Artes mechanicae, *creatio*, *ingenium* and *phantasia* –
Some remarks on the term 'art' in the Middle Ages[*]

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These considerations focus on a hermeneutical problem.[1] Many histories of medieval art have been written without any consideration of the fact that the medieval Latin term *ars* has nothing in common with the early modern meaning of art, and that the artist in the early modern sense did not exist in the Middle Ages. There is no simple solution. Stating that Fine Arts were non-existent in the Middle Ages may be correct, but is not truly viable. On the other hand, to surrender and ignore the problem makes no sense either. In order to attain a profounder understanding of a certain period it seems necessary, regardless how difficult it may appear, to reconstruct its history from the viewpoint of the historical protagonists. I wish to start with a few preliminary remarks on the early modern term 'art' and the socially accepted role of an artist. The main part of the essay will then focus on the medieval understanding of *ars* and the differences in meaning between conceptual terms like *creatio*, *ingenium*, and *phantasia*. These became, in the early modern period, features of the artist as a man who was creative, a genius, and possessed abounding imagination.

I. Some preliminary notes on the term 'art'
and the role of the artist in the early modern period

The difference between the medieval understanding of *ars* and what art historians today consider medieval art is best explained if one begins the discussion of the theme in relation to the early modern concept of art and the notion of art employed in the early academic tradition of the 19th century. But even this academic notion was only valid for a short period. At the beginning of the 20th century, it was generally accepted that a canon of the Fine Arts cannot be specified. Moreover, new forms of

artistic activities, such as photography or film, challenged the traditionally acknowledged principles of artistic work. But also the self-concept of an artist had radically changed.[2]

I shall first outline the most important features of the early modern term 'art', before analysing in detail the medieval concept of *ars*. Of interest are the fundamental differences which distinguished a medieval process of design from the early modern process of artistic design.

The early modern artist occupied, on different levels, a socially acknowledged role and differed thus from the medieval craftsman.[3] The break with the mechanical arts, the separation of art and technique or engineering, as well as the distinction between artistic and artificial were at once preconditions and conditions.[4] Only after that break occurred could art in the modern sense be institutionalized in a variety of social discourses. One of the first steps taken was in Italy, with the foundation of the Accademia delle Arti del Disegno in Florence in 1563 by Giorgio Vasari (1511–1574), Agnolo Bronzino (1503–1572), and Bartolomeo Ammanati (1511–1592). For the very first time, artistic discourse proper could be incorporated institutionally.[5] Also in Italy, decades earlier, the writing of artist's Vite began. These biographies conventionalised the life of the protagonists and culminated in Vasari's 'Le Vite de' più eccelenti pittori scultori e architettori nelle redazioni del 1550 e 1568'.[6] In 15th century Florence, within the context of the rebuilding of the cathedral, one can observe early forms of public or semi-public art criticism. The construction process was not supervised by building experts, master masons, stone-cutters or sculptors, but overseen by the wool weavers' guild (Arte della Lana). The administrators appointed committees to evaluate the various works. These committees consisted of specialists and non-specialists selected by lot. Here we find one of the earliest well documented examples of artistic competition, in which master foremen competed for profitable contracts at one and the same building site. All proposals were exhibited publically, so citizens could form their own opinions.[7] Sovereigns began establishing Chambers of Art,

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2   Locher, Hubert, Kunstgeschichte als historische Theorie der Kunst, München 2001; Prange, Regine, Die Geburt der Kunstgeschichte. Philosophische Ästhetik und empirische Wissenschaft, Köln 2004.

3   Conti, Alessandro, Der Weg des Künstlers. Vom Handwerker zum Virtuosen, Berlin 1998.

4   Blumenberg, Hans, Nachahmung der Natur, in: id., Wirklichkeiten in denen wir leben, Stuttgart 1981, pp. 55–103.

5   Pevsner, Nikolaus, Die Geschichte der Kunstakademien, München 1986, pp. 56–67; Roeck, Bernd, Gelehrte Künstler. Maler, Bildhauer und Architekten der Renaissance, Berlin 2013, pp. 17–55.

6   Vasari, Giorgio, Le Vite de' più eccelenti pittori scultori e architettori nelle redazioni del 1550 e 1568, testo a cura di Rosana Bettarini, commento secolare a cura di Paola Barocchi, 9 vols, Firenze 1966–1987; Kris, Ernst and Kurz, Otto, Die Legende vom Künstler. Ein geschichtlicher Versuch, Frankfurt a. M. 1995.

