Changing Public Realm and Urban Green; The New Interior Landscape
CONTENTS
The transformation of the great Western cities is an on-going process. It has become evident over the last decades that cities need to transform into compact, interrelated and creative artefacts. Within this process the nature of natural and artificial urban green, in other words the verdure, is already changing today in both qualitative and quantitative terms.

New concepts of verdure, may they be natural or artificial, on the scale of a building or of the urban block, are introduced, not only as a means to save natural resources, as a response to the increasing demand of sustainability, but also simply to improve the quality of everyday life in urban settings. Moreover, these concepts offer the possibility to meet the need for a new green public realm caused by a shifting focus due to rearrangements in the relation between working, dwelling and leisure, including new patterns of everyday life and working practices of urban citizens. Within this process of urban ‘greenification’ we would like to dwell on a specific phenomenon: the architectural design of artificial urban green and interior landscapes.

THE RELEVANCE OF THE (GREEN) PUBLIC REALM AS WORKING SPACE
To start with, within the future perspective of the creative economy the public realm, including urban green spaces, gains importance as a place to work in public. This is not a local phenomenon, but should be understood in the light of the increasing mobility of citizens within network cities, and consequently the way in which different architectural and urban scales are perceived and interrelated. Technical devices like mobile phones, laptops and computer tablets define more and more a working ‘cloud’ for the young urban professionals and creative industries, enabling them to work outdoors, while blurring the traditional distinction between inside and outside, and private and public as a constitutional quality of the European city. Public space becomes increasingly important as a space in which to meet and greet, to do business, and to relax – as a public realm, ‘the turf where strangers meet’, a podium for forming opinions and taking initiatives. As a consequence, green public spaces define a specific part of the cities’ public realm. Nowadays they not only offer space for leisure, but also for work and other everyday practices.

With regard to the (green) public space as locus of work and knowledge exchange, it is important to note that specific knowledge is mainly gained by direct face-to-face contact, not with standing the increasing presence of multimedia communication. Unlike general knowledge, which can be obtained via libraries, magazines, Internet and other media, acquiring specific knowledge remains largely dependent on physical contact between people and on a process of gaining trust in the ‘other’.

In fact, the renewed integration of work, dwelling and leisure in great cities, like the Dutch cities of Amsterdam and Rotterdam, opposes and contradicts the effects that traditional capitalism has had on the subsequent division of urban functions, infrastructure and territory in the past. For us as architects, the recent development raises the following questions: How can the physical structure of buildings, urban blocks and cities accommodate this new public realm in the form of natural, but also ‘artificial’ urban green? How can we research and design new architectural and urban models to meet this new quest? What roles do colour, material and ornament play today? What kind of architectural precedents are at hand?

CHANGING URBAN GREEN, THE QUESTION OF VERDURE
In fact, within the general framework of physically accommodating the creative industries, it becomes evident that the nature of architectural and urban green, the verdure, within the great Dutch cities of Rotterdam and Amsterdam already is changing today due to bottom-up interventions of city inhabitants, sometimes in collaboration with institutional decision makers. For instance, on the level of the city this becomes clear if we look for example at the attention paid to landscape preservation and revitalized use of city parks. On the level of urban blocks the (re)appearance of façade gardens and forms of ‘home zones’ actually is a sign of a general increase in the integration of working, living and leisure and an increasing differentiation between different forms of urban green. We can also register new forms of urban farming and gardening in the communal territory. Members of the ‘creative industries’ often initiate these changing practices, while moving their work into the public realm. This group is especially eager to find spaces where living, working and leisure can be combined with a minimum of time-loss for travelling. Or, while travelling and arriving, using public space as a working space. Specifically on the scale of public buildings, extremely condensed urban blocks and hybrid multifunctional buildings, rooftop parks, green courts, interior landscapes and sporting facilities add new possibilities to this new experience and practises within the condensed city. Additionally, these changing practices offer a very interesting perspective with regard to the shifting role of verdure in contemporary cities.
The modern public sphere and specifically the physical (green) public space in the Netherlands, but also elsewhere in Europe, were highly influenced by the process of industrialization and the upcoming middle-class and bourgeoisie culture at the end of the nineteenth century and in the early twentieth century. Certain building types and urban block models date from that period. Here we selected one, the shopping arcade, to serve as a precedent and to apply the method of comparative research of architectural paradigms. This research addresses the contemporary issue of urban green as a powerful representation of new urban configurations. Precedents, like this one, were typical for their own time in regard to new building types and combination of programmes, the use of modern materials, colours and ornament, and the way in which they expressed and served the new public realm within cities. Moreover, if we look at recent successful hybrid building designs for the contemporary condensed cities we will discover how certain typologies, like the shopping arcade, which was developed in the nineteenth century, remain, transform and still inform our design practice and architectural models today. Additionally, considering the contemporary role of urban green, whether natural or artificial, these former models deserve reassessment with regard to their former rules and ideals and their future prospects.

