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*The Visual Arts as a Source for the Historian of Music*  
*Die bildenden Künste als Quelle für den Musikhistoriker*  
*Les Arts plastiques et leur contribution à l'histoire de la musique*

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I. Past Achievements.

IT WAS not the historian of music who first indulged in the systematic collection of musical information from monuments of art. It was rather the artist himself who, during the Early and High Renaissance, turned to the monuments of the Ancients for models and inspiration, and borrowed what he needed for his own artistic purposes, including the images of ancient musicians and musical instruments. An enormous quantity of sketches and drawings of ancient Greek sculpture and Roman sarcophagi, many including musical subjects, has survived to our day from the 15th and 16th centuries. Raphael, to mention only one great name, employed draftsmen to obtain as many drawings as possible of ancient works of art, and he used the musical instruments of a Roman sarcophagus as models for those in his Parnassus in the Stanza della Segnatura.<sup>1</sup> Only later, when 16th century Humanism revived the ideal of recovering and if possible reconstructing Ancient Greek music, did musical treatises begin to refer occasionally to Greek and Roman sculpture as authentic documents of ancient musical practice. At the same time, however, they referred also to contemporary, that is Renaissance, works of art, sometimes naively crediting their creators with an exact understanding and imitation of the ancient originals. Ganassi (*Regola Rubertina* 1542, pt. I cap. VIII), in discussing whether the lute or the "violone" is more ancient, refers to an ancient Roman marble relief in which one figure holds an instrument with a bow, "una viola d'arco" (I); and the *Hieroglyphica* (1550) of Pierio Valeriano includes a woodcut showing an "ancient" Roman altar decorated on all four sides with lire da braccio in relief (Ill. 1), a pseudo-archeological imitation of an actual ancient Roman type of altar with four lyres, such as we find, for instance in the Lateran Museum.<sup>2</sup> Zarlino's *Istitutioni* confine themselves to mentioning that "the Ancients had a statue of Apollo with a kithara on his knees." (Part II p. 81)

Vincenzo Galilei, in his *Dialogo della musica antica, et della moderna* (1581), repeatedly refers to the "marmi antichi," but he has few qualms in referring to works of art of his time or of shortly before his time, trusting that these copies of ancient instruments were archeologically correct, and being a true Florentine, he, of course, proudly refers to Florentine artists. In his chapter on the ancient lyre, he tells the reader to go to the court of the Medici palace where he will find a statue of Orpheus, by Bandinelli, holding a lyre of ancient shape, and in his detailed discussion of the ancient plectrum, he cites the frescoes by Filippino Lippi in Santa Maria Novella which include a large kithara flanked by two Muses, of which one is holding a plectrum. The Muses, by the way, had been copied by Filippino from a Roman sarcophagus.

In the north, Praetorius, who obviously based the woodcuts of his *Organographia* (1618) on actual contemporary instruments, occasionally gives art objects as his source as, for instance, in speaking of early kettle drums ("eine Art Paucken, wie aus der alten Münze zu ersehen," *Sciagraphia* XL, 5) and of one of the ancient lyres ("Unbekante und ungewöhnliche Art von

<sup>1</sup> See my article, *Archeologia Musicale del Rinascimento nel Parnasso di Raffaello*, *Rendiconti della Pontificia Accademia Romana di Archeologia* 27 (1952-54).

<sup>2</sup> For more detailed information about this pseudo-archeology, see *Archeologia . . . nel Parnasso*, 385.

Leyren," *Sciag.* XLI, 9 & 10). Father Mersenne's *Harmonie universelle* (1636) also mentions the ancient Italian marbles and medals as important sources of information, but he broadens the horizon by at least mentioning the Egyptians (Bk. III Prop. XXIV) and by including early Christian iconography. In the preface of his book he speaks of the Redeemer in the form of a shepherd holding a "seringue" (or "flute pastorale"), which he found illustrated in the treatise, "La Roma Sotterranea."

Kircher's *Musurgia* (1650) borrows, for one of his title pages, the schematic design of a lyre from an ancient gem, and a pseudo-ancient figure of Orpheus for another title page; but Lib. VIII contains a large engraving of a sort of filing cabinet with tabulations of the Greek Toni and other theoretical information, as well as pictures of eleven instruments labelled "Veterum Graecorum antiquis monumentis desumpta," though two Egyptian *sistra* are also included. Buonanni, the learned student of Kircher, in his *Descrizione degli Istromenti Armonici* (1722) illustrates the instruments in a room contiguous to the Museo Kircheriano, today in the Collegio Romano in Rome. Buonanni's book is a curious mixture of lip service to the ancients from Pythagoras to Vergil and astonishing carelessness in the illustrations. If he absorbed little from Roman statuary in his immediate environment, ancient monuments are at least mentioned in his quotations from Mersenne, Kircher, and Strabo who tells of having seen the statue of a kithara player in Calabria.

Padre Martini's classical *Storia* refers only occasionally to several Monumenta (that is, the illustrated editions of collections of classical antiquities), for instance that of P. Montfaucon; and many of the charming vignettes with puzzle canons on Latin texts that are dispersed through the three volumes show musicians borrowed from ancient Roman reliefs. Vol. III includes large engravings with groundplans of the Greek and Roman theatre. Burney, manifestly affected by the English antiquarianism of his time, used his visit to Italy to good purpose. We may safely conclude from many of his explanations and illustrations of bas reliefs, sculptures, vases, and frescoes, that he spent some time in Pompei and Herculaneum, in museums at Rome, Portici, and Naples, and visited many of the Roman palaces that housed antiquities. Forkel's meagre iconographical references (*Allg. Gesch. der Musik* 1788, 1801) are largely based on Burney. As early as 1774, the first systematic exploration of medieval miniatures for the purposes of musical history is found in Gerbert's *De cantu et musica sacra* in which pictures from several codices are reproduced.

Lack of space prevents a review of 19th century achievements, but among the most important contributions towards musical iconology, there should be mentioned the works of Ambros (at home in the history of art as well as in that of music), Coussemaker, and the second volume of Viollet-le-Duc's *Dictionnaire raisonné du mobilier français* (1871). Evidence of the rapidly growing interest in musical iconology, no doubt stimulated by the publication of illustrated art books and facsimile editions of illuminated MSS between 1900 and the outbreak of the First World War, are the many standard works of Buhle, G. Kinsky (Cat. of the Heyer Coll.), Galpin, K. Schlesinger, Lütgendorff, C. Sachs (*Real-Lexikon*), and the remarkable *Iconographie des instruments de musique*, organized by the Dutch collector of instruments, D. F. Scheurleer.

