional practice enforce known solutions and safe repetitions." Critical practice, on the contrary, is theoretically driven. "Not a static reflection of concepts defined elsewhere, [the critical practice protocol is] flexible enough to engage the complexity of the real, yet sufficiency secure in its own technical and theoretical bases to go beyond the simple reflection of the real as given." Thus in critical practice, theory becomes a pragmatic tool feasible "to confer unity on the wildly disparate procedures of design and construction" (Allen, 2009, p. XII).

Allen's distinction between conventional practice and critical practice is useful when extrapolating the design of the architectural concept for Unit C. Conventional practice correlates with zoning praxis, because such protocol enforces known solutions which can be referred to a posteriori. For the design of an emergent building type, however, the rather limited access to empiricism requires a priori assumptions. As critical practice may go beyond empirical reflections, such protocol seems feasible to use when positioning the design of architectural concept for emergent building types, such as ADUs. However, when a zoning amendment relies on a priori assumptions, weak empiricism tends to obstruct decision-making in city agencies. This creates a space for design experimentation and negotiation between the architectural concept and the zoning administration. As we will see, theory would prove to be imperative for negotiating that space at Unit C.

# The space for design experimentation and negotiation

Råå was designated a National Heritage Site (Riksintresse) by the Swedish National Heritage Board (Riksantikvarieämbetet), thus architectural design is regulated by guidelines for historical preservation. These guidelines are extrapolated in the conservation program, which is a 64-page provision compiled by the Helsingborg Museum (Helsingborgs museum) and adopted by the City Council on 27 August 1991. The main purpose of the conservation program is to delineate the neighbourhood character and historic values, which were imperative for the designation of Råå as a National Heritage Site.

The conservation program is one of several documents that regulate development at Råå. As the protection of cultural heritage is implicit in the Planning and Building Act (PBL), the guidelines for historical preservation are moulded into planning objective. When reading the conservation plan, one can conclude that its aim derives from an anxiety that "the requirements of our age of comfort and space tend to modify the nineteenth century building, and new additions and alternations have many times had negative impact on the historic milieu" (Helsingborgs museum, 1991, p. 7). Thus the planning objective is to preserve the fisherman's village character through the regulation of architecture. Indeed, it is by safeguarding building elements and tectonic specificities such as the aesthetics of brick walls, the continuous use of tar paper roofing, and the plan organisation of the historic houses that the character of the fisherman's village is preserved. The conservation program hence resonates Aldo Rossi's interest in the city as an autonomous entity that is feasible to be studied "only when we take it as a fundamental given, as a construction and as architecture" (Rossi, 1982, p. 22).

In a close examination of the regulations of the conservation program, two main design guidelines for historical preservation occur. One is urban, the other architectural. The urban guideline states that "the organization and form of buildings should relate to the visual characteristics and the cultural heritage of the place." The architectural guideline states that "additions, renovations, and alterations should obey the style of the main building" (Helsingborgs museum, 1991, p. 35). While several buildings in Råå have been modified, the conservation program includes a survey that identifies all building objects that are considered specifically valuable for historical preservation. Visualised through a plan drawing, a total of 294 houses have been classified as "specifically valuable buildings" by PBL 3kap 12 $\S$  (Fig. 1). Governed by the highest degree of preservation, these buildings may not be altered, and all maintenance must obey the historical characteristics.

While most of the identified buildings comply with the architecture of the traditional fisherman's house, the plan drawing also detects buildings of a different style that are considered historically significant and important to preserve (Fig. 2). These buildings consist of a small stock of neo-classical villas built during the years between the first and the second World Wars (Fig. 3). Characterised by plaster walls with ornaments, steep roofs, and delicate detailing, the architectural style of these buildings differs radically from the style of the traditional fisherman's house. As the main house to Unit C encompasses one of these neo-classical villas, an important question is raised. Should the aesthetics of the ADU comply with the urban approach to cultural heritage, or should the new addition comply with the architectural approach to the preservation of style? Due to the universal criteria of urban planning, this distinction, which is disciplinarily explicit, produced levels of uncertainty for both design and administration. Thus, at Unit C, the space for design experimentation and negotiation emerged in the guidelines for historical preservation.

## Theory as platform

The space for design experimentation and negotiation was imperative for the design of the architectural concept of Unit C. If we adhere to Allen's definition of critical practice, architectural theory may be utilised to extrapolate such space by means of discipline. Thus we need to analyse the two different styles implicit in the conservation program through architectural theory.

The neo-classical villa, to which Unit C was added, can be analysed with reference to the discourse on tectonics. Tracing the scope of the tectonic, Kenneth Frampton describes the analysis of the Caribbean hut which Gottfried Semper pursued after encountering the primordial dwelling at the Great Exhibition of 1851 in London (Fig. 4). Frampton clarifies the "theoretical departure from the Vitruvian triad of *utilitas, fermitas*, and *venustas*," which Semper undertook when dividing his primordial dwelling "into four basic elements: (1) the earthwork, (2) the hearth, (3) the framework/roof, and (4) the lightweight enclosing membrane" (Frampton, 1996, pp. 4-5). Reconceptualising architecture into an art of joining the basic elements of building with "the material as physical matter," the neo-classical architecture at Råå can be understood by the tradition of generating form through the assemblage of taxonomies (Semper, 1989, p. 269).



FIGURE 2 Tar paper is utilised for roof and gable cladding at a fisherman's house in Råå.



FIGURE 3 The neo-classical villa to which Unit C was added.

A different approach to creating form was articulated by Adolf von Hildebrand, who argued that space is a product of movement, vision, and touch, rather than the genesis of material conditions. With his book *The Problem of Form in Painting and Sculpture*, von Hildebrand argued that the principles governing the construction of forms "cannot be arbitrary, but must come from our perception of space" (von Hildebrand 1907, p. 14). Stanford Kwinter utilises the term plasticity to describe von Hildebrand's approach to form – a terminology that can be clarified with reference to von Hildebrand's sculptures in which the human face lost its organic corporality, the clear articulation of its parts (Kwinter, 1986) (Fig. 5). Thus, von Hildebrand's theory does not support the understanding of architecture through differentiation between basic elements, but rather through our ability "to combine the piece-work of perception into an ideal whole" (von Hildebrand, 1907, p. 12). Referring to the morphological attributes of form, von Hildebrand's discourse goes beyond the idea of the assemblage, and introduces a kinetic approach to the perception of space.

When analysing the traditional fisherman's house at Råå, the relationship between form and architecture complies with von Hildebrand's continuous form rather than with Semper's congregation of material as physical matter. Even if the brickworks and roofing surfaces tend to imply a tectonic clarity, the *building elements* at the traditional fisherman's house do not comply with an assemblage of taxonomies. Their relationships are, on the contrary, often blurred with roofs morphing into walls and details, resulting in a unity of form that counteracts the idea of clear joints and explicit elements. By congregating the disciplinary distinctions of building form, the architectural concept for a zoning amendment can be pursued with reference to theory rather than to style. In this case, the design of the architectural concept becomes a critical practice in which theory is used as a platform for negotiation with the zoning administration.

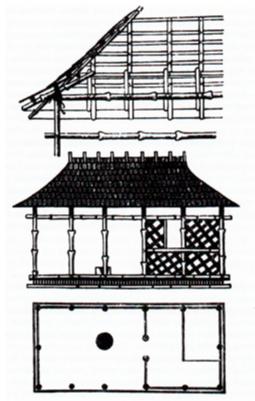


FIGURE 4 Caribbean Hut on display at the Great Exhibition of 1851 in London by G. Semper (1863) Der Stil, vol. II. Copyright 1863 by Der Stil.

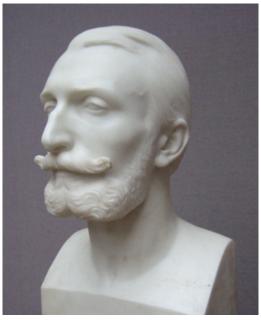


FIGURE 5 Bust of Konrad Fiedler, a plastic approach to form. (Adolf von Hildrebrand, 1874-75, distributed under a Creative Commons Attribution 2.0 Germany licence)

# The negotiation between architectural practice and planning praxis

Deciding to comply with visual characteristics and the cultural heritage of the place, smog studio discarded the mere normative way to approach the design of architectural concept, which is to comply with the architectural guidelines in the conservation program. Deciding instead to connect the design to the characteristics of the place, the cultural heritage was referenced through the distribution of objects on the lot and their cumulative relationship to the spatial characteristics of the surroundings. smog studio extrapolated three possible lot distributions, which were discussed with client and authorities. The consensus – a corner location was preferable. The reasoning also determined the building footprint for Unit C to be 40 sqm.

The programmatic requirement of an ADU is rather basic as it includes only the necessary dwelling functions. However, the form is more complex, as it ought to draw from its "position on the site to camouflage itself with reference to the surrounding neighborhood" (Dahl, 2014, p. 75). The corner position allocated for Unit C encompasses the prime location of the lot, with maximised exposure to the intersection of two public

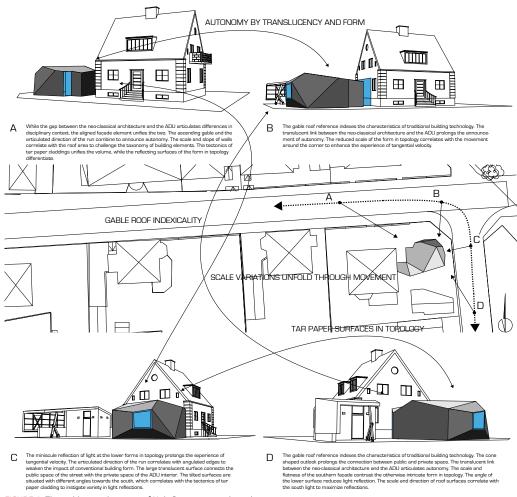


FIGURE 6 The architectural concept of Unit C: montage and topology.

streets. Camouflaging a building at such a location therefore cannot rely solely on the disguising aspects of surrounding buildings and foliage. Indeed, when a building can't be hidden, its appearance may be manipulated through the artistic intentionality of form. It can be manipulated through scale and index: scale establishes connections between subject and object, and index establishes connections to the memory of place because it relies on the traces of prior building forms (Eisenman, 2007, p. 134). The conceptual strategy for Unit C was to alter the experience of scale through geometry, and to alter the indexicality of building form through tectonics.

With scale and index as the conceptual paradigm of Unit C, the negotiation between architectural practice and planning praxis required a transition from concept to design. A zoning amendment in Swedish jurisdiction is a political decision, so the mere abstract realm of architectural concept needed to be explained through representation. Only by evaluating the implication of a building's appearance in the public space could the City Council justify transitions in the conservation program, hence the artistic intention of Unit C to utilise the specific qualities of the corner site as a form generator. The corner, as Eisenman denounces, "reflect a thought-to-be generic problem" in architecture (Eisenman, 2007). Hence, the act of turning a corner – the shifting of directions implicit in such an endeavor – signifies motion, which can be articulated with reference to von Hildebrand's discourse. In his scholarship on montage theory, Stan Allen discusses "construction with intervals" as a design approach that recognises "the discontinuities that are [...] built into the fabric of time and space" (Allen, 2009, p. 28). Challenging the classical references to Euclidian geometry, the montage "no longer tries to model depth, either the finite depth of perspective or the infinite depth of axonometric" (Allen, 2009, p. 28). Working rather with surfaces and images, montage echoes a kinetic experience, a "compressed space, unfolding in time and linked together by the perception and recall of the observer" (Allen, 2009, p. 30).

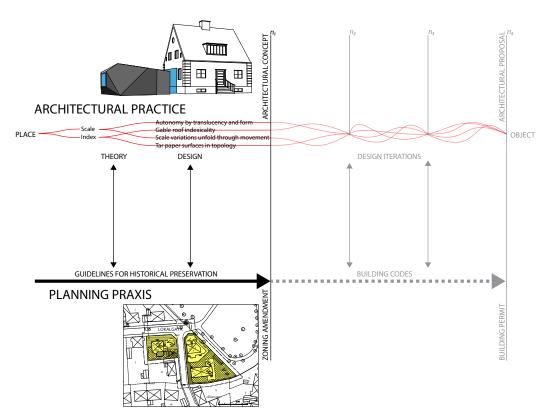


FIGURE 7 Negotiating architectural practice and planning praxis at Unit C.

The montage approach to space construction complied not only with the disciplinary connections of the corner problem, but also with the characteristics of the fisherman's houses discussed previously. When the configuration of a building counteracts the idea of clear joints and explicit elements, its disciplinary references discard the traits of classical geometries, thus the use of topology for the design of Unit C, which is a geometry of position based on the "relationships between component spaces or activities of buildings" (Burry & Burry, 2010, p. 158). Topology does not depend on the exact form of an object, but rather on the way an object is put together. It therefore supports an architecture based on malleable relations between scale and index, which matched the conceptual strategy of the project. The transition from concept to design at Unit C proceeded accordingly, as a shaping of surfaces in topology.

The site-specific qualities and spatial composition at the corner lot framed the artistic intentionality at Unit C. Articulating the corner experience, the shifting relationships between the building and the public space that unfolded through montage, were constantly measured and analysed to alter the experience of scale. Combinations of smaller and larger surfaces created a dynamic object that was in stark contrast to the neoclassical architecture of the main building (Fig. 6). The volume was big enough to instigate aesthetic variety in manifold surfaces, yet small enough to correlate with the expectations from the Planning Department. By cladding most surfaces in tar paper, the architecture of Unit C referenced the historical fisherman's houses by morphing roofs, walls, and details through the tectonic qualities of a traditional building material. Thus, the conceptual strategy was met accordingly by altering the experience of scale through a dynamic form in topology, and by altering the visual references of building form through the tectonic qualities of tar paper cladding.

## Conclusions

This article has utilised the design of architectural concept for an Accessory Dwelling Unit at Råå, Sweden as an applied research project to critically analyse the guidelines for historical preservation of buildings in a Swedish zoning plan. The article has demonstrated discrepancies within the guidelines between the objectives of urban planning and those of architecture, which created a space for experimentation and negotiation in the conservation program. While conventional practices may continue to operate in accordance with the logics of zoning, such an issue is problematic for any attempt to improve the building stock through innovation, because innovation may not evolve through *a posteriori* hypothesis, which remains implicit in building and planning regulations. Utilising architectural theory to analyse the planning objectives in the conservation program, this article has demonstrated that disciplinary connections between regulation and place may serve to clarify the intent in historical preservation, and thus to articulate ways to correlate artistic attributes with administrative processes. The indiscernible forces of urbanisation, to which building and planning regulations belong, are generally imperative for the designer's ability to implement innovation. This article concludes, therefore, that innovation and administration may encounter common grounds at the intersection between regulation, place, design, and theory.

For the administration of urban planning at Råå, the architectural concept was implicit in the zoning amendment. By operating through a critical practice protocol, the architects consulted theory to negotiate relationships between planning objectives, building forms, and materiality (Fig. 7). Mobilising the architectural discipline to rethink the heritage, the architects articulated new connections between historically disparate building forms – connections that were unidentified in the zoning plan and therefore difficult to incorporate through conventional practice protocol. While these connections can be described

through various techniques, such as writing or image sampling, the administrative process of zoning amendment required the representation of building form through architectural drawing. Thus informing the decision to develop the concept at Unit C by means of architectural design, which can accommodate both the abstract premises of concept and the indexical premises of representation. As the zoning amendment was approved by City Council on 20 August 2013, this article demonstrates that architectural design might function as a critique of zoning laws and preservation guidelines.

While the zoning amendment focuses on the urban aspects of space construction, the building permit encompasses a second level of administration necessary for the designer to approach when materialising the indiscernible forces of urbanisation. As the conceptual building form may or may not extend from the administration of zoning amendment to the granting of building permit, malleable connections between concept and design are imperative for the architect's ability to usher an artistic intention from representation to fabrication in complex zoning processes. Because the restrictions in planning regulation tend to increase in Sweden and elsewhere, the creation of form ought to operate beyond the rigidity of universal geometries. Alternative geometries to the metric Euclidian or Cartesian, therefore, offer solutions to engage with complex, or unclear, objectives through negotiation. Such a procedure is particularly useful for design in historical single-family residential areas, because the preservation codes may be extrapolated through interpretations in scale, visual depths, indexicality, and tectonics. This article concludes, therefore, that the discrepancies between form and regulation can be adjusted through negotiations between the geometrical configuration of the building and the disciplinary re-configuration of the place.



FIGURE 8 Location of Unit C at Råå in Sweden.

#### References

Allen, S. (2009). Practice: Architecture, Technique, and Representation. New York, NY: Routledge.

Boverket. PBL kunskapsbanken – en handbok om plan- och bygglagen. Ändring av detaljplan [PBL body of knowlege – a handbook on planning and building regulaton. Amendment of the zoning plan]. Retrieved from http://www.boverket.se/sv/pbl-kunskapsbanken/planering/detaljplan/andring-av-detaljplan/

Burry, J., and Burry, M. (2010). Topology. In Burry, J., and Burry, M. (eds), The New Mathematics of Architecture (pp. 157-61). London, England: Thames & Hudson.

Choay, F. (1997). The Rule and the Model: On the Theory of Architecture and Urbanism. Cambridge, MA: The MIT Press.

Dahl, P-J. (2017). Design Beyond Zoning: Negotiating Architectural Form and Bulk Restrictions at HL23. URBAN DESIGN International 22, no. 1, pp. 13-27. doi: 10.1057/s41289-016-0033-5

Dahl, P-J. (2014). Densifying the Suburban Metropolis: Architecture as an Instrument for Urban Planning. Nordic Journal of Architectural Research 2, no. 2, pp. 57-81. SR record: http://cityusr.lib.cityu.edu.hk/jspui/handle/123456789/14143

Eisenman, P. (2007). Written into the Void: Selected Writings 1990-2004. New Haven, CT: Yale University Press.

Fishman, R. (1987). Bourgeois Utopias: The Rise and Fall of Suburbia. New York, NY: Basic Books, Inc., Publishers.

Frampton, K. (1996). Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture. Cambridge, MA: The MIT Press.

Fraser, M. (2013). Introduction. Design Research in Architecture: An Overview. Surrey, England: Ashgate.

Helsingborgs museum (1992). Bevaringsprogram för Råå [Conservation program for Råå], adopted by City Council 27 August 1991. Helsingborgs bevaringskommitté: Helsingborg.

Kwinter, S. (1986). La Città Nuova: Modernity and Continuity. Zone 1/2, pp. 80-121.

McLeod, M. (1987). On Criticism. Places 4, no. 1, pp. 4-6.

Rossi, A. (1982). The Architecture of the City. New York, NY: The Institute for Architecture and Urban Studies.

Semper, G. (1989). The Four Elements of Architecture and Other Writings. Cambridge, MA: Cambridge University Press.

von Hildebrand, A. (1907). The Problem of Form in Painting and Sculpture. New York, MA: G. E. Stechert & Co.

Virilio, P. (1991). The Aesthetics of Disappearance. Los Angeles, CA: Semiotext(e).

# The Trombe Wall during the 1970s: technological device or architectural space?

Critical inquiry on the Trombe Wall in Europe and the role of architectural magazines

#### Piero Medici

IUAV, PhD candidate TU Delft, Guest Researcher Delft, the Netherlands

#### **Abstract**

During the 1970s, before and after the international oil crisis of 1973, some European architectural periodicals were critical of standard construction methods and the architecture of the time. They described how architects and engineers reacted to the crisis, proposing new techniques and projects in order to intervene innovatively in the built environment, using energy and natural resources more efficiently.

This article will provide a critical analysis of the role of architectural magazines of the time, describing the technological innovation of the *Trombe Wall* in Europe. It will treat when, how, and what specific aspects were described. It will also carry out a critical analysis of the *Trombe Wall* itself: about its performances, its evolution throughout the 1970s, its integration in different houses, and its influence on inhabitants' behaviour. Using three houses as case studies, an analysis of the architects' efforts to integrate the technology of the *Trombe Wall* with architectural elements such as shape, aesthetic, materiality, and natural light will be carried out.

Though this article is historical in character, it aims to inform the contemporary debate, especially concerning issues of the built environment meeting the Paris agreement on climate change (AA, 2015).

#### Keywords

Trombe Wall; solar house; architectural magazine; oil crisis, energy efficiency; natural resources.

#### Introduction

The *Trombe Wall* is a solar collector composed of a massive south wall covered with external glazing. It is a technology, integrated with the architectural element of the wall, whose goal is to achieve energy efficiency in buildings with passive heating and natural ventilation. It was invented before the 1960s, but during the 1970s was developed further, used on several houses and largely analysed by architectural magazines. During the 1980s when the price of fossil fuels decreased, it was used less often and temporarily cast aside (Medici, 2017) (Borasi & Zardini, 2007).

During the 1970s, some architectural magazines were particularly critical of the standard ways of building, and analysed alternative innovations as the Trombe Wall. Around the time of the oil crisis of 1973, such events happened: the drastic increase of oil prices at the beginning of the decade, the UN Conference in Stockholm, the publication of *Limits to Growth* by the Club of Rome (Meadows, Randers, & Meadows, 2004) in 1972, the financial crisis subsequent to the oil crisis of 1973 to 1976, and the second oil crisis in 1979. There tends to be a resonance between historical events. The relationship between energy and financial crises, on the one hand, and interests in sustainable or more energy efficient architecture (Borasi & Zardini, 2007), on the other, is no exception. Rethinking the relations and connections between architecture, the vernacular, and technology in Europe within the historical context of the oil crisis, the 1970s can be identified as a moment of recalibration between architecture and its integration with these different lines. An analysis of this period is needed because the major histories of modern architecture (e.g., Curtis' Modern Architecture Since 1900 (Curtis, 1996), Frampton's Modern Architecture: A Critical History (Frampton, 2007), Colquhoun's Modern Architecture (Colquhoun, 2002), and Tafuri and Dal Co's Modern Architecture (Tafuri & Dal Co, 1987) have not thoroughly addressed the experimental ecological design of the 1970s (Stickells, 2015). According to architectural historians Sarah Bonnemaison and Christine Macy, a "whole generation of ecological architecture has not been critically analysed within the architectural mainstream (Bonnemaison & Macy, 2003)". Additionally, the Trombe Wall and its integration with architecture have been underestimated and therefore are not sufficiently known. The architects' attempts to integrate the Trombe Wall with architectural elements on façade (e.g. windows, balconies, greenhouses), the design process, and architecture culture, didn't receive much attention from critics or architectural historians. It is not easy to assess to what extent studies and applications of the Trombe Wall informed architecture overall during and after the 1970s. However, certain aspects might have influenced architecture, for instance in the use of greenhouse spaces, although these were built for aesthetic reasons, and not necessarily for solar light nor to improve energy efficiency. When, during the 1980s, fossil fuels and energy prices decreased in Europe, several architects apparently lost interest in investigating the integration of the Trombe Wall with architecture.

This article will study the development of the *Trombe Wall* in Europe throughout the 1970s, as covered by some architectural magazines. The research methodology consists of the analysis of the period, through twelve of the most influential architectural periodicals from six European countries, published in the 1970s. Among others, some of the magazines analysing the *Trombe Wall* more consistently and frequently were: *Architecture d'Aujourd'hui* (AA, 1973) and *Technique et Arquitecture* (AA, 1979), from France; *Architectural Design Magazine* (AA, 1974a) from UK; and *Casabella* (AA, 1977) from Italy. Among the editors of these architectural magazines, Robin Middleton and Monica Pidgeon for *Architectural Design*, Bernard Huet for *Architecture d'Aujourd'hui*, and Tomas Maldonado for *Casabella*, are renowned for their critical approach and their interest in ecological issues (AA, 2010) (AA, 1974b) (AA, 1977). Architectural periodicals were chosen for this analysis because, especially at that time, they were a kind of seismographic tool to trace influences on architectural debates and developments in architectural culture. It always takes a long time to publish a book, while periodicals appear very regularly, and it was in these periodicals that new architectural tendencies were articulated.

The role of the magazines, together with a critical appraisal of the *Trombe Wall*, will be processed in this article. Critique, as defined by the contemporary philosophy of the art of Noël Carroll in his book *On Criticism* (Carroll, 2009), is not necessarily negative and it does, at least partially, embed evaluation. Therefore, the goal of this article is to highlight some of the positive and constructive contributions of the magazines in relation to the *Trombe Wall*. It will analyse how the magazines described it throughout the 1970s and how they related the *Trombe Wall* projects to each other. In the conclusions, it will emerge that their main focus was on the technology. Architectural aesthetics, access of natural light, and inhabitants' behaviour were rarely central to the analysis.