Within the framework of this paper our main interest centres upon European cities’ phenomenal capacity to interiorize landscape elements in specific ways. Following the above-developed argument we address the (re-)examination of the new ‘domesticated landscape’ – whether natural or artificial – in mixed-use public buildings, especially the European fabric or grafted, hybridized urban blocks. Or, to put it in other words, our field of interest centres on the ‘ground scraper’ as a fundamental urban and architectural entity of the contemporary European city.

INTERIOR LANDSCAPES: ARTIFICIAL URBAN GREEN
Taking into account the question of the green public realm on the scale of public buildings and urban blocks, the nineteenth century marks the advent of the remarkable tradition of artificial interior landscapes and the use of ‘flowered’ motifs. Looking back, the nineteenth century put a lot of effort into turning the new public interiors of train stations, shopping arcades and the like into pleasing and enjoyable environments, trying to reconcile nature, industrialisation and modernity. At the advent of industrialization and under the influence of the discovery of the colouring of ancient Greek temples and Moresque architecture by Gottfried Semper (1803–1879), Owen Jones (1809–1874) and others, new theories and practices of colouring and ornamenting public buildings were already developed at the beginning of the nineteenth century.

Nineteenth-century ornamental motifs usually refer to elements in nature, which puts them in the colour tradition such as the one developed by Semper in his Vorläufige Bemerkungen über bemalte Architektur bei den Alten (1834) and later extended by John Ruskin in his The Seven Lamps of Architecture (1849) and Owen Jones in The Grammar of Ornament (1856).

Gottfried Semper developed the theory of using paint or coloured materials as cladding or dressing. He developed his theories of Stoffwechsel (metabolism) and Bekleidung (dressing, cladding) by analysing the colour traces of antique temples and Moresque architecture. In Semper’s theory the ‘cladding’ or ‘dressing’ was much more important than the other elements. Dressing in this theoretical context relates to everything that can be seen on the surface, felt or smelled and hence, can be perceived. Jones documented the fascination with abstraction and geometric construction of flower motifs extensively in his Grammar of Ornament (1856) in order to show and, together with Semper, even teach how they could be geometrically constructed. In Owen’s perspective ‘epigraphs (like Arabic scripts and calligraphy) replace mimetic images and symbolism of other religions and cultures and brought pleasure to the viewer’ and ‘they (these flourishing scripts and later complexly constructed ornaments and pattern) address themselves to the eye of the observer by beautiful forms of the characters; exercise his intellect by the difficulty deciphering their curious and complex involutions; and reward his imagination, when read by the beautiful sentiments they express, and the music of their composition.’ Today we again see the use of ‘nature related’ colour, material and ornament in contemporary interior landscapes.
own covered ground. Before entering into a more thorough analysis we would like to state that the shopping arcade, including its predecessors and successors, points not only to new ways of ‘being in public’ and ‘being outside in’, but additionally it also incorporates more hidden, symbolical and metaphorical dimensions of artificial green. According to us these hidden dimensions incorporate an assumingly longstanding, probably involuntary tradition, which allows artificial green as ornament to appear and reappear again and again. We will try to trace this mimetically relationship by analysing the way in which the combination of different kinds of programmes, inner façades decorated alluding to motifs from outdoor nature and the buildings section allowing natural daylight to enter the inner spaces evolved through time.

