

The Heckelphone

About this book.

The heckelpone is a woodwind instrument invented at the dawn of the 20th century. Inspired by Richard Wagner and prominently used by Richard Strauss, it soon rose to prominence in its native Germany and far beyond. In this book, the history and use of this curious and obscure instrument serves as a thread running through the history of music, from the romantic period to the late 1960s.

From the invention and making of musical instruments to the origins of widely known and all-but-forgotten composers and their works, from New Orleans jazz to atonal music, from 19th-century Germany to 20th-century Mexico, "The Heckelphone" provides glimpses into "a past of which one has been ignorant" – a past made of music, musicians, conductors, composers, instrument makers and collectors, who all play their parts in a series of intriguing, interweaving stories, told here to educate and entertain.

Holger Hoos

The Heckelphone

A Window into the History of Music



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Music [...] creates for one a past of which one has been ignorant.

OSCAR WILDE (1891)

PROLOGUE: BASSE DE MUSETTE

A most unusual design! Gently tracing the grain of the aged wood, Alain Girard carefully examined the instrument before him. There was grace and beauty to this *basse de musette*, and a mystery, too. Picking it up carefully, he was once again surprised how light it was. At eighty centimetres, the wooden body was about as long as that of a modern cor anglais, and about one third longer than that of an oboe, and yet, it felt much lighter. In part, the reason was the lack of metal keywork on the *basse de musette*, which had only five extremely simple keys, compared to the more than twenty found on a modern oboe. But then, the mountain maple from which this particular instrument was constructed had been worked very thinly – surprising, in fact, that the wood had not cracked.

Without conscious thought, Alain's fingers found the five key touches and the two open tone holes. No thumb rest, but the instrument was light enough that one could do without it. There was a certain elegance to the bocal, the metal tube attached to the top of the *basse de musette*, curled like the tail of a pig, like a simple post horn. At the tip of the bocal, the intricately turned wooden *pirouette*, on which his lips would

rest were he to play the instrument, visually echoed the wide bell, whose flare resembled that of a trumpet. No wonder this family of instruments was also known as *trompettes d'église*, "church trumpets". But this particular instrument was special, as for reasons unknown, the opening of its bell had been narrowed to just under half its outside diameter of eleven centimetres, and its inside worked into a pear-shaped cavity – the only *basse de musette* known to be equipped with this type of bell.

If only I could be certain what it sounded like, thought Alain, when this was made, 250 years ago! Alas, the double reed needed to play the *basse de musette* had been lost, and one could only speculate what it might have looked and sounded like. No reed, no sound; wrong reed, wrong sound – it really was that simple. If one could only go back in time, to even briefly listen in...

#

Steady rain was drumming against the wooden shingles on the roof of the cramped workshop. Every once in a while, a sudden gust of wind drove the rain against the panes of the small windows, causing the flame of the lamp to flicker. Jacques Jeanneret was deep in thought. His father had frowned when he first told him about his idea. Then he had argued. It had never been done this way, and there was no reason to waste a perfectly good piece of wood. But it wouldn't be wasted, Jacques had replied, it could always be worked further to make a traditional bell. Perhaps so, his father had said, but think of the hours of work wasted, and the serious work to be done in those hours. So many instruments to be made, so



Basse de musette with unconventional bell,
Museum of Musical Instruments, Leipzig (Germany)

many mouths to feed, and Jacques wanted to waste his time on this absurd idea!

Yet, here he was, moving the curved carving knife deftly along the inside of the bell, feeling his way towards the shape he firmly held in his mind. This would work, and it would be worth it, he was certain of it. What's more, pastor Frêne had agreed that his idea sounded interesting and was eager to try his new *basse de musette*.

It really was quite simple, and Jacques couldn't understand why his father was so stubborn about it. If you covered part the opening of a trumpet with your hand, the sound was muted. If you did it just right, the tone lost some of its sharpness, became softer and darker. Experimenting with the *trompettes d'église* his family had been making, he had found the same effect. He had shown his father, from whom he had learned his craft since he'd been a small boy. Of course the sound was

altered, but to what end, his father had asked? Everyone knew what a good *trompette d'église* should sound like, what one of *their* instruments should sound like, so why even consider any changes to it? That's what people wanted, that's what they expected.

Perhaps his father was simply too old to try new things. And yet, he was proud, and rightfully so, of the new key design he had come up with twenty years ago, which had since been copied by all the other makers. Well, at least by all the serious ones. If only there were a way to make them pay, at least a little, for using his father's idea!

Jacques put aside the tool and picked up the almost finished body of the instrument. Running his thumb along the inside of the bell, he thought: This is it! A nice, well-rounded shape, like the bottom end of a perfect pear, for a mellow, well-rounded sound. For a moment, he revelled in the product of his imagination. He knew that his workmanship was excellent. His father had trained him well. There were very few who could turn the soft wood that thin without ruining it, even if they had started with the right wood and aged it well. And there was no other instrument maker anywhere who had ever made a bell like the one he was about to finish, no one but he!