The same applies to the *Trombe Wall* itself. It will be assessed: its evolution during the decade; its integration within the design process of the house; its technical results; and the feeling of living inside it. The *Trombe Wall* evolved throughout the 1970s from an innovative technology that was applied to the house, to a usable space being part of the house. From this perspective, it will be possible to conclude that the acquired knowledge of the *Trombe Wall* became a design tool for the architect. It became an architectural element and space within the house, and was part of the design process from the beginning, even if there were room for improvement.

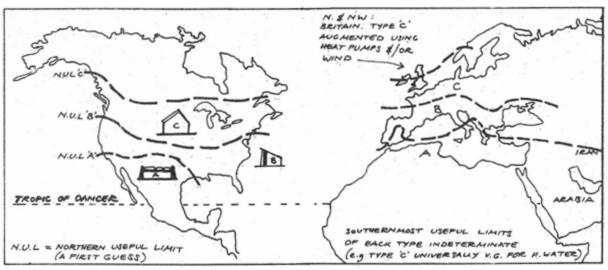


FIGURE 1 Three generic types of solar houses. These types are applicable across most of Europe and North America: A) Skytherm for heating & cooling (classified as a passive system); B) Glazed, heavy south wall for heating and some cooling effect (a passive system, the Trombe Wall belongs to this type); C) Sloping fluid-cooled, heating (an active system). The three types are suitable on areas belonging to particular climatic regions as indicated on the map. The article says that the three types all have something in common with the vernacular architecture of the related climatic region and that they are all economically affordable. They are described as a good starting point with room for improvements and a clear overall principle. (Architectural Design, 1/1976)

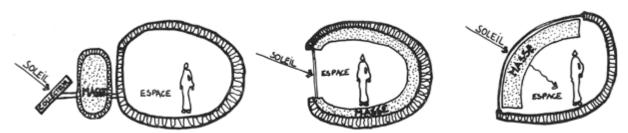


FIGURE 2 Bio-climatic architecture. Hand-drawn diagrams: solar collector external to the building; glass façade and thermal mass inside the building; Trombe Wall. (Architecture d'Aujourd'hui, 4/1977)

# Architectural periodicals on solar housing as an alternative

During the 1970s, some architectural magazines were proposing alternative building construction methods. The *Trombe Wall* was the central element of two classifications of solar devices and solar houses by *Architectural Design Magazine* and *Architecture d'Aujourd'hui*. Ian Hogan, in the special *Alternative Technologies* section of *Architectural Design* (Hogan, 1976) discerns three generic types of solar house including the *Trombe Wall* as Type B (Fig. 1). Type A is a device composed of water barrels placed on the flat roof for heating and cooling, while Type C is a solar collector for heating, mounted, for instance, on a pitched roof, with an inclination depending on latitude.

This differentiation was mainly centred on technological devices applied to the building envelope, instead of being focused on the overall architecture. It did not really investigate on which side of the building a specific program should take place, depending on the device position. It also did not take into account elements such as architectural aesthetic, internal circulation, or quality of living.

In the issue of Architecture d'Aujourd'hui, called Quelle architecture solaire? (Nicolas & Vaye, 1977), three sketched drawings of different solar houses (Fig. 2) were published. The first one depicts a solar collector and its external thermal mass storage (e.g. a water barrel), simply connected to the building: an example of innovative technology not being fully embedded into the architectural form. In the second drawing, the architecture is influenced by a vernacular technique: the south façade is open towards sunlight, which warms up the thermal mass inside the building such as internal walls and floor slabs. With insulation on the outside, the thermal mass will store and slowly release the warmth to the inside. The *Trombe Wall*, the third drawing, stands between the other two, achieving a synthesis of some of their advantages. The thermal mass is placed close to the glass, leaving an air cavity for ventilation, and creating a solar collector. As in the technique of the second example, the south façade is exposed to the sunlight. The technology of the solar collector is also part of the architectural element of the external southern wall.

This classification, in contrast to that of *Architectural Design*, considers the integration between technology and architecture to a greater degree. For example the first of the three sketches is described as "mainly solar devices allocated on top of buildings [...] with the result of formalism of the most outrageous sort" (Pedregal, 1977, pp. 2–6), illustrating that an integration of technology and architecture was needed.

## The Trombe Wall

At the beginning of the 1970s, *Architecture d'Aujourd'hui* published an entire issue called *Architecture De Soleil* (AA, 1973). In that magazine, several buildings related to solar energy were described, including the *Trombe Wall* solar houses in Odeillo, France, designed by architect Jacques Michel. These buildings comprised the first *Trombe Wall* detached house built in 1967 (Fig. 3) and three row houses completed after 1973. Jacques Michel wrote the article. Before describing the houses in Odeillo, he illustrated the *Trombe Wall* and its main technological principles, using the detached house built in 1967 (Michel, 1973) as an example. Colin Moorcraft, in *Architectural Design* (Moorcraft, 1973), described the technical principles of the *Trombe Wall* 

and the houses in greater detail. The first solar heating device by engineer Felix Trombe was patented in France in 1956. Later patents, including the *Anvar Trombe*, were dated 1971 and 1972. Most of the research studies related to the *Trombe Wall* were conducted at the *Centre National de la Recherche Scientifique* in France (Michel, 1973). In a comparison by Jacques Michel, the *Trombe Wall* panels installed on one of the vertical walls of the structure are more productive and efficient than external heat-capturing devices placed, for instance on the roof, as shown on the first sketch of Fig. 2. This is because the latter require mechanical extraction of the hot air produced (Michel, 1973).

With relation to general functioning, a concrete wall, which is the surface to be heated, sits behind the external glass panels of the Trombe Wall. It operates as the mass and it serves to transmit the heat to the interior space of the building. In the northern hemisphere, the external glass panels and the Trombe Wall should be placed on the south façade (Michel, 1973). The south wall absorbs the short-wave solar radiation that penetrates the glass. The thermal mass is heated up and emits radiation of a longer wavelength. This radiation does not penetrate the first sheet of glass encountered. The thermal mass absorbs the radiation and produces heat towards inside the house (Moorcraft, 1973). Heat can be stored overnight in the thermal mass without mechanical assistance. The Trombe Wall is not restricted to latitudes where direct sunlight is abundant, because the greenhouse principle also operates, for example, on cloudy days with diffused solar radiation. The relatively large surface of the south façade should be adjusted, with specific formulas, in relation to the total enclosed space (Michel, 1973). The Trombe Wall includes two gaps on its top and base for air circulation. During the winter, the air heated behind the glass panel recirculates inside the building. During the summer, an inlet on the north façade allows fresh air to enter for cross ventilation towards an aperture on the south façade (Fig. 4) (Michel, 1973). The gaps at the bottom and top of the collector areas connect the cooler air mass inside the building with the heated air mass in the collector. Thanks to the natural stack effect, cooler air flows in at the bottom, while the heated air flows out of the top. A thermal circulation of air is established throughout the building (Fig. 5) (Moorcraft, 1973). The detached house in the Pyrenees demonstrates that the thermal capacity of the collector wall is sufficient to re-radiate heat for most of the night. In effect, a 35cm thick concrete wall stores about half the heat absorbed by it. This is sufficient to maintain, until the early hours of the morning, a warm air current (Moorcraft, 1973).

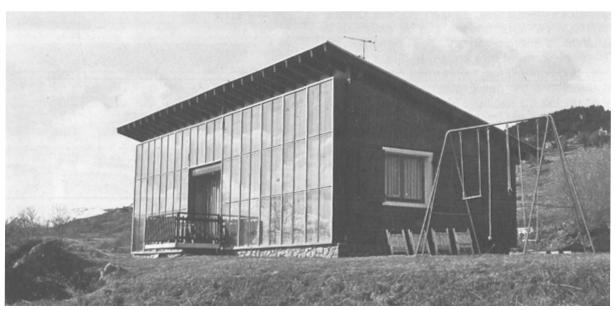


FIGURE 3 Single solar house in Odeillo. Detached house with Trombe wall, built in 1967 in Odeillo, France. (Architecture d'Aujourd'hui, 4/1977)

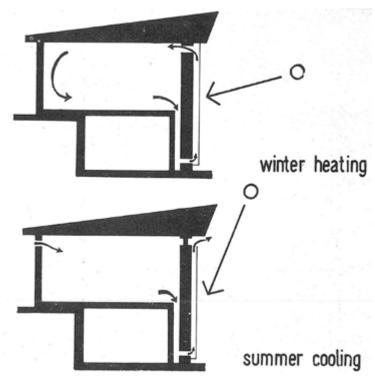


FIGURE 4 Trombe Wall, Winter heating and summer cooling. Section of the detached house with Trombe Wall, built in 1967 in Odeillo, France. (Architectural Design, 1/1975)

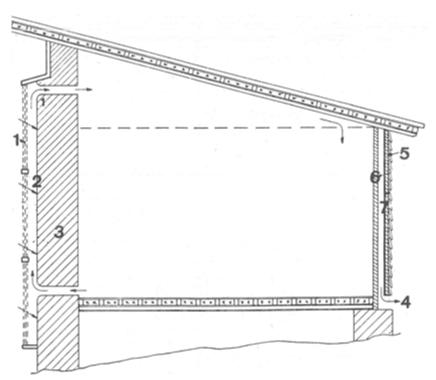


FIGURE 5 Section of prototype detached house built in Odeillo, French Pyrenees. One layer of glass covers the area of the wall intended to collect solar energy (1). The external surface of the wall (2) is painted black or very dark, roughcast or with an absorptive coating. The south wall (3) consists of a structural concrete wall that also functions as a heat store. Inlet on the north façade (4). The curved arrows indicate the flow direction. (Architectural Design, 10/1973)

However, some magazines also described some technical limitations of the *Trombe Wall*. Ian Hogan in *Architectural Design* (Hogan, 1975) defined the *Trombe Wall* as more suitable for heating in areas with cold winters and clear sunny summers, stating that the system was only capable of supplying 70-90% of the heating needed. Mario Scheichenbauer in *Casabella* (Scheichenbauer, 1977) described the *Trombe Wall* as solar panels, extremely simplified but with poor control of the temperature, and with difficulties to heat a room not directly exposed to the sun or next to the *Trombe Wall*.

It was remarkable how much the *Trombe Wall* was embedded in the architecture, especially when compared to its predecessor, the external solar collector. The *Trombe Wall* in the detached house in Odeillo was also a structural wall and one of the longest of the house, running adjacent to 4 rooms. However, some architectural aspects were not solved. The southern façade is a full dark *Trombe Wall* with the entrance door as the only opening. The south façade is completely blind, with no landscape view or access of natural light. Bathroom, kitchen, and entrance spaces are located in the north side (Fig. 6), probably because these areas with services and for internal circulation need less heating. Aesthetically, from the outside the full dark façade could be considered as an architectural statement about the importance of saving energy, as well as a very strong and visible technological device. These considerations show the potentials of the *Trombe Wall* as a design tool, for the architect, which were still not sufficiently explored.

The above-mentioned magazines, compared to other magazines of the time, analysed the *Trombe Wall* extensively in different articles and entire issues. However, they focused mainly on the technological aspects and on the technical properties rather than on quality of architecture and living. In the case of the detached house in Odeillo, the periodicals of the time never considered the quality of the interior, the view of the inhabitants from the inside, the natural light coming in. In their analysis, the magazines did not go into the behaviour of the inhabitants and to what extent their life would change with the *Trombe Wall*. Moreover, the rooms that heated up more were the ones closer to the *Trombe Wall*, which could have had an influence on their use during different hours and seasons. Not much was said about the different behaviour of the inhabitants in such a house compared to a standard one. Reflections about aesthetic are also missing, such as, for instance, how the extended dark glassed façade would fit in the natural context and with the local traditional architecture.

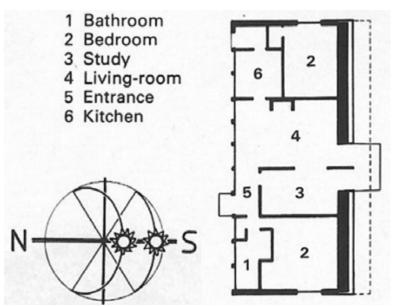


FIGURE 6 Trombe Wall, Winter heating and summer cooling. Section of the detached house with Trombe Wall, built in 1967 in Odeillo, France. (source: https://jjureidini.wordpress.com/2011/01/18/trombe-wall-case-studies/)

## Three solar row houses

Jacques Michel in *Architecture d'Aujourd'hui* (Michel, 1973), also describes the three solar row houses (Fig. 7) in Odeillo, which he designed. In this case, both the openings and the *Trombe Walls* are in the southern, eastern, and western façades. The solar collectors' glass panels are placed on top of the thermal mass (i.e. concrete walls) and are supported by an aluminium structure behind some elements of Polyglass, constituting the *Trombe Wall* (Michel, 1973). Michel explains that the design of the façades is customisable and flexible before the construction (Michel, 1973). Additionally, in this case there is a missed chance for an architectural analysis. Probably the architect intends that every apartment could have *Trombe Wall*, balconies, and windows located within various façade designs. However, this important architecture detail regarding both the interior and the exterior of the building is not clearly explained or analysed.

In the first example mentioned above – the detached house – the *Trombe Wall* was simply applied to the entire southern side of the rectangular form of the detached house. In the second example, the *Trombe Wall* was used on three sides of the three row houses instead of one side. Looking at the plan (Fig. 8), the eastern and western walls are diagonal to the sun and the southern wall is curved, with a peak at the central part, to catch the highest possible amount of solar radiation. The southern façade has a curved shape, following the daily solar path. It is thus able to catch the sunlight from both morning and afternoon. Moreover, there are several windows embedded in the façade. This dramatically changes the aesthetic with an alternation, all along the façade, between dark *Trombe Walls*, lighter coloured panels, balconies, and transparent windows.

In this case, the technology of the *Trombe Wall* itself developed and evolved thanks to the experimental integration within a different architecture. In effect, in the three row houses, the *Trombe Wall* was built on two different levels along the south façade (Fig. 9). The *Trombe Wall* is subdivided and has more openings, compared to the door as the only opening of the detached house. The masses of air heated up by the *Trombe Wall* move to the rooms upstairs because of the stack effect. The engineers had the chance to test the efficiency of the fragmented *Trombe Wall* in a more complex double height space compared to the preceding example. As regards the architectural program, the northern part of the row houses accommodates the areas with less need of heating, such as staircases, bathrooms, and toilets. In effect, in this case also, the *Trombe Wall* heats up the house during the winter and cools it down during summer. During the summer, the *Trombe Wall* contributes to cross ventilation using the inlets in the north façade, while in wintertime the *Trombe Wall* heats up the interiors. Since the warmer rooms are those close to it, the living rooms are often located there.

Even in this case, the architect in the periodical is focused mainly on the technological aspects of the *Trombe Wall*. Only a few words were spent on its curved shape in plan and on the fragmentation by windows and balconies. Not much is mentioned in terms of comfort of the inhabitants. Something is said about the thermal comfort but not much about the views from the inside, the amount of natural light coming in, or the differences in the inhabitants' behaviour by having the southern wall emitting heat. Nor is there any focus on the aesthetic, even if the alternation of dark *Trombe Wall* panels with windows and white panels substantially changes the aesthetic of the façade, in comparison to the example of the detached house.



FIGURE 7 Single solar house in Odeillo. Detached house with Trombe wall, built in 1967 in Odeillo, France. (Architecture d'Aujourd'hui, 4/1977)

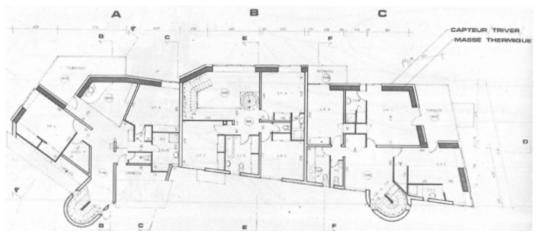


FIGURE 8 Single solar house in Odeillo. Detached house with Trombe wall, built in 1967 in Odeillo, France. (Architecture d'Aujourd'hui, 4/1977)

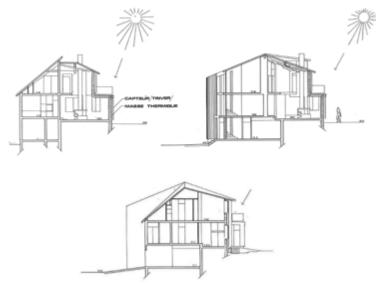


FIGURE 9 Three solar apartments in Odeillo, France. Sections with the dark Trombe Wall on two levels. (Architecture d'Aujourd'hui, 5/1973)

# The Trombe Wall as architectural and technical reference

In Architectural Design, Greenhill & Jenner's design for public housing (Fig. 10-11), is illustrated as a second stage scheme for the Royal Mint Housing Competition in London, UK (Mulcahy, 1975). In this case, the Trombe Wall is taken as a reference, both technological and architectural. Climatic houses are described as using the air cavity space, unused by the Trombe Wall houses in Odeillo. The engineer Sean Mulcahy, author of the article, writes: "in the French prototypes the opportunity was lost of using the inter-space between

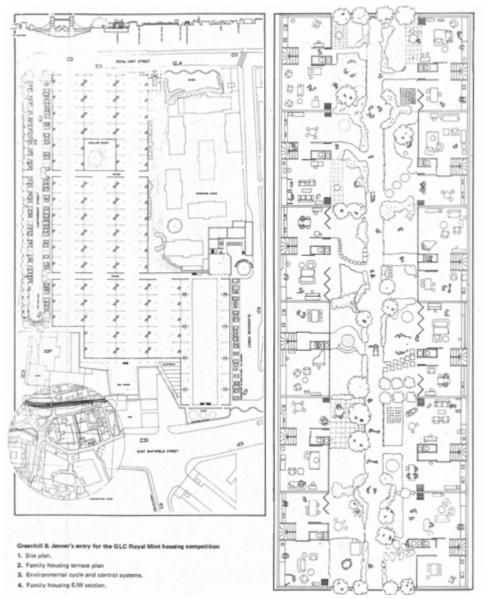


FIGURE 10 Single solar house in Odeillo. Detached house with Trombe wall, built in 1967 in Odeillo, France. (Architecture d'Aujourd'hui, 4/1977)

the glass wall and thermal-storage wall as an internal garden (Mulcahy, 1975, pp. 144–148)." In Mulcahy's analysis, the *Trombe Wall* technology was used as a reference for an architectural space. More specifically, Mulcahy mentions a technical feature of the houses at Odeillo: the use of summer sun for cooling by means of increased ventilation. The project scheme is composed of two rows of houses with glass-covered front gardens in between. The glass-covered garden malls are defined by the architect as "socially critical spaces that permit community formation (Mulcahy, 1975, pp. 144–148)."

In this case, the glass panel of the original French *Trombe Wall* becomes the glass roof between the two rows of houses. Sunlight penetrates the glass and reaches the garden, warming up the thermal masses of floor slabs and walls. Ventilation and stack effect are favoured by air gaps on different parts of the glass roof. The result is a kind of *Trombe Wall* rotated 90 degrees to the horizontal, becoming the roof between the row houses; the greenhouse underneath is the air cavity while the walls and pavements are the thermal masses. Compared to the *Trombe Wall* of the detached house in Odeillo, its scale increases both in height, being three floors tall, and length, as the row of houses is approximately 60 metres.

Architectural Design highlights the missed opportunity of transforming the air cavity of the Trombe Wall into a usable space. Although this concept was merely mentioned, it contributed to spreading the culture that inspired such projects as the one described in the next paragraph, the Maison à Argenteuil.

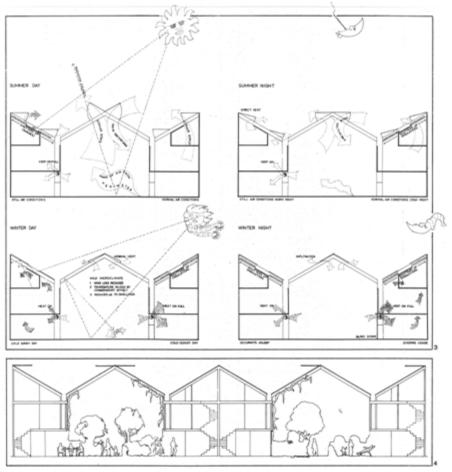


FIGURE 11 Trombe Wall, Winter heating and summer cooling. Section of the detached house with Trombe Wall, built in 1967 in Odeillo, France. (Architectural Design, 1/1975)

## Evolution of the Trombe Wall

Architecture d'Aujourd'hui (Nicolas & Vaye, 1977) described a case study that was characterised by further experimentation between the Trombe Wall and architecture on the ground floor, while the solar collectors are integrated with the façade on the first floor. On the ground floor, the air cavity between the glass and the dark thermal mass wall of the Trombe Wall is extended and transformed into a usable green space. It is the Maison à Argenteuil, in Val d'Oise (Fig. 12) by architects Marc Vaye and Frédéric Nicolas, also authors of the book La Face cachée du soleil (Nicolas, Traisnel, & Vaye, 1974), which puts forward an ecological approach in architecture. In the house, the space between the glass and thermal mass wall is used as a greenhouse (Fig. 14). The solar technical operation of the envelope on the ground floor, on the southwest and southeast, is similar to the Trombe Wall. It is a space where the air still separates glazing from masonry and air circulation is still provided via gaps on the top and bottom of the thermal mass wall (Fig. 15). The greenhouse space is also integrated with the main entrance of the house. In this case, part of the Trombe Wall technology is transformed into an architectural space. The expanded greenhouse becomes a space defined by the article as temporarily habitable. A second innovation listed by the article is the abandoned linearity of the southern façade, as it was in the detached solar house in Odeillo. The two main façades are in fact oriented to southeast and southwest. Moreover, the angle formed by the façades is underlined by the extension of the "greenhouse" towards the south. The architects describe the building as one of the first experiments where the volumetric rigidity of the solar house is broken (Nicolas & Vaye, 1977). It is also broken in the three row houses in Odeillo with the curved southern wall. In this example, the Trombe Wall evolved by becoming a usable space also hosting some vegetation.

Vaye and Nicolas built the  $130 \text{ m}^2$  area house (greenhouse included) for Vaye's parents. It materialises the ecological concept defined by the architects in their book La Face cachée du soleil (Nicolas et al., 1974). The house has the disadvantage that the ground floor doesn't get much solar light. The architects weakly justify the choice of the blind wall behind the greenhouse, not only for energy efficiency reasons, but also to preserve the privacy of the inhabitants.

The vernacular principles of the second sketched drawing of Figure 2, characterised by a totally transparent element warming up the internal thermal masses of the south façade, are also partially embedded in the ground floor project. In this sense, the article describes the greenhouse by introducing the design concept of relative transparency (i.e. due also to the vegetation and to the different opacity of the glass panels) whose variations are accomplished in the double rhythm of day and night, summer and winter. The experimental house stands between the vernacular solutions proposed in the second drawing of Figure 2 and the *Trombe Wall* on the ground floor. However, the innovative space of the usable greenhouse with *Trombe Wall*, paradoxically makes the living room dark.

From both a technical point of view and an architectural one, the building envelope proposed by Vaye and Nicolas opens up an original research path. In an issue of the French magazine Techniques et Architecture from 1979, the house in Argenteuil is described as "a house in a garden, a garden in a house (Cabessa, 1979, p. 80)". The 42m² greenhouse area can be used during the hot season for 70% of the time, and 100% of the time during other seasons (Cabessa, 1979). In reality, this house was able to produce the 70% of energy needed for heating. The increased energy efficiency was also due to the standard solar collectors on the upper floor.

Even if it is a remarkable fact that the interest of the magazines was already directed towards energetic autonomy (i.e. 100% of energy needed produced by the house itself) only a couple of years after the first Trombe Wall prototypes, the main focus is still on the technological innovation of the Trombe Wall with the greenhouse. Not much is mentioned about the fact that, for instance, the living room doesn't have a view to the outside. The natural light is only entering the living room from the triangular opening on the first floor, through the double height space. The fact that a rotating shutter (Fig. 13) is applied on the Trombe Wall is also barely mentioned. It is a crucial point because it affects the behaviour of the inhabitants. It is manually manoeuvred, protecting the thermal mass of the Trombe Wall overnight, in order to avoid releases of warm air to the outside. It can be seen as a paradox that the technology, which is transformed and integrated in the architecture, needs a manually manoeuvred protection in order to be more efficient. The architects and the magazines did not extensively describe and investigate these problems and considerations. In an interview with the architects, who knew the inhabitants, they maintained that the wall never reaches very high temperatures meaning that is always comfortable to stay close to it on the living room side. They also confirmed that that the manual manipulation of the shutters can affect the optimum efficiency of the Trombe Wall. The shutters are realised to improve performances and if left open the entire night, the wall loses only a minimal part of its efficiency. On the other hand, if they are left closed during a sunny day, a huge amount of solar energy is not captured (Medici, 2017).