Hybrid Formation by Programme,
Ornamentation of the Inner façade, Section and Daylight, the Bazaar and the Rotterdam Shopping Arcade

Usually the typology of the shopping arcade is supposed to be derived from the Oriental bazaar. Not with standing, in the European city the arcade’s capacity to break through the existing street system was an architectural feature used since the sixteenth century to transform the already existing urban block. Basically this capacity has driven its historical transformation process. The comparison between bazaar and arcade here refers to the shared experience of open or closed shops lining an interior street receiving light from above, and its relationship with artificial green, such as for instance ceilings and columns decorated with geometrical (painted) flower motifs.

The ‘Rotterdam Passage’ (1879), designed by Christiaan van Wijk, which was unfortunately bombed in 1940 during the Second World War, faced the new city square called Van Hogendorpplein and was situated between the new urban boulevard Coolsingel and the Korte Hoogstraat, a main street within an ‘old’, very dense inner-city fabric. Programmatically the arcade hosted 30 exclusive shops with adjacent apartments for the shop owners, 60 independent apartments, the ‘Grand Hotel du Passage’ with 80 hotel rooms, a fancy restaurant and two coffeehouses. Due to the difference in heights between the level of Coolsingel and Korte Hoogstraat, a former dike, the passage additionally contained an extensive sub-ground floor level, which received daylight by glass tiles incorporated into the floor of the passage. The 1800 m² of the sublevel were dedicated to exhibitions and a market. Additionally, as an artificial landscape, a grotto with gold fish swimming in it and a Biergarten were part of this underground world. Moreover, in a way extending this artificial landscape, a bathing facility with 40 private bathrooms was exploited in the lower building part facing the square and the water and greenery of the Coolsingel.

Drawing parallels between Oriental bazaar and shopping arcade, both building types share the mixed programmatic organization, which often includes, besides shops and dwellings, public leisure and ‘relaxation’ amenities like restaurants, coffee houses and bath houses. In both cases the ornamentation of the inner façades refers to nature, may it be the painted ornaments of for example the Grand Bazaar in Istanbul or the cast-iron ornaments in the Rotterdam Passage. Also the natural lightning from above helps to create the idea of being inside out, the idea of an interior landscape. Moreover, programmatic elements that include water, like fountains, aquaria or grottos support this perception of the user or visitor. In the case of the Rotterdam Passage, natural and artificial green ornaments and elements formed a sequence, which guided the route and established an on-going rapport between the inside and the outside of the building. In addition to the cast-iron ‘flowered’ inner façades an element like a fountain was situated toped by a plant in the very middle of the passage space. It is not clear from photographs if it was indeed a fountain containing water with natural plantation or a planted void surrounded by a railing establishing a visual and acoustic connection between the upper and underground leisure programme. Moving outside, on the square in front of the Passage entrance and in the axis of the Coolsingel, another water fountain could be found.

Market Hall in Rotterdam (2014), MVRDV

The design for the Rotterdam Market Hall by MVRDV architects is currently under construction right in the ancient centre of the city, which was rebuilt after the bombing in the Second World War. Basically the building has the size and footprint of an urban block. It combines 246 apartments, a market hall and bars and restaurants. Additionally, it provides space for shops in its plinth facing inside and outside, and for a grocery store on the sublevel. Underneath this level a parking garage is situated.

Due to its size, the building block will reshape and re-establish the former urban fabric, including the large outdoor space of the Binnenrotte, the former river that gave Rotterdam its name and which accommodates the current open-air weekly market.

