

Vibrato Awareness

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Few aspects of musical performance provoke as much emotionally-charged debate as vibrato. Whether instrumental or vocal, vibrato is closely associated with human physicality, a fact that only fires the controversy. A tremulous voice is taken as a sign of emotion, and the purportedly “natural” vibrato of the human voice is well established as the model for instrumental “imitations.” Despite its alliance with human physicality, the mechanics of vocal and woodwind vibrato production are not well understood, and most explanations remain frustratingly enigmatic.

Defining vibrato is particularly difficult because it covers a number of concepts and techniques. In the most general terms, it is any regular fluctuation to a steady tone and can involve changes of timbre, intensity, resonance, or pitch, or a combination of these. But in order for pitch oscillation to be registered as vibrato and not a pitch distortion, the amplitude must be less than a semitone. Today most wind players produce vibrato by manipulating the air stream, but up to the 20th century other techniques were used, and the history of vibrato is intertwined with that of other effects like tremolo.

VIBRATO: A NECESSARY VICE?

For some vibrato is integral to sound production - something that beautifies and enlivens the tone, but to others it is the very opposite - a mannerism that is superimposed onto sound production that corrupts the purity of the tone. These divergent opinions arise from different traditions and the historical awareness that players bring to the subject. Amongst 20th-century oboists, vibrato is often described as much as a necessity as something that must be disguised. E.C. Moore, for instance wrote that “vibrato is a necessary adjunct to the experienced player.” but that “it should be done so that the listener is hardly aware that a vibrato is being used.”¹

The ambivalent nature of vibrato intrigued Arnold Schoenberg who explained that vibrato transforms “‘pure,’ ‘isolated,’ ‘stiff,’ ‘clear,’ and ‘lifeless’” tones into “‘living,’ ‘interesting,’ ‘lively,’ ‘warm,’” sound precisely by undermining the

purity of the tones.²

The basis of what we feel to be a living, beautiful, warm tone is a certain impurity. [...] Now, is it that what is pure, the ultimate discovery, is already so clarified that one has to destroy its purity (by admixture) in order to establish any contact with it; or is it that since the material (even, if one may say it, the material of ideas) is faulty, it calls for touching-up, which throws the true relationships into shadow and makes the defects invisible?³

For Schoenberg then, vibrato supplements a pure sound, in the sense that it both enhances and contaminates. In particular, he was unforgiving of the type of vibrato fashionable at the time, the “goat-like bleating used by many instrumentalists to curry favour with the public.”⁴

Schoenberg’s comments are of interest as they date from the period when constant vibrato first came into regular use. But already at the turn of the 20th century vibrato had been described as a contagion that was corrupting Western art. In the 1880s Chorley felt that vibrato gave the impression of fatigue and premature decay,⁵ George Bernard Shaw is said to have declared that vibrato was “spreading like the influenza,”⁶ and the American laryngologist, Dr. Holbrook Curtis, was critical of this burgeoning fashion, which he saw as a foreign pollutant. According to him “the vibrato is popular among the Latin races, while the Anglo-Saxons will not tolerate it [...] no great singer has ever succeeded in securing recognition in the US [...] who has attempted to secure his effects with a vibrato quality.”⁷

Despite such denials, the fashion for vibrato almost certainly began amongst singers in the late 19th century and was later copied by instrumentalists. Noted veteran French oboist André Lardrot recalls that in the 1950s the term “vibrato” was not used at the Paris Conservatoire, but that the effect was implied in the expression “chanté.”⁸ Similarly to the present day the request to “sing more” on the oboe is usually interpreted as an invitation to add vibrato.

