

FROM LODGE TO STUDIO: TRANSMISSIONS OF ARCHITECTURAL KNOWLEDGE IN THE LOW COUNTRIES 1480–1530*

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Peter Paul Rubens's involvement in the design of the Antwerp Jesuit Church, the publication of his *Palazzo di Genova*, and the design of his own house make him an iconic illustration of how painters were involved in architectural design.¹ By the beginning of the seventeenth century, a formal knowledge of Vitruvian architectural language had become a basic skill which every beginning artist was required to master. The previous century is often considered as a starting point for this involvement of the visual artist in architectural design. The architectural historian Ruud Meischke, for example, considered the increasing involvement of painters, sculptors and military engineers in architectural design as a phenomenon which originated at the dawn of the sixteenth century with examples such as Jacques Dubroecq and Jan Gossart.² The Antwerp Town Hall can be regarded as one of the pivotal moments of this changing attitude towards architecture. The list of participants of the 1560 design competition included only names of print designers, painters, and sculptors who had established a good reputation in mastering the antique architectural language.³

The phenomenon of architectural commissions handed over to visual artists is explained by radical changes in mentality towards the concept of architecture. According to a traditional point of view, printed publications of Vitruvius, Alberti, and Serlio altered the character of the architect from being a master mason active on the building site to a different concept of the architect as an intellectual profession, theoretically incorporated in the Liberal Arts.⁴ It is our opinion that the formation of 'the painter-architect' is a much more complex process which was already set into motion before humanist intellectual notions of architecture came into play. In this article we will point out that the responsibility for architectural design cannot be clearly defined to one professional group, but was the shared skill of many artists involved in design in general. The main goal is to examine the process from

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¹ On Rubens and Architecture: A. Blunt, 'Rubens and Architecture', *The Burlington Magazine*, 129 (1977), p. 617; F. Baudouin, 'Peter Paul Rubens and the notion *Painter-Architect*', in: P. Lombaerde (ed.) *The Reception of P.P. Rubens's Palazzi di Genova During the 17th Century in Europe: Questions and Problems* (Architectura Moderna, 1), (Turnhout 2002), pp. 15–36; B. Uppenkamp, B. Van Beneden and P. Lombaerde, *Palazzo Rubens. The Master as Architect*, (Antwerp 2012).

² R. Meischke, 'Het architectonische ontwerp in de Nederlanden gedurende de late Middeleeuwen en de zestiende Eeuw', in: R. Meischke (ed.), *De Gotische Bouwtraditie*, (Amersfoort 1988), pp. 186–91.

³ The twelve involved artists were Jan de Heere, Jacques Dubroecq, Jan du Jardin, Lambert Suavius, Lambert van Noort, Louis du Foix, Nicollò Scarini, Wouter vanden Elsmer, Jan Metsys, Paludanus (Willem van den Broecke), Hans Vredeman de Vries and Cornelis (II) Floris: F. Prims, *Het Stadhuis te Antwerpen. Geschiedenis en beschrijving*, (Antwerp 1930); A. Corbet, 'Cornelis Floris en de bouw van het stadhuis van Antwerpen', *Revue belge d'Archéologie et d'histoire de l'Art*, 6, 1936, pp. 223–64; J. Duverger, 'Cornelis Floris II en het stadhuis te Antwerpen', *Genise Bijdragen tot de kunstgeschiedenis*, 7, 1941, pp. 37–72; H. Bevers, *Der Rathaus von Antwerpen (1561–1565). Architektur und Figurenprogramm* (Hildesheim, Zürich and New York 1985); W. Kuyper, *The Triumphant Entry of Renaissance Architecture into the Netherlands*, (Alphen aan den Rijn 1994), pp.156–8; J. Lampo, *Het Stadhuis van Antwerpen*, (Brussels 1993).

⁴ See, for example, H. Miedema, 'Over de waardering van Architect en beeldend kunstenaar in de zestiende eeuw', *Oud Holland*, 94, 1980, pp. 71–85.

architectural designers towards visual artists in the Low Countries at the end of the fifteenth century and the dawn of the subsequent century by focusing on the ways in which architectural knowledge disseminated through guild structures and family connections.

Stylistic Novelty as Motivator

The case of the Antwerp Town Hall illustrates that the experience of visual artists in designing antique architectural ornament is often considered as one of the main reasons for their increasing responsibility in the design of edifices. Almost a generation prior to the canonization of the Serlian architectural language by the painter Pieter Coecke van Aelst (1502–1550) in 1539⁵ and before the first attempts were made around the early 1530s to construct edifices in the antique manner, painters, sculptors, woodcarvers, and printmakers in the Low Countries had already become experts in applying the style most favoured by the Burgundian-Habsburg court and civic elite. According to some scholars it was their expertise of the antique style which put craftsmen associated with the guild of St Luke one step ahead of those of the masons guild (the *Vier Gekroonden*).⁶ Examples to support this theory are easy to find. The Habsburg court painter *par excellence*, Jan Gossart was renowned for his architectural knowledge.⁷ Being one of the first to have studied antiquity in Rome as early as 1508, Gossart had first-hand knowledge of antique architectural and ornamental vocabulary which resulted in his involvement in architectural projects. A detailed design for the Tomb of Isabella of Austria is a first sign of his versatility in designing for different media (fig. 1). Some years earlier, the painter was also consulted in an often-quoted dispute over the antique design and feasibility of the casting of a copper choir screen, commissioned by the canons of the Utrecht cathedral in 1517.⁸ After the painter Hendrik de Zwart of Gouda had made

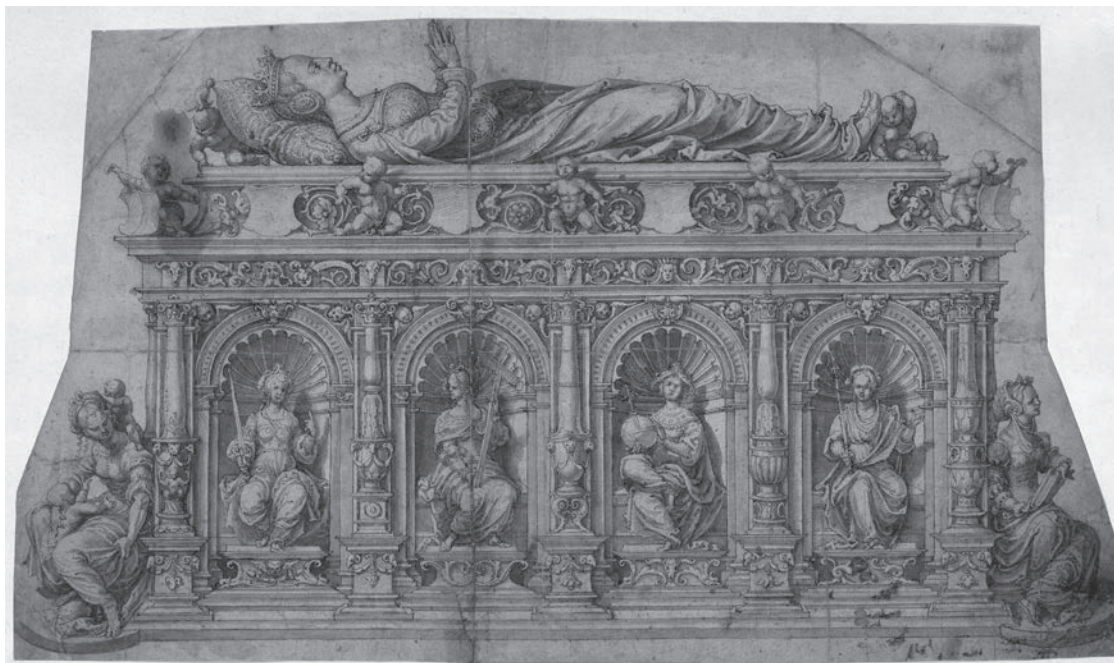
⁵ H. de la Fontaine Verwey, 'Pieter Coecke van Aelst and the publication of Serlio's book on architecture', *Quaerendo*, 6, 1976, pp. 166–94; R. Rolf, *Pieter Coecke van Aelst en zijn architectuuruitgaves van 1539; met reprint van zijn 'Die inventie der colommen' en Generale Reglen der Architecturen*, (Amsterdam 1978); J. Offerhaus, 'Pieter Coecke et l'introduction des traités d'architecture aux Pays-Bas', in: J. Guillaume (ed.), *Les traités d'architecture de la Renaissance* (De Architectura, 3), (Paris 1988), pp. 443–52; K. De Jonge, 'Vitruvius, Alberti and Serlio. Architectural treatises in the Low Countries 1530–1620', in: V. Hicks and P. Hart (eds.), *Paper Palaces. The rise of the Renaissance Architectural Treatise*, (London 2004), pp. 281–96; K. De Jonge and K. Ottenheim (eds.), *Unity and Discontinuity. Architectural Relationships between Southern and Northern Low Countries (1530–1700)* (Architectura Moderna, 5), (Turnhout 2007), pp. 41–50.

