

Jacob Adlung's *Musica mechanica organoedi* and the "Bach Organ"

by

Quentin Faulkner

When we begin to discuss the "Bach organ", meaning the characteristics that J.S. Bach might have sought in an ideal instrument, we are immediately confronted with the problem of sources. For although Bach left us a multitude of organ works, the information that has reached us concerning the type of instrument on which he preferred to play them is limited. To be sure, there is a larger body of circumstantial evidence: extant organs that Bach played, even some that he examined, and organs by builders to whom Bach granted testimonials; reports on organ examinations; anecdotes. But if we admit as genuine only information from Bach himself or from his students that is specific enough to afford us substantial evidence, that evidence is quite circumscribed. It consists, as far as I can tell, of two parts: first, the memorandum concerning proposed changes to the organ of the Blasiuskirche at Mühlhausen, and second, the few brief remarks written by Johann Friedrich Agricola in the notes he supplied for Jacob Adlung's *Musica mechanica organoedi* (hereinafter abbreviated to *Mmo*).

Bach probably drew up the memorandum of proposed repairs and changes to the organ of the Blasiuskirche,¹ Mühlhausen, sometime toward the end of 1707. There are a number of elements in it that provide insight into Bach's organ preferences:

1. The first three articles are directed toward creating a stronger and more sufficient wind pressure, "so all the stops may be used together" and the wind supply would still remain stable (*Mmo* I, § 232-3, § 370ff).
2. Bach proposed a 32' Subbass of wood, on its own windchest (presumably behind the rest of the organ), to give "the whole organ an excellent gravity."
3. The Posaunenbass was to be supplied with larger resonators and new shallots, again to provide greater gravity (*Mmo* I, § 456). A note by J.L. Albrecht in the *Mmo* reveals, however, that this was never carried out (§ 176, note 42).
4. The 8' Trompete on the Oberwerk (Hauptwerk) was to be replaced with a 16' Fagotto. Bach did not intend this stop to be a less powerful trumpet (the type of Fagott normally built by Gottfried Silbermann), but a quieter Dulzian, since he states that it sounds "very well in [concerted] music," i.e. for the realization of the basso continuo. The

removal of the Trompete meant that there was no manual chorus reed in the entire organ.

5. The Hauptwerk Gemshorn 8' was likewise to be removed, and in its place was to go an 8' VioldiGamba, which "will accord well with [*i.e.*, pair up with] the 4' Salicional in the Rückpositiv."

6. The 3' Quinte in the Rückpositiv was to be replaced by a wide-scale Nassat 3'. Albrecht's stoplist of this instrument (*Mmo* I, p. 261) calls this stop "Quintflöte" and does not specify its pitch.

7. The major change to the organ was to be the addition of a third manual, operating a new Brustpositiv. This division was to have three *Principalia* or facade ranks (Praetorius uses the term in the same way in *Syntagma musicum II*): 3' Quinte (principal-scale; noted as 1-1/2' in Albrecht's stoplist, *Mmo* I, p. 261), 2' Octava, and 8' Schallmey, all "of good 14-ounce tin." There was also to be a Mixtur III, a Tertia (which, combined with other stops, would make a "Sesquialtera," *i.e.*, a Cornet), a 4' Fleute douce, and an 8' Stillgedackt (for continuo realization; Bach seemed to think this stop would sound better if made of wood rather than metal).

8. There was to be a Glockenspiel at 4' pitch in the pedal, as "desired by members of the parish." Since a Glockenspiel was also installed in the organ at Weimar in 1715, during Bach's tenure, we may suppose that Bach's phrasing does not imply a personal distaste for the stop.

9. A coupler was to connect the Brustpositiv to the Oberwerk.

10. The whole organ was to be tuned; and finally

11. The tremulant was to be regulated to beat at the proper rate.

There are a number of points to be noted about these proposed changes:

1. Bach drew them up at the outset of his career, while he was still a young man; they do not necessarily reflect his mature views.
2. Except for the new division, they appear to represent a series of compromises with an already existing specification—an attempt not to reach an ideal but only to improve those elements of the instrument that Bach regarded as unsatisfactory.
3. The limited size of the new division, as well as the

fact that a number of Bach's requests were never implemented, suggest that the renovation was carried out within tight financial restraints.

4. Both Bach's concern for winding that would allow using multiple 8' stops simultaneously, as well as his request for a 32' stop and new pedal reed resonators and shallots, must be considered in the context of the inherent weaknesses (as Bach understood them) in the existing Blasiuskirche organ; they also suggest that he valued a strong, sonorous organ tone.

5. The majority of Bach's directives were aimed at supplying the organ with a more colorful tonal palette: *e.g.*, the 16' Fagotto, 8' VioldiGamba, Nassat, Cornet, Glockenspiel, and well-regulated tremulant.

Weimar--what wouldn't Weimar tell us about the "ideal Bach organ"! Unfortunately, whatever changes were made to the organ by H. N. Trebs during the 1719-20 renovation prevent the oft-quoted Wette stoplist of 1737 from being a reliable indicator of Bach's intentions. The 1737 Weimar stoplist can never be ignored, but neither can it ever be taken as conclusive proof of any ideal "Bach organ."

The only other specific remarks about Bach's preferences in organ design were recorded more than fifteen years after his death. They are to be found in the notes that Bach's student Johann Friedrich Agricola added to the published edition of Jacob Adlung's *Musica mechanica organoedi*, published in 1768. Agricola calls his teacher "the greatest organist and organ expert in Germany, and perhaps in all of Europe"; he also recalls that Bach was a great friend of reed stops, and knew very well how to use them (*Mmo* I, § 104).

Later (*Mmo* I, § 267) Agricola refers in particular to Bach's admiration for the sixteen reeds in the organ at the Catharinenkirche in Hamburg, where Reinken was organist. He also records Bach's praise for the prompt speech of the 32' stops in the same organ (*Mmo* I, p. 288, note ^a), obliquely confirming Bach's esteem for gravity. Finally, Agricola asserts that manual keys should be of short length, and supports his statement by recalling that Bach liked short keys on the organ, as well as tapered chromatic keys (*Mmo* II, § 349).

These few clues would appear to be the only specific and reliable information we have concerning Bach's preferences in an organ. All other sources are either too general (*e.g.*, the tantalizing remarks in the *Nekrolog*² about Bach's unique skill in registration and his detailed knowledge of organ construction) or they represent Bach's reaction to an already existing instrument (*e.g.*, the various extant reports of organ examinations). Although it is possible that Bach had a hand in designing at least one large organ (more on that later), there is actually no incontrovertible evidence of his ever having designed any instrument at all.