## II. Historical Survey of Images.

Egypt and the ancient Near East abound in pictorial representations of musicians and instruments, and certain stylistic peculiarities in perspective and other mannerisms hardly hamper the recognition of actual shapes, fingerings, and embouchures, especially since so many depictions in reliefs and wall paintings are life-size or very nearly so. Ancient Hebrew musical culture, with its disproportion between abundant references in the Scriptures, and utmost

scarcity of pictorial monuments, presents a problem too complex to pursue here. The Greco-Roman world left us many visual records depicting musical scenes and instruments with admirable exactness. There are, above all, vase paintings, sculptures, reliefs, and coins, and from the Roman world an enormous quantity of frescoes, mosaics, and sarcophagi. Topics were mythological as well as secular, including revelries, music lessons, and the like.

In the Middle Ages, topics were for a long time limited to illustrations of the Scriptures, especially of apocalyptic themes, the *Rex Psalmista*, and the 150th Psalm. The apocalyptic subjects were:

1. The seven angels with trumpets, Rev. VIII, 2 & 6.
2. The seven holy men playing instruments in front of the Lamb ("numeri habentes cytharas").
3. The two figures flanking each of the animalia with the Lamb ("tenens cytharam") in Spanish *Beatus* MSS, represented with longnecked fiddles.
4. The seven holy men "stantes super mare vitreum habentes cytharas."
5. The twenty-four elders surrounding Christ in Glory (Rev. IV, 4; VII, 11; XIV, 14). For the organologist this theme is by far the most rewarding of the apocalyptic scenes. Sometimes the elders are shown holding stereotyped, identical vielles (e. g. in the 11th cent. *Beatus* MS of St. Severe, Bib. Nat. Paris); later the vielles often differ in shape and in the number of strings (Moissac); even later, other instruments, such as harps, organistrum, etc. join them (Santiago di Compostela, Portico de la Gloria; Chartres, Portail Royal).

Carolingian illuminated MSS, above all the Utrecht Psalter, abound with portrayals of musicians (never angels) surrounding the Psalmist. These have been repeatedly, though not yet exhaustively, explored, especially in the works of Buhle, K. Schlesinger, and Panum. They represent an exceedingly complex problem in view of the fact that many of their illuminations are copied from, or at least influenced by much earlier models, and therefore cannot be taken simply as depictions of contemporary practice. They may, however, throw new light on one of the great lacunae of musical history, the transition from the instrumental practice of Late Antiquity to that of the early Middle Ages, and especially on the rise, in the Occident, of instruments with fingerboards for stopping of the strings, possibly owing to the influence of performing practices in the Eastern Mediterranean.<sup>3</sup> Outstanding examples of the depiction of performance of secular music are the *Manesse* MS and above all the *Cantigas de Santa Maria*, with their enormous array of instrumentalists reflecting, side by side, Christian and Moslem tradition. In gothic art, when the sacred and the profane, even the vulgar, meet as close neighbors, a great number of wild and fantastic creatures, monsters, monks and nuns, jugglers and beggars invade the margins of the pages in psalters, books of hours, and prayer books.<sup>4</sup> But while some of the instruments and ensembles are products of fancy, others are realistic depictions and rich in information about a period from which very few actual instruments have survived.

Musical angels, other than apocalyptic, enter the scene with the spread of the *Legenda Aurea*, when legends of the saints and Marian topics, especially the Assumption and the Coronation (the latter being the themes most conducive to the portrayal of large angel orchestras) prevail, and later, chiefly in the Venetian realm, with the *Sacre Conversazioni* and its small ensembles or single angels playing the lute, the *lira da braccio*, and occasionally other instruments.

<sup>3</sup> See my article, *The Survival of the Kithara and the Evolution of the English Cittern*, *JOUR. WARBURG INST.* (in press); synopsis in forthcoming proceedings of the Galpin Society Congress, Cambridge 1959.

<sup>4</sup> I have attempted an analysis of musical drolleries in the Hours of Jeanne d'Evreux, painted by Jean Pucelle, c. 1325, in my article, *Bagpipes for the Lord*, *MET MUSEUM ART BULL* 16 (1958) 276-286.

Of the Biblical musicians, Renaissance imagery retains King David playing psaltery or harp, and from the end of the 15th century, more often the *lira da braccio*. Of secular musical figures, the symbolical representation of Musica as one of the liberal arts is retained. At the same time, competing with the countless angel concerts, the mythological musicians of the ancient Greco-Roman world reappear on the scene. Apollo as kitharoedes, Hermes with the lyre he invented, Pallas Athena with her creation, the aulos,<sup>5</sup> Orpheus playing in Hades or for the beasts, and the Muses, particularly Erato, Euterpe, and Calliope. The publication of the *Ovidio Metamorphoseos Vulgare* (Venice 1497) stimulated countless portrayals of the contests between Apollo and his musical rivals, Pan and Marsyas, in Lombard, Venetian, and Tuscan paintings, woodcuts, engravings, and plaquettes. The models for the instruments are found in ancient statues, sarcophagi, and other reliefs, greedily and systematically collected by the Renaissance connoisseurs and copied, sometimes with great precision and thorough archeological understanding, but more often misunderstood and distorted, or stylized and decorated with free pictorial fancy. True musical archeology blended with strange misconceptions; Sappho, for instance, was credited with the invention of the fiddle bow, and etymology added to this confusion: "lira" meant the ancient lyre as well as the *lira da braccio*,<sup>6</sup> and "cetra," the ancient kithara as well as the contemporary cittern. Consequently Apollo, Orpheus, King David, and the allegorical Musica are now shown, more often than not, playing contemporary *lire da braccio*. Similarly, the *diaulos* is frequently replaced by contemporary wind instruments, usually double recorders, sometimes two shawms (as in a print by Giulio Romano); and the highest degree of pictorial fancy is reached in those paintings which evidently are renderings of scenes from stage plays, or intermedia, and which portray fantastic instruments that are not functional, but are in all probability stage props.<sup>7</sup> The greatest precision in the rendering of instruments is reached in the *Sacre Conversazioni* and the *intarsias*,<sup>8</sup> the life-size portrayals of musical instruments in the choir stalls of Italian churches, in door panels of palaces, and especially in the *studioli* of Federigo da Montefeltre in Urbino and Gubbio.<sup>9</sup>

