English Translation

Introduction

In *OverHolland* 6, much attention is paid to 17th-century Dutch architecture. Although this is a historical subject, the period remains crucial in order to gain a good understanding of the development of the Dutch city and its architectural structure. It is not so much the historical respect of the cultural inheritance of the Golden Age that plays a role here, but more the inevitable physical presence of the design and building production from this phase of development in the modern city.

Esther Gramsbergen researches the transformation of the Binnengasthuis area and monastery area in Amsterdam after the *Alteratie*. Using typo-morphological research, she points out the interaction between the development of urban institutions and the typology of buildings and developments of areas, during which the ever so characteristic building form of the 'court' became prominent.

Everhard Korthals Altes too focuses on 17th-century Dutch architecture in his article. This art historical investigation focuses on the physical presence of buildings of the past in paintings and drawings, with many urban scenes, images of church interiors and important public buildings in Dutch cities. The core question is the reason behind the theme of these paintings or drawings and whether the architectural style played an active part in this choice.

In addition, naturally the 20th and 21st century are also addressed in this issue of *OverHolland*. Lara Schrijver focuses on the problematic relationship between Rem Koolhaas and Dutch architecture. She defends the theory that contrary to the general idea, architectonic form and composition most definitely play a main role in Koolhaas' work. To this end, his work is interpreted through the texts and work of O.M. Ungers with whom Koolhaas collaborated in the period 1968-1978. This cooperation profoundly influenced Koolhaas during the years that he established himself as an architect.

Furthermore in this issue, architecture projects are presented for the Delft rail zone, which were nominated for the Zuid-Hollandse Vormgevingsprijs (South Holland Design Award) 2007. Willemijn Wilms Floet examines their designs, which were all created in the Hybrid Buildings Master's studios of the Delft University of Technology, including the award winning design by Luuk Stoltenberg and that of Carien Akkermans, which won the public award.

Finally, two books on 17th-century Dutch architecture are discussed in the Polemen section. Herman van Bergeijk reviews the book by De Jonge and Ottenheym about the difficult relations in architecture between the Northern and Southern Low Countries in the 16th and 17th centuries. Merlijn Hurx discusses the publication of Gerritsen about the role of architectural drawing in the design and building practices in the Dutch Republic.

Hidden Amsterdam: the Binnengasthuis (municipal hospital) and the transformation of the former monastery areas after the *Alteratie*
Esther Gramsbergen

In the article about the first Commodity Exchange and the forming of the centre of Amsterdam, published in *OverHolland* 3, the position was that public buildings could be seen as generators of city formation and urban development. Establishing and differentiating urban institutions, which take shape in public buildings, were considered indicators of various phases in the city's development. In the study, the public buildings for the city council and trade in Amsterdam were closely examined: the old Town Hall on the Dam, the weigh houses, the buildings around the fish market and the Commodity Exchange by De Keyser. Research was done into the contribution of these buildings to the spatial transformation of the area around the Dam in the period from city formation to the beginning of the 17th century.[1]

The development of public buildings to care for the sick and poor was therefore only indirectly addressed. It has been suggested that Amsterdam's first hospital, the Oude- of Sint-Elisabethgasthuis (St Elisabeth' hospital), had been the beginning of later developments of the administrative and trading centre on the western side of the Dam. In any case, before constructing a separate building for the city council, the Sint-Elisabethgasthuis was established on the Middendam.[2] In 1395 the city council bought a parcel of the hospital grounds to build the first part of the Town Hall. At the end of the 15th century, the expanding Town Hall claimed the hospital buildings, which is how it lost its prominent position on the Middendam. And so the way was paved for continued specialisation of the area around the Dam as an administrative and trading centre. The role of the first hospital – and of charitable institutions later on – that were founded in the development of the city has not been further addressed in the study. As of the end of the 15th century, these institutions are indeed outside the centre area in a certain sense.[3]

To further examine the significance of the charitable institutions for the urban development of Amsterdam we must shift our attention from the Dam to the edge of the medieval city. The concentration of the most important administration and trading buildings around the Dam had as a side effect that other activities, including the hospital, had to be moved.[4] First, the Sint-Elisabethgasthuis moved to the Nes where it was merged with the Sint-Pietersgasthuis (St Peter's hospital) located there. In a second wave of reorganisation at the end of the 16th century, the hospitals were moved to the area south of the Grimburgwal. This final move was part of a large-scale reorganisation of the charitable institutions, the reason for which was rooted in the political revolution of 1578, known as the *Alteratie*.[5]

As a consequence of the *Alteratie*, the city council gained control over all Catholic properties in the city, including parish churches and the many city monasteries located on the edge of the city. The freed up monastery area made up almost 25 per cent of the surface area within the city walls, and as compared to other city districts were much less densely built up.[6] But before new city expansions could be realised, the re-use of the former monastery area provided a solution for the lack of space in the city.[7]

A part of these city monasteries were given to the most important charitable institutions in the city to manage.[8]

What was actually the influence of the charitable institutions on the developments of the former monastery areas? Examining the known map of Balthasar Floriszoon van Berckenrode from 1625 provides the beginning of an answer. When this map is compared to the map of Cornelis Anthoniszoon from 1544 on which the city monasteries are clearly inked in, one notices that in the decade after the *Alteratie,* the spaciously set up monastery areas are transformed into compact urban areas. These areas differentiate themselves from the other parts of the city by way of a deviant urban form, a new type of building block. Differently than with the regular blocks of buildings, the inner areas of this new building block are not parcelled into private gardens, but divided into various courtyards. Extended bodies of buildings formed the courtyards. This new type of building block can be referred to as a 'super block'.[9] Therefore, it seems that the charitable institutions did influence the urban condensing of the monastery areas in such a way that it has developed into a court-shaped building structure here.

Even though not all of these courtyards have still remained, the former monastery areas are still characterised by an exceptional urban pattern. The best-kept part is the building block on the Kalverstraat that was built on the monastery area of the Sint-Lucienklooster (St Lucian's monastery). Here, the Municipal Orphanage was established in 1579. The complex is now being used by the Amsterdam Historical Museum. The different courtyards and the passage with paintings are open to the public during the day. Another example is the area that used to be occupied by the municipal hospital, the Binnengasthuis, with the bordering Oudemanhuispoort (Old Men's Home Gate). The Binnengasthuis was created after the *Alteratie* from a merger of the Sint-Pietersgasthuis and the Onze Lieve Vrouwegasthuis (Our Dear Lady's hospital). The institutions were given possession of the grounds of the Oude en Nieuwe Nonnenklooster (Old and New Nunneries), located south of the Grimburgwal. The Binnengasthuis then covered a big uniform area in the southeast corner of the medieval city and dominated the urban development of the area for a long time. The Binnengasthuis area underwent a radical transformation in the 19th century during which the typical main structure disappeared from the area.[10] Only the part of the area that at the end of the 16th century was sold to the regents of the Oude-mannen- en -vrouwenhuis (Old Men's and Old Women's Home) still has the traits of a 'super block'. In this building block, located between Kloveniersburgwal and Oudezijds Achterburgwal at the location of the Oudemanhuispoort, a new Oude-mannen- en -vrouwenhuis was built in 1601. In the 18th century, the building was renovated and is now the head office of the Universiteit van Amsterdam. Unique to the complex is the stately inner courtyard and the Oudemanhuispoort, an 18th-century passage with stalls for booksellers.[11]

Since the publication in 1975 of a study about the Burgerweeshuis (Municipal Orphanage) by R. Meischke, a series of books dedicated to the most important 17th-century buildings for charitable institutions in Amsterdam have appeared. Without any exceptions, the authors focused on the architectonic properties and described the unique history of these buildings. Before then, no study had been done on these buildings for charitable institutions, described as a typological homogenous group of buildings with similar morphological characteristics.[12]

The purpose of this study is to describe the charitable institutions in 17th-century Amsterdam from this perspective and to expose the mechanism that led to the specific form of urban condensing in the former monastery areas. The developments of the Binnengasthuis area are therefore used as a representative example. The way in which the councillors of the Binnengasthuis obtained the means to fulfil their social obligations is illustrative for every 17th-century charitable institution in Amsterdam and at the same time is also the key to understanding spatial transformation of the monastery areas. The forming of the 'super block' is described below in four steps. The first part deals with the hospital as a public institution, while the second part focuses on the medieval hospitals in Amsterdam. The subject of the third part is the confiscation of the city monasteries and the reorganisation of the charitable institutions as a result of the *Alteratie*. In the last part, the buildings of the Binnengasthuis in the 17th century are examined.

The hospital as a public institution
The establishing of charitable institutions in the Middle Ages originates from medieval religious beliefs about poverty and charity. According to church teachings, charity was the holy duty of all Christians. Concretely, this meant performing the 'seven deeds of mercy', namely feeding the hungry, giving drink to the thirsty, clothe the naked, offer foreigners a roof, take care of the sick, visit prisoners and bury the dead.[13]

The first institutions that concentrated on giving this care were the monasteries. As of around 800, guest rooms were set up at the abbeys for travellers, pilgrims, the poor, the sick, the elderly and the handicapped. From around the same period there is a church regulation that obliged bishops to establish a hospital for the poor and the sick, and use 10% of their income to do so, which is how the first city hospitals were established in the episcopal cities.[14]

It is striking to see that in the episcopal and monastic hospitals, the guest rooms and sick rooms were in a hall construction, an undivided great hall. In the Near East tradition, this kind of institution was actually built up of individual cells. Another typological characteristic was the link between the great hall and the chapel or altar alcove. This derived from the desire to let the sick and the dying take part in mass.[15]

With the founding of the Order of the Holy Spirit, an order of lay brothers specialised in caring for the sick, church meddling in hospitals decreased. The hospitals of this order fell under secular authority as of 1200. This was particularly the case for the business part of the hospital, as the priests working in the hospital still fell under the responsibility of the Pope. To establish altars, chapels and cemeteries, the Pope's permission was still required.[16]

The hospital turning bourgeois must be seen in the light of the origin of the cities and the growing power of the bourgeoisie in the beginning of the 13th century. In German and Italian cities, public hospitals were established on a large scale by the Order of the Holy Spirit. Existing episcopal or monastic hospitals were taken over, such as the Ospedale Santo Spirito in Rome (as of 1204), for example.[17] In the Hanseatic city of Lübeck, the magnificent Heilige-Geist-Hospital was founded at the end of the 13th century. Right after it was founded by the Teutonic Order in 1286, the bourgeoisie took over the management of the hospital.[18]

The medieval public hospital was an amalgamation of church and secular influences in its construction as well as its organisation. The institutions were ruled by secular authorities and were established and maintained through donations from the bourgeoisie and nobility. The 'services', however, remained strongly influenced by religious beliefs. Celebrating holy mass and the proximity and worship of relics remained important practices for treating the sick and the dying. A direct link between the chapel and sick ward was essential.[19] Therefore, in many cases the daily work at the hospital was carried out by religious brotherhoods. The 'monastic' life of these brothers or nuns placed requirements on the religious leadership and design of the hospital building. Besides a sick ward and a chapel, sometimes a cloister was part of the hospital building.[20]

Before establishing and developing hospitals in the Dutch cities, cloister orders were barely of any importance. Contrary to the neighbouring countries, it was only in the 15th century that monasteries were established on a large scale in Dutch cities. At that time there already was a well-organised system of caring for the poor and the sick. This system originated from the parish churches and was largely coordinated by the city council.[21] Caring for the poor and the sick was divided into 'external' help to the 'poor sitting at home' and 'internal' help to the visitors of hospitals.[22] As mentioned in the introduction, the cloister orders in the Dutch city were only an important factor in the further development of charitable institutions after the Reformation.

As of around 1250 the first public hospitals were established in the Dutch cities. In many cases, the Count or one of the members of the Count's family took the initiative.[23] During the 13th century, the city councils took over the business side by appointing a hospital director, a municipal official in charge of the financial control of the hospital. The control of hospitals was important to city councils for many reasons: first to monitor public health and second to maintain public order; in the hospital homeless people and other riffraff came asking for shelter and this could sometimes get out of hand. A final reason why the city council wanted to monitor the budget of the hospital was because it operated on donations from the bourgeoisie.

Barely any construction data are known regarding the earlier hospitals. The hospitals were destroyed in city fires or modified so much that the original construction could not be reconstituted.[24] Most researchers believe that the earlier hospitals were made from simple bay halls in which the guest areas and sick ward and chapel (choir) overlapped.[25] From the outside these buildings looked like chapels, and Craemer points out that this has often lead to confusion. What was thought to be the chapel of a hospital was in fact the hospital itself.[26] This confusion is not so strange if one keeps in mind that during the Middle Ages hospitals grew into building complexes with separate sections for transients and *proveniers*, elderly who were taken care of at the hospital in exchange for payment.[27] An overview of the building typology development of medieval hospitals is not forthcoming in the Netherlands. For the large part, this development probably ran parallel to the developments of the small public hospitals in Germany, which were well documented by Craemer.[28]

Medieval hospitals in Amsterdam
Amsterdam had six hospitals in the Middle Ages. As mentioned, half way through the 14th century, the Sint-Elisabethgasthuis was established on the Middendam. Later the Sint-Pietersgasthuis (just before 1395) followed on the Nes, the Onze Lieve Vrouwegasthuis (between 1413-1420) across from the Onze Lieve Vrouwekapel (Our Dear Lady's chapel) on the Nieuwe Lange Dijk and the Heilig-Sacramentsgasthuis (Holy Sacrament's hospital) (1422) in the Kalverstraat across from the chapel of the Heilige Stede (Holy Homestead). The Sint-Jorisgasthuis (1403), a leper hospital, was located west of the Rokin outside the city walls, just like the

Sint-Nicolaasgasthuis (1403), located on the Zeedijk.[29] The latter was actually not a classic hospital that cared for transients as well as the sick, but was specialised in caring for *proveniers*.[30] During the 16th century, two other social institutions were established, which took over a part of the duties of the hospitals: an orphanage in 1523 and an Oudemannenhuis (Old Men's home) in 1548, both located near the chapel of the Heilige Stede.

The literature about Amsterdam hospitals only mentions that the hospitals were established by religious brotherhoods.[31] However, the question remains whether the six medieval hospitals were seen as one and the same. Wasn't the Sint-Elisabethgasthuis in fact mainly a public institution that had a relation with the city council that was different from that of the other hospitals, as well as a different role in society? In her description of the Heilig-Sacramentsgasthuis (Holy Sacrament's hospital) in Dordrecht, Kool-Blokland argues that the Heilig-Sacramentsgasthuis must primarily be considered as a public institution. She advances a number of interesting aspects in which this hospital differentiates itself from the other eleven medieval hospitals in Dordrecht. She points out that the Heilig-Sacramentsgasthuis was the city's first hospital, that the building was located at a prominent place in the city, and that some urban tax revenue was directly injected into the hospital. Moreover, she advances typological differences in the hospital buildings as an argument for her claim. "The later hospitals were established by the guilds, mainly for transients who could stay the night. These hospitals were located nearby or in a chapel and fell under the responsibility of the guild or brotherhood that took care of the material aspects of the clients."[32] It is remarkable that of these hospitals, the chapels existed before the hospital function. In many cases, this led to a typological differentiation in which the guild hospitals were characterised by the physical separation of the chapel and sick ward. This was definitely not the case in the oldest urban hospital, where, as Kool-Blokland describes, "the sick lay in a church building".[33]

When we look at the Amsterdam hospitals and Sint-Elisabethgasthuis in that way, we can see a number of parallels. Interesting is the typological angle. As we already saw, the Sint-Pietersgasthuis, Onze Lieve Vrouwegasthuis and Heilig-Sacramentsgasthuis were established near an already existing chapel, which in these cases were even located on the other side of the street, which excluded a spatial connection between the chapel and sick ward. In his dissertation *Metamorfose van stad en devotie (Metamorphosis of the city and devotion)*, Melker calls this the *gasthuisconstructie (hospital construction)*. He assumes that the hospitals at the chapels are established based on

financial considerations: "The introduction of the hospital annexed to the chapel provided an opportunity to generate new income, for example by selling residences to *proveniers*."[34]

What did the Sint-Elisabethgasthuis actually look like? What can we say about the relation between the chapel and sick ward? Can a parallel be drawn with Dordrecht? The construction data of the Sint-Elisabethgasthuis date from the 17th century, from the time that the buildings of the hospital were already being used by the city council. Saendredam's painting *Het Oude Stadhuis te Amsterdam (The Old Town Hall in Amsterdam)* from 1657 provides an impression of the hospital. On the left-hand side of the Town Hall complex, we see a typical hall construction with the ridge turret, common to hospitals.[35] If we combine this information with the floor plan of the old Town Hall from 1639, on which 'gasthuis' ('hospital') was shown in the great hall along the *Gasthuissteeg* ('hospital alley'), then one could assume that the Sint-Elisabethgasthuis was a linearly organised hospital where the chapel and sick ward overlapped. Melker claims that after the buildings of the hospital were integrated to the Town Hall, only the chapel of the hospital kept its original form and function as a chapel for the magistrates. Whether the common confusion of hospital with hospital chapel played a role in this should be further examined.[36]

Melker also points out a number of remarkable differences between the Sint-Elisabethgasthuis and the other hospitals. First, he states the relatively large reception capital of the hospital that was many times bigger than that of other hospitals in Amsterdam.[37] Second – and this is perhaps the most convincing bit of proof that helps consider the Sint-Elisabethgasthuis as a public institution – he states that the Sint-Elisabethgasthuis was the only charitable institution under financial supervision of the four councils (later, burgomasters) as early as the late 14th century.[38]

The introduction has already stated that the Sint-Elisabethgasthuis merged with the Sint-Pietersgasthuis at the end of the 15th century. After the *Alteratie,* the Binnengasthuis was created out of a merger of the Sint-Pietersgasthuis with the Onze Lieve Vrouwegasthuis. The first Amsterdam hospital played a continuous role in the development of Amsterdam and grew into the municipal Binnengasthuis, addressed in the last paragraph.

The *Alteratie*: Revolt and Reformation
The year 1578 is an important date in the history of Amsterdam. By that time, Amsterdam joined the Revolt against the Spanish king and became part of the rebellious provinces led by William of Orange and supported by Calvinist activists. This transition in Amsterdam is normally referred to as the

Alteratie. The estates of Holland and Zeeland rewarded Calvinists for their support by making the reformed faith the public religion of the rebellious provinces in 1572. However, the Calvinist Church never acquired the status of formal state church. After the dominance of the Spanish crown and the religious discipline of the Counter Reformation, the city municipalities were fighting any political encroachment from a stadholder, a provincial Estate, or a Calvinist synod. The former properties of the Catholic Church (parish and monastic) came under control of civil authorities and were never administered by the Reformed Church.[39]

The purchase of Catholic properties enabled the magistrates of Amsterdam to gain full control of all agencies and foundations responsible for poor relief. Immediately after the *Alteratie,* the fragmented system of parish poor relief was converted into a centralised system of municipal poor relief. The availability of numerous monastic complexes within the city provided the unique possibility of reorganising the accommodation of hospitals and transforming these old foundations into new municipal institutes.[40] Only then did the layout of the monastic complexes, their position in the city and building structures become important for the history of the institutions of poor relief.

