

# The Sound of the South German Organ

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## Overview: Sounds from South Germany

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### 1. The beginnings of a new sound defined by 8' colour stops: the 1672 Vest organ in Hermannstadt (Sibiu), Transylvania, and the 1673 Mundt organ in the Týn Church in Prague.

From about 1670 – before composers Johann Pachelbel, Georg Muffat, and Arcangelo Corelli had yet turned 20<sup>1</sup> – we can observe a new style of organ sound emerging in southern Europe. Its most distinctive characteristic was the use of the so-called *Unterscheidlichen*, a variety of 8' colour stops placed on the same manual, usually the Hauptwerk.<sup>2</sup> The 1672 Vest organ in Hermannstadt, today Sibiu in Romania,<sup>3</sup> and the 1673 Mundt organ in the Týn Church in Prague<sup>4</sup> each have five 8' stops in the Hauptwerk. We see the same in the 1685 specification by

<sup>1</sup> Georg Muffat (1653–1704), Johann Pachelbel (1653–1706), Arcangelo Corelli (1653–1713).

<sup>2</sup> In the two-manual organ by Jan Leopold Burkhard (1673–1741) in the Kladruby monastery (Bohemia) from 1726, the Hauptwerk (called Manual) is restricted to the principal plenum. The 8' colour stops have been relocated to the Positiv, which is played from the upper manual. They include a Copula 8', Quintaton 8', Gamba 8', Salicional 8', and Flauta 8'.

<sup>3</sup> Johannes Vest (1630–94). The five 8' stops on the Hauptwerk include a Salicional and a Flauta dulcis; the Positiv has a Flauta amabile 4'.

<sup>4</sup> Heinrich Mundt (1632–91).

Jost Schleich for Amorbach.<sup>5</sup> All are evidence of a new set of priorities emerging. Its keenest expression is perhaps in Mundt's concept for his organ in Prague. There, despite the large Gothic church interior, Mundt eschewed powerful reeds in the Manual, preferring instead delicate colour stops such as the Flauto amabile, the Salicional, and the Quintatön.

Each of these delicate stops has a distinct character and a unique function that result from its particular structural characteristics and the sound phenomena these produce - varied qualities of speech, overtone production, spatial presence and tonal power. By the beginning of the 18<sup>th</sup> century, these principles are already considered self-evident in many parts of south and central Germany.<sup>6</sup> We can recognize in this development an idea of unique individuality, and at least as far as Protestant regions are concerned, it is quite clearly both an outgrowth and a realization of the Lutheran intellectual heritage.<sup>7</sup>

This generates even more new tonal phenomena: for example, we see right away that any two individual sound colours can form a pair, and that every pair so formed will result in a new, third category of colour and function. Thus, for example, the combination of Gemshorn (Spitzflöte) with a string stop (Viola di Gamba or Salicional) led to the Echoprincipal; the blend of Quintatön and Viola di Gamba approaches very closely the colour of the oboe d'amore; and a blend of flute and string stops anticipates the tonal colour of the clarinet.

If, then, organ specifications from 1670 onwards sometimes included up to five 8' stops on the same manual, this seems like a veritable provocation for organists to exploit the possibility of combining foundational sounds. To do so, however, was to break with an explicit principle of traditional registration: the so-called *Äqualverbot*, which forbade the doubling of registers at the same pitch. This led to another new development, which we can call a principle of shading. Shading, however, means a reduced aural presence, which has two effects. First, the Baroque organ, of all organs, is defined by presence, so that we now are justified in finding within that tradition the precursors of the later aesthetic of *Empfindsamkeit*. Second, the blending of flutes and strings resulted in another new tonal innovation, such that the organs around the turn of

<sup>5</sup> The organ for the Benedictine monastery in Amorbach by Johann Jost Schleich (ca. 1645-1707). The specification is from 1685; the project was realized in 1687. In the Oberwerck (Hauptwerk): Principal 16', Quintathön 16', Octav 8', Spitzflöth 8', Großgedackt 8', Quintathön 8', Viol di Gamb 8', Quint 6', Super Octav 4', Kleingedackt 4', Coppelflöth 4', Quint 3', Klein Octav 2', Cymbel II, Sesquialter II from c<sup>1</sup>, Nassat III, Mixtur VI-V, Posaun 8'. In the Unteren Werck: Flöthen von Holtz 8', Principal in Gesicht 4', Rohrflöth 4', Hohlflöth 4', Quintflöth 3', Octav 2', Sesquialtera II, Mixtur IV. In the Subbass: Register von Holtz offen 32', Register von Holtz 16', Register von Holtz 8', Fagott 16', Posaun 8', Mixtur IV. See Ernst Schmid and Franz Böskens, *Die Orgeln von Amorbach* (Mainz: Schott, 1963), p. 53. Cf. Christoph Bossert, 'Die Singularität des süddeutschen Klangprinzips innerhalb der europäischen Klangstile nach 1670 als Wurzel der romantischen Orgel', *Acta Organologica* 32 (2011): pp. 35-50.