Woodwind instruments not only play a key role in the classical orchestra, but are also used extensively in jazz, film music; they even make the occasional appearance in chart-topping popular music. Modern woodwinds can be categorised into two major families: flutes and reed instruments, the latter comprising single-reed instruments, notably clarinets and saxophones,

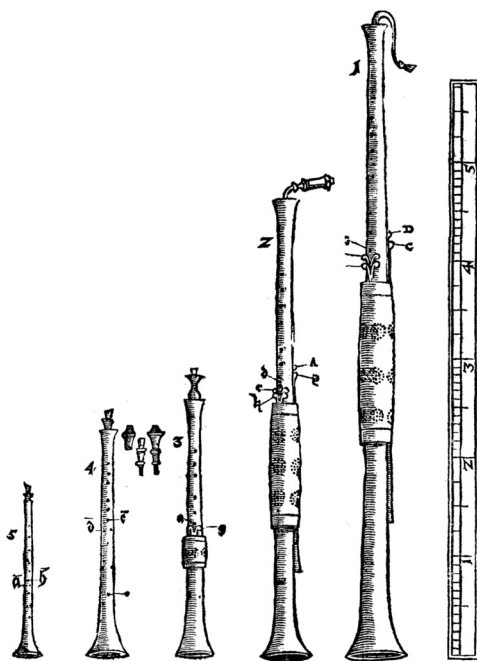


Modern woodwind instruments:
recorder, flute, oboe, clarinet, bassoon, saxophone

as well as double reed instruments, such as oboes and bassoons. This book is focussed on instruments, whose sound is produced by two thin pieces of cane vibrating against each other. Our story begins with an old branch of the double reed family: the *shawms*.

The origins of the shawm are shrouded in mystery, but it is thought to have its roots in ancient instruments of a similar design used in ancient Greece, Persia and Armenia. From

there, it likely came to Western Europe during the High Middle Ages. The shawm is a simple instrument, consisting of a conical tube, usually made from a single piece of wood, with a flared bottom end resembling the bell of a trumpet. The double reed, fashioned from a tall cane called *arundo donax*, *giant reed* or *elephant grass*, is inserted into a wooden mouthpiece called the *pirouette*. When the shawm is played, only a small portion of the reed protrudes from *pirouette* and thus comes into direct contact with the player's lips. As a result, the sound of the shawm is trumpet-like and piercing, with limited dynamic range, making it particularly suitable for outdoor use.



Shawms and pommers,
Michael Praetorius (1619)

Similar to recorders, shawms typically have seven tone holes, and sometimes an additional hole operated by the left thumb. In the renaissance period, shawms were built in various sizes; in 1619, Michael Praetorius, a German composer and music theorist, described seven sizes of shawms and closely related pommers, with a range of about one-and-a-half octaves each (five of these are shown above). The lower members of this extended family used up to five simple keys, protected by a perforated wooden capsule called *fontanelle*, as well as a metal tube, similar to the S-shaped bocal of a bassoon, to connect the *pirouette* with the top of the tall body of the instrument.



A direct descendant of the shawm, the *trompette d'église* was used in village churches in the western part of Switzerland well into the late 18th century, to accompany congregations in psalm-singing. Made from maple, a relatively light and soft wood, it tended to be constructed with relatively thin walls, and its bore was more conical - that is, its diameter increased more rapidly over the length of the instrument - than commonly found in shawms and their other descendants. In a document dating back to 1781, its sound is described as "very piercing" and "intolerable", a quality that may well have inspired experimentation aimed at a mellower sound, such as the unique bell design described earlier.

The *basse de musette* is the lowest member of the *trompettes d'église* family, a baritone instrument (the bass, when called for, would have been provided by an early bassoon). To reduce its length for easier handling, the *basse de musette* is equipped with a metal bocal that is wound into a



Renaissance shawm,
baroque oboe
and modern oboe

full loop, connecting the *pirouette* and reed to the body of the instrument.

Towards the end of the 19th century, the *trompettes d'église* fell out of use, and many of the remaining instruments went to museums. The shawms themselves had long since been superseded by two families of double reed instruments widely used up to the present: the oboes and bassoons. Different from shawms, oboes and bassoons do not have a

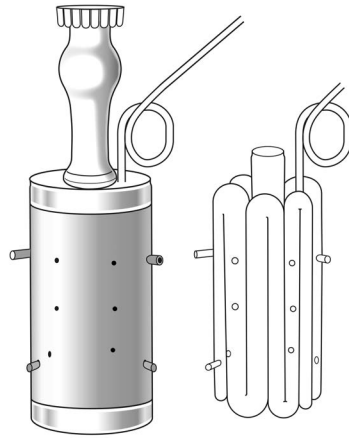
pirouette; instead, the double reed is fully exposed and held between the player's lips. This affords much more control over the tone and makes it possible to play more softly.

The first oboes were developed in the mid-17th century by instrument makers connected to the royal court of France, members of the Philidor and Hotteterre families. Oboes are made of wood much denser than the maple used for *trompettes d'église*; in the Baroque period (*i.e.*, the 17th and early 18th century), boxwood was commonly used, while modern oboes are mostly made from grenadilla, also known as African blackwood. Unlike the shawm, the body of the oboe is assembled from three sections: the upper joint, lower joint and bell.

Bassoons are larger and lower-pitched instruments that are believed to have evolved from the shawm family via an instrument called the *dulcian*. Like the *trompettes d'église*, dulcians and bassoons are usually made from maple. Their defining characteristic is the U-shaped bore, obtained by connecting two parallel, conically expanding bores like those of the shawm at the bottom end of the instrument. Dulcians were typically constructed from a single piece of maple, with the reed attached to a curved metal bocal connecting to the small end of the bore, next to a gently flared bell.