Since the information from more immediate sources is

clearly insufficient to gain any complete conception of Bach's ideas, we are forced to look further afield for clues as to what he might have regarded as ideal. Among the various sources at our disposal, it seems to me that one of the most fruitful and reliable is Jacob Adlung's *Musica mechanica organoedi*. There are a number of reasons why this treatise is the likeliest candidate to consider as a mirror of Bach's preferences:

First, Bach and Adlung were in close geographical and temporal proximity. Adlung (1699-1762) was born near Erfurt, and his career centered around Erfurt (only about 75 miles/120 km from Leipzig) and Jena (even closer to Leipzig). The *Mmo* had a long genesis: Adlung began to write it in 1726, and continued to expand it over the rest of his life, so that Johann Lorenz Albrecht could report that "there was more in the margin and between the regular text than the space available...would permit" (*Mmo* II, Foreword, p. XVI). Thus the treatise corresponds in date to the greater part of Bach's career (though its publication occurred more than a decade after Bach's death and a number of decades after his most intensive activity in organ composition).

Second, the *Mmo* is much more than a product of Adlung's views and experience; it is a compendium, a digest encompassing knowledge about the organ covering the greater part of the 17th and 18th centuries. Thus, along with many others, the treatise incorporates the works of Michael Praetorius and Andreas Werkmeister, citing their views and often quoting them directly. If we are to believe the *Nekrolog* that Bach "knew the construction of organs from one end to the other," then he surely must have gained his knowledge in some part from the same sources on which Adlung so heavily depends.

Finally, however, it is the role of the editors that makes the *Mmo* so indispensable to understanding the "Bach organ." At the author's death the treatise was still in manuscript, and Adlung's heirs turned it over to Johann Lorenz Albrecht (1732-1773), organist of the Marienkirche in Mühlhausen, who prepared it for printing. In this process he unfortunately obliterated the distinction between the original manuscript and later additions (which would have been most enlightening), but he does not seem to have emended or supplemented Adlung's text. Rather he added a series of footnotes, distinct from Adlung's work, offering his own views and comments. The publisher, F.W. Birnstiel in Berlin, not being entirely confident of Albrecht's work, then invited Johann Friedrich Agricola (1720-1774), Royal Prussian Court Composer in Berlin, to review the entire project. Agricola added many additional notes and comments; these are distinct both from the original text and from Albrecht's additions. Albrecht, while he may have been acquainted with Bach, was not a member of the Bach circle. Agricola, on the other hand, had been Bach's student from 1738-41; his comments in the *Mmo* reveal that he was not only intimately acquainted with organ design

and construction, but also held the views of his teacher in high regard. Thus the *Mmo* not only mirrors changes in ideas and attitudes over several generations, it also is related directly to the Bach circle by virtue of Agricola's editorial role.

Can the treatise, then, be said to reflect Bach's ideas? That is a difficult question. Bach does not mention Adlung in any of his writings that have been preserved. On the other hand, Adlung studied organ with Bach's cousin Johann Nicolaus Bach in Jena; in a brief entry in his other great work, the *Anleitung zu der musikalischen Gelahrtheit*, he gives a thumbnail sketch of Bach's career and mentions favorably his organ chorales (pp. 690 & 691). Yet even though Adlung and Bach were near-contemporaries, and both subscribed to the same orthodox Lutheran tradition that exalted the use of the organ in worship (*Mmo* I, § 14 & 15), they do not seem to have had much to do with each other. Bach's station in life was more distinguished than Adlung's, but that hardly seems the reason for their lack of familiarity. It more likely lies in their quite different personalities. Adlung was a polymath: a musician, but also a scholar well-versed in mathematics and languages, and proud of his erudition; fascinated by new inventions, some of which do not seem to further music-making, but are only for the sake of mechanical ingenuity—in short, a bit of a pedant. Bach was by no means ignorant, but all of his learning was put in the service of music, and he seems to have had little patience with pedantry.

Even though they were not on familiar terms, however, the two men show strikingly similar ideas regarding organ design and construction wherever their writings happen to treat this topic. For example, Bach's report on his examination of the new Scheibe organ in the Paulinerkirche in Leipzig (1717) reveals precepts identical to those propounded by Adlung in Chapter 16 of the *Mmo*, "Concerning the Delivery and Examination of an Organ." Agricola, who would surely have taken Adlung to task for any major deviation from the principles he learned from Bach, takes exception to Adlung's advice only in a few distinct matters.

For purposes of argument, then, let us assume for the present that the *Mmo* does indeed represent in large part Bach's views on organ design and construction. The questions that immediately arise are: 1) What are the major features of organ design as Adlung describes them? 2) Do these features correspond to those of Bach we have already noted? 3) In what ways, if any, do they differ?

In Chapter 10 of *Mmo*, in the course of discussing the organ stoplist, Adlung provides more or less systematic instruction on how to draw up an organ specification. Let us design a three-manual organ, using his suggestions as a guide. [For ease of comparison, the organs at Mühlhausen and Naumburg are co-ordinated with Adlung's ideal specification in Table I; see p. 6-7.] He begins by establishing

—continued on page 4

The Westfield Center for Early Keyboard Studies was founded in 1979 to create a forum for active interchange among scholars, performers, and instrument builders in the field of early music. The Center's interest is keyboard music on original instruments—from whatever period—and the purpose of its wide range of programs is to consider aspects of performance practice and keyboard repertoire in its historical and cultural context, as well as specific matters of form, style, and composition. The Westfield Center has been praised for its innovative programming and for its leadership role in the field of early music. Its membership is worldwide.

Based in western Massachusetts, since 1979 The Center has presented a series of recitals and chamber concerts on period instruments in Westfield. In 1988, The Center implemented an Outreach Program for Children in conjunction with the concerts, bringing early music specialists to the Westfield community.

The Westfield Center has sponsored more than a dozen conferences and, in 1986, published *Charles Brenton Fisk, Organ Builder*.

Lynn Edwards, *Executive Director*
Marilyn Kushick, *Associate Director, Development*
Cindy Wurner, *Administrative Assistant*

BOARD OF TRUSTEES

Stuart J. Bellows, Steven B. Booth, Richard K. Douglas, Lynn Edwards, John R. Ferris, Janee Friedmann, T. Marc Futter, Deborah F. Jacobson, Owen Jander, Carlo A. Marchetti, and Ernest D. May.