7   Mustari, Louis Frank, The Sculptor in the Fourteenth-Century Florentine Opera del Duomo, PhD University of Iowa 1975; id., Some procedures and working arrangements of Trecento Stonemasons in the Florentine Opera del Duomo, in: Santa Maria del Fiore – The cathedral and its sculpture. Acts of the International Symposium for the VII Centenary of

and in the late 18th century the first public museums were founded (British Museum: 1759; Louvre: 1793).[8]

Another measure of the evolution from the medieval craftsman to the early modern artist is the changing attitude to payment. The craftsmen received wages, sometimes an additional gratuity that recompensed the work solely according to economic criteria such as the duration of labour, and costs for materials and transport: the early modern artist, as Martin Warnke has observed, was paid an appropriate fee, like the court artists.[9] The committees overseeing the rebuilding of Florence Cathedral moved towards early modern practice, in that they endeavoured to make additional allowances specifically for artistic merit. Furthermore, while the craftsman would only begin work when he received an order, the artist might work without having a specific customer. He began to produce his works for an anonymous art market. His payment was no longer based on the value of the material or the hours spent working, but rather on the basis of additional artistic merit, which distinguishes him from the craftsman.[10]

In addition to these historical observations, some methodical reflections must also be taken into account. The easiest way to solve the problem of the differences between medieval craftsmanship and the early modern artist would be to consider art as an anthropological constant. In that case my contribution here would be moot. But the fact that works may exceed their mere purpose in several respects does not automatically make them works of art from a social perspective. To complicate matters further, the field of Art History established in the 19th century adopted an exceedingly Eurocentric view point, and sometimes still does. The established canon assigned the works of ancient civilisations of non-European countries either to the Ethnologists or to the Egyptologists, or, as in the case of Europe, artefacts from Antiquity to the Archaeologists.

In summary: it is not my intended propose to trace a teleologically stringent development from the medieval craftsman to the early modern artist. Rather, I wish to describe a very contradictory process, which evolved differently at different times and in different areas. The simultaneity of the non-simultaneous is a characteristic feature of this process. Finally, my special interest lies in attempting to reconstruct this process from the perspective of the historical protagonists.

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the Cathedral of Florence, Florence Villa I Tatti, 5–6 June 1997, ed. by Haines, Margaret, Fiesole 2001, pp. 195–203.

8　Schlosser, Julius von, Die Kunst- und Wunderkammern der Spätrenaissance. Ein Beitrag zur Geschichte des Sammelwesens, Leipzig 1908; Wittlin, Alma S., The Museum. Its History and its Tasks in Education, London 1949; Grasskamp, Walter, Museumsgründer und Museumsstürmer. Zur Sozialgeschichte des Kunstmuseums, München 1981; Museumsgeschichte. Kommentierte Quellentexte 1750–1950, ed. by Kratz-Kessemeier, Kristina, Meyer, Andrea and Savoy, Bénédicte, Berlin 2010.

9　Warnke, Martin, Hofkünstler, Köln 1996, pp. 159–201.

10　Rüffer (note 1), pp. 196–199.

II. The term *ars* in the Middle Ages – The liberal and the mechanical arts

One enduring heritage of the Middle Ages, which was inherited from Antiquity, was the contempt for physical labour and the association of intellectual activities with personal freedom. The *septem artes* – the Seven Arts[11] – are not referred to as liberal, that is to say free, for no reason. The practice of the liberal arts was bound to a specific social status. The complementary sphere was that of the mechanical arts – *artes mechanicae*.[12] While the canon of the seven liberal arts remained relatively constant, the mechanical arts varied. The learned Canon Regular from the Abbey of St. Victor in Paris, Hugh of St. Victor († 1141) discussed the *artes* at great length in his famous book 'Didascalicon – De studio legendi'.[13] The text, written during the 1120s, was conceived as a schoolbook. It instructs students how to read properly. But Hugh of St. Victor was not the only erudite scholar to reflect on the division of the arts. Others include: Dominicus Gundissalinus († 1181), Radulfus Ardens (fl. second half of the 12th century), Vincent of Beauvais († ca. 1264), Bonaventure († 1274) or Robert Kilwardby († 1279).[14] As far as their respective historical reception is concerned, Hugh of St. Victor remained the most influential.