Folding the bore brought several advantages. Firstly, it made the dulcian rather compact. Secondly, it allowed for more convenient placement of the tone holes, and thus reduced the need for mechanical keywork.

Dulcians can be traced back to the early 16th century and were often used in ensembles with other instruments, including shawms and sackbuts (an early type of trombone). Like many instruments of their time, they were built in different



Rackett; right: illustration of folded bore

sizes, from small soprano to large contrabass instruments. Dulcians existed long before the first oboes and may have been the first double reed instruments played with a fully exposed reed.

There even was a instrument that took the idea of folding the bore much further: The so-called *rackett* (or sausage bassoon) was made from a compact cylinder of wood, into which nine parallel bores were drilled and then connected to form a single, intricately wound passage. Some racketts had a looped bocal, similar to that of the *basse de musette*.



The design of string instruments, notably the violin, viola, violoncello and double bass, has not changed much since the early 16th century, when they first emerged in their present form. Therefore, a violin built by Antonio Stradivarius in 1697 is

still considered an exceptional instrument and perfectly suited for use in contemporary orchestras and chamber music ensembles. Wind instruments, on the other hand, have undergone a major evolution over the same period of time, and instruments made prior to 1900, if at all in a playable state, are used at best in ensembles specialising in early music.

One reason for this lies in the mechanical complexity of modern double reed instruments and in the manufacturing techniques required for making them, which have undergone profound improvements during the industrial revolution and into the early 20th century. As a result, keywork that would have been difficult or impossible to build in the late 18th century could be designed and produced at scale a hundred years later. Similarly, the ability to precisely dimension the conical bores and tone holes has improved markedly. Finally, woodwind instruments tend to deteriorate as they age, as a result of the regular exposure of the wood to the moisture of human breath. Because of this, there is a relatively stable, high demand for new instruments.

The basic design for most woodwind instruments is that of a hollow tube whose effective length can be modified by opening or closing a series of tone holes: The longer the tube, the lower the note that is produced by it. The exterior of the instrument is shaped by turning a piece of wood on a lathe, while the interior bore and the tone holes are created using drills and reamers. Drills and reamers are ancient tools, dating back to the very dawn of civilisation, and even lathes have been used for well over 2000 years. What changed over this period of time is the precision that could be achieved with these tools. This has important consequences for the process of making wind instruments, where precision is the key not

only to creating complex keywork (and to thus move beyond simple tone holes that are covered solely by the player's fingers, as was the case on early flutes and shawms), but more fundamentally for achieving bores and keyhole placements that would produce clear, even tones, and good intonation.

Instruments such as shawms and dulcians, oboes and bassoons, whose inner diameter increases over the length of the instrument, are especially challenging to make, since creating their conical bores requires the use of multiple drills and reamers. Especially when making instruments with very thin walls, such as the *basse de musette* mentioned earlier, there would be a high risk of the wood cracking, which would typically ruin the instrument. To prevent this from happening, instrument makers to this day not only very carefully select the wood they are working with, but also cure and treat it, using elaborate processes that can take many years. Thus, making such instruments is an involved and labour-intensive process that requires a great deal of skill and patience – and this was especially true in the 18th century, when *trompettes d'église* were still commonly heard in Switzerland.



It sounded wonderful, quite mellow, yet rich in tone, just as he had imagined it. After a first demonstration, pastor Frêne had expressed delight at the sound of this new *basse de musette*. And yet, after its debut in the Sunday service, as a member of the consort, the ensemble accompanying the hymns sung by the congregation, Jacques knew that there was a problem. He therefore wasn't surprised when some of the more musically skilled singers, as well as two of the other players from the



Basses de musette (played by Christophe Pidoux and Alain Girard, second and third from left, with Nicolas Rihs, *basson d'amour* and Michel Piguët, *dessus de musette*) in a contemporary performance in Sornetan, Switzerland (2001)

consort, complained that the bass line was muted and hard to follow. His new bell had indeed improved the tone of the *basse de musette*, but it had also changed the balance of the consort, and now the upper voices seemed even more piercing than before. And yet, the sound of the *basse*, especially when playing some of the more prominent lines, was undeniably more pleasant than that of the older instruments.

Of course, there was an obvious solution to this problem: To also redesign the higher *trompettes d'église*, to match their tone more closely to that of the new *basse de musette*, and to

thus restore the balance of the consort. Too bad that pastor Frêne had made it clear that, at least for the time being, commissioning additional instruments was out of the question. Meanwhile, there was a long list of other instruments to complete, so it would be a while before he could get back to improving the sound of the *trompettes d'église* ...



NOTES

► **Fact and fiction.** For the most part, this book is rooted in known facts, collected and verified by the author using the sources listed at the end of each chapter. Sometimes, contradictory or uncertain information is found in different, credible sources, and in such cases, the author has attempted to relate what appears to be most likely. Finally, in some cases, what really took place, and certainly what those involved in the events said or thought, cannot be known, and here, the author took the liberty to imagine what might have plausibly transpired.