The acquired knowledge of the greenhouse embedded in the *Trombe Wall* could be a design tool with several potentials. Especially if such issues are solved: inhabitants' behaviour, natural light access, and internal program depending on the different temperature in the rooms and view from the inside. With a solution for these issues, the technology might have become an even more powerful design opportunity and tool instead of a constraint, even during the 1970s.



FIGURE 12 Maison particulière, Argenteuil, Val d'Oise. Main entrance on the south. (Techniques et architecture, 6/1979)



FIGURE 13 Maison particulière, Internal view of the greenhouse. Detail of the (white) rotating shutter closed in front of the thermal mass wall.(Image by Marc Vaye © , 1980)

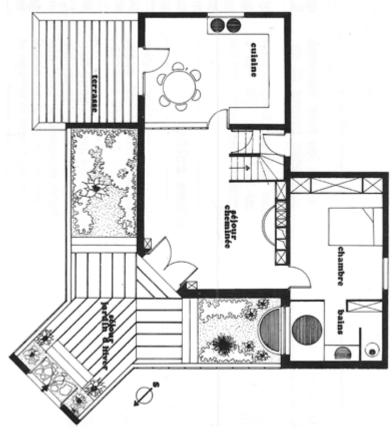


FIGURE 14 Maison particulière, Argenteuil, Val d'Oise. Plan and program. (Architecture d'Aujourd'hui, 4/1977)

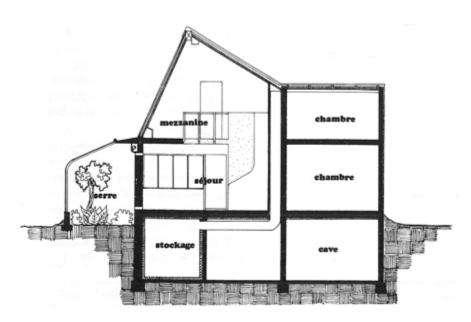


FIGURE 15 Maison particulière, Argenteuil, Val d'Oise. Section and program. Air inlets visible on the top and bottom of the Trombe Wall next to the greenhouse. (Architecture d'Aujourd'hui, 4/1977)

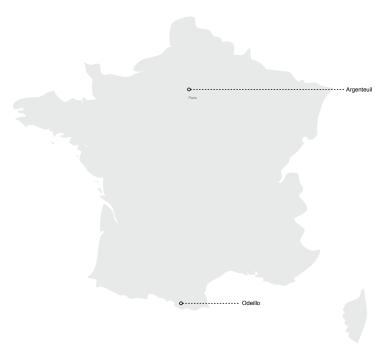


FIGURE 16 The location of Argenteuil and Odeillo in France

## Conclusions

With the development of the *Trombe Wall*, the possibility to integrate the solar collector with elements of architecture such as the wall, the façade, the garden, and the greenhouse, was explored.

At first, the architecture was hidden behind a dark wall until the air cavity, between glass and thermal mass, was transformed into a usable space: a garden and an entrance preserving its ventilation properties. In the third example that used the *Trombe Wall* as a reference, the garden between glass and thermal masses increased its size, becoming, instead of a wall, a space with a roof connecting two rows of houses. The *Trombe Wall* technology, when integrated in more complex architectures, achieved new developments. Engineers had the chance to test its efficiency when the thin air layer became a garden or when the *Trombe Wall* was fragmented into a façade of a double level open space. In some cases, the *Trombe Wall* became a design tool for the architect. This design tool is intended as the acquired knowledge by the architect about the *Trombe Wall* technology embedded in the architecture of the house. In effect, the *Trombe Wall* was an element to improve energy efficiency, while at the same time generating architecturally innovative spaces and solutions. Throughout the 1970s, architects had the chance to learn different methods to integrate the *Trombe Wall* with façades impacted by solar radiation directly or through a greenhouse.

In the first example, in Odeillo emerged the contradiction between the need for an energy efficient architecture and a house with almost blind walls to the south. In the second example, this problem was solved by fragmenting the curved *Trombe Wall* facing south, west, and east. This was the first effort to make the technical space more habitable. In the last two examples, the need to transform the technological device into a habitable space emerged even more clearly. In the final built solution, transforming the device into a usable space brought back the problem of creating a living room almost without direct natural light, as in the first detached house example. The trajectory during the 1970s was from a functionalist architecture towards a different way of living. In the house in Argenteuil, the use of the greenhouse space was different during the seasons and throughout the day. Moreover, because of the manually manoeuvred shutters, the life of the inhabitants unexpectedly changed their daily behaviour, with manual actions contributing to the house's energy efficiency.

As visible in the examples above, during the 1970s some architectural magazines focused more often on the technological solution, while quality of architecture and quality of living were not so central in their descriptions. Written analyses about these topics were missing, as were visual descriptions, for instance: pictures or artistic impressions of the interiors, views from the interiors to the outside, view of the technical installations from the inside. Useful analytical and representation tools were rarely used, for instance: diagrams illustrating energy flows and social quality of spaces; 3D images illustrating the comfort of the interiors looking towards the outside through the greenhouse. Only a few of them were realised at that time. In effect, there was still not enough knowledge on integration between solar technologies and design process or architecture culture.

The incomplete analysis by magazines and architects, and the fact that some disadvantages were not clearly identified or solved, probably didn't help in spreading its implementation within the culture of standard architecture even further. If side effects and problems had been better stated, analysed, and understood, the *Trombe Wall* could have become a stronger design tool.

Now that the implementation of sustainable and energy-efficient strategies have, again, become imperative, as they were in the 1970s, these strategies are used more often than not as add-ons to existing architectural schemes, without much interaction, and without much consideration of their possible spatial, social, and experiential qualities. The 1970s development of how the *Trombe Wall* became embedded in the architecture of the house, and its reception and description by the magazines, can inform the contemporary debate about the sustainable and energy-efficient architecture of today.

#### References

AA, V. (1973). Architecture d'Aujourd'hui, pp. 88-93 (Vol. 167). Groupe Expansion, Paris.

AA, V. (1974a). Architectural Design (AD), n. 9 (Vol. 44). The Standard Catalogue Company Ltd, 26 Blomsbury Way, London, WC1A2SS.

AA, V. (1974b). Architecture d'Aujourd'hui (Vol. 174). Groupe Expansion, Paris.

AA, V. (1977). Casabella. pp. 22-33 (Vol. 425). Electa.

AA, V. (1979). Techniques et architecture, pp. 80 (Vol. 325). Editions Regirex-France Juin - Jt 1979, Paris.

AA, V. (2010). Field: 4 'Ecology', Issue 1. Filed: journal. Retrieved from http://field-journal.org/portfolio-items/field-4-ecology/

AA, V. (2015, December). United Nations Treaty Collection. Retrieved 3 April 2017, from https://treaties.un.org/pages/ViewDetails.aspx?s-rc=TREATY&mtdsg\_no=XXVII-7-d&chapter=27&clang=\_en

Bonnemaison, S., & Macy, C. (2003). Architecture and Nature: Creating the American Landscape. London, England: Routledge.

Borasi, G., & Zardini, M. (2007). Sorry, Out of Gas: Architecture's Response to the 1973 Oil Crisis. Canadian Centre for Architecture.

Cabessa, R. (1979). La démarche de conception de l'habitat climatique [The design process of the climatic habitat]. *Techniques et Architecture*. 325. 76-80.

Carroll, N. (2009). On Criticism. London, England: Routledge.

Colquhoun, A. (2002). Modern Architecture. Oxford, England: Oxford University Press.

Curtis, W. J. R. (1996). Modern Architecture Since 1900. London, England: Phaidon Press.

Frampton, K. (2007). Modern Architecture: A Critical History. London, England: Thames & Hudson.

 $Hogan, I. \ (1975). \ Solar \ building \ in \ the \ Pyrenees. \ \textit{Architectural Design}, \ 45 (1), \ 13-17.$ 

Hogan, I. (1976). Generic Solar houses. Alternatives Technologies Section of Architectural Design, 46(1), 50-51.

Meadows, D. H., Randers, J., & Meadows, D. L. (2004). The Limits to Growth: The 30-year Update (Revised edition edition). London, England: Routledge.

Medici, P. (2017, August). Interview with Mark Vaye and Frédéric Nicolas.

Michel, J. (1973). Chauffage par rayonnement solaire [Heating by solar radiation]. Architecture d'Aujourd'hui, 167, 88-93.

Moorcraft, C. (1973). Solar energy in housing. Architectural Design, 43(10), 634–643, 652–653.

Mulcahy, S. (1975). Glass Houses. Architectural Design, 45(3), 144–148.

Nicolas, F., Traisnel, J.-P., & Vaye, M. (1974). La Face cachée du soleil: énergie solaire et architecture [The hidden face of the sun: solar energy and architecture]. Paris: Bricolo Lezardeur Nicolas, F., & Vaye, M. (1977). Pour une approche bio-climatique de l'Architecture [For a bio-climatic approach to Architecture]. Architecture d'Aujourd'hui, 192(4), 28–30.

Pedregal, P. D. (1977). Architecture solaire: quelques perspectives [Solar architecture: some perspectives]. Architecture d'Aujourd'hui, 192(4), 2–6.

Scheichenbauer, M. (1977). Impianti e pannelli solari [Solar panels and installations]. Casabella, 425, 22–34.

Stickells, L. (2015). Exiting the Grid: Autonomous House Design in the 1970s. *Proceedings of the Society of Architectural Historians Australia and New Zealand*, 32. Retrieved from https://www.academia.edu/16106628/Exiting\_the\_Grid\_Autonomous\_House\_Design\_in\_the\_1970s

Tafuri, M., & Dal Co, F. (1987). Modern architecture. London, England: Electa/Rizzoli.

# What the 'green city' is up to

# Two lenses of criticism for the green facades of Oluf Bager Plaza in Odense, Denmark

#### Ann-Charlott Eriksen, Svava Riesto

University of Copenhagen Landscape and Architecture Planning Copenhagen, Denmark

#### **Abstract**

Increasingly celebrated, often without questioning, "green architecture" calls for a substantiated discussion. This article explores how design critique can contribute to the thinking and practice around green architecture, particularly green facades, which are growing in number and significance. How can green facades be critically discussed, beyond the dominating glossy project presentations and quantitative measurements of technological and ecological aspects? This article studies the green facades in the architectural competition, Oluf Bager's Plaza, 2016, in Odense, Denmark, using two traditions of critique: Noël Carroll's art criticism, in which green facades are seen as part of a designed work that follows certain intentions, and Mary McLeod's concept of architecture as public domain that requires critical attention towards broader cultural, social, and economic processes. The study shows that the projects for the new Oluf Bager's Plaza strike a balance between different ambitions, mainly adjusting to the historical context, while also answering the paradoxical double aim of Odense to become a densely built yet green city. The assumption that green facades can bridge the gap between density and green-ness became an important premise for the project. Green architecture should therefore be critiqued from multiple angles, including the ideas, plans, politics, and economics that shape future cities.

#### Keywords

Design Critique; Green facades; Green architecture; Green city development; Dense city; Urban transformation; Landscape Architecture; Thomas B. Thrige Street

#### Introduction

Being "green" is an increasingly popular ambition in contemporary architecture and urban design practice; in particular, using plants to make "green facades" in new and creative ways. Planting vegetation on or close to building facades is often perceived positively, as sustainable and forward-looking (Dunnett & Kingsburg, 2008; Kellert, Heerwagen, & Mador, 2008). Yet, very little critical debate has addressed green facades by questioning the thinking and designerly approaches to this celebrated architectural feature (see Gandy, 2010; Zaera-Polo, Koolhaas, & Boom, 2014). How can design critique contribute to the practice and thinking about green facades in contemporary spatial design? Using two different approaches to design critique, this article explores the genesis of the green facades in a design competition of 2016, called Oluf Bager's Plaza, in Odense, Denmark. The current debate about contemporary uses of green facades requires more substance, to go beyond accepting the picture-perfect presentations in popular architectural publications (for example van Uffelen, 2017; archdaily.com, 2016). Sometimes such facades are simply promoted as "green architecture," often based on the general perception that green equals good. Other discussion extolls the idea of green-ness and that communicating green is good, without further explication about the goals of going green.

The main bulk of critique about green facades today is technical and examines the extent to which they respond to major challenges such as climate change and loss of biodiversity and contribute to "liveable environments" (Köhler, 2008; Schmidt, 2009; Sheweka & Magdy, 2011; Ottelé, Perini, Fraaij, Haas, & Raiteri, 2011; Ignatieva & Ahrné, 2013). Important to this strain of critique is the examination of how green facades can contribute to the benefits that humans obtain from ecosystems based on scientific investigation in what is often referred to as "ecosystem services" (Millennium Ecosystem Assessment, 2005, p. 49). Other important themes in the technical strain of critique are how green facades can improve the ecological systems, and biodiversity of a city (Ignatieva & Ahrné, 2013), as well as the thermal performance of a building's envelope (Wong et al., 2010; Perini, Ottele, Fraajj, Haas, & Raiteri, 2011; Hunter et al., 2014). Examining these technical features is highly specialised and often relies on quantitative measurements. If used in a reductive perspective, it involves risks of what architecture historian Antoine Picon has called the "pitfall of technological determinism" (Picon, 2015, pp. 24–25).

Green facades are part of our urban landscapes, not just domains of specialised knowledge. In recent decades agents from multiple fields have sought to reassemble the city and nature in ways that move beyond narrow disciplinary perspectives and dissolve modernist binaries of nature and culture. Urbanism is increasingly conceptualised from multiple perspectives that attempt to include ecological and cultural dimensions, by using notions such as ecological urbanism (Mostafavi & Doherty, 2010), metropolitan nature (Gandy, 2002) and urban nature (Spirn, 1984). Growing vegetation on facades is part of this new interest in the relationship between urbanism and ecology, and can be linked to ambitions where "buildings and landscapes perform as linked interactive systems" (Balmori & Sanders, 2011, p. 8). Yet, researchers have noted that there is a need for a critical cultural and political discussion of how various green facades work in specific urban spaces (Gandy, 2010, p. 22) and, as will be the focus in this article, of the forces that shape them, in particular how discussions on green facades are used to meet other ends. Because green architecture is accompanied by a powerful value-laden rhetoric, we need a nuanced debate on the aesthetic, cultural, and political thinking that is used in shaping our cities.

In this article we explore how two scopes of design critique can contribute to such a debate. Employing the scope of critique that emerges out of traditional art criticism can uncover how green facades are cultural products that are connected to certain intentions. An urban mode of critique, taking the wider political, economic, and urban context into account, can potentially address the ways in which design of green facades are shaped by other forces in the city.

#### Art criticism

Art criticism has a long tradition in the elucidation and interpretation of artistic products. The term does not refer to a homogeneous practice, but denotes various practices that have been questioned, declared in a crisis, recovered, changed, and theorised several times in recent scholarship (inter alia Elkins & Newman Eds, 2008). One of the influential art critics of the 20th and early 21st century, which is also cited in contemporary landscape architecture critique (inter alia van Dooren, 2017- this issue), is the American film, dance and theatre critic and philosopher Noël Carroll. His book, On Criticism. Thinking in Action, will be the starting point for the following examination of how art criticism can contribute to the discussion of green facades. Carrol promotes the idea that the critic should not only elucidate artworks but also evaluate them (2009). This evaluation, he argues, should not be generic, nor depend simply on the taste and preconceptions of the critic, but rather the critic should judge the artwork "on its own terms". Carroll describes how such a "grounded evaluation" (Carroll, 2009, p. 44) should be based on an understanding that artworks are inseparable from artistic styles, groups, and movements, which provide contexts for these works (Carroll, 2009, p. 27). Moreover, he sees work as an object that (more or less successfully) relies on an artist's (identifiable) purpose in creating the work (Carroll, 2009, p. 50). To understand the intention, Carroll argues, the critic must connect an investigation of the artwork with a study of the artist's intentions (Carroll, 2009, p. 66). Critics must focus on the "artistic acts performed in the work" so that "the object of criticism is what the artist performs, his or her artistic acts in terms of their achievement (or failure)" (Carroll, 2009, p. 52).

If Carroll's thinking is transferred to architecture, landscape architecture, and urban design, then the design project must be examined not only as physical artefact but also as cultural expression that is based on the intentions of its maker. Projects from the design competition for Oluf Bager's Plaza were not realised at the time of writing, so the artistic objects of study in this article are the texts and visuals of the competition entries. These entries also provide knowledge about the designers' intentions, which should be seen in relation to the competition aims, and which are further elucidated in the semi-structured interviews with the participants of the competition.<sup>1</sup>



FIGURE 1 Odense is the third largest city in Denmark.

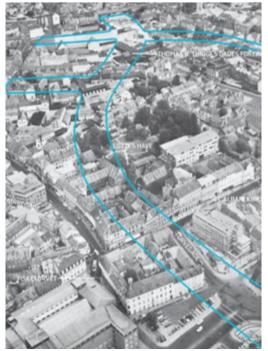


FIGURE 2 The area before the construction of Thomas B. Thrige Street. (Image by Odense Municipality and Realdania, 2011)



FIGURE 3 Thomas B. Thrige Street before the transformation into a new urban district, which began in the 1960s. (Image from Entasis, 2013)



FIGURE 4 Visualisation of the future conditions as pictured plan 'From Street to City' after the transformation of Thomas B. Thrige Street into a new, green, dense urban district. (Image by Entasis, 2013)

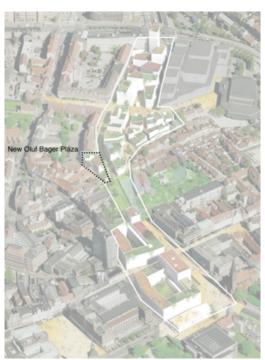


FIGURE 5 Plan for Thomas B. Thrige Street. Perspective of the new urban district at Thomas B. Thrige Street with the site of the architectural project new Oluf Bager Plaza centrally located. (Image by Entasis, 2011)

# The design competition for the new Oluf Bager Plaza

Oluf Bager Plaza in Odense, Denmark's third largest city, is part of Thomas B. Thrige Street, an urban transformation project that has generated much discussion over the years (Fig.1). In the 1960s, a four-lane road called Thomas B. Thrige Street, was constructed, cutting directly through the town centre and requiring the demolition of a large part of the building mass dating from the sixteenth to the nineteenth century (Figs. 2–5). The new road bisected the old courtyard named Oluf Bager, which was left open facing the road (Fig. 6). The current idea for the street's transformation is to create "a new sustainable urban district" consisting of "housing, offices, cultural institutions, restaurants, cafes and a large parking cellar" (realdania. dk, 2017). The most recent urban project narrows the four-lane street into several sub-projects, and is realised through a collaboration of the City of Odense and one of the world's largest charitable trusts within architecture and the built environment: Realdania.² One of these sub-project sites is the Oluf Bager Plaza, where the intent, as described in the competition program, is to enclose the plaza with two new buildings and to make it into "a new spatial and mental connection between the old town and the new urban district" (Realdania By & Byg, 2016, p. 3).

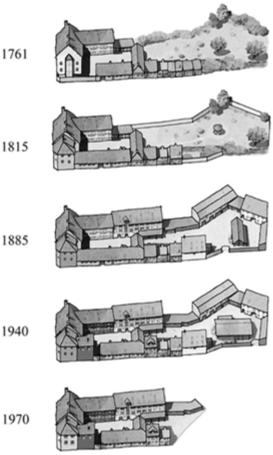


FIGURE 6 Historical studies of the courtyard of Oluf Bager. Note how the courtyard was cut off with the street breakthrough of Thomas B. Thrige street in the '60s and left open. (Image by Claus Thøgersen, 2016. Retrieved from http://realdania.dk)

















FIGURE 7 The Oluf Bager courtyard. The existing environment in and around the courtyard of Oluf Bager with the buildings dating back to the 16<sup>th</sup> - 19<sup>th</sup> century. (Images by Praksis Architects, 2016)

Realdania By & Byg commissioned the Oluf Bager Plaza competition, and is also the building owner of the project site. Realdania By & Byg is a daughter company of Realdania that builds experimental new buildings, preserves historic houses and partakes in urban development projects in Denmark. Their goal was "experimenting with innovative buildings, where new environmental techniques are included as integrated architectural elements in the design of the buildings and the plaza, while interacting with the new Thomas B. Thrige Street project and the historic buildings in the courtyard of Oluf Bager" (Realdania By & Byg, 2016, p. 7) (Figs. 7a-h). Realdania By & Byg conceptualised the project as an exemplary project where "the houses should be part of a climate change adaptation solution together with the plaza through local management of storm water and the establishment of green facades" (Realdania By & Byg, 2016, p. 8).3 The competition brief identified the site's cultural historic qualities in the protected buildings dating back to medieval and Renaissance times,<sup>4</sup> and asked the design teams to integrate the new buildings into the existing urban environment without compromising those historical qualities. Realdania By & Byg had commissioned a volume study by Praksis Architects prior to the competition, defining the heights, sizes, and placement of the new buildings in relation to the old ones (Fig. 8). When the design teams in the competition first presented their projects in 2016, they referred to the assignment as a "facade project," due to the need to relate to the significant historical facades of the Oluf Bager Plaza (Entasis, 2016; LETH & GORI, 2016; Maali & Lalanda MLAS, 2016; Praksis Architects, 2016). However, the competition program did not stress that existing and new facades be treated in similar ways, leaving the problem open for interpretation by the designers.

Realdania By & Byg invited four well-known Danish architecture firms to participate: Entasis, LETH & GORI, Praksis Architects, and Frank Maali & Gemma Lalanda MLAS. LETH & GORI and Praksis Architects qualified for a second phase, and finally, in October 2016 Praksis Architects won the competition; their project is under construction, to be finished by 2018.



FIGURE 8 Volume studies. Model of the volume studies of new Oluf Bager Plaza, with the existing buildings in white and the new buildings in green. The plaza between the new buildings acts as a new entrance to the historical courtyard. The new buildings will contain housing, small shops, and a cafe. (Image by Realdania, 2016)



FIGURE 9 LETH & GORI's visualisation from the first design round with retracted facades openings, a solitary tree, and a seating element along the edge of the site. (Image by LETH & GORI, 2016)



FIGURE 10 Praksis Architects' visualisation from the first design round with ornamental facades with bow-shaped facade openings and some green elements. (Image by Praksis Architects, 2016)

### New Oluf Bager Plaza: works and intentions

To study these competition entries in a Carrollesque way, we must see them as designed objects that are based on certain intentions. In the first competition entry, the four architecture firms interpreted and solved the task rather differently. Following the guides from the volume studies, the teams could not vary building height and size. However, all the architect teams employed different materials and details for both the buildings and the plaza: from dark grey concrete facades and minimalistic design of the plaza, to ornamental facades and a patterned plaza that looked like a carpet (Figs. 9–10).

A common feature among the designs was openness on the ground level of the buildings, which created a spatial connection between the interior and the plaza. With regard to the green elements, most of the design teams worked with simple solutions, such as a solitary tree on the plaza and a mirror basin for storm water management. The competition brief stated that the water should be managed locally; however, because of a high groundwater table under Oluf Bager Plaza, this request became difficult to comply with. Some of the architects proposed collecting the water in underground basins, intending to reuse the water locally, or to retain the water and lead it out to the sewer system. In the designs where the buildings and the ground plane of the plaza were given a lot of attention, the green facades were reduced to a minimum, while the plants were treated in a rudimentary way. In a drawing by LETH & GORI that shows many details in brick, handrails, and framing of windows, the facade vegetation is drawn as almost invisible lines on the facades, as if to simply decorate the already designed facade and to fit into its composition (Figs. 11a-c). The vegetation is not integrated in the plaza's storm water mitigation system and seems to be added on to the facade after all other choices were made. The only design team that actually combined storm water management with green facades is Entasis, who treated green facades as an extension of a new element that they termed the "rain water garden," where climbers and creepers formed the walls of the plaza (Figs. 12 and 13a-c). In contrast, the winner of the competition, Praksis Architects, did not include green facades in their design proposal for the first round of the competition (Figs. 14a-c). However, in the second round of the competition, they responded to comments from Realdania By & Byg: "The proposal with the houses and the urban plaza needs to be reworked in a more innovative manner, so that the green facades become central in the architectural expression"

(Realdania By & Byg, personal communication, 2016). In Praksis' second design proposal, they drew the plants in a way that adjusts to the architectural form and language: trimmed to follow the composition and facade openings of the building, rather than transgressing the building's ground level (Figs. 15a-b).