⁶ On the masons guilds in the Low Countries: C. van Cauwenbergs, *Les Quatre Couronnés d'Anvers ou les Architectes Anversois du Moyen Age (1324–1542)*, (Antwerp 1889); J. Duverger, *De Brusselse Steenbickelaren. Beeldhouwers, bouwmeesters, metselaars enz. der 14e en 15e eeuw, met een aanhangsel over Klaas Sluter en zijn Brusselsche medewerkers te Dijon*, (Antwerp 1933); F. Van Tyghem, *Op en om de middeleeuwse bouwwerf*,

(Verhandelingen van de Koninklijke Vlaamse Academie voor Letteren, Wetenschappen en Schone Kunsten van België 19), (Brussels 1966).

⁷ For Gossart and architecture, see: S. Herzog, 'Tradition and Innovation in Gossart's Neptune and Amphitrite, and Danae', *Bulletin Museum Boijmans-Van Beuningen*, 19, 1968, pp. 25–41; A. Mensger, *Jan Gossaert. Die Niederländische Kunst zu Beginn der Neuzeit*, (Berlin 2002); S. Heringuez, 'L'architecture antique dans le Neptune et Amphitrite de Jean Gossart', *Journal de la Renaissance*, 6, 2008, pp. 107–18; E.M. Kavalier, 'Gossart as Architect', in: M.W. Ainsworth (ed.), *Man, Myth and Sensual Pleasures: Jan Gossart's Renaissance*, (New York 2002), pp. 31–43; S. Heringuez, 'Bramante's Architecture in Jan Gossart's painting', *Dutch Crossing*, 3, 2011, pp. 229–48.

⁸ H.P. Coster, 'Het koperen hek voor het altaar van St. Maarten in den Dom te Utrecht', *Bulletin van den Nederlandschen Oudbeidkundigen Bond*, 2, 1909, pp. 196–218; H. Van Miegroet, 'Modern, antique, and novelty antique in 1517', in: J. Vander Auwera (ed.), *Liber Amicorum Rapbaël De Smedt*, (Leuven 2001), pp.153–71; K. Ottenheim, 'Renaissancearchitektur und Architekturpraxis im städtischen Bereich', in: N. Nussbaum, C. Euskirchen and S. Hoppe (eds.), *Wege zur Renaissance*, (Cologne 2003), pp. 211–13; K. De Jonge and K. Ottenheim (eds.), *o.c.*, 2007, p. 22.



1. Jan Gossart, *Design for Tomb of Isabella of Austria*, 1526–27. (© Kupferstichkabinett, Staatliche Museen Zu Berlin, Kdz 4646).

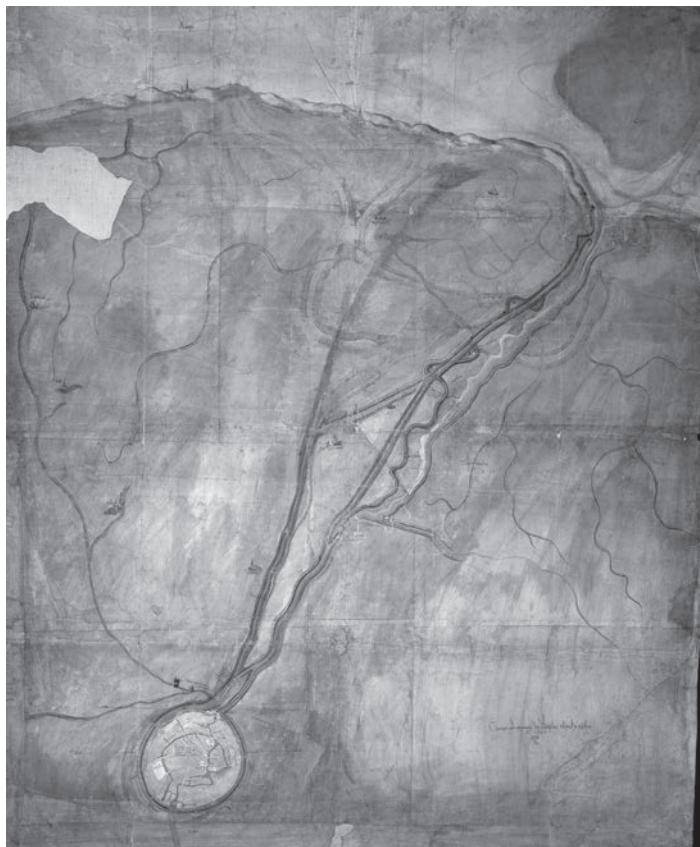
a design drawing for the choir screen, the Antwerp woodcarver Gregorius Wellemans was ordered to create a wooden model – in which all modern (*i.e.* Flamboyant Gothic) elements were to be avoided and replaced with antique ornament. Jan van den Eynde of Mechelen who, in the last stage, was asked to cast the choir screen, complained about the infeasibility of transporting the wooden design into copper. In 1522, Jan Gossart was asked to make a final verdict about the design and agreed with the goldsmith that Wellemans' design was too complicated to be executed in copper. The document is often treated as evidence of Gossart's expertise in the antique style, even though the advice seems to have been of technical rather than stylistic nature.

Another artist who was often considered as a sculptural and architectural adviser is Lanceloot Blondeel (1498–1561). In 1528 the Bruges painter, who had already shown his expertise of antique ornament in some of his panels,⁹ was contacted to make a design for a prestigious chimneypiece in the Alderman's chamber of the Brugse Vrije, even though the Bruges stone cutter Willem Aerts had already delivered a design, three years earlier.¹⁰ Two decades later, in 1546, the Bruges City Council relied on Blondeel again, now for quite a different matter. To bypass the rapid silting up of the Zwin area – which was cutting off Bruges from its commercial access to the North Sea – the artist was asked to design plans for a new canal to the city as an alternative route (fig. 2).¹¹ Although the ability of Blondeel to design antique ornament and architecture might help to explain his involvement in the chimneypiece, this

⁹ See for example, L. Blondeel, *The calling of St Peter and the healing of Hemorroïssa*, 1525, Bruges Groeningemuseum, inv. 0000GRO0224.I.

¹⁰ L. Devlieger, *De Keizer Karel-schouw van het Brugse Vrije*, (Tielt 1987), pp. 45–50.