<sup>6</sup> In central Germany it was especially Gottfried Silbermann who pursued a different ideal, as he had received his training primarily from his brother Andreas in Strasbourg, who in turn had studied the classical French style in Paris.

<sup>7</sup> To date there have been no detailed studies of this subject. We can assume, however, that the emphasis on 8' colour stops had multiple foundations, since Heinrich Mundt, for example, came to Prague from Catholic Cologne, while Johannes Vest worked in Lutheran Transylvania. In Thuringia, Lutheran and Catholic traditions co-existed peaceably in places such as Erfurt. This is clear, for example, if we look at the Predigerkirche where Pachelbel and, later, his student Johann Heinrich Buttstedt worked, which was a *Simultankirche*, a shared church. In the Protestant parts of Thuringia, it seems likely the question of individuality was grounded in the Lutheran tradition. Via the Bach circle and other persons with roots in Thuringia - helped, importantly, by specific instruments such as the Wiegleb organ in Ansbach - the artistic emphasis on individuality radiated out into the south German cultural sphere and reshaped the seventy-year-old paradigm represented by the use of colour stops into a new paradigm built on the notion of humans as individuals. Cf. Christoph Reinhold Morath and Hans Reil, 'Die Wiegleb-Orgel: Konzept und Rekonstruktion', in *Festschrift zur Einweihung der rekonstruierten Orgel von Johann Christoph Wiegleb*, ed. Egert Pöhlmann (Ansbach, 2007), pp. 29-65, especially 38-41.

the 18<sup>th</sup> century make available a sound colour that would not reach the public ear as an independent instrument until 1713,<sup>8</sup> and would not establish itself in musical life more generally until after 1750: namely, the sound colour of the clarinet.<sup>9</sup>

If we consider that at this time – when the clarinet colour had been available by blending flutes and strings since 1670 – organists, composers and music directors were frequently one and the same person, we are bound to conclude that the organ provided an experimental space that led to new experiences; a space in which new kinds of sounds could arise, which, importantly, laid the groundwork for the new colours offered by the orchestra that was to come. This implies something contrary to what is usually assumed: it was not so much that a taste for the orchestra rubbed off on the organ, but rather that the specific colours of the orchestra could be cultivated in the experimental soil provided by the organ. And this is consistent with the fact that the subsequent tonal innovations represented by the orchestral crescendo and the classical symphonic style emerged and gained ground not in northern Europe but rather in the south, namely in Mannheim and in Vienna.

## 2. Sidelight on Ohrdruf and Arnstadt, and their importance in the life of Johann Sebastian Bach – Ohrdruf, however, was under Hohenlohe rule, but Hohenlohe was a region in south Germany.

In 1703, the young J. S. Bach was called from Weimar to Arnstadt to examine the Wender organ in the church of St. Boniface. The organ, which became Bach's organ until 1707, has 10 stops on the Hauptwerk; six out of the 10 are 8' stops. Five of these are flue stops and the sixth is a Trompete 8'. The Brustpositiv has three different 4' stops. As a result the two manuals stand in a relationship to one another that one could describe as one of *pars major* and *pars minor*, greater and lesser partners.

In the immediate neighbourhood of Arnstadt is Ohrdruf. This was the home of Johann Christoph Bach, who was 17 years older than his brother Johann Sebastian, and had studied with Pachelbel. Beginning in 1695, the young Johann Sebastian lived in his brother's home until deciding to attend school in Lüneburg with his friend Georg Erdmann.

One reason for this decision was probably the rather unsatisfactory school situation in Ohrdruf; in Bach's time and indeed for generations prior, this was the responsibility of the house of Hohenlohe, which had been impoverished by the Thirty Years' War. (For reasons of inheritance, the house of Hohenlohe and the county [Grafenschaft] of Gleichen jointly controlled the area from the early 17<sup>th</sup> century until 1805.)<sup>10</sup> At that time it was correct to say: 'The preceptors in Hohenlohe come from Thuringia'.<sup>11</sup> Conversely, in regions such as Hohenlohe Thuringia provided something akin to development help, to rebuild areas impoverished by the

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<sup>8</sup> The newly invented clarinet, which evolved from the chalumeau, was presented for the first time in 1713 at the *Musikmesse* in Frankfurt am Main.

<sup>9</sup> The first international Max Reger Biennale at Giengen an der Brenz was dedicated to this phenomenon (2006; the author served as artistic director). See also Christoph Bossert, *Die verlorene Spur* (audio book), a portrait of the Walcker organ in Hoffenheim (Baden-Baden: SWR Organum Musikproduktion, 2001).