FIGURE 11 LETH & GORI's facade elevations from the first design round show how the buildings are detailed and how to the plants are drawn in a manner that suggests rather than clarifies. (Image by LETH & GORI, 2016)

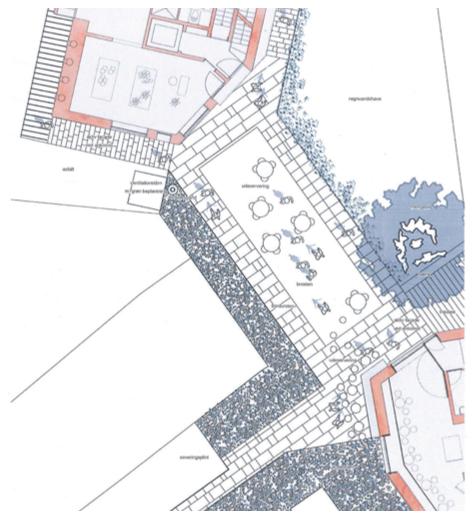


FIGURE 12 Entasis turns the plaza into a large paved square framed by plant beds and water drainage systems, a "rain garden", which continues towards the facades, where climbers and creepers grow on the grey facades. (Image by Entasis, 2016)

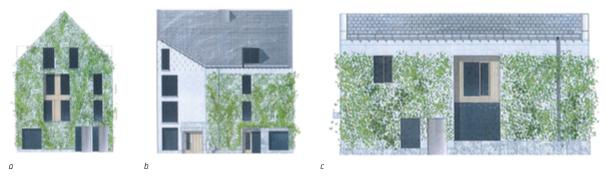


FIGURE 13 Entasis' green facades, where the plants cover large areas. (Images by Entasis, 2016)



FIGURE 14 In the first proposal, Praksis Architects chose not to show vegetation on the facades. There are, however, as these visualisations show, small patches of vegetation in between the facade openings on the buildings' ground level. (Images by Praksis Architects, 2016)



FIGURE 15 In the second round of the design competition, at the request of the building owner, Praksis Architects chose to give the green facades a much more important role in the facade expression. (Images by Praksis Architects, 2016)



FIGURE 16 Frank Maali & Gemma Lalanda MLAS' project for the first round of the design competition, with facade vegetation suggested in grey. (Image by Frank Maali & Gemma Lalanda MLAS, 2016)

Another similarity across all entries was that the plants were in the same state in all the illustrations. Vegetation changes more quickly than bricks, steel and other building materials, experiencing both growth and seasonal changes, but such changes were not reflected in the design entries. The drawings by Praksis Architects exemplify how vegetation is shown as a static ornamental feature (Figs. 15a-b) and Frank Maali & Gemma Lalanda MLAS' proposal shows vegetation in grey along the red brick facades (Fig.16). Given the importance of facade vegetation expressed in the brief, it is remarkable that the designers treated the plants mainly as static architectural decorative and communicative elements. Despite Realdania By & Byg's ambition to showcase innovative green facade solutions, the competitors made little attempt to explore facade vegetation as a material or to relate it to larger urban landscape processes, and did not explore the potential of green facades in terms of colour, temporal variations and other perceivable characteristics that plants may provide in the city.

Following Carroll, it is necessary to find out what was the artistic premise of these projects in order to critique them: How do the architects themselves describe their intentions and how does the work fulfil them? In later interviews, the designers expressed that they had been concerned with what they considered a key challenge: balancing the potentially conflicting aims of adapting to the risk of storm water in innovative ways while adapting to, and preserving, the historic buildings. Some of the teams were reluctant to use vegetation at all; Frank Maali & Gemma Lalanda MLAS, for instance, stated that "in a project like this we can't see the relevance of experimenting with climate change adaptation solutions; the context is too delicate and the architecture itself should be in focus" (Frank Maali & Gemma Lalanda MLAS, personal communication, June 23, 2016). Complying with the brief, they chose a compromise, in which they proposed roses and creepers on the lower parts of the facades, with reference to historical European cities (Frank Maali & Gemma Lalanda MLAS, personal communication, June 23, 2016). LETH & GORI also addressed the facade vegetation in relation to rainwater mitigation, by reflecting upon its role and relevance in the project (LETH & GORI, personal communication, July 05, 2016). They chose to use "low-tech solutions with plants that were easy to maintain and control, and that should cover large parts of the facade surfaces to contribute to climate change adaptation" (LETH & GORI, personal communication, July 05, 2016).

When asked to characterise their work and the role of the plantings in their competition proposals, the designers searched for words and narratives that were often stereotypical and coming from different realms than the "innovativeness" that the brief emphasised. Entasis, for instance, who combined dark grey facades and evergreen and flowering plant species, described this encounter as a meeting between "the masculine and heavy appearance of the building materials and the feminine, neat and lush expression of the plants" (2016). Praksis Architects described their green facade design as a "three-dimensional and voluminous alternative to traditional facade materials, which appear almost as a hedge". (Praksis Architects, personal communication, June 13, 2016). Praksis Architects saw the green facades as a contribution to the architectural form, where the plants were "framed by the lines on the ground level of the building" and offered a "tactile experience to the people using the plaza" (Praksis Architects, personal communication, June 13, 2016). As such, the architects described the plants metaphorically and as static entities in line with other architectural materials.

All the design proposals for new Oluf Bager Plaza create a hierarchy between the plants and the buildings, reflecting their perception that the buildings had priority. Based on the initial requirements stated by the building owner, who intended to create an "example project with regards to climate change adaptation" (Realdania By & Byg, 2016, p. 8), the design projects worked only semantically with the issue; the green facades are reduced to a minimum in most of the design proposals, almost like afterthoughts. All the four design teams used rooted climbers and creepers, which, in literature about green facades, is often referred to as characteristic for "traditional green facade typologies". Other possibilities would have been to use for example "high-tech and modern green facade typologies", for example "living facades", where plants are rooted in a growth medium placed as an external layer on the facade (Dunnett & Kingsburg, 2009, pp. 191-240) (Fig.17a-c).

Seen through the lens of Carroll's art criticism, the proposals for Oluf Bager's Plaza should be judged on their own merits; that is the critic should see "what the designers were up to" (Carroll, 2009, p. 66) and assess the projects as to how they "succeeded." Apart from metaphorical one-liners, the architects did express a concern for preserving the aesthetic qualities of this urban space that is now changing radically, as it did when the Thomas B. Thrige street was built half a century ago. Countering the program by not introducing new architecture that communicates "innovation" and "sustainability" and by choosing to combine vegetation and facades in ways that resemble historical architecture (not necessarily from the time period or location of Oluf Bager's Plaza), is thus a way to achieve the goal of historical preservation. The facade materials and the building sizes and shapes are all intended to fulfil the same purpose and in many ways succeed in not taking focus away from the historical architecture. Yet, why do these design projects have green facades in the first place? While downplayed by the designers, the green facades are a major theme in the competition. What underlying agendas drive the use of green facades on this historical location and what purpose are they intended to serve? The designers responded to an ambitious brief that involved density, climate change adaptation, novelty, and adjusting to the character of the historical city. With their intentions and projects, the designers commented on the brief and introduced hierarchies among its different agendas. To find out how the green facades came to be part of the original agenda, we must employ another kind of critique that can reveal more about the different elements that were at play and that entailed the introduction of hierarchies. We thus need to move beyond Carroll's scope of art critique, to the architectural projects and the designer's intentions. Paraphrasing Carroll's question of "what the artist is up to" (Carroll, 2009, p. 66), it also becomes necessary to ask "what the city is up to" by focusing on the premises that were laid by other actors during the transformation of Thomas B. Thrige Street.







FIGURE 17 Examples of different facade vegetation, showing different colours, shapes, and techniques. The green facades with climbers and creepers are located in Copenhagen (a-b) and the living facade in Aarhus (c). (Images a-b by Ann-Charlott Eriksen; image c retrieved from http://byggros.dk)

## Critique of architecture as public domain

In her article 'On Criticism' (1987), architecture theorist Mary McLeod outlines the need for design critique to relate to a broader domain of urban discourses and processes. Architecture is often part of a public domain and its premises conveyed through planning and policies, which thus need to be critically interrogated, she says. The "general cultural, social and economic forces," she writes "are central in determining the form of places and large-scale architecture" (McLeod, 1987, p. 5). Therefore, it is not enough to study architecture as designed objects based on the intentions of an architect. Rather, McLeod argues, the critic "must confront the broader range of issues (...) - building practices, zoning legislation, urban institutions - cultural and productive relations in their most encompassing sense" (McLeod, 1987, p. 6). To do so, the critic must be open to multiple perceptions of meanings and value, because "architectural form necessitates a conception of meaning that is highly ambivalent, continually changing and closely linked to context" (McLeod, 1987, p. 4). To better understand the public negotiation and meaning-making process that affected the design of green facades for the new Oluf Bager Plaza, then, we will now broaden the scope to investigate the competition's relationship with the larger transformation of Thomas B. Thrige Street and Odense's "green city" strategies. What role was vegetation ascribed at multiple planning and design levels in the transformation of Thomas B. Thrige Street, by whom and why? The following section scrutinizes the city's strategic planning documents, official policies, legislative documents, etc. (from the time the project began in 2008 up to today) to find out how the idea of green facades came into play in the redevelopment of Thomas B. Thrige Street.

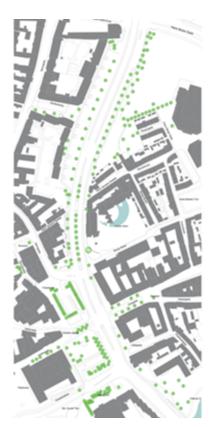


FIGURE 18 Plan showing the conditions before the transformation of Thomas B. Thrige Street. (Image by Entasis, 2013)



FIGURE 19 Plan showing the planned conditions at Thomas B. Thrige Street, with the new urban blocks, more narrow streets, and urban spaces.



FIGURE 20 Plan for green facades. The plan shows where the green facades in the new urban district could be placed. (Image by Entasis, 2013)

## Green facades as salvation in urban strategies

In the strategies and visions of the city of Odense, two conflicting ideas appear as important for the future urban development of the Thomas B. Thrige Street district: improving the city's green image and qualities while also increasing the density of the city centre. For decades, Odense has branded itself as a green city and worked strategically to improve the amount and quality of public parks; its official municipal documents express a self-understanding as a green city (Planstrategi, 2015; Municipal plan, 2016–2028). Odense also has the ambition of becoming the "greenest city in Denmark" by 2025, explaining the city's increased amount of vegetation (Municipal Plan, 2016-2028). The Thomas B. Thrige Street transformation into a "green urban district" plays a considerable role in realising this ambition (Planstrategi, 2015). At the same time, building densely is a target in the planning strategy: "70% of the urban development will happen through densification of the existing city centre" (Planstrategi, 2015, p. 40). In the 51,000m2 area of the Thomas B. Thrige Street district, a total amount of 53,000m2 floor area is planned (realdania.dk, 2017). The potential conflict of aiming for both density and greenery is recognised in the municipal plan: "the dense city should not develop at the cost of the city's green values" (Planstrategi, 2015, p. 51). This inherent contradiction is then presented as a win-win situation; densification is seen "as an opportunity to create an even more green and blue city than today, that will benefit the citizens of Odense" (Planstrategi, 2015, p. 50). How is this to be realised? One central idea is to use the construction of new buildings to achieve a green city. Green facades are presented as central tools to green the city, as they can be implemented without compromising the desired density. The municipality further argues that green facades contribute to sustainability: they "have a strong visual effect, can be used for retention of storm water, reduce noise and air pollutants, reduce energy levels—and increase the lifetime of buildings" (Planstrategi, 2015, p. 55).

The municipal strategy relates back to an urban plan for the Thomas B. Thrige street transformation project from 2012, which Entasis had won after a competition. This urban plan divided the transformation area into four parts, each with their own characteristics (Helhedsplan, 2013, p. 8). It consists of nineteen new buildings, as well as urban spaces and pedestrian streets, a large underground parking garage and a new light rail passing through the area.

In the urban plan Entasis Architects turn the existing landscape into a densely built urban area with building blocks of between two and seventeen floors (Figs. 18-19). The new building blocks frame narrow streets, rectangular urban spaces and the new light rail course. The previously car-oriented modernist landscape is thus combated with urban spaces that are shaped by building blocks and that accommodate movement on foot, a car-free district oriented towards pedestrians, though paradoxically it includes parking garage space that encompasses the entire span of the site underground. Entasis proposed that the new district should be recognised by its "sustainability and a green and lush landscape-on buildings, roofs, balconies and in the urban spaces" (Entasis TBT5000c, 2012, p.4), that would "make Odense take the leap into the new (sustainable) millennium" (Entasis TBT5000c, 2012, p. 8). New trees would grow along central streets in the new district, though they are likely to be challenged by the large underground parking garage. The most central locus for greenery appears to be the surface of buildings that create a narrative of the place as "green," helped by pictures and words to describe the facade vegetation (Fig. 20). The "unused roof surfaces" should be "greened," they say (Entasis TBT5000c, 2012, p. 13). This was translated into a specific quantitative requirement in the municipally approved physical development plans; green facades should "cover at least 30% of the facade length of each building site (...) as far as possible, with plants rooted at the foot of the building" (Lokalplan 0-732, 2012, p. 9). Many developers who owned the construction projects asked to reduce or drop the green facade requirement, but they were not allowed because green facades are "an important contribution to the area's identity" (Lokalplan 0-770, 2014).



FIGURE 21 The visualisation shows one example of the new street environment with green facades, as imagined in the plan from 2013. (Image by Entasis, 2013)

The urban plan is highly ambitious in prescribing that up to 50% of the facade becomes green (Fig. 20–21). In general, the urban plan has multiple requirements for the facades of building. The architects are given guidelines on colour, material, texture, detail, height, windows, doors, etc., for each area, while vegetation is only suggested. It discusses green facades in a way that focuses on building and planting techniques and quantity, not the specific site and its existing characteristics. The reference images (Figs. 22–24) continue a global architecture discussion of green facades as novelty features, with little concern for how it relates to the specificity of the historical urban fabric, landscape, cultural practices, and accumulated meanings of Thomas B. Thrige Street.

# Critiquing the contemporary green city: conclusion and discussion

This article explored two modes of design critique to discuss the proposed futures for new Oluf Bager's Plaza. Starting with the art criticism approach of Noël Carroll, we studied the design projects and the intentions expressed by the designers. In words and images, the competition entries presented facade vegetation as rather static architectural decoration. The green facades, although playing an important role for the promotion of the urban project, appeared as insignificant add-ons in the competition projects, with little concern for the ecological processes connected to vegetation and little attention to the choice of species, composition, colour and more. Some of the designers characterised their facade plantings with vague metaphors such as male and female. Almost all of the teams worked with building details and expressed a strong concern for the historical architecture that already encloses the plaza. Most of the designers thought that the "innovative" green-facade architecture requested by the brief, as exemplified in the reference images of "best practice" in the urban plans, would obstruct the historical qualities of the plaza. The designers questioned the urban project's premise that green facades could solve ecological issues and climate adaption on this site.

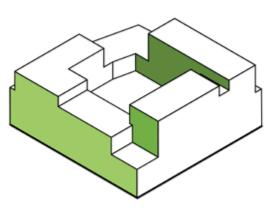


FIGURE 22 Excerpt of urban plan references. The majority of the reference images of green facades in the urban plan show widely published examples from all over the world focusing on "newness" and technological innovation. (Images by Entasis, 2013)

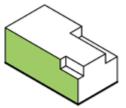
The second mode of critique shifted the focus from the designers and their intentions to the urban plan and strategies that formed the premise of their work. Drawing from Mary McLeod, we conceptualised the new design for Oluf Bager's Plaza as part of a public realm and examined the planning context of the design projects. Planning and policies created multiple premises for the competition. The new urban district at Thomas B. Thrige Street will be a dense city and the green facades and roofs are rhetorical devices that justify the dense building scheme, seemingly eroding the conflict between maximising the amount of built-up space and still upholding the narrative of Odense as a particularly green city. The attempt to build densely has been a dominant paradigm in many European cities in the last few decades and results in an often unspoken correlation of two strong forces. The economic interests of building densely in cities with promising property markets is often supported by certain strains of urbanism that promote dense cities as particularly sustainable, "classical", and able to accommodate street life (Sieverts, 1997, pp. 41–45; Riesto, 2018, p. 173-181). Seen in this perspective, Odense's new green facades are mainly a semiotic gesture that supports such economic agendas and urban ideals towards density.

There is clearly a need to discuss greening of cities critically, to look beyond the dominant assumption that green is inherently good. Rather, as in the case of Odense, green facades can be actors in larger urban development processes that can and should be discussed openly. Furthermore, the role of vegetation in the city is not simply a question of percentages of facades; the challenge is to comprehensively rework the way in which humans live in, and with, urban landscapes in ecologically, culturally, and economically sustainable ways, seen in both long-term and short-term perspectives. How can green spaces in the cities of the future accommodate different cultures and serve as common areas that can be used by, and potentially gather, different people and other species? As vertical surfaces, green facades do not offer the same space as parks and green streets, although their surface area may be the same.

### Eksempel på rumlig placering af grønne facader



Bygning nr 1 (Albani karréen)



Bygning nr 9 Rosengade kvarteret



Bygning nr 16 TBT Kvarteret

FIGURE 23 The diagram from the urban plan shows how the green facades could be placed at various levels on the new buildings, which are composed as multiple cubes in a rectilinear pattern. (Image by Entasis, 2013)

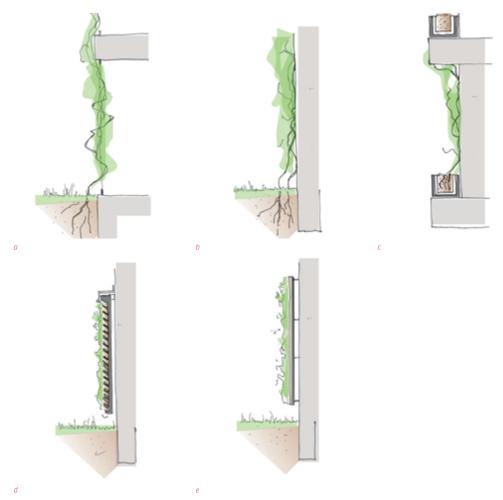


FIGURE 24 The diagrams from the urban plan show five different techniques for greening the facades, using different growth media and location of the plants' roots. (Image by Entasis, 2013)

The competition for Oluf Bager's Plaza reveals a tension between making green facades that could signal "innovation" and working with, rather than against, the qualities of an historical site. In a European context where most urban projects are transformations of already urbanized landscapes, the challenge in the coming decades will be how to adapt cities to such new agendas in a way that considers existing materialities, practices and accumulated-and often conflicting-meanings (see Braae & Riesto, 2017). While green architecture and green city debates are easily characterised by the desire for "newness," the historical assumptions and the relationship of green-ness to the existing city needs to be addressed in substantial ways. Critics, planners, designers and citizens should engage in such debates and practices about urban transformation. Such a culturally oriented debate should not be detached from other critical points, such as the influence that design interventions have on existing ecosystems, which some of the participants in the Oluf Bager's Plaza competition wondered about. Seen in this light, the design projects for Oluf Bager's Plaza can be looked upon in two different ways. On the one hand they express a negotiation with the forces and agencies in the city and introduce hierarchies in a multi-facetted brief. On the other hand, the competition entries can be seen as an act of critique in themselves, directed towards the brief and the logic of density in the planning of this district. The mode of critique that the designers practised, however, was not explicit, only tacitly articulated in the proposals (and later in the interviews), but not actually discussed to any great degree.

The architects in the Oluf Bager's Plaza competition chose relatively similar design approaches, while the city's urban plans and strategies were far more significant determinants in how Thomas B. Thrige Street was reconfigured. This demonstrates Mary McLeod's point that architecture in the city is not an autonomous artistic activity, but is rather embedded in public processes of making and appropriation, negotiation, power and politics. Her critique is not purely a discussion of political governance that ignores the potential agency that designers and designed spaces can have (see e.g. Schneider & Till, 2009). Rather, to foster a nuanced debate about green architecture, exemplified here through green facades, criticism should explore multiple perspectives, including both "what the designer is up to" and "what the city is up to"-in the broadest sense, knowing that the "city" is a layered and dynamic public domain of negotiation and spatial transformation processes. To grasp such processes, it is necessary for the critic to use sources that are related to the designer's intentions, and to the intentions underlying the direction a designer is allowed to go-planning documents, public debates, and other forces and agencies in the city. The critic must continuously question the underlying assumptions and the negotiation of values used to make design decisions in the urban landscape, just as the critic must reflect upon his or her own position - and make it transparent - in relation to examining those values. Only on the basis of such critical and informed debates can we substantiate the ground on which we stand when intervening in the existing urban landscapes in the context of design.

### **Notes**

- [i] The interviews were carried out by Ann-Charlott Eriksen in 2016, just after the competition. The interviews were semi-structured, recorded interviews with the project leaders, and situated in the designers' studios.
- [2] More information can be found at realdaniabyogbyg.org
- [3] Initially Realdania By & Byg had the ambition of implementing green facades in the interior of the buildings as well as in the exterior, where the plants would contribute to a healthier indoor climate. However, in the final projects this idea was left out as it's success depended on the future residents, their preferences and their will to maintain the green facades. Creating a healthy indoor climate was still a focus in the project, but it was based on the construction materials and their properties.
- [4] Many of the buildings and urban spaces around the old town of Odense are classified as having cultural historic value and the two buildings in the existing courtyard are classified as worthy of preservation see e.g. https://realdania.dk/projekter/oluf-bagers-moed-rene-gaard

### References

Balmori, D., & Sanders, J. (2011). Groundwork: Between Landscape and Architecture. New York, NY: The Monacelli Press.

Braae, E. M., & Riesto, S. (2017). Designing Urban Natures: Ambiguities in urban space design on the threshold of climate disaster. *Kritische Berichte*, 45(2): 92-101.

Carroll, N. (2009). On Criticism, Thinking in Action. London and New York: Routledge

Dunnett, N., & Kingsburg, N. (2009). Planting Green Roofs and Living Walls. Portland, OR: Timber Press Inc.

Elkins, J.; & Newman, M., (Eds.) (2008). The State of Art Criticism. London and New York: Routledge.

Entasis. (2012). Helhedsplan: TBT5000c (Masterplan for Thomas B: Thrige street, second edition). Copenhagen, Denmark.

Entasis, Odense Municipality; Realdania. (2013). Fra Gade til By: Omdannelse af Thomas B. Thriges Gade (Masterplan for Thomas B. Thrige street, final version) Odense, Denmark.

Entasis; LETH & GORI; Maali & Lalanda MLAS; Praksis Architects. (2016, May). Project presentations. Realdania By & BYg in Odense, Denmark

Gandy, M. (2002). Concrete and Clay: Re-working Nature in New York City. New York, NY: MIT Press.

Gandy, M. (2010). The ecological facades of Patrick Blanc. Hoboken, NJ: John Wiley & Sons Ltd.

Green Wall: ArchDaily. (2017, June 14). Retrieved from https://www.archdaily.com/tag/green-wall/

Hunter, A.M., Willams, S.G., Rayner, J.P., Aye, L., & Hes, D., Livesley, S.J. (2014). Quantifying the thermal performace of green facades: A critcal review. *Ecological Engineering* 63:102-113

Ignatieva, M., & Ahrné, K. (2013). Biodiverse green infrastructure for the 21stcentury: from "green desert" of lawns to biophilic cities. *Journal of Architecture and Urbanism*, 37:1, 1-9. London, England: Routledge.

Kellert, S.R., Heerwagen, J.H., & Mador, M.L. (2008). Biophilic Design: The Theory, Science and Practice of Bringing Buildings to Life. Hoboken, NJ: John Wiley & Sons Ltd.