The influence of Jazz musicians on Classical vibrato is often overlooked. Ernest Ansermet, like many Europeans, was fascinated by the unconventional ways in which Black Jazz musicians handled Western musical instruments. In

an essay entitled “Sur un orchestre nègre” he drew attention to their use of vibrato on clarinet and saxophone, which was then rare in Classical music. It is significant that, like Crutis’ “Latin races” Ansermet identifies the introduction of vibrato with peoples who, at the time, were stigmatised as “primitive” foreigners.⁹

By the 1930s when Carl Seashore wrote his classic study of vibrato, vocal vibrato was established not only as the original and natural form, but an indicator of genuine musical expression that occurred “automatically whenever the person sings with genuine feeling.”¹⁰ Seashore reported that the average rate of vibrato amongst “the best singers” was about 6.5 cycles per second, and that the average amplitude was a semitone. The vibrato of the violinists he measured had an amplitude only approximately half as wide.¹¹ Seashore took these findings to be universally valid. But, as his sample was limited to contemporary Classical musicians, what he measured was actually no more than contemporary taste. He disregarded the different approaches to vibrato found in earlier periods and non-Western cultures.¹² The bias of his conclusions notwithstanding, Seashore’s work was significant because it was the first attempt to subject the vibrato of numerous famous artists to scientific study.

More than anything, Seashore’s research lacked historical perspective and social awareness. Historical documents and early recordings indicate that, far from being the universal constant that Seashore wanted to make it, the use and practice of vibrato in Western music has been closely connected with musical style. Furthermore, since Seashore’s time, there has been greater awareness of the various uses of vibrato in different musical styles and social contexts. Vibrato is a marker of elite culture: heard more in opera than in Broadway.

A SHORT HISTORY OF OBOE VIBRATO: VIBRATO AS ORNAMENT: THE 18TH AND 19TH CENTURIES

Before the 20th century instrumentalists used vibrato only rarely. In the 17th and 18th centuries wind players practised a type of microtonal trill produced by partially closing tone holes with the side of the finger. This ornament, called *flattement* or *balancement* in France and “sweetening” in England, was used on individual notes often in conjunction with the *mesa di voce* (crescendo-diminuendo) to imitate the human voice.¹³

Some players used a combination of different

vibrato techniques. In 1761 the French flautist Delusse mentioned finger vibrato, breath vibrato (which he said the Italians called *tremolo*) produced by pronouncing *hou hou*, and the *tremblement flexible* produced by rolling the flute (a technique analogous to the rocking motion of the wrist used to produce vibrato on the violin). Delusse’s description of vibrato was cribbed almost verbatim from Geminiani’s violin method from ten years prior. Both writers ascribed specific emotional qualities to the *tremblement flexible* when it was used in combination with certain dynamics. When used on a note played with a crescendo and terminated with force, it expresses “weight and fear” [*la gravité et la frayeur*], on shorter, softer notes it expresses “affliction and languishing” [*l’affliction et la langueur*] and on short notes it makes the melody “more pleasant and tender” [*plus agréable et plus tendre*].¹⁴

Did 18th-century oboists follow the same principles? From the little information available, it would appear that there was considerable variation. Two famous 18th-century oboists are mentioned in the Mozart family letters. Leopold’s praise for Carlo Besozzi’s remarkable “ability to sustain his notes and his power to increase and decrease their volume without introducing even the slightest quiver into his very pure tone” implies that he did not use vibrato. However, Leopold found Besozzi’s constant use of the *mesa di voce* without vibrato monotonous as it produced “the same melancholy effect [...] as the tones of the [glass] harmonica,” an instrument famed for its ability to send player and listener to distraction.¹⁵ On the other hand, when Wolfgang heard Johann Christian Fischer in 1787, he complained of the oboist’s excessive vibrato: “The long and short of it is that he plays like a bad beginner [...] his vibrato is like the tremulant on the organ.”¹⁶ This reference is often interpreted as an indication of Fischer’s failing ability in old age.