<sup>10</sup> They maintained possession until the Imperial Recess (Reichdeputationshauptschluss) of 1803, after which the Franconian areas of the Principality of Hohenlohe, along with the region of Upper Swabia, were transferred to the house of Württemberg, as an expression of thanks (or spoils of war) for their military alliance with Napoleon.

<sup>11</sup> See Rosemarie Volz, 'Johann Adam Ehrlich (1703–84) und Sohn Johann Anton Ehrlich (1742–1824) – zwei kunsterfahrene Orgel- und Instrumentenmacher', in *Württembergisch Franken: Jahrbuch des historischen Vereins für Württembergisch Franken* 79 (1995): pp. 181–222.

war. Thus it is no surprise that not only schoolmasters and cantors but also organ builders of rank migrated from Thuringia to the Franconian Hohenlohe territories.<sup>12</sup>

Why is this interesting? If we can let ourselves be guided by the character of organ stoplists, the aspect of a new cultural identity appears significant, specifically the need for a more individualized sound. Southern and central Germany are clearly forerunners in this area. For another thing, it involves the question of the influence of the Bach family in southern Germany. This influence comes above all through the descendants of Johann Christoph Bach of Ohrdruf, where we can name five members of the Bach family from that time until the 19<sup>th</sup> century. It was the connection between the south Thuringian county of Gleichen and the Hohenlohe lands that brought Johann Heinrich Bach (1707–83), in particular, to Hohenlohe; who, after the death of his father Johann Christoph in 1721, grew up in the household of Johann Sebastian Bach and became an important copyist. From 1735 until his death, Johann Heinrich was cantor at the Stiftskirche in Öhringen.

In 1732, Wiegleb had built an organ there, with 26 stops on two manuals and pedal. An allegorical description of the organ in the form of a riddle has also been preserved from the pen of Johann Heinrich.<sup>13</sup> Possibly we can trace the line of a Bach reception in the Hohenlohe and Württemberg lands running through Johann Heinrich; it would include Christian Friedrich Daniel Schubart (1739–91), also born in Hohenlohe, a prominent organist and improviser of the period of Sturm und Drang. In his *Ideen zu einer Ästhetik der Tonkunst*, Schubart shows himself to have possessed deep knowledge about musical life throughout Germany, and, although he himself was emphatically a musician of the Sturm und Drang as well as an advocate of freedom, Bach and Händel were indisputably his most important role models.<sup>14</sup>

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<sup>12</sup> The organ builder Johann Christian Dauphin, a student of Johann Friedrich Wender, set up his shop in Kleinheubach in Mainfranken in 1710. Bach's Wender organ in Arnstadt was finished in 1703. Dauphin thus likely worked on the instrument himself. Johann Christoph Wiegleb, a native of Erfurt, relocated with his workshop to Wilhermsdorf near Ansbach in 1711. His teachers were Johann Georg Fincke in Saalfeld in Thuringia and Adam Ernst Reichard, who had moved to Nürnberg from Thuringia. In 1739, Wiegleb built the 47-stop organ, his largest, for the Hofkirche of St. Gumbertus in Ansbach. Several members of the Bach family were active in Hohenlohe. Of particular note is Johann Heinrich Bach, as he was a part of the Leipzig household from 1723, following the death of Johann Christoph in Ohrdruf. Johann Heinrich's brother, Johann Andreas (1713–99) worked at the Hohenlohe residences in Weikersheim and Langenburg. Johann Wendelin Glaser (1713–83) came from the Thuringian exclave of Ostheim vor der Rhön and was active first in Weikersheim and Langenburg, then until his death in Wertheim am Main. His surviving compositions include annual cycles of cantatas (about 300 cantatas in all) and an important Passion setting.

<sup>13</sup> The Wiegleb organ was built only a few years before he assumed the post. The original text of the riddle, together with an English translation, is found in the Appendix to this article.

<sup>14</sup> Christian Friedrich Daniel Schubart was born in Obersontheim near Schwäbisch Hall. Like Schiller, he criticized the authoritarian power relationships of his day; for this, he had to serve a 10-year prison term (1777–87) at Hohenasperg near Ludwigsburg. During this period Schubart wrote his *Ideen zu einer Ästhetik der Tonkunst*, published posthumously in 1806 (Vienna: J. V. Degen). Although he owed his allegiance as a musician to the Sturm und Drang movement and the aesthetics of the Bach sons, Schubart never wearies of naming Johann Sebastian Bach and Georg Friedrich Händel as Germany's greatest musicians. Schubart was also a poet; his best known poem is *Die Forelle* (The Trout) – also written during his imprisonment – which was set to music by Franz Schubert in 1817.