BOARD OF ADVISORS

Malcolm Bilson, *Cornell University*; John Brombaugh, *Eugene, Oregon*; David Dahl, *Pacific Lutheran University*; Fenner Douglass, *Wellfleet, Mass.*; William R. Dowd, *Washington, D.C.*; John Fesperman, *Smithsonian Institution*; Virginia Lee Fisk, *Gloucester, Mass.*; Don Franklin, *University of Pittsburgh*; Yuko Hayashi, *New England Conservatory*; Margaret Irwin-Brandon, *Haydenville, Mass.*; Nicholas Kenyon, *London, England*; Ton Koopman, *Amsterdam, The Netherlands*; Joan Lippincott, *Westminster Choir College*; Michael Lynn, *Oberlin Conservatory of Music*; Barbara Owen, *Newburyport, Mass.*; William Porter, *New England Conservatory*; Kerala J. Snyder, *Eastman School of Music*; Luigi Ferdinando Tagliavini, *Bologna, Italy*; George Taylor, *Staunton, Virginia*; Harald Vogel, *North German Organ Academy*; Peter Williams, *Duke University*; and Christoph Wolff, *Harvard University*.

Early Keyboard Studies NEWSLETTER (ISSN 0882-0201) is published quarterly by The Westfield Center for Early Keyboard Studies, Inc., One Cottage Street, Easthampton, Mass. 01027, and is distributed free to the Center's members. Volume V, No. 2 (March, 1989) published May 31, 1990. Copyright 1990 by The Westfield Center for Early Keyboard Studies, Inc., Easthampton, Mass. All rights reserved.

the preliminary requirements that "heavy or deep stops are needed in order that the bass may receive its proper gravity," that "bright stops must also be included, so that in chorales and such the instrument may be heard above the congregation," and finally, that "quiet-sounding stops must also be included for the sake of continuo playing" (§ 260; cf. also § 231). The term "gravity" calls to mind Bach's concern for this quality expressed in the Mühlhausen memorandum, and Adlung's frequent use of the word betrays that same concern: § 126, 237, 261, 272, 275 and 456. In § 260 Adlung continues by distinguishing between "necessary" and "unnecessary" stops; the former are practically synonymous with what we would call the plenum, and he is more specific in his recommendations for these. "Necessary" stops include:

The main manual (called the Hauptwerk: § 266):

16' Gedackt/Bourdon (better than a 16' Quintatön: § 261)

8' Principal (§ 262)

4' Oktave (")

2' Superoktave (")

[2 2/3' or 1 1/3'] Quinte (")

Sesquialtera, Terz, Tertian, Rauschpfeife, Mixtur, Scharp, Cymbel (one should choose from these, according to the degree of intensity one desires and how much one can afford: § 262). It is significant that in § 233 and 244 Adlung seems to take it as a matter of course that mixtures will contain third-sounding ranks; does this correspond to Bach's desires?

8' Gedackt or 8' Quintatön (a quiet stop intended for continuo realization: § 263). This stop is on the third manual if one is present: § 266).

8' Trompete (§ 264)

Pedal:

32' Subbass or 32' Principal (§ 268; but Adlung advises against the latter, since it speaks slowly and is not as useful).

16' Violonbaß or 16' Principalbaß, or both (§ 264)

16' Subbass (§ 268)

8' Oktave (§ 263 and § 268)

4' Oktave (§ 264)

2' or 1' Bauernflöte (§ 268)

In § 268 Adlung claims that there is no need for any brilliant stops in the pedal, since they detract from the gravity of the bass and "it is not proper that little boys should sing along with the bass" (cf. § 276). If brilliant stops are desired, then they may be coupled from the manual. Corroborating this in § 345, he says that there are usually fewer pedal stopknobs.

32' Posaune (§ 268)

16' or 8' Posaunbaß (§ 264)

16' or 8" Trompete (§ 268; in § 270 and 271 Adlung distinguishes between the Posaune and the Trompete, and contends that both may appear in the pedal at the same pitch).

[4' or 2'] Cornet (§ 268; cf. also § 132 concerning the pitch of this stop).

Second manual: § 266 says this should be less loud and brilliant (scharff) than the Hauptwerk, since it would be of little use if it were as loud; this seems to contradict the concept of the secondary manual as a foil to the primary.

[8' Gedackt or]

8' Principal (§ 266; this stop is particularly useful for playing continuo bass).

4' Principal (§ 264)

2' Oktave (§ 264)

Mixtur or Scharff (§ 264)

Third manual: § 272 presumes that the third manual, if it is present, will also have a plenum. § 266 assigns the 8' *Musicirgedackt*, the stopped flute used for continuo realization, to the third manual.

In two places (§ 177 and § 272) Adlung notes the option that the scaling of the principals on each of the three manuals may be contrasted: "Sometimes the same scale is maintained throughout all keyboards; but at other times one keyboard is of broad scale while the other is of narrow scale...For this reason the Görlitz organ [built by Casparini] is praised, since its Hauptwerk [principals] are broadly scaled, while the Oberwerk sounds very acute and penetrating due to its narrow scale" (§ 272). To these observations Agricola appends the remark that "The organs of Silbermann, Friderici and Hildebrand are all constructed like this." Adlung also offers a number of possibilities for the relative sizes of principals in the various divisions, and these possibilities coincide only partially with the concept of the *Werkprinzip*: § 266 "If the first and second keyboards have, let us say, 8', then the third will be a 4'. If the first is an 8' and the second a 4', then the third will be a 2'. If, however, the first is a 16', then the second will be an 8' and the third 8' or 4'." § 273 advises that compound stops should have a generous number of ranks if money permits: a cymbel of 3 ranks is best, while a mixture may be 4, 5 or 6 ranks, "according to the characteristics of the church and its size, and also according to the character of the other stops." But having said that, Adlung immediately counsels against any larger compound stops, especially if keyboards can be coupled.

Adlung leaves the choice of "unnecessary stops" to the reader (§ 267). It is clear, however, from § 232-3 (as well as parallel passages in his *Anleitung zu der musikalischen Gelahrtheit*) that he presupposes a variety of these on each manual, with more than one at 8' pitch. Chapter 7 describes a plethora of flute and string stops that might be candidates, and § 229 mentions that the Violdigamba is useful for playing running bass passages. Adlung does suggest that the 8' & 4' "unnecessary stops" on each manual may be the same, if money allows, for the sake of variety (i.e., the colors of the flute or string ensemble are then contrasted from manual to manual). This suggestion recalls

Bach's comment in the Mühlhausen memorandum that the proposed 8' Viol-digamba in the Hauptwerk would "accord well with the 4' Salicional in the Rückpositiv." Hildebrand's organ in the Wenzelskirche at Naumburg follows this plan, and Agricola praises it in the new organ in the Hamburg Michaeliskirche, built by Hildebrand's son (*Mmo* I, § 301).