¹¹ P. Parmentier, 'The struggle to maintain the Zwin', in: *Bruges and Zeebrugge. The city and the sea*, (London 1995), pp. 64–69; M.P.J. Martens (ed.), *Brugge en de Renaissance van Memling tot Pourbus*, (exh. cat.), (Brugge 1998), p. 115; E. Tahon and V. Vermeersch (eds.), *Lanceloot Blondeel*, (Bruges 1988).



2. Lanceloot Blondeel, *Bruges harbor project*, 1546. (Bruges City Archives, Kaarten en Plannen, inv. 14).

¹² Three years later, this project was given a second life, as also Pieter Pourbus was commissioned to make designs for revitalizing Bruges commercial life: P. Huvenne, *Pieter Pourbus. Meester-schilder 1524–1584*, (Brugge 1984), pp. 25–26, 277–306. A similar case was the involvement of the painters Jan van Scorel and Jan Cornelisz. Vermeyen in the design of plans of the reclamation of the Zijpe River, near Utrecht in 1552. M.A. Faries, *Jan van Scorel, his style and its historical context* (Diss.), (Bryn Mawr 1972); M.A. Faries, 'Jan van Scorel, terug uit Italië, in Utrecht en Haarlem', in: J.P. Filedt Kok, W. Halsema-Kubers and W. Th. Kloek (eds.), *Kunst voor de Beeldenstorm. Noordnederlandse kunst 1525–1580*, (exh. cat.), (The Hague 1986), pp.180–81.

¹³ Although this might seem an obvious statement, the anachronistic term 'architect' to describe designers of Medieval architecture is used frequently. Literature on Villard de Honnecourt's, for example, is still strongly centered on the question of the draftsman's professional identity. For a discussion of this interpretation and alternatives, see C.F. Barnes, *The*

knowledge would have been of little help to him for such a complex engineering project.¹² In order to answer the question why painters were commissioned architectural drawings it is clear that a purely stylistic explanation does not suffice.

Designing Architecture

At least until the late seventeenth century, the term architect remained a rather fluid term, which exceeded the mere design of edifices.¹³ Traditionally, architecture was designed by masons, stonemasons or – mostly – ornamental sculptors who had gained enough experience on building sites in order to be trusted with a large commission. Domien de Wagemakere, for example, who in 1521 provided the designs for the north tower of the Antwerp Church of Our Lady, came from a long family tradition of ornamental sculptors (*cleenstekers*). Between 1431 and 1445 his grandfather, Pieter de Wagemakere, received payments on various occasions for the delivery of pre-cut ornamental sculpture such as thresholds, a stone cross and lintels for the choir of the Church of Our Lady.¹⁴ It is safe to assume that any member who had joined

Portfolio of Villard De Honnecourt (Paris, Bibliothèque Nationale de France, Ms Fr 19093): A New Critical Edition and Color Facsimile, (Aldershot 2009), pp. 23–25. On the professional identity of the architect in the Low Countries, see K. J. Philipp, "Eyn huys in manieren van eynre kirchen" Werkmeister, Parliere, Steinlieferanten, Zimmermeister und Bauorganisatoren in den Niederlanden von 14. Bis zum 16. Jahrhundert', *Walraff-Richards Jahrbuch*, 50, 1989, pp. 69–113; E. Gerritsen, *Zeventiende-Eeuwse Architectuurtekeningen. De tekening in de ontwerpen-Bouwpraktijk in de Nederlandse Republiek*, (Zwolle 2006); K. Ottenheym, 'The Rise of a Profession: The architect in 17th-century Holland', in: G. Beltrami and H. Burns (eds.), *L'Architetto: ruolo, volto, milto*, (Venice–Vicenza 2009), pp. 199–219; M. Hurx, 'Architecten en gildendwang; vernieuwingen in de ontwerppraktijk in de vijftiende en zestiende eeuw?', *Bulletin KNOB*, 108, 2009, pp.1–18.

¹⁴ C. Van Cauwenberghs, *Les Quatre Couronnés d'Anvers ou les architectes anversoils du Moyen Ages*, (Antwerp 1889), p. 20.

the masons guild and gained enough reliability was able to deliver designs for architectural projects. These members were involved in a wide range of different crafts. In both Leuven and Brussels, this guild consisted of sculptors, stonecutters, masons and roof makers.¹⁵ The Antwerp masons guild also counted the ornamental sculptors among their ranks. Perhaps with the exception of the roof makers, all of them would have been more than able to design architecture ranging from small scale micro-architecture to large projects such as cathedral facades and towers. Both designs embedded within the same logic of constructive geometry. At least since the twelfth century, Gothic design principles were based upon a strict system in which the elevation and the three-dimensional projection of an architectural design were derived from a geometrical ground plan.¹⁶ Most ground plans show a superimposing of the structural levels with the use of basic Euclidian trigonometry. By the end of the fifteenth century, some of these geometrical rules of thumb were published as small instruction manuals such as the well-known *Büchlein von der Fialen Gerechtigkeit* (1486) of the Regensburger Mathes Roriczer and the contemporary smaller *Fialenbüchlein* (1487) of Hans Schmuttermayer.¹⁷ The latter addressed the booklet to “all masters and workshop assistants who make use of the noble and liberal art of Geometry.”¹⁸ Apart from designers of buildings this also included goldsmiths – like the booklet’s author himself – carpenters, stonecutters, sculptors and perhaps even painters. Fifty years later, Pieter Coecke van Aelst would not have a different readership in mind, when he addressed his Vitruvian booklet *Die Inventie der Colommen* to “painters, sculptors, stonecutter and all who derive pleasure from antique edifices.”¹⁹

The missing link? Goldsmith-engravers

The career of Alart Du Hameel (c. 1460–c. 1506) offers an illustration of the thin boundaries between early modern professional groups.²⁰ Documented as master mason of the main building sites of ‘s-Hertogenbosch (1478–1495), Antwerp (1484–1493) and Leuven (1495–1502), he was also responsible for one of the few tangible examples of

¹⁵ J. Duverger, *l. c.*, 1941, p. 14; J. Crab, *Het Brabants beeldsnijcentrum*, (Leuven 1977), pp. 299–300.

¹⁶ Especially see, L.R. Shelby, *Gothic Design Techniques. The Fifteenth-Century Design Booklets of Mathes Roriczer and Hanns Schmuttermayer*, (London – Amsterdam 1977); L.R. Shelby, ‘The geometrical knowledge of Medieval master masons’, in: L.T. Courtenay (ed.), *The engineering of Medieval cathedrals*, (Aldershot 1997), pp. 27–62; R. Bork, *The Geometry of Creation. Architectural Drawing and the Dynamics of Gothic Design*, (Farnham 2011).

¹⁷ L. Shelby, *o. c.*, 1977; F. Bucher, *The lodge books and sketch books of Medieval architects*, (New York 1979); U. Coenen, *Die spätgotischen Werkmeisterbücher in Deutschland. Untersuchung und Edition der Lehrschriften für Entwurf und Ausführung von Sakralbauten*, (Munich 1990); W. Müller, *Grundlagen gotischer Bautechnik*, (Munich 1990).

¹⁸ H. Schmuttermayer, *Das Fialenbüchlein*, 1487, fol. 1a: “zutrost vñ vntterweysung vnnserm nachsten vñ all maisteren vñ gesellen die sich diser hohen vñ freyen kunst der Geo-metria geprauchten ir gemute speculirung vnd ymaginacion”.

