

# What the 'green city' is up to

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

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### **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; Ottel , Perini, Fraaij, Haas, & Raiteri, 2011; Ignatieva & Ahrn , 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 & Ahrn , 2013), as well as the thermal performance of a building’s envelope (Wong et al., 2010; Perini, Ottele, Fraaij, 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.

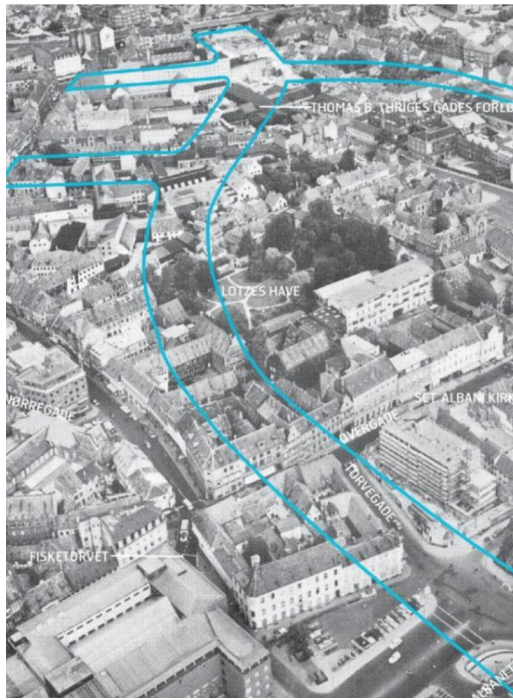
## Art criticism

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 20<sup>th</sup> and early 21<sup>st</sup> 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. Carroll 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.



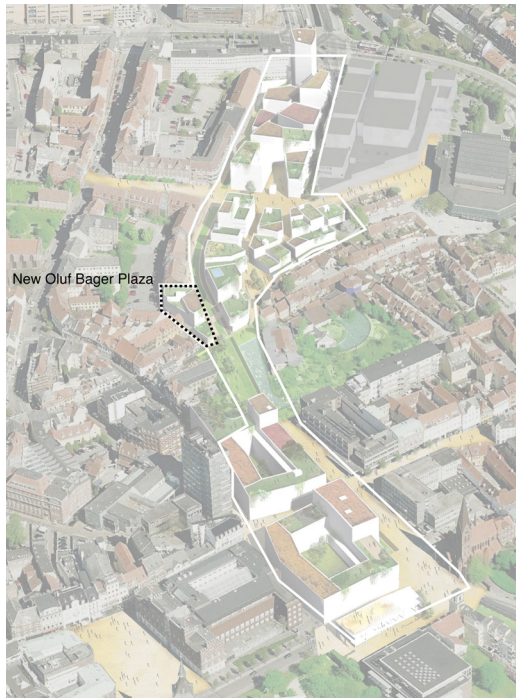
**FIGURE 2** The area before the construction of Thomas B. Thrige Street. (Image by Odense Municipality and Realdania, 2011)



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



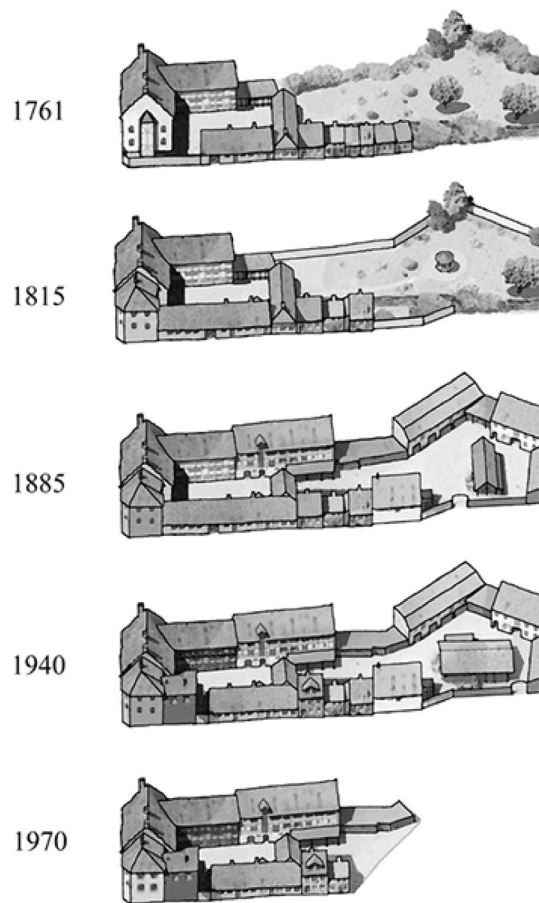
**FIGURE 4** Visualisation of the future conditions as pictured plan 'From Street to City' after the transformation of Thomas B. Thrige Street into a new, green, dense urban district. (Image by Entasis, 2013)