### III. Typical Pitfalls and Misinterpretations.

In reviewing 19th and 20th century achievements in musical iconology, it would be overly optimistic to believe that they are all better or more careful in method than their predecessors, although they are based on an incomparably greater wealth of source material. They often take pictures at face value, without critical discrimination between real and imaginary objects; without sufficient regard for successive styles, technical peculiarities, and mannerisms of pictorial representation; without an awareness of the artist's lack of freedom, during certain periods, in choosing his topic, and often even in delineating his objects; without sufficient familiarity with the theological or political doctrines which enforced allegorical representation, and therefore deviated from faithful adherence to the actual appearance of the object. Furthermore, they frequently take a pitiful handful of depictions as adequate evidence, ignoring the possibility that these may be atypical, or that the rarity or profusion of certain pictorial representations may not at all correspond to the actual historical distribution of instru-

<sup>5</sup> See my article, *The Curse of Pallas Athena*, *STUDIES IN THE HISTORY OF ART*, ed. W. Suida (Leicester 1959) 186-195.

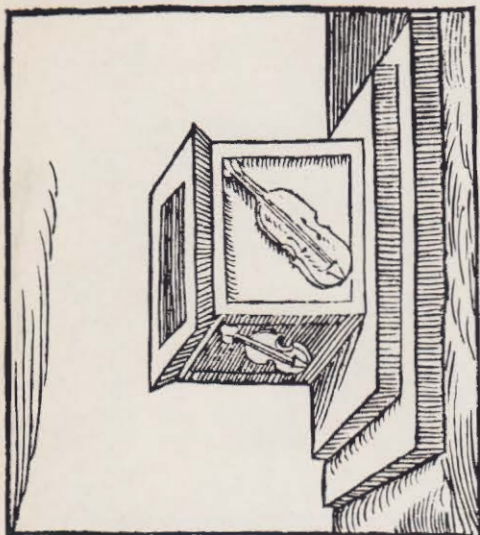
<sup>6</sup> See my article on this instrument in MGG 8.

<sup>7</sup> See my article, *Instrumente de musique étranges, chez Filippino Lippi, Piero de Cosimo, et Lorenzo Costa*, in *LES FÊTES DE LA RENAISSANCE*, Edit. du Centre Nat. de la Recherche Scientifique (Paris 1956).

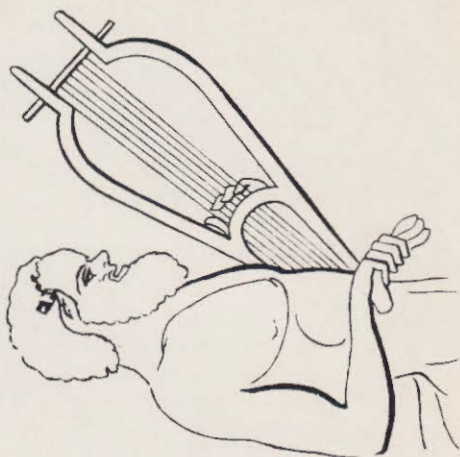
<sup>8</sup> See my articles, *Alcune Rappresentazioni di Antichi Strumenti Italiani a Tastiera*, *COLLECTANEA 2* (Florence 1956) 465-473; *Quattrocento Intarsien als Quellen der Instrumentengeschichte*, *Kgr-Ber IGMW*, Köln 1958 (Kassel 1959) 300-302.

<sup>9</sup> *Quattrocento Science in the Gubbio Study*, *MET MUSEUM ART BULL* 1 (1942) 104-116.