As mentioned earlier, monastic development in Dutch cities started relatively late. It was Geert Groote, a Catholic priest from Deventer who established a new religious movement called 'Devotio Moderna' at the end of the 14th century. The movement promoted the foundations of religious communities for lay people called *Brethren* (or Sisters) of the Common Life. Its members took no vows, neither asked nor received alms; their first aim was to cultivate inner life, and they worked to earn their daily bread. The movement became very popular in the Netherlands and during the 15th century many communities were founded in Dutch cities. In Amsterdam for instance 22 monasteries were established, 19 within the city limits and three within the immediate vicinity of the city. The priest Gysbrecht Douwe made Devotio Moderna popular in Amsterdam. Douwe was a disciple of Groote and a descendent of an Amsterdam patrician family. He was the initiator of the two first monastic institutions in Amsterdam, one for men and one for women, respectively Reguliersklooster and Oude Nonnenklooster (Reguliers Nunnery and Old Nunnery).[41]

The city map of Cornelis Anthoniszoon from 1544 provides a precise image of the urban form of Amsterdam at that time and the position of the 19 monasteries within the city. The grey colored roofs, in contrast to the red coloured roofs for the regular townhouses, provide a clear indication for the location of the convents and monasteries. With the exception of two monastery

chapels and a cellar, no buildings or parts of buildings remain of these monastic complexes. Of the Franciscan monastery only a floor plan dating from 1578 survived.[42] Consequently, Anthoniszoon's map is the best source on the built form of the city monasteries. The basic elements of the monasteries consist of the monastery chapel and living quarters. The living quarters are organised around a court; sometimes closed as a proper monastery, sometimes open. In addition to the living quarters most monastic communities possessed gardens and orchards. As they preferred to function as autarkic communities, also service buildings, workshops, sheds, etc. formed part of the monastic complexes. The Franciscan monastery by far showed the most monastery-like layout. In general, the complexes are humble and irregularly shaped. They seem adapted to circumstances as shape of land property and existing buildings.

Very remarkable is the fact that a concentration of monastic complexes is visible in the southeast corner of the city. From the 19 monasteries, 16 were situated in the part of the city on the east side of the Amstel, which was called the Oude Zijde (Old Side). Three foundations were located on the west side of the Amstel, the part of the city indicated as the Nieuwe Zijde (New Side). In his article 'Burgers en devotie' ('Citizens and Devotion'), Bas Melker explained this remarkable difference from the fact that Gysbrecht Douwe himself lived on the Oude Zijde and established his first commune there. His family probably already owned land there. Once religious fraternities possessed land or houses, they offered help to new groups. The sisters of the Oude Nonnenklooster allowed the sisters of the New Nonnenklooster (New Nunnery) to start their communal life in one of the houses on their property.[43] Due to donations, legacies, revenues from land possessions and thanks to privileges given by the municipality, the monastic institutions could enlarge their possessions. In their heydays they owned 25 percent of the urban territory within the walls. As well, they owned agricultural lands outside the city.[44]

Binnengasthuis, the municipal hospital
In October 1578 the municipality decided to move two major hospitals, the Onze Lieve Vrouwegasthuis and the Sint-Pietergasthuis, to the properties of respectively the Oude Nonnenklooster and Nieuwe Nonnenklooster. The assignment of these exact properties, which covered a large united area at the south border of the Oude Zijde, created the conditions for a future fusion. The first step was the specialisation of the Onze Lieve Vrouwegasthuis into a women's hospital and the Sint-Pietergasthuis into a men's hospital. Finally, in 1582, the merger took place and from that time on the development of one large municipal hospital

began. This new institution administrated the properties of the two original hospitals as well as the properties of the Old Nuns and the New Nuns. As compared to the properties of the convents, the properties of the hospitals were small. Information about the possessions of the New Nuns is available from bookkeepers' calculations that have survived. We know that in 1578 the Nieuwe Nonnenklooster owned 2.5 hectares of land in the city and 92 hectares of agricultural land outside the city, besides the property on which they lived. Van Eeghen values the properties of the Oude Nonnen (Old Nuns) as twice as much.[45]

It was the task of the managers of the hospital to house the poor, sick and aged and offer shelter to strangers within the rules prescribed by the local municipality. The almshouse's expenses had to be paid by the property revenues. To perform their duties, the managers developed two types of building activities; the first focused on the accommodation of the different wards of the almshouse, the second on generating income by erecting rental houses.

The building activities set up to accommodate the almshouse started with the conversion of the former monastic buildings into wards. If we remember the early hospital typology, it is not surprising that especially the former chapels were perfectly suited for conversion into sick wards. Probably only a wooden gallery on the first floor was built to enable the staff to open the high placed windows. Below the gallery, against the walls, beds were placed, separated by curtains. More alterations were needed to transform the former dorms and living areas into the same type of hall.[46] From the start, the needy were divided into four different groups and housed in different parts of the complex. A section for men, a section for women, one for transients and a sick ward for plague patients were built. More differentiation of the residents of the hospital emerged when in 1587 a first new building was erected, a soldiers' house, intended for wounded and old soldiers. It consisted of an elongated building volume with saddle roof, similar in construction as the medieval hospital hall-type, but without the chapel or altar. The section of the building corresponded with the scheme of the converted chapels with the wooden galleries and the arrangement of the beds along the walls. The building was unique in its measurements: with a length of 50 metres, a width of 8 metres and a height of 9 metres it housed about 50 beds.[47] During the 17th century, the hospital established a new department specifically for medical treatment. The plague patients were moved to a new building located outside the city walls. Furthermore, service buildings and living quarters for staff members were erected. All new additions were placed in such a way that the buildings filled in the space between the

two monastic complexes forming one large structure of wards and courts connected by galleries. The courts were used for different purposes: herb gardens, bleaching fields, graveyard, even a formal garden were part of the complex.[48]

In the meantime, the building activities aiming to generate money were set up. First of all, a part of the former living areas of the Nieuwe Nonnen (New Nuns) was converted into small rental units, the Gasthuishof (Hospital court). Secondly, the large orchard of the Old Nuns was sold in a special way. The area was divided into a central part and a zone of land along the perimeter. The central part was sold to the managers of the old people's home who planned to build new accommodations here. The perimeter zone was kept and developed for private purposes. Rows of rental houses were built here. As a result, the new old people's home, built in 1602 became a totally enclosed building only accessible by a corridor. This corridor led to a large court of about 30 x 40 metres formed by the buildings of the old people's home. The building was divided into three wings with living quarters and a main building with collective services as regents' rooms and dining rooms. The representative façade of the main building faced the court.[49]

The managers of the almshouse used the principle of estate development along the perimeter of their property on other sites of their property as well. Uniform rows of rental houses were erected on the west side of the property along the Kloveniersburgwal between 1603-1611. These houses were called the 'nummerhuizen' ('number houses') because they were the first houses in the city indicated by house numbers. Contrary to the small rental units created around the Gasthuishof, the number houses belonged to the highest category of rental units in Amsterdam, due to their size and location.[50] After the demolition of the city walls along the Kloveniersburgwal around 1600, the former city moat was converted into a luxury 'living canal'. The erection of 11 large rental units there was worthwhile and can be regarded as a sign of rational economical policy of the managers. Even more prestigious was the erection of a row of nine mansions along the Turfmarkt, the wharf on the east side of the Rokin, designed by the famous Dutch classicist architect Philips Vingboons and built in 1643. Consisting of main and outer buildings, these houses were very similar typologically to the mansions of the richest merchants in Amsterdam.[51]

In conclusion one can state that the first type of building activities (for the accommodation of the hospital) was directed inwards and the second type of building activities was directed outwards. This process created the 'super block', an urban form combining two different worlds: on the one hand the very familiar world of rows of narrow town-

houses, the rental houses, and behind it, the hidden world of wards, courts and galleries.

As mentioned in the introduction, the Binnengasthuis complex has not survived in the way it is described here. Due to economical decline and political alterations, the managers were forced to sell their property bit by bit. In the 19th century only the land immediately around the almshouse buildings were left. By then the almshouse, originally a medieval institution, had already been converted into a modern hospital. The old buildings could not meet the new requirements and were replaced by new hospital buildings. Nevertheless, the reduced property turned to be a handicap and due to a lack of space, the hospital finally moved to the edge of the city. The 19th-century hospital buildings were taken over by the Universiteit van Amsterdam during the 1980s.[52]

Conclusion

As a public charitable institution, the Sint-Elisabethgasthuis on the Middendam was an indicator of the first phase of city formation. The need to establish hospitals shows the force of attraction of the settlement on foreigners: tradesmen, pilgrims, fortune seekers, and down-and-outers.[53] At the end of the 16th century, the displacement of the charitable institutions to the former monastery areas marked a new phase in the city's development. Through concentration and accumulation of capital, the charitable institutions grew into the driving force behind the urbanisation of these areas. Project development on an unprecedented scale produced a particular type of urban building block, the 'super block'.[54] This building block developed from the inside out, with the existing monasteries as its core. On the surrounding grounds, formerly used as gardens and orchards for the monasteries, the institutions developed residences of which the income was injected into the institution.[55] This is how the buildings in front of the institutions became encapsulated in a building block that at first glance did not differ from a common urban building block in Amsterdam, but hid charitable institutions behind the residences. And so new architectonic projects were introduced into Amsterdam. First, serial residential buildings were a new assignment for architects, and second, the public accessibility of the institutions located in the blocks of buildings formed a new type of design assignment. Institutional gates, galleries and publicly accessible courtyards were the new architectonic elements, which made their appearance into the city.[56]

It is interesting to put the guise of the 17th-century charitable institutions in Amsterdam in a European perspective. Although foreign contemporaries considered these institutions as exemplary, we notice that in studies about the developments of hospital buildings, Dutch examples are barely mentioned.[57] From the few lines that

Dieter Jetter devotes to the Netherlands in his book *Das Europäische Hospital von der Spätantike bis 1800 (The European hospital of the Late Antiquity until 1800)*, we see a lack of knowledge on these matters.[58] He believes that the freedom of religion after the Reformation was the reason for a fragmented 'health system', which was not good for the building of hospitals. The complex, fragmented, character of the buildings of the Binnengasthuis and Burgerweeshuis could be the reason why researchers, interested in the building typological development of hospitals and related institutions, ignore them. Only when these institutions are studied from an urban morphological perspective can we get an insight into in their true nature. Then, they do not appear as insignificant and lacking in capital as Jetter claims.[59]

Recent studies by McCants (1997) and Parker (1998) revealed the foreign interest for Dutch charitable institutions at the time of the Republic. Written from social (Parker) and economic (McCants) viewpoints, the authors emphasise the unique way in which charity was organised at the time of the Republic in the Netherlands.[60] The urban morphological and building typology implications of this have not yet been sufficiently researched, although with this article an attempt is made to initiate further research into this.

Notes

1. Engel and Gramsbergen, 'Het eerste beursgebouw en de vorming van het centrum van Amsterdam'(The first Commodity Exchange and the forming of the centre of Amsterdam'), 2006, p. 59.
2. The Sint-Elisabethgasthuis was probably established around the middle of the 14th century; see De Melker, *Metamorfose van stad en devotie (Metamorphosis of the city and devotion)*, 2002, p. 65.
3. Engel and Gramsbergen, 'Het eerste beursgebouw and de vorming van het centrum van Amsterdam', ('The first Commodity Exchange and the forming of the centre of Amsterdam'), 2006.
4. This mechanism is elaborated on in the article of Busso von der Dollen, 'An historico-geographical perspective on urban fringe-belt phenomena', 1990.
5. The political revolution in 1578 in which Amsterdam's city council chose the side of the Revolt and the Reformation is simply referred to as the *Alteratie*. The Revolt was directed against the Spanish rulers and the Catholic repression associated with it. Amsterdam joined the revolting provinces led by William of Orange.
6. See Schilder (red.), *Amsterdamse kloosters in de Middeleeuwen (Amsterdam monasteries in de Middle Ages)*, 1997; see also Van Eeghen, *Vrouwenkloosters en Begijnhof in Amsterdam*, (*Nunneries and the Begijnhof in Amsterdam*), 1941.

7. For the place and the way in which the city expanded after the *Alteratie*, see Bakker, 'De zichtbare stad 1578-1813'('The visible city 1578-1813'), 2005.

8. The city council did not have free reign in redestinating the Catholic properties. The States-General forced the city councils to adhere to the principe that the profit of these properties would be distributed *ad pios usus*, meaning for charitable purposes as was being done by the parishes. Concretely, this meant taking care of the poor and maintaining church buildings. See Parker, *The Reformation of Community*, 1998, p. 90. It is noticeable that the city council took the opportunity to reorganise the most important social institutions in the city. The Oude Mannenhuis (Old age home for men), the Burgerweeshuis (City Orphanage), the Sint-Pietersgasthuis and the Onze Lieve Vrouwengasthuis were given the right to use and manage a part of the former monasteries. As well, new institutions such as the Spinhuis (Spinning house, for female prisoners) and Rasphuis (Rasp house, for male prisoners) were housed in former monastery buildings. Sometime earlier in 1560 a Dolhuys (a house for the mentally ill) was established on land of the Paulusconvent (Paulus convent). After the *Alteratie,* the Dolhuys was given the opportunity to expand. See for re-use of monastery areas: Bakker, 'De zichtbare stad 1578-1813' ('The visible city 1578-1813'), 2004, pp. 25-26.

9. The notion of 'super block' was used at the beginning of the 20th century by Eberstadt (*Städtebau und Wohnungswesen in Holland*, 1914) *(Urban design and housing in Holland*, 1914) to typify this form of development in the Dutch city.

10. The most important reason for this is that the Binnengasthuis in the 19th century began to tear down the 17th-century hospital buildings. In its place came typical 19th-century hospital buildings, designed, for better or worse, as free-standing pavilions in a park-like environment. See for this Meischke, 'De gebouwen van het Binnengasthuis in de 19e en 20e eeuw' ('The buildings of the Binnengasthuis in the 19th and 20th century'), 1981.

11. See for this Haan and Haagsma, *Al de gebouwen van de Universiteit van Amsterdam (All the buildings of the Universiteit van Amsterdam)*, 2000, pp. 54-56.

12. What is meant are the following studies: Meischke, *Amsterdam Burgerweeshuis (Amsterdam's City Orphanage)*, 1975; Moulin et al., *Vier eeuwen Amsterdams Binnengasthuis (Four centuries of the Amsterdam Binnengasthuis)*, 1981; Jeeninga, *Het Oostindisch Huis en het Sint Jorishof te Amsterdam (The East Indies House and the Sint Jorishof in Amsterdam)*, 1995; Vis, *De Poort. De Oudemanhuispoort en haar gebruikers (The Gate. The Old Men's Home Gate and its users)*, 2002.

13. Querido, *Godshuizen en gasthuizen (Almshouses and hospitals)*, 1960, p. 8.

14. A known example of a hospital established by a bishop is the Hôtel-Dieu in Paris, that as of 829 was mentioned and stood beside the Notre-Dame on the Île de la Cité. See Pevsner, *A History of Building Types*, 1976, p. 139.

15. Craemer, *Das Hospital als Bautyp des Mittelalters (The hospital as a building type of the Middle Ages)*, 1963, pp. 9-13 and 17.

16. In 1204 Pope Innocent III handed over the hospital S. Maria in Sassia built in Rome in 727 to the Order. As *Ospedale Santo Spirito* this become the seat of the Order. See ibidem, p. 54.

17. Ibidem.

18. Ibidem, pp. 42-43.

19. For medieval beliefs about healing see Bowers, *Medieval Hospital and Medical Practice*, 2007, particularly the exciting article by Lynn Courtenay, 'The Hospital of Notre-Dame des Fontenilles at Tonnerre: Medicine as Misericordia', pp. 77-106.

20. A good example is the Heilige-Geist-Hospital in Lübeck, the floor plan of which is included in this article.

21. Parker, *The Reformation of Community*, 1998, pp. 20-59.

22. The 'poor sitting at home' were poor residents of the city who, contrary to most visitors of the hospital, actually had their own place to stay.

23. The small hospital of 's-Gravenzande was established before 1255 for a member of the Dutch line of counts; see Kossmann-Putto, 'Armen- en ziekenzorg in de Noordelijke Nederlanden' ('Caring for the poor and the sick in the Northern Low Countries'), 1982, p. 255. The first hospital in Dordrecht was established before 1284, probably by Count Floris V; see Kool-Blokland, *Zeven eeuwen ziekenverzorging in Dordrecht en Sliedrecht (Seven centuries of caring for the sick in Dordrecht and Sliedrecht)*, 1995, pp. 8-10. The oldest hospital institution in Gouda is the Sint-Catharina Gasthuis (St Catherine's hospital) probably established in the 13th century by the landlord. The first hospital in Delft is a separate case. In 1252 at the initiative of Ricardis, an aunt of the Dutch Count William II, in Delft a Premonstratensian monastery was established. At the same time and linked to this monastery a hospital was established. See Oosterbaan, *Zeven eeuwen. Geschiedenis van het Oude en Nieuwe Gasthuis te Delft (Seven centuries. History of the Oude and Nieuwe Gasthuis in Delft)*, 1954, pp. 3-14.

24. These first hospitals have often survived as institutions. In almost every Dutch city, the current municipal hospitals can be traced back to the first municipal hospitals at that location. See literature in note 23.

25. In the case of Dordrecht, this is probably based on old maps, in the case of Delft and Gouda, on descriptions in historical documents. See Kool-Blokland, *Zeven eeuwen ziekenverzorging in Dordrecht en Sliedrecht (Seven centuries of caring for the sick in Dordrecht and Sliedrecht)*, 1995, p. 11; see also Oosterbaan, *Zeven eeuwen. Geschiedenis van het Oude en Nieuwe Gasthuis te Delft (Seven centuries. History of the Oude and Nieuwe Gasthuis in Delft)*, 1954, p. 28. Also about the hospital in Gouda it is said that in the beginning there was no separate chapel and that the altar was located in the sick ward. See Denslagen, *Gouda*, 2001, p. 144.

26. Craemer, *Das Hospital als Bautyp des Mittelalters (The hospital as a building type of the Middle Ages)*, 1963, p. 97.

27. See for example the Sint-Catharinagasthuis (St Catherine's hospital) in Gouda. Well documented in drawings and text in Denslagen, *Gouda*, 2001, pp. 141-147 and 270.

28. Just like in Germany, hospitals in Dutch cities were in the hands of the bourgeoisie. In France, on the contrary, hospitals remained under the supervision of the Church during the entire Middle Ages. See Craemer, *Das Hospital als Bautyp des Mittelalter (The hospital as a building type of the Middle Ages)*, 1963, pp. 54-93.