¹⁹ S. Schéle, *Cornelis Bos. A study of the Origins of the Netherland Grottesque*, (Stockholm 1965), p. 23;

S. Schéle, ‘Pieter Coecke van Aelst and Cornelis Bos’, *Oud Holland*, 77, 1962, pp. 235–40; R. Rolf, *o. c.*, 1978; K. De Jonge, *l. c.*, 2004, pp. 281–296; K. De Jonge, ‘Standardizing antique architecture 1539–1543’, in: K. De Jonge and K. Ottenheim (eds.), *o. c.*, 2007, pp. 42–49.

²⁰ E. Van Even, ‘Alart Du Hameel, architecte ou maître-ouvrier des maçonneries de la ville de Louvain, 1495–1502’, *Bulletin du comité de la province de Brabant de la Comission royale des Monuments*, 8, 1881, pp. 40–43; C.V. Verreyt and M. Lehrs, ‘Alart Du Hamel of Duhomeel’, *Oud Holland*, 11/12, 1894, pp. 7–25; E. Van Even, *Louvain dans le passé et le présent*, (Leuven 1895); C.F.X. Smits, *De Kathedraal van ‘s Hertogenbosch*, (Brussels 1907), pp. 99–105; C.J.A.C. Peeters, *De Sint Janskathedraal te ‘s Hertogenbosch (De Nederlandse Monumenten van Geschiedenis en Kunst)*, (Den Haag 1985), pp. 39–41; H. Boekwilt, R. Claudemans and W. Hagemans, *De Sint-Janskathedraal van ‘s- Hertogenbosch*, (Alphen aan de Maas 2010), pp. 130–34; K. De Jonge, ‘“Scientie” et “experientie” dans le gotique moderne des anciens Pays-Bas’, in: M. Chatenet, K. De Jonge, E.M. Kavalier and N. Nussbaum (eds.), *Le Gotique de la Renaissance. Actes des quatrième Rencontres d’architecture européenne. Paris 12–16 juin 2007*, (De Architectura 13), (Paris 2011), p. 205.



3. Alart Duameel, *South Portal St John's Cathedral 's-Hertogenbosch*, 1478–95. (Photo Oliver Kik).

²¹ On constructive geometry in the Low Countries, especially see H. Vandevyvere, 'Gothic Town Halls in and around Flandres, 1350–1550: A Geometrical Analysis', *Nexus Network Journal*, 3, 2001, pp. 59–84; K. De Jonge, *l.c.*, 2011.

²² Versions of the monstrance print are now in the Louvre, Rothshield collection, inv. 75 L.R. and Vienna, Graphische Sammlung Albertina. *The Illustrated Bartsch*, 1991, p. 247, 0911.009. Verreyt suggested that the engraving might have been related to a commission which Du Hameel received for designing a monstrance which would later be executed by the Cologne goldsmith Hendrick de Borchgreve. Since there is no trace of the original monstrance this remains an assumption. C.V. Verreyt and M. Lehrs, *l.c.*, 1894, pp. 10–11. Prints of the baldachin design are preserved in Dresden, London (British Museum), and Vienna, Graphische Sammlung Albertina. *The Illustrated Bartsch*, 1991, p. 248, 0911.010. Timmermans associates the design to Matthues de Layens' sacrament house in the Louvain church of St Peter's. This would suggest a printing date later than Du Hameel's arrival in Louvain in 1495.

the application of constructive geometry in the Low Countries (fig. 3).²¹ In an engraved design for a monstrance and for a Late Gothic baldachin, Du Hameel was one of the first artists to experiment with the new medium of printed media as a channel to disseminate architectural designs (fig. 4).²² It was not uncommon for architectural designers to include goldsmith design into their work load.²³ One of the earliest examples of architectural drawings, Villard de Honnecourt's enigmatic sketchbook, combines architectural designs with those for woodcarvers, painters and goldsmiths.²⁴ A similar example is the printed oeuvre of the Bruges Master W with the Key, a contemporary of Du Hameel.²⁵ His prints reveal the different applications of 'the Liberal Art of geometry', ranging from similar monstrance designs to engravings depicting architectural elements such as an orthogonal elevation of a flying buttress (fig. 5). In an art market where most workshops relied on the integration and combination of various successful motives rather than individual originality, these designs were in high demand as workshop models of all crafts related to architectural design. The

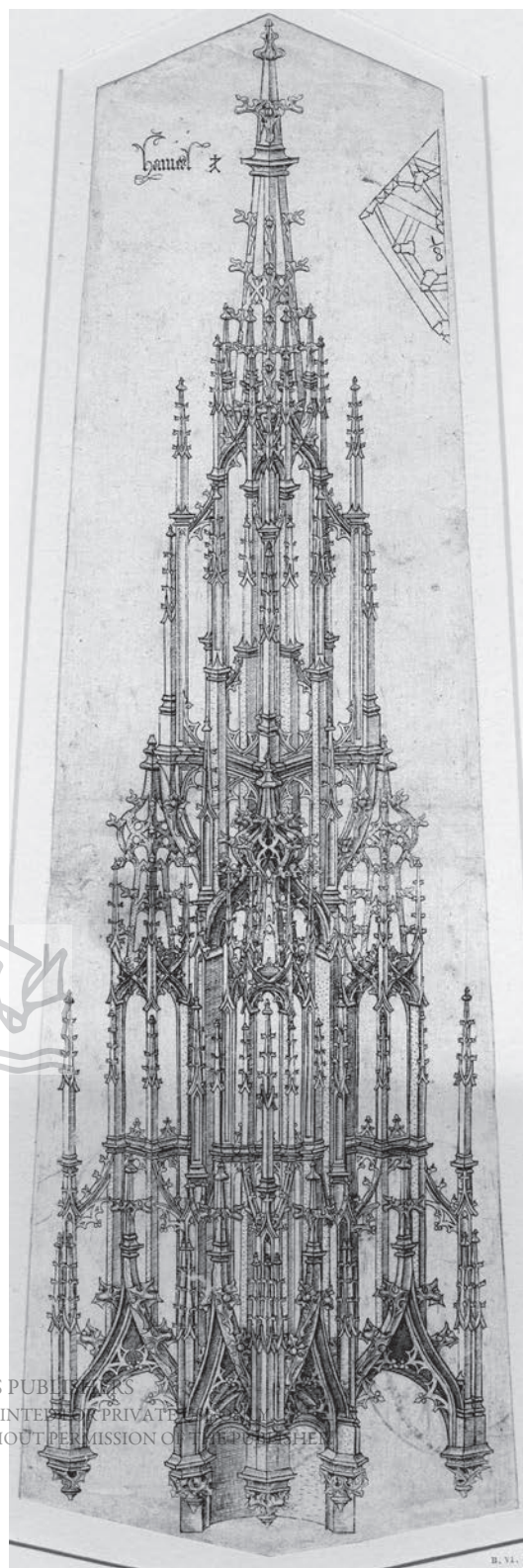
A. Timmerman, *Real Presence. Sacrament Houses and the Body of Christ c. 1270–1600*, (Architectura Medii Aevi 4), (Leuven 2009), p. 185

²³ On the relationship between goldsmiths and other artists in the Low Countries, see: L. De Ren, 'Over samenwerking en verwantschap tussen Antwerpse beeldhouwers, schilders en zilversmeden tijdens het Ancien Régime', in: L. De Ren (ed.), *Zilver in Antwerpen. De handel, het ambacht en de klant*, (Leuven 2011), pp. 127–45.

²⁴ F. Bucher, 'Micro-architecture as the "idea" of Gothic theory and style', *Gesta*, 15, 1972, pp. 71–89; C.F. Barnes, 'Le "problem" Villard De Honnecourt', in: R. Recht (ed.), *Les Battisseurs Des Cathedrales Gothiques*, (Strasbourg 1989), pp. 209–23; C.F. Barnes, *o. c.*, 2009.