Pure lead, Adlung advises, should never be used for organ pipes: "Pure lead is never recommended, since salt-peter soon corrodes pipes made of pure lead." (§ 245) He infers that tin is superior to lead as a pipe metal: "Those pipes that are to stand in the facade normally get more tin, even pure tin, while on the other hand the interior pipes may be fashioned of an inferior material [*i.e.*, an alloy of tin and lead]." (§ 87) Bach calls for "good...tin" for the three *Principalia* in the new Brustwerk at Mühlhausen. Agricola not only agrees with Adlung, but infers an even stronger preference for tin: "There are some who insist that absolutely pure tin cannot be wrought into organ pipes. Others, for example, Mr. Joh. Gottlieb Schramm in Berlin, assert that it can indeed be made [into pipes], although with considerable trouble and diligence." (§ 87) Speaking of the organ at the Johanniskirche in Danzig, Agricola says: "With the exception of the Subbass and the Quinta major [10 2/3'] in the pedal, which are made of wood, all the rest of the stops of this instrument are made entirely of fine English tin, without the least admixture of lead. This reinforces that which was said...[in § 87] by yet another new example." (*Mmo* II, p. 185) Hildebrand's instrument at Naumburg is likewise distinguished by a large number of stops made of tin, including all the principals.

The best way to design a three-manual organ, says Adlung (§ 266) is to consult the specifications he gives in Chapter 10: "These may be taken as models and pondered thoroughly." The first three-manual specification that he mentions in this regard is that of the Hildebrand organ in the Wenzelskirche at Naumburg.

How does the specification of the Mühlhausen organ, as revised by Bach, correspond with Adlung's recommendations? This question may best be answered by referring to the Appendix [see page XXX] comparing the two stoplists (together with the stoplist of the Hildebrand organ at Naumburg). The similarities are quite striking; in fact, it is easier to note the differences:

Hauptwerk: Mühlhausen has a 16' Quintatön instead of a 16' Bourdon, and a 16' Fagott instead of an 8' Trompete.

Pedal: Mühlhausen has a four-rank Mixtur, whereas Adlung advises against putting any higher-pitched stops in the pedal.

Second manual: Mühlhausen has a Rückpositiv, a feature Adlung detests. The St. Blasius organ also has several more mutations than Adlung calls for (but this may be only a matter of Adlung's lack of detail).

Third manual: Mühlhausen has an 8' Schallmey, whereas Adlung advises omitting reed stops.

There are a number of instances in which Agricola takes exception to Adlung's statements and opinions, and these provide legitimate reason to suspect that Agricola is expressing Bach's opinion as well (in particular when the ideas they espouse seem to correspond to Bach's musical personality and preferences).

1. Adlung scorns reed stops in general: "...I would not advise putting too many reeds into an organ because of the thankless task of tuning them. If the organist is not very conscientious [in tuning them], then they are practically worthless and cost a lot of money to boot; ...In the organ at Groningen there are 14 reeds, enough to cause an organist to work up a sweat at times" (§ 267; *cf.* also § 104 and 261). Each time that Adlung maligns the reeds, Agricola hastens to their defense, and in doing so he tells us that Bach also loved reed stops: "The greatest organist and organ expert in Germany, and perhaps in all of Europe, the deceased Kapellmeister Bach was a great friend of them. He knew very well what could be played on them and how to do it. Is the convenience of some organists and builders sufficient cause to scorn, revile and eliminate such lovely stops?" (§ 104; *cf.* also § 267 and II, p. 288e).

2. Adlung manifests a distinct aversion to Rückpositivs, expressing his distaste for them more than once: "Rückpositivs were much more in use in earlier times than now; the entire organ is nowadays in one case, which is much better. The name meanwhile continues to creep into use, in that a smaller division or the least substantial manual of an organ is often called the "Rückpositiv." (§ 20) "In Jena the organ is built conveniently in one unit, but in Naumburg there is a Rückpositiv, a loathsome thing." (§ 324; *cf.* also § 248, 344 and 347) Here Albrecht appends the note, "Indeed not everyone would be satisfied with this statement," and immediately thereafter Agricola adds, "Many would go so far as to say that a well-built Rückpositiv is a beautiful thing." Each time Adlung criticizes the Rückpositiv, Agricola adds a note contradicting him, until finally he loses patience: "Once and for all we must note that this is Mr. Adlung's opinion. It would be very easy to refute with solid reasons his entire loathing for Rückpositivs." (§ 344; *cf.* also § 248, 324, and *Mmo* I, p. 289, n.i).

3. The normal compass of the pedal, according to Adlung, is two complete octaves, C - c', including all the chromatic pitches, even the low D# (§ 354). But he thinks it not a bad idea to add the c# and d on top, and mentions that some organ pedalboards go even higher. He ends by citing as an example the Förner organ in the Augustusburg at Weissenfels, whose pedal extends up to f'; but, he says, "that is excessive." (§ 354) Immediately Agricola interjects a note: "I do not know why it should be [considered] excessive. On the contrary, for certain types of pieces that require the pedals it is very good." For anyone familiar with Bach's organ works, it will not take long to imagine some pieces Agricola might have had in mind.

Hauptwerk

Adlung - Mmo

Main Manual (Hauptwerk: §266)

(16' Principal unnecessary: §268)
 16' Gedacht/Bourdon (better than 16'
 Quintatön: §261)
 8' Principal: §262
 8' Gedackt/Quintatön (for continuo:
 §262; on 3rd manual if there is one:
 §266)
 8' "unnecessary stop:" §267, 232-3
 4' Oktave: §262
 4' "unnecessary stop"
 [2 2/3' or 1 1/3'] Quinte: §262
 2' Superoktave: §262

Sesquialtera, Terz, Tertian, Rausch-
 pfeife, Mixtur, Scharp, Cymbel
 (choose between: §262; mixtures
 contain 3rds: §233 & 244)

8' Trompete: §264

Mühlhausen 1708 (Mmo I, p. 260-1)

Ober-und Hauptwerk
(middle manual)

16' Quintatön
 8' Principal
 8' Violdigamba*
 4' Oktave
 4' Gedackt
 2 2/3' Quinte
 2' Oktave

Sesquialtera 2 fach

Mixtur 4 fach
 Cymbel 2 fach
 16' Fagott, C-c^[1]*

*at J.S. Bach's request

Naumburg 1746 (Mmo I, p. 263-4)

Hauptwerk

16' Principal
 16' Quintatön

8' Oktave
 8' Gedackt

8' Spitzflöte
 4' Oktave
 4' Spitzflöte
 2 2/3' Quinte
 2' Oktave
 2' Weitpfeife
 Sesquialtera 3 fach
 Cornet 4 fach
 Mixtur 6,7,8 fach