29. In the Middle Ages, lepers were society outcasts. Separate hospitals were established for them outside the city. See Kossmann-Putto, 'Armen- en ziekenzorg in de Noordelijke Nederlanden'('Caring for the poor and the sick in the Northern Low Countries'), 1982, pp. 263-264.

30. De Melker, *Metamorfose van stad en devotie (Metamorphosis of the city and devotion)*, 2002, p. 264.

31. Carasso-Kok and Verkerk, 'Eenheid en verdeeldheid. Politieke en sociale geschiedenis tot in de zestiende eeuw' ('Unity and discontinuity. Political and social history until the 16th century'), 2004, p. 243. Tang and Wigard, *Amsterdamse gasthuizen vanaf de Middeleeuwen (Amsterdam hospitals from the Middle Ages)*, 1994.

32. Kool-Blokland, *Zeven eeuwen ziekenverzorging in Dordrecht en Sliedrecht (Seven centuries of caring for the sick in Dordrecht and Sliedrecht)*, 1995, p. 12.

33. Ibidem, p. 11.

34. De Melker, *Metamorfose van stad en devotie (Metamorphosis of the city and devotion)*, 2002, p. 259.

35. Craemer, *Das Hospital als Bautyp des Mittelalters (The hospital as a building type of the Middle Ages)*, 1963, p. 58.

36. De Melker, *Metamorfose van city en devotie (Metamorphosis of the city and devotion)*, 2002, p. 66

37. Ibidem, p. 283.

38. Ibidem, p. 66.

39. Parker, *The Reformation of Community*, 1998, pp. 4-7.

40. Ibidem, p. 90.

41. De Melker, 'Burgers en devotie 1340-1520' ('Citizens and Devotion 1340-1520'), 2004, pp. 271-277

42. Vermeer, 'De Amsterdamse kloosters stedenbouwkundig en architectuurhistorisch belicht' ('The urban planning and architecture history of Amsterdam's monasteries explained'), 1997, pp. 21-46, floor plan of Franciscan monastery, p. 28.

43. De Melker, 'Burgers en devotie 1340-1520' ('Citizens and devotion 1340-1520'), 2004, p. 279.

44. Van Eeghen, *Vrouwenkloosters and Begijnhof in Amsterdam (Nunneries and the Begijnhof in Amsterdam)*, 1941.

45. Van Eeghen, 'Van Gasthuis tot academisch ziekenhuis' ('From hospital to academic hospital'), 1981, pp. 54-58.

46. Meischke, 'De gebouwen van het Binnengasthuis in de 19e en 20e eeuw' ('The buildings of the Binnengasthuis in the 19th and 20th century'), 1981, p. 105.

47. For an extensive description of the building see Meischke, 'De geschiedenis van het terrein van het St. Pieters- of Binnengasthuis te Amsterdam' ('The history of the grounds of the St. Pieters- of Binnengasthuis in Amsterdam'), 1955, episode 2, column 49-52.

48. This information is derived from the arial view of the *Binnengasthuis* by Johannes Leupenius from 1680.

49. For an extensive description of the building see Meischke, 'De geschiedenis van het terrein van het St. Pieters- of Binnengasthuis' ('The history of the grounds of the St. Pieters- or Binnengasthuis'), 1955, column 53-59.

50. Lesger, *Huur en conjunctuur. De woningmarkt in Amsterdam (Rent and cycle. The housing market in Amsterdam), 1550-1850*, 1986, pp. 90-92.

51. This list is incomplete; a complete list of all buildings erected on the site by the managers of the Binnengasthuis is available in Meischke, 'De geschiedenis van het terrein van het St. Pieters- of Binnengasthuis' ('The history of the grounds of the St. Pieters- or Binnengasthuis'), 1955.

52. In the beginning of the 1980s, the huge Academic Medical Centre (AMC) was built in Bullewijk, Bijlmermeer and Amsterdam Zuidoost. All wards of the Binnengasthuis were moved to the new complex. De Haan and Haagsma, *Al de gebouwen van de Universiteit van Amsterdam (All the buildings of the Universiteit van Amsterdam)*, 2000, pp. 138-139.

53. See for this also Kool-Blokland, *Zeven eeuwen ziekenverzorging in Dordrecht en Sliedrecht (Seven centuries of caring for the sick in Dordrecht and Sliedrecht*), 1995, p. 8.

54. In his research into the development of rent prices in Amsterdam in 1550-1850, Clé Lesger bases himself entirely on the rent prices which were set by the charitable institutions. This mainly has to do with the fact that the well kept archives of these institutions was the best available source for his research. See Lesger, *Huur en conjunctuur. De woningmarkt in Amsterdam (Rent and business cycle. The housing market in Amsterdam)*, 1986.

55. For McCants (*Civic Charity in a Golden Age. Orphan care in early modern Amsterdam*, 1997) it is clear that the Catholic heritage (in the form of land and buildings) provided a financial basis of the well functioning charitable institutions in Amsterdam during the Republic (p. 165): 'Taken together, the financial records of the Burgerweeshuis discussed so far point to the overwhelming importance of the Catholic legacy in the endowment of one of Amsterdam's most famous reformed institutions in the seventeenth century.'

56. We have seen that the architect Philips Vingboons was responsible for the design of the nine mansions on the Turfmarkt. The designers of the number houses, the soldiers' hospital and the other building projects of the Binnengasthuis are unknown. Maybe the Stadsfabriek (municipal architect) was involved with these building projects? Much more data are known of the architects who were involved in the building projects of the Burgerweeshuis. Besides Philips Vingboons, Hendrick de Keyser and Jacob van Campen worked for the orphanage. See Meischke, *Amsterdam Burgerweeshuis* (*Amsterdam City Orphanage*), 1975. As for the development of a series of residential buildings by the managers of the charitable institutions in Amsterdam, the project of the Weeverswoningen (Weever residences) in the Noordse Bos (Northern forest), designed by Philips Vingboons, is a nice example. See books such as McCants, *Civic Charity in a Golden Age*, 1997, p. 158.

57. Ibidem, p. 10.

58. Jetter, *Das europäische Hospital von der Spätantike bis 1800* (*The European hospital of the Late Antiquity until 1800*), 1987, pp. 113-114.

59. Ibidem, p. 113. See also note 55 here above.

60. McCants, *Civic Charity in a Golden Age*, 1997, and Parker, *The Reformation of Community*, 1998.

Bibliography

Bakker, B., 'De zichtbare stad 1578-1813', in W. Frijhoff and M. Prak (ed.), *Geschiedenis van Amsterdam 1578-1650. Centrum van de wereld* (*The history of Amsterdam 1578-1650. Centre of the world*). Amsterdam, SUN, 2005, pp. 17-101.

Bowers, B.S. (ed.), *The Medieval Hospital and Medical Practice*. AVISTA Studies in History of Medieval Technology, Science and Art, vol. 3, Aldershot, Hampshire, Ashgate Publishing, 2007.

Carasso-Kok, M., and C.L. Verkerk, 'Eenheid en verdeeldheid. Politieke en sociale geschiedenis tot in de zestiende eeuw' ('Unity and discontinuity. Political and social history until the 16th century'), in M. Carasso-Kok (ed.), *Geschiedenis van Amsterdam tot 1578. Een stad uit het niets* (*The History of Amsterdam until 1578. A city out of nowhere*). Amsterdam, SUN,
2004, pp. 205-249.

Craemer, U., *Das Hospital als Bautyp des Mittelalters* (*The hospital as a building type of the Middle Ages*). Cologne , W. Kohlhammer Verlag, 1963.

Denslagen, W., *Gouda*. Zwolle, Waanders, 2001.

Dollen, Busso von der, 'An historico-geographical perspective on urban fringe-belt phenomena', in T.R. Slater (red.), *The Built Form of Western Cities. Essays for M.R.G. Conzen on the occasion of his eightieth birthday*. Leicester, Leicester University Press, 1990.

Eberstadt, R., *Städtebau und Wohnungswesen in Holland* (*Urban design and housing in Holland*). Jena, Fischer, 1914.

Eeghen, I.H. van, *Vrouwenkloosters en Begijnhof in Amsterdam, van de 14e tot het eind der 16e eeuw* (*Nunneries and the Begijnhof in Amsterdam, from the 14th to the end of the 16th century*). Universiteit van Amsterdam, dissertation, Amsterdam, 1941.

Eeghen, I.H. van, 'Van Gasthuis tot academisch ziekenhuis' ('From hospital to academic hospital'), in Moulin et al., *Vier eeuwen Amsterdams Binnengasthuis* (*Four centuries of the Amsterdam Binnengasthuis*), 1981.

Engel, H.J., and E.H. Gramsbergen, 'The eerste beursgebouw en de vorming van het centrum van Amsterdam' (The first Commodity Exchange and the forming of the centre of Amsterdam'), in *OverHolland 3*. Amsterdam, SUN, 2006, p. 59.

Haan, H. de, and I. Haagsma, *Al de gebouwen van de Universiteit van Amsterdam* (*All the buildings of the Universiteit van Amsterdam*). Haarlem, Architext, 2000.

Jeeninga, W., *Het Oostindisch Huis en het Sint Jorishof te Amsterdam* (*The East Indies House and the Sint Jorishof in Amsterdam*). Zwolle, Waanders, 1995.

Jetter, D., *Das europäische Hospital, von der Spätantike bis 1800* (*The European hospital of the Late Antiquity until 1800*). Cologne, DuMont Verlag, 1987.

Kool-Blokland, J.L., *Zeven eeuwen ziekenverzorging in Dordrecht en Sliedrecht. Van Heilig-Sacramentsgasthuis tot Merwedeziekenhuis* (*Seven centuries of caring for the sick in Dordrecht and Sliedrecht. From Heilig-Sacramentsgasthuis to the Merwedeziekenhuis*). Dordrecht, Morks, 1995.

Kossmann-Putto, J.A., 'Armen- en ziekenzorg in de Noordelijke Nederlanden' ('Caring for the poor and the sick in the Northern Low Countries'), in *Algemene Geschiedenis der Nederlanden* (*General History of the Netherlands*), Vol 2. *Middeleeuwen* (*Middle Ages*). Haarlem, Fibula-Van Dishoeck, 1982, pp. 254-267.

Lesger, C., *Huur en conjunctuur. De woningmarkt in Amsterdam* (*Rent and business cycle. The housing market in Amsterdam*), *1550-1850* (Amsterdam Historical Series
10). History Seminar of the Universiteit van Amsterdam, 1986.

McCants, A.E.C., *Civic Charity in a Golden Age. Orphan care in early modern Amsterdam*. Urbana, University of Illinois Press, 1997.

Meischke, R., 'De geschiedenis van het terrein van het St. Pieters- of Binnengasthuis te Amsterdam' ('The history of the grounds of the St. Pieters- or Binnengasthuis in Amsterdam'), in *Bulletin KNOB*, year 8 (1955), episode 1, February 1955, column 1-20, and episode 2, April 1955, column 49-84.

Meischke, R., *Amsterdam Burgerweeshuis* (*Amsterdam City Orphanage*). The Hague, Staatsuitgeverij, 1975.

Meischke, R., 'De gebouwen van het Binnengasthuis in de 19e en 20e eeuw' ('The buildings of the Binnengasthuis in the 19th and 20th centuries'), in Moulin et al., *Vier eeuwen Amsterdams Binnengasthuis* (*Four centuries of the Amsterdam Binnengasthuis*), 1981.

Melker, B.R. de, *Metamorfose van stad en devotie. Ontstaan en conjunctuur van kerkelijke, religieuze en charitatieve instellingen in Amsterdam in het licht van de stedelijke ontwikkeling, 1385-1435* (*Metamorphosis of the city and devotion. Rise and business cycle of church, religious and charitable institutions in Amsterdam in the light of urban development, 1385-1435*). Unpublished dissertation, Universiteit van Amsterdam, 2002.

Melker, B.R. de, 'Burgers en devotie 1340-1520', in M. Carasso-Kok (ed.), *Geschiedenis van Amsterdam tot 1578. Een stad uit het niets* (*The History of Amsterdam until 1578. A city out of nowhere*). Amsterdam, SUN, 2004, pp. 251-311.

Moulin, D. de, I.H. van Eeghen and R. Meischke, *Vier eeuwen Amsterdams Binnengasthuis. Drie bijdragen over de geschiedenis van een gasthuis* (*Four centuries of the Amsterdam Binnengasthuis. Three contributions about the history of a hospital*). Wormer, Immerc / Amsterdam 1981.

Oosterbaan, D.P., *Zeven Eeuwen. Geschiedenis van het Oude and Nieuwe Gasthuis te Delft* (*Seven centuries. History of the Oude and Nieuwe Gasthuis in Delft*). Delft, Gaade, 1954.

Parker, C. H., *The Reformation of Community. Social Welfare and Calvinist Charity in Holland, 1572-1620*. Cambridge, Cambridge University Press, 1998.

Pevsner, N., *A History of Building Types*. Princeton, Princeton University Press, 1976.

Querido, A., *Godshuizen en gasthuizen* (*Almshouses and hospitals*). Amsterdam, Wetenschappelijke Uitgeverij N.V., 1960.

Schilder, M. (red.), *Amsterdamse kloosters in de Middeleeuwen* (*Amsterdam monasteries in the Middle Ages*). Amsterdam, Vossiuspers, AUP, 1997.
Tang, F., and M. Wigard, *Amsterdamse gasthuizen vanaf de Middeleeuwen* (*Amsterdam hospitals as of the Middle Ages*). Amsterdam, Amsterdam University Press, 1994.

Vermeer, G., 'De Amsterdamse kloosters stedenbouwkundig en architectuurhistorisch belicht' ('The urban planning and architecture history of Amsterdam's monasteries explained'), in Schilder (ed.), *Amsterdamse kloosters in de Middeleeuwen* (*Amsterdam monasteries in the Middle Ages*), 1997, pp. 21-46.

Vis, J., *De Poort. De Oudemanhuispoort en haar gebruikers* (*The Gate. The Old Men's Home Gate and its users*), 1602-2002. Amsterdam, Boom, 2002.

Seventeenth-century Dutch architecture in paintings and drawings*
Everhard Korthals Altes

In the second half of the 17th century, paintings of church interiors and urban scenes were unprecedentedly popular in the Republic. Artists such as Pieter Saenredam, Emanuel de Witte, Gerrit Berckheyde and Jan van der Heyden painted images of churches, town houses and city squares in places such as Amsterdam, Utrecht, Delft and Haarlem. The main question is, did the architectural style play a role when deciding on the motive of a painting or drawing? Until recently, this subject has not received much attention in art history literature.

It is remarkable that artists often chose medieval buildings instead of contemporary architecture as their subjects. Painters of church interiors such as Pieter Saenredam had an unmistakable preference for the interiors of Sint Bavo (St Bavo) in Haarlem and the Romanesque and Gothic churches in Utrecht (Fig. 2). The only contemporary building Saenredam ever painted was the Nieuwe Kerk (New Church) in Haarlem, designed by Jacob van Campen.[1] Emanuel de Witte almost always painted old buildings such as the Oude and Nieuwe Kerk (Old and New Church) in Delft and Amsterdam (Fig. 3). Only in rare exceptions would he paint a 17th-century building, such as the Commodity Exchange in Amsterdam (Fig. 4) or the Portuguese-Jewish synagogue designed by Elias Bouman. It is remarkable that painters never depicted the interiors of the Westerkerk (Western Church) or Zuiderkerk (Southern Church), the two most important churches of Hendrick de Keyser in Amsterdam.[2]

Even though painters of church exteriors initially also depicted mainly old, often medieval buildings, more attention was paid to contemporary architecture throughout the 17th century. This article pursues this issue in greater depth and investigates the artists who showed an interest in the architecture of Hendrick de Keyser, Jacob van Campen and Pieter Post among others. How did they depict this architecture and what does this tell us about the appreciation of contempo-

rary architecture in the 17th century? Finally, is there an explanation for the rather limited interest in De Keyser's work?

Hendrick de Keyser
The popularity of Hendrick de Keyser in the 17th century was mainly based on his magnum opus, William of Orange's tomb in the Nieuwe Kerk in Delft.[3] Poets Joost van den Vondel and Jan Vos were among those who praised the sculpture, and several Dutch and foreign travellers made a special journey to Delft to admire the monument. Furthermore, it was regularly painted by artists such as Gerard Houckgeest, Emanuel de Witte and Hendrick van Vliet (Fig. 5). The sculptures of De Keyser brought him fame and his architecture contributed to this. Cornelis Danckertsz van Seevenhove and Salomon de Bray published a book in 1631 entitled *Architectura Moderna ofte Bouwinge van onsen tyt (Modern architecture or Buildings of our time)*, which describes and depicts the most important works of De Keyser's architecture in great detail.[4] Even though his architectural style was possibly already dated and a more strict form of classicism had appeared, his buildings were still very much appreciated ten years after his death, which made the publication of such a book still possible.[5] An indication of the fading glory of De Keyser can perhaps be found in the illustrated historical-topographical descriptions of Amsterdam in the second half of the 17th century, which depicted, described and praised the architecture of the Westerkerk, Zuiderkerk and Noorderkerk (Northern Church), although failing to mention the name of the architect.[6] Furthermore, it is remarkable to see that churches designed by De Keyser were scarcely depicted in 17th-century art. The exteriors did not attract much interest from artists and the interiors, none at all. However, the church towers were regularly seen in the background of urban scenes or town profiles. The following mainly describes the paintings and drawings in which the architecture of De Keyser is prominently present.