Köhler, M. (2008). Green facades - a view back and some visions. Urban Ecosystems 11:423-436, Springer Science + Business Media.

McLeod, M. (1987). On Criticism [Criticism of Place: A Symposium], *Places Journal 4* (1). Retrieved from https://placesjournal.org/assets/legacy/ndfs/on-criticism-mcleod.ndf

Millennium Ecosystem Assessment (2005). *Ecosystems and Human Well-being: Synthesis.* Washington DC: Island Press. Retrieved from http://www.millenniumassessment.org/documents/document.356.aspx.pdf

Mostafavi, M., & Doherty, G. (2010). Ecological Urbanism. Zürich, Switzerland: Lars Müller Publishers.

Odense Municipality. (2012). Lokalplan 0-732: Omdannelse af Thomas B. Thriqes Gade (district plan). Odense, Denmark.

Odense Municipality. (2014). Lokalplan 0-770: Thomas B. Thriqes Gade omkring Skulkenborg (district plan). Odense, Denmark.

Odense Municipality. (2015). Ny Odense: Fra stor dansk by til dansk storby (Municipal Plan 2016-2028). Odense, Denmark.

Odense Municipality. (2015). Ny Odense: Fra Dansk Stor By til Dansk Storby (Plan strategy 2015). Odense, Denmark.

Ottelé, M., Perini, K., Fraaij, A.L.A., Haas, E.M., Raiteri, R. (2011). Comparative life cycle analysis for green facades and living wall systems. Energy and Buildings 43: 3419-3429.

Perini, K., Ottelé, M., Fraaij, A.L.A., Haas, E.M., & Raiteri, R. (2011). Vertical greening systems and the effect on air flow and temperature on the building envelope. *Building and Environment 46*: 2287-2294.

Picon, A. (2015). Smart Cities: A Spatialised Intelligence. Hoboken, NJ: John Wiley & Sons Ltd.

Realdania (2017, June 14). Retrieved from www.realdania.dk/samlet-projektliste/thomas-b-thriges-gade

Realdania By & Byg. (2016). Oluf Bagers Plads: 2 nye huse og en plads (Competition program). Odense, Denmark.

Realdania By & Byg. (2016). Kommentarer til viderebearbejdning af konkurrenceforslag i Fase 2 [Comments to second phase of competition].

Odense, Denmark.

Realdania By & Byg. (2016). Oluf Bagers Plads: 2 nye huse og en plads (Competition program). Odense, Denmark.

Riesto, S. (2018). Biography of an Industrial Landscape: Carlsberg's urban spaces retold. Amsterdam, Netherlands: Amsterdam Uiversity
Press 2018

Schmidt, M. (2009, June). Rainwater Harvesting for Mitigating Local and Global Warming. Fifth Urban Research Symposium: Cities and Climate Change: Responding to the Urgent Agenda. Marseille: SDG Knowledge Hub.

Schneider, T., & Till, J. (2009). Beyond Discourse: Notes on Spatial Agency. FOOTPRINT (4). 97-112. doi:10.7480/footprint.3.1.702

Sheweka, S., & Magdy, N. (2001). The Living walls as an Approach for a Healthy Urban Environment, Energy Procedia 6 (2011) 592-599.

Sieverts, T. (1997). In M. Stadler (Ed.). Where We Live Now: An Annotated Reader. Portland, OR: Verse Chorus Press.

Spirn, A. (1984). Granite Garden. Urban Nature and Human Design. New York, NY: Basic Books.

van Dooren, N. (2017). The landscape of critique: The state of critique in landscape architecture and its future challenges. SPOOL, 5(1).

Retrieved from https://journals.open.tudelft.nl/index.php/spool/article/view/1936

van Uffelen, C. (2017). Green, greener, greenest: Facades, Roofs, Indoors. Salenstein, Switserland: Braun Publishing AG.

Wong, N.H., Tan, A.Y.K., Chen, Y., Sekar, K., Tan, P.Y., Chan, D., Chiang, K., & Wong, N.C. (2010). Thermal evaluation of vertical greenery systems for building walls. *Building and Environment* 45 (2010) 663–672.

Zaera-Polo, A., Koolhaas, R., & Boom, I. (2014). The Elements of Architecture #7: façade. Venezia, Italy: Marsilio.

# Metropolitan Landscapes?

# Grappling with the urban in landscape design

### Greet De Block, Nitay Lehrer, Koenraad Danneels & Bruno Notteboom

University of Antwerp Antwerp, Belgium

### **Abstract**

On January 2016, a joint consortium of the Flemish and Brussels Chief Architects published *Metropolitan Landscapes*. *Espaces ouvert, base de développement urbain/Open ruimte als basis voor stedelijke ontwikkeling*. Based on the assumption that open spaces have the potential to spur and structure future urban development and surpass administrative boundaries, Metropolitan Landscapes presents research by design, authored by four prominent design firms with the intention of jumpstarting conversations about a shared spatial vision for the fragmented territory of Brussels and its periphery.

In this article, we examine the methodology and definitions put forth by Bureau Bas Smets & List, explore the historical context that has rendered the landscape approach so promising in Brussels, and perform a thematic and critical reading of the four projects and their underlying rationale. These projects demonstrate the potential of landscape to engender novel territorial solutions. However, by choosing to ignore competing spatial claims and tending towards a techno-managerial rationale based on infrastructural and ecological systems, these designs raise questions as to the capacity of the landscape approach to deal with ever-present socio-political concerns in Brussels.

### Keywords

Metropolitan Landscapes; Bureau Bas Smets & List; Brussels; urban design; landscape design; design methodology

## Introduction

On 28th January 2016, the publication Metropolitan Landscapes. Espaces ouvert, base de développement urbain/Opren ruimte als basis voor stedelijke ontwikkeling (open space as a base for development) was presented to the public. Intended to jumpstart conversation about a shared spatial vision for Brussels, the publication encompasses research by design authored by prominent design firms exploring 'the capacity of open space to take up an active and structuring role in the qualitative development of the urban space' of Brussels and its environment (Mabilde & Vanempten, 2016, p. 11). The project areas are located at the peri-urban fringe of the Brussels Capital Region, intersecting with rigid administrative borders as well as hard infrastructural edges like highways and railways, and are further fragmented on a smaller scale by ribbon development, subdivisions, agricultural land, and undefined in-between open space. Commissioned by a consortium of the Flemish and Brussels Chief Architects and both 'urban' and 'open space' planning administrations, four design teams formulated proposals exploring the potential of a landscape lens within the context of the 'horizontal metropolis' of Brussels, defined by a common urbanity while being territorially and administratively splintered (Dejemeppe & Périlleux, 2012). Eric Corijn, André Loeckx and Freek Persyn elucidate in the final, critical chapter on the strategic choice of open space as crux of design: 'Many open spaces around the city escape speculative overpressure: protected as green space, set aside as leftover space of real estate development, abandoned private property, ...' Focusing on open landscape as a new paradigm for urbanisation, Metropolitan Landscapes aims at evading competing claims and real-estate pressures associated with high-density urban projects, thus unlocking the terrain for experiment and dialogue within the tense context of Brussels. What's more, the open space entry surfs the wave of a renewed interest in an ecosystem approach as an antidote to the disruptive excesses of the industrial, capitalist society and political appropriation strategies (Corijn, Loeckx, & Persyn, 2016, p. 172).

# Urban processes in Brussels – top-down, bottom-up and the landscape alternative

The landscape approach embodied in Metropolitan Landscapes did not come out of thin air, and owes its existence to the troubled history of Brussels' urbanisation. It offers an alternative to a specific history of brutal, top-down interventions fragmenting the urban tissue in Brussels, as well as to the strong bottom-up movements and small, punctual projects resulting from this tradition. The binary opposition between topdown and bottom-up planning has marked the course of Brussels' urbanisation, and until recently resulted in a perceived absence of a common urban project for the city. In order to understand this opposition, one must dive into the rather recent history of the Brussels metropolis. By the middle of the 20th century, the historic urban fabric of Brussels had already experienced large-scale demolition works, mostly due to the construction of a major railway line, central station, and grand boulevards. However, some consider the real shift in Brussels urbanism to have happened in the 1950s, when the government opened up the city to large scale vehicular traffic and undertook the simultaneous construction of multiple highways in view of the international world fair of 1958 (Leloutre, 2009, p. 174). One might add to this the placement of the European institutions in Brussels, the programmatic destruction and reconstruction of the quartier du Nord, the undiscerning erasure of historic buildings and urban fabrics in and around the city centre, as well as many more traumatic urban interventions undertaken in a manner that was later to become known as 'Brusselization' (Brasseur, 1979; State, 2004; Swyngedouw & Baeten, 2001).

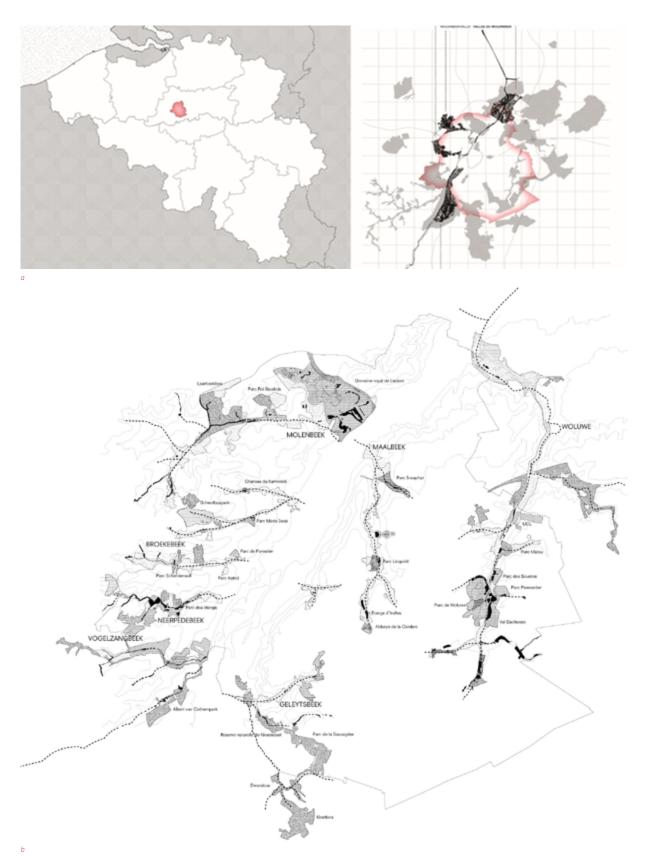


FIGURE 1 The hydrographical and topographical reading of Brussels by Bureau Bas Smets for Brussel 2040. The study restructures the city by connecting all the tributary rivers, offering a landscape reading of the city by basing. The Zenne, however, disappeared because it has been buried (Dejemeppe & Périlleux, 2012, p. 59).

Internationally, Brussels became the prime example of haphazard urban development, driven by a laissezfaire politics, "which featured a lack of detailed and enforced zoning regulations, the desire of municipal authorities to cater to national political interests at the expense of local residents" (State, 2004, p. 52). Although this history is often viewed as a moment in which there was no collective project for Brussels, Géry Leloutre emphasises that these large-scale projects had a common logic of converting the Belgian capital into an international hub, which would tackle the national mobility question and the shortage in housing (Leloutre, 2009, p. 177). With the subsequent rise of protest movements in the seventies and the eighties, an opposing planning culture arose in which participation of local inhabitants would become paramount. Thierry Demey saw the weakness of politicians during the seventies and the eighties, vis-à-vis these aggressive manifestations of private and public promotion, as the very reason for the strong reaction of the sidelined inhabitants (Demey, 1992a, p. 281). By the end of the 1960s, the creation of the Atelier de Recherche et d'Action Urbaines (ARAU) and the proliferation of citizen committees around the city initiated a veritable counterculture (Demey, 1992b; Doucet, 2015, p. 40). From 1979 onwards, as an outcome of this counterculture, citizen consultation became an official part of the planning process with the creation of the Plan Secteur, or regional plan, which legalised reactions to urban projects (Doucet, 2015, p. 141). However, only after the creation of the Brussels Region in 1989 did this counterculture gain a truly active voice in a new planning apparatus, with the instatement of a planning instrument called the neighbourhood contract, or contrat de quartier (see chapter 5 of Doucet, 2015), which was designed and funded by the region yet applied on a municipal level. Until recently, these contrats were the only real planning tools used by the regional government, thus building up a strong culture of participation, albeit at the expense of any large scale urban projects or a common vision for the Brussels urbanity (Borret, 2017).

According to Brussels Chief Architect Kristiaan Borret, this perceived deadlock was only recently broken down with a new, landscape infused reading of the city structure initiated in the *Brussels 2040* study commissioned by the regional government (Borret, 2017). Borret states that a landscape reading of Brussels urbanity was instrumental in the invention of a new, collective urban project that went beyond the small-scale neighbourhood contracts. In this publication, Bureau Bas Smets forwarded a topological and hydrographical reading of the city (Fig. 1) as a new, cultural way of envisioning the future of Brussels. The valley structure served as a coherent development structure, on which mobility and new housing could be connected (Dejemeppe & Périlleux, 2012, p. 58). This alternative reading of the city fabric runs counter to two centuries of urban practice in Brussels, where rivers were simply covered and the topography ignored. Inserting landscape into planning processes was therefore a novel way of sidestepping the previous oppositions that existed in the city's history - landscape (urbanism) became a way out of the disciplinary crises of modern planning "through a synthesis of ecological function and design culture" (Waldheim, 2016, p. 50). Metropolitan Landscapes was therefore seen as the next logical step in the promotion of a landscape reading of the Brussels territory, putting forward open space as a new, structuring element in the large-scale planning of the metropolis (as opposed to the small-scale visions of the Neighbourhood Contract).

# Metropolitan Landscapes – Defining the Metropolitan?

The research by design methodology for the open landscape is defined by Bureau Bas Smets & List, framing the proposals of (1) WIT Architecten, OSA research group, Annabelle Blin, and Philip Stessens; (2) Coloco, DEVspace, and Gilles Clément; (3) Agence Ter; (4) LOLA Landscape Architects, Floris Alkemade, and Grontmij (see Fig. 2).



FIGURE 2 The four project areas of Metropolitan Landscapes. (Bureau Bas Smets & List, 2016, p. 57)

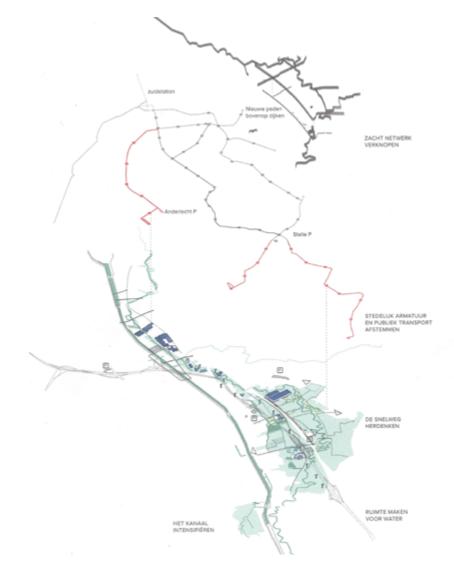
Introducing the different proposals, Smets & List clearly outline that the central hypothesis of Metropolitan Landscapes is twofold: First, they stipulate that research by design should explore the potential of open landscape to play a productive, reconciling role in formulating a comprehensive, shared spatial vision for Brussels, beyond administrative borders of municipalities as well as regions - that is the regional border between Brussels and Flanders; Secondly, the proposals should search for ways in which open landscape could prompt a new dynamic and serve as 'magnetic poles' around which urban development could be structured (Bureau Bas Smets & List, 2016, pp. 45-46). In contrast to prevailing defensive and passive open space policies geared towards conservation and zoning, the design proposals in Metropolitan Landscapes aim at reimagining open space in view of development and networking. Open space is reconceptualised as a dynamic networked structure, or as the spatial nuclei around which urbanisation and its actors assemble. Attempting to avoid losing sight of the ultimately urban goal and its associated socio-political drivers when focusing on open space, Smets & List define three criteria that should guarantee the metropolitan character of the landscape, namely, (1) accessibility, (2) adjacent programs, and (3) systemic value. These criteria are then used to identify four key study areas - large-scale landscapes considered to have the potential to incite administrative and spatial interconnection between the city and its periphery, while offering answers to decidedly urban problems.

In the following, we will reflect on these three criteria as they are manifested in the different designs, not as a way to evaluate these proposals or critique the Metropolitan Landscapes study as a whole, but as a means of raising questions and possibly setting an agenda for (open) landscape design, an approach whose attention is increasingly turning towards the city as its object of study. Thus, Metropolitan Landscapes serves as a proxy for such disciplines as Landscape Urbanism and Ecological Urbanism in which, quoting Charles Waldheim's seminal manifesto, 'landscape replaces architecture as the basic building block of contemporary urbanism ... landscape has become both the lens through which the contemporary city is represented and the medium through which it is constructed' (Waldheim, 2006, p. 11). The aim of this article is to question this trope through the designs of Metropolitan Landscapes, thus using the projects instrumentally. Instead of aligning ourselves with operative criticism, which offers solutions resulting from a selective account (McLeod, 1987), we choose to examine the projects in order to call into question certain trends in the broader field of design. More specifically, this article is rooted in a concern about the relation between recent design cultures and the socio-political context in which they seek to intervene, with the associated hypothesis that these designs risk being too disconnected from their socio-political context in order to 'hit the ground' and materialise. These questions incited us to contact the Brussels Chief Architect Kristiaan Borret, who was instrumental in the development of Metropolitan Landscapes. As a strong and influential practice and policyoriented voice, Borret offered us insider knowledge of actual urban processes and visions in Brussels, thus giving more concrete context to the theoretical and more academically-oriented Metropolitan Landscapes.

# Accessibility: making things public?

The first criteria forwarded for a landscape to be metropolitan is accessibility, according to Smets & List, urging the designers to relate public space to public transport. By ensuring connection between the city and the project areas in the fringe, Metropolitan Landscapes assumes that the open landscape becomes a public space 'where different social groups mix, in the same manner as elsewhere in the metropolis' (Bureau Bas Smets & List, 2016, p. 49). The problem with this interpretation of public space is quite obvious, as it sidelines the fact that 'making things public' requires either democratic politics focusing on matters of concern (in the Latourian sense) or (in more radical terms of 'the right to the city') a space to interrupt in order to offer a stage for the struggle for equality, for shaping and claiming rights (Amin, 2014; Dikeç & Swyngedouw, 2017; Latour & Weibel, 2005). Keeping in mind that the exact aim of Metropolitan Landscapes is to shortcut these meanings of public space as it tries to distance itself from a history of democratic processes being restrained by administrative impasses, as well as a tradition of insurgency or 'counter-projects', let's engage – reluctantly – with the minimal definition of public space as proposed by Smets & List. We would not be alone in doing so, as prominent international designers and authors like Pierre Bélanger and Charles Waldheim have also aligned themselves with this post-political perspective on public space (Bélanger, 2013, 2016; Metzger, Allmendinger, & Oosterlynck, 2015; Waldheim, 2016).

Of the four design teams, only those of WIT Architecten and (to a certain extent) Agence Ter zoom out and explicitly bring the connection to the public transport network into focus, relating the green network with a mobility system at a larger scale. WIT's team even proposes to expand and transform the tram system in order to anchor the open space, and in extenso the peri-urban fringe, on the urban armature (WIT Architecten et al., 2016, pp. 60, 63, see Fig. 3). The other teams engage with the issue of accessibility solely within the contours of the project area, without positioning it in a larger urban or metropolitan context.



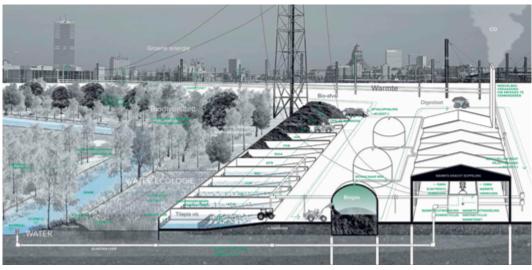


FIGURE 3 The metropolitan landscape of WIT Architecten et al. In this 'waterlandscape', the river is connected to public infrastructure such as the public transport and the highway (WIT Architecten, OSA Onderzoeksgroep, Annabelle Blin, & Philip Stessens, 2016, p. 63).

Moreover, the concept is generally interpreted quite traditionally, engineering-wise, as a matter of overcoming technical obstacles – i.e. the railway, highway and canal – by means of what could be described as equally technical fixes such as bridges, dikes and tunnels (be it with a green, or 'public', platform instead of concrete surface, see Fig. 4.). The core of engineering, as Antoine Picon explains, is to perfect nature and smooth out the accident-ridden territory by means of bridges and other connections levelling mountains and filling ravines, in order to facilitate exchange between people and abolish administrative compartmentalisation (Picon & Thom. 1992).

This definition is quite close to the interpretation of accessibility by Metropolitan Landscape, which aims at envisioning a continuous (infra)structure bringing both people and administration into a shared territory. Although these connections could potentially construct a territory that is mentally cohesive and connected, there is no such thing as equal access, nor a guarantee of social mixing by providing bridges or other kinds of infrastructural linkages. Living next to open space, and having to use public transport to travel from a high-density neighbourhood in the city centre to the outskirts, are two very different levels of accessibility. In addition, the public transport connection to these outskirts, crossing regional borders, is far from failsafe and could result in a large-scale park landscape used exclusively by suburbanites living adjacent to it. Moreover, we also would like to question the assumption that providing a continuous infrastructure to, and within, a park leads to a social mix. As Kristiaan Borret explains, the design principles promoted by Metropolitan Landscapes are not meant to be concretely instrumentalised, but instead retain a cultural productivity by instigating a change of mind and by showing how Brussels could be territorially connected (Borret, 2017). He also admits, however, that it is currently not possible to steer the informal appropriation mechanisms, let alone lead to a socially just urban project, without resorting to the 'classical' urban tools like social housing quotas, land ownership management, and zoning regulations determining form and function. Moreover, Borret elaborates, guaranteeing physical accessibility, even in its most modest form such as the removal of fences, would be almost impossible to regulate or control at the territorial scale of these projects (Borret, 2017).

# Adjacent program: Revisiting the nature-culture divide?

Since landscape cannot be metropolitan without a program reflecting diversity and multiplicity, Smets & List forward the criterion of shared programs that should encircle the open space. "The 'green' cannot be metropolitan without the 'grey'", they assert in the methodological chapter (Bureau Bas Smets & List, 2016, pp. 49–50). In a study that aims to transcend the nature-culture divide, this is a surprising statement. One would suspect an engagement with the idea of urbanised nature, instead of literally pushing the urban program to the margins of the drawing and setting up an explicit spatial divide between the green and grey. Smets & List do allude to land-sharing and co-productive constellations, but these notions are never actually elaborated upon. This vagueness, coupled with the internal contradiction of the criterion, has resulted in very different interpretations of 'adjacent program' by the different teams.

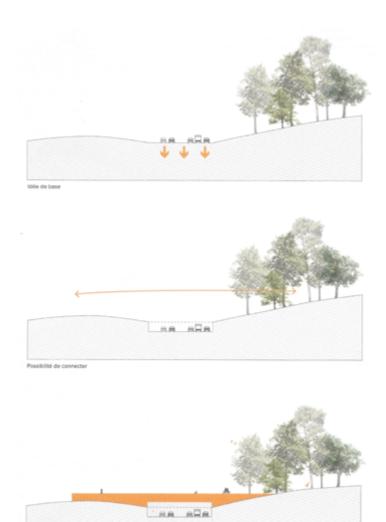




FIGURE 4 The construction of a public terrace on top of the ring road by Agence Ter. The road is a technical obstacle, overcome by the 'technofix' of the terrace (Agence Ter, 2016, p. 105).