### 3. Three South German organ builders:

- Johann Adam Ehrlich: The basic principles of a seven-stop organ
- Martin Baumeister and his organ in the Maihingen Klosterkirche
- Johann Christoph Wiegleb and his large organ in the former Hofkirche in Ansbach (St. Gumbertus)

Two builders competed for the new organ in Öhringen: Johann Christoph Wiegleb and Johann Adam Ehrlich from Wachbach near Mergentheim. The job finally went not to Ehrlich of Hohenlohe, but to Wiegleb, an immigrant from Coburg. If we consider Ehrlich's well-preserved organ in the Protestant Stadtkirche in Bad Wimpfen, however, we see in its sound design characteristics that are all typical also for Thuringia at this time: multiple 8' colour stops, a *pars major-pars minor* relationship between the two manual divisions, tierce mixtures, and a very convincing marriage of *gravitas* and delicacy, *cantabile* and a *concertante* crispness.

The example of a small organ in Adolzhausen, built by Ehrlich in 1742, shows how even in an organ of only six registers he was able to achieve the essence of all of the important sound properties of his much larger organs. The Adolzhausen specification is: Gedackt 8', Quintatön 8', Principal 4', Holzspitzflöte 4', Quinte 1½' with breaks, Mixtur III-II, probably with a third rank 4/5' to f<sup>0</sup> corresponding to the compass of the Pedal.<sup>15</sup>

Characteristics that apply equally to larger organs by Ehrlich:<sup>16</sup>

- a) Colour stops: Prinzipal [4'] for power, strings [Holzspitzflöte 4'] for delicacy, a Quintatön [8'] as an expressive colour and a Gedact [8'] as an accompanying register. All of these can be used as solo stops, including using the 4' stops an octave lower, so six options in all; moreover, each stop can be paired with each other stop (ab, ac, ad, bc, bd, cd), providing six more options.
- b) Two kinds of plenum: The third rank of the Mixtur III-II which colours the bass to great effect, adopts the role of the smallest form of the *Grand jeu* and functions as a surrogate for reed stops; the Quint 1½', in contrast, lightens the bass, giving it brilliance, delineation, and the potential for merging with other sounds, and because of the 2 2/3' break it moves to a broad cantabile in the treble. Thus, due to the different properties of bass and treble created by the Mixtur and the Quint, it is possible to distinguish between four different sound ranges altogether.
- c) This supremely differentiated sound then becomes the benchmark for the differentiation between the ranges in all kinds of stops, but especially the foundation stops.

Almost perfectly preserved in original condition and with a marvellous sound is the organ in the former Klosterkirche at Maihingen, built in 1737 by Martin Baumeister of Donauwörth. Here too we find five 8' stops on the Hauptwerk, including two string stops: a Gamba and a Salecinal. In addition to the obligatory stop for accompaniment, the Copula 8', the Rückpositiv offers a Flauten 8' and an undulating stop, the Cythara. Baumeister included an Octav 4' on the Hauptwerk and a Principal 4' on the Positiv, but no 4' colour stops. The Quint 3' and Gembshorn 2' on the Rückpositiv both have a delicate character. The Hauptwerk has two tierce

<sup>15</sup> The Pedal probably originally was not an independent division but only a pull-down. See Robert Kopf, 'Der Orgelbauer Johann Adam Ehrlich', Diplomarbeit, Musikhochschule Trossingen, 2006.

<sup>16</sup> Christoph Bossert, 'Der Klangstil des Orgelbauers Johann Adam Ehrlich im Kontext des spätbarocken Orgelbaus in Süd- und Mitteldeutschland', *Musik in Baden-Württemberg* 10 (2003): pp. 249-62.

mixtures, which because of their polychoral breadth on the one hand, and two-voiced leanness on the other, can be deployed in the plenum and as a solo stop, respectively. A solo in the tenor, in particular, has a powerful effect. A plenum without a third rank is only possible by using the Mixtur on the Rückpositiv; thus, a grand plenum without the third can only be achieved by coupling the manuals. The Pedal goes up to  $a^0$  and, like the manuals, has split sharps sounding D/F-sharp and E/G-sharp. The Pedal has no reeds. Among the four Pedal stops, the Quinte 6' can be used to develop an effect of substantial gravitas.