The notes at the end of each chapter not only provide additional information, but are also intended to help the reader distinguish fact from fiction. Furthermore, statements directly attributed to persons are shown in italics if, and only if, they are known to be historically accurate (for example, quotations from letters). One ambition in writing this book has been to keep all speculation and imagination consistent with known history and facts – that is, to refrain from writing anything that stands in contradiction with what is known or plausible. Some further thoughts on this effort can be found in the Postscriptum at the very end of this book.

► **Alain Girard.** As recounted in his 2021 article in *The Double Reed*, Alain Girard first encountered the heckelphone in 1984. Three years later, he took delivery of heckelphone #4989. Girard also plays the baritone oboe and the *basse de musette* – an instrument on whose history he is one of the leading experts. In 1994, Alain Girard founded *Les Roseaux Chantants*, a double reed quartet in which he played the heckelphone.

Girard's examination of the *basse de musette* described at the opening of the chapter is imagined; he did, however, study that

instrument, along with other specimens, and published his findings in 2001 (see sources).

► **Basse de musette.** The description of the *basse de musette* is based on research published by Alain Girard (see above). According to Michael Finkelman, an expert on the history of oboe instruments and their predecessors, the name ‘basse de musette’ was first mentioned in 1884 by Gustave Chouquet, in his catalogue of the Museum of the Paris Conservatory; it therefore seems possible that prior to that time, the instrument was not known under this name in Switzerland, where it was produced and used.

The unique *basse de musette* described in the text does exist and is now part of the collection of the Grassi museum of musical instruments in Leipzig (where it has inventory number 1352). Its history is imagined, loosely following insights and plausible speculation from Alain Girard’s research. This instrument once belonged to Paul de Wit and then to Wilhelm Heyer’s collection (both mentioned in later chapters), and – as accurately described in Chapter 1 – was studied and copied by Wilhelm Heckel during the time he was working on the heckelphone (see also Wilhelm Altenburg’s article from 1898). It is very likely that this specific instrument played a significant role in the development of the heckelphone.

► **Jacques Jeanneret.** Alain Girard’s research, published in 2001, references a documented from 1786, in which a pastor Théophile Rémy Frêne mentions a “sieur Jeanneret” as a maker of *trompettes d’église* living and working in the Jura Mountains between Neuchâtel and the French border. While it is therefore likely that a Swiss instrument maker named Jeanneret produced *basses de musette* at the time in question, it is unknown whether he made the unmarked instrument with the unique bell later copied by Heckel. Girard’s research concludes that the *basses de musette* marked by their makers with the initials I·IR may well have been made by craftsmen

not named Jeanneret, but does not advance a concrete hypothesis regarding their identities. The speculation regarding the purpose of the modified bell is based on a note found in Alain Girard's 2001 article.

► **Michael Praetorius.** Born in 1571 as Michael Schulteis, youngest son of a protestant pastor, Praetorius began studying theology and philosophy at the Viadrina University in Frankfurt an der Oder (Germany) as a young teenager, in 1585. At that point, he was already quite proficient as an organist – an ability that first helped him finance his studies and later became his profession. In 1604, he was appointed music director at the court of Henry Julius, Duke of Brunswick-Lüneburg, and shortly after, he published his first two collections of compositions.

In the remaining 16 years of his life, Praetorius composed a large number of sacred and secular works. Between 1614 and 1619 he published his magnum opus, *Syntagma musicum*, whose three volumes cover a broad range of topics related to performance practices, musical instruments, music theory and musical terminology. The second part of the second volume of the *Syntagma musicum* provides a classification and detailed illustrations of an astonishing variety of musical instruments, including the shawms and pommers mentioned earlier and detailed further below.

► **Shawms and pommers.** Most likely derived from Asian or Near Eastern precursors, the shawm appears to have reached Europe in the middle ages, around the time of the Crusades. Expanded into a family of instruments of different sizes, as documented by Michael Praetorius, it became an important and widely used instrument in the Renaissance period. It was often heard together with slide trumpets or sackbuts – precursors of the modern trombone – in outdoor performances. Variants of shawms are still widely used in folk music in some European countries, including Spain, Portugal, Italy and parts of France.

The lower-pitched instruments of the shawm family were called pommers or bombards; the largest of them, the great contrabass pommer, stood 2.7 metres tall. After the higher shawms had been superseded by the oboe in the late 1700s, pommers continued to be used for several decades, before they, too, were gradually replaced by newly developed lower oboes, such as as the cor anglais.

► **Dulcians and bassoons.** A precursor of the modern bassoon, the dulcian was a popular instrument between roughly 1550 and 1700. Because in contrast to the shawms and pommers, dulcians of all sizes were played with their reed fully exposed, their tone could be modulated and controlled to a much larger extent by a skilled player. As a result, the instrument had a much larger dynamic range and could be played effectively in outdoor-settings as well as in chamber music. While for the most part, dulcians were replaced by the Baroque bassoon around the mid-1700s, in Spain, they continued to be used in different sizes well into the late 1800s.

Early bassoons differed from dulcians mainly by their narrower bore and by the fact that were made from four separate parts, which could be manufactured more easily and more accurately. Like dulcians, bassoons were originally built in a range of sizes, of which only two eventually found a permanent place in the classical orchestra: the regular bassoon and the contrabassoon, both of which will play a prominent role in the next chapter.