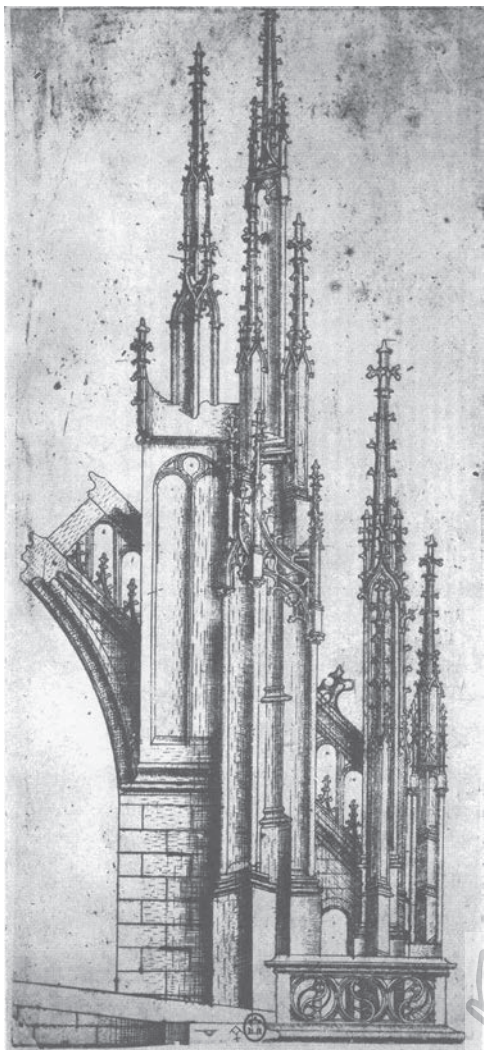
²⁵ M. Lehrs, *Der Meister W A. Ein kupferstecher der Zeit Karls des Kubnen*, (Leipzig 1895); W. Boerner, *Der Meister W*, (Bonn 1927); M. Lehrs, *Geschichte und kritischer Katalog des deutschen, niederländischen und französischen Kupferstichs im XV. Jahrhundert*, vol. 7, (Nendeln 1930), pp. 1–101; *The Illustrated Bartsch*, vol. 8, 1991, pp. 124–48.

role of the new medium of printed engravings in the spread of models and the diffusion of architectural knowledge can hardly be underestimated. In contrast to traditional lodge books and individual workshop drawings, architectural design and their underlying technique could be accessed by a wider international audience. Prints of Master W with the Key, for instance, were copied rapidly by Israel van Meckenem (c. 1445–1503). Printed media, and especially their producers, were a crucial link between architectural design and the visual arts. Almost all of the early engravers in the Low Countries and Germany had a family background of goldsmiths or master masons. It is no coincidence that goldsmith designs and ornamental prints are one of the most frequently depicted subject matters during the final decades of the fifteenth century. Israel van Meckenem, Albrecht Altdorfer, Heinrich Aldegrever, Martin Schongauer, Peter Flötner, Lucas Cranach the Elder, Daniel Hopfer and Hans Holbein: they are just a few of the names of early German engravers who had come from a long family tradition of master masons and especially goldsmiths. Perhaps the most prolific example is that of Albrecht Dürer (1471–1528), whose father was a successful Nuremberg goldsmith. The young Dürer was probably introduced into the world of the printed image by his godfather, Anton Koberger, who himself had ceased his occupation as a goldsmith to become one of the first successful printers and publishers.²⁶ During his journey to the Netherlands in 1520–21, Dürer did not only have many encounters with the famous local painters, but he was equally eager to meet the Antwerp goldsmiths, such as ‘Alexander the goldsmith, a rich and stately man’ who he met



4. Alart Duhomeel, *Design for gothic Baldachin*. (London, © British Museum).

²⁶ E. Panofsky, *The Life and Art of Albrecht Dürer*, (Princeton – Oxford 1943), p. 5.



5. Master W with the Key, *Design for Flying Buttress*, c. 1480. (Paris, Bibliothèque Nationale).

²⁷ H. Rupprich, *Dürer. Schriftlicher Nachlass*, vol. 1, (Berlin 1956), pp. 152, 169. This was most likely Alexander of Brussels, who was inscribed in the Antwerp Guild of St Luke in 1516. He was also mentioned in a often-cited Utrecht court case in 1542 in which the carpenter Willem van Noort was forced to join the masons guild, if he wanted to design architecture. In the court case van Noort's witnesses referred to famous Italian and Antwerp artists, under whom a certain Master Alexander. Pinchart also associated the artist with the anonymous medalist Alexander P.F., who in 1578 had cast a medal of the poet Jean Baptiste Houwaert, and had worked at the English court of Henry VIII. Since this implies a minimum age of ninety years old, this seems unlikely. A. Pinchart, *Histoire de la gravure des médailles en Belgique*, (Brussels 1870); G.F. Hill, *Medals of the Renaissance*, (Oxford 1920), p. 134.

at least twice during his sojourn.²⁷ This Antwerp goldsmith is probably identifiable with the Master Alexander who is mentioned in a oft-cited Utrecht court case in 1542 in which the carpenter Willem van Noort was forced to join the masons guild, if he wanted to be able to design architecture. In the court case van Noort's witnesses referred to famous Italian and Antwerp artists, under whom a certain Master Alexander.²⁸

Goldsmith-engravers such as Dürer and his Antwerp colleagues had profound knowledge of designing architectural structures but were shifting their profession towards the visual arts through the use of printed woodcuts and engravings. When Du Hameel was putting his goldsmith designs into print, he combined it with the publication of folio prints which anticipated the growing popularity of his close colleague Hieronymus Bosch. Both artists were members of the brotherhood of Our Lady and might have collaborated for some commissions for St John's church in 's-Hertogenbosch.²⁹ Prints such as his *Last Judgement* not only illustrate his reliance on Boschian typology and style, but also shows an architectural designer bridging the disciplinary gap between architectural design and

²⁸ S. Muller Fz., 'Getuigenverhoor te Antwerpen over het maken van ontwerpen van gebouwen in de 16de eeuw door schilders, goudsmeden, timmerlieden en metselaars', in: F.D.O Obreen (ed.), *Archief voor Nederlandse Kunstgeschiedenis* (vol. IV), (Rotterdam 1881–1882), pp. 227–45; G.W.C. Van Wezel, *Het paleis van Hendrik III, graaf van Nassau te Breda*, (Zwolle 1999), p. 121; K. Ottenheim, *l.c.*, 2003, pp. 214–15.

²⁹ Koldewey draws attention to the stylistic relationship between composition of Hieronymus Bosch and those on a baptismal font, for which Du Hameel made the design and which the goldsmith Aert van Tricht executed. On the relationship between Bosch and Du Hameel, see G. Unverfehrt, *Hieronymus Bosch. Die Rezeption seiner Kunst im frühen 16. Jahrhundert*, (Berlin 1980), pp. 190–96; J. Koldewey, *Jheronimus Bosch. Alle schilderijen en tekeningen*, (Gent – Amsterdam 2001), pp. 44–47.



6. Alart Duhamel, *Last Judgement*, 1478–1506. (© London, British Museum).

the visual arts (fig. 6).³⁰ Early print makers functioned as an intermediate between masons guilds and painters guilds, because they could maintain an independent position on the art market. Jan van der Stock indicated that as soon as printmakers started to produce images, the Antwerp St Luke's guild made many attempts to force print-publishers to join the guild, resulting in several court cases.³¹ Since the obligation of early printers and engravers to join the guild remained very unclear until 1558, many printers of books and prints did not join the guild, and were thus free from any restrictions which guild ordinances might involve. We see that many of the *peintre-graveurs* of the generation between 1480 and 1530 were in fact goldsmiths and architectural designers who shifted their career towards painting, often with prints as intermedium.