The inclusion of the Quint 6' in the Pedal led seamlessly to the type of Violonbass 16' stop later used by Walcker and his school, where the Violonbass was realized by using two pipes of 8' and 6' lengths glued together. Wender and Dauphin did something similar, though on the Hauptwerk, with a Quint 6' and no 16' foot stop.<sup>17</sup> This insight can indeed be exploited to such an extent that, for instance, Ehrlich has one of his mixtures break back to  $3\ 1/5'$  at  $c^1$ . This creates a very special effect in homophonic textures, where the real 16' region is taken over by the Pedal; the tenor register sounds like a 16' while remaining very lean. Contributing to the effect is the fact that the Posaune produces a strong third overtone at  $3\ 1/5'$  pitch and thus seamlessly connects to the highest sound; that is, the Mixtur.

Wiegleb's largest organ, in St. Gumbertus in Ansbach, built in 1739, is something different yet again, but still with an eye toward the 8' colour stops, the *pars major*–*pars minor* relationships, the tierce mixtures, and the properties of gravitas, delicacy, cantabile and concertante crispness. The organ is of a size with the Hildebrandt organ in Naumburg, but departs from it in its deployment of 8' colour stops in all three manual divisions. Hildebrandt emphasizes the 8' colours explicitly only on the Rückpositiv. Hildebrandt's concept for the Oberwerk follows an idea of Gottfried Silbermann's, with the same gapless spectrum of partials from 8' to 1' that Silbermann used, also on the Oberwerk. We can understand Hildebrandt's Hauptwerk as balancing horizontal and vertical elements against one another: a variety of 8' stops against the development of the overtone series. Comparing Johann Christoph Wiegleb, from Heldritt bei Coburg, with Hildebrandt, the Silbermann pupil from Silesia, we can conclude with regard to Wiegleb's large organ in St. Gumbertus that the Werkprinzip, with subdivisions Haupt-, Mittel-, and Oberwerk, is certainly still identifiable in the façade, but in terms of the sound design, other considerations take priority. We could almost, if we imagine all the manuals coupled together, think of Wiegleb's organ as a giant one-manual instrument that, thanks to various correspondences of tone colour, can also open out into two or three manuals, each with its own distinguishing characteristics. Within the bounds of the three manuals, however, the Echo can be swelled on its own, thus leading a separate existence, with the effect that on the manuals, divisions in four sizes are now available.

The principle of contrasting divisions now has to be acknowledged as secondary or even dispensable; and this is further evidenced by the swell on the Echo stop. This is a five-rank Mixture from 8' to  $1\ 3/5'$ , non-breaking, with a narrow scaling; on the one hand, it indeed aims at a near-and-far effect; on the other, since it is not built under expression, it is conceivable that it could be used to dynamically shape an ornamented solo voice.<sup>18</sup>

<sup>17</sup> Georg Joseph Vogler (1749–1814), called Abbé Vogler, made this property the foundation of his so-called *Simplifikationssystem*, using Tartini's discovery of combination tones as a point of departure. His purpose was especially to replace expensive, large stops requiring high wind pressure with acoustic stops that made 32' and 16' pitches audible as combination tones.

<sup>18</sup> One reason for this peculiar feature might be the close familial relationship of the house of Brandenburg-Ansbach to the English royal family. In England in the time of Händel, as also much earlier in Spain, swellable solo stops were far from uncommon. See Morath and Reil, 'Die Wiegleb-Orgel'.

#### 4. The Schmahl–Fries–Walcker lineage and the organ in Hoffenheim

Alongside the names of Ehrlich, Baumeister, and Wiegleb stands another equally notable organ building family: the Schmahls, who were active throughout South Germany. The first organ builder in the family was Johann Michael Schmahl (1654–1725) from Kamenz in Saxony, with whom Ehrlich also trained after finishing his education in Würzburg. The Schmahl workshop in Heilbronn was taken over by Simon Fries; Johann Eberhard Walcker (1756–1843) trained with Fries. Johann Eberhard Walcker was the first member of an organ building dynasty that developed worldwide influence in the 19<sup>th</sup> century under his son, Eberhard Friedrich Walcker (1794–1872).

An 1845 organ by Eberhard Friedrich Walcker in Hoffenheim, Baden is preserved completely in its original state. Its sound is quite remarkable. A recent audio book, *Die verlorene Spur*, discusses the quality of universality displayed by this 28-stop organ, and draws comparisons between its sound colours and those of the Ehrlich organ in Bad Wimpfen, built over 100 years earlier.<sup>19</sup> Very briefly, here are some points to note:

- For certain stops like the Viola da Gamba 8' or the Spitzflöte 4', strong similarities are apparent between Bad Wimpfen and Hoffenheim.
- Walcker goes further than the Baroque models in making a distinction between more penetrating strings and markedly softer ones: the Holzharmonika, as an echo of the Gambe, and the Dolce, as an echo of the Salicional, move into pianissimo territory.
- Another notable similarity is the way the two organs apply a principle of sound transfer between stop families: from principals to flutes to strings to reeds. Walcker extends the Prinzipal 8' on Manual II with a Spitzflöte 4' and a Flautino 2'; the effect is a sound that wavers between principal and flute, and a seamless transition to the flutes. In the bass, Walcker makes the Traversflöte sound similar to a Dolce 4', thus enabling a similarly seamless transition from flutes to strings. With sensitive handling of the Windschweller, the Physharmonika can be added seamlessly to the quietest string stop, the Holzharmonika, and when the swell is fully opened it can even transition to the Trompete. The Trompete and the tierce mixture filled out with just a few stops produce a definitely Classical effect of a Grand jeu. Adding more stops gives the full plenum. In the absence of the Trompete, the Mixtur crowns the principal chorus. The Octave 2' on the Hauptwerk is very bright and thus in some measure fills the function of a Cymbel. Finally, the relationship of Prinzipal and Spitzflöte on Manual II brings us full circle. A similar circle of relationships can be described for the Bad Wimpfen organ.
- A further particular point of similarity to Ehrlich's sound concept is the inclusion of a mixture with third ranks as a matter of course. In contrast to the five distinct uncoupled plenum registrations that Ehrlich provides, however, the option for a tierceless plenum is the one part of Walcker's specification that actually appears underdeveloped.
- In contrast to Ehrlich in Bad Wimpfen, Walcker provides manual reed stops, among them the Physharmonika, whose Windschweller gives it dynamic variation. This register makes it possible to achieve the most varied combinations of delicate 16', 8', and 4' colours, with the Holzharmonika as a starting point. Such combinations not only represent contemporary practice in the period around 1850, but also look far ahead to the late Romantic period.

<sup>19</sup> Bossert, *Die verlorene Spur*.

- Moreover, the Walcker organ in Hoffenheim remains true to its Baroque predecessors as regards the inner mobility of its sound. This mobility is made possible by the way that the distinctly delayed speech of especially the string stops, combines with the somewhat quicker speech of stops like the Traversflöte 4'. Because the initial transient phases have different speeds, but also due to the interaction between transient (thus crescendoing) and decaying (decrescendoing) sound processes, the result is an enormously differentiated set of sound events, on a microscopic time scale. The mechanical cone chest allows the organist to actively influence this behaviour, reacting to and layering the sounds. By a judicious handling of the attack that may include everything from small movements of the fingers to the application of the full weight of the arm, the organist can convey every dynamic level to the listener as an immediate physical sensation. In this respect, we can say that an organ of this type fulfills an ideal pursued since the Baroque period: to move the listener, *affectus movere*.

### 5. The late Romantic Link organ in Giengen an der Brenz (1906) still follows Schmahl's scalings

With their 51-stop organ in Giengen an der Brenz from 1906, still very well preserved, the Gebrüder Link created a masterpiece. The instrument extended the principles of the Walcker organ further in two directions. First, we can detect a distinct awareness of musical styles with respect to Baroque genres such as the trio sonata with obbligato pedal all the way to the French *Grand jeu*, drawing on the builders' experiences especially of Upper Swabian Baroque organs of the type built by Gabler, Riepp, and Holzhey, and transforming them into something more universal.<sup>20</sup> Second, in the Giengen organ the character of the Viola da Gamba has evolved into a 'Stentorgambe', the Flauto into a 'Stentorflöte', and the Trompete into a 'Tuba mirabilis', all supported by a massive Prinzipalbass 32' in the Pedal and a Principal 16' on Manual I. We could go so far as to say that only about a dozen out of all the stops contribute to the tutti; all the others follow the south German concept of a plethora of 8' stops and support a rich colour in delicate registrations.

In contrast to Hoffenheim the pneumatic action in Giengen gives the organist no opportunity to shape the speech of the pipes. Still, even on this organ, it seems quite possible to tell the difference between a player with a sophisticated touch and one without. How is that possible?

For one thing, the Gebrüder Link made every effort to differentiate the initial transient phases of the various registers. Aside from this, however, the organist needs to be able to perceive the dynamic development of the tone – for in no case does a pipe ever sound at full strength from the first instant. This can be demonstrated with a simple test: draw one stop, preferably a string stop, and play one note with as short a touch as possible. Then lengthen the touch in very small steps. The loudness of the tone will constantly increase, up to a certain point. An organist can learn how to evaluate the specific potential of each pipe and how to exploit that potential fully. This could entail, for instance, interrupting the developing tone through articulation at a suitable point, in this way creating a varied, dynamically plastic, almost palpable sound, in spite of the pneumatic action. In addition, the dynamic capabilities of the

<sup>20</sup> Joseph Gabler (1700-71), who was trained in Mainz, was influenced solely by south German tonal principles. Karl Joseph Riepp (1710-75), however, though he was born in Ottobeuren in Upper Swabia and worked there later, also worked in both the organ building and the wine trade in Dijon, and thus brought new French sounds to South Germany. Riepp, therefore, but also and especially his pupil Johann Nepomuk Holzhey, are responsible for a new style that synthesized French and German influences. We see a similar style in the work of the Stumm brothers of Hunsrück, which however arose quite independently.



swell can be exploited, along with the addition or subtraction of stops. If the player is able by such methods to purposefully create relationships between the overlapping dynamic levels produced by the transient and decay phases of the tone, the register crescendo, and the swell, and thus to govern the most various sound processes, then the crusade against the pneumatic organ which has dominated much of the 20<sup>th</sup> century would seem rather unreasonable.