According to the ancient tradition, Hugh distinguished within the liberal arts the *trivium* from the *quadrivium*. The *trivium* is concerned with words. To it

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11 Artes liberales. Von der antiken Bildung zur Wissenschaft des Mittelalters, ed. by Koch, Josef, Leiden/Köln 1976; Illmer, Detlef, Artes liberales, in: Theologische Realenzyklopädie, 36 vols, ed. Müller, Gerhard et alii, Berlin 1977–2007, vol. 4, 1979, pp. 156–171; Dechant, Friedrich, Die theologische Rezeption der Artes liberales und die Entwicklung des Philosophiebegriffs in theologischen Programmschriften des Mittelalters von Alkuin bis Bonaventura (Dissertationen, Theologische Reihe 62), St. Ottilien 1993; Tezmen Siegel, Jutta, Die Darstellungen der septem artes liberales in der Bildenden Kunst als Rezeption der Lehrplangeschichte (tuduv-Studien, Reihe Kunstgeschichte 14), München 1985; Stolz, Michael, Artes-liberales-Zyklen. Formationen des Wissens im Mittelalter, 2 vols, Tübingen/ Basel 2004, vol. 1, pp. 1–188.

12 Sternagel, Peter, Die Artes mechanicae im Mittelalter. Begriffs- und Bedeutungsgeschichte bis zum Ende des 13. Jahrhunderts (Münchner Historische Studien, Abteilung Mittelalterliche Geschichte 2), Kallmünz 1966; Ovitt, George, The Status of the Mechanical Arts in Medieval Classifications of Learning, in: Viator 14 (1983), pp. 89–105.

13 Hugh of St. Victor, Didascalicon, in: Hugo von St. Viktor, Didascalicon. De studio legendi – Studienbuch, lat./dt., ed. with an introduction by Offergeld, Thilo (Fontes Christiani 27), Freiburg i.Br. 1997, English translation: The Didascalicon of Hugh of St. Victor. A Medieval Guide to the Arts, translated from the Latin with introduction and notes by Taylor, Jerome, New York/London 1968.

14 Dominicus Gundissalinus, De divisione philosophiae – Über die Einteilung der Philosophie, lat./dt., translated, with introduction and notes by Fidora, Alexander and Werner, Dorothée (Herders Bibliothek der Philosophie des Mittelalters 11), Freiburg i.Br./Basel/Wien 2007; Radulfus Ardens, Speculum universale, in: Radulfi Ardentis Speculum universale, libri I–V, ed. by Heimann, Claudia and Ernst, Stephan (CChrCM 241), Turnhout 2011; Bonaventura, De reductione artium ad theologiam, studio et cura pp. Collegii a S. Bonaventura (Bonaventurae Opera omnia 8), Quaracchi 1898, pp. 68–86; Robert Kilwardby, De ortu scientiarum, ed. by Judy, Albert G. (Auctores Britannici medii aevi 4), London 1976.

belong grammar, dialectics, and rhetoric. To the *quadrivium*, which is concerned with numbers, belong music, geometry, arithmetic, and astronomy. But Hugh also examined the mechanical arts. He wrote:

> Mechanical science contains seven sciences: fabric making, armament, commerce, agriculture, hunting, medicine, and theatrics. Of these, three pertain to external covers for nature, by which she protects herself from harms, and four to internal, by which she feeds and nourishes herself.[15]

One-and-a-half centuries later, the eminent Franciscan theologian Bonaventure still referred to Hugh of St. Victor when explaining the mechanical arts. All the crafts which we retrospectively consider artistic Hugh subsumed under the term *armatura*. Part of the *armatura* were the so-called *architectonica*. To the *architectonica* belong the crafts building, painting, and sculpting.[16] The function of the mechanical arts was to compensate for all the shortfalls of human existence after the expulsion from Paradise (nourishment, clothing, dwelling, and so forth). All these arts fulfil the specific purpose of enabling daily human life. The mechanical arts are regarded as practical and serving. They are established crafts compared to the liberal arts, which counted as theoretical, reflective, and speculative, based on reason and rationality. They were also called *scientiae* or *disciplinae*.[17] In practice, the craftsman makes an object according to a model or prototype by imitation (*imitatio*). Criticism of the work of a craftsman is only possible, as Thomas Aquinas stated, if he does not fulfil the determined aim.[18] The most famous example Thomas gave in the 'Summa theologiae' was the glass saw, which might be more beautiful to look at as one made of iron, but is certainly not suitable for sawing. Thus, a glass saw is useless.[19]

In the second half of the 13th century the English Dominican Robert Kilwardby also discussed the mechanical arts at length. His system is very complex. He begins with the fundamental distinction between human and divine things. Human things have a verbal and a practical side. The practical is divided into ethics and mechanics. Significant is the fact that Robert Kilwardby departs from the categorical division of speculative / theoretical and practical knowledge. For him, even the craftsman participates to a certain extent in speculative or theoretical knowledge in order to produce his objects in the required quality.[20]

The kind of knowledge required for the mechanical arts can be summarized as follows: in contrast to the scholar, who possesses speculative knowledge and knows

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15 *Mechanica septem scientias continet: lanificium, armaturam, navigationem, agriculturam, venationem, medicinam, theatricam. Ex quibus tres ad extrinsecus vestimentum naturae pertinent, quo se ipsa natura ab incommodis protegit, quattuor ad intrinsecus, quo se alendo et fovendo nutrit,* [...]. Hugh of St. Victor, Didascalicon II, 20 (note 13), p. 192, English translation by Jerome Taylor (note 13), p. 74.