The construction of the Westerkerk started in 1620. Hendrick de Keyser had designed the church, but died a year later. Led by his son Pieter, the church was completed in 1631 and the tower, possibly designed by Cornelis Danckerts, was completed a few years later in 1638. The exterior of the Westerkerk is depicted as the main theme in several paintings by Jan van der Heyden. Around 1660, he painted a nearly frontal view of the east side of the church from across the Keizersgracht (Fig. 6) in the most precise manner and with an incredible eye for detail.[7] On the left, the Westermarkt (Western Market) can be seen with the Westerhal (Western Hall) on the far left. Apart from some small details, the painting, which was probably commissioned by the church wardens of the

Westerkerk, accurately depicts reality. Also, a preliminary sketch of this exceptional work by Van der Heyden exists (Amsterdam, city archives).[8] Approximately ten years later, he painted a similar view of the church from a slightly closer position (Wallace Collection, London).[9] Ultimately, around 1667-1670, he painted *Het gezicht op de Keizersgracht met de Westerkerk vanuit het Zuid-Oosten gezien en de Oude Waag (View of Keizersgracht with the Western Church seen from the South-East and Oude Waag)* (Fig. 7).[10] This painting does not have the character of an architectural portrait, but is rather a depiction of the church's surroundings and its location. Using a low viewpoint, the artist emphasised the difference in height between the canal houses and the church and tower, Amsterdam's highest point. Jan van Kessel did something similar in his painting *De Keizersgracht met de Westerhal en de Westerkerk (Keizersgracht with the Westerhal and the Westerkerk)* (Fig. 8).[11] He also chose a low viewpoint, creating the illusion that the tower of the Westerkerk looks higher than it actually is, even though the use of light draws the attention to the Westerhal, giving the impression that the tower is less important in this composition. This also applies to another painting from Van Kessel in which the brightly lit trees along the canal dominate the painting, while the church and tower, which rise just above the trees and fall in the shadow of a cloud, attract less attention (Brussels, Musée d'Ixelles).[12]

No one in the 17th century made a more detailed study of the Westertoren than an unknown student of Rembrandt van Rijn (Fig. 9), possibly Samuel van Hoogstraten.[13] This famous drawing, for a long time attributed to the master himself, is a view of the church from the Leliebrug. At first glance, the accuracy in the representation of detail is striking. However, precision was never the intention of Rembrandt's drawings. He focused on the characterisation and attractiveness rather than on topographical accuracy. Some differences with reality can also be seen in this drawing. The coarse depiction of the tower is striking. Another drawing, attributed to Rembrandt in the 19th century, is *Het gezicht op de Westerkerk en omgeving (View of the Westerkerk and surroundings)*, possibly by Philips Koninck (Fig. 10).[14] The artist chose a more distant viewpoint, possibly the Osdorp or Nieuwkerk bulwark, near Elandsgracht. Rembrandt himself drew *De Keizersgracht met op de achtergrond de Westertoren (The Keizersgracht with the Westertoren in the background)* (Paris, Musée du Louvre). According to Boudewijn Bakker, Rembrandt drew from the second bridge over the Keizersgracht, north of the Westermarkt, meaning that the bridge shown on the drawing is the one near the Leliegracht.[15] Based on the tower's typical crown, it is clearly the Westertoren. In the 18th century, the Westerkerk was depicted

more often than in the previous century. From time to time it was painted by artists such as Isaak Ouwater, but mainly drawn or printed by Jan de Beyer and Reinier Vinkeles among others.[16]

The Zuiderkerk, the first large and newly built Protestant church in Amsterdam (1603-1611), was hardly ever depicted as the main theme in the 17th century. The church was most clearly depicted in a painting from 1659 by Reinier Nooms, known as Zeeman (Sailor), which also shows the Zwanenburgwal (Fig. 11). However, there are several depictions of the tower showing in the background, as in *Het gezicht op de Nieuwmarkt met de Zuiderkerk (View of the Nieuwmarkt with the Zuiderkerk)* by Gerrit Adriaensz. Berckheyde.[17] On the right, the old medieval building of the Waag (Weigh house) is shown, with behind it, rising high above the houses, the Zuiderkerkstoren (Tower of the Southern Church), the height of which seems to be slightly exaggerated. Other examples are two paintings from Jan van der Heyden, in which the tower rises above the houses located near the Sint Anthonispoort (Saint Anthony's Gate) (St. Petersburg, Hermitage, and private collection).[18] This gate was built in 1636 in accordance with Pieter de Keyser's design. With little attention to accuracy, Jacob van Ruisdael used the same viewpoint in a drawing (Bremen, Kunsthalle) that was later printed by Abraham Blooteling.[19] The background of the painting *Het gezicht op de Binnenamstel (View of the Binnenamstel)*, also by Jacob van Ruisdael, was dominated by the Zuiderkerkstoren as well (Budapest, Szépmûvészeti Múzeum).[20] The viewer looks over the right bank of the Amstel in the direction of the Blauwbrug. Drawn by Abraham Beerstraaten, *Gezicht op de Binnenamstel met de Kloveniersdoelen en de Kloveniersburgwal (View of the Binnenamstel with the Kloveniersdoelen and the Kloveniersburgwal)* is an extremely detailed drawing.[21] The Zuiderkerkstoren takes only a secondary role in the background, but it gets a far more prominent role in a drawing by Jan van Kessel (Fig. 12) in which he roughly outlined the Raamgracht and the tower rising high above the houses and trees.[22] The number of depictions of the Zuiderkerk in the 18th century is larger. The tower appears in the works of Jan de Beyer several times: for example, a painting and drawing from 1758 depict the Houtgracht and the Zuiderkerkstoren (both Amsterdam Historical Museum).[23] It is remarkable that no one in the 17th and 18th centuries opted for the obvious picturesque Groenburgwal viewpoint, while many artists in later centuries (including Claude Monet in a painting in the Philadelphia Museum of Art) did use this position.

The Noorderkerk, designed by Hendrick de Keyser and built between 1620 and 1623, hardly received any attention from 17th-century artists. An exception was Abraham

Beerstraaten who depicted the church centrally in a winter view (Fig. 13).[24] While a crowd of people are enjoying themselves on the ice, dark clouds appear in the sky above the city. The roof of the church and the branches of the trees are covered in snow. The sunlight illuminates the church, making it the focal point of the painting. Hercules Seghers also depicted the Noorderkerk in a fascinating etch (Fig. 14).[25] He must have etched the church from a tall house, possibly his own on the North side of the Lindengracht. High up from a window, he looked over the North side of the building and the roofs of the houses surrounding the church. A painting from Seghers of the Noorderkerk is supposed to also have existed. It was sold on 18 April 1709, but no trace of the painting has been found since.

In 1607, building works of the Commodity Exchange, generally attributed to Hendrick de Keyser, started.[26] In the 17th century, the Commodity Exchange was hardly painted or drawn, although it was regularly printed. Examples include paintings by Philips Vingboons, the Huis Berckheyde and Emanuel de Witte (Rotterdam, Museum Boijmans Van Beuningen, Amsterdam, Amsterdam Historical Museum and Frankfurt am Main, Staedel (Fig. 15)).[27] These painters mostly chose the courtyard as their subject. The painting in Frankfurt however, shows the North façade of the building, including the gate leading to the courtyard. Most of these paintings not only depict the architecture, but they also include many traders who emphasise the importance of the Amsterdam Commodity Exchange as an international trade centre. Jan van der Heyden also painted the Commodity Exchange, but chose an unusual and unobvious viewpoint from the back of the building, and in addition, adding a partly imaginary surrounding (Stuttgart, Staatsgalerie).[28] Reinier Nooms depicted the Rokin and the Commodity Exchange several times, both drawn and etched.[29] Furthermore, there is a drawing of the Rokin and the Commodity Exchange by the Rembrandt school (Vienna, Albertina).

It is remarkable that the old city towers of Amsterdam, the Montelbaanstoren, Jan Roodenpoortstoren and Haringpakkerstoren, all renovated by Hendrick de Keyser, regularly appear in 17th-century art. The Montelbaanstoren was painted by Reinier Nooms, Jan Abrahamsz. Beerstraaten, Aert van der Neer, Thomas Heeremans and Abraham and Jacobus Storck and drawn by Roelant Saverij, Jan van Goyen (Fig. 16), Rembrandt, Pieter de la Tombe, Aert van der Neer, Jan van Kessel (?), Jacob van Ruisdael and Ludolf Backhuizen among others.[30] The Zuiderkerkstoren is often depicted small in the background. The Jan Roodenpoortstoren was painted by Reinier Nooms, Jacobus Storck, Gerrit Berckheyde and an anonymous painter (possibly Job Berckheyde) among others. The Haringpakkerstoren

was painted by Jan van Goyen, Abraham Beerstraaten, Jacobus and Abraham Storck, Thomas Heeremans and Meindert Hobbema and drawn by Claes Jan Visscher, Jan van Goyen and Jacobus Storck among others.

Why did these three remarkable city towers get so much more attention than the churches by De Keyser? The towers of the Westerkerk and Zuiderkerk are much taller and look equally picturesque. An important factor was perhaps that these churches were relatively new, while the Montelbaanstoren, Jan Roodenpoortstoren and Haringpakkerstoren were more than 100 years old. They dated back to the 15th and 16th centuries and it was their age that certain artists emphasised. The best examples of this are three drawings of the Montelbaanstoren. Both Roelant Saverij and Rembrandt, as well as Jacob van Ruisdael intentionally omitted the high spire, a modern addition which was added afterwards by De Keyser (Fig. 17 and 1).

Other buildings in the style of Hendrick de Keyser, such as the Munttoren (Mint Tower), the Huis Bartolotti (House Bartolotti), the 'Dolphin House', Singel 140-142, the Haarlemmerpoort (Haarlemmer Gate), the Spin- en Rasphuispoortje (Spin and Rasphuis Gate), the East Indian House (VOC – East Indian Company), the 'House with the Heads' and the town hall of Delft were even less depicted than the Amsterdam churches in the 17th century.[31]

Picturesque

How can we explain the limited interest in Hendrick de Keyser's architecture in the visual arts? During a large part of the 17th century, artists often chose medieval architecture instead of contemporary architecture as their subject. This preference can perhaps be explained by many art lovers' appreciation of the 'schilderachtig' (i.e. 'picturesque') character of old architecture. Boudewijn Bakker researched this term, which often appeared in 17th-century art history literature.[32] The neutral meaning of the word was 'suitable to be painted'. At the start of the 17th century however, picturesque meant particularly colourful, characterised by time and irregular in structure. A building was thought to be picturesque if it was run-down or unsuitable. Other possible meanings are characteristic, special or peculiar, deviant or even ugly, varied, striking, typical and strange. During the 17th century, classicistic authors, such as amateur artist Jan de Bisschop (in his *Paradigmata* from 1671), revert to the original, neutral meaning in order to subsequently descibe what they believed was worth painting, namely straight, fine, new, clear, balanced and strictly built geometric shapes, while others kept on using the word in its traditional meaning. Eventually, more appreciation was given to the more liberal variation of the term, praised by painter and

art theorist Gerard de Lairesse in his *Groot Schilderboek (The great book of painting)* (1707), namely lively, charming and true-to-nature but thanks to a 'correct' preference also exquisite, respectable and modest. It is this view that has determined the 18th-century character of landscapes and urban scenes. The different definitions of the term picturesque were possibly established as the result of a change in taste. During the 17th century, the middle class became 'noble' and subsequently also did the paintings desired by the bourgeoisie.[33]

It is plausible that due to the changed definition of the term 'picturesque', the frequency with which certain buildings appeared in the visual arts was also altered. In fact, the number of depictions of contemporary, classicistic architecture increased in the second half of the 17th century, while the number of depictions of medieval architecture decreased. The new town hall in Amsterdam, designed by Jacob van Campen, was often depicted by Jacob van der Ulft, Jan van Heyden and Gerrit Adriaensz. Berckheyde among others.[34] A beautiful example is the frontal view of the town hall by Berckheyde, who paid much attention to classicistic architecture (Fig. 18). The modern style as well as the exceptional size and purpose of the town hall as a symbol of the pride of Amsterdam's citizens played an important role in the immense popularity of this subject. However, other classicistic buildings, designed by Jacob van Campen and Pieter Post among others, were also regularly depicted in paintings and drawings during the last decades of the 17th century, such as the Heiligewegspoort in Amsterdam and the Mauritshuis and Huis Ten Bosch in The Hague. Jan de Bisschop and Jan van Call drew both the Huygenshuis and the Mauritshuis (Fig. 19).[35] The Mauritshuis was painted several times by Gerrit Berckheyde (Fig. 20).[36] He always depicted the façade near the water of the Hofvijver viewed from the Lange Vijverberg. A small part of the Huygenshuis can often be seen in the background. Jan van der Heyden painted Huis Ten Bosch six times, paying much attention to the beautiful gardens that he and Pieter Florisz. van der Sallem had designed (Fig. 21).[37] Examples of other classicistic palaces are Huis Honselaersdijck, depicted by Abraham van Beerstraaten and Huis ter Nieuburch near Rijswijk, which Anthony, Jacob and Pieter van der Croos depicted on several occasions and Jan de Bisschop drew a few times (Fig. 22).[38] The drawing shown clearly depicts the unique loggia, situated on the South side of the house's principle axis.

Cynthia Lawrence already noted in her study on Gerrit Berckheyde that it is peculiar why this artist, who worked in the second half of the 17th century, did not depict the old churches in Amsterdam, such as the Oude Kerk, and showed no interest in the Westerkerk, Zuiderkerk and Noorderkerk

by De Keyser either, but instead felt more drawn to contemporary architecture such as the Ronde Lutherse Kerk (Round Lutheran Church), the Oudezijds Herenlogement (Oudezijds Guesthouse), the Synagogue and obviously the new town hall.[39] Berckheyde probably chose contemporary architecture, as it was more picturesque in his opinion, meaning clear and balanced. The churches of De Keyser were designed in a style that became superseded due to the rise of a more strict form of classicism and out of fashion in the 17th century. Painters initially did not consider De Keyser's architecture to be old enough and later in the 17th century it was considered too old to be picturesque. This possibly explains the small number of paintings and drawings clearly depicting his architecture. The style of the architecture must have played a significant role in deciding on the subject of a painting or drawing.

Notes

* I would like to thank Boudewijn Bakker for his comments and suggestions on a previous version of this article.
1. G. Schwartz and M.J. Bok, *Pieter Saenredam. De schilder in zijn tijd (The painter in his day)*. Maarssen/Den Haag 1989, pp. 215-228.
2. I. Manke, *Emanuel de Witte 1617-1672*. Amsterdam 1963, pp. 43-44, mentions a few church interiors of Emanuel de Witte that look like the Westerkerk and Zuiderkerk, but which most definitely are not (Fig. 76, 77 and 109).
3. N. Ex and F. Scholten, *De Prins en De Keyser (The Prince and De Keyser)*. Bussum, 2001, pp. 110-118 and 126-132; F. Scholten, *Sumptuous memories: studies in seventeenth-century Dutch tomb sculpture*. Zwolle, 2003, pp. 211-231. See also E. Neurdenburg, *Hendrick de Keyser, beeldhouwer en bouwmeester van Amsterdam (Hendrick de Keyser, sculptor and architect of Amsterdam)*. Amsterdam sa [around 1930].
4. S. de Bray and C. Danckertsz, *Architectura Moderna ofte Bouwinge van onsen tyt (Modern Architecture or Buildings of our time)*. Amsterdam, 1631.
5. See also F.R.E. Blom, H.G. Bruin and K. Ottenheym, *Domus. Het huis van Constantijn Huygens in Den Haag (Domus. The house of Constantijn Huygens in The Hague)*. Zutphen, 1999, p. 101.
6. Melchior Fokkens, *Beschrijvinge der wijdt-vermaarde koop-stadt Amstelredam (Topography of the renowned trading town Amsterdam)*. Amsterdam, 1663, pp. 226-232; Filips von Zesen, *Beschreibung der Stadt Amsterdam (Topography of Amsterdam city)*. Amsterdam 1664, pp. 307-308 (Zuiderkerk), pp. 360-361 (Westerkerk), pp. 369-370 (Noorderkerk); Tobias van Domselaer, *Beschryvinge van Amsterdam (Topography of Amsterdam)*. Amsterdam 1665, pp. 77-82, 255-256 and 262, does not mention De Keyser as the architect of the Zuiderkerk,

Westerkerk and Noorderkerk, the Montel-baanstoren (Montelbaan Tower) and Haring-pakkertoren (Herring Packer Tower); on p. 258 he does mention him as the architect of a section of the Jan Roodenpoortstoren (Jan Roodenpoort Tower). Olfert Dapper, *Historische beschrijvinge van Amsterdam (Historic topography of Amsterdam)*. Amsterdam 1663, p. 397, mentions Hendrick de Keyser as the architect of the Westerkerk, Zuiderkerk and Noorderkerk, Commodity Exchange, Jan Roodenpoortstoren and Haarlemmerpoort (Haarlemmer Tower).

7. H. Wagner, *Jan van der Heyden*. Amsterdam/Haarlem 1971, p. 69, no. 8; N. MacLaren en C. Brown, *The Dutch School 1600-1900*. National Gallery, London, 1991, p. 557, no. 6526; P.C. Sutton, exhibition catalogue *Jan van der Heyden (1637-1712)*. Bruce Museum, Greenwich, Connecticut, USA and Rijksmuseum, Amsterdam, 2006, pp. 37-38.

8. B. Bakker et al. *De verzameling Van Eeghen: Amsterdamse Tekeningen 1600-1900 (The Van Eeghen collection: Drawings of Amsterdam 1600-1900)*. Amsterdam (City Archives, Amsterdam) 1989, pp. 99-101, no. 39.

9. Wagner, *Jan van der Heyden* (note 7), p. 67, no. 7; J. Ingamells, *The Wallace Collection. Catalogue of pictures*. London 1992, pp. 147-149, P 225; Sutton, *Jan van der Heyden* (note 7), p. 38-39.

10. Wagner, *Jan van der Heyden* (note 7), p. 69, no. 9; Sutton, *Jan van der Heyden* (note 7), cat. no. 13, pp. 133-134. Another example is an imaginary urban scene of Van der Heyden in London, Bridgewater House, which depicts the Westertoren very small in the background. See Wagner, *Jan van der Heyden* (note 7), p. 16.

11. A. Davies, *Jan van Kessel (1641-1680)*, Doornspijk 1992, pp. 113-115, cat. no. 7.

12. Ibidem, p. 118-119, cat. no. 10.

13. B. Broos, exhibition catalogue. *Rembrandt en tekenaars uit zijn omgeving ('Rembrandt and draughtsmen in his environment')*. Amsterdam (Amsterdam Historic Museum) 1981, cat. no. 19, pp. 82-86; B. Binstock, 'Samuel van Hoogstraten's Westertoren' ('Samuel van Hoogstraten's Western Tower'). *Master Drawings* XLV (2007), pp. 187-200.

14. Broos, exhibition catalogue. *Rembrandt* (note 13), cat. no. 44, pp. 159-161. Broos also mentions a different 17th-century drawing with virtually the same viewpoint (Vienna, Albertina). In a different drawing from Philips Koninck, a glimpse of the Westertoren is visible on the far right, Amsterdam auction (Sotheby's), 12 November 1996, no. 75.

15. B. Bakker et al. *Het landschap van Rembrandt. Wandelingen in en om Amsterdam (The landscape of Rembrandt. Walks in and near Amsterdam)*. City Archives Amsterdam/Custodia Foundation, Paris, Bussum 1998-1999, pp. 171-173, fig 2.

16. Ouwater's version from 1778 is on display in the National Gallery of Canada, Ottawa. He painted a different version in 1779 which was auctioned in London (Sotheby's) on 3 October 1997. For De Beijer, see H. Romers, *J. de Beijer. Oeuvre-catalogus ('J. de Beijer. Catalogue of his works')*. 's-Gravenhage, 1969, pp. 87-88.

17. London Auction (Bonhams), 7 July 2004, panel, 29,5 x 41 cm.

18. Wagner, *Jan van der Heyden* (note 7), no. 17 and 19. See also Sutton, *Jan van der Heyden* (note 7), p. 45; London auction (Sotheby's), 6 December 2006, no. 20.

19. S. Slive, *Jacob van Ruisdael. A complete catalogue of his paintings, drawings and etchings*. New Haven & London 2001, pp. 516-517, no. D 32.

20. Ibidem, p. 15, no. 2.

21. Previously Fodor Museum, see catalogue 1874, no. 240.

22. Davies, *Jan van Kessel* (note 11), pp. 232-233, cat. no. d1. 1, fig. 194, which mentions that over the years, three paintings of the Zuiderkerk by Van Kessel were lost.