## 6. The Hochschule für Musik in Würzburg: The Lenter organ on the Hoffenheim model

In early 2012, Orgelbau Lenter completed a very special organ for the Hochschule für Musik in Würzburg, based on input from the author.<sup>21</sup> The organ is built with mechanical cone valve chests with 11 stops on three manuals and pedal. Four of these stops are available on both the second and third manuals, in a principle similar to that of a twin slider chest (a *Zwillinglade* or *Wechselschleife*, but here a 'Wechselkegel'). There is only one pedal coupler to the third manual. This can also be used as an octave coupler. The organ has no pipes in the façade. It has three swells, two for the second and third manuals and one 'echo swell' as a general swell enclosing the entire case. This makes it possible both to create a true *pppp* and also to let the full organ sound indirectly, which is especially effective in the rather restricted space.

### Specification

Manual I:	Salicional 16*, Viola da Gamba 8'
Manual II:	Gemshorn 8', Spitzflöte 4'
	with III: Gedackt 8', Salicional 8', Labialklarinetten 8'**, Flauto traverso 4'
Manual III:	Nasard 2 2/3' as well as
	Gedackt 8', Salicional 8', Labialklarinetten 8', Flauto traverso 4'
Pedal:	Violonbass 16***, Gedackt 8'
Couplers:	II/I, III/I, III/II, III/P, III 4'/P

\* Bass octave: Gedackt 16', Dolce 8'

\*\* Quintaton 8' and Gamba 8'

\*\*\* Transmission Salicional 16'

In conclusion, we ought to mention at least a few of the very many possibilities offered by this organ:

- The organ stands in a small room that can hold 15 people at most. The voicing is enormously varied. Every stop has its own individual character. The model for the sound and specification is the organ in Hoffenheim, but this organ has been adapted to fit a very different kind of space.
- The specification is designed so that each manual can display an individual character: the first manual using strings, the second conical stops, the third flutes up to 2 2/3'.
- For a pedal solo, the organist can use the Koppel III 4'/P to reach up to 1 1/3' pitch, thus producing the sound of a Pedal mixture. The Labialklarinetten at 8' and 4' pitch adds colour and power. In this manner it is even possible to realize Bach's six-voice *ricercare Aus tiefer Not schrei ich zu dir* from the third part of the *Clavier-Übung* obbligato without any overlapping of voices. In this case Manual I and II are coupled, with the Salicional 16', Gamba 8', Gemshorn 8' (possibly with the addition of the Salicional 8')

<sup>21</sup> Design and construction led by Markus Lenter, voicing by Gerhard Lenter.

and Spitzflöte 4' sounding, and these are set against all the rest of the stops on Manual III and the Pedal, including both Pedal couplers.

- Experience has shown that Baroque repertoire sounds just as authentic to the listener as does Romantic or modern repertoire.
- An early Baroque *ricercare* with a Gemshorn 8' and Salicional 8' registration is practically indistinguishable from a Principal 8'. Only the equal temperament does not suit the style. A Bach trio sonata can provide the sounds we have come to love from instruments such as the 1730 Trost organ in Waltershausen, thanks to combinations using the Labialklarinetten or the Flauto traverso. Schumann's *Skizzen für den Pedal-Flügel*, op. 58, have just as authentic an effect as Reger's Chorale Preludes, op. 79b. But – and this is almost miraculous – the organ also makes it possible to perform a large chorale fantasia such as Reger's *Wie schön leuchtet der Morgenstern*. The player can go from *pianissimo* all the way to *forte* and back again with just a few hand motions.

## 7. Summary and final claim: Of all the European musical styles, it is the singular sound ideal of the southern German Baroque that became the germ of the Romantic organ.

I have previously suggested<sup>22</sup> that for the period after 1670, we must proceed on the assumption that the appearance of multiple 8' stops on a single manual and the presumed exploitation of the opportunities afforded by these stops, not only singly but also in combination, marked the emergence of a new sound ideal tied to the territory of the southern and central German cultural sphere. This new sound ideal distinguished itself from all regional styles of that time and initiated a paradigm shift that would continually and decisively shape the entire period up until the emergence of the *Orgelbewegung* in the 1920s, when it encountered massive opposition. Only very recently has this ideal been re-evaluated and begun to find expression in new organ projects – though still only a few.