16' Bombart
 8' Trompete

Pedal

Adlung - Mmo

32' Subbaß or Principal (§268; former
 is preferred)
 16' Violonbaß or Principalbaß, or both
 (§264)
 16' Subbaß: §268
 8' Oktave: §263, §268
 4' Oktave: §264
 2' or 1' Bauernflöte: §268 (a very small
 Gedackt or Rohrflöte: §121)
 (there is no need for any brilliant
 stops in the pedal; may be coupled
 from manual: §268)
 32' Posaune: §268
 16' or 8' Posaunbaß: §264
 16' or 8' Trompete: §268 (cf. also
 §270-1)
 [4' or 2'] Cornet: §228 (cf. also §132)

Mühlhausen

32' Untersatz
 16' Principal
 16' Subbaß
 8' Oktave
 4' Oktave
 1' Rohrflötenbaß
 Mixtur 4 fach
 16' Posaune
 8' Trompete
 2' Cornetbaß

Naumburg (1746)

16' Principalbaß
 16' Violonbaß
 16' Subbaß
 8' Oktave
 8' Violon
 4' Oktave
 2' Nachthorn
 Mixtur 7 fach
 32' Posaunebaß
 16' Posaunbaß
 8' Trompete
 4' Clarino

Second Manual

Adlung - Mmo

(Should be less loud than Hw: §266)

[8' Gedackt or]

8' Principal (particularly useful for playing continuo bass: §266)

8' "unnecessary stop": §267; 232-3

4' Principal: §264

4' "unnecessary stop"

2' Oktave

2' "unnecessary stop"

Mixtur or Scharff: §264

(omit reed stops: §261)

Mühlhausen

Rückpositiv
(bottom manual)

8' Gedackt

8' Quintatön

4' Principal

4' Salicional

2' Oktave

2' Spitzflöte

[1 1/3'?] Quintflöte

Sesquialtera

Cymbel 3 fach

Naumburg

Oberwerk

16' Bordun

8' Principal

8' Hohlflöte

8' Unda Maris (a-c³)

4' Prästant

4' Gemshorn

3' Quinte

2' Oktave

2' Waldflöte

1 1/3' Quinte

1 1/5' [sic] Terz

1' Siffflöte

Scharf 5 fach

8' Vox humana

Third Manual

Adlung - Mmo

§272 presumes that the 3rd manual, if present, will also have a plenum; §266 assigns the stopped flute for continuo realization (either Gedackt or Quintatön: §263) to the 3rd manual.

§267 leaves the choice of "unnecessary stops" to the reader; §232-3 suggest there may be more than one of them.

§261 advises omitting reeds, since they cannot so easily be used in concerted music, *i. e.*, for continuo.

Mühlhausen

Burstwerk
(top manual)

8' Stillgedackt*

4' Flöte

2' Principal*

1 1/3' Quinte (Bach's memorandum requests a 3' Quinte)

1 3/5' Terz*

Mixtur 3 fach*

8' Schallmeyer*

Naumburg

Rückpositive

8' Principal

8' Quintatön

8' Violdigamba

8' Rohrflöte

4' Prästant

4' Fugara

4' Rohrflöte

3' Nasat

2' Oktave

Rauschpfeife

Cymbel 5 fach

16' Fagott

(*cf.* Mühlhausen Hauptwerk)

*at J.S. Bach's request

The details of organ design and construction conveyed in the *Mmo* must surely have been familiar to Bach. He could hardly have taken exception to most of them, since generally speaking, the practices they represent were universal throughout Germany at the time. Yet there are a number of precepts Adlung advances that are at odds with today's stereotypical notion of the "Bach organ" as reflected in contemporary recordings and new "historically-informed" instruments. With the wisdom of hindsight we can see that for Adlung's time all of them are progressive ideas; here, of course, we begin to deal both with regional differences as well as with the conflict between older, 17th-century organ patterns and more forward-looking 18th-century practices that prefigure the romantic organ ideal. In two cases already mentioned, namely manual reed stops and the Rückpositiv, Agricola's (and presumably J.S. Bach's) conservative traits are a matter of record. But does Agricola's silence in the other cases now to be explored mean that he (and Bach) agree with Adlung? We will probably never know the answer to that question with any certainty, but we ought to take seriously the possibility of an affirmative answer to it.

1. Adlung's discussion of temperament in the *Mmo* (in Chap. 14--mostly derivative) is long and abstruse, and its finer points need not concern us here. Adlung's opinion on the subject, though, is evident: "...it is a major fault for an organ not to be properly tempered and tuned." (§ 391) Since Bach himself made no pronouncement on the subject, most of today's organbuilders and theorists seem to accept either Werkmeister's or Kirnberger's scheme of well-temperament as the one that best fulfills Bach's intentions. It is worth noting, however, that Adlung advises "...one should have no patience with anyone who wants to tune some keys purer than others; rather all the keys should be tempered equally, both for the sake of transposition and so that other keys should not turn out to be unusable." (§ 409) It is clear from his discussion of Werkmeister's schemes in § 400 that Adlung knows the difference between well- and equal-temperament, and it is the latter he is promoting.

2. The best way to construct an organ according to Adlung is to require the builder to leave plenty of space around the pipes: "...the more he spreads [the organ] out, the better. Several organbuilders have the habit of crowding everything in the structure so close together that it is completely inaccessible. This is of course to their advantage, since they do not need to use so much material to build it. But it is a defect, and also inconvenient, since everything is inaccessible. One ought to be able to get around all the chests with ease." (§ 247; see also § 333, 339 and 347). It is evident that Adlung either does not understand or does not appreciate the sound-reflecting quality of a solid case: "On top of the organ case there is built at times a roof of boards, or a stretched-out cloth, to prevent filth from falling into the pipes" (§ 31). By "case" Adlung plainly means here (and elsewhere in the *Mmo*) primarily the facade of

display pipes, not a sound-reflecting enclosure.

Instructions in the *Mmo* about organ registration have nothing directly to do with organ design, of course, but they do reveal attitudes that supplement our fragmentary understanding of design and construction. In each of the following instances, of course, it is necessary to reflect on what Bach might have thought about the matter.

3. Adlung's prescription for the plenum (§ 231, 233 and 234) is well-known. It may include all the flue registers in the manuals (with the exception of the *Unda maris*, which is "drawn [with] the Principal of the same size and nothing else" § 229), including all mutations and compound stops. There must be both stops that provide intensity and stops that produce gravity. If greater volume is desired, then manuals may be coupled. Providing the organ has enough wind, all of the lowest stops in the pedal may be drawn, as well as the pedal reeds.