16 Hugh of St. Victor, Didascalicon II, 22 (note 13), pp. 194 and 196.

17 Ibid., pp. 154–158.

18 Thomas Aquinas, Summa theologie I–II, q. 21, a. 2, ad 2, in: Sancti Thomae Aquinatis, Summa theologiae, 6 vols, cura Fratrum eiusdem Ordinis, tertia edition, Matriti 1961, vol. 2, p. 155.

19 Ibid., I, q. 91, a. 3, vol. 1, p. 650.

20 Robert Kilwardby, De ortu scientiarum XLII.393 (note 14), p. 138; Rüffer (note. 1), p. 61f.

the causes of things and processes, the craftsman must be satisfied with knowledge gathered from practical experience, or what could also be called 'learning by doing'. The knowledge of a craftsman is normative and follows corresponding rules. In short: if you wish to have this, you have to do this. This is a classical formula or instruction from a craftsman's manual. The craftsman does not need to know why something works, but simply that it does work as long as he follows the rules of the manufacturing process. In contrast, those educated in the liberal arts should have an idea why something works and what the apparent cause for it is. The *artifex* or craftsman makes an object by imitating a model (*exemplar*) with respect to a specific purpose. All the mechanical arts are learnable and teachable, they possess their own methods and they follow their own principles. With respect to that which we used to call the artistic aspect, it immediately becomes clear that from the medieval perspective, qualities like creativity, imagination (*phantasia*) or inventive talent played no role whatsoever. There is not yet a separation between arts and crafts, between artistic and artificial, between the arts and techniques. Within this model of thinking nature can only be rediscovered, but not invented in its modern sense. Perfection prevails over originality.

III. The problem of creativity

A creative act – or creativity in its modern sense – could hardly have met with social approval during the Middle Ages,[21] because creative action includes the creation of entirely new things, or, as a theologian would state: *creatio ex nihilo*.[22] As Augustine wrote in 'De Trinitate': *Solus creator est Deus*.[23] To apply *creatio ex nihilo* to human activity was to the medieval mind blasphemous.[24] The fundamental difference

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21 But even for the Italian Renaissance Martin Kemp concluded: "It is salutary to realize that the verb 'to create' was barely exploited at all in an artistic context before Leonardo, whatever modern translations might suggest to the contrary. The verb invariably used to denote the production of a work of art was 'fare', which could be applied as readily to pasta as painting." Kemp, Martin, From 'Mimesis' to 'Fantasia'. The Quatrocento Vocabulary of Creation, Inspiration and Genius in the Visual Arts, in: Viator 8 (1977), pp. 347–398, here 397.

22 For the problem of creativity in the Middle Ages see: Blumenberg (note 4); Wieland, Georg: Zwischen Naturnachahmung und Kreativität, in: Philosophisches Jahrbuch 90 (1983), pp. 258–276; Cramer, Thomas, Solus creator est deus – Der Autor auf dem Weg zum Schöpfertum, in: Daphnis 15 (1986), pp. 261–276; Haug, Walter, Die theologische Leugnung der menschlichen Kreativität und die Gegenzüge der mittelalterlichen Dichter, in: Inspiration und Adaption. Tarnkappen mittelalterlicher Autorschaft, ed. by Schlesier, Renate and Trînca, Beatrice (Spolia Berolinensia – Beiträge zur Geistes- und Kulturgeschichte des Mittelalters und der Neuzeit), Hildesheim 2008, pp. 73–88; Rüffer (note 1), pp. 69–84.

23 Augustine, De Trinitate III, 8, in: Sancti Aurelii Augustini De Trinitate libri XV, ed. Mountain, William J. (CCL 50, Aurelii Augustini opera, pars XVI, 1), Turnhout 1968, p. 143; Cramer (note 22), pp. 261–263.

24 Thomas Aquinas: Summa theologiae (note 18) I, q. 45, a. 1, 2 and 5, vol. 1, pp. 324–327 and 329–331. There are two important biblical references which ascribe the act of creation to