Family Matters

One such career shift of almost legendary proportion is that of Quinten Metsys (1466–1530). In one of the earliest written descriptions of Quinten's life, the humanist Dominic Lampsonius tells us the story of how his protagonist changed his craft from goldsmith to painting, due to his fiancée's preference for the 'soft brush strokes over the hammering sounds

³⁰ Copies in Berlin, Frankfurt, London (British Museum), and Vienna (Graphische Sammlung Albertina). *The Illustrated Bartch*, 1991, p. 233, 0911.002.

³¹ J. Van der Stock, *Printing images in Antwerp* (Studies in Prints and Printmaking 2), (Rotterdam 1998), pp. 27–58.



7. Joos II Metsys, *Design West front St Peter's church Leuven*, 1505. (Leuven, © Museum M, inv. 927).

of the smith'.³² Despite this romantic love story, Quinten's family tree has some firm roots in architectural design and the goldsmith's trade.³³ His father Joos I Metsys (?–1482) arrived in Louvain in 1460 and held a prominent position in the city's goldsmith guild of St Elois.³⁴ It was probably also thanks to his close guild connections to master masons such as Matheus de Layens and Gillis Steurbout that his oldest son, Joos II Metsys (?–1529), was appointed to deliver new designs for the new west front of the church of St Peter's in 1505 (fig. 7).³⁵ This plan was both a structural and stylistic update of an earlier plan, commissioned to Steurbout in 1481.³⁶ The staggering amount of sculptural and ornamental detail in the architectural drawing reveals the hand of an experienced draftsman. In comparison to the multiple contemporary examples of Gothic elevation drawings in Germany and Austria, the Louvain drawing shows an increased use of perspective and even includes anecdotic details such as a trumpet player on top of the middle tower (fig. 8). In contrast to the architectural drawings of Strasbourg or Vienna, the drawing style is more loose and less dependent on auxiliary tools to maintain a strict geometrical ratio.³⁷ Indubitably the experience of the young

³² D. Lampsonius, *Pictorum aliquot celebrium Germaniae inferioris effigies*, (Antwerp 1572), fol. 9. Translation: "Before I used to be a Cyclopean smith, but when a wooing painter began to love on an equal footing with me, and the cautious girl objected to me that she liked the heavy thundering of hammers less than the silent paintbrush, love made me a painter. A tiny hammer, which is the sure note of my paintings, alludes to this. Thus, when Venus had asked Vulcan for arms for her son, you, greatest of poets, made a painter out of a smith." Z. Van Ruyven-Zeman, *The Wierix Family*, in: J. van der Stock and M. Leesberg (eds.), *The New Hollstein Dutch and Flemish etchings, Engravings, and Woodcuts, 1450–1700*, (Rotterdam 2004), vol. 9, p. 168, no. 2024.

³³ On the Metsys family and Quinten Metsys's youth in Louvain, especially see L. Van Buyten, 'Quinten Metsys en Leuven', *Arca Lovaniensis*, 33, 2004, pp. 13–85.

³⁴ In 1469 he was appointed as guardian of the Chapel of St Elois. E. Van Even, *L'Ancien Ecole de peinture de Louvain*, (Leuven 1870), p. 326; L. Van Buyten, *l.c.*, 2004, p. 37.

³⁵ SAL, n° 1526, fol. 250v.–251v. 11th April 1526; Published in J. Crab, *Het Brabants Beeldsnijcentrum Leuven*, (Leuven 1977), pp. 332–33.

³⁶ *Item meester Gielys Steurbout van den betreкке te beworpene van en drie toren die ghemaeft sullen worden op 'sondersel dat ghemaeft es voer den mommaers duere (...)*. SAL, n° 5105, fol. 129r., 134v.; F. Doperé, 'Ontwerptekening voor de torenpartij van de Sint-Pieterskerk', in: M. Smeyers (ed.), *Dirk Bouts (ca. 1410–1475), een Vlaams Primitief te Leuven*, (Leuven 1998), pp. 323–24; G.J. Bral, 'De Westtorens van de Sint-Pieterskerk in Leuven. Architectuurtekeningen en een stenen maquette van Joos II Metsys', *Arca Lovaniensis*, 33, 2004, pp. 139–42, 151–52.

³⁷ Especially see J.J. Böker, *Gothic Architecture. Catalogue of the world's largest collection of gothic architectural drawings in the Academy of fine Arts Vienna*, (Salzburg 2005).

Quinten among architectural designers must have shaped his artistic conception to a great extent.³⁸ A precedent exists in the partnership between Gillis Steurbout and his father – a painter – Hubert Steurbout for the first St Peter’s design in 1481. For this project Hubert was asked to make a painted version on paper of Gillis’ design.³⁹ The education of Quinten as a painter is still wrapped in clouds. In 1491, he is first mentioned in the Antwerp *Liggeren* without any record of his apprenticeship.⁴⁰ Although some have proposed a training in the Louvain workshop of Albrecht Bouts, his experience as an architectural draftsman in his father’s workshop might have made him skillful enough to enroll as a journeyman in Antwerp, which would not be recorded in the guild registries.⁴¹ Although no architectural commissions can be associated with Quinten Metsys, architecture remains a constant presence throughout his oeuvre.⁴² His familiarity with architectural novelties is perhaps most telling in the S.-Anne altarpiece commissioned by the Louvain fraternity of St Anne in 1508–09.⁴³ The painted architecture is proof of a good understanding of both *antiecse* and *modern* architecture. The main scene, St Anne with Christ and the Virgin, takes place in a cupola structure, which reminds us of Renaissance architecture of Northern Italy. The cupola structure and the two coffered barrel-vaults on each side adds a visual division and accentuates the main scene. Both Perugino and



8. Joos II Metsys, *Design West front St Peter's church Leuven* (detail), 1505, Leuven, Museum M, inv. 927. (Photo: Merlijn Hurx).

Cima de Conegliano have been suggested as possible visual source for Metsys’ architectural

³⁸ Given the drawings style, it is not even unthinkable that Quinten collaborated with the execution of the St Peter’s design in 1505.

³⁹ “Item, meester Houbrecht, de schildere van den patroone van den torre te scildere, op pampier, hem vergouwen, 27 pl.”, SAL, n° 5086, fol. 97; F. Dopère, *l.c.*, 1998, p. 324; G.J. Bral, *o.c.*, 2004, p. 140. Hubert’s earliest mention is at the building site of St Peter’s in May 1439, for painting bas relief designs on the choir ribs. In 1499 he made designs for the sculptures of the city hall. E. Van Even, *o.c.*, 1870, pp. 59–63.

⁴⁰ P. Rombouts and T. Van Lerius, *De Liggeren en andere historische archieven van het Antwerpse Sint-Lukasgilde*, vol. 1, (Antwerp 1864–1876), p. 43.

⁴¹ N. Peeters and M.P.J. Martens, ‘Assistants in artist’s workshops in the Southern Netherlands. An overview of the archive sources’, in: N. Peeters (ed.), *Invisible Hands? The Role and Status of the Painter’s Journeyman in the Low Countries c. 1450–1650*, (Leuven 2007), p. 35.

⁴² Perhaps closest to architectural design is his participation in the festive decorations for the Joyous Entry of Charles V, on April 3rd 1520. The program of the event was devised by Peter Gillis, whose portrait Metsys had painted a few years earlier. L. Silver, *The paintings of Quinten Metsys with catalogue raisonné*, (Oxford 1984), pp. 14–15; L. Van Buyten, *l.c.*, 2004, p. 52.