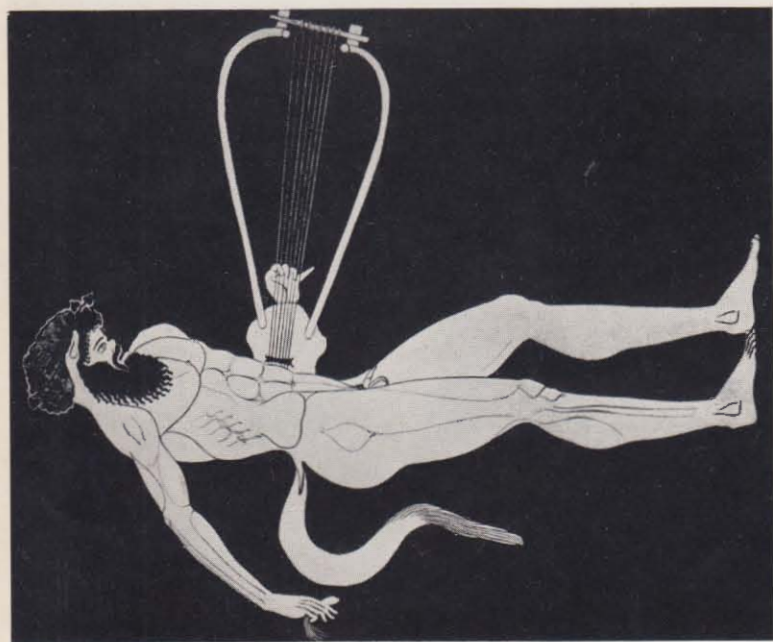




1



2 b

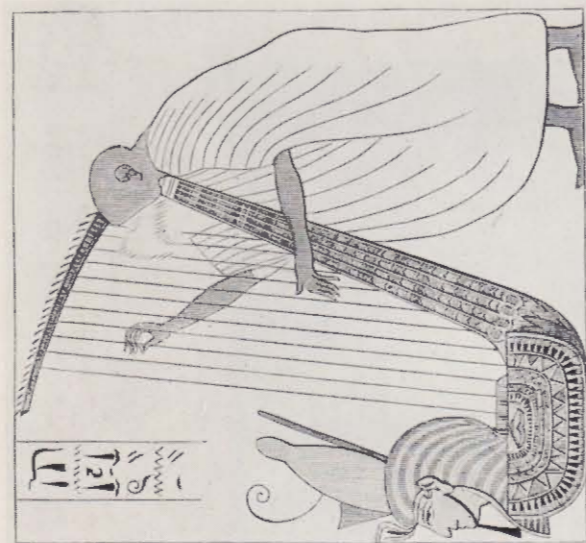


2 a

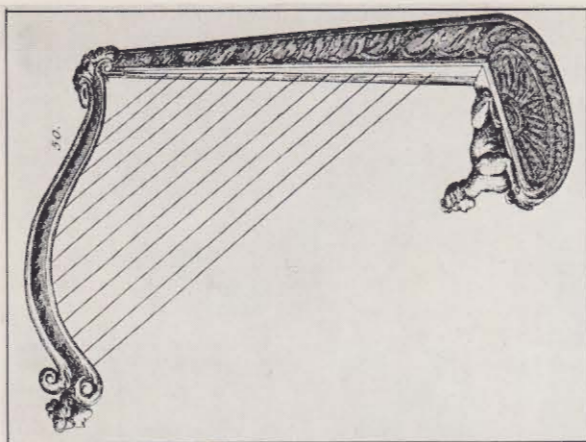
1. Pseudo-ancient Roman altar with lyre da braccio. Woodcut from *Hieroglyphica* (1550) 346.

2 a. Silenus with lyre from red-figured Greek amphora, c. 490 B. C.

2 b. Illustration from Fétis, *Histoire générale de la Musique* III, 549. Misinterpretation of a Greek original.



3 a



3 b

3 a. Illustration in Fétis (*Histoire 1, 255*) of a harp, after a reliable archaeological drawing of the wall painting in the tomb of Ramses III.

3 b. Illustration of same harp in Forkel's *Allg. Gesd. der Musik* (1788) I Tab. 5. An adaptation to please 18th-century taste.

4. Upper margin of an illumination from a Florentine choirbook, Cleveland Museum of Art, J. H. Wade Collection. Four trumpets in symmetrical duplication, overpowering the string instruments.



4





5 a



5 b

5 a. Kithara from the sarcophagus of the Muses, now in the Museo Nazionale in Rome.

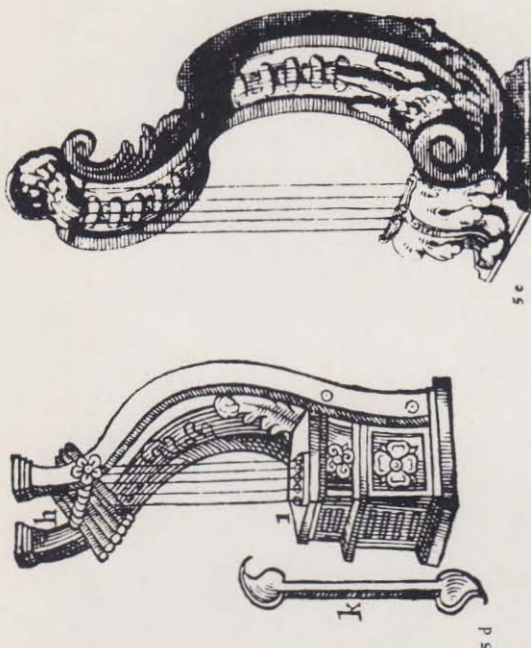
5 b. Drawing of the same kithara by Francesco di Giorgio, 15th century (Uffizi 326 A, R.).





5 c

5 c. The same kithara as copied by Raphael in his Parnassus. Stanza della Segnatura.



5 d

5 e

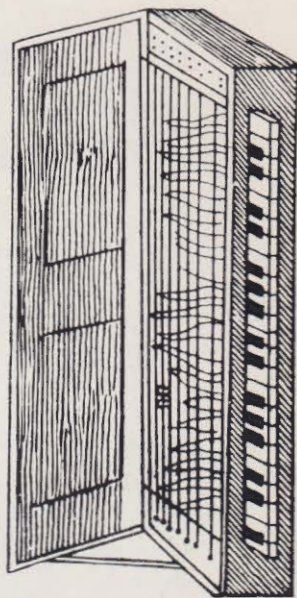
5 d. The same kithara in altered form in an illustration of Mercenne's *Harmonie universelle* (1636).

5 e. A later stylized version from *Gramures en Lettres, en Géographie, et en Musique*.



6 a

6 a. Woodcut suggesting a clavichord in Viridung's *Musica getuschelt* (Basel 1511) page B.



6 b

6 b. Nonsensical copy of this woodcut in Martin Agricola's *Musica Instrumentalis Dandioli* (trvii), and used later as an illustration in Fétis, *Hist. gén. de la Mus.* V.202.



7



8

7. Apocalyptic elder holding a vielle showing a bourdon not appearing in contemporary representations of the same subject in sculpture. Detail from fresco in Saint-Martin de Fenollar, Roussillon.

8. Chinese musician with vielle à roue c. 1719, after Watteau.





9

9. Allegorical combination of ribia and trumpet, from Raphael's Parnassus.



10

10. Satirical woodcut, 1535.



11. Angel playing a bagpipe, bizarre but workable with two chanter and two drones. From Gaudenzio Ferrari's cupola fresco in Saronno.



ments and ensembles, or performing practices. Last, but not least, they do not take sufficient account of the fact that the image on an object may not have been drawn directly from the object itself, but copied from a picture of it (Ill. 2, 3), and this again from another, resulting often in a chain of successive copies reaching back, often through centuries, to the point of complete denaturalization of the original object. An enumeration of typical pitfalls and misunderstandings may help to illustrate these flaws in method.

In the interpretation of medieval illuminated manuscripts, two diverging lines coming from a person's mouth, with a horned head issuing from the open end of the tube thus formed, have been taken for a wind instrument, while actually they symbolize a curse—in the fashion of the balloon in modern comic strips—and the horned head is none other than Satan's. Likewise, in ignorance of traditional allegories, wind instruments have been seen in the four corners of illuminations in 12th century *Beatus* MSS where actually the artist was suggesting the airstreams issuing forth from the mouths of "the four winds of the earth held back by angels." (Rev. VII, 1.)