4. The approach to registration that Adlung follows is characterized by experimentation rather than by adherence to rules, especially as regards registration other than the plenum: "One ought to use first this, then that [stop], first this combination, then that. This all depends, though, on one's [sense of] hearing—one must register according to one's fancy. Accordingly one should sometimes go into the church alone and try out this and that ...I have lived at various places over a period of years, and can indeed assert that in all those years I never exhausted all the registration possibilities, not even once." (§ 228)

5. There is a lengthy defense of drawing more than one stop at the same pitch on the same manual (§ 232 and 233). Adlung begins by noting Niedt's and Werkmeister's objection to this practice, and then proceeds to demolish it: "...if the wind pressure is steady enough and the bellows are large and well made, I see no reason to abide by this rule [i.e., drawing only one stop at each pitch level], and draw such stops of the same pitch together without a second thought." (§ 232)

6. Adlung criticizes gapped registrations as sounding disagreeable: "The octave-sounding stops must not be too far distant [in pitch] from these stops [i.e., fifth-sounding ranks]; e.g., the Sesquialtera (if the Oktave 4' does not stand [with it] on the toeboard) sounds far worse if an 8' is drawn instead of a 4'. For the 8' sounds C, the Sesquialtera with the Quinte 3' sounds g, a twelfth removed from the 8', and the Terz is even higher, 17 notes removed from C. The great gap between the two stops is rather disagreeable, and the Quinte is less well absorbed by it [i.e., the 8'] ...Even the octave-sounding stops do not sound well if they are too far removed from each other; e.g. 16' and 2', or [16' and] 1'." (§ 218) On the other hand, Adlung considers that mutations closer to the fundamental pitch sound quite acceptable: "...I have heard the Principal 8', Bordun 16' and Rohrflöt 8' together with the Quinte 6', [a combination] that sounded well in the upper register; but in the bass the Quinte was much too unpleasant to listen to." (§ 216)

The notion that the Gottfried Silbermann organ type is the ideal "Bach organ" was widely accepted for many years; in more recent times, however, a number of scholars have come to consider this notion a fundamental error.³ Agricola himself provides evidence against it in several of his notes to the *Mmo*: "True connoisseurs of the organ find nothing to fault in his [i.e., Silbermann's] organs except: the all-too-uniform stoplist[s], which originated only out of an exaggerated reluctance to attempt stops that he was not absolutely sure of, so that nothing would turn out badly for him; also the all-too-peculiar temperament; and finally the all-too-weak mixtures and cymbels, due to which his instruments, especially those in large churches, do not have an amply brilliant and penetrating character—three things he could very easily have altered. On the other hand, connoisseurs admire: the excellent neatness, quality and durability of the materials as well as the workmanship; the great simplicity of the interior layout; the uncommonly magnificent and full voicing; and the exceedingly light and easily playable keyboards." (§ 287) "...a 32' Posaune, and even more a Principal of that size, is of course one of the great masterful accomplishments of an organbuilder. The deceased Gottfried Silbermann was far too timid ever to dare to build one of these two stops" (p. 290).

If the Silbermann organ is not the ideal, then what organ is? This question is not easy to answer, and there is surely more than one organ type and one organbuilder that might qualify. If there is one organ that perhaps comes closest, however, it would be the instrument Zacharias Hildebrand built from 1743-46 for the Wenzelskirche at Naumburg. Bach and Silbermann examined this instrument in 1746; their report approving it is preserved in the town records. J.S. Bach maintained friendly relations with Hildebrand from at least 1723, when he examined Hildebrand's opus 1 at Störmthal, and some scholars, notably Ulrich Dähnert, hold that Bach may have had a hand in designing the instrument.⁴ The significance of the Naumburg organ becomes clearer, however, when it is compared to Adlung's stoplist. Again, correspondences greatly outweigh discrepancies, and thus it is the latter that are the more instructive:

1. The organ has a Rückpositiv: is it the secondary or tertiary manual? Is it a foil to the Hauptwerk?⁵ Is its presence to be explained entirely by Hildebrand's being required to use the existing Thaysner case?

2. There are more manual reeds than Adlung might have recommended, including a 16' Fagott (of the Dulzian type) on the Rückpositiv that, like the one on the Hauptwerk at Mühlhausen, would sound "very fine in concerted music."

3. The pedal contains a 7-rank Mixtur, but no 32' flue stop (perhaps due to space limitations?).

4. The 16' stopped flute in the Hauptwerk is a Quintatön, not a Bourdon (but the Oberwerk holds a 16' Bordun).

5. The organ is in a case, and thus seems to be built quite compactly, not spread out, as Adlung would have it. Are these features entirely a consequence of Hildebrand's being required to use the existing case?

In spite of obvious disagreements with certain features of the Naumburg organ, however, Adlung had great respect for the instrument: "The present organ at St. Wenceslas in Naumburg, as it has been completely rebuilt by...Mr. Zacharias Hildebrand, has 52 stops...It is a successful instrument, whose lovely tone can scarcely be equaled." (*Mmo* I, § 310) Agricola likewise has nothing but praise for this organ (*Mmo* I, § 324, note). One of its most unusual features is the 8' Unda Maris on the Oberwerk. Adlung (*Mmo* I, § 173) quotes Boxberg⁶ in saying that it should be used only with the 8' Principal, against which it is tuned slightly sharp. In § 266 Adlung speaks of the value of having an 8' Principal on the second manual: "When it has a Principal 8', then [that stop] is of good use in concerted music [i.e., continuo], since the organist may play a prelude on the [Haupt]werk [i.e., presumably on the plenum]; then he may play the bass line on the second manual, while playing the chords on the third, where the *Musircirgedackt* is located." The 16' Fagott at Naumburg, the stop presumably drawn (with the 8' Principal?) for the continuo bass line, is in the Rückpositiv. The 8' Hohlflöte might seem a bit heavy for continuo realization, but perhaps there is another solution to the problem: Adlung, again quoting Boxberg on the Unda Maris (§ 173), says: "When it is played as a continuo [beym Generalbasse] above a gentle pedal registration, it is hardly noticeable that it is tuned somewhat sharp, since the undulating effect is perceived more in chords if it is drawn with the Principal." Does this mean the continuo realization may be played on the Unda Maris alone? or on it together with the 8' Principal?