SOURCES

- ▷ Wilhelm Altenburg: *Ueber einige Holzblasinstrumente mit Doppelzungenblatt in dem de Wit'schen Musikhistorischen Museum*. Zeitschrift für Instrumentenbau 18(21): 543–546, 1898.
- ▷ Michael Finkelman: *The Heckelphone – A Centenary Salute*. The Double Reed 27(4): 33–54, 2004.
- ▷ Alain Girard: *Les Hautbois d'église et leur énigme*. Glareana 50(2): 67–129, 2001.
- ▷ Alain Girard: *Thirty-five Years of "Heckelphony"*. The Double Reed 44(4): 104–110, 2021.
- ▷ Bruce Haynes: *The eloquent oboe: a history of the hautboy from 1640 to 1760*. Oxford University Press, 2001.

NB: Useful and interesting information on the instruments mentioned in this chapter, including shawms, pommers, dulcians, rackets, oboes and bassoons, on specific features (such as the pirouette) and their history, as well as further information on the life and works of Michael Praetorius can be found in the English and German editions of Wikipedia, and the author gratefully acknowledges the many contributions underlying these articles.

1

RHEINGOLD

Green and golden highlights were dancing on the surface of the water before them as the two men slowly walked towards the stone-rimmed basin of the fountain. "Have you ever seen the Rhinemaidens play, my dear Heckel?", said one of them, an older gentleman with a peculiar fringe of a beard framing his prominent features. "You know, I saw them often, walking on the bank of the river, while I lived in Biebrich. Once, your father was with me – so I even had a witness", he added, with a twinkle in his eye.

For a moment, a melancholy smile appeared on Wilhelm Heckel's face. Thinking of his father, he still felt a great deal of sadness – hard to believe that it had been two-and-a-half years now since the elder Heckel had passed away, leaving him in charge of the workshop, the business, his family's future. His father had done well, had made some extraordinary achievements, and perhaps most importantly, had passed on his knowledge and ideas, so they could be further developed. Wilhelm had been just 21 years old when he inherited his father's business, but in the time since, he had accomplished much, and he knew that his father would have approved of his work.



Richard Wagner (ca. 1875)

“Your father, he would be very proud of you, for what you did with the bassoon. Truly, a marvellous improvement, young man.”

That was high praise, coming from his distinguished host, the famous composer, and Wilhelm had to make an effort to not let the feeling of admiration and awe stand in the way of keeping the conversation going.

“Well, Maestro, as I’ve explained, I just made a few more tweaks. My father and Almenräder, they are to be credited for reinventing the bassoon.”

“That they are, Herr Heckel, there can’t be any doubt about it. And yet, it is you who perfected the design, and what’s more, who finally produced a usable contrabassoon.”

“I’m glad you find it useful, Herr Wagner.” Now, Wilhelm was beaming. The problems encountered in designing the new contrabassoon had appeared insurmountable at times, but in the end, it had come together very well. Still, he had

been quite nervous about the demonstration to Richard Wagner, knowing fully well how much depended on the maestro's assessment of the instrument.

"It's quite remarkable how proper slurs can now be played even in the lowest register, and the sound is truly outstanding. As I wrote to you, having such an instrument would open many new possibilities, and now that you've managed to provide it, everyone will soon know what wonderful colour it adds to the orchestra. You know, I've decided to use it in *Parsifal*."

Wilhelm Heckel's heart missed a beat. This would make his name and guarantee the lasting success of the family business. His father would have been very proud, indeed.



In the Spring of 1813, when Richard Wagner was born in Leipzig, Germany, no one would have predicted his rise to fame. He was the ninth child of a police clerk, Carl Friedrich Wilhelm Wagner, and the daughter of a baker, Johanna Rosine Wagner, who at the time lived at a modest inn, *Zum roten und weißen Löwen*. In hindsight, it seems fitting that young Richard was baptised in the St. Thomas Church, where Johann Sebastian Bach had worked as music director during the last 27 years of his life, and where in 1727 the première of Bach's *Matthäus-Passion* had taken place.



St. Thomas Church
in Leipzig

Not long thereafter, a tragedy occurred that turned out to be decisive for Wagner's later career: in November 1813, when Richard was barely 6 months old, his father, Carl, died of typhoid fever. Wagner's mother, Johanna Rosine, now turned to Carl's friend, Ludwig Geyer, whom she married in August 1814. Geyer was a full-blooded artist – a painter, playwright and actor, whose passion for the theatre left a mark on young Richard.

At the age of 13, clear signs of Wagner's talents and ambition began to emerge. Since he had heard Carl Maria von Weber's romantic opera *Der Freischütz* at the age of nine, Richard had developed a fascination with music. Now, shortly before his family moved from Dresden, where they had lived since 1814, to Prague, he began writing a play, a drama strongly influenced by the works of Shakespeare and Goethe. *Leubald*, an extensive work of five acts, was finished in 1828. That same year, Richard began taking lessons in composition, quite likely driven by the desire to set *Leubald* to music. Meanwhile, in 1821, Richard's stepfather had died, and in the years that followed, his sister Rosalie had become a celebrated actress.

In 1829, Richard Wagner, now 16 years old, had an experience that would firmly set him on his path towards becoming one of the most influential composers in music history.