Angel orchestras depicted in trecento and quattrocento art have been accepted as true ensembles, while often the traditional requirements of compositional symmetry have led to the mirror-like duplication of such visually conspicuous shapes as trumpets, organetti, and the like. For instance, the representation of four trumpets pitted against a few soft string instruments should be taken *cum grano salis*. (Ill. 4) Similarly, homogeneous angel orchestras consisting of musicians all playing the same type of instrument, for instance, all lutes, or all organetti, have been taken at face value, while actually the depiction was of an allegorical nature. Similar misconceptions were provoked by the frequent allegorical representation of the 150th Psalm, of which Luca della Robbia's Cantoria in the Museo del Duomo in Florence is a famous example. There the various groups of angels, one playing trumpets, another psalteries and so forth, are literal illustrations of the verses of the psalm, "Laudate eum in sono tubae, laudate eum in psalterio," and have nothing to do with actual ensembles. Even the combination of portatif, lute, and harp is only an illustration of the words, "Laudate eum in chordis et organo." Still, Schering (*Studien zur Musikgeschichte der Frührenaissance*, Leipzig 1913, p. 59) accepts this relief as the depiction of an actual ensemble.

Sometimes even the most crucial questions of organology were "solved" by erroneous interpretation of pictorial evidence. A flagrant case in point is the attribution of the first fiddle bow in the Occident to the Carolingian period by Curt Sachs in his *Handbuch* (Leipzig 1920), followed by Georg Kinsky (*Geschichte der Musik in Bildern*, Leipzig 1929, p. 32), and still more recently in MGG's article on the *fidel* (Vol. 4 p. 158 Ill. 4). The basis for this dating is the illustration of Psalm 108 in the Utrecht Psalter. Here the psalmist carries two instruments: a long-necked cittern in his left hand, and a harp on his left shoulder. The long stick is not a bow, but a measuring rod—"exsurge psalterium" (the harp) "et cythara" (the long-necked cittern) "et dividam Sicimam et convallem tabernaculorum dimeciar" (I will divide Sichem and mete out the valley of the tabernacles). Regrettably, the Latin text has been ignored, and the incorrect interpretation made plausible by showing only one third of the meting rod in the illustration. Friedrich Behn's *Musikleben im Altertum und frühen Mittelalter* (Stuttgart 1954) reproduces in Tafel 95 a larger section of the page from the Utrecht Psalter, showing the whole length of the rod, which is substantially longer than the player himself. Yet, in the text (162–163) he still regards this illustration as the first evidence of bowing in Europe. From the excessive length of the clumsy bow, he concludes "that in the middle of the 9th century, that is at the time of the origin of this Psalter, bowing had just been introduced."

The illustrations in the Utrecht Psalter, as well as in a great many other psalters and illuminated manuscripts, have also been erroneously accepted as evidence of "contemporary" instruments, whereas these manuscripts are often links in a long chain of successive copies.

The Utrecht Psalter, though written in Carolingian times, is derived from a manuscript predating it by three-hundred years. No botanist would uncritically accept literally the evidence of Herbaria, again copies of copies, but organologists do just this. Even today the precise dating of many early medieval manuscripts is controversial, and caution is required in accepting their illuminations as illustrations of contemporary life.

One should perhaps expect that this practice of copying copies, with its resulting accumulation of distortions, would come to an end with the invention of the printing process, which offered for the first time in the history of civilization the means of reproducing visual statements with a high degree of accuracy. But, while this invention was of enormous value to scientific publications, it did not have the same impact on the arts, for the simple reason that the exact repetition of a particular object, or in a more general sense, of so-called visual reality, is not necessarily the artist's goal. Even those prints which copied frescoes or paintings soon after their completion often simplified or distorted certain objects for the sake of popularization. I will mention here only two outstanding examples among many: Raphael, in his Parnassus in the Stanza della Segnatura, based the rendering of Sappho and the Muses on thorough archaeological research, and borrowed their instruments from the famous sarcophagus of the Muses, which was long in the Palazzo Mattei, and is now in the Museo Nazionale in Rome. But, when Marc Antonio Raimondi made an engraving of it, he preferred to replace the true ancient musical instruments with banal and stylized specimens.<sup>10</sup> Similarly, Raphael's famous painting of Santa Cecilia in San Petronio in Bologna appears distorted in Marc Antonio's engraving and deprived of its original meaning. In Raphael's painting, the instruments lying at the feet of the saint have been broken and the angels in heaven engage solely in vocal music. In Raimondi's engraving, the instruments are intact and the angels blast away blithely with fiddle and harp.

Even after the invention of the printing process, distortions of illustrations accumulated through successive copies, owing to the fact that woodblocks and copper plates for engraving wear out and must be replaced or reworked; besides which, authors borrowing illustrations from earlier treatises had to employ draftsmen, and their drawings were again inevitably altered by the engraver. Examples of this progressive distortion may be seen in Ill. 5.

The study of Egyptian instruments and music through its pictorial representations has been comparatively free of such misinterpretations because Egyptian archeology began much later than Classical archeology and involved the simultaneous unearthing of an enormous wealth of precise representations in sculpture, relief, and wall paintings, as well as the excavation of a substantial number of well-preserved actual instruments from dry, sealed burial chambers. Of course, musicologists had been interested in the music of the Egyptians long before the large bulk of excavated treasures was available. A. Kircher, in his *Oedipus Aegyptiacus* 1652 (Tom. IV Chap. 13 p. 426) mentions a "lyra triangularis, von einem egyptischen Basrelief genommen"; and Burney, in his *General History of Music* (Vol. I p. 204 ff.) includes a very large engraving of an Egyptian "lute" and reports that he had seen this instrument on the Egyptian obelisk lying in the Campus Martius in Rome, and that he had a drawing of it made under his very eyes. He also devotes almost two pages to the explanation of this instrument. This drawing then found its way into Forkel's *Allg. Gesch. der Musik* (Vol. I chap. 2 p. 83, *Gesch. der Musik bei den Egyptiern*). This "lute," however, is nothing else than a very common Egyptian hieroglyph, meaning "good," which uses an ideogram based on the shape of the windpipe joined to the heart.