Finally, there is one more body of information that Adlung has preserved for us that may, in the long run, be of greater value in understanding Bach's organ music than anything mentioned thus far. Chapter 26 gives rather detailed instructions for the building of clavichords together with matching pedal instruments. We have long known that Bach, just as all his 17th- and 18th-century organ colleagues, practiced not on the organ, but on the pedal clavichord. In spite of this, however, the number of small practice organs in modern conservatories and schools of music is legion, while there are relatively few pedal clavichords. If we want our students to penetrate the secrets of Bach's performing art, should we not encourage them to form their techniques, not on the organ, but on the pedal clavichord? □



Notes

¹Hans T. David and Arthur Mendel, *The Bach Reader* (Revised edition; New York: W.W. Norton, 1966), 58-60. The "Project for Repairs" referred to above was attached to the "Proceedings of St. Blasius Church's Parish Meeting" of February, 1708.

²David and Mendel, *Bach Reader*, 223.

³E.g., Ulrich Dähnert, "Johann Sebastian Bach's Ideal Organ," *Organ Yearbook* (1970): 23f.; Winfried Schrammek, "Versuch über Johann Sebastian Bachs Vorstellung von Orgelbau, Orgeldisposition and Orgelregistrierung," *Bach-Studien 7: J.S. Bach und die Aufklärung* (Leipzig: VEB Breitkopf u. Härtel, 1982), 201ff.

⁴Dähnert, "Bach's Ideal Organ," 27f.

⁵Since the character of this instrument has been fundamentally altered by later repair and rebuilding, answers to questions such as these must await a sympathetic rebuilding of this instrument by a committed restorer.

⁶Christian Ludwig Boxberg (or Boxbergen), *Ausführliche Beschreibung der grossen neuen Orgel in der Kirchen zu St. Petri und Pauli allhie zu Görlitz* (Görlitz, 1704).

IN BRIEF

Lucas van Dijck and Ton Koopman. *Het klavecimbel in de Nederlandse kunst tot 1800/The Harpsichord in Dutch Art before 1800.* Zutphen: De Walburg Pers BV, 1987. Unpaginated: 266 plates, introductory essays in Dutch and English.

Students of the awkwardly-named "historical" keyboard instruments have as one benefit of their stock in trade a felicitous if rather vague proximity with the past. Though we most often play *modern* replicas of old instruments, we profess to do so with our mind's ear attuned to the sounds and practices of a time when the notes were still new. If we are fortunate enough to own or have access to a fine "old" instrument, we might also delight in what organologist Emanuel Winternitz calls "that strange object, the tool of music...serving an art and often itself a work of art, pleasing the eye as well as the ear."

Another link to the past is especially inviting, though often less accessible: the works of art which depict instruments and their players. As Winternitz observes (*Musical Instruments and their Symbolism in Western Art*; New York, 1967), such representations have much to tell us: the habits and methods of performers, the placement and participation of listeners, the performing environment, the symbolic associations of a particular instrument, and the social status of musicians, to name a few. There is also a certain (romantic?) allure to these images, for they remind

us of what we can easily overlook in our current scholarly pre-occupations. The museum-pieces of today were the household furnishings of a former time; and music-making was, above all, a domestic activity. In dozens of paintings entitled "Musical company" or "Family portrait" the harpsichord or virginal occupies a central position. The comparison with our photographic performance practice today regarding "family portraits" is not a happy one. Hence the value and attraction of *The Harpsichord in Dutch Art before 1800*, a paperback volume of some 160 pages containing 266 illustrations (black and white) along with a brief introduction by Lucas van Dijck on the art works themselves and a longer essay by the Dutch keyboardist, conductor, and scholar Ton Koopman on the instruments and players depicted.

Plates are generally two to a page. Therein lies my only reservation: frequently busy scenes of music-making rich in potential symbolism and detail are simply too small to apprehend fully. In a footnote to his introductory remarks, Van Dijck defends his decision to show complete pictures, arguing that "the context is as important as the instrument itself." In a tart aside, he also comments on the prohibitive cost of copyright payments demanded by some museums, preventing the inclusion of certain items. One can infer that production costs also impelled the sad decision to reproduce two to a page, and in black and white.

In his dry but informative essay, Koopman offers a wealth of technical information on the instruments and their makers. (I especially enjoyed the footnote listing the Latin mottoes on the instruments, since they are entirely unreadable in the reproductions.) He saves his two most enticing observations for last. In more than half the prints, the players are sitting at their instruments (often despite fallboards hinged at the front). Players, he concludes, sat to play, at least in the Netherlands. His other observation is just as obvious and even more telling: about 90% of the keyboard players pictured are women and girls. Were keyboards a strictly feminine domain? □

—Gregory Hayes

—Contributors—

Quentin Faulkner, professor of organ and music history at the University of Nebraska-Lincoln, is the author of *J.S. Bach's Keyboard Technique: A Historical Introduction*. He is presently preparing an annotated translation of Jacob Adlung's *Musica mechanica organoedi*.

Gregory Hayes performs often as harpsichordist and pianist in Western Massachusetts and New England, and is the author of numerous reviews and articles.

MINIMS

● *The Organ in Music History*, a conference on the organ, its repertory, and its cultural context throughout history, will be presented by the Music Department of the University of California, Berkeley, on the Berkeley campus, November 11-13, 1990. Organ recitals by Jacques van Oortmerssen, Gillian Weir, and Westfield Center members **Robert Parkins** and **William Peterson** will focus attention on the university's remarkable collection of organs (by Ahrend, Harrold, Holtkamp, and others). Preethi de Silva and Peter Williams will present harpsichord recitals. **Lawrence Archbold, Robert Bates, John Brombaugh, John Butt, Fenner Douglass, Lynn Edwards, Gregory Harrold, Calvert Johnson, Cleveland Johnson, Hugh Maclean, Kimberly Marshall, Lawrence Moe, Anthony Newcomb, Robert Parkins, Kerala Snyder, George Stauffer, Russell Stinson, John Thow, and Jacques van Oortmerssen** will present papers. For further information and registrations forms, contact John Butt, Music Department, University of California, Berkeley, CA 94720.

● The University of Nebraska-Lincoln has announced its fourteenth annual organ conference, *Franck and the Organ*, with Kurt Lueders and Rollin Smith, to take place October 4-6, 1990, at the University of Nebraska-Lincoln, Lincoln, Nebraska. Marking the centennial of César Franck's death, this conference will explore questions relating to Franck's compositional style and performance practices of his works, from the perspective both of the Franck primary source material, as well as the milieu in which Franck lived and worked. For more information and registration forms, contact **George Ritchie**, School of Music, University of Nebraska-Lincoln, Lincoln, NE 68588-0100.