**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.<sup>2</sup> 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>)



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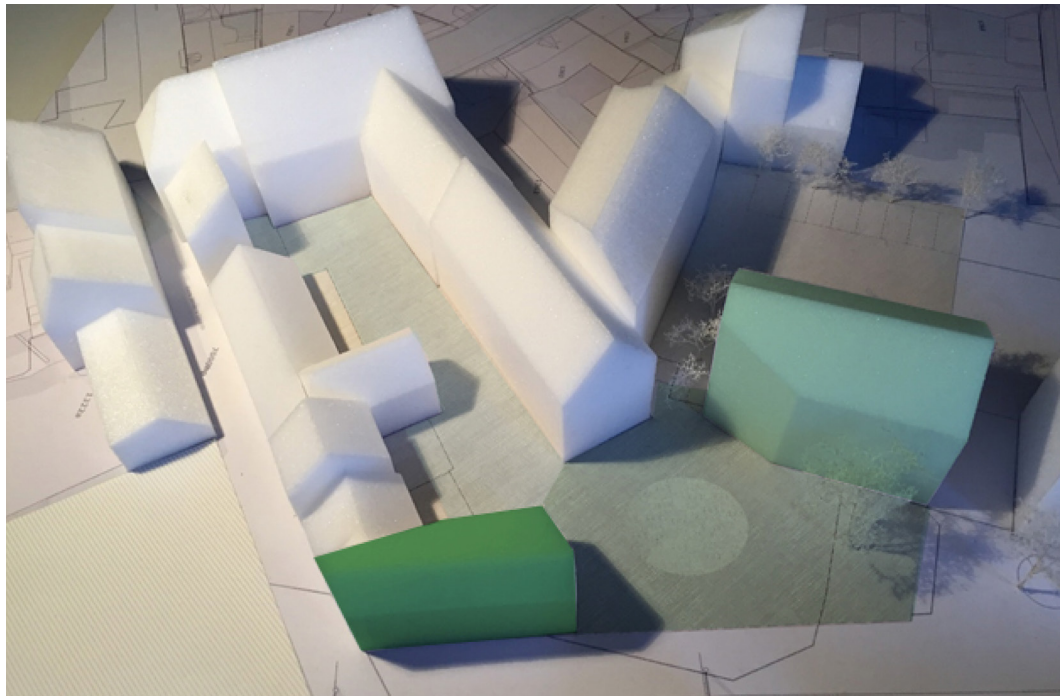


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FIGURE 7 The Oluf Bager courtyard. The existing environment in and around the courtyard of Oluf Bager with the buildings dating back to the 16<sup>th</sup> - 19<sup>th</sup> century. (Images by Praksis Architects, 2016)

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).<sup>3</sup> 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).

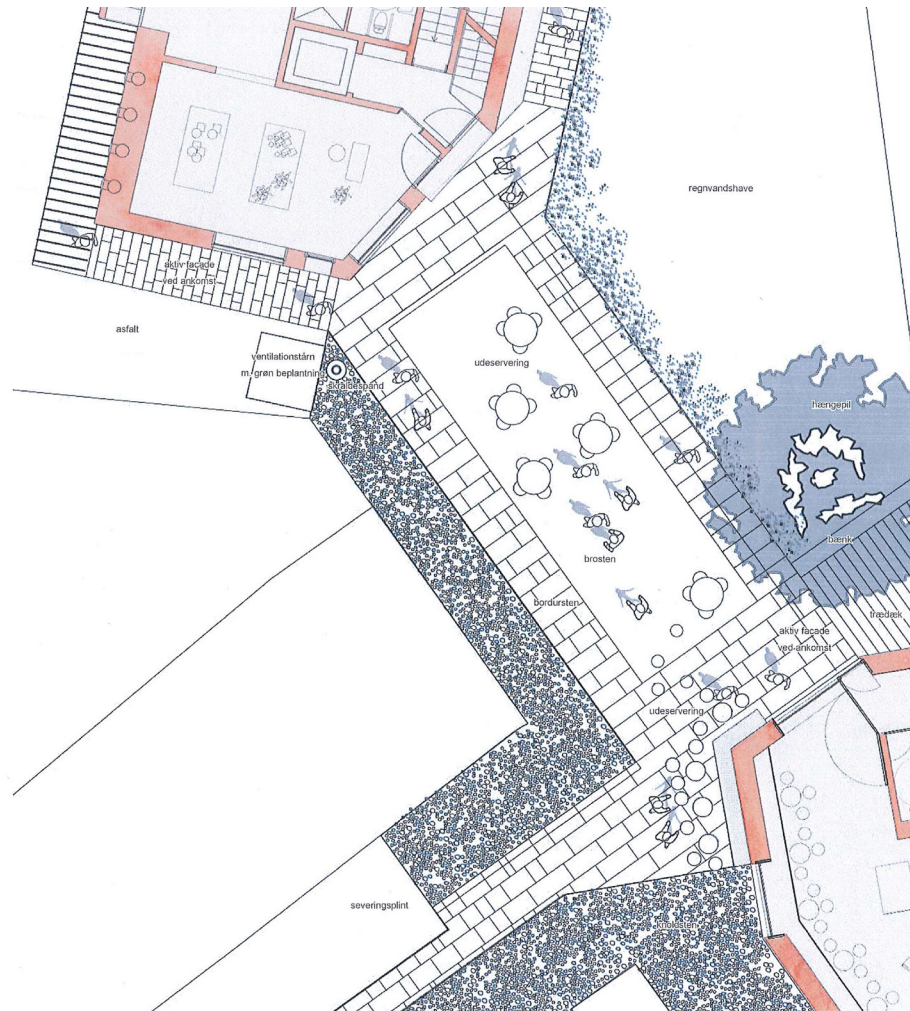
A common feature among the designs was openness on the ground level of the buildings, which created a spatial connection between the interior and the plaza. With regard to the green elements, most of the design teams worked with simple solutions, such as a solitary tree on the plaza and a mirror basin 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 Praxis's 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 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)