⁴³ Koninklijke Musea voor Schone Kunsten van België, inv. 2784.



9. Quinten Metsys, *St Anne triptych* (left panel), 1508–09. (© Koninklijke Musea voor Schone Kunsten van België, Brussel, inv. 2784, Photograph: J. Geleyns/www.roscaan.be).

was active as a goldsmith and mason. His wife, Margriet's Molders, came from a family of retable carvers.⁴⁹ Given the hereditary nature of crafts and the custom to marry within the

novelty.⁴⁴ Just as interesting as his antique architecture is Quinten's reference to *modern* architecture, as the Brabantine Gothic was then called. In the outer left panel, the offering of the gifts of St Anna and St Joachim is set against the background of a window overlooking a Brabantine city view in which Larry Silver recognized the north tower of the Antwerp church of Our Lady, completed after a design of Domien de Wagemakere (fig. 9).⁴⁵ This tower, however, would not be completed until 1521.⁴⁶ At the same time, a similar project was undertaken for the west front of the St Rombold church of Mechelen, designed by Rombout II Keldermans.⁴⁷ This resemblance of Quinten's imaginary church tower, more than ten years before the first Brabantine Gothic spire was completed, can be explained by his family network of master masons in Brabant. Both his father and brother had collaborated several times with the Keldermans family for projects in Louvain, especially with Matheus III Keldermans who was supervising on the building site of St Peter's.⁴⁸

Metsys' story of a goldsmith who became a painter is not as exceptional as Lampsonius would want us to believe. In fact, many of the mayor players on the art market of the first half of the sixteenth century had close family ties to architectural designers. Jan Gossart's brother, Nicasius

⁴⁴ H.T. Broadley, 'The mature style of Quinten Massys', *Marsyas*, 11, 1962, p. 105; A. de Bosque, *Quinten Metsys*, (Brussels 1975), p. 95; L. Silver, *o.c.*, 1984, pp. 36–37, 202–03; J. Wood, 'Perugino and the influence of Northern Art on devotional pictures in the late Quattrocento', *Konsthistorik Tidskrift*, 58, 1989, pp. 7–18.

⁴⁵ Although the depicted building is most likely to be identified with the Antwerp church of Our Lady, many similar towers were designed but never finished such as St James in Antwerp, St Rombold in Mechelen, the church of Our Lady in Dordrecht, and of course the Louvain design itself. L. Silver, *o.c.*, 1984, pp. 42, 202. Metsys depicted a similar gothic spire in 1514 in right panel of the *Passion triptych*, Coimbra, Museu Machado de Castro, inv. 11267.

⁴⁶ L. van Langendonck, 'The History of the Construction', in: W. Aerts, *The Cathedral of Our Lady in Antwerp*, (Antwerp 1993), pp. 111–12.

⁴⁷ Although the original design has been lost, a 1550 copy of the original drawing is still preserved in Mons. D. Roggen and J. Withof, 'Grondleggers en grootmeesters der Brabantsche gotiek', *Gentse Bijdragen tot de Kunstgeschiedenis*, 10, 1944, p. 148.

⁴⁸ J. Duverger, 'Jan Gossaert te Antwerpen', *Bulletin Museum Boijmans - Van Beuningen*, 1–3, 1968, p. 18; M.W. Ainsworth, 'The painter Gossart in his artistic milieu', in: M.W. Ainsworth (ed.), *o.c.*, 2002, p. 14, 130.



10. Jan Gossart, *Deesis (Holy Virgin, Christ and Saint John the Baptist)*, 122 x 133 cm. (© Museo del Prado, Madrid, inv. P01510).

same guild – making the guild more than merely a metaphorical family – it seems possible to suggest that Gossart had a family background of sculptors, masons or goldsmiths.⁵⁰ A design for a reliquary also seems to point towards this direction.⁵¹ Recent technical analysis of Gossart's *Deesis* (Madrid, Museo del Prado) has clarified that the artist used gold leaf for the Gothic framework surrounding the Virgin, Christ and Saint John the Baptist (fig. 10).⁵² By applying this labor intensive technique, rather than just painting the tracery pattern in lead-tin yellow, might be explained by his skills as decorative designer. In fact, the artist designed a small goldsmith work of thin gold leaf, which was pasted on the prepared panel. Perhaps it was not merely the painter's stylistic expertise but also his technical know-how which influenced his patron's decision to take a young and rather inexperienced architect-painter on

⁵⁰ This suggestion was already made by Friedländer: M.J. Friedländer, *Die Altniederländische Malerei*, vol. 14, (Berlin – Leiden 1937), p. 111; S. Alsteens, 'Gossart as a draftsman', in: M.W. Ainsworth (ed.), *o.c.*, 2002, p. 96.

⁵¹ New York (The Morgan Library and Museum), inv. III, 127b; M.W. Ainsworth (ed.), *o.c.*, 2002, pp. 400–1, no. 110.

⁵² M.W. Ainsworth (ed.), *o.c.*, 2002, p. 216.

his diplomatic visit to Rome.⁵³ A third familiar case of a painter with architectural background is that of Frans Floris (1517–1570), whose lineage of master masons, stonemasons and land surveyors dates back to at least the beginning of the fifteenth century.⁵⁴ His grandfather, Jan Florisz. de Vriendt, had been involved in the delivery of ornamental sculpture of the Antwerp church of Our Lady and is mentioned in the accounts as *metsere*, *steenhouwere* and *erfscheyder*.⁵⁵ The career of the above mentioned Lanceloot Blondeel seems to be analogous.⁵⁶ In 1561, the Bruges humanist poet Eduard de Dene (1505–1578) wrote a collection of literary epitaphs for renowned Bruges citizens. In Blondeel's epitaph he leaves no doubt on the painter's family background and training:

Here lays buried the body of Lanslood Blondeel/ First he was a work man with masons trowel/and a great artist, after which he became a painter / following Apelles's brush in painting /thus completing himself in Architecture.⁵⁷

This last phrase is of particular interest since architecture is treated as superior to painting. The latter profession only provides completion to architecture. It is almost a reversal of Lampsonius' vision of architects and goldsmiths as inferior to the Liberal Art of painting. Blondeel was not very shy about his background since his monogram was combined with the picture of a trowel in most of his work.

Workshop Drawings

More visual information on the transmission of architectural design techniques from architectural workshops to the painter's studio is provided by a sketchbook attributed to the circle of the Amsterdam painter and sculptor Jacob Cornelisz. van Oostsanen (c. 1470–1533).⁵⁸ The sketchbook of workshop drawings, known as the Berlin sketchbook and dated around the mid-1520s, offers a unique look on architectural interest and knowledge of a painter's workshop. When browsing through the sketchbook, about 40% of all drawings are related to architectural design, ranging from exercises in perspective to ornamental details. This number already gives us some indication of the importance of architectural design within an early-sixteenth century painter's workshop. Of particular interest in the context of designing methods is a sketch of a clustered column (fig. 11). Since some of the drawings can be traced in van Oostsanen's painted oeuvre, we suggest that the column drawing was a design for a

⁵³ The reasons why Gossart was chosen to accompany Philip of Burgundy on his diplomatic mission is still unclear. A much more logical choice for the position would have been Gerard David. Since Philip of Burgundy strove to emulate the splendor of his father's Burgundian court, David would not only have been a more mature artist, but also be the direct cultural inheritor of Philip the Good's court painter Jan van Eyck. Gossart's experience both as architectural designer and painter would make him more qualified to study antique architecture, given the patron's knowledge of Vitruvius.