23. Romers, *Jan de Beijer* (note 16), pp. 78-84; I. Oud & L. van Oosterzee, *Oude tekeningen in het bezit van het Amsterdams Historisch Museum. Nederlandse tekenaars geboren tussen 1660 en 1745 (Old drawings in hands of Amsterdam Historical Museum. Dutch draughtsmen born between 1660 and 1745)*. Amsterdam/Zwolle 1999, p. 30, no. 14.

24. G. van der Most, *Beerstraaten. Kunstschilders uit de zeventiende eeuw (Beerstraaten. Artists from the seventeenth century)*. Noorden 2002, p. 26 (as Jan Abrahamsz. Beerstraaten).

25. E. Haverkamp Begemann, *Hercules Seghers*. The Hague, 1973, pp. 87-88, no. 41.

26. H. Engel and E. Gramsbergen, 'Het eerste beursgebouw en de vorming van het centrum van Amsterdam' ('The first commodity exchange and the creation of Amsterdam's city centre'), *OverHolland* 3, 2006, pp. 57-87.

27. J. Giltaij & G. Jansen, exhibition catalogue. *Perspectieven: Saenredam en de architectuurschilders van de 17e eeuw (Perspectives: Saenredam and the architectural painters of the 17th century)*. Rotterdam, Museum Boijmans Van Beuningen, 1991, pp. 188-191 and 278-281, no. 35 and 59; L. Krempel, *Holländische Gemälde im Städel 1550-1800 (Dutch paintings at the Staedel 1550-1800)*. Petersberg, 2005, pp. 30-36.

28. Wagner, *Jan van der Heyden* (note 7), p. 68, no. 5; Sutton, *Jan van der Heyden* (note 7), p. 46-47.

29. Bakker et al., *De verzameling Van Eeghen (The Van Eeghen collection)* (note 8), p. 77, no. 23.

30. See Bakker, *Het landschap van Rembrandt (Rembrandt's landscape)* (note 15), pp. 156-161; S. Slive, *Jacob van Ruisdael. Master of Landscape*. Los Angeles (Los Angeles County Museum)/ Philadelphia

(Philadelphia Museum of Art)/ London (Royal Academy) 2005, pp. 184-185, no. 70. Bakker et al. *De verzameling Van Eeghen (The Van Eeghen collection)* (note 8), p. 61, no. 5, p. 87, no. 34; Most, *Beerstraaten* (note 24), p. 33; W. Schulz, *Aert van der Neer*. Doornspijk 2002, pp. 151 and 484, no. 99 and D 4.

31. The Munt was depicted by Jacobus Storck and Pieter de la Tombe among others. See exhibition catalogue *Opkomst en bloei van het Noordnederlandse stadsgezicht in de 17de eeuw (The Dutch Cityscape in the 17th Century and its Sources)*. Toronto, Art Gallery of Ontario/Amsterdam, Amsterdam Historical Museum, 1977, no. 86. For the Bartolotti Huis, see Sutton, *Jan van der Heyden* (note 7), p. 47. The Haarlemmerpoort was depicted in a painting by Hendrick Cornelisz. Vroom (Amsterdam Historical Museum), Jan van Goyen (Private collection), Jan van der Heyden (Berlin, Gemäldegalerie, Staatliche Museen zu Berlin) and in a drawing by Gerbrand van den Eeckhout (Haarlem, Teylers Museum).

32. B. Bakker, '"Schilderachtig": discussies over term en begrip in de zeventiende eeuw' ('"Schilderachtig": discussions of a seventeenth century term and concept'), in C. van Eck et al. (ed.) *Het Schilderachtige. Studies over het schilderachtige in de Nederlandse kunst, theorie en architectuur 1650-1900 ('Schilderachtig'. Studies about 'Schilderachtig' in Dutch art, theory and architecture 1650-1900)*. Amsterdam 1994, pp. 11-24; B. Bakker, 'Schilderachtig: discussions of a seventeenth-century term and concept', *Simiolus* 23 (1995), pp. 147-162. See also J.A. Emmens, *Rembrandt en de regels van de kunst (Rembrandt and the rules of art)*. Utrecht 1968, pp. 124-129; B. Bakker, *Landschap en wereldbeeld. Van Van Eyck tot Rembrandt (Landscape and world view. From Van Eyck to Rembrandt')*. Bussum 2004, pp. 319-338; B. Bakker, 'Natuur of kunst? Rembrandts esthetica en de Nederlandse traditie', ('Nature or Art? Rembrandt's aesthetics and the Dutch tradition'), in C. Vogelaar, G.J.M. Weber, exh. cat. *Rembrandts landschappen (Rembrandt's landscapes)*. Gemäldegalerie Alte Meister, Kassel and Museum de Lakenhal, Leiden, Zwolle, 2006, pp. 145-171.

33. G. Weber, 'Een steile klim. Enkele aspecten van de "veradellijking" van de schilderkunst rond 1700' ('A steep climb. Several aspects of how the art of painting became "noble" around 1700'), in E. Mai, S. Paarlberg, G. Weber, *De Kroon op het werk. Hollandse schilderkunst 1670-1750 (The Crowning glory. Dutch painting 1670-1750)*. Wallraf-Richartz-Museum, Cologne / Dordrecht's Museum, Dordrecht / Gemäldegalerie Alte Meister, Kassel 2006, pp. 51-60.

34. J. Peeters et al., *Het paleis in de schilderkunst van de Gouden Eeuw (The palace in Golden Age paintings)*, Royal Palace Foundation, Amsterdam, Zwolle 1997;

C. Lawrence, *Gerrit Adriaensz. Berckheyde (1638-1698)*. Doornspijk 1991, pp. 49-60, Figs. 48, 49, 52, 54, 56 and 57.

35. J. Huisken, K. Ottenheym, G. Schwartz, *Jacob van Campen. Het klassieke ideaal in de Gouden Eeuw (Jacob van Campen. The classic ideal in the Golden Age)*. Amsterdam, 1995; J.J. Terwen and K.A. Ottenheym, *Pieter Post (1608-1669), architect*. Zutphen 1993; J.G. van Gelder, 'Jan de Bisschop 1628-1671', *Oud Holland* 86 (1971), pp. 201-288, in particular pp. 268-269; R.E. Jellema and M. Plomp, *Jan de Bisschop (1628-1671). Episcopus, advocaat en tekenaar (Jan de Bisschop (1628-1671). Episcopus, lawyer and draughtsman)*. Het Rembrandthuis, Amsterdam, Zwolle 1992, pp. 9, 33 and 36; C. Dumas, *Haagse stadsgezichten 1550-1800 (Hague urban scenes 1550-1800)*. Zwolle, 1991, p. 167, which also shows a drawing of the Huygenshuis by Hendrik Hondius after Pieter Post. For the Heiligewegspoort, see paintings by Jan van Kessel (Davies, pp. 109-113) and Jan Abrahamsz. and Abraham Beerstraaten and drawings by Jan Abrahamsz. Beerstraaten and Jacob van Ruisdael among others (Bakker et al., *De verzameling Van Eeghen (The Van Eeghen collection)* (note 8), pp. 72-73, no. 17, and pp. 85-86, no. 32). It is remarkable that some buildings of Post and Van Campen were almost never painted or drawn, while others were depicted often.

36. Lawrence, *Berckheyde* (note 34), fig. 79; Dumas, *Haagse stadsgezichten (Hague urban scenes)* (note 35), pp. 115-116 and 192-197.

37. Wagner, *Jan van der Heyden* (note 7), pp. 96-98, no. 133-139; Sutton, Jan van der Heyden (note 7), p. *158-163, no. 22-23. Dumas, Haagse stadsgezichten (Hague urban scenes)* (note 35), pp. 322-329 and 364 also mentions several paintings and drawings by other artists, among which Jacob and Anthony van der Croos, Jan van Call and Valentijn Klotz.

38. Dumas, *Haagse stadsgezichten (Hague urban scenes)* (note 35), p. 23, fig 15, and pp. 344-349 and 520-527.

39. Lawrence, *Berckheyde* (note 34), p. 52.

Ungers and Koolhaas: Urban conditions and architectural form
Lara Schrijver

'Als de moderniteit zich afspeelt in een spanningsveld tussen overgave en schrapzetten, overgave aan de maalstroom van modernisering, of schrapzetten tegen diezelfde maalstroom, dan heeft de Nederlandse architectuur zich al voor de oorlog minimaal overgegeven en zich maximaal schrapgezet. Rem Koolhaas (in *Hoe modern is de Nederlandse architectuur?* Rotterdam: 010, 1990, p. 15)

'The great originality of the Generic City is simply to abandon what doesn't work – what has outlived its use – to break up the blacktop of idealism with the jackhammers of realism and to accept whatever grows in its place.'
Rem Koolhaas (Generic City 6.1, in: *S,M,L,XL*. Rotterdam, 010, 1995. p. 1232)

The criticism that Koolhaas directs at Dutch architecture during the symposium *Hoe modern is de Nederlandse architectuur?* in 1990 is about its inflexibility. He comments on its conventionality, its politeness and above all the need to keep everything under control. This is in direct opposition to the potential that could arise if the discipline could only 'accept whatever grows in its place'. At the symposium he also notes that Dutch cities suffer from a certain myth of the 'nice' historic city center, which results in everything outside of that being left to its own devices. The rigid approach to the city centers leads to everything around them being neglected. In this view, the 'clutter' of the Dutch landscape might not be caused despite, but rather *because of* the resistance to the 'maelstrom of modernity'. In opposition to the extremely overdetermined spatial planning that he perceives in the Netherlands, Koolhaas tries to offer alternatives.

The early work of Koolhaas already hints at this. Until the publication of *Delirious New York*, his work is oriented towards the shifts in urban and architectural paradigms. This is to be seen in his affinity with the work of Oswald Mathias Ungers, who had both a

loose connection with Team X as well as a number of ideas he shared with Aldo Rossi. Koolhaas first studied with Ungers, and subsequently also worked on a number of projects for him. Both conceived of a different role for the architectural object in the city than what was common at the time. The building is their focus, and not as an ideal carved in stone, but rather as an object in itself. In this sense, the work of Koolhaas and Ungers between 1968 and 1978 offers a different perspective on the contemporary European city. The field of contradictions they continually explore, makes it possible to embrace the potential of the 'realism' that Generic City invokes.

The work of Koolhaas tends to raise at least as many questions as it answers, and in the Netherlands in particular his work has often been at odds with the ideas of the time. This often resulted in dilemmas being voiced from the side of architectural criticism. For example, the jury report on the extension to the Dutch parliament building offers an exemplary display of ambivalence: 'Het is in deze omgeving een hard plan waarvan de intellectuele pretentie in de architectonische doorwerking niet wordt waargemaakt … Omdat dit ontwerp door een shockeffect de gedachten over ontwerp en situatie, ook voor de algemene discussie over de waarden van architectuur en stedebouw, in beweging kan zetten, heeft de jury gemeend dit plan met een premie te belonen.'[1] His own relationship with the Dutch context is put forward unapologetically in an early interview with Hans van Dijk. In response to the question whether he can compare the educational contexts of New York, London and Delft, he answers: 'Van Delft kan ik zeggen dat het de meest verloederde onderwijssituatie is die ik ooit in mijn leven ben tegengekomen. Er heerst hier een groot wederzijds negeren. Ook heeft juist de aandacht voor het menselijke, het warme, het sociaal bewogene en het politieke geleid tot een volkomen wegebben van het bewustzijn van de architectuur als een formele kunst. Vandaar dat alle formele theorieën hier ontstellend primitief zijn. Dat zogenoemde Hollandse Structuralisme is toch van een ontstellende plompverlorenheid en naïviteit?'[2] All of this did not prevent him from accepting a temporary professorship at the TU Delft however. This is where he saw the opportunity to pose some questions at the symposium *Hoe modern is de Nederlandse architectuur?* which revealed the discomfort that still reigned at the TU Delft in its relationship with modern architecture. In the Netherlands, the belief in social engineering through architecture was still too strong to consider the possibility of 'accepting reality' as Koolhaas would suggest in *Delirious New York* and the later 'Generic City'.

The complicated relationship between the Dutch architecture debate, predomi-

nantly revolving around the ideas of Van Eyck in the late 1960s, and the work (as well as the inscrutable personality) of Rem Koolhaas has likely contributed to an interpretation of his work that supports his refusal to speak explicitly about the formal aspects of architecture – since indeed this debate is focused primarily on function and program. This leads to excessive attention being given to his background as a writer (of scenarios), and little to his work as an architect.

Against idealisations
Rem Koolhaas began studying architecture in 1968, after first studying film and working as a journalist for the Dutch *Haagse Post*. At the Architectural Association (AA) in London, he encountered the quintessential 1960s culture of 'rice-cooking hippies' who believed it was more important to 'free your mind' than to learn drafting techniques. In a sense, this school was a disappointment to Koolhaas, who had hoped to learn a craft from experienced teachers, through concrete knowledge and techniques. However, he would later suggest that this environment was more fruitful for him than he could have imagined, since it forced him to be extremely clear on what he expected from architecture *in opposition* to the dominant mode of thought at the AA.[3]

In the summer of 1971, he visited Berlin as part of his studies at the AA. One of the few traditional elements of the program, the 'Summer Study' was intended as a documentation of an existing architectural object. The typical choice of project was a 'classic' work of architecture such as an Italian villa. Koolhaas decided to study the Berlin wall, by then already ten years old. Although he appeared to stray from the assignment with his unconventional choice of object, his examination of it was precisely what was required: a carefully articulated analysis of the architecture. At the same time, his approach would prove prophetic for his later work. Combining a careful study of the architectural presence of the wall with speculations on its formation, he argued that the Berlin wall embodied an urban *condition*. Oddly enough, his specifically architectural view of the object at hand overturned a traditional understanding of the discipline of architecture: it questioned the direct correlation between architectural form and its significance. His choice of project and subsequent interpretation did not follow a conventional trajectory, and his writing on it holds many of the questions he later struggles with. It confronted him with the question of architectural form versus the event, with a heroic scale, with the tension between its totality and the separate elements that create it, with the various disguises along its length from intensely symbolic to 'casual, banal', with the lively character of an object without program. In his own words, it confronted him with "architecture's true nature",

which he defined in a series of five 'reverse epiphanies', which it is tempting to consider as a counterpoint to Le Corbusier's five points towards a new architecture. Rather than Le Corbusier's description of 'architectural facts that imply a new kind of building' (which could then lead to new forms of dwelling), the statements on the Berlin wall reveal the limits of what architecture can achieve coupled with a sensitivity to the pure fact of its presence. First, he concluded that architecture was inevitably more about separation and exclusion than about the liberation he was taught. Architecture certainly had power, but contrary to what his teachers believed, it was not a power of political and social emancipation. Next, in a series of four revisions of accepted truths in architecture, he concluded that the beauty of the wall was proportional to its horror; that there was no causal relationship between form and meaning; that importance and mass could not be equated; and that the wall represented an underlying 'essential' modern project that was nevertheless expressed in infinite, often contradictory, deformations.[4]

The accompanying photographs support the tension between program and form, between decision and creation, and demonstrate architecture as simultaneously impotent and omnipotent. Some images show everyday life somehow defying the wall, where a bride and her groom look over the concrete blocks and through the barbed wire to see people waving to them (family left behind? friends?). Or the passing of an object (a bag?) between the chain-link fence and the barbed wire (figs.1, 2). Other images are more ominous, with antitank crosses in the foreground, and just the lower bodies of two soldiers marching in the background – the glint of their guns still visible; yet here, the crosses become aesthetic (Koolhaas describes them as "an endless line of Sol LeWitt structures"), a compositional element that expresses the ambivalence written out in the text (fig. 3). The series of photographs, as a storyboard of events along the wall, already hints at the later introduction of the *scenario* as a guiding force in creating architecture (figs. 4, 5).

In his conclusions to the confrontation with the Berlin wall, in these reverse epiphanies, both insights and little paradoxes are embedded that merit study in light of his later work. The optimism of the 1960s about architecture "seemed feeble rhetorical play. It evaporated on the spot." The wall as absence demonstrated the power of nothingness, which could incorporate more than any object ever could: "in architecture – absence would always win in a contest with presence". And perhaps the most fundamental: the tension between the appearance of the wall and the message it was communicating, why he "would never again believe in form as a vessel for meaning". The project, when presented at the AA,

raised some question, not the least of which was posed by Alvin Boyarsky: "Where do you go from here?"[5] The answer, oddly, was a departure for Cornell University in Ithaca, New York, to study with O.M. Ungers. If Koolhaas' belief in the connection between form and meaning were irrevocably severed, then at the very least he must have been determined to explore this disconnection.

Oswald Mathias Ungers had been exploring the problem of form and composition in architecture since at least 1963, when his publication 'Die Stadt als Kunstwerk' raised issues of composition both in architecture and in urban design. In direct opposition to many of his colleagues, he refused to entertain the idea that architecture itself could be political. His work resonated more with the ideas of Aldo Rossi than with those of Team X, who he was briefly associated with.[6] Just before Koolhaas began studying architecture in 1968, Ungers was still lecturing on the rich array of building forms and types in architectural history to his students at the TU Berlin. The students in the meantime were arguing in the halls about reconfiguring the entire structure of the university, while Ungers was trying to teach them the foundations of their discipline. In 1967, during a seminar on architectural theory that Ungers had organised, students protested the studies of architecture with signs stating "Alle Häuser sind schön, hört auf zu bauen!"[7] In 1968, while Koolhaas was suffering through the abstract musings of his teachers at the AA, Ungers moved to the United States, escaping the all-encompassing activism that was keeping his students from wanting to learn architecture. In September of 1972, Koolhaas was to make a similar move: fleeing his final studio at the AA with Peter Cook, he went to study with Ungers at Cornell. The inverted trajectories of Koolhaas as a student wanting to be taught a discipline in an activist environment, and Ungers as a teacher trying to impart knowledge to his students interested only in social upheaval, converged in Ithaca, New York.

Forms and conditions
"In the end it is a pity that in this historical process, everybody has been concentrating on Rem Koolhaas for his smartness and not for his ability as a good architect."
Elia Zenghelis (*Exit Utopia*, p262)

Koolhaas became known for his writings before he began to build. The texts have engendered many interpretations, perhaps even more so than his buildings. And in some ways we might consider them mystifying, insofar as they offer general thoughts on architecture and the conditions that form it, more than on Koolhaas' intentions per project. Somehow (because the writings appear more accessible perhaps?) there seems to be an idea that Koolhaas relegates architectural form to a secondary

status, that he almost 'forgets' to address it. This idea of 'forgetting' form does in fact derive from the texts that Koolhaas is so well-known for such as 'Bigness' and *Delirious New York*.[8] These are texts that explore the various contemporary conditions that surround architecture, that offer conceptual transformations without being explicit about the formal rules of architecture. In the work of Koolhaas, urban *form* becomes urban *condition*. In *Delirious New York*, the city that was built without recourse to (theories of) architecture, can now only be understood through the retroactive manifesto, which reveals the underlying logic of congestion and the vertical schism, to name but two 'conditions'. Yet the images accompanying the book also express a fascination with the crystallisation of these conditions into concrete and specific architectural forms, but also with the explosion of different forms not governed by architectural coherence (figs. 6, 7).