The schemes of WIT's team do not even include adjacent urbanisation, instead defining large productive programs such as a biogas factory and logistical terrains, of a scale too large and unwieldly for a city centre. Agence Ter and Coloco only give an indication of the edges to be urbanised, selected either by topography or by what Coloco refers to as 'metropolitan living rooms'. The design team of LOLA Landscape Architects, in their plan to upgrade the post-industrial and deteriorated Northern Canal Zone, is the only one that does suggest an urban program in its drawings, explicitly calling for the creation of regulatory plans for these urban zones along the open spaces to ensure 'an attractive mix of living, working and recreation' (LOLA Landscape Architects, Floris Alkemade, & Grontmij, 2016, p. 120). However, whereas Borret clarifies that these zones are in need of some degree of gentrification, where should it end? In the designs of the other firms, regulation of the urban program is not even posited – without it, what stops these projects from resembling countless other landscape designs that have proposed green corridors weaving together an undefined urban program, and which are ultimately left to the market to develop (Czechowski, Hauck, & Hausladen, 2014)? Although the choice to move the urban to the margin is strategic in a context that is fundamentally stuck, one could raise the question of what is left to program in the open space, and whether the strategy of leaving the urban edges to free-market development is defendable in a metropolitan context like Brussels, which is dealing with high poverty rates and social unrest? If you avoid competing claims, struggle, and pressure, is there anything left in which to spatially intervene that could have an impact on a socially just urbanisation? Aren't these design rationales far more prone to being co-opted by neoliberal market logics, with an increased risk of segregation in city which is already torn, where the wealthy live in the 'adjacent program' and the less fortunate are connected via the 'accessibility' of public transport? By not defining the adjacent program or public program within the park, the projects risk becoming gentrification and segregation machines.

# Systemic value: systems as (re-)productive program?

The third criterion forwarded by Bureau Bas Smets & List in defining the metropolitan character of a landscape is its systemic value. Their elucidation of this principle opens with the following statement: "Systemic thinking approaches phenomena and their interconnections in an interdisciplinary manner, focusing mainly on the relations and exchanges between different components of the studied system rather than on the internal functioning of each individual component" (Bureau Bas Smets & List, 2016, p. 50). While this opening could call for a further exploration of these notions and a discussion about the complexities of intertwined systems, the reader is instead confronted with a rather vague and tautological expansion of the subject - the 'metropolitan' quality is defined by 'participation in the general functioning of metropolitan systems', and 'systemic value' is defined as the importance of an element in the functioning of systems in the metropolitan scale. By this, it is later explained, the writers allude mostly to an area's importance within metropolitan environmental systems - ecological networks, ecosystem services, etc. However, they also include 'human activities' as being part of the metropolitan ecosystem, and the example they provide clarifies their intention of defining areas of high systemic values as those in which high infrastructural, logistical and environmental stakes are spatially superimposed. Following this definition, they claim, unsurprisingly, that areas that display this high systemic value are also prone to functional and programmatic conflict. Once again, having focused exclusively on infrastructural, logistical and environmental parameters, and by calling for the creation of interconnections, synergies and cooperation between 'grey' (urban), 'blue' (humid), 'green' (natural) and 'yellow' (agricultural) systems, Bureau Bas

Smets & List reduce the complex realities of these landscapes to open spaces in need of techno-managerial fixes. By circumventing any socio-political discussion, they therefore open the door for the four design teams to create socially 'all-is-well' scenarios, in which novel techno-natures further realise the functional potential of the metropolitan landscape, while social questions such as inclusion/exclusion and justice are conveniently pushed aside. As with the two previous criteria nonetheless, the vague definition of systemic value has offered the different design teams the possibility of interpreting this value in multiple ways: WIT Architecten, OSA Onderzoeksgroep, Annabelle Blin & Philip Stessens see the systemic value of their study area (the southern Senne Valley) as pertaining mostly to aquatic systems and their interplay with important infrastructural elements; Agence TER, working on the Molenbeek Valley which links dense urban neighbourhoods with natural reserves, large transport arteries and agricultural land, identifies the systemic value of their study zone as being ecosystemic, infrastructural and productive; LOLA Landscape Architects, Floris Alkemade and Grontmii highlight the tension between economic, infrastructural and environmental systems in their zone (the north of the Senne Valley); Coloco, DEVspace and Gilles Clément, as opposed to the other design teams, do not stress the systemic value of their study zone when introducing their project as a convergence point of multiple systems, but still illustrate the potential of their zone (stretching from the ring highway to the West station of Brussels) to participate in Brussels' food-production system due to its high soil fertility.

Nonetheless, all teams share similar techno-managerial rationales in their proposals for improving the systemic value (and performance) of their study zones, following the ideas put forth by Bureau Bas Smets & List in their definition of the metropolitan question - WIT Architecten's team propose 4 pilot projects which attempt to create new synergies between their identified systems, mostly concentrating on problemsolving through newly designed infrastructure or managerial tools. Their sole pilot project which could be construed as aiming towards social inclusion (creating communal gardens on flood-prone land) addresses this goal through a managerial scheme (WIT Architecten et al., 2016, p. 53, see Fig. 3), renouncing reflection on the correlation between spatial configurations and societal systems (See, for instance, Tonkiss, 2013). LOLA Architecten's team explicitly raise the issue of social inclusion and the heterogeneity of actors in their introduction (LOLA Landscape Architects et al., 2016, p. 114), even going as far as to bring up two acts of urban planning in the northern periphery of Brussels which evoke clear social systemic issues – the 'megaprison' of Haren (physical marginalisation of the 'unwanted') and the Uplace commercial centre (neo-liberal privatisation of open space). However, their actual proposal relies almost solely on an infrastructure system to generate development of the environment, housing and leisure-oriented landscapes. No mention is made of the social needs of local or adjacent communities, neither is there a clear reaction to their above-cited examples of socially significant urban planning. Instead, their images seem to evoke mainly gentrification and a healthy, environmentally conscious lifestyle. Agence TER's proposal addresses the systemic values of their sites through means of ecosystem services and land productivity, but does not ask who will ultimately benefit from these services or products. Finally, the Coloco team does actually address the social, by emphasising the role of citizen participation in the process of constituting, inhabiting, and using the landscape. However, the tools proposed in order to achieve these social goals are once again managerial rather than spatial, and the study remains vague as to the specificities of the local or regional populations it is intended to serve.

Perhaps it is not surprising that all teams had chosen technical or managerial strategies to address questions of systemic value, since this path was clearly paved by Bureau Bas Smets & List's emphasis on infrastructural and environmental systems. Nonetheless, even though their thought process was constrained at its onset by an overarching methodology, this methodology seems flexible and vague enough to have allowed for a deeper dive into the less obvious aspects of infrastructural and environmental systems. While all design teams concentrated on the importance of these systems and on their potential to induce territorial and urban change, how is it that they have all turned a blind eye to the fact that these systems are inherently socio-political in nature (Amin, 2014), and as such could have also been used as a tool in favour of social justice and equality?

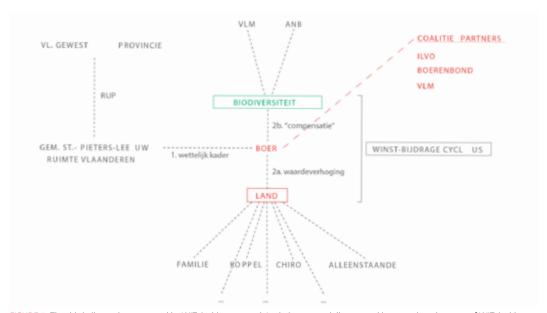


FIGURE 5 The third pilot project proposed by WIT Architecten et al. In their most socially engaged intervention, the team of WIT Architecten propose a communal garden, yet do not commit to a spatial design. Instead, they handle the subject through a purely managerial scheme. (WIT Architecten et al., 2016, p. 73)

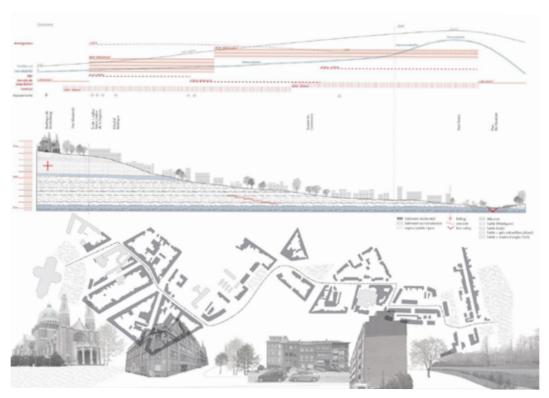


FIGURE 6 The Molenbeek valley envisioned as Geddes' valley section. The topographical structure of the valley is determining the activities, as well as the age groups that are present in different parts of the valley (Agence Ter, 2016, pp. 102–103).

## Conclusion

What becomes apparent from the analyses of the underlying rationale behind Metropolitan Landscapes is that the landscape lens is seen as a potential instigator of a new urban project for the city of Brussels, based on a shared agenda formulated by Bas Smets in his topographical and hydrological reading of the territory. However, using this approach to bypass previous binaries between top-down and bottom-up urbanisation, so constitutive of the city's urban history, should not ignore the reason for which the bottom-up movements developed in the first place.

As we have seen, previous planning practice – where neighbourhood contracts entailed a high participation level of local stakeholders – are problematic, since large-scale concerns are not addressed. Accordingly, approaching the territory through the lens of landscape seems indeed very promising, as it transcends the small-scale communal reflection and seeks a larger context for action. However, the democratic nature of communal projects in Brussels might be very difficult to maintain as we widen our scope of action, because action groups tend to focus on the local but not on the regional scale, as Kristiaan Borret mentioned (Borret, 2017). Is this the end of the discussion, or are we just missing the theoretical framework and applicable tools in order for this tentative revisiting of large-scale visions in Brussels not to lose its democratic legitimacy?

Christopher Marcinkoski stated in his article on speculative urbanisation that in the past, urbanisation was viewed as a *response* to the social demands of economic growth (Marcinkoski, 2014, p. 48). In Metropolitan Landscapes, as we often see in ecological urbanism, the logic seems to have been flipped, and urbanisation has become a *means* to growth. This brings us to our second question, which is tightly bound to our reflections on scale - the question of control: How much - or how little - should we design and control the open spaces of the peri-urban fringes in contrast to the market pressures? If we are to accept Borret's statement that the classical urban regulation tools are only proven to work at a smaller scale, which regulation could, or should, we apply to lead these designs towards a socially just urban project?

The last question to come from our analysis is that of the ecological: In Metropolitan Landscapes, as in landscape urbanism and ecological urbanism, the ecological structure constitutes the fundamental anchor of the urban project and design. As the "underlying structures of topography and hydrology" become the major structuring elements of urban form, the designs of Metropolitan Landscapes attach the social structure to the ecological infrastructure, by alluding to the valley section of Geddes (Fig. 4) for example, thus ultimately subjugating everything to a scientific reading of the territory. In this logic, starting from a systemic reading of the territory, everything becomes naturalised, and the socially just city is a logical outcome of ecologically sound planning. Landscape design should look beyond this rationale. Quoting Georg Hausladen, we therefore argue that "ecosystem theory can serve as a basis for the production of so-called instrumental knowledge, however, for landscape architecture, such knowledge is useful but utterly not sufficient because architecture must go beyond science and technology" (Hausladen, 2014, p. 127). Designing the metropolitan landscapes of Brussels must go beyond a mere rhetorical use of the social in its projects, so that landscapes can become the groundwork for an urbanism that dares to question its socio-economical context, and not only its ecological potential (Swyngedouw & Kaika, 2014a, 2014b).

#### References

Agence Ter. (2016). Le relief de la vallée du Molenbeek comme base d'un parc productif/Het reliëf van de Molenbeekvallei als basis voor een productief park. In J. Mabilde, E. Vanempten, S. Devoldere, & C. Oosterlynck (Eds.), *Metropolitan Landscapes. Espace ouvert, base de développement urbain* (pp. 94–111). Brussels: Vlaams Bouwmeester.

Amin, A. (2014). Lively Infrastructure. Theory, Culture & Society, 31(7-8), 137-161.

Bélanger, P. (2013). Infrastructural ecologies: Fluid, biotic, contingent. In P. Bélanger (Ed.), Landscape Infrastructure. Case Studies by SWA. (Second and Revised Edition) (pp. 20–27). Basel, Switzerland: Birkhaüser Verlag.

Bélanger, P. (2016). Landscape as Infrastructure: A Base Primer. New York, NY: Routledge.

Borret, K. (2017). Personal Interview, July 6. Brussels

Brasseur, N. (1979). An Urban Renovation Experience in the Center of Brussels: The Manhattan Plan. In D. Appleyard (Ed.), *The Conservation of European Cities* (pp. 98–103). Cambridge, MA: MIT Press.

Bureau Bas Smets, & List. (2016). Quel "metropolitan landscape" pour Bruxelles et sa périphérie? Welk "metropolitan landscape" voor Brussel en de rand? In J. Mabilde, E. Vanempten, S. Devoldere, & C. Oosterlynck (Eds.), Metropolitan Landscapes. Espace ouvert, base de développement urbain (pp. 42–57). Brussels: Vlaams Bouwmeester.

Corijn, E., Loeckx, A., & Persyn, F. (2016). Metropolitan landscapes: 9+1 maal anders kijken, een kritische commentaar door de externe experten/Metropolitan landscapes: regarder autrement 9+1 fois, un commentaire critique par les experts externe. In J. Mabilde, E. Vanempten, S. Devoldere, & C. Oosterlynck (Eds.), Metropolitan Landscapes. Espace ouvert, base de développement urbain (pp. 171–187). Brussels: Vlaams Bouwmeester.

Czechowski, D., Hauck, T., & Hausladen, G. (2014). Revising green infrastructure: Concepts between nature and design. Boca Raton, FL: CRC Press

Dejemeppe, P., & Périlleux, B. (2012). Brussels 2040. Brussels: Brussels Hoofdstedelijk Gewest.

Demey, T. (1992a). Bruxelles: chronique d'une capitale en chantier. 2: De l'Expo '58 au siège de la CEE. Bruxelles: Legrain.

Demey, T. (1992b). La Ville aux Cent Comites d'Habitants. In T. Demey (Ed.), Bruxelles: chronique d'une capitale en chantier. 2: De l'Expo '58 au siège de la CEE (pp. 281–321). Bruxelles: Legrain.

Dikeç, M., & Swyngedouw, E. (2017). Theorizing the Politicizing City. International Journal of Urban and Regional Research, 289374(289374), 2–18. https://doi.org/10.1111/1468-2427.12388

Doucet, I. (2015). The practice turn in architecture: Brussels after 1968. Surrey, England: Ashgate.

Hausladen, G. (2014). Problems of the Odumian Theory of Ecosystems. In D. Czechowski, T. Hauck, & G. Hausladen (Eds.), Revising Green Infrostructure (p. 449). Boca Raton, FL: CRC Press.

Latour, B., & Weibel, P. (2005). Making things public: atmospheres of democracy. Cambridge & London: MIT Press.

Leloutre, G. (2009). Revisiting the modern project for Brussel: an observatory for metropolisation. In B. De Meulder, M. Ryckewaert, & K. Shannon (Eds.), 5th international PhD seminar Urbanism & Urbanization: Transcending the discipline. Urbanism & urbanization as receptors of multiple practices, discourses and realities (pp. 173–192). Leuven.

LOLA Landscape Architects, Floris Alkemade, & Grontmij. (2016). L'infrastructure en tant que paysage dans le nord de la zone canal/Infrastructur als landschap in de noordelijke kanaalzone. In J. Mabilde, E. Vanempten, S. Devoldere, & C. Oosterlynck (Eds.), Metropolitan Landscapes. Espace ouvert, base de développement urbain (pp. 112–131). Brussels: Vlaams Bouwmeester.

Mabilde, J., & Vanempten, E. (2016). Le paysage métropolitain en tant que coalition. Metropolitaan landschap als coalitie. In J. Mabilde, E. Vanempten, S. Devoldere, & C. Oosterlynck (Eds.), *Metropolitan Landscapes. Espace ouvert, base de développement urbain* (pp. 10–16). Brussels: Vlaams Bouwmeester.

Marcinkoski, C. (2014). The City That Never Was: Engaging Speculative Urbanization through the Logics of Landscape. In Revising Green Infrastructure: Concepts Between Nature and Design (pp. 47–70). Boca Raton, FL: CRC Press.

McLeod, M. (1987). On Criticism. Places, 4(1), 4-6.

Metzger, J., Allmendinger, P., & Oosterlynck, S. (2015). Planning against the political. democratic deficits in European territorial governance. New York, NY: Routledge.

Picon, A., & Thom, M. (1992). French architects and engineers in the age of enlightenment. Cambridge, MA: Cambridge University Press. State, P. F. (2004). Brusselization. In Historical Dictionary of Brussels (Historical, pp. 51–52). Lanham, Toronto, Oxford: The Scarecrow Press. Swyngedouw, E., & Baeten, G. (2001). Scaling the City: The Political Economy of "Glocal" Development - Brussels' Conundrum. European

Swyngedouw, E., & Kaika, M. (2014a). Radical urban political-ecological imaginaries: Planetary urbanization and politicizing nature. *Dérive*, 55, 15–20.

Swyngedouw, E., & Kaika, M. (2014b). Urban Political Ecology. Great Promises, Deadlock... and New Beginnings? *Documents d'Analisi Geografica*, 60(3), 459–481. https://doi.org/10.5565/rev/dag.155

Tonkiss, F. (2013). Cities by design: the social life of urban form. Cambridge & Malden MA: Polity Press.

Planning Studies, 9(7), 827-849. https://doi.org/10.1080/09654310120079797

Waldheim, C. (2006). The Landscape Urbanism Reader. New York, NY: Princeton Architectural Press.

Waldheim, C. (2016). Landscape as urbanism: A general theory. Princeton and Oxford: Princeton University Press.

WIT Architecten, OSA Onderzoeksgroep, Annabelle Blin, & Philip Stessens. (2016). Le paysage aquatique du sud de la vallée de la Senne/ Het waterlandschap van de zuidelijke Zennevallei. In J. Mabilde, E. Vanempten, S. Devoldere, & C. Oosterlynck (Eds.), Metropolitan Landscapes. Espace ouvert, base de développement urbain (pp. 58–77). Brussels: Vlaams Bouwmeester.

# Small matters:

# Explaining the city through a medieval wall

### Tadej Bevk

University of Ljubljana Ljubljana, Slovenia

### **Abstract**

In the city of Kranj, Slovenia, three former medieval defence towers were redesigned as public spaces. The three interventions are positioned and discussed within the frame of small-scale interventions, specifically as urban acupuncture. First, small-scale interventions are looked at as an approach to designing open space, and parallels with landscape approach are presented. Second, the Three Towers project is discussed, focussing on the relationship it establishes between the city and its context. As the city is built on top of a conglomerate canyon, the interventions open up the slopes and offer distinct views of the surrounding landscape. In this way, they rediscover and emphasise the relationships between the existing contextual amenities and the city itself. The experience of the site grounds the visitor in a physical and historical context and thus fulfils the mental map one might create of Kranj. In this way, the three small interventions influence the perception of the whole city.

### Keywords

small scale interventions; urban acupuncture; urban design; Slovenia

## Introduction

The role of the city and its relationship with the surrounding landscape has been constantly evolving throughout the history. Landscape, once seen as lawless wilderness to be walled out is, nowadays, as cities grew extensively into metropolitan regions, seen as an amenity providing various services such as food, leisure, water retention, climatic benefits etc. The once divided city and landscape are understood as integral parts of a common system. Seeking connections and facilitating flows between the two is among the main objectives of contemporary urban developments. However, while the city-landscape relationship was evolving, spatial organization and built structures often remained the same. Medieval European cities grew fast and far beyond their fortification structures, crawling into the landscape. Old city centres were thus distanced from the landscape while dense urban fabric often hindered possibilities to develop new green spaces. This is somewhat ironic, considering landscape was usually detrimental in siting of medieval cities.

In such a setting, dense cities need to resort to specific design strategies, one of which is small-scale interventions (Marzi & Ancona, 2014). An example of such a small-scale design approach from Kranj, Slovenia, will be looked at in this article through a critical lens in order to explore how, in a dense medieval city, awareness of surrounding landscape and site's history can ground the city within its context and explain spatial relationships to the visitors. Critique as a mode of thinking about design, incorporating both theory-based exploration of projects and evaluation through transparent, albeit subjective, argumentation, is used to elucidate and reflect upon a given project (van Dooren, 2006). It seeks to answer if, how, and why a project is a good project in a certain spatial and temporal context. To this end, small-scale intervention as a design category will be discussed first to establish a framework through which a specific project, supported by onsite observations conducted in the past two years, will be described and evaluated.

# Small interventions

Whether small-scale intervention is its own design category is arguable. It appears difficult to conceptualise small interventions - what does the "smallness" refer to? Though the idea is often mentioned (see Topos issue 79 from 2012 dedicated to the theme) discussion seldom dives into its specifics. However, there are some approaches that set small interventions as their main tool of change. Tactical urbanism, for example, emphasises the process - small bottom-up initiatives trigger urban change independently of formal planning institutions (Silva, 2016). In a critique of ubiquitous modernist urbanism, Rowe and Koetter (1986) introduced the notion of pocket utopias as places evoking different narratives and design themes, increasing plurality and diversity of the city. Employing principles of a traditional Chinese method of healing, urban acupuncture is also a frequently used term. It targets and treats specific strategic points which then revitalise the broader area (Houghton, Hee-jeong Choi, & Lugmayr, 2015a), focusing on the relationship between input, which is to be as small as possible, and its effect, which is to be great, implying that definition of small intervention is not related solely to physical scale, but rather to design intentions and their ramifications. Although many practical examples of the concept can be found throughout the world, attention was seldom given to the principle by academia (Houghton, Foth, & Miller, 2015b; Unt & Bell, 2014). However the systemic approach advocated by urban acupuncture is akin to landscape thinking (Harsema, 2011). Going beyond the physical borders of the site to be designed is the main motivation of urban acupuncture, and design decisions are made primarily to follow this objective. Understanding the broader context and circumstances within which we design allows us to determine certain hot-spots or strategic points that influence other areas.

Urban acupuncture was successfully employed to make the Brazilian city of Curitiba more environmentally friendly and walkable, and to improve microclimatic conditions and fight poverty (Rosario, 2016). The key actor in the transformation, architect and former mayor of the city, Jaime Lerner, argues that the imperative of a successful urban acupuncture is preservation and restoration of cultural identity of a place or community (Lerner, 2014, p. 9). Sensitivity to the context and local culture is, in general, stressed as paramount to urban acupuncture and seems to be the principle most authors address as vital for a successful intervention (Marzi & Ancona, 2004; Houghton et al. 2015a; Shidan& Qian, 2011). While such general principles of urban acupuncture – define strategic points and respond appropriately – are widely agreed upon, the more concrete principles of the concept seem to differ across practitioners and theorists. Swift interventions, social inclusiveness, and de-automobilisation are the recurring themes stressed by Lerner (2014). While some propose activist-like actions – being in the area and intuitively coming to intervention ideas (Elkjaer, 2010), others advocate the use of information-communication technologies to collect intervention suggestions from local community (Houghton et al., 2015b) or even to compute the acupuncture points using neural networks (Tortosa, Vicent, Zamora, & Oliver 2010).

While no general theory on small-scale intervention or urban acupuncture has yet emerged, it is possible to place it within other existing planning theories, for example the incremental planning. Charles Lindbloom (1959) described the theory as "muddling through" alluding to gradual steps toward an objective instead of one big comprehensive change. Following incrementalism, the complex reality of spatial problems is best tackled with a series of small, practical, and easily manageable solutions over a period of time. This allows for experimentation with different ideas and makes quick adjustments possible. Each increment is, in essence, a small scale intervention. The small-scale approach is also akin to the theory of everyday urbanism, which deals with the intermittent space between the home, the institution, and the workplace – seeking to intervene in the often-marginalised spaces (Crawford, Speaks, & Mehrotra, 2005; Kelbaugh, 2000).

Looking at small-scale projects can also offer some reflection in the wake of western world's (financial) crisis, when cranes are again beginning to fill the city skylines (EUROSTAT, 2016). Small-scale interventions such as urban acupuncture seem attractive in the times of uncertainty as they mostly require little investment, but still take into account the long-term goals (Pasha, 2015). While the theory on the topic is far from comprehensive, small scale intervention appears to be a convenient design philosophy when dealing with dense historic urban fabric and limited spatial options. Such an example will be looked at next to explore how this can be achieved: 3 stolpi in Kranj, Slovenia.