The block’s section combines cellular, balconied housing with a single, big space in
its inside, which in a certain sense forms the successor of the arcade. In fact, the apartments all with individual balconies on the outside literally overarch the market space, which receives daylight from the huge transparent shields of the front and back façade. The arched ‘ceiling’ of the public interior of the market hall will be clad with LCD lights allowing for ever-changing light patterns. In the rendered drawings for the market hall competition (2004), gigantic fruit was projected on the ceiling’s surface. Potentially the design of the Rotterdam Market Hall combines the idea of a large interior artificial green landscape as a trading place, emphasized by the close-by Blaak Train and Metro Station, and a public indoor realm for staying, encountering, passing through and ‘working in public’. The literal combination of food trading, health and symbolical ‘nature’ in the form of an upside-down projected garden makes it a very interesting experiment with regard to natural and artificial green on the level of the mixed, hybrid block within a condensed city. Moreover, one could state that the arcade and ‘green’ ornamentation, here in the form of a projected collage, is back again in a new, postmodern way.

CONCLUSION
The changes in the public realm and everyday practises of contemporary Western cities, for example working in public in relation to new forms of urban green on all scales, require elaboration of architects’ and architecture’s position to identify and to confront ‘new urban problems’ by turning them into unexpected opportunities. In particular, the Network Society and its morphological evidence, the Network City, offer us the opportunity to creatively face the shift of urban green from former outside domains into new inside spaces including artificial interior landscapes. Comparing precedents, delivering typo-morphological studies and investigating the phenomena of architectural perception help us to envision innovative architectural solutions. By connecting practise, education and academia within the framework of the verdure research we hope not only to deliver research, but that we will also be able to act by research-by-design upon this future reality. Our objective is especially to deepen the design knowledge of the coexistence between ‘representational, artificial green’ of many contemporary public buildings, to which we called attention in this paper, and the ‘natural green’ as new means of addressing the hybrid ‘publicness’ within contemporary cities.

NOTES
1 AARTS, M.J. & TILLIE, N. 2012. Rotterdam, People make the innercity; Densification + Greenification = Sustainable City, 5th International Architecture Biennale, Rotterdam, Municipality of Rotterdam.
4 CASTELLS, M., AND CARDOOOS, G. eds., The Network Society: From Knowledge to Policy, Washington DC, Johns Hopkins Center for Transatlantic Relations, 2005
5 Jos Gadet, Hoofdplanoloog Dienst Ruimtelijke Ordening Amsterdam in a personal conversation on 26 May 2006. See also: Gadet, J. 2009. in: Simon Franke and Gert-Jan Hoppers, De levende stad: over de hedendaagse betekenis van Jane Jacobs, Amsterdam, SUN.
6 KOMOSSA, S. 2010. The public realm and the economy of the city; The relationship between the urban block and the urban economy. The Dutch urban block and the public realm; Models, rules, ideals, Nijmegen, Vanilt.
FIGURES

1. Interior Grand Bazaar (1455), the Kapalıçarşı in Istanbul featuring lighting from above and floral ornamentation of arches and columns giving the overall impression of ‘being inside out’. Source photograph: Susanne Komossa

2. Interior Rotterdam Shopping Arcade, the ‘Passage’ (van Wijk, 1879) providing a new kind of public realm decorated with natural and artificial green located under a glass roof. The drawing shows the arcade’s hybrid formation by programme and building volume. Sources: photographs GAR, Drawing Monadnock Architects Rotterdam/TU-Delft

3. Computer rendering of the Rotterdam Market Hall (MVRDV 2014), cross section and front façade showing the flower decoration arching the interior market. The section indicates the stacking of dwellings located in the ‘thick’ skin, shops, restaurants, the market, space for an underground grocery store and parking. Sources: rendering MVRDV, Drawings Monadnock Architects Rotterdam/TU-Delft