⁵⁴ Van Mander, (ed. Miedema) *The lives of the illustrious Netherlandish and German painters, from the first edition of the Schilder-boeck (1603–1604)*, (Doornspijk 1994–1999), fol. 239r; J. Duverger, o.c., 1933, p. 45, 55; C. van de Velde, Frans Floris (1519/20–1570). *Leven en Werken*, (Brussels 1975), pp. 21–23.

⁵⁵ Van de Velde, o.c., 1975, p. 22.

⁵⁶ L. Devliegher, o.c., 1987, pp.87–92.

⁵⁷ *Hier licht. tveesch begrauen van Landslood blondeel voormaels werckman gheveest / met maetsers truweel groot constenare / schilder gheworden der naer Reyn naervolgher in pictura Apelles pincheel vvetenlick inde Architecture ghebeel*. W. Waterschoot and D. Coigneau, 'Eduard De Dene, Testament Rhetoricael', *Jaarboek Koninklijke soevereine hoofdkamer van retorica De Fonteyne te Gent*, 2, 1976–77, p. 22.

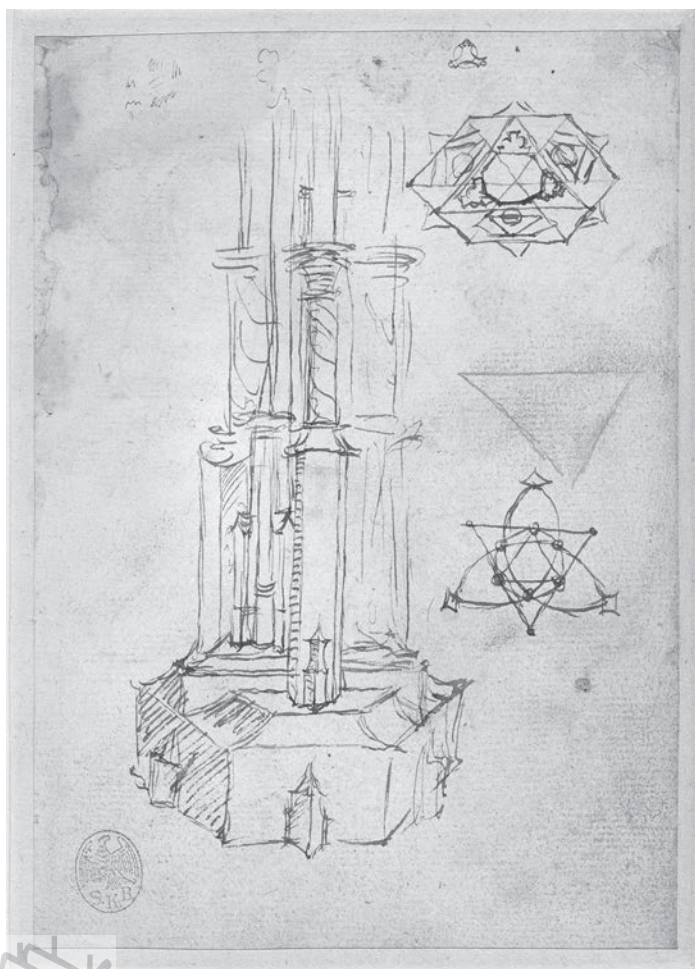
⁵⁸ Berlin, Staatliche Museen, Kupferstichkabinett, inv. KdZ 79 C2 a, fol. 34v. J.L. Carroll, *The Paintings of Jacob Cornelisz. van Oostsanen (1472–1533)*, (Ph.D), (s.l., 1987). Many thanks to Ilona van Tuinen and dr. Daantje Meuwissen for sharing their information. The Stichting Jacob Cornelisz. van Oostsanen is preparing a critical facsimile edition of the sketchbook by 2013–14.

painted version rather than for real architecture. Interesting in the context of the relationship between painter and architect is the fact that the draftsman applies the same geometrical principles as Duhamel in his goldsmith designs (fig. 4). In order to generate the perspective drawing of the column, the object was first rendered on a geometrical ground plan of three layers. These layers are individually grouped around the perspective drawing. Although very little is known about the training and background of the Amsterdam painter, the linear and decorative character of his early works led Jane Carroll to suggest that he received a goldsmith training.⁵⁹

Conclusions

These short biographical examples are an indication that external factors such as the new humanist Vitruvian ideals on the architectural profession and the expertise in antique architecture can only be offered as partial explanations for the emergence of the painter-architect in the Low Countries. Guild- and family networks played a crucial role as transmission mechanisms of architectural knowledge. Within the diffusion process, early printmaking seems to have had a quintessential position as an intermediate between architecture and visual arts.

Many early printmakers quickly combined their practice of engraving ornamental and architectural prints with lucrative figurative subjects and reproductive prints.⁶⁰ Closely connected to this, is the way architectural knowledge was orally transmitted through family ties, rather than the study of architectural treatises. Small fragments such as the sketches in the Berlin sketchbook are pieces of evidence of how Gothic design principles were transmitted in painter's workshop drawings. With its wide range of subjects – ranging from figural studies to sculptural and architectural drawings – the sketchbook shows a close resemblance to the spectrum of subjects treated by Villard de Honnecourt, about three centuries earlier. What connects these two sketchbooks is the fluid versatility of the architectural designer. The professional identity of the architect during the fifteenth and sixteenth century is at least to be described as fluid and transversal. However, this was not a strictly northern 'Gothic' phenomenon. It is not unusual



11. Workshop Jacob Cornelisz. van Oostsanen, *Berlin Sketchbook*, fol. 70r. (© Kupferstichkabinett, Staatliche Museen Zu Berlin, Kdz 79 C 2 a, fol. 34 verso).

⁵⁹ J. Carroll, 'Jacob Cornelisz. van Oostsanen en zijn uistraling', in: J.P. Filedt Kok, W. Halsema-Kubes and W. Th. Kloek (eds.), *Kunst voor de Beeldenstorm. Noordnederlandse kunst 1525–1580*, (exh. cat.), (The Hague 1986), p. 131.

⁶⁰ Hans Vredeman de Vries' print production of designs for architecture, furniture, goldsmith art or sculpture shows a clear continuity of this matter in printed media throughout the century.

that all major Italian architects of the Quattrocento hardly had any architectural education, since architecture was still a vague definition. Although the concept of architecture as Liberal Art might have been introduced on a theoretical level by Alberti and spread through early Vitruvius editions, this remained a theoretical level. By avoiding anachronistic categories such as *goldsmith*, *mason*, and (especially) *architect* we might come a little closer to the contemporary meaning of designing early modern architecture. Although being just as anachronistic, the term 'designer' would perhaps be most adequate to describe the conglomerate of people involved in architectural drawing. Of course, this also has its consequences for the concept 'painter-architect'. For the generation between 1480 and 1530, many of the painters who designed architecture and sculpture were doing so because of experience gained through long lasting family traditions in masons- and/or goldsmith guilds. They are not painters who suddenly got mixed up in architectural practice, but quite the opposite. These 'architect-painters', could be considered as the bridging generation between a complex geometrical Gothic design practice and a more simplified classical ordering of antique architecture.⁶¹



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⁶¹ On the relationship between Gothic-antique practice and their different audiences, especially see: R. Bork, 'The unspeakable logic of Gothic architecture', in: M. Chatenet, K. De Jonge,

E.M. Kavalier and N. Nussbaum (eds.), *Le Gotique de la Renaissance. Actes des quatrième Rencontres d'architecture européenne. Paris 12-16 juin 2007*, (De Architectura 13), (Paris 2011), pp. 187-98.