Fidelio, Ludwig van Beethoven's only opera, could not by any account be considered a success when it was first performed 1805 in Vienna. It took Beethoven two major revisions to arrive at a final version that was well-received at its première in 1814, and the maestro himself was quite candid about how much frustration and disappointment the work had caused him. "*This opera will win me a martyr's crown,*" he wrote in a



Wilhelmine Schröder-Devrient
in Carl-Maria von Weber's opera
Euryanthe

letter to Georg Friedrich Treitschke, who revised the libretto for the final version.

The ultimate international success of *Fidelio* came when soprano Wilhelmine Schröder-Devrient, widely considered one of the greatest singers of 19th-century Germany, took the lead role of Eleonore. And so it was in April 1829 when young Richard Wagner first experienced *Fidelio*, with Schröder-Devrient leading the cast, that his passion for music truly awoke.

Thirty-five years later, Wagner would write of this experience in his autobiography: "*When I look back upon my life,*

I cannot find a single event that compares to this in terms of the impression it made on me." Wilhelmine Schröder-Devrient became his ideal for a fusion of drama and music in opera, and he claimed that *"the profoundly human and ecstatic performance of this incomparable artist"* kindled in him *"an almost demonic fire"*. From that moment, Wagner's energy was focussed on becoming a composer.

Intriguingly, *Fidelio* was one of the first operas to make prominent use of the contrabassoon, the lowest double reed instrument in the classical orchestra.



While Wagner developed his skills as a composer, Carl Almenröder was working on a project of a different nature: the modernisation of the bassoon. Composers in the Baroque era had already used the instrument prominently, not only as an integral part of the orchestra, but also in smaller ensembles. Like its ancestor, the dulcian, the bassoon was often used to carry or reinforce bass lines; however, noted composers of the time, including Georg Philipp Telemann and Antonio Vivaldi recognised its potential as a solo instrument that could be used for virtuoso performances. Vivaldi alone wrote 39 solo concertos (2 of which remained incomplete) that contributed greatly to the prominence of the bassoon.

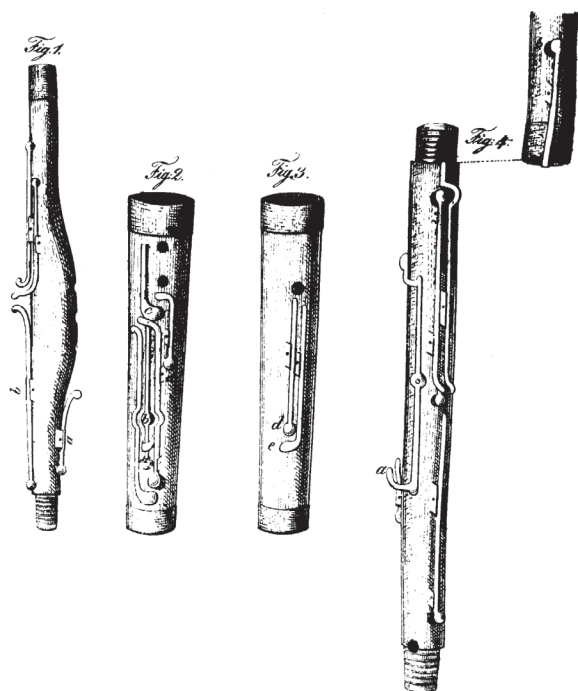
The 19th century saw great improvements in the design of all wind instruments, aimed at improving their tone, their expressiveness and their technical versatility. By 1850, Theobald Böhm's newly designed flute had inspired Guillaume Triebert and his sons to modernise the oboe, and Hyacinthe Klosé to do the same for the clarinet. Around the same time,

the design of brass instruments also saw substantial improvements, as different types of valves were invented and perfected, leading to more versatile trumpets, French horns, tubas and even trombones.

Carl Almenröder had begun working towards improving the bassoon in 1817, when he joined the orchestra of the theatre in Mainz as a bassoonist. In 1819, he moved to Cologne, further down the river Rhine, to make flutes and clarinets in his brother's workshop. Three years later, in 1822, Almenröder moved again, up the Rhine to Biebrich, where he played in the court orchestra of the Dukes of Nassau. At the same time, he became a consultant to Schott, a music publishing company that also produced musical instruments. This appointment gave Almenröder the opportunity to build and experiment with his designs for a thoroughly modernised bassoon.

Carl Almenröder was not alone in this pursuit; he worked quite closely with Gottfried Weber, a prominent music theorist and composer, and with other bassoon makers at Schott, notably Johann Adam Heckel. Born 1812 in the Vogtland, a small region at the border of Saxony and neighbouring Bohemia widely known as a centre for musical instrument manufacturing, Heckel was 25 years younger than Almenröder. Prompted by an uncle, he had moved to Mainz in 1829 and started to make bassoons for Schott. There, he met Carl Almenröder, who quickly recognised his talent. Two years later, in 1831, the two established their own workshop in Biebrich and started producing woodwind instruments – notably, Almenröder's improved bassoons.

Although elsewhere, efforts were also underway to design an improved bassoon, the instruments built by Almenröder



Carl Almenröder's improved bassoon

and Heckel's new company proved to be the most successful. Compared to earlier bassoons, they could be played with relative ease and good intonation in all keys; they also had a much extended range, exceeding three and a half octaves. However, these improvements had come at the price of an overall tone quality slightly inferior to that of earlier, simpler bassoons – a seemingly necessary compromise that left neither Heckel nor Almenröder fully satisfied.