One extremely frequent misnomer concerns ancient woodwind instruments. One can hardly blame Classical archeologists for calling ancient oboes "flutes," as they do when confronted

<sup>10</sup> See my article, *Archeologia . . . nel Parnasso*, 359 ff.

with auli and diauli, but the same is often done by historians of music; and even in Robert Haas's admirably illustrated *Aufführungspraxis der Musik*, double reed-pipes in Egyptian paintings are captioned "Doppelflöte." (p. 5 Ill. 4; p. 9 Ill. 6.) Another source of bewilderment, a veritable *richesse d'embarras*, are pictures of early reed instruments, which are often interpreted as brass instruments—or to use the more pretentious term, lip-vibrated aerophones—whenever the reeds are invisible. In the playing of early double reed instruments with pirouettes, such as the shawms, the reeds were sometimes held, not between the lips, but rather in the cavity of the mouth, producing the same stiff tone that is peculiar to instruments with wind caps, such as the cromorne. It is obvious that such a misinterpretation leads to a total misunderstanding of the timbre of these instruments.

Other frequent misunderstandings have arisen in the case of the flood of allegorical subjects in engravings of the late Northern Renaissance and the early Baroque, as for instance in the many religious musical allegories engraved by Antwerp artists beginning with the end of the 16th century, and above all, in the "Encomium musices." Exact reproduction of the instruments is not the main concern of the draftsman; the more striking or interesting the shape of the instrument, and the more varied and colorful the ensemble, the more attractive the composition. Yet such prints are frequently accepted as the gospel truth concerning both the instruments and their combination. Robert Haas reproduces one of these engravings, "Die Musik" by Philipp Galle, in the chapter on *Verzierungspraxis* (*Aufführungspraxis* 115). The "lutes" are downright fantastic; the "zink" is no zink, but apparently a shawm, with its protective cylinder, however, in the wrong place, close to its bell; and the harp has one of those undulating "scrolliferous" frames, lacking any sounding box, and the strings care neither from whence they come, nor where they go.

Finally, one of the most wide-spread misinterpretations of instruments in pictorial representation should be mentioned: that of small keyboard instruments. Surprisingly, this happens even with woodcuts and engravings, though as a rule the printmakers take the trouble to indicate such unmistakable features as the jackrail<sup>11</sup> of virginals or spinetti, and the typical curvature of the keys of a fretted clavichord.<sup>12</sup> Amusingly enough, the reverse also occurs; an author, though himself entirely at home with the intricacies of a clavichord, employs for the illustration a draftsman who, unfamiliar with the real mechanism, copies another illustration and produces a jumble of incoherent curves. (Ill. 6)

#### IV. Directions of Iconological Research.

The information furnished by pictorial sources is by no means restricted to the field of performance practices, and for the sake of brevity a tentative tabulation of such data may not be amiss.

A. Performance and Performers (habits and methods of performance). 1. Instruments, their shape and construction. 2. Playing methods. 3. Ensembles: a. Vocal, instrumental, and mixed groups: numerical proportions between the constituents; "loud" and "soft" instruments; the rules for grouping instruments in "Accorts" or "Stimmwerke," formulated for his time by Praetorius, can be partly reconstructed for other periods by a comparative study of the visual sources. b. Use of written music for performance (choir books, part books, scores). c. Spatial disposition of performing groups (*cori spezzati*, polychoral music, placing of continuo instruments, etc. 4. Methods of conducting.

<sup>11</sup> See the "Musica" engraved after Hans Floris, reproduced in Haas, *Aufführungspraxis* p. 132 Ill. 55, where the virginal is called a clavichord.

<sup>12</sup> See the admirably precise woodcut, "Die Geschicklichkeit in der Musik" in Hans Burgkmair's *Der Weisskünstler* (c. 1516), in which the clavichord is seen chiefly from the back, yet sufficiently indicated by just a few curved lines for the keys.

B. The Listener. Placement of the audience in church or theater, habits of acclamation, audience participation in the performance.

C. The Site of Performance and the Acoustical Environment. Here the pictures of rooms and halls, palaces and churches, theaters and even gardens, no longer in existence are often the only source of information we have about the acoustical conditions of performance.

D. Stage Settings. Depictions of settings and decorations of church plays, intermedia, and operas are of significance to the modern performance and interpretation of these works.

E. Social Status and Environment. — 1. The social status of performers and instruments; social connotations of certain types of instruments and ensembles (typical high and low-class instruments and ensembles).<sup>13</sup> 2. The role of the musician in society: court musicians, troubadours, minnesingers, jugglers, beggars, in early illuminations; the poet-musician, the humanist-recitator, musician portraits in Renaissance art; the virtuoso as the center of social circles in 18th century and Romantic art; the professional, the amateur, the dilettant. 3. Types of ensembles and instruments associated by custom or tradition with various public occasions (weddings, funerals, receptions, festivals, *fêtes champêtres*, serenades, *notturni*, *cassazioni*, etc.) in contemporary imagery.

F. Symbolism and Allegory (mystical, religious, erotic, political symbolism). Here again, the overwhelming wealth of topics makes a systematic tabulation nearly impossible, but a few promising directions of research may be suggested: 1. Association of musical instruments with religious and cosmological beliefs; magical instruments in "primitive" and Far Eastern art. 2. Instrumental concerts on the walls of Egyptian burial chambers. 3. Instruments symbolic of passion and reason in Greek mythology, philosophy, and educational doctrine (the instruments of Dionysos and Apollo; the symbolic implications of the musical contests between Apollo and Marsyas, Apollo and Pan, between the Muses and the Sirens; the significance of the invention of the aulos by Pallas Athena.) 4. Medieval and Renaissance representation of Biblical musicians (King David and the elders with their "appropriate" instruments; King David with, successively, the lyre, rotta, harp, and *lyra da braccio*.) 5. The allegories of *Musica* from the late Middle Ages to the Baroque, and the instruments in the representation of the *Artes Liberales*; Pythagoras and Tubal with their instruments as traditional accompaniment of the allegorical *Musica*; the organ, clavichord, and harp as the instruments of Santa Cecilia in successive periods of painting.