To Zenghelis, the explicit preference towards conceptual underpinnings more than form has everything to do with Koolhaas' professional background. "As scriptwriter Rem magnified the importance of the programme in architecture. Already established from Modernism's outset in one form, amplified by Team X in another, the notion of the plan as scenario became central to the work of OMA, growing in importance to the point where it became a bureaucratic tyranny. In the present predicament – and in retrospect – it is easy to recognize the shortcoming involved in neglecting the quintessence of form. Despite our radical drives we were allergic to the label of 'formalism' – the most misused, despotic and callous misrepresentation of meaning exploited by institutional modernism, in its calculating and opportunistic abuse of the 'ism' classification."[9] Yet does this in fact mean that form is forgotten? Is it truly a matter of one or the other, of choosing between 'continuing the legacy of the modernist formal vocabulary' or 'absorbing the dynamics of the metropolis'?[10] It would seem that the texts and statements are also misleading. Although the constraints and conditions through which architecture is built do deeply concern Koolhaas, the evidence also seems to indicate that architectural form and composition concern him no less. The carefully selected photographs accompanying his work show an eye for the graphic and compositional quality not only of architecture, but also of objects and events (fig. 8, 9). His concerns in architectural design are complex, they can not be captured within a simple scheme of form versus function, nor do they follow a direct principle of representation, as when the architectural form is perceived to express a political or moral truth. In many cases, the projects are an assemblage of contradictory elements, which are nevertheless carefully orchestrated combinations.[11]

Therefore, despite his own misgivings about addressing the notion of form, the early work of Koolhaas, through the completion of *Delirious New York* can be seen as an exploration of ideas on architectural and urban form. Simplistic schemes that force a choice between program *or* form, deny the complexity of a position that refers to formal considerations as well as the ephemeral conditions that precede them. It is this interaction between program and form that is visible in the work produced in resistance to the 'rice-cooking hippies' at the AA, and later under the collegial tutelage of O.M. Ungers.

To understand the undercurrent of architectural form that is embedded in this exploration of the urban condition, the work of Ungers is helpful, since he explicitly addresses many of the concerns that we can find implicitly present in the work of Koolhaas. Rather than obscuring these questions, Ungers addresses them directly and tries to explore them very specifically in both text and object. From investigating the city as a work of art in 1963 in his installation in the exhibition *Man transForms* in 1976, Ungers always reflected directly on the techniques and instruments of architecture itself.[12] In other words: exploring the work of Ungers and Koolhaas as complementary oeuvres, we can reveal a position that neither equates architecture with the political (as the more 'engaged' architecture of the 1960s did), nor denies any possibility of social impact for architecture (as the debates on 'autonomy' centering around the work of Eisenman did). Instead, both Ungers and Koolhaas are aware of the societal constraints that architecture operates within, and both demonstrate interests in social issues (such as the promise of the collective, the contemporary condition of the metropolis, the simply factual need for housing), yet they operate within the discipline of architecture and the tools that are available to it (which here I am, for the sake of argument, allowing to be encompassed under the larger category of 'form'). Regardless of personal ideas, they remain aware of the limits of architecture.[13]

Exploring form
Insofar as Koolhaas addresses formal issues in architecture, he typically does so indirectly. His own writing emphasises the conditions within which architecture is construed, but many analyses of his work also focus on the program, the scenario, the event and the analysis of urban conditions. While he primarily redirects the reader's gaze to urban and ephemeral conditions, this by no means indicates that he is ignorant of form. When he is searching for new words, new means to address architecture, it is not because he is looking for something formless, but rather he is looking for a way to address the forms that are there but have

remained 'unseen' by architecture. This is most clear in the idea of creating a retroactive manifesto for the concrete manifestation of a new architecture as visible in New York. *Delirious New York* struggles with the traditional vocabulary of architecture, it attempts to address New York from a new perspective, hoping to reveal what is already there. Here too, his encounter with the Berlin wall is visible: approaching it as an object of study, he began to discover *as built reality* the incredible architectural and urban ramifications of an object like the wall. This was architecture as brute force, not as something that can be comfortably analysed within the boundaries of the architectural tradition.

Moreover, he is also explicitly sceptical of the revolutionary potential claimed for architecture in the 1960s, which tended to preference program over form. The difficulty in the ideological positions in the late 1960s caused to some degree a rift between the formal and the programmatic in architecture. This was to give rise to the highly autonomous architecture of Eisenman on the one hand, and the socially programmed architecture of Van Eyck on the other. Koolhaas found his space to think, write and design in the relative calm of Ithaca, where at least some questions of form were being made explicit in the work of Ungers and his colleague Colin Rowe.[14] His ideas on architecture could begin to settle within this sphere of influence of Rowe, Ungers, and perhaps also Eisenman to some degree.[15] The place itself had some influence – there was something about the amnesia of New York, the naïveté of American architecture which was simply built reality without a master plan. This allowed Koolhaas to look for what there already was, to explore the endless potential of the city as it stood.[16] Here, the form of New York represented the result of building without the weight of the (political) manifestoes being designed in Europe. Here, the various aspects of architectural form – composition, detailing, massing, materialisation – were not part of a grand ideology. They were instruments to be used, and architecture was something to be made, not thought.

The work of Koolhaas is continually situated in the tension between making and thinking. In his ambivalence towards the traditional notions of architectural form, he tried to write a book that does not use any literal architectural criteria, *Delirious New York*. As he states in an interview with Franziska Bollerey: "Und so habe ich ein buch geschrieben, in dem wortwörtlich architektonische Kriterien fehlen. Kein einziges Mal ist die Rede von schön, häßlich, hoch, niedrig, weiß... Nichts über das Äußere."[17] As those before him, he is conscious of a shift, of something that he cannot as yet describe. He concentrates on avoiding traditional descriptions of architecture, on writing a manifesto for something that was built

(unreflectively) in accordance with the spirit of its time. According to Fritz Neumeyer, Koolhaas, like the modernists before him, turns to the 'wrong side of architecture'.[18] It is, however, not the heroically engineered side of modernity, but a perhaps even more unforgivable side: one of hedonism, of mass culture not as cheerful pop but as absolute reality (figs. 10, 11). In the process, Koolhaas manages to describe the ineffable tensions in such concepts as the 'lobotomy' and the 'vertical schism', both of which allow the existence of distinct realities and absolute opposites within the same skin (fig. 12). In the condition of the skyscraper, when the form disengages itself from the program and manifests itself as an undeniable presence of architecture, it creates a new condition that is strong enough to encompass the complexity of everyday reality.

In the meantime, Ungers had been working along a similar line, but not with formal considerations as an undercurrent or with form as a counterpoint to program, but rather as a direct line of inquiry in his understanding of architecture. Like Koolhaas, Ungers struggled with the extremely politicised view of architecture on the European mainland in the late 1960s. Unlike his students, he believed that building beautiful houses was an important task, and that one must take it seriously as an architect.[19] This does not preclude thinking about more than only architectural questions, but it does indicate the limits of agency available to an architect. In an interview, Koolhaas notes an undertone of political issues in the work of Ungers, that nevertheless remains only that: "Und eigentlich sagen Sie auch in jeder Arbeit, dass es für diese Dinge formal und morphologisch Lösungen gibt, aber nicht sozial."[20] In reply, Ungers confirms a position towards the autonomy of art and architecture: "Ich bin der Meinung, dass die sozialen Probleme von Architektur nicht gelöst werden können. Wir haben keine Mittel dazu. Sie können architektonische Probleme lösen. Genauso kann Kunst die gesellschaftlichen Fragen nicht lösen." Koolhaas resists this, questioning whether there is not some moral position embedded in the architecture. Although Ungers concurs that he has a personal moral principle, he describes it as separate from the architectural.

Ungers goes furthest in his explicit investigations of form in his 1982 publication *Morphologie/City Metaphors*. The publication was based on his installation for *Man Trans-Forms* at the Cooper-Hewitt in 1976, with an essay that was developed to explore more extensively ideas of image, analogy and metaphor, and their place in human thinking. The ideas posed here by Ungers can help illuminate the undertones of formal gestures and innovations in the work of Koolhaas, simply because Ungers positions the different techniques explicitly, all the while maintaining space for what cannot be restricted

to a description only in words. In the essay he declares that form is necessary to man to bring order to the world, and that to do so he employs imagination together with thought. Ungers attributes a strong significance to the role of vision and imagination as the guiding principle upon which consciousness comprehends the world. Analysis may be necessary to understand various parts of our reality, to Ungers it is detrimental when taken too far, since it tends to also reduce everything to a chaotic mass where everything is of equal importance. The need for specificity and distinction is served by the imagination and by sensuous perception. In other words, Ungers allows the formal to be more than 'decoration', and also more than a singular expression of an underlying idea. He employs the concepts of metaphor, analogy, symbols, models to suggest that there is a space between the intention of the designer and the reception of the user that is productive in itself. It is the gap that Koolhaas sees in the presence of the Berlin wall, which Ungers here conceptualises as the very foundation of the architectural discipline.

In the book, as in the exhibition, this idea of the importance of forms and images is further explored through juxtapositions of two images and a word, which create a new whole (fig. 13). Each group consists of an urban plan as the architectural image; a reference photo, which is not part of the original design, but an associative image based primarily on formal similarities; and the word as a description of the conceptual content (figs. 14, 15). To Ungers, this circumscribes a more complex reality than the typical architectural and urban analyses, which explore the quantitative or functional aspects of planning. Instead, his assemblages describe not only the object (the plan itself), but also "the conceptual reality – the idea, shown as the plan – the image – the word".[21]

After the exhibition, the intellectual exploration of the role of form lays dormant for a brief time, but implicitly finds its way into the work of the Berlin summer academies, held in 1977 and 1978. The two themes in 1977 were the 'Urban villa' and the 'City within the city'. The summer academies continued along the lines of earlier projects undertaken by Ungers, where specific ideas were given a systematic framework to be worked through as design projects. In these projects, a fundamental connection between the work of Ungers and of Koolhaas becomes visible: the interest in the various conflicting conditions that make up our world as we know it, and the desire to not smooth that over with a single architectural gesture. The summer academies begin to explore the potential of multiplicity, particularly through the notion of the city-within-the-city, which allows for the juxtaposition of fundamentally different areas within a larger whole. As a design proposition, it is not dependent on a single architectural or

urban gesture, but rather offers a framework within which differences can exist and be cultivated.[22]

Contradictions and oxymorons
"The test of a first-rate intelligence is the ability to hold two opposite ideas in the mind at the same time, and still retain the ability to function."
F. Scott Fitzgerald, as quoted in *Delirious New York*, p. 162[23]

Both Koolhaas and Ungers employ a specific concept to instrumentalise these contradictions. For Koolhaas, it is the oxymoron, while for Ungers it is the *coincidentia oppositorum*. Ungers borrows the notion of the *coincidentia oppositorum* from Nikolaus von Kues, to identify a "coincidence of antitheses and not their overcoming", where "[t]hese contradictions do not shut themselves up in their antithetical nature, but are integrated into an all-inclusive image." To Ungers, this allows a new vision for architecture, one that releases itself from the obligation of unity. "A new dimension of thought is opened up if the world is experienced in all its contradictions, that is in all its multiplicity and variety, if it is not forced into the concept of homogeneity that shapes everything to itself."[24] In relation to his colleagues attempting to sketch a brave new world of architectural unity, this concept gave him a way to conceptualise plurality and use it in a formal sense. In a similar fashion, the oxymoron, as a combination of contradictory words, allows a simultaneous presence of incongruous realities. Both concepts address the contradictions inherent in the contemporary urban field, and help to situate architecture as a strategic intervention within the city and particularly the public domain. Architecture is not in itself a social or political gesture, but it is embedded within a political and societal structure and is simultaneously the backdrop for many significant events. In this sense, it is situated in a field of tension: one that is circumscribed by political and social conditions (for example, the question of who has the power and/or the money to build), by the history of the discipline but also by its public reception. It is circumscribed by the process of building, which is dependent on many different parties, and dictated simultaneously by current ideas and the almost inevitable slowness and permanence of building.

So many factors comprise the entire discipline, yet quick one-liners make for better public relations. The texts of Koolhaas are not simply explanations of the projects, nor do the projects merely illustrate the texts. His projects revolve around architectural concerns: layering, circulation, the combination and the collision of different materials. His texts are eminently quotable, full of short and provocative statements, exploring the underlying conditions for his architecture.

Ungers' texts tend to be less mystifying, exploring questions of architecture, the city and form directly. At the same time, the texts are no more explanations of his projects than those of Koolhaas are. Instead, they explore themes and ideas that are related to the discipline of architecture, from proportion and order to visual metaphors and analogies.[25]

The projects of OMA hold their ground between ambivalent tendencies, suspended in between the oppositions they simply demonstrate. Rather than see this as an extreme turn to 'realism', we could also see this as a series of small ideologies, or ideals expressed purely through a form of specificity. The provocations that are present in the work of Koolhaas (provocations against political architecture) were also present in Ungers (as his general mode of work). Both help illuminate some of the (im)possibilities of architecture in the contemporary city. Through this, we can rethink our understanding of the city, and the role of architecture within it. But perhaps more importantly, they can help us reassess the importance of the formal ('formal' in its broadest sense: the composition of a building, the image it evokes, the sensibility of a detail). In the Dutch debate with all its attention for social context and the human scale, a powerful formal gesture was easily interpreted as a disregard on the part of the architect for the user or the surrounding urban context.[26] But that also begs the question: what good is an idea when it is not given form? Idea must become form to become part of the world. Through the explicit formal concerns offered by Ungers, we can reevaluate the role of form in the work of OMA: it is not about the autonomy of form as an experimental drive within the limits of the discipline, taking no account of possible external realities. Rather, as Neumeyer notes, it uses an "aggregation of metropolitan life in everchanging configurations … with a daring program in a conventional (even boring) architecture". This metropolitan condition then breathes new life into architecture. "OMA's architecture of the city, however, did not take historical typology as a prototypical model, but rather depended on a bizarre multiplicity of forms of urban life, which desperately demanded a new architectural and urban optimism for their revival."[27]

Neither the work of Ungers nor that of Koolhaas addressed the political directly, but rather explored the formal autonomy of architecture while attempting to understand its cultural ramifications in the meantime. This is also where we find a distinction between Koolhaas and his former partner Elia Zenghelis, who thought that the Exodus project "should really have been concerned with pure architecture and its autonomy". For Koolhaas, on the other hand, "there is a kind of social program underlying Exodus: 'At the very least, there is a sort of

overwrought insistence on collectivity."'[28] Zenghelis, in the end, does retreat further into a notion of autonomy, while Koolhaas uses architectural tools to formulate a strategy that becomes flexible in the face of contemporary urban transformations. His use of the oxymoron as a design tool – the clash of inherent contradictions – clears out a space of architectural specificity that stands its ground because it does not offer a direct link between form and meaning. Form is present, as is significance, but they are autonomous conditions that both have their influence on the experience of architecture.

To return to an earlier thought then: "I would never again believe in form as the primary vessel of meaning." Could it be that Koolhaas here is suggesting not so much that form is irrelevant, but rather that the relation between form and meaning is not as easily correlated as his architectural education had implied? That the optimism of his 1960s teachers, a renewed version of the social engineering in modernist architecture, needed to be discarded before architecture could rediscover its own strengths, based on its own instruments and methods? Is it possible that the strange space that Ungers opens up between form-metaphor-analogy-meaning in his essay in *City Metaphors*, is precisely the ambiguity that Koolhaas discovers to be the essence of architectural form? Certainly the implied freedom in the idea of the *contradictio oppositorum* and the oxymoron, suggest that same space of imagination, and of the undetermined (as opposed to the overdetermined forms of Dutch modernism and its heirs in the 1960s).

If one major shift can be identified in the work of Ungers and Koolhaas both, it is from the city as a unified whole to a city that is embedded with various pluralities, in a sense the acceptance of the postmodern condition. The work is about collisions, not about finding a unified whole, but about creating tiny momentary utopias, defiant in the field around themselves. This defiance is how the collective is then given form, how individuals find the space to navigate the impossible complexity of the contemporary city that keeps us tossing between the private and the public. This space is where they find hope, despite the fact that the ideals of the 1960s failed to materialise. Within an individualised collective there may yet be a potential for architecture that neither embodies a mechanical utopia, nor an idealised perception of the creative individual. This potential for contemporary architecture finds its manifestation in the tools of its own discipline, particularly in that of form. And in that, they potentially stand in a longer tradition than the postmodern they are typically linked with (Ungers) or even the modern (Koolhaas). Maybe we can consider them a strange combination of the classical and the contemporary. Ungers' architecture may originate from an understanding of the

plurality inherent in the postmodern condition, but as form it is primarily based on the classical language of architecture with its attention to proportion and pure geometry. Koolhaas may continually be navigating the flows of the contemporary through concepts like the generic city, bigness, or the explosive growth of Lagos; he nevertheless employs a strategy of oppositions, or oxymorons, in a way that is reminiscent of an earlier use of harmony or symmetry.[29] Here, the strategy precedes the form, but the form is the final expression by which the building proves itself. This is where Koolhaas proves Joost Meuwissen wrong when he states: "Er is een zekere overeenstemming tussen Koolhaas' desinteresse voor de bespreek-bare architectuurvorm (anders dan voor de inhoud) en Koolhaas' planningsopvatting als een blauwdruk voor een toekomstige omgeving waar men alleen ja of neen op kan zeggen en weinig anders. Dergelijke cultuur en planning zijn in Nederland gelukkig niet zo gebruikelijk."[30]

The legacy of an architectural debate in which the form is offered a very limited range of action and the possibility of socially engineering a society through architecture was given primacy. This is precisely why it is important to examine how urbanity can not only be programmed, but also given *form*.