In 1838, Carl Almenröder sold his part of the business to Johann Adam Heckel; in 1843, shortly before his death, he published a comprehensive teaching manual for the improved bassoon that was now produced, in increasingly large

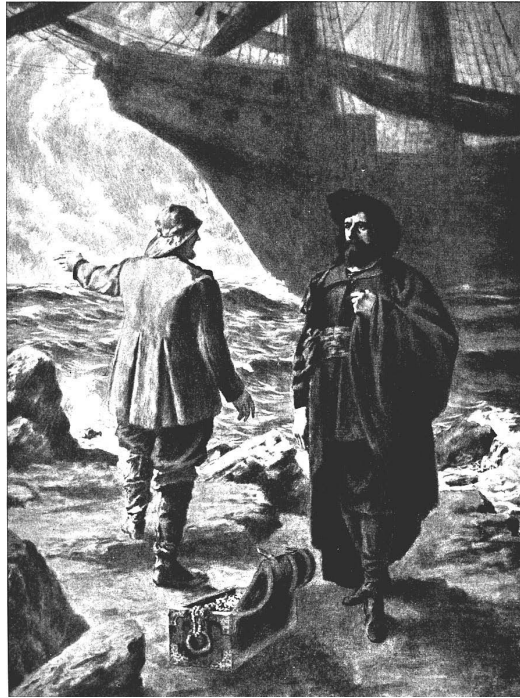
numbers, by Heckel's company. Highly successful business trips to St. Petersburg, London and Paris, during which Heckel demonstrated the instruments he was manufacturing to influential figures of the international music scene, further increased the demand for what was quickly becoming known as the 'Heckel bassoon'.



Richard Wagner's rise to fame began in the autumn of 1842, with the première of his opera *Rienzi* in Dresden, with Wilhelmine Schröder-Devrient in one of the lead roles. Despite its length of over three hours (without a series of cuts that later became widely adopted, *Rienzi* is four hours long), which was atypical for the time, the performance was a great success, with the audience as well as with the critics.

This paved the way to the première of *Der fliegende Holländer* (*The Flying Dutchman*), less than three months later, also in Dresden, and once again with Schröder-Devrient in a lead role. One month later, on 2 February 1843, Richard Wagner, now 29 years old, was appointed conductor at the Royal Court Theatre in Dresden, one of Germany's leading opera houses. After years of financial struggles and difficulties to gain recognition in the musical world of mid-19th century Europe, Wagner had finally established himself in a secure and highly influential position.

Der fliegende Holländer was the fourth opera completed by Wagner; while he would later regard the preceding three, including *Rienzi*, as immature and overly conventional, of the *Holländer* he wrote: "From here begins my career as a poet, and my farewell to the mere concoctor of opera-texts."



Der fliegende Holländer, Act I:
Farewell, To-day thou shalt
my daughter see
by Ferdinand Leeke (ca. 1900)

In the five years that followed, Wagner completed another two major operas, *Tannhäuser* and *Lohengrin*, which not only cemented his reputation as one of the foremost composers of his time, but also clearly reflected the further development of his abilities and style. However, not unlike the operatic worlds he created, Wagner's own life seemed destined to be filled with passion and drama.

In February 1848, a revolution fuelled by economic hardship ended the reign of King Louis Philippe I in France and led

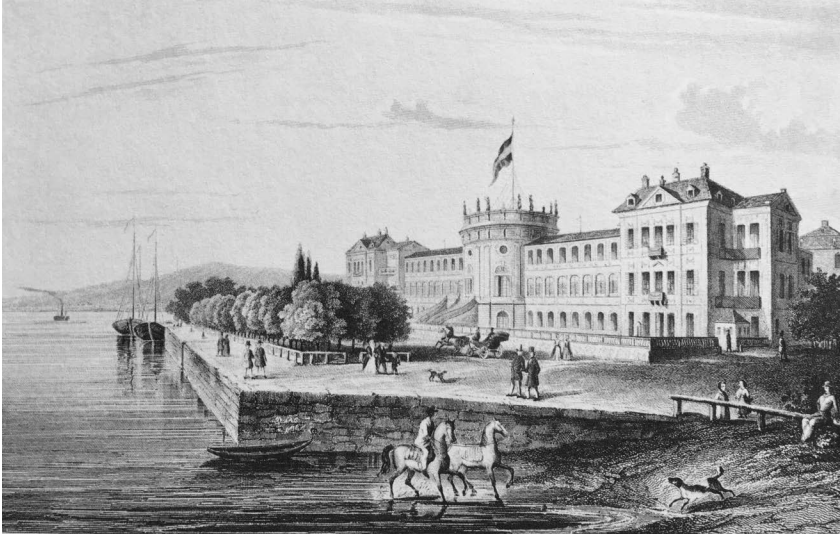
to the establishment the *Deuxième République Française*. This triggered an unparalleled series of revolutionary uprisings across Europe, affecting over 50 countries. At that time, Germany was a confederation of 39 sovereign states that had been created in 1815 to replace the Holy Roman Empire, which had been dissolved during the Napoleonic Wars, in 1806. Fuelled by discontent with the economic conditions of workers and dissatisfaction with the autocratic political structures, revolutionaries throughout the German states now demanded freedom of the press, freedom of assembly as well as the transformation of the confederation into a unified German nation state with a liberal constitution.