Pervading all musical cultures is the erotic symbolism of musical instruments, especially of wind instruments and idiophones, traceable in their music and visual representations alike. The following are some outstanding examples. The aulos as the instrument of passion, urges, instincts; the aulos in the entourage of Dionysos, in the hands of satyrs, in drinking parties (Greek vase painting). The Dionysiac connotation of woodwind instruments (reed pipes, vertical flutes) in Renaissance art (as for instance in the woodcuts in the *Hypnerotomachia*, engravings by Marc Antonio, Zoan Andrea, Girolamo Mocetto; numerous *trionfi d'amore*; Francesco Cossa's Schifanoja frescoes, Ferrara; the numerous flute lessons, for instance in drawings by Lodovico Caracci (Uffizi) and other music lessons on the lute, theorboe, virginal, in Baroque Genre painting.<sup>14</sup>

A special section of the broad field of the symbolism of musical instruments concerns their specific timbre as indicative of character, temperament, mood, and many other things. A few obvious examples are: 1. The timbre of reed instruments, often with drones, associated with the Nativity, both in painting and in music. 2. The "heroic" connotation of the trumpet,

<sup>13</sup> On instruments gaining and losing caste due to changing fashions, see my article, *Bagpipes and Hurdy-gurdies in Their Social Setting*, *MET MUSEUM ART BULL* 2 (1943) 56-83.

<sup>14</sup> See note 5.



traceable in the visual sources long before its absorption into oratorio, opera, and symphony. 3. The musical equivalent of the visible halo (for instance, Christ's halo suggested by string timbre in J. S. Bach's *St. Matthew Passion*, and in the cantatas.)

#### V. Degrees of Realism.

In many periods of art the portrayal of the visible world, including musical scenes, is not a simple mirror reflecting objects with photographic precision; rather, it renders or suggests them through various "stylizations." The artist is subject to many influences and factors that have an impact on his work and may interfere, in some measure, with the "realistic" portrayal of the object. Some of these factors are of a psychological nature, others are rooted in traditions of technique or style, and still others are the result of the social environment in which the artist creates. More precisely: 1. He is style-bound, born into a definite tradition with all its pictorial devices, tricks and mannerisms. 2. He is often limited in the choice of his subject and in the manner of delineating it by church or secular authorities and by the tastes and predilections of his sponsors and critics. 3. He is limited by his media and tools, stone or terra cotta, canvas or paper, brush or pencil, stained glass or needle work. Also the two and three-dimensional realms restrict "realism" of portrayal in different ways. Depictions on the two-dimensional surface can represent the object from only one angle, and the various types of perspective used by different periods of art to create the illusion of depth must then be interpreted by the style-conscious beholder. Sculpture, on the other hand, does not easily permit the rendering of strings, the hairs of bows, and the like, and either omits these features entirely or suggests them in simplified form. (III. 7)

These are truisms, but perhaps not unnecessary in view of a certain naiveté often associated with the "reading" of pictures, and the exploration of their "objective content" by historians not steeped in the tricks of illusion that are part and parcel of the visual arts. The aim of the musical iconologist is to "read" the work of art as a document, to concentrate on its material content, and thereby see beyond the devices of stylization; to abstract, as it were, from the work of art just those elements which make it art. To formulate this paradox even more pungently, he should be an art historian, not for art's sake, but for the purpose of concentrating on the core and body of the image by consciously eliminating the subjective, "disturbing" elements of style.

In selecting some outstanding examples of exact renderings of musical subjects in two-dimensional representations from the last five hundred years of Occidental art alone, one could mention the schools of van Eyck and Memling; virtually all the Italian painters of *Sacre Conversazioni*, such as Giovanni Bellini, Carpaccio, Montagna, Fra Bartolomeo, and many more; Holbein's *Ambassadors* with the famous portrait of a lute in the National Gallery, London; Jan Breughel's *Allegory of Hearing*, in the Prado, with its nearly complete inventory of early 17th century instruments; the many still-lives by Baschenis composed entirely of musical instruments; not to mention the enormous wealth of Netherlandish genre paintings with their virginals, lutes, citterns, and theorboes. Though they all excel in their attention to minute detail and consistent use of linear perspective, they are yet surpassed, if this be possible, by the wood intarsias of 15th and 16th century Italy, with their many beautiful instruments.

The problem for the fact-finder is then to interpret the pictures "correctly," that is, for his practical purposes, and it may be useful to attempt an approximate tabulation of those factors which cause an image to deviate from "reality."

1. *Limitation of the medium of depiction.* For instance, in sculpture, strings are often not detached from the sounding board or fingerboard, or are omitted altogether. In woodcuts,

frequently the number of strings is reduced, and other elements, such as pegs, are disproportionately large.

2. *Pictorial style of the period or of the individual painter.* An example would be the finger positions of the musician angels in the Isenheim altar by Mathias Grünewald; an example of typical *chinoise* transformation can be found in Watteau's depiction of a *vielle à roue*. (III. 8)

3. *Carelessness or lack of mechanical or musical understanding.* Pseudo-lyres and harps, non-functional pipes, and many other acoustically impossible instruments, as well as ensembles composed at random and at the painter's fancy, are all too frequent.

4. *Requirements of pictorial composition.* One case in point is symmetry, often imposed by pictorial convention; for instance, the symmetrical duplication of instruments, particularly those of striking appearance, such as organetti,<sup>15</sup> trumpets,<sup>16</sup> etc. or even of all instruments<sup>17</sup> in order to achieve visual balance, at the expense of musical balance. Many examples are found in 14th and 15th century angel concerts celebrating the Assumption and the Coronation of the Virgin.

5. *"Prettification."* Rubens, who has no qualms in showing the puffed-out cheeks of a satyr playing the double recorder in the "Silenus," (National Gallery, London) prefers to show the fingers of Santa Cecilia elegantly hovering over the clavichord keys, rather than in the contracted position required. The problem confronting the painter in the conflict between the pleasant and the realistic has already been clearly formulated by Giov. Paolo Lomazzo in his *Trattato dell'Arte della Pittura, Scultura, ed Architettura* (1580) Liv. II Cap. VIII. He recommends reckless realism at the expense of prettiness, an attitude quite remarkable in view of Lomazzo's manneristic leanings.