Notes

1. *Juryrapport prijsvraag uitbreiding Tweede Kamer.* Staatsuitgeverij The Hague, 1978. p. 25.
2. Hans van Dijk, 'Interview with Rem Koolhaas', in: *Wonen-TABK* 13-14, 1982, pp. 17-20.
3. "Man profitiert mehr von einer Unterweisung, mit der man nicht übereinstimmt: Das zwingt zu tüchtigen Reflexen. Isoliert muß man seine Standpunkte dauernd begründen." 'Die erschreckende Schönheit des 20. Jahrhunderts,' *Arch+* 86, aug. 1986. pp. 34-43.
4. 'Field trip, A(A) Memoir', in *S,M,L,XL*, pp. 215-232. The memoir was written in 1993, which perhaps explains the misattribution of the publication *Architecture: Action and Plan* to Peter (and Alison) Smithson. In fact, it was written by the other Peter at the AA, Peter Cook.
5. 'Field trip, A(A) Memoir'. in *S,M,L,XL*, p. 231.
6. Rossi introduced the work of Ungers to Italy in *Casabella* 244 in 1960. Ungers organized a Team X meeting in Berlin in 1965, but even then the differences were visible. Ungers' sympathy lay more with the rationalist approach to urban and architectural form that was present in the Italian circles surrounding Rossi. The most dramatic gesture from the side of Team X is represented by Aldo van Eyck's fuming 'Letter to Mathias Ungers from another world' in *Spazio e Società* 8, 1979, where he declares Ungers as completely at odds with every-

thing that Team X stands for. Moreover, in a gesture not unlike Guy Debord's disavowing the term 'situationists', Van Eyck claims that "membership was never our line," and that Ungers may turn out to be "the first, last, and only member of Team X".
7. See 'Oswald Mathias Ungers im Gespräch mit Rem Koolhaas und Hans Ulrich Obrist,' *Arch+* 179, pp. 6-11, and E. Mühlthaler, 'Lernen von O.M. Ungers: Die Berliner Lehrzeit,' in E. Mühlthaler (ed.) *Lernen von OMU*, catalog, Arch+ and TU Berlin, 2006. p28.
8. As will be discussed later, he wrote *Delirious New York* without using any typical architectural terms – this was an experimental side to the book: the desire, in a sense, to redefine how we speak and think about architecture. Rem Koolhaas in conversation with Franziska Bollerey, *Bauwelt* 17/18, 1987, pp. 627-633. 'Bigness' revolves around an urban condition of scale that transcends formal tools, about a condition that creates something new.
9. Zenghelis, *Exit Utopia*, p. 261.
10. Hans van Dijk, *Architectuur in Nederland in de twintigste eeuw*. Rotterdam: 010 publishers, 1999, p. 177.
11. Koolhaas' knowledge of and insight in issues of form are visible for example throughout the references and images in *S,M,L,XL*, but also in his interest in the work of Leonidov, which he had been researching together with Gerrit Oorthuys. His notion of architectural forms however is not limited to canonised 'good architecture'.
12. *Man transForms*, exhibition at Cooper-Hewitt 1976. Later, Ungers published his installation with an accompanying essay on images and metaphors, as 'Morphologie / City Metaphors' (1982).
13. "People can inhabit anything. And they can be miserable in anything and ecstatic in anything. More and more I think architecture has nothing to do with it. Of course that's both liberating and alarming." (interview, *Wired magazine*, July 1996. See www.wired.com/wired/archive/4.07/koolhaas.html).
14. Koolhaas remarks that Rowe and Ungers are essentially the same, which no doubt they would have contested at the time. Yet this remark may signify a correspondence in their work that is as yet underrecognised. 'Die erschreckende Schönheit des 20. Jahrhunderts,' *Arch+* 86, aug. 1986, pp. 34-43.
15. Koolhaas worked on the manuscript for *Delirious New York* with a fellowship at the Institute for Architecture and Urban Studies in 1973, where Peter Eisenman was director.
16. In this sense, the work itself resonates with what Venturi and Scott Brown did in their publication *Learning from Las Vegas* (also in 1972): examining the environment that was already there in order to reassess the tools and vocabulary of the discipline.
17. Rem Koolhaas in conversation with Franziska Bollerey, *Bauwelt* 17/18, 1987, pp. 627-633. quote from pp. 628-629.

18. F. Neumeyer, 'OMA's Berlin: The Polemic Island in the City', *Assemblage* 11, pp. 36-52, quote from p. 44.
19. Ungers was briefly involved with Team X, and deeply interested in the questions facing architecture in a changing society, yet he always firmly believed that architecture could only solve architectural problems, not social ones. His increasing disagreements with Team X were concomitant to the rise of postmodernism, around the time Ungers organised the Team X seminar at Cornell. see also www.team10online.org.
20. 'Oswald Mathias Ungers im Gespräch mit Rem Koolhaas und Hans Ulrich Obrist', *Arch+* 179, pp. 6-11.
21. O.M. Ungers, *Morphologie/City Metaphors*, Cologne: Walther König, 1982.
22. For a more specific elaboration on the idea of the City within the City, see my article 'The Archipelago City: Piecing together collectivities', *OASE* 71 (2006), pp. 18-36.
23. In the original 1963 text "The Crack-Up", the phrase is actually 'opposed ideas' rather than 'opposite ideas' (*Oxford Book of 20th Century Quotations*, 113:6). The continuation of the essay seems particularly suitable to the two architects being discussed here: "One should, for example, be able to see that things are hopeless and yet be determined to make them otherwise."
24. *Lotus Documents (Quaderni di Lotus)* no. 1, 'Architecture as theme', O.M. Ungers, Milano: Gruppo Editoriale Electa, 1982.
25. See for example O.M. Ungers, 'Ordo, fondo et mesura: The Criteria of Architecture', in: Henry A. Millon (ed.), *The Renaissance from Brunelleschi to Michelangelo: The Representation of Architecture*. London: Thames and Hudson, 1994, pp. 307-317.
26. "De ontwerper heeft onvoldoende geluisterd naar het probleem. Hij heeft een standpunt ingenomen, waarbij de omgeving vernield wordt en hij de gebruiker ondergeschikt maakt aan zijn formele visie." *Juryrapport prijsvraag uitbreiding Tweede Kamer*. Staatsuitgeverij The Hague, 1978, p. 25.
27. Neumeyer, *OMA's Berlin*, p. 43, 46.
28. Hilde Heynen, 'The Antinomies of Utopia. Superstudio in context', in: V. Bijvanck (ed.) *Superstudio: The Middelburg lectures.* De Vleeshal and Zeeuws Museum, 2005, pp. 61-74.
29. This was seen quite quickly by Hans van Dijk. The oxymoron, as Van Dijk notes, is not only a favorite form of speech for Koolhaas, but is used as a design method by OMA. Hans van Dijk, 'Het bezwijken van tegenstellingen', in: *Wonen-TABK* 13-14, 1982, pp. 12-19.
30. Joost Meuwissen, 'Overgeaccentueerde architectuur in Stedelijk Museum Amsterdam' (in een ongeïdentificeerde krant op maandag 29 december 1980. Knipselarchief NAi, map Koolhaas, 1975-1980).
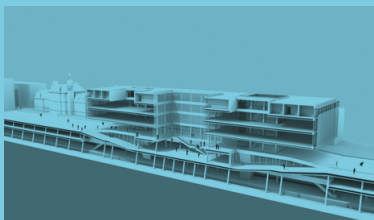
Zuid-Hollandse Vormgevingsprijs 2007: Three hybrids for Delft's railway zone
Willemijn Wilms Floet

Three projects of students from the Hybrid Buildings Master's studio at the Faculty of Architecture of the Delft University of Technology have recently been nominated for the *Zuid-Hollandse Vormgevingsprijs 2007* (South Holland Design Award 2007).[1] The award is meant to encourage young design talent and draw attention to current projects in the province of South Holland. This year, student projects on the Delft railway zone from every South Holland design institution (at the university, higher vocational and intermediate vocational training level) could be submitted. If everything goes as planned, in 2012 the train will disappear from view in Delft, underground. A total of 42 entries were submitted, of which four were nominated in the 'spatial design' category and four in the 'product design' category. There were no nominations for 'visual communication' this year. With three nominations, resulting in two prizes, we have good reason to draw attention to this contest in this issue of *OverHolland*.

At the Hybrid Buildings Master's studio, design research is conducted in large-scale buildings with complex programmes at urban locations. Students research the possibilities of renewal and transformation in urban areas using concrete architectonic interventions. What contribution could architecture make to the spatial development of these areas? What programmes, urban morphologies, building typologies and architecture could be developed? Various studios are alternately studying nine Dutch cities in the Randstad.

The railway zone in Delft is a concrete and current project that is perfect for design research projects of Master's students in Architecture. Once a tunnel replaces the railway through Delft, a large area will be freed up above ground, centrally located between the city centre and the expansions. It is not only a question of the identity of a new urban district, but also a new cohesion in the city, the character of the new

underground station, a complex junction of infrastructure, and the design of the tunnel. There is also a project in the transformation of the existing buildings: what is now the rear side of residential development along the railway will change into a front side after the railway disappears.[2]

For the Urban Architecture research group at the Faculty of Architecture, which conducts research into the interaction between architectonic interventions and urban transformations in the Dutch city, the Delft railway zone project was used to research the possibilities of tunnelling under the railway in the city centres of similar smaller cities in the Randstad, such as Haarlem, Leiden, Gouda and Dordrecht. This design research project is called '5 x 5' and is currently being carried out by a number of leading architecture firms, linked to the Faculty of Architecture of the university. Preliminary urban and architecture analytical studies have already been published in *OverHolland* 5.[3] The Hybrid Buildings Master's studios were developed as a pilot for this design research project.

Since the introduction of the Bachelor's-Master's system in 2002, the Delft railway zone is a recurring subject in architecture studies at the Faculty of Architecture of the university.[4]

For the Master's project of the Hybrid Buildings Master's studio, students were initially free to choose projects along the entire railway in Delft. However, this resulted in such a large variety of planning proposals (from the design of a residential district or station building to a sanatorium in Midden Delfland) that the results were difficult to compare.[5] The starting point for the more recent studies is the urban master plan that Spanish urban planner Joan Busquets made for the city of Delft. This plan offers students a framework in which they can propose their own design project, test design solutions and provide viable alternative designs.

Busquets' idea for the new station area was an inner urban environment, where living, working and parking are combined in blocks of buildings with semi-public inner courtyards. For the blocks, rules have been established which should guarantee variation and alternation like in the historical city. Busquets sees the area as a link between the historical city centre and the expansions. The existing main roads in the area, like the Westlandseweg and Phoenixstraat, will be transformed into boulevards. The form of the new blocks of buildings is formally determined by drawing lines in the planning area from neighbouring districts, which do not always correspond to spatial and visual connections. Also, the character of the corresponding buildings – the hierarchy in the street pattern – was not taken into account. The zone of the tunnel, owned by ProRail, may not be built upon in connection with insurance claims and is designated as a park.

In the first semester of the Hybrid Buildings Master's studio, students must design a hybrid building based on a given schedule of requirements. To do so, three locations are offered in Busquets' plan, on which the schedule of requirements are tested by formulating different building alternatives. Then, a single variant is elaborated. The locations have specific urban planning problems: at the main road Westlandseweg, it regards a project that is proportional to the infrastructure, with space for high-rises. At the location south of the old station building, the relation with the new station square is addressed. The nominated projects regard the third location: the building block between the new, combined city records office and station hall and the bulwark designed by Busquets at the Waterslootse Poort, an intersection where many roads converge. One of them forms the connection between the station and the city centre, with a line of vision between the station area and the Oude Kerk (Old Church). According to Busquets' plan, this building block has a 'service role', as it follows the contour of the public spaces and makes a transition to the smaller scale buildings on the Coenderstraat, as regards buildings and building height.

Students have trouble with Busquets' formal, graphical approach: the diagonal shapes and the rules for the high-rises are rarely used as starting point. The designs are usually an elaboration of a chosen building typology, in which the relation between building and urban space is more obvious, and there is a possibility of adapting it to the existing architectonic cultures.

In Carien Akkermans' vision – the first nominated student – Busquets' solution is too careful and too anonymous. She proposes placing an elongated building between the station and the Waterslootse Poort. The distinct form has two intentions: the building shows the way between the station and the city centre, forms a point of orientation, and presents itself as an obstinate link between the centre and the suburbs.

Oscar Arce's project – the second nominated plan – should be viewed as an elaboration in the spirit of Busquets' plan in an obstinate handwriting. He chose the form of undulating, flowing linear movements, which are characteristic for the area, giving the new station area its own identity. The design consists of a number of strips that flow over each other in a dynamic way, form an urban space and react to the context. The formal language is more intense in the design of the public space, where buildings and outdoor space form a three-dimensional entity. It is an expressionistic submission.

In the last two semesters of the studio – the Master's project – students formulate their own design project, based on an urban planning analysis and architectonic research, in which the 'hybrid building' and

'urban architecture' themes are part of the studies. These projects regard questions that have already been mentioned above. The design is developed architecturally up to the level of a definitive design.

Luuk Stoltenborg – the third nominated student – sees the new station area as an autonomous and distinct urban area. For his Master's project (in which he combined the studies of architecture and structural engineering) he designed an alternative master plan, in which the station and city hall expressly manifest themselves in the tradition of important public facilities. They are designed as two monumental buildings, which together with the old station enclose a square. During the project research was done into how construction could be done on a train tunnel so that the underground and above ground buildings could benefit from each other's day light as well as house various programmes.

Project descriptions for three documentations

Project 1: Delft Central Station (winner ZHVP 2007 spatial design)
Design: Luuk Stoltenborg
Teachers: Maarten Korpershoek, Leen van Duin and Henk Mihl

With the arrival of the railway zone, the train threatens to disappear from the cityscape of Delft for good. Busquets' urban design plan attributes a modest role to the station area: the new zone is seen as an extension of the city centre, where Delft Central Station is reduced to an almost invisible transport junction. It is a metro stop in the lobby extension of the new city hall, in the middle of a narrow park zone of a kilometre.

The station area should become a new and complete centre with a distinct urban character, built on and beside the tunnel. The new station and the city records office are prominently housed in two autonomous, monumental buildings, which together surround the old station with a pedestrianised square.

In the design of the new station research was done into how the train tunnel as well as other forms of transport and a diverse urban programme could be combined into a 'hybrid building'. The starting point was a vertical organisation: the platforms, the station square and the station building are stacked into an efficient and compact transport junction. Supposing that the station of the 21st century wants to manifest itself more and more as a place to stay, a hotel, a restaurant and a conference centre were added. They are bundled into a building volume that is tilted five metres above the ground, so that the station in the city has a face.

The tunnel and the building are spatially connected by a construction system that

gradually changes from a closed tunnel to an open set of light wells as it goes upwards. These light wells carry the building volume as if it were floating and also provides daylight to the underlying square and station hall.

Project 2: Urban Gesture (winner selected by public jury)
Design: Carien Akkermans
Teachers: Petra Bus and Jaco Haartsen

Now that the railway will disappear underground, there is a unique chance for the station to be moved to the Binnenwatersloot, which historically was the main entrance to Delft. At the place where Busquets locates the station, the possibility of making a large entrance to the city centre lacks, unfortunately. That is why a 'guiding wall' must be built, which clearly points visitors the way..

To make sure that this wall is not a barrier between the city centre and the suburbs, the building is tilted six metres by way of a transparent plinth and the volume is broken up in various places. An inner harbour, open air theatre, a tourist information centre, shops, a hotel, and cafés and restaurants will be built. Residences are located in the storeys.

The east elevation on the side of the city centre reflects the traditional proportions of the Dutch city and is made of bricks. The west elevation on the busy and noisy road, the Coenderstraat, has another character and it is built up of two layers. The inner layer is a level with the east elevation and the outer layer is a fence where ivy grows, absorbing sound and giving the building a different look, year round.

Project 3: Delft Strips
Design: Oscar Arce Gonzalez
Teachers: Maarten Korpershoek and Hubert van Meel

Starting point for this design was the use of twisting and turning movements, two attractive characteristics of human movements.

Analysis of the area led to the realisation that this place is about flows in a North-South direction. A flow of water on the east side in the form of a canal, a flow of cars on the west side, a flow of pedestrians who go to the historical city from the south, and the new flow of pedestrians who come through the train tunnel. The main idea in this design was to increase the flows, making a composition with undulating strips, which together form one large space for various activities.

The new public space and the buildings (with residences, supermarket, cafés and restaurants and hotel) are seen as a unit. By using the same kind of shapes for the cross-section as well as the map, the complex is given a strong and powerful character. The oscillating form is used for paths, slopes, bridges and elevations. The entire design

can be considered as an interesting pedestrian area with quiet, sunny places to stay, green, where an interesting convergence of shapes takes place, with places for relaxation on a human scale.

The entire design does its best to be part of Delft. It was developed from a study into visual relations with both church towers, existing movements through the city and the significance of water and canals for Delft. The colours of the façades were taken from a typical image of Delft.

Notes
1. See www.zhvp.nl.
2. Railway locations are a desirable and recurring theme in the design studios at the Master's Architecture programme Hybrid Building. See François Claessens, Willemijn Wilms Floet, Leen van Duin, 'Projects for the Dutch City: architectural interventions for inner city railroad areas', in *The Architecture Annual 2005-2006. Delft University of Technology*. Rotterdam, 010, 2007, pp. 134-135.
3. See *OverHolland* 5, Amsterdam, SUN, 2007, pp. 69-138. The results of the design research were published in a special edition of *OverHolland* in June 2008, entitled *5x5 Projects for the Dutch city*.
4. The key semester for new HBO (higher vocational education) students has a master plan above the railway tunnel through Delft as urban planning design project. In the third semester of the Bachelor's design project, the project is the redevelopment of the yeast factory grounds. For the Master's project Architecture Hybrid Building, the rail zone is addressed every semester in many ways.
5. See Leen van Duin and Willemijn Wilms Floet, 'Delft Rail Zone', in *OverHolland* 2, Amsterdam, SUN, 2005, pp. 91-104.

[Polemen]

Book review
Herman van Bergeijk

K. de Jonge, K. Ottenheym (eds.)
Unity and Discontinuity. Architectural Relationships between the Southern and Northern Low Countries, 1530-1700
Architectura Moderna 5, Turnhout, Brepols Publishers, 2007. ISBN 978-2-503-51366-9

With his treatise on *The burgerlijcke leven (The middle-class)* from 1590, Simon Stevin, theorist, inventor and scientist from Leiden, who was to become an important advisor to Prince Maurits, codifies the duties and privileges of the new middle-class that arose in the United Republic of the Netherlands. It is a plea for political and religious tolerance inspired by his ideas about the revolt of the young republic, whereby he uses exact science and renounces classical rhetoric. He formulates his sentences level-headedly and uses themes for the compliance factor. When we compare Stevin with scholar Justus Lipsius, who later would move from the University of Leiden to the University of Leuven, we can conclude that in his plea the historic precedent was an extremely important argument for the latter, while the former considered venturing into the past in order to identify the present to be meaningless. Not history but common sense was raised as the standard for people's actions. Laws need to be linked logically. It is therefore not strange that Stevin rejected the existing system of orders in architecture, a subject he studied intensively. This is similar to his rejection of how, in the empire, the position of citizens in society was determined by class and tradition. He wants a state based on modern foundations rather than one based on old-fashioned and superseded traditions. Stevin distances himself in his treatise, which he consciously wrote in Dutch, from the way that for example, the Southern Low Countries, his native country, were still weighed down by the yoke of the Spanish. He wrote a manuscript that had to support the Dutch identity and how it would slowly crystallise during the Eighty Years' War. The gap between North and South is widening despite the many contacts and exchanges and the stream of immigrants to the North. A wedge is driven in what could be considered, up until a certain time, as a unity. This clearly and loudly clarifies the need for differences. It is all about clearing your mind. The stress is on being different but not to the extent that the gap becomes too wide. Above all, the revolt of the Netherlands is justified.