Richard Wagner, who had an active interest in politics, shared some of these ideas, and was thus caught up in the May Uprising in Dresden. Despite the fact that he only played a minor role, in 1849, a warrant was issued for his arrest, which forced him to flee with a forged passport, and to seek refuge, first in Paris and then with a friend in Zurich. There, exiled and without employment, dependent on modest support by benefactors, Wagner began to elaborate and publish his ideas on the unified artwork of the future: the *Gesamtkunstwerk*.

In his treatise *Oper und Drama (Opera and Drama)*, Wagner lays the theoretical foundations for merging opera and theatre into a new art form in which music and poetry perfectly complement each other. He explores the mechanisms by which music can be best used to support theatrical action and intent, based on the psychological impact of music on the listener. Concluding that “*what is not worth being sung is also undeserving of being written by the poet,*” Wagner aims for nothing less than revolutionising the way operas are written, perceived and performed.

When he fled from Dresden, ideas for what was to become the core of Richard Wagner's artistic legacy, his *opus summum*, had been on his mind for at least five years. In 1852, the third year of his exile in Zurich, his work on *Der Ring des Nibelungen* kicked into high gear. Wagner's goal was to put his theories into practice, to realise his ideal of the *Gesamtkunstwerk*. Early on, he decided that this work, once finished, should be performed in the form of a festival, organised specifically for this purpose, over the course of four days. While the work was to be rooted deeply in Germanic mythology, Wagner intended it to be a critical reflection of society in the mid-19th century. In February 1853, the text – which Wagner referred to as *poem* – was completed and read, by Richard Wagner himself, over the course of four evenings, to a sizeable audience, including his friends and members of the general public, at the Hotel *Baur au Lac* in Zurich. Shortly after, he began setting the 700-page poem to music. 18 months later, in the Autumn of 1854, the first of the four *Ring* operas, *Das Rheingold*, was completed.

During his exile in Switzerland, Wagner was generously supported by Otto and Mathilde Wesendonck, who also provided a cottage for him and his wife Minna close to their own villa, on the "Green Hill" at Enge near Zurich. In Mathilde Wesendonck, a poet of German descent, Richard Wagner found a kindred soul, a muse. In 1857, he began setting five of Mathilde's poems to music: *Der Engel (The Angel)*, *Stehe still! (Stand still!)*, *Im Treibhaus (In the Greenhouse)*, *Schmerzen (Pain)*, and *Träume (Dreams)*. On her birthday, the 23rd of December 1857, an orchestrated version of *Träume* was



Biebrich am Rhein (ca. 1860)

performed beneath Mathilde's window. Clearly, there was a deep and intense connection between Wagner and his muse, a relationship that soon served as inspiration for his next opera, *Tristan und Isolde*. In 1858, shortly after the last of the five Wesendonck songs had been completed, this relationship led to a breakup between Wagner and his wife, Minna, and they both left Zurich – one for Venice, and the other to return to Dresden.

The three years that followed saw Wagner moving frequently: from Venice to Vienna, then to Lucerne, onwards to Paris, Karlsruhe, back to Venice, Vienna, and once again to Paris. Finally, in early 1862, he settled in Biebrich, where he rented two rooms in the newly completed Villa Annica, overlooking the Rhine. From here, he often strolled along the bank of the river, through the gardens of the nearby ducal



Ludwig II of Bavaria (1864)

palace, and he occasionally visited the workshop of Johann Adam Heckel, whose bassoons and other wind instruments had become known and sought after throughout Europe. Of the same age, Wagner and Heckel both were passionate about the way musical instruments, when constructed and played well, could speak directly to the soul. The atmosphere in Heckel's workshop, calm yet filled with purposeful activity, and talking to Heckel himself had a wonderfully soothing effect on Wagner, a welcome counterpoint to his own troubled life.

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In late 1862, King John of Saxony gave Wagner an amnesty for his involvement in the May Uprising, making it possible for him to return to his homeland – first to Leipzig, then to Weimar, where he spent time with Franz Liszt, whom he had befriended 15 years earlier, while he still lived in Dresden. Then, he moved to Vienna, where for the first time he conducted concert performances of parts of his *Ring*, in the presence of Empress Elisabeth of Austria.

Richard Wagner was now a celebrated composer. Yet, despite the great success of the concerts he gave all over Europe, Wagner's income was insufficient to maintain the lavish lifestyle he insisted on keeping. In early 1864, Wagner had to flee from Vienna to Zurich, to escape the Austrian tax authorities and numerous creditors. Shortly before, he had begun an affair with Franz Liszt's daughter, Cosima, who was married to his friend and former composition student, Hans von Bülow.

On 10 March 1864, King Maximilian of Bavaria passed away unexpectedly, leaving the throne to his 18-year-old son, Ludwig II. As a result, the life of young Ludwig changed profoundly, along with that of Richard Wagner, whose music he admired.

Less than 8 weeks after ascending the Bavarian throne, in early May 1864, Ludwig summoned Richard Wagner to the Royal Palace in Munich, where the two men met for close to two hours. Immediately, there was a deep connection between the young king and the older artist. Of Ludwig, Wagner later wrote: *"Alas, he is so handsome and wise, soulful and lovely, that I fear that his life must melt away in this vulgar world like a fleeting dream of the gods."* Indeed, Ludwig had the soul of an artist, and his true interests lay in music, theatre and archi-