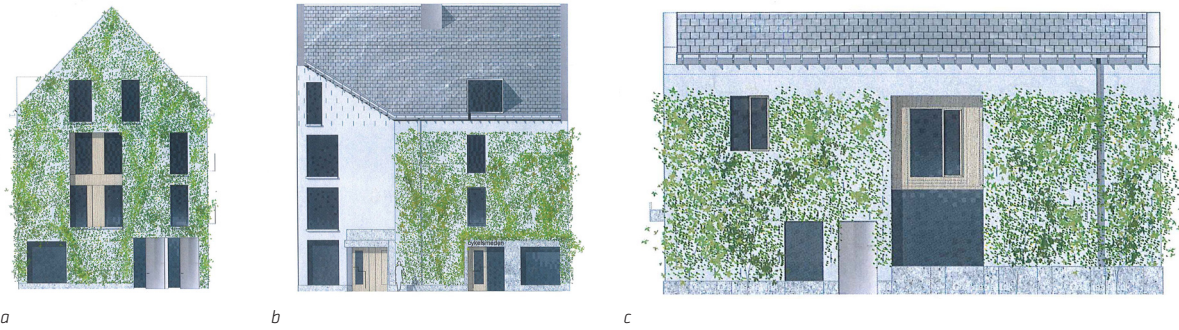


FIGURE 13 Entasis' green facades, where the plants cover large areas. (Images by Entasis, 2016)



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.

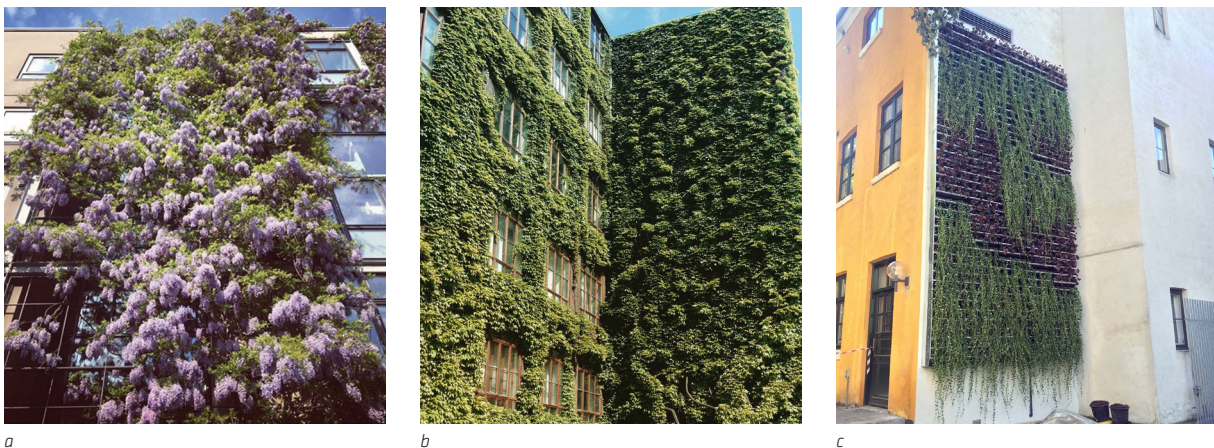


FIGURE 17 Examples of different facade vegetation, showing different colours, shapes, and techniques. The green facades with climbers and creepers are located in Copenhagen (a-b) and the living facade in Aarhus (c). (Images a-b by Ann-Charlott Eriksen; image c retrieved from <http://byggros.dk>)

## 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 51,000m<sup>2</sup> area of the Thomas B. Thrige Street district, a total amount of 53,000m<sup>2</sup> 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 façade 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.