Finger vibrato seems to have co-existed with breath vibrato well into the 19th century. The flautist Anton Bernard Fürstenau discussed both finger vibrato (*Klopfen*) and breath vibrato produced by the lungs (*Bebung*) but cautioned that these ornaments should be reserved for special effects on single notes.¹⁷ The bassoonists Almenraeder¹⁸ and Eugène Jancourt also advocated the selective use of finger vibrato. Jancourt indicated that this effect should not be considered an ornament of taste, but that it resulted from “the expression of profound emotion on the instrument.”¹⁹ This might seem like a foreshadowing of Seashore’s notion of

vibrato, but Jancourt still used this vibrato as an ornament on isolated notes. The violinist Charles Bériot stressed the connection between vibrato and singing, but he still recognised non-vibrato as the basis of tone production. Which singers would Bériot have had in mind as his models? Undoubtedly one would have been his brother-in-law, the famous tenor Manuel García. In his influential *Complete Treatise on the Art of Singing*, García also described vibrato (which he called *tremolo*) not as a constant element of tone production but as an ornament reserved for the expression of those sentiments which “in real life, are of a poignant character such as anguish [...] or tears extorted by certain acts of anger, revenge, etc.”²⁰

Again there is only very little information specific to the use of vibrato on the oboe in the 19th century. Garnier’s oboe method published c. 1800 mentions a technique similar to Delusse’s breath vibrato, but in this case it is classified as the subtlest form of articulation, produced by a shaking of the lips (*frémissement de lèvres*).²¹ Gustave Vogt, on the other hand, cautioned oboists to maintain a firm embouchure in order to avoid any “trembling which is harmful to the tone quality,”²² implying that he did not condone vibrato. Other oboists do seem to have used some form of vibrato. In 1819 Franz Czerwenka was praised for “the strength and length of his sustained tones, his *crescendi*, vibrato [*Vibriieren*], and the tender beauty of his sound, as well as the heartfelt feeling in his performance of the Adagio.”²³ Later in the century, the 1865 revised edition of Koch’s *Musikalisches Lexikon* indicated that “on many wind instruments, such as the oboe and flute, vibrato is not only very possible, but also of very good effect.”²⁴

Sara Bloom has surmised that “the resistance added to the instrument during Schumann’s lifetime had much to do with allowing air to be used at greater speeds (without overblowing the octave), creating these newly possible vibrato speeds and colors, and possibly the natural vibrato itself [...] The dramatic range of the oboe was fulfilled [...] when the natural vibrato and its range of speed matched the voice’s ‘proper limit’.”²⁵ There is, however, little evidence that mid-19th-century oboes were more resistant than earlier instruments, nor that this might have influenced vibrato. She seems to be applying the modern concept of a vocal technique constant (“natural”) vibrato to a period when the evidence indicates that vibrato was used only selectively.

TOWARDS THE MODERN CONCEPT OF VIBRATO

It was in the last years of the 19th century when vibrato came into more regular use and was identified as an element in tone production. At the time vibrato was also the subject of considerable controversy. References to its abuse proliferated. Around 1885, the first edition of *Grove’s Dictionary* indicated that

“when the vibrato is really an emotional thrill it can be highly effective [...] but when, as is too often the case, it degenerates into mannerism, its effect is painful, ridiculous, or nauseous, entirely opposed to good taste and common sense, and to be severely reprehended in all students whether of vocal or instrumental music.”²⁶

Over the course of the 20th century the ideal of instrumental tone production shifted from one in which straight tone was the basis to one in which constant vibrato was the norm and non-vibrato the exception. In *Early Recordings and Musical Style*, Robert Philip sketches the progression from the “old-fashioned” use of vibrato as an ornament to its “modern” function as “a continuous colour, producing uniformity.”²⁷ Although this paradigm serves as a working model, there is no hard-and-fast division between “old-fashioned” and “modern” vibrato styles. There have always been exceptional oboists whose playing resists being categorised and regional preferences often cut across the simple chronological development.

The shift towards constant vibrato is most apparent in violin technique and this had a decisive influence on all other instrumental performance. In 1905 Joseph Joachim linked a steady tone and minimal vibrato with good taste and a healthy tone,²⁸ but two decades later Carl Flesch observed that the most celebrated violinists of the day, “in nearly every case [...], employ an uninterrupted (though technically unobjectionable) vibrato,”²⁹ and the 1928 edition of *Grove’s Dictionary* stated that no string-player’s technique was complete without it. By 1938, constant vibrato was the norm and more than any other performers, Fritz Kreisler and Heifetz who led the change.³⁰ As Kreisler wrote: “The vital fact about vibrato is that it should be continuous; there must be no break in it whatsoever.”³¹

When Richard Strauss compared the Austro-German and French styles of oboe in 1904, he described the French oboe tone as “softer and often vibrant [*dünner und oft vibrierend*].”³² This may indicate that, already by that date, he

had heard French oboists playing with vibrato. Alternatively, his intention may have been more figurative, but nevertheless it stands as an indication that when vibrato did become part of French oboe technique, it complemented the inherently vibrant quality of the French oboe.