### Basic info

- Original operation name: 3 stolpi
- Location: Kranj, Slovenia
- Contracting authority: Mestna obcina Kranj (City municipality Kranj)
- Offices/authors: LUZ d.d., / Karla Jankovic, Kranjc Urška, Trbižan Gaja, Tina Cotic

Projecta d.o.o (statics)

Klimaterm, d.o.o. (electro installations) Irgo Consulting, d.o.o. (geomechanics)

Cost: 1.957.900.29 €

Total surface area: 415 m²
 Construction date: 2010 - 2011

Date of study: mid 2016

# The Three Towers

In a general wish to renovate the old city centre, the municipality of Kranj, Slovenia (Fig. 1), decided to renovate areas of three former defence towers, two of which had already collapsed. The project was done at a time when urban development was increasingly focusing on open public space. While the initiative was part of a broader scheme to renovate the city, it is noteworthy that the city authorities recognised the importance of these three specific areas and dedicated special attention to them. For defensive purposes, the medieval city is set on top of a crumbling conglomerate pier surrounded by canyons at the confluence of two rivers below the tip of the pier (Fig. 2). The city used to be guarded by a wall and a series of defence towers (Fig. 3). As defensive functions of the wall and its towers became redundant, the area around them was mostly occupied by private gardens, blocking public access to the city's edge, so it was the main objective of the design to convert the area into public space. The fact that sites were spatially disconnected and relatively small (Fig. 4) posed a question of how to create a coherent urban gesture while respecting the particularities of each site.



FIGURE 1 Location of Kranj. The city is located in northwest region of Slovenia and is its administrative centre.



FIGURE 2 Topography of Kranj. The city is built on a conglomerate pier above confluence of two rivers, with steep slopes on both sides. This combined with dense urban structure leaves little space for open public space development. (Digital elevation model by GURS, 2016: Ortophoto by Atlas okolia, 2016)

The first tower, dubbed Pungart, is located right at the tip of the conglomerate pier. In Figure 4, it is marked by the lower red dot. The site is at the end of the main city promenade. The designers' solution seems simple, but the experience it can offer is quite complex. A circular weathered steel platform is placed along the remains of the medieval wall, extending over the edge of the slope (Fig. 5 and Fig. 6) where the former defence tower used to be. The platform is perforated and visitors can see through it. In this way the platform not only marks the location of the former defence tower, but also expresses the emptiness left by the collapse of the tower. It is not its intention to recreate the tower or its parts, but to evoke a memory, expressed by the emptiness (Fig. 7 and Fig. 8). Preservation of memory ensures that places can

be associated with history and maintains the historical continuity (Karamanea, 2015: 119). The scrutinised design, however, is bold and different enough to differentiate it from historical substance. Designs that exceed mere conservation and formal concerns add another layer to the palimpsest of the city (Heyde, 2015). The design's reference to history is further highlighted by the side sections of the platform being made of walk-on glass, thus revealing the remains of the medieval wall.

Besides the historical narrative, the design also employs the principle of borrowed landscape i.e. incorporating the surrounding landscape into the design (Kuitert, 2015). By opening the city's edge with the extended platform, long vistas are offered to the visitors (Fig. 8). The contextual entities and relations between them become the substance of the design. The suspended platform becomes a focal point, where the relationships can be most aptly understood. Due to dense city structure, this is one of the rare spots where city's edge opens up and one can actually observe the slopes of the conglomerate canyon and the river in it. The design thus grounds the user in the context of the city and explains it. A sort of revelation happens: *This is where you stand; this is where the city is is* the statement of the design.





FIGURE 3 Kranj in 1649 (top) and today (bottom). The medieval wall and its defence towers are mostly gone, with two exceptions, one on each side of the lower image. (top drawing by Zeiller, 2005; bottom photography by Luka Dakskobler, arhiv Zavoda za turizem in kulturo Kranj, 2016).

Such an experience can be possible because of the small scale of the intervention, as it condenses the experience, as opposed to spreading it out, as might happen if, for example, a design were done over a broader area. The platform is a pivotal point – not only the end of the main city axis, where one has to turn around and go back, but also a place that helps explain the city's context by exposing key landscape features in a multisensory way. The depth of the canyon is exposed by perforated flooring, the rivers by the sound of the rapids, the history by different materials (weathered steel, stone). By involving the whole body in the perception, the knowledge about the city and the landscape can become embodied, instead of remaining just a picture in one's mind. The "smallness" of the intervention allows all the stimuli to be perceived

simultaneously. In frequent visits to observe the site, it was noticed that when people walk to the platform they tend to stop in silence and gaze into the canyon and the landscape, an effect most obviously seen in children who after playfully running onto the platform fall silent.



FIGURE 4 Locations of interventions. The interventions are located on the edge of the city where the medieval fortifications used to be. Remnants of these can still be seen at these places. (Plan by LUZ d.d., 2011).

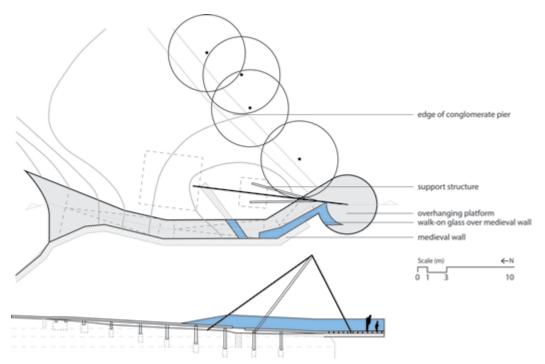


FIGURE 5 Plan and section of the platform. The approach to the platform runs along the remnants of the medieval wall and then over the edge of the slope, where a tower used to be until it crumbeled into the gorge below. While the circular form references the tower's floorplan, the lightness of the overhanging construction, combined with a perforated weathered steel surface, emphasises the emptiness left by the collapse, and offers extensive views of the surrounding landscape. (Plan by LUZ d.d., 2011)



FIGURE 6 Render of the viewing platform. The contrast in materials clearly differentiate the old and the new, adding a contemporary layer to the city. (Render by LUZ d.d., 2011).

The second tower, located at the western edge of the city, employs similar design principles. The site, Vovkov garden, is framed by a 13<sup>th</sup> century mansion, its wall, and the former tower. The enclosed setting creates an intimate ambience, reinforced by the stable tripartite design of the garden (Fig. 9).

A grass meadow with a line-of-beauty kind of path connects the paved mansion courtyard to a gravel surface surrounding the remains of the tower. The path runs along a former defence bunker, which now serves as a lookout hill (see Figure 9, on the right) from where views of the surroundings can be enjoyed, offering a similar but less intense experience to the one described above. On top of the remains of the tower a half-tube was placed, doubling as a small stage and thus providing a new cultural venue for the city (Fig. 10). The new additions are again made of weathered steel, establishing a clear link between this intervention and the one described above. Even though both designs use the same design language, they create different atmospheres and convey different narratives. The first - the platform - is a logical end to the city promenade. With a nearby playground, the place is lively. On a sunny day, the air is full of children's' laughter, parents' chitchat and the city's buzz. Even on a cloudy or rainy day people stroll to the end of the platform to enjoy the views of a stormy landscape. At the castle's garden the ambience is more serene; there is a peaceful feel to the place, separated from the mumbo jumbo of the city, quite clearly signalled by the walled-in premises. The area seems to be appreciated by the residents, as people sitting and chatting on the benches and youth hanging around is a familiar sight (Fig. 10 and Fig. 11). While the ambience of the sites differ, each is achieved by (re)establishing relationships between existing contextual amenities, which is also the key characteristic of the small intervention approach. It shows how a seemingly modest design gesture can positively influence the perception of a certain place.

The preserved third tower (Fig. 12) was retrofitted to create an exhibition room and a small venue for performances. This intervention is confined to the interior and there is no use of weathered steel, making it difficult to connect this intervention to the other two. When observed from a distance, the renewed tower creates a landmark and defines the rhythm of city silhouette, but other than that, it offers little on the urban scale. Linking it to the other two interventions, possibly by utilising the same materials, could have introduced a specific rhythm to the street, connecting all three and providing a coherent theme along the city's edge.



FIGURE 7 View of the platform from below. The platform extends over the edge of the slope, commemorating the former defence tower.



FIGURE 8 The view from the platform. The perforated surface and walk-on glass expose the medieval wall and the height of the slopes. This is one of the rare places where the river gorge and the height difference between the city and its surroundings can be observed. By also offering long vistas it is a key point for understanding the city's context. (photography by Luka Dakskobler, arhiv Zavoda za turizem in kulturo Kranj, 2016).

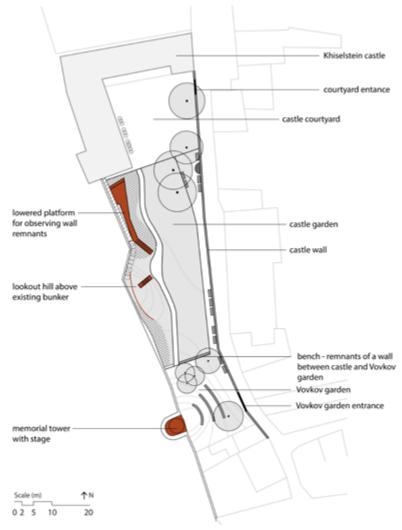


FIGURE 9 Plan of intervention at castle Khislstein. Starting at the north, the intervention is divided on three parts: the castle's courtyard; the castle's garden with a meadow; and Vovkov garden, where another defence tower used to stand. This part is now designed as a small stage providing a venue for events. (plan by LUZ d.d., 2011)



FIGURE 10 Vovkov garden. The weathered steel structure marks the location of the former tower and can also be used for performances. The material is a clear reference to the first intervention – the overhanging platform. Views of the surroundings can, again, be appreciated at this location. (photography by Luka Dakskobler, arhiv Zavoda za turizem in kulturo Kranj, 2016).

## Discussion and conclusion

When thinking about urban acupuncture, the question about the relationship between the site and its surroundings comes to mind. The scrutinised project exploits its specific location on the fringe of the medieval city and the landscape. It is respectful of the history while also adding another layer. By emphasising the edge, a clear relationship is established between the city and its context with the design site as a mediator from where the relationship can be best understood. The edge of the city is not really an edge anymore, but a strategic point in the city-landscape continuum. Creating continuity and filling urban voids is one of the principal tasks of urban acupuncture (Lerner, 2014). At the same time, the design is clearly different from the existing urban fabric. Such differentiation creates clear identities for these small places, while also imposing a rhythm to the streetscape and thus adding a new contemporary layer to the city. Amongst a recent increase in urban renovations it is refreshing to stumble upon a project showing how such a task can achieve more than just replacing pavements and "beautifying" the city. The main far-reaching effect of the design is the fulfilment of the mental image of Kranj, exposing the city's key characteristics and contributing to a clear collective image (Fig. 13), while some shopkeepers also report increased numbers of flâneurs since the project's implementation<sup>1</sup>. Increased visits to the sites also generates new flows of people and amplifies weak ones, which is especially important in times when shopping malls continue to rise on the outskirts of cities, pulling residents and businesses out of old centres. The three interventions further introduce three new environments to the city, increasing the diversity of public space. They offer playful, calm, and cultural venues, and in this manner create pocket utopias, which can allow different ideas of living to manifest themselves, increasing democracy and diversity of the city (Rowe & Koetter, 1986).

Urban acupuncture and small-scale interventions alike can offer new possibilities to densely built cities with little space for new development. Instead of going outside of the city limits and expanding further into the surrounding land, small-scale intervention can contribute to revitalising existing sites. It can bring new meanings to places or rediscover forgotten ones. With minimal investment, it could also be easier to try new, as yet untested ideas that can provide the city with a new energy. A plethora of small-scale interventions can make cities more democratic, as each project can be targeted towards a specific group, ensuring an abundance of different environments for different people to enjoy. As shown in the example, small interventions can revitalise a marginalised, left-over space and turn it into a well-functioning public place. Small can matter.

The author spoke with two shopkeepers and two waiters in two different cafés. They all reported an increase of people on the streets of the city centre since the renovation took place. However, according to shopkeepers, number of people buying in their shops did not increase in tandem.



FIGURE 11 View towards castle wall. People sitting and enjoying the peace and quiet is a familiar sight at Vovkov garden. The wall behind the benches creates a division between the serenity of the garden and bustle of the city.



FIGURE 12 The preserved and refitted tower. The third tower is one of those that have not collapsed. It hosts performances and art exhibitions. Although there is no use of weathered steel to directly link with the other two interventions, the tower with its recognisable roof is a landmark in the silhouette of the city. (photography by Luka Dakskobler, arhiv Zavoda za turizem in kulturo Kranj, 2016).

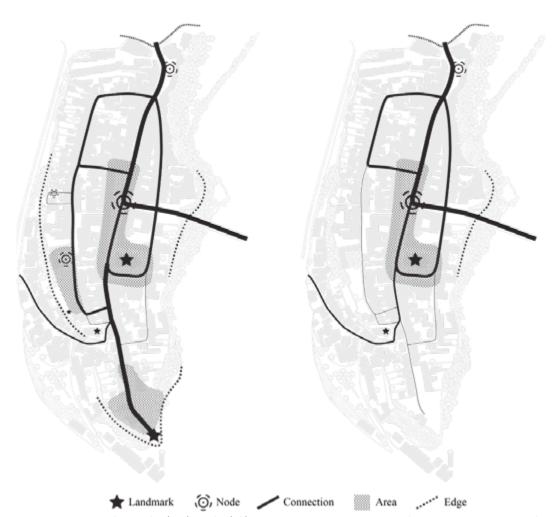


FIGURE 13 Mental map of Kranj before (right) and after (left) the interventions. All three interventions fill some voids in the perception of the city. They create a distinct ending to the main city promenade, help understand the context of the city, and provide different venues for play, contemplation, and cultural activites.

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#### References

Crawford, M., Speaks, M., & Mehrotra, R. (2005). Everyday urbanism: Margaret Crawford vs. Michael Speaks / edited by Rahul Mehrotra.

Ann Arbor, Mich.: University of Michigan, A. Alfred Taubman College of Architecture; New York, NY: Distributed Arts Press, c2005.

Dooren, N. van. (2006). Thoughts on the relevance of landscape architecture: The Berlin Tilla-Durieux-Park and Spreebogenpark examined in the context of a unifying capital. *Journal of Landscape Architecture*, 1(2), 54–65. https://doi.org/10.1080/18626033.2006.9723373

Elkjaer, L. (2010). Laurits Elkjær - Marco Casagrande: Urban Acupuncture. The Royal Danish Academy of Fine Arts - School of Architecture in Copenhagen. Retrieved from: http://casagrandetext.blogspot.si/2010/04/laurits-elkjr-marco-casagrande-urban.html

Eurostat. (2016). Eurostatistics. Data for short-term economic analysis. Luxemburg: Publications Office of the European Union.

Harsema, H. (2011). Acpupunctuur. 'Scape, 2011: 1, (pp. 14-16).
Heyde, S. (2015). History as a source for innovation in landscape architecture: the First World War landscapes in Flanders. Studies in the

History of Gardens & Designed Landscapes, 2015: 35, 3, (pp. 183-197).

Houghton, K., Foth, M. & Miller, E. (2015b). Urban Acupuncture: Hybrid Social and Technological Practices for Hyperlocal Placemaking. *Journal of Urban Technology*, 2015: 22, 3, (pp. 3-19).

Houghton, K., Hee-jeong Choi, J. & Lugmayr, A. (2015a). From the Guest Editors: Urban Acupuncture. *Journal of Urban Technology*, 2015: 22, 3, (pp. 1-2).

Karamanea, P. (2015). Landscape, memory and contemporary design. Craft-Design Enquiry, 2015: 7, (pp. 113-134).

Kelbaugh, D. (2000). Three Paradigms: New Urbanism, Everyday Urbanism, Post Urbanism—An Excerpt From The Essential COMMON PLACE. Bulletin of Science, Technology & Society, 20(4), 285–289. https://doi.org/10.1177/027046760002000406

Kuitert, W. (2015). Borrowing scenery and the landscape that lends–the final chapter of Yuanye. Journal of Landscape Architecture, 10(2), 32-43. https://doi.org/10.1080/18626033.2015.1058570

Lerner, J. (2014). Urban Acupuncture: Celebrating Priciples of Change that Enrich City Life. London, England: Island Press.

Lindblom, C. E. (1959). The Science of 'Muddling Through'. Public Administration Review, 1959: 19, 2, (pp. 79-88).

Marzi, M. & Ancona, N. (2004, September). *Urban acupuncture, a proposal for the renewal of Milan's urban ring road, Milan, Italy.* Paper presented at the 40<sup>th</sup> ISoCaRP Congress, Geneva, Switzerland. Article retrieved online from http://www.isocarp.net/Data/case\_studies/553.pdf

Mestna obcina Kranj. (not dated). 3 stolp: Predstavitev ureditve obrambnega sistema Kranja (Mestna obcina Kranj) [3 Towers: Introduction to the design of defense system of Kranj (Municipality of Kranj)] [Brochure] http://www.luz.si/sites/default/files/zlozenka\_3stolpi\_zadnia.pdf

Pasha, A. A. (2015). Punctured Urbanism. Journal of Civil Engineering and Architectural Research, 2015: 2, 9, (pp. 891-897).

Rowe, C. & Koetter, F. (1986). Collage city. Cambridge, MA: MIT Press.

Shidan, C. & Qian, S. (2011). Urban Acupuncture: strategy in the Urban Renewal. *International Conference on Electric Technology and Civil Engineering* (ICETCE), 2011 (pp. 1859-1862).

Silva, P. (2016). Tactical urbanism: Towards an evolutionary cities' approach?. Environment and Planning, 2016: 43, 6, (pp. 1040-1051).

Tortosa, L., Vicent, J.F., Zamora, A. & Oliver, J.L. (2010). A neutral network model to develop urban acupuncture. In: Setchi, R., Jordanov, I., Howlett, R.J. & Jain, L.C. (eds.). Knowledge-based and Intelligent Information and Engineering Systems. 14th International Conference, KES 2010 Cardiff.. Berlin, Germany: Springer-Verlag 2010 (31–40).

Unt, A. L. & Bell, S. (2014). The impact of small-scale design interventions on the behaviour patterns of the users of an urban wasteland. *Urban Forestry & Urban Greening*, 2014: 13, 1, (pp. 121-135).

# Contingency, debate, and popuper up 'hygge' at *Valby Pavilion:*

Situating temporary public urban settings in design critique

### Anne Margrethe Wagner

Assistant professor, Architect MAA
University of Copenhagen
Division of Landscape Architecture and Planning/IGN
Copenhagen, Denmark

### **Abstract**

Public spaces emerge through a diverse field of practices and events that combine to make space and create meaning. In today's design and planning practice, temporary interventions play an increasing role in the creation and rethinking of public space 'on the go'. In such transitional interventions, 'the project' is both physically and symbolically created through entangled actions of design with somewhat non-designed and informal practices and DIY aesthetics, as well as various narratives and modes of communication. Temporary public spaces thereby challenge established ways of evaluating and critiquing spatial settings as determined design solutions or 'classic' architectural works-in terms of what they do and how they can be qualitatively understood as part of contemporary place-making approaches. This article forms a critique of the project Valby Pavilion, a temporary space in Valby (Copenhagen, Denmark) that serves as a test setup for the future use of its highly contested site. Through a juxtaposition of selected theoretical perspectives from art and architectural criticism to relational site thinking and performance studies, the discussion of the project elaborates upon which aspects require detailed attention when performing a critique of temporary urban public spaces. The article concludes that critical examination of a number of issues (intentionality and origin, the role of spatial adaptions, appropriation, events and situated public debate, dominant planning paradigms, and the characteristic aesthetics of the informal) helps to fruitfully locate public settings initiated under the 'temporary project' label within design and architectural critique.

### Keywords

critique; criticism; temporary urban public space; site understanding; narratives; place-making; performativity

## Situating the Valby Pavilion

Valby Pavilion is a simple temporary wooden pavilion structure located on a small plot along the main street of Copenhagen's Valby district. Valby Pavilion was installed in the summer of 2013 as part of a site activation strategy through a collaboration between a local committee¹ in Valby and a research team that included the author of this paper.² The temporary setting aimed to activate the vacant site and create a frame for use and debate while the fate of the municipally-owned plot of land was discussed by politicians at city hall. The activation was initiated by a series of installations (smaller installations were later added around the pavilion) to draw attention to the site, and as an initial frame within which the local committee could facilitate new use of the site on a temporary basis. The local committee was interested in relocating the local library to this plot, and it was hoped that the idea of a new cultural facility could be tested through the site's temporary use.

The plot itself, Smedestræde 2, is in an attractive location in the centre of the district. It provides a unique view down the street, which has a characteristic historic village structure. Despite its direct connection to busy surroundings, the plot's setting is intimate, featuring hedges and wooden fences, partially overgrown by intertwined plants and trees. A grassy gravel surface increases the plot's garden character and the sense of wilderness encroaching upon the city. As is typical of sites formerly used for small-scale industry, the plot itself consists of a bricolage of buildings both large and small, a paved backyard, and a gravel lot facing the main street. The remains of a car dealership and associated workshop buildings had lain dormant for some years until the need for a new location for the library focused attention upon the site.

The local committee and our research team collaborated on preparing an initial site 'opening' and frame for activation. More projects and uses were added to the site over time, combining with the already-overgrown gravel surface to narrate the plot as a garden space. The plot was used for activities such as small markets and sustainable living seminars. Other actors added elements to the site, including book exchange cabinets, a seed library, planting beds, and play equipment. In summer 2015, a pop-up bar and café, 'TH. Bar', was permitted to begin operations at the site. Slowly, and unexpectedly, the open area in front of the crumbling buildings, with their bolted doors and windows, developed into a popular hang-out space. The bright red container bar in the front yard provided a Biergarten ambience that was quickly embraced by local residents, leading to new traditions in the form of game evenings, communal dinners, and concerts, coordinated by the bar and the local community.

Ultimately, the future of the site was still undetermined. Budget meetings in the municipal council in late 2015 did not result in any final decision. For the third year in a row, the site's uncertain status was extended, and Smedestræde 2's future use remained open to negotiation. In spring 2016, the council finally reached a decision: Smedestræde 2 would not become the site of a cultural facility. At the same time, however, with increasing frequency, the plot was being appropriated by the community and transformed into a social space and cultural area, facilitated by the pop-up bar.



FIGURE 1 Location of the site and Valby district in Copenhagen, Denmark



FIGURE 2 The Valby Pavilion site on the corner of Smedestræde and Valby Langgade. The aerial view shows the layout with the pavilion and pop-up bar in front of the vacant buildings (Copyright 2014 by Copenhagen Municipality)



FIGURE 3



FIGURE 5

The setup around the pavilion and the temporary installations



FIGURE 4



FIGURE 6

## 'Unfinished and not good enough'

In spring 2016, as Valby was preparing for a third, and potentially final, lively summer with TH. Bar's container bar at the pavilion, the local committee in Valby called for nominations of buildings and urban design projects for their annual local architectural award. The rising appreciation of Valby Pavilion site and the pop-up bar as a popular public space in the district, the complex nature of the decision-making process, and curiosity regarding how something like an architectural award would cope with such a project led our team to nominate Valby Pavilion. The nomination argued for the project's value as a collective and appreciated cultural and social space, with a green oasis character. Although a few other projects, such as building renovations and squares, were nominated as well, the award committee decided not to give the prize to any project that year. Perhaps the quirky and ambiguous atmosphere of the pavilion did not serve as an example of traditional 'good architecture'? Had Valby Pavilion actually won, it might also have proved difficult to find a permanent spot in the project's uncertain temporary setting to place the engraved award plate as well as to name the project's 'architect' and 'client'. Furthermore, the award committee put forward two arguments: that it could not consider projects that were 'unfinished', and that none of the nominated projects were 'good enough'.<sup>3</sup>

Whether Valby Pavilion is worthy of an architectural award is not the significant point here. Instead, it is interesting to consider the procedure and criteria for the granting of the architectural award and what these say about the appropriate aesthetic and social parameters for undertaking a critical evaluation of an urban phenomenon like Valby Pavilion. This article uses the award committee's statement and associated evaluation criteria as a productive driver to discuss which aspects are important to consider when performing a critique of a temporary public setting.

While the focal point is the specific example in Valby, this discussion relates to a more general increasing interest in temporary-use projects within urban redevelopment. Initiating temporary-use projects is often promoted as a specific transformation strategy and as part of collaborative and exploratory design modes (e.g. Oswalt, Overmeyer, & Misselwitz, 2007; Diedrich, 2013; Wagner, 2016). Such projects are an important part of today's urban landscape. However, their outcomes remain difficult to grasp and evaluate. Discussing this type of space-making under the label of 'criticism' is thus relevant for urban practice as well as for discourse on a wider scale.