a



b



c



d



e

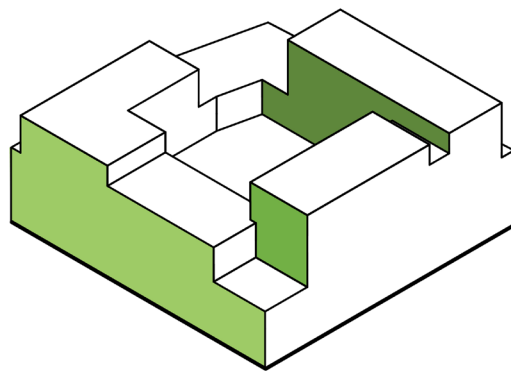
**FIGURE 22** Excerpt of urban plan references. The majority of the reference images of green facades in the urban plan show widely published examples from all over the world focusing on “newness” and technological innovation. (Images by Entasis, 2013)



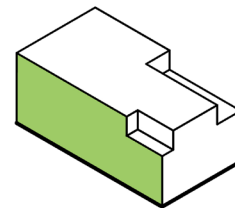
The second mode of critique shifted the focus from the designers and their intentions to the urban plan and strategies that formed the premise of their work. Drawing from Mary McLeod, we conceptualised the new design for Oluf Bager's Plaza as part of a public realm and examined the planning context of 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.

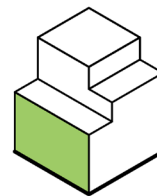
#### Eksempel på rumlig placering af grønne facader



*Bygning nr 1 (Albani karréen)*

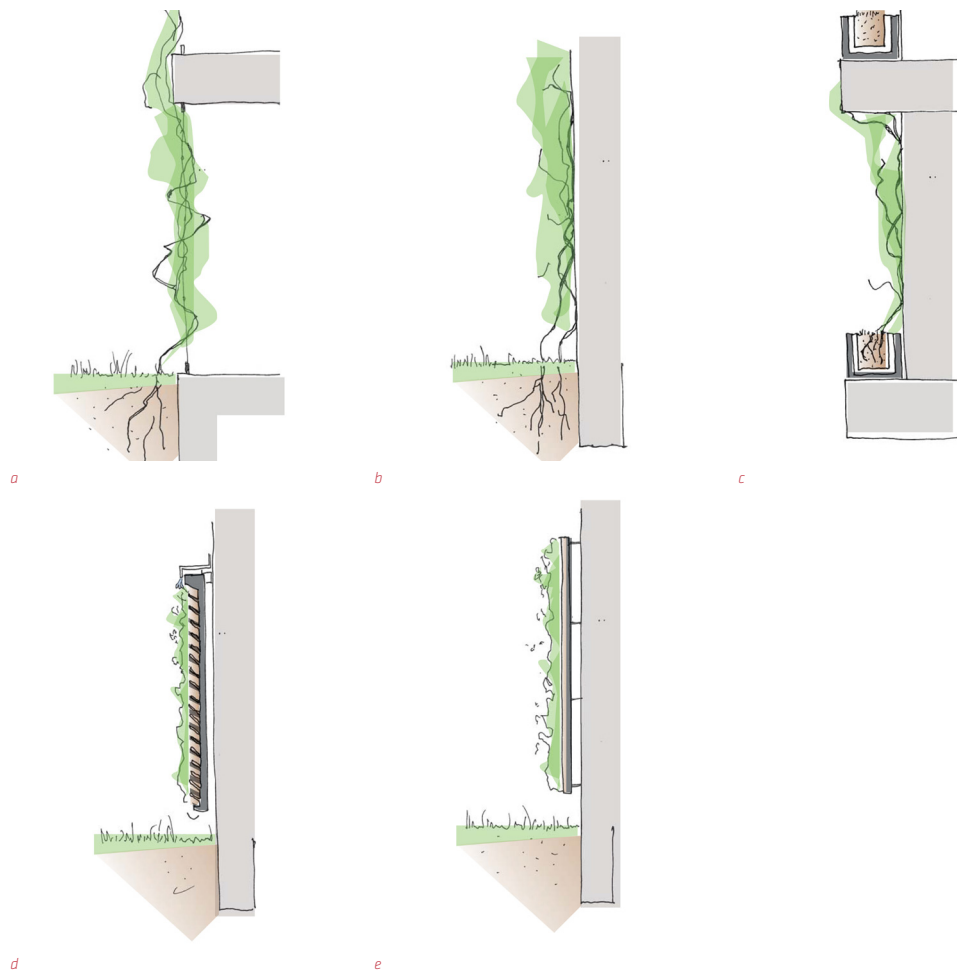


*Bygning nr 9 Rosengade kvarteret*



*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-faceted 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

- [1] 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 [realdaniabybyg.org](http://realdaniabybyg.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>

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