It does appear that breath vibrato on woodwind instruments was first cultivated as an adjunct of tone production amongst French players - notably the flautist Paul Taffanel (1844-1908) and oboist Georges Gillet (1854-1934). However these players still used vibrato more sparingly than their string-player contemporaries. It was the next generation of oboists that harnessed vibrato as an adjunct to tone production and who, taking up appointments outside France, were largely responsible for the dissemination of woodwind vibrato.

According to Taffanel's pupil Marcel Moÿse, vibrato was first used around 1905, but that it was a hotly debated topic. Moÿse later recalled some of the extreme reactions to vibrato that were circulating then, including "Vibrato? It was worse than cholera!" reminiscent of Shaw's reference to the spread of vibrato as an epidemic.³³ Fernand Gillet reported that when he was a student at the Paris Conservatoire in the last years of the 19th century vibrato was officially forbidden, but that his uncle Georges Gillet used it, and that his students imitated his example.³⁴ Gillet's recording of excerpts from Rossini's *Guillaume Tell* made 1904-7 reveals a flute-like tone with no trace of vibrato.³⁵ A recording Fernand made near the middle of the 20th century of the *2nd Brandenburg Concerto* with the Boston Symphony Orchestra under Koussevitsky shows that even then he used markedly less vibrato than the flute and violin soloists.³⁶

Léon Goossens was the first English oboist to use a consistent breath vibrato. Indeed vibrato was to become something of a Goossens trademark. He described the atmosphere around the time he introduced it in 1915.

"The fashionable woodwind sound in the early days of this century was more wooden. *Vibrato* was rarely, if ever used, and certainly not as a fundamental aspect of tone production. Those first days at the Queen's Hall Orchestra represented for me a period of isolation from the prevalent style of sound reproduction. I suffered a great deal of abuse and jibing from other players at this time for persisting with my own concept of a beautiful oboe sound incorporating *vibrato* as an essential aspect of its singing quality."³⁷

Goossens' vibrato would certainly have stood out in the wind section at Queen's Hall Orchestra

as, at the time, none of the other wind players were using it. Even the flautists resisted "infection" from the new French fashion. It would be some decades before they replaced their wooden flutes with the metal flutes and adopted the vibrato championed by the French school. But according to Goossens' own report, Henri de Busscher, his predecessor at Queen's Hall played with more vibrato than other oboists of that time.³⁸ The earliest recordings preserved of de Busscher's playing were made much later in the 1940s, and show a fairly slow vibrato on selected notes, so Goossens' faster and more present vibrato would probably have been new to London in the 1910s.

Fritz Kreisler's playing was probably of prime inspiration for Goossens. The two artists can be heard side-by-side on at least one recording: the Brahms *Violin Concerto* with the London Philharmonic under Sir John Barbirolli made in 1935.³⁹ Here Goossens matched Kreisler's vibrato in the oboe solo at the opening of the slow movement (of course he did not attempt to imitate the violinist's idiosyncratic portamento style). Kreisler had recorded the same work four years before with the Berlin State Opera Orchestra under Leo Blech, but here the vibrato-less oboe tone contrasts markedly with the violinist's highly nuanced playing.⁴⁰

While vibrato is virtually always present in Goossens' playing, it is far from uniform: sometimes faster, sometimes slower, at the others almost imperceptible. He was the master of modulating vibrato to enhance the shape of the music. As he built a phrase he would often increase the intensity of his vibrato; on the resolution of appoggiaturas his vibrato would melt into a straighter tone; and he enhanced *diminuendi* on sustained tones with a gradual slowing of the vibrato. These techniques can be heard to good effect at the end of the first phrases in the first cadenza in the *Concerto* by Richard Strauss.⁴¹