● Summer Harpsichord Master Classes are being offered by Larry Palmer and Wm. Neil Roberts (July 22-July 28, 1990) and Larry Palmer and **Susan Ferré** (July 29-August 4, 1990) at Fort Burgwin, Southern Methodist University's picturesque campus near Taos, New Mexico. Designed for educators, professionals, and students, four hours of masterclasses will be taught daily. Repertoire will include J. S. Bach's "Goldberg" variations; J. S. Bach's sonatas for flute and harpsichord and sonatas for viola da gamba and harpsichord; François Couperin's *Pieces de Clavecin*, Book II; music of Jacques Duphy; as well as 20th-century literature (Ligeti, Ohana, Martinu, Bartok, Lou Harrison, Zwilich) and continuo studies. College credit available. For information, write the Meadows School of the Arts, Southern Methodist University, Dallas, TX 75275, or call 214-692-2880.

● Wilfrid Laurier University's *Baroque and Classical Music Workshop* will be offered July 8-20, 1990, at Wilfrid Laurier University, Waterloo, Ontario, Canada. Designed especially for voice, strings, harpsichord, fortepiano, oboe,

flute, and recorder, the workshop will also include Baroque dance. Faculty include Elaine Biagi Turner (Baroque dance), Jean Lamon (violin), Christina Mahler (violoncello), Victor Martens (choir), **Boyd McDonald** (fortepiano), Susan Prior (recorder), Michael Purves-Smith (Baroque oboe), Colin Tilney (harpsichord), and Nancy Zylstra (voice). For more information, write Baroque Workshop, Faculty of Music, Wilfrid Laurier University, 75 University Avenue West, Waterloo, Ontario, Canada N2L 3C5, or phone 519-884-1970, ext. 2631.

● The Southeastern Historical Keyboard Society is pleased to announce its Third International Harpsichord Competition, to be held April 4-6, 1991, in Winston-Salem, North Carolina. The competition is open to harpsichordists of any nationality who are under the age of 33 at the time of the competition. Tapes for the preliminary screening are due October 3, 1990. Prizes will total more than \$6,000. For further information and application forms, write SEHKS Harpsichord Competition, School of Music R-71, Florida State University, Tallahassee, FL 32306-2098.

● **Robert Cornell, Lynn Edwards, and Quentin Faulkner** presented a session on "The Bach Organ in Thuringia" at the recent meeting of the American Bach Society, held at the Riemenschneider Bach Institute, Berea, Ohio, April 20-22, 1990. Their comments reflected observations made and research conducted on the September, 1989 Westfield Center trip to organs in Thuringia and Saxony. Quentin Faulkner's paper, "Jacob Adlung's *Musica mechanica organoedi* and the 'Bach Organ'" is published in this issue of the Newsletter.

● The Sequentia Ensemble will conduct a special course on medieval music at the University of Vermont, June 25-July 5, 1990. Musical theory and practice of medieval traditions from the 12th and 13th centuries will be studied in depth. Practical work will focus on medieval notation, versification, song, and song accompaniment, with special emphasis on the Troubadour repertoire, vowel tuning, and other vocal technique work for soloists and ensembles. Call University of Vermont Continuing Education at 802-656-2085 for further information.

● **Gene Bedient** and Jesse Eschbach will conduct the fifth annual *Summer Institute for French Organ Studies* from July 16-27, in Souvigny and Lyon. Enrollment is limited to five students who will work with only two unaltered French instruments—the 1783 organ of François-Henri Clicquot (Souvigny) and the 1880 organ of Aristide Cavaillé-Coll (Lyon). For information, please write to SIFOS, 4221 N.W. 37th Street, Lincoln, Nebraska 68524, or call 402-470-3675.

● **Margaret Irwin-Brandon** has announced the 1990 Spring tour to *Organs of Italy*, to take place June 3-12, visiting, among others, organs in Rome, Florence, Amelia, Siena, Arezzo, and Pistoia. For information and to be put on the mailing list for announcements of future tours, write Organs of Italy Tours, P.O. Box 387, Northampton, MA 01061, or call 413-268-7560.

● The 1990 catalogue of McGill Records includes two compact discs of music of Buxtehude: *Buxtehude Christmas Concert*, winner of the *Noah Greenberg Award* for Early Music, includes cantatas performed by the McGill Chamber Singers and Collegium Musicum, directed by Fred Stoltzfus, and organ chorale preludes performed by **John Grew**, organist; *Dieterich Buxtehude: Alto Cantatas & Sonatas*, is performed by Allan Fast, alto soloist, and the McGill Collegium Musicum directed by Mary Cyr. Other McGill early music releases include J.S. Bach's sonatas for viola da gamba and harpsichord, with Mary Cyr (viola da gamba) and **John Grew** (harpsichord); *Buxtehude: Cantatas for Lent and Easter*, again with the Chamber Singers and the Collegium Musicum directed by Fred Stoltzfus; and *Loves Pashion and other Ayres for Lyra Violl*, performed by Mary Cyr. For a complete catalogue, write McGill Records, 555 Sherbrooke W., Montreal, Quebec, Canada H3A 1E3, or call 514-398-4537.

● Gasparo Records has released "The Art of the Lautenwerk", with works of Weiss, Dowland, J.S. Bach, Duphy, and Scarlatti performed by Kim Heindel, university organist at Lehigh University in Bethlehem, Pennsylvania. The Lautenwerk, or "lute-harpsichord", is a keyboard instrument that is strung with gut rather than wire. Accord-

ing to liner notes provided by **Willard Martin**, the Lautenwerk existed as early as 1511 (it was described by Virdung), and was popular as both a solo and continuo instrument well into the eighteenth century. The hybrid concept of the instrument derived from the beautiful tone of the gut-strung lute and the facility of the keyboard. J.S. Bach apparently thought highly of the instrument and owned several of them, including one made to his specification by Zacharias Hildebrandt in 1740.

The Lautenwerk used in the recording was reconstructed by Martin Harpsichords (Bethlehem, Pennsylvania). The concept for the design is based primarily on the technical description of a Lautenwerk given by Johann Christoph Fleischer in 1719; Fleischer's design was similar to the Bach-Hildebrandt design and to the descriptions found in Adlung. The instrument has one manual (FF,GG,AA-d³), a transposing keyboard (allowing four different pitches), two 8' choirs of gut strings, and one 4' set of brass strings. One of the 8' registers has light dampers; the other two choirs are completely free (as are strings of any member of the lute family). The plucking mechanism is that of a normal harpsichord.

● **Umberto Pineschi**, **Margaret Irwin-Brandon**, and **Gwendolyn Toth** are the faculty for the *Academy of Italian Organ Music*, to take place at Mount Holyoke College, South Hadley, Massachusetts, August 16-18, 1990. The repertoire to be studied on the Italian-inspired C.B. Fisk organ in Abbey Chapel includes music of Gabrieli, Cavazzoni, Frescobaldi, Storace, Walther, and Ghirardeschi. For information, call 212-873-0473.