It is impossible not to conclude that the adherents of the *Orgelbewegung* were perfectly aware of the Romantic potential of the South German organ, since they advocated for it much less than for the North German organ, which they extolled as the yardstick by which all else had to be measured – *cum grano salis!*

In future years, the artistic-scientific discourse will surely have as a very important concern to address those sound potentials which particularly support the tonal ideas of J. S. Bach on combinations and shading and are devised to produce the so-called 'fremde Wirkung' ('strange effect'): to bring those potentials back into general awareness and return them to their rightful place.<sup>23</sup>

The same must also apply to the complete rehabilitation of the mechanical cone valve chest as a complement to the slider chest. In that connection, we ought to remember that the view of the cone valve chest as exclusively associated with Romanticism, which is almost universal, is too restrictive. It is a result of the circumstance that stop-channel wind chests have only been preserved starting with Walcker's Romantic organs with cone valve chests, but in fact, the

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<sup>22</sup> Bossert, 'Die Singularität'.

<sup>23</sup> Johann Adolf Scheibe coined the phrase 'fremde Wirkung'. Scheibe – the son of a Leipzig organ builder – was a composer and music critic who accused Bach in 1739 of having a 'confused' compositional style upon the publication of the *Clavier-Übung III*. By 'fremde Wirkung' he meant the effect of pulling multiple stops at the same pitch, as, for instance, the combination Principal 8', Quintatön 8', Viola di Gamba 8' and Rohrflöte 8'. See Bossert, 'Die Singularität'.

history of stop channel chests actually dates back to the Baroque era, to 1752.<sup>24</sup> In contrast to the situation in North Germany, in southern and Central Germany the stop channel chest was the logical response to a growing need in the middle of the Baroque period for combinations of sounds and shading in connection with the use of multiple 8' stops. Making the wind more stable was a significant side effect.

Finally, we need to appreciate anew the large and ultimately very unified line of development of the south and central German organ, regional and individual variations notwithstanding, from about 1670 until the first World War as a significant contribution to the history of organ music, where Bach and Reger are the most noteworthy cornerstones.

*Translated from German by Robin Blanton and Tilman Skowronek.*

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<sup>24</sup> Johann Carl Sigmund Haussdörfer (1714-67) built organs that featured stop channel chests, for example in Blaubeuren, Esslingen, and Tübingen. He was a second-generation pupil of Gottfried Silbermann and had his workshop in Tübingen.

## Appendix

### Allegorical description (in the form of a riddle) of the organ of the Stiftskirche in Öhringen, by its organist, Johann Heinrich Bach

Source: URL[<https://www.landesarchiv-bw.de/web/43294>] accessed December 2, 2016.

#### Original:

INSCRIPTION/Auf/Das Neue Werck  
Bin ich gleich jetzund todt/bestehet doch mein Wesen: (a)  
All meine Gebeine (b) sind ohne Adem/Fleisch und Haut/  
Und bleibet doch ein Leib. Mein Geist ist auserlesen/  
Er geht durch alles (c) durch/auch alles er beschaut.  
Hab werde Zung noch Mund/und sprech doch alles nach.  
a LEGRO (d) heist mein Nam. Nun rath/was ich seyn mag?

- (a) Die gantze Höhe des Wercks bestehet in 30. Schuhen, die Breite aber in 27. Schuhen.  
(b) Sind 1700 Pfeiffen, sowohl Zinnerne als Hölzerne. Von dene Zinnern ist die größte 10. und einen halben Schuh hoch; die Hölzerne 16. Schuh, zusammen nur 110 sind, die übrigen alle Zinnerne.  
(c) Durch 26. klingende Register, und durch 6. Neben-Züge.  
(d) Rückwärts: ORGEL.

#### Translation:

INSCRIPTION/On/The New Work  
I will soon be dead/but my essence lives on: (a)  
All my bones (b) are without breath/Flesh and skin  
Yet still make a body. My spirit is exquisite/  
It penetrates everything (c)/and it contemplates everything.  
It has neither tongue nor mouth/yet still enunciates everything.  
a LEGRO (d) is my name. Now tell me/what I might be?

- (a) The whole height of the organ is 30 feet, the width only 27 feet.  
(b) There are 1700 pipes, both of tin and of wood. Of the tin pipes the largest is 10 and a half feet high; the largest wooden is 16 feet, altogether there are only 110 wooden, the rest all of tin.  
(c) With 26 sounding stops and 6 toy stops.  
(d) Backwards: ORGEL ('organ').  
A stoplist follows.