In *Unity and Discontinuity. Architectural Relationships between the Southern and Northern Low Countries, 1530-1700*, published in English and for the greater part written by Krista de Jonge and Konrad

Ottenheym, Stevin, born in 1548 in Bruges, naturally appears. They argue that 'Stevin's sense for the practical application of the knowledge as well as his talent for solving complex, logistic problems made him a useful adviser' for the young Prince Maurits. Although his texts on the military and architecture are briefly discussed, Stevin's political treatise is not mentioned. The political context is of less importance to the authors. Without losing sight of the political, religious and military background, they focus on the architecture and its development. They turn against the existing and in their view timeworn clichés about architecture in the Low Countries and believe that the architectural relations between North and South after the political secession have never been researched. Their conclusion, which is already written in the introduction, is 'Seventeenth-century architecture in both parts of the Low Countries should not be seen as two opposing styles, but as two species of a common architectural system with a more "magnificent" use for the Church and court in the South, and a more "modest" use for citizens and civic authorities in Holland' (p. 13). According to them, it is more of a rhetorical difference than a stylistic one.

To a certain extent, De Jonge and Ottenheym are right. Also after the secession, many exchanges were still taking place between the rebellious North and the Catholic South, although there was a larger exchange from South to North, if only because of the many refugees, than from North to South. The Dutch culture would have looked entirely different if it were not for the refugees. They brought a different type of knowledge to the North, knowledge of a different type of theory, different materials and different building practices. This proved to be of use to the North Low Countries. In order to build representative buildings, representative materials and ornaments had to be used. Looking for new ornaments resulted in many ornament books dominated by irregularities. This was not only the case in the North Low Countries; Germany and England experienced the same trend. The excessive decorative books by John Shute or Wendel Dietterlin, or even Hans Vredeman de Vries would have been inconceivable without the quest. The classical orders are degenerated and transformed into an entirely different style. Their ornament books hardly contain text. They are aware of the existing architectural literature but choose to take a new route. Nevertheless, their books enjoyed considerable fame and, just like Thomas DaCosta Kaufmann, who wrote the epilogue for this book, indicated in his study about North European courts, monasteries and cities, this self-willed culture managed to spread quickly across large parts of Northern Europe due to the exodus of capital and artists.[1] The still young Republic lacked natural building

materials, the ones generally considered to be of the highest quality. Therefore it is not surprising to see that a builders' family such as the Van Neurenbergs, as illustrated in Gabri van Tussenbroek's contribution, covered work in both the North and South Low Countries.[2] Initially, raw material was processed near the quarry, later this was taken over by local traders in the North. Without a doubt, continuity remains between the different cultures, as well as strategic and ideological differences. Wood and brick were of a different value in the North.

For many years, problems of continuity and discontinuity have been a lively point of discussion in historic circles. Ernst Gombrich could still contend that 'the study of culture is largely the study of continuities', however, one may wonder if this is still the case today.[3] The urge for identity which became stronger in many countries in Europe, cried for a distinction, for discriminating factors. Whether this distinction between the North and South Low Countries in the period investigated by De Jonge and Ottenheym is solely of a rhetorical nature, is doubtful. The fact that both countries like to be different and value both differences and similarities is a historical fact. Even historiography could not deny this, as Jo Tollebeek indicated.[4] F.A.J. Vermeulen, who would later come under heavy criticism, described in 1928 in his guide to the *Geschiedenis der Nederlandsche bouwkunst* (*History of Dutch architecture*) nearly exclusively the North Dutch developments, to which historian Pieter Geyl in 1930 replied and indicated that the perception of history of art was far too much determined by the then borders of the nation and that they were considered cultural boundaries. Geyl regarded the Netherlands as part of a larger Dutch unity.[5] One may ask if the writers of this book, that they worked on for more than ten years and which incorporates a large number of monographs, have taken on a view that is determined by a larger agenda or programme. They gratefully used recent researched sources but what is the greater idea behind this publication? In these imbalanced times of European unity, the Netherlands and Belgium have to be further embedded in a more European context, resulting in the difference being less pronounced. The authors stayed well clear of large narrative liberties as Simon Schama used in his voluminous book on Rembrandt and Rubens.[6] On the contrary, the authors remain close to the facts and do not dwell on theories, except that there would have been continuity and discontinuity after all and that too much attention would have been focused on the latter. The name of the series in which de Jonge and Ottenheym's book is published, 'Architectura Moderna', refers to the first book which captured the confidence of the Dutch architecture. Whether Salomon de Bray, author of the book, also tried to create

a distance from the ancient architecture, as described in many Italian architecture books, remains the question. According to Ottenheym, he is not, although he does say 'whereas De Bray preaches the true and eternal validity of the classical principles, the engravings receive praise for the novelty of the ornament and the designers' ingenuity'. The inherent contradiction is not further elaborated upon. As De Bray indicated: Did this book present 'only the first examples of the movement towards a pure and ancient architecture'? Why the subtitle 'Ofte Bouwinge van onsen tyt' ('Or Buildings of our time')? What era did they have in mind? What is meant by 'modern' and what was De Keyser's image? It is clear that the Dutch architecture, and particularly that of the late Hendrick de Keyser, is placed on a pedestal. Whether there really is a 'systemization of architectural ornament around 1600', as Ottenheym claims, remains the question. He argues that 'the term *Architectura Moderna* referred to modern architecture that applied ancient architectural forms according to modern ideas', but what are they and how does this transition take place? According to Stevin and also De Bray, 'mathematical' ideas played an important role; however, reality proves that major irregularities in shapes and ideas continued to exist. An overall unity is sometimes clearly missing.

Calling upon the rhetoric of classic architecture, as was canonised in Italy, was of extreme importance to the South Low Countries in order to historically support the continuity of reasoning. The matter was more complicated for the North Low Countries. They had to try to indicate that they could call upon their own culture, which may have had similarities to those in other countries, as well as differences and its own existence, which was not derived from the existing balance of power. In this respect, Stevin's treatise was instrumental. Without taking a radical point of view, he legitimised in a reasonable and rational fashion, the revolt of the Dutch against a dominating order created by God. This order was expressed in the classical architecture. Before the revolt and Reformation we could perhaps notice an attempt to standardise the ancient architecture, as is discussed in Krista de Jonge's chapter with regard to the period 1539-1543, however after the iconoclastic outbreak, things looked significantly different. Several events become responsible for a substantial difference in the approach to architecture in the North and South Low Countries. Due to this division, the architecture will develop in different directions in both parts. In spite of using mathematical and therefore abstract principles, the Republican Dutchmen could afford liberties from an entirely different level to those permitted to the 'mannerists' in Catholic Italy or Belgium. As Novalis would later say, for them 'pure mathematics equalled religion'. On the one hand, they

definitely strived towards characterising building types, and on the other hand, the exterior was usually decorated with irregular ornaments and different orders. This was accompanied by conflicting appearances and tensions that were not revealed in the architecture. Only after the Republic became an economic power did they look for an architectural style which was less 'local', had a universal character and was easier to 'read'. The architecture had to be strict and clear. This style could be found in the equally sober though slightly boring classicism of Vincenzo Scammozzi, and even more in his treatise *L'idea dell'architettura universale* from 1615. The Dutch liked this text more than for example that of Palladio, which mainly had an influence in England. Besides the fact that Scamozzi focussed on middle-class' architecture, the Dutch also liked the mixture of ideas. Furthermore, Scamozzi upgraded architecture to an exact science with representative qualities.

The historical process has continuous and discontinuous lines. It even has conflicting lines. The value of this book lies in the fact that it questions this subject matter and that it offers a large-scale overview of both the developments in the South and the North Low Countries. The history of architecture in both parts is far more interesting and exciting than generally acknowledged. By publishing this book in English, this issue could be tackled, however the standards of the book are still very much determined by what happens in Italy. As a background, Italy is over-present, which results in a slightly distorted perspective of the specific elements of the young republic's architecture. The theory that Wilhelm Worringer presents in his programmatic essay *Abstraktion und Einfühlung* ('Abstraction and Empathy') from 1908, namely that 'the essence of art on this side of the Alps only exists (...) that this art expresses what it would like to say, not using pure formal means, however that it downgrades the means to a carrier of literary content unrelated to the esthetical effect, resulting in the deprivation of the visual arts' character. (...) Until the day that his [the Northerner, *HvB*] eyes are opened up to the higher existence of the shape, which will come to him as a revelation and will turn him into an exclusive classicist, but still with a serious passion that in the Roman style, where the instinct for shapes comes naturally and therefore appears as a problem free given aspect, is unknown.'[7] The question about the difference between the art above and below the Alps is not addressed by Ottenheym and de Jonge. Nevertheless, their book is daring. Daring not to fall back into the convenient regional division and to use a united pan-Dutch angle. They try to approach the researched timeframe in a different manner, focussing more strongly on the theoretical and organisational aspects. Also the client's role receives much atten-

tion, as we are used to from Ottenheym. The cities and rich and powerful families – the middle class – take over the pioneering work from the Church. The architect's knowledge is no longer based on his experience of the practical side but on his artistic and theoretical notes and readings.

The book also offers an extensive bibliography. It must be pointed out that Wouter Kuyper's recent book is missing,[8] possibly because Kuyper severely criticised previous work by Ottenheym and J.J. Terwen about Pieter Post. Furthermore, it needs to be mentioned that the many bad quality or poor images in this book devalue the magnificent character of this architecture. It is vital that the value of this sparkling historic inheritance, which gives colour to nearly every Dutch city, is illustrated with good photography. This could spread the interest in this inheritance to others rather than to just historians of architecture, because Louis Couperus, a lover of the ancient world, was right when he wrote: 'Our previous cultural expressions are trapped, dying under the cruel steps of our future.'[9]

Notes
1. Thomas DaCosta Kaufmann, *Court, Cloister & City. The Art and Culture of Central Europe 1450-1800*. London 1995.
2. This contribution is a summary of the study of this author: *The architectural network of the Van Neurenberg family in the Low Countries (1480-1640)*. Turnhout 2006.
3. Ernst Gombrich, *In search of cultural history*. Oxford 1969, pp. 48-49.
4. See Jo Tollebeek, *De ijkmeesters. Opstellen over de geschiedschrijving in Nederland en België (Gaugers. Essays about the historiography in the Netherlands and Belgium)*. Amsterdam 1994.
5. See P. Geyl, 'De kunsthistorie onder de ban van de moderne staat' ('History of art under the spell of the modern state'), in P. Geyl, *De Groot-Nederlandsche gedachte. Tweede bundel historische beschouwingen, kritieken en polemieken (The United Dutch vision. Second volume of historic views, criticisms and polemics)*. Antwerp/Amsterdam 1930, pp. 203-213.
6. Simon Schama, *Rembrandt's Eyes*. New York 1999. In a review, Ernst Gombrich had already pointed out the liberties Schama took when telling his story; see E.H. Gombrich, 'Portrait of the Artist as Paradox', www.gombrich.co.uk.
7. Translated from the Dutch translation: W. Worringer, *Esthetica en kunst (Aesthetics and art)*. Utrecht/Antwerp 1965, pp. 56 and 58.
8. W. Kuyper, *Het monumentale hart van Holland (The monumental heart of Holland)*. Leiden 2002.
9. L. Couperus, 'Intieme impressies' ('Intimate impressions'), in L. Couperus, *Proza*. Vol. II, Amsterdam sa, p. 19.

Book review
Merlijn Hurx

E. Gerritsen
Zeventiende-eeuwse architectuurteke-ningen. De tekening in de ontwerp- en bouwpraktijk in de Nederlandse Republiek ('Seventeenth-century architectural drawings. The drawing in the design and building practices in the Dutch Republic'). Zwolle, Waanders, 2006, 287 pp.

Strangely enough, hardly any books on the history of architecture tackle the subject of the actual output of architects, namely architectural drawings, as an independent theme. The standard Dutch article on this subject by architectural historian Ruud Meischke, a paper on the architectural design in the late Middle Ages and the sixteenth century (1952), remained an exception for a long time.[1] The book *Zeventiende-eeuwse architectuurtekeningen ('Seventeenth-century architectural drawings')*, which is the commercial edition of Elske Gerritsen's dissertation (Utrecht University, 2004), further fills in this gap. In four generously illustrated chapters, both the drawings and the designers are discussed at great length. The author researched a considerable amount of seventeenth-century drawings, including lesser known examples. Though the field of research is limited to civil architecture, all types of the entire production of drawing are analysed, from rough draft and proposed design to contract drawing.

As can be expected from a good dissertation, the book is not just the opening up of the various consulted collections of drawings. The goal was to explain the development of the architectural drawing by means of linking it to the changes occurring in the responsible groups of designers and the variations in the design and building practices. Three factors are linked to this: a larger diversity of designers, an increasing interest of clients in architecture and the growing gap between designers and builders, all resulting in an increasingly important role for the drawing as a communication tool. An exceptional role is reserved for the painter-architects who enjoyed their education outside the building trade, with Jacob van Campen as a key figure.

The first chapter outlines the emerging new groups of designers in the sixteenth century, who thanks to their intellectual baggage and knowledge of the language of classical style could better meet the changing demand of the client. Not the stonemasons, but surveyors, goldsmiths, sculptors and painters were in charge of the architectural design of top commissions. The new term *architect*, which appeared in this period, is linked to the term free designer: someone who is unrelated to the traditional

building trade and who is not bound by restricting rules of the guild. The chapter gives a clear overview of the status quo of the research and offers a good introduction to the remaining part.

The second chapter lays down the question whether a univocal profile of the designer's profession came into being in the seventeenth century. Although in theory a clear image of the qualities of the architect existed in the Republic, a separate profession never developed. An important reason was the lack of an institution for education. Just as in the sixteenth century, a large diversity of designers existed, of whom only the top layer of painter-architects, who had fully specialised in designing, met the theoretical formulation. Most of the architecture was still designed by craftsmen working in the building trades. Nevertheless, in practice, there was a consensus on the meaning of the term *architect*, namely someone who was trained in architectural theory, while possessing excellent drawing skills.

Chapters three and four expand more on the drawings themselves and take up the largest part of the book. The third chapter focuses on the role of the drawing as a means of communication between the designer, client and builder and its importance in the process of planning and realisation. The author ascertains an increase in the use of drawings in the seventeenth century. Moreover, its importance also increased in relation to written contracts. During the preparations of a complex building, nothing was left to chance and nearly all sections were put on paper in great detail.

The last chapter looks at the appearance of the drawings and consists of two parts. One focuses on the projections used and the systematic link between elevation, floor plan and cross-section, the other on the actual realisation of the drawing. The images in Italian tracts and Dutch land surveying practices are held responsible for the changes in projection and the link between elevation, floor plan and cross-section. This strict depicting manner led to the standardisation of the architectural drawing in the seventeenth century.

The second part investigates how the drawings were made in practice. The draft phase is not discussed, as this category of drawings from the seventeenth century did not survive. An interesting section is the explanation of how proposed designs were created. Making use of a simple coordinate system, mainly utilising concrete measures in feet and inches, they came into being. With this observation, Gerritsen adds an important differentiation to the belief that a system of geometric constructions was used when creating designs in the seventeenth century. She believes that the design principles, as described by Jan Terwen and Koen Ottenheym, probably served as a theoretical model when conceptualising a design, but

that the conversion from a geometric construction to real measures had already taken place when creating the proposed design. The reason for this is obvious, as these drawings were also used by the builder who had to be able to read the exact usable measures.

The final interesting observation of this chapter is that the Dutch seventeenth-century design practice is exceptional in applying colour to the drawings. As a possible source for the typical use of colours, a reference is made to Dutch surveyors colouring maps.

Elske Gerritsen's book is worth it, even just for the large amount of drawings. The author has conducted in-depth research and did not get lost in the details. The structure of the book is clear and its use of language is fluent. An additional positive aspect is that the amount of new resources, both in images and text, go together with a wider and international perspective. The developments leading up to the 'standardisation of the drawing' can scrupulously be followed.

However, there are certain elements in Gerritsen's work that still raise questions. She should have adapted a more critical attitude towards Meischke's article. Certain assumptions from the article from 1952 are in need of review. For example, the shift from stonemasons to painter-architects as top designers still seems to be up for discussion. The assumption that men from the building trades were by definition less skilled than painters to meet the new demand from clients is unsatisfactory. Firstly, several stonemasons from Brabant had managed to become courtiers in the sixteenth century. Secondly, Italian examples such as Palladio and Scamozzi also originated from a milieu of stonemasons. It is necessary to pay attention to such contradictions where the risk exists of bringing all stonemasons down to the same level as working craftsmen with a conservative inclination. Perhaps other reasons can be indicated which would be able to offer an explanation why stonemasons became part of the top layer of designers increasingly less. The North Low Countries only knew a small tradition with regard to stonemasons. For example, in the sixteenth century in Holland, there were hardly any mason's guilds, while nearly every city had a large guild of carpenters. Future research opting for a more sociological and economic-historical approach will possibly shed a different light on this issue. Potential aspects for research could be matters such as whether the amount and manner of payment when supplying drawings changed; were designers paid an hourly rate or did expertise and artistic qualities determine the price, etc.

Furthermore, it would be interesting to study the conspicuously continuous characteristics in the design and building trade.

In the fifteenth century, the building trade was already considerably specialised and in many cases, the designer was not permanently present on the building site. This is not the place to go further into detail about this; however one can wonder which strategic similarities existed in order to avoid communication problems in the fifteenth, sixteenth and seventeenth centuries. It would be interesting to see what can be deduced from the comparison between the designs of Alart Duhamel for a monstrance and canopy (now in Vienna), where a front view and part of the cross-section are presented on the same scale (pointed out by Krista De Jonge) and the standardisation as described so well by Gerritsen.[2]

In order to come to a critical view of these issues, in-depth and new research should be undertaken, which largely falls outside the selected point of discussion. This does not alter the strong reasoning of this book, which belongs on the shelves of every architectural historian. Although the book is based on strong academic traditions, both the subject and style are suitable for a wider audience. For architects in particular, the book offers interesting material, since the drawing is still the most important medium for the architect. In addition to this, the book focuses on a professional group which possibly became the first in Dutch history to be able to solely live on creating designs.

Finally, it should be mentioned that the follow-up research of the eighteenth century, currently being completed by Eva Röell of the architectural history department of Utrecht University, is to be expected in the near future.

Notes
1. R. Meischke, 'Het architectonische ontwerp in de Nederlanden gedurende de late middeleeuwen en de zestiende eeuw' ('The architectural design in the Netherlands during the late Middle Ages and the 16th century'), *Bulletin KNOB*, 5 (1952), pp. 161-230.
2. K. De Jonge, K. Ottenheym (eds.), *Unity and Discontinuity. Architectural Relationships between the Southern and Northern Low Countries 1530-1700.* Architectura Moderna 5, Turnhout, Brepols, 2007, p. 49 note 157.