# Falling apart and temporary but perfect for watching the sunset

In her essay 'The Architecture of Criticism' (1991), urban design scholar Miriam Gusevich describes how institutionalised formats that evaluate architectural work, such as the 'architectural canon', follow and convey specific selective orderings and definitions of values. These formats—here, I regard the aforementioned architectural award and its criteria as belonging to such evaluative structures—establish a divide between what may be deemed architecture as an elite discipline with certain favourable attributes,

and that which constitutes the rest, i.e. common and ordinary built structures (Gusevich, 1991, p. 8). According to Gusevich, the criteria for evaluating architecture—to decide what deserves to be on a list of good works—primarily refer to factors of "aesthetic merit", represented must fundamentally by the Vitruvian trilogy of *venustas*, *firmitas*, and *utilitas* (firmness, commodity, and delight) (Gusevich, 1991, p. 10), alternatively translated as strength, utility, and beauty. These are simple words, yet they carry complex meanings. Consulting the guidelines for the architectural award in Valby<sup>4</sup>, these factors certainly prove apparent and relatable as a framework for its evaluation of incoming nominations. The guidelines list their main criteria for eligibility as: "beautiful buildings and complexes of high architectural quality", "architectural innovation and a contemporary and modern mode of expression", "a beautiful restoration of an old building taking point of departure in the original architecture", and "a positive contribution to the district, neighbourhood, street, or surroundings".



FIGURE 7 The containers of TH. Bar frame the pavilion that serves as a relaxed stage and seating in front of the crumbling backdrop with smashed windows, bolted doors and graffiti.

Most of the time, the dominant character of the Valby Pavilion site is one of a rather trashy bricolage. The worn-out pavilion itself, with its coloured lanterns, second-hand interior, and pallet furniture; the plant beds and various 'homemade' signs; the DIY swap stations, graffiti art, containers, Biergarten benches, and parasols in front of the deteriorating and empty buildings combine to create an eclectic backyard style. This is an ambience more associated with 'hygge's and an informal community get-together than with good qualitative architecture and specific, well-thought-out urban design solutions. While this setting can nonetheless be one of 'beauty' and 'delight', its references are of a rather contingent, informal, and non-designed nature. Valby Pavilion is a "third place" (Oldenburg, 1989), created more by its appropriation or inhabitation through human presence and its traces of conviviality than it is by wooden beams or other material elements. The criteria of innovation and quest for contemporary and modern expressions are equally difficult to apply to the Valby Pavilion. Much like other recent temporary projects (see e.g. Reynolds, 2015), the DIY character and Berlinian<sup>6</sup> ambience are rather amateurish and nostalgic. While the combination of programmes could be described as 'modern', featuring for instance a pop-up bar and a plant seed and book exchange system, their 'design solutions' are simple and mainstream, uncomplicated, readymade, ad hoc, and to some extent not even particularly well manufactured in terms of craftsmanship. Aspects of innovation could arguably be mentioned in terms of the overall programmatic test setting of the temporary space, but these are difficult to ascribe to anything specifically innovative in the site's physical layout. While good restoration solutions and enhancements of heritage qualities are highlighted in the award guidelines, this criterion is likewise difficult to read directly within the space at Smedestræde 2. The surrounding buildings are in very bad shape, ready for demolition, and the pavilion itself and the additional temporary installations are, due to their 'prolonged' temporary state, similarly being worn down as time passes. This represents a state that is quite the opposite from improvement and renovation of an existing building structure. However, if we consider the aim of the pavilion being to mimic, catalyse, and highlight a discussion of how to deal with the site's heritage, then the project does indeed address heritage on a more symbolic and abstract level, placing the site's history in a new context-without, however, leading to actual renovation.

Valby Pavilion thus confronts several challenges when it comes to meeting the criteria of the award nomination. Perhaps, however, a temporary setting such as this one relinquishes the possibility for this kind of recognition and dissemination because other logics are at stake than those that dominate and are framed by award guidelines of this kind. What other aspects can help us reveal the particularities of a space such as Valby Pavilion? I will explore this further in the following discussions of evaluative criteria of relevance for the contextual and dynamic properties of urban spaces.







FIGURE 8

FIGURE 9 FIGURE 10

The neighbour, Louise, describes the space like this: "To me it is a free space where I can relax with my 'neighbours' and enjoy a green spot in the city that creates a community among locals. The ambience and 'hygge' that spreads among people, in the light of the coloured lanterns, music and candlelight, the homey atmosphere, (no matter if it's a boring Monday or a Saturday evening), under the open sky, the rough look with the beautiful old buildings of Valby in the back—to me this is the heart of Valby, with space for everybody" (Photographs by Louise Lammert, 2017).

There are a number of important aspects in identifying the significance, value, and disvalue of spatial settings that challenge static rules and aesthetic criteria. As Gusevich (1991, p. 10) argues, the historic, social, and cultural context might reveal logics that transgress and challenge, or even oppose, dominant "aesthetics merits". These logics can be of a paradigmatic nature, for instance by challenging good taste and promoting the "cultural values of ugliness" (Gusevich, 1991). Bad taste and ugliness can be correct. This is not a new phenomenon but is a recurring concept in aesthetic theory and philosophy (e.g. Goodman, 1968). Ordinariness, imperfection, disharmony, and their ambiguity can form strong aesthetic stimulations and attractions, represented for instance by the aesthetics of decay in ruinous settings of post-industrial environments (Braae, 2015), where a modern version of the "ruin gaze" and "ruinophilia" is an important aspect of the spatial qualities of "eclectic transitional architecture" (Boym, 2008). As one of the neighbouring residents to Valby Pavilion and a regular customer of TH. Bar says when I ask her about the generally poor state of the built structures at the site: "I find it very *hygqeliq*! It's beautiful. It creates a rough look." <sup>7</sup>

While the traces of decay and the general neglect surrounding Valby Pavilion are not obvious positive qualities, and could even be considered quite problematic in terms of heritage and sustainability, these conditions nevertheless seem to play a paradoxical role in creating the space as a distinct milieu, infusing it with a character that speaks of dereliction and misuse, but also of invitation and liberatory imperfection. This is highlighted by the contrast between the site's overall dysfunctional 'bad shape' and the meticulous care and detailing that can be found in the caretaking of plants, changing decorations, and creative add-ons to the pavilion and the bar setting, including blankets, cushions, and candlelight. Basic functions such as water and toilets are lacking here. However, sitting amongst all this in the pavilion "is a perfect setting for enjoying pink sunsets," as the neighbour says.

The trendy aesthetics of DIY and re-use encompassed by the temporary setting add complexity to the aesthetic parameters that we might find in traditional architecture award guidelines. While it is right that aesthetic criteria is taken seriously, the paradigmatic aspects of culture and the meaning of counterand cross-cultural dynamics affect these criteria. We must thus carefully consider historic and social context when seeking to understand these dynamics (Gusevich, 1991, p. 11). Since the informal, unplanned, and open character of public temporary spaces such as the one in Valby reflect a certain Zeitgeist and trend in urban culture, the corresponding paradigmatic planning and design rationale based upon participatory and exploratory formats form an important background to inquiry and critical examination. A closer look at such uses and discourses might inform the ways in which we can address the final, quite open criteria of the award guidelines: "a positive contribution to the district, neighbourhood, street or surroundings"—first by considering the intentions behind the establishment of Valby Pavilion as a temporary site activation.

# An 'open' frame with and for multiple intentions

Art critic and philosopher Noël Carroll offers us further concepts with which to discuss and perform criticism of artistic products. These prove useful for exploring Valby Pavilion. In his book *On Criticism* (2009), Carroll presents an insightful overview of what he regards as the basis for performing critique of cultural productions. One of his rationales is the "reasoned evaluation" (Carroll, 2009, p. 7), which he considers to be the goal of criticism, requiring a focus on the cultural product in question as an intentional outcome of an artistic act. The "success value" (Carroll, 2009, p. 53) of a given work thus depends on whether one can identify the artist's intentions and evaluate the work relative to these. If we transfer Carroll's concept to a spatial setting, we must investigate the intentions behind the setting's origins and emergence.

What, then, are the intentions behind Valby Pavilion? The pavilion was designed and conceptualised by our research team, in close collaboration with a representative from the local committee. As designers and researchers, we sought to create a temporary physical frame that could facilitate a public debate about the site, its history, and its future, and to support the local committee by creating a space for sharing local discussions and programmatic experiments regarding the proposed cultural facility. The structure was also designed to deliberately mirror the building morphology of the surrounding historical context, thereby addressing the theme of cultural heritage.

"Smedestræde in the old village environment is a very special part of Valby's identity.

A vacant site is a chance for something new to happen. How can cultural heritage and future ideas meet? Throughout the rest of this year, the temporary installation will create a basis for further discussion and idea development: How can this site become a new urban meeting place? The site has been opened up and offers space to stay and relax.

The wooden construction is a terrace, a stage, a culture house, and a dream bed.

A structure that can frame relaxation, performances, meetings, and communities.

As a fictional house that needs to be filled with thoughts and ideas about the future.

The window displays project material about a possible new cultural gathering place on the site.

On the blackboard, everybody is invited to note down their dreams and visions – for this site, for the district, or for life in general.

The project is part of SEEDS, an EU project through which University of Copenhagen and Valby Local Committee work together to test strategies for appropriating and transforming leftover areas in the city through locally based temporary projects." (Text from inauguration poster)

The shared goal was for citizens to be able to play in, collaborate, and enter the development process as soon as the 'pavilion skeleton' had been constructed. As a result, 'the client', you could say, was not a passive receiver but various known (the local committee) and unknown (potential users) active co-players or co-creators, and our intentions as architects, landscape architects, and researchers were thus strongly linked to a specific collaborative setup and the negotiations, changes, and compromises that it entailed.

Significantly, the local committee shared our ambitions, reflecting the overall municipal vision of co-creation and urban experimentation.8 However, although the committee was a municipal organisation, its members held diverse viewpoints and agendas in relation to the project. While the project manager was keen to initiate DIY facilities and environment-focused programmes, some colleagues were more focused on the political goal of building the library, while others were more interested in promoting other local political agendas more generally. As a result, the intentions behind the project were numerous and were coloured by the fact that the project emerged as a combinatory and collaborative setup, involving researchers with design backgrounds, local politicians, grassroots-oriented staff from the local committee's administration, volunteers, and activists. Valby Pavilion was not an independent artistic statement, nor a piece of architecture with a clear brief.

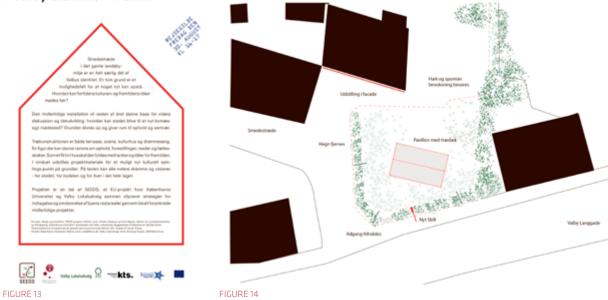




FIGURE 11

The 'homemade' DIY style of the container bar taking over the Valby Pavilion

## I Valby drømmer vi om...



The inauguration poster and layout for the initial temporary interventions

If we consult Carroll's terminology, the "success value" relating to the intentions foregrounds the "reception value", the value that the recipients or audience get from experiencing the produced work (Carroll, 2009, p. 6). While it is possible to ask whether the pavilion meets the divergent initial intentions of both the researchers and the various local agents, the logic of the space is such that its meaning is to be created through use and appropriation – through the open call. This occurs in a manner that is characterised by contingency and unpredictability, difficult to relate to intentional acts and choices. Activation of the site via the installations did indeed occur, and public debate and discussions took place, but the prototyping of ideas for the expected new facility was relatively less prominent. The most evident increased use of the site, however, emerged from the unexpected but successful activation by the private bar owner, resulting in a rising interest in the site's future and even a petition to "save the 'TH. Bar"<sup>9</sup>, "Valby's cosiest gap" (TH. Bar sign)—itself representing public debate and involvement. Whereas official municipal information meetings did not evoke strong public opinion about use of the site, the announcement of the coming closure





FIGURE 15

FIGURE 16

'Save TH. Bar' protest info by local residents at the site advocating for keeping 'Valby's cosiest gap'

of the pop-up gathering point certainly did. Polemically, one might ask whether this popularity and care is not, in fact, related to the "positive contribution to the district, neighbourhood, street or surroundings" requested by the award criteria. Nevertheless, this engagement is also anchored in fear of loss of the specific quality that emerged within Valby Pavilion in its later stages as a lively hang-out spot, an engagement that could potentially cause agitation and discontent upon closure. Not all public awareness is positive.

## A discursive public space

The importance of ongoing shifts in the appropriations, alterations, debates, and negotiations centred around Valby Pavilion points to the necessity of considering another aspect of critical evaluation: the space as a public realm. In her article 'On criticism' (1987), architecture theorist and historian Mary McLeod discusses the ways in which criticism of public space requires specific attention to forces other than initial intentions (1987, p. 5). Architecture, and public space in particular, "necessitates a conception of meaning that is highly ambivalent, continually changing, and closely linked to context" (McLeod, 1987, p. 4). Criticism of public space must deal with a wide range of issues and "cultural and productive relations in their most encompassing sense". This also requires that "influence becomes a more difficult, and inherently more political, issue", McLeod (1987, p. 6) argues. The overall political situation and debate of the site 'in limbo', awaiting its fate, is thus a fundamental condition of Valby Pavilion's trajectory.

With so many agents influencing the space, there are a great number of "architectural practitioners" (Jacobs & Merriman, 2011, p. 211) involved. Valby Pavilion, as a public realm, is occupied by multiple voices. The pavilion is used for play, musical performances, and as bar seating. However, it also works as a 'speaker's corner' for media performances. On several occasions, local politicians have used the setting for publicity,





FIGURE 17

FIGURE 18

The pavilion as a discursive space and symbol for political and cultural agendas (Photograph by Martin Sørensen, 2013, 2014)

with the installation acting as a prop in photo sessions. In this media context, the installation is appropriated and used to perform symbolic gestures of a political character. Appropriation by different actors engages these installations in various practices and agendas, and as a consequence, their meanings shift. They lack a single clear expression and purpose. Valby Pavilion is a rather simple installation, but its strategic or tactical appropriation endows it with symbolic meaning that transcends the site's simple appearance. This is further intensified by the plot's uncertain state and ambiguous ownership. The spatial setting is difficult to label because of the ongoing loading of intentions, yet, it can nevertheless be used to absorb new attentions as a public setting with an 'open call' for appropriation.

In temporary public settings that serve as supportive frames for DIY activities and local engagement, the meaning of appropriation and space production, the "taking and making" of space (Vallance, Dupuis, Thorns, & Edwards ,2017, p. 88) is thus an important factor to draw into a critical examination. It is vital to consider the ways in which a setting becomes public through acts of "occupation, production, management, use, function or service, responsiveness and adaptability" (Vallance et al., 2017, p. 89), revealing both emancipatory spaces of possibility and forces of dominance and control. The various appropriations of Valby Pavilion—from political debate to occupancy by a pop-up bar—underline how the vagueness of the temporary framing can withdraw itself from adhering to certain dominant logics (Vallance et al., 2017, p. 88), and how the DIY format can take on a mediating role (Dahl, 2016).

## Meaning on the move

In the context of critique, it is important to advocate consideration of temporary public spaces as a form of spatial reasoning and as highly discursive settings, transcending their more obvious uses and the properties of their amenities and facilities. The field of performance studies (e.g. Fischer Lichte, 2004; Schechner, 2013; Jalving, 2011), is useful here for critically investigating cross-cultural and processual aspects. Since performance studies investigate *doings and changes*, a frame is created within which the performative and dynamic character of the temporary installation in Valby can be addressed. For instance, arguing for the consideration of objects not as static artefacts but *as a performance*, performance theorist Richard Schechner (2013, p. 3) points out that "the artefact may be relatively stable, but the performances it creates or takes part in can change radically". This is demonstrated in the presentation of the multiple meanings

of the pavilion. The pavilion stays the same, yet it is activated by various narratives and uses. The pavilion gains what architectural historian Stanford Anderson (1987, p. 10) terms a certain "quasi-autonomy", meaning "a degree of independence from precedent, from intentions, from specific patterns of use and meaning; an availability for re-use and reinterpretation".

A perspective on space as practiced and continuously constructed is thus necessary to address site development of a temporary character, like the one in Valby. It is important to consider not only the aforementioned change in use and appropriation but also the diachronic aspects of space, since temporary spaces are situated in the grey zone, in a state of tension between being a means to a certain result and being a goal unto themselves (Samson, 2010, p. 123). The changes and overlays in use and understanding thus require scrutiny. These changes can be rather drastic, due to the highly scenographic use as Valby Pavilion's dominant characteristic. Designer and theorist Andrea Kahn (2005, p. 286) argues that urban sites are in constant change, with "overlay and interplay of multiple realities operating at the same time, on the same place". Whether Valby Pavilion is 'good enough' as a space remains open to question. However, it is definitely not 'finished', and is definitely undergoing change. This is not only because Valby Pavilion is a site development project, but also because the project's temporary condition and transforming state require a critical examination of its coming into being, development, and multiple meanings, rather than of some fixed end result.

## Conclusion and reflection

This article's point of departure was the open question of whether Valby Pavilion could be considered 'good enough' in its 'unfinished', temporary and ambiguous state. This question arises from the generic statement produced by the local architecture award committee to explain why it turned down all project nominations. This paper seeks neither to answer this question with a clear yes or no, nor to overthrow or fully adhere to criteria of this specific award. Instead, the aim has been to use ruminations concerning this statement and its background as an invitation to explore which aspects of temporary public settings require critical and openminded investigation in the context of current design and planning paradigms. First, I show that a critique requires close attention to aesthetic expressions and their cultural references and development, in this case the setting's informal, non-designed, and makeshift character. Second, an investigation of the intentions behind the project reveals multiple coexisting agendas and shows that the programmatic open call for appropriation and DIY action makes it challenging to define whether any single, clear intention has been fulfilled. Third, considering the space as a public setting highlights how, despite their contingency, the appropriations of the space over time play an important role in matters of agency and public debate. Finally, exploring temporary public settings such as Valby Pavilion from a performance perspective and with a relational and dynamic understanding of space making-in which spatial alterations, events, and discourses combine to narrate and create the projectunderlines the need to address temporary public settings diachronically and as a form of ongoing literal and figurative meaning-making.

Just as meaning is cultivated and continuously developed, the object of criticism itself is also an ongoing construction. As Miriam Gusevich (1991, p. 21) argues, criticism is reflective and reactive, drawing upon a specific context; yet it is also a highly editorial and constructive act: "the object of criticism, however, is not simply given. It is reconstructed through discourse". As designers and researchers, we thus have the responsibility to challenge, nuance, and cultivate modes of criticism that can qualify emerging, but difficult to grasp, fields of practice and discourse.

### Notes

- [1] Copenhagen has 12 local committees that serve to connect the citizens of districts with the city council and the municipality's administrative departments. The committee is a municipal unit but also an independent local agent. It consists of representatives of local associations and representatives from the political parties in the Copenhagen City Council. The committee can have an advisory role or limited decision-making authority in specific cases. The organisation is obliged to secure dialogue with citizens and coordinate municipal activities in the district.
- [2] This paper elaborates upon studies from my PhD research and work conducted in our research team involved in the Valby collaboration, through the EU Interreg SEEDS project. The research team consisted of Associate Professor Bettina Lamm, the author as a PhD student, and the research assistants Kristian Skaarup (2013) and Anaïs Lora (2014).
- [3] http://www.valbylokaludvalg.kk.dk/ingen-arkitekturpris-i-aar/
- [4] http://www.valbylokaludvalg.kk.dk/fokusomraader/arkitekturpris/
- [5] The Danish word hygge has recently been added to The Oxford English Dictionary and is here defined as: "hygge: Esp. with reference to Danish culture: a quality of cosiness and comfortable conviviality that engenders a feeling of contentment or well-being; contentment from simple pleasures, such as warmth, food, friends, etc./Esp. with reference to Danish culture: that inspires or engenders feelings of contentment or well-being as from experiencing cosiness, comfort, social harmony, etc.; pleasant, harmonious; cosy, comfortable."
- [6] On multiple occasions, people using the space and commenting on related social media (Valby Pavilion, the TH. Bar, and the local committee all have Facebook and Instagram profiles) refer to the 'Berlin' ambience as characteristic of the site.
- [7] Based on a phone conversation and e-mail correspondence with the neighbour in September 2017.
- [8] Co-creation Copenhagen/Fællesskab I København, Teknik- og Miljøforvaltningen, Københavns Kommune, 2015.
- [9] https://www.skrivunder.net/bevar\_th\_bar, https://www.facebook.com/groups/bevar.th.bar

### References

Anderson, S. (1987). On Criticism. On Criticism. A Symposium on the Criticism of Place. *Places Journal* (Vol. 4, no. 1), pp 10-15. Retrieved from: https://placesjournal.org/assets/legacy/pdfs/on-criticism-mcleod.pdf

Boym, S. (2008). Ruinophilia: Appreciation of Ruins. Atlas of transformation. Retrieved from: http://monumenttotransformation.org/atlas-of-transformation/html/r/ruinophilia/ruinophilia-appreciation-of-ruins-svetlana-boym.html

Braae, E. (2015). Beauty Redeemed - Recycling post-industrial landscapes. Risskov/Basel: Ikaros Press & Birkhäuser.

Carroll, N. (2009). On Criticism. New York, NY: Routledge.

Dahl, C. (2016). Gothenborg's Jublieumsparken 0.5 and Frihamnen: explorations into the aesthetic of DIY. SPOOL, Vol. 3, Issue 2, 2016, pp. 73-86. DOI: http://dx.doi.org/10.7480/spool.2016.2.1115

Diedrich, L. (2013). Translating Harbourscapes. Site-specific Design Approaches in Contemporary European Harbour Transformation. PhD Thesis. Frederiksberg: Department of Geosciences and Natural Resource Management Copenhagen University.

Fischer-Lichte, E. (2004). Ästhetik des Performativen. Frankfurt am Main, Germany: Suhrkamp Verlag.

Gusevich, M. (1991). The Architecture of Criticism—A Question of Autonomy. In Kahn, A (Ed.), Drawing/Building/Text—Essays in Architectural Theory (pp.8-25). New York, NY: Princeton Architectural Press.

Jacobs, J.M. & Merriman, P. (2011). Practising architectures, Social & Cultural Geography, 12:03, 211-222, DOI: 10.1080/14649365.2011.565884 Jalving, C. (2011). Værket som handling. Copenhagen, Denmark: Museum Tusculanums Forlag.

Kahn, A. (2005). Defining Urban Sites. Burns, C. J. & Kahn, A. (eds.) Site Matters. New York, NY: Routledge, pp 281-296.

McLeod, M. (1987). On Criticism. A Symposium on the Criticism of Place. Places Journal (Vol. 4, no. 1) Pp 4-5. Retrieved from: https://places-journal.org/assets/legacy/pdfs/on-criticism-mcleod.pdf

Oldenburg, R. (1989). The great good place: cafes, coffee shops, community centers, beauty parlors, general stores, bars, hangouts, and how they get you through the day. New York, NY: Paragon House.

Oswalt, P., Overmeyer, K. & Misselwitz, P. (2013). *Urban Catalyst -The Power of Temporary Use*. Berlin, Germany: Dom Publishers.

Samson, K. (2010). Det performativt æstetiske byrum. Juul og Frost Arkitekter, Institut for Miljø, Samfund og Rumlig Forandring, Roskilde Universitet, ph.d.-afhandling.

Schechner, R. (2013). What is Performance Studies. Special Issue on *Performance Studies*, Vol. V, Nr 2, Rupkathka Journal - On Interdisciplinary Studies in Humanities. pp 2-11.

Reynolds, R. M. (2015). Desire for the Gap. Axon, Creative Explorations, Vol 5, No 1,Issue 8, Creative Cities.

Retrieved from: http://www.axonjournal.com.au/issue-8-1/desire-gap

Vallance, S., Dupuis, A., Thorns, D., Edwards, S. (2017). Temporary use and the onto-politics of 'public' space. Cities Volume 70, pp. 83-90. https://doi.org/10.1016/j.cities.2017.06.023

Wagner, A.M. (2016). Permitted Exceptions—Authorised Temporary Urban Spaces between Vision and Everyday. PhD Thesis. Copenhagen, Denmark: Department of Geosciences and Natural Resource Management, Faculty of Science, University of Copenhagen.

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### Contac

Principal: Frank van der Hoeven (f.d.vanderhoeven@tudelft.nl)

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