6. *Symbolic or allegorical significance of the painting.* This is a vast field whose magnitude can only be suggested by a few examples. Number symbolism is frequent. Apollo's *lira da braccio* in Raphael's Parnassus has nine strings (7 stopped and 2 open strings) instead of the customary seven strings (5 plus 2), thus alluding to Apollo's function as leader of the nine Muses, and possibly referring to the nine *modi*. Seven identical instruments are found in the hands of the apocalyptic angels and holy men. Number also plays a role in the numerous symbolic depictions of the nine angel choirs, and usually each of the nine groups is homogeneous, that is, devoted to singing or to playing the same type of instrument. In these paintings, the instruments are usually the exact images of contemporary ones, yet the "homogeneous" ensembles offer no information as to usual ensemble practices. I have already mentioned the role of musical instruments as traditional attributes of mythological figures and saints. A main source of these symbolical connotations are the illustrated emblem books of the late Renaissance.<sup>18</sup>

Here too can be grouped many of the allegorical and fantastic instruments and musical scenes in those paintings that represent or reflect actual stage performances (church plays, intermedia, etc.). The function of these instruments can frequently be clarified by the examination of contemporary instructions for the theater workshop. Among the most important musical allegories in the visual arts are the representations of *Musica*, *Poesia*, *Harmonia*, and *Auditus*,

<sup>15</sup> P. and G. Veneziano's Coronation, 1358, in the Met. Mus., N. Y.

<sup>16</sup> Florentine Choirbook, c. 1350, Cleveland Mus., where the convincingly balanced string ensemble is overpowered by two flanking pairs of trumpets — III. 4.

<sup>17</sup> Bernardo Daddi's Coronation of the Virgin, Altenburg.

<sup>18</sup> For the symbolism of the *lira da braccio* and the bagpipes, see my articles, *The Lira da Braccio*, MGG 8; *Bagpipes & Hurdy-gurdies* (note 13).

all with more or less stereotyped attributes. To mention only one: a stag head made into a lyre in Filippino Lippi's *Allegory of Music* (Berlin Museum), evidently a variation of the traditional attribute of *Musica*, the stag symbolizing velocity of sound.

7. *Archaic aims.* In periods of revival such as the Carolingian era and the 14th and 15th centuries, the artist will often fuse ancient models with actual objects taken from his contemporary environment. A characteristic case is that of the wind instrument held by Euterpe in Raphael's *Parnassus*. To comply with the archeological ambitions of the time, it has the typical protuberances of the ancient Roman tibia, but at the same time it has the mouthcup and bell of a trumpet, the traditional attribute of *Fama*. (Ill. 9) This purposeful blending of two different mythological notions is of course acoustical nonsense.

8. *The Fantastic.* Bizarre performances and instruments abound in the drolleries found in illuminated prayer books of 13th and 14th century Flanders, France, and England, and later in the Italian grotesques of the Cinquecento. The works of Bosch and Peter Breughel teem with demonic and humorous musicians and instruments. These depictions are often symptomatic of popular customs. At this point, one should also mention musical caricatures, as well as satirical paintings, prints, pamphlets, and broadsides, some of which are full of information about the social status and political connotations of certain instruments. (Ill. 10)

In Italian Renaissance painting, especially in the large angel concerts, one often finds instruments that appear fantastic, and it sometimes requires more than a glance to establish whether they are: a. actual but rare instruments; b. common instruments, but smothered in Renaissance decor; c. instruments created *ad hoc* by the painter's brush, but nevertheless acoustically feasible (Ill. 11); or d. instruments which are grotesque inventions with no basis in reality. All of these types occur simultaneously, for instance, in Gaudenzio Ferrari's magnificent angel concert in the cupola of the Santuario in Saronno.

Another important factor that may blur the reliability of the visual document is spoiling due to time and falsification due to inept restoration. Many telling details are often distorted or overpainted through a lack of understanding or a desire to "prettify." Unfortunately, the more famous the work of art, the greater the chance that it has been restored, and possibly altered. The organologist in search of accurate documentation would often do better to go to out-of-the-way museums, which have less money for restoration, and see the correct shapes through layers of time-darkened varnish.

In addition to these factors impeding accuracy of portrayal, we must be aware that the popularity of certain instruments and musical practices is not necessarily reflected by their frequency of depiction in art. This is particularly true of periods in which most of the visual arts were of a religious nature. In such periods folk music or secular court music had fewer chances of representation. Furthermore, large quantities of sculpture and painting have been destroyed by iconoclasm, war, and natural catastrophe.

## VI. Horizons.

In conclusion, and in view of the rapidly growing availability of pictorial sources, I should like to suggest at least some desiderata concerning the method of iconological research:

1. Critical interpretation with awareness of all the factors that might possibly have blurred the faithful delineation of the object depicted.
2. Methodic evaluation of pictorial evidence, not in single, isolated instances, but on the widest possible comparative basis, taking into account a reliable number of parallel cases, and making due allowance for contemporary local or regional deviations or variances in instrument building or playing habits.

3. Systematic distinction between functional and non-functional elements of instruments; and between those non-functional ones that are derived from decorative fashions, as against atrophic remnants of once functional elements (carried through the centuries by the sheer force of habit or tradition).<sup>19</sup> Such distinction might help to pave the way towards a morphological view of instruments throughout their gradual evolution.

Finally, I might suggest a few topics for research and discussion:

1. A comparative study of Near-Eastern parallels to the musical scenes in illuminations of the Carolingian period, especially in the Utrecht Psalter.
2. New search for the origin of bowing in the Occident.
3. The survival or revival of double-pipes in the Middle Ages and the Renaissance, and the question of the perpetuation of aulos practice in the double-ohoe and double-recorder.
4. A study of the irruption of large and varied angel concerts into painting and sculpture with the rising popularity of Marian subjects (especially of the Assumption, Ascension, Coronation, Mary in Glory, etc.), and a systematic investigation of the extent to which their instrumental ensembles are symptomatic of the contemporary evolution of polyphony.
5. The examination of Renaissance and early Baroque paintings to establish those scenes that are based upon actual or planned stage performances.
6. Re-investigation of the early history of the violin, especially through its documentation in frescoes and other art media, long before its regular production in more or less standardized shapes by the dynasties of the famous builders.

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<sup>19</sup> I have tried to follow this method in my paper, *The Survival of the Kithara* (note 3).