Goossens' contemporary Marcel Tabuteau developed a vibrato ranging from hardly perceptible to a shimmer behind the sound, rather than Goossens' forward placement of vibrato. Tabuteau's vibrato technique also seems to involve less fluctuation in pitch than oscillations of intensity. Tabuteau never developed a pronounced, constant and fast vibrato to match his long-time colleague in the Philadelphia Orchestra, William Kincaid.⁴²

Wind players working in Germany and Austria in the first part of the century used virtually no vibrato but, with the widespread adoption of French oboes in German orchestras after World

War II, German oboists emulated French players in this regard. Perhaps the most representative player in this vein was Karl Steins (1919-?), principal oboe with the Berlin Philharmonic from 1949 to 1981 under Furtwängler, Klemperer and Karajan, and professor at the Berlin Hochschule from 1959. Steins was one of the first German oboists to play a French oboe and cultivate vibrato with a full, dark German sonority.

It is often claimed that constant vibrato was a necessity to make the sound project better in large concert halls, but early recordings indicate that constant vibrato became a regular feature of woodwind technique only some decades into the century - that is, well after orchestras began playing in large concert halls.

CONSTANT VIBRATO?

If constant vibrato was ever a standard practice, it was in the middle of the century, roughly from 1940 to 1980, but even then each national school cultivated its own ideals, influenced closely by the style of their needs. "No vibrato" was used only to create eerie effects⁴³ or used as a disparaging remark.⁴⁴ Evelyn Rothwell's remarks are typical of the period "it is a good axiom that you should not have to think about making a vibrato, but about stopping it!"⁴⁵

As Goossens was one of the most recorded oboists of the early 20th century, his influence was great. Goossens' own pupils and their pupils adopted a rather broader vibrato that is both constant and prominent. In 1959 Baines complained that English players used a slow "incessantly-continued tremulant," and preferred French oboists' vibrato which, "if heard at all, is typically of the fast 'instinctive' kind, introduced to heighten a phrase at its climax [...]. One may feel that one is hearing the oboe for a change, rather than the oboist."⁴⁶ Baines' comments still hold for some English players whose prominent vibrato gives a passionate, almost agitated, intensity to their playing, but at the same time, because it is constant, actually produces uniformity and erodes its expressive potential.

It was in the middle of the 20th century, that French oboists with Pierre Pierlot at the lead cultivated an "ample" vibrato style that, being both fast and relatively wide, added vibrancy to the characteristically bright French oboe tone. Although in most aspects his playing is the antithesis to his teacher's buoyant interpretations of Baroque concertos, Heinz Holliger's constant and intense vibrato coupled with a bright tone are not unlike Pierlot's. Holliger's approach to vibrato has been quite uniform

both over the course of his career and over the enormous range of musical styles that he has performed.

Robert Philip's observation that up to 1950 American oboists preferred faster vibrato than European players, is generally true for the second half of the century. But the differences in vibrato styles concerns more than speed. Players in the Tabuteau tradition have also tended to cultivate a vibrato of smaller amplitude than most European players. This gives the effect of a shimmer, or occasionally even a nervous tremor in the sound. The contrast between American and European styles is perhaps most marked when comparing the reserved use of vibrato of players like John De Lancie and John Mack with that of Pierre Pierlot, Heinz Holliger and Nicholas Daniel whose vibrati, while each quite idiosyncratic, are all in their own ways markedly present and forward in the sound.

This diversity of approaches to vibrato demonstrates that "modern" vibrato cannot be described simply as constantly present and unvaried. Fine players have always modulated their vibrato to suit musical circumstances. With the recent *rapprochement* of the French and German schools of oboe playing, the vibrato of younger French oboists is less obtrusive than Pierlot's, more like that of contemporary German oboists. This hybrid is exemplified by Michel Benet, principal oboe of the Orchestre de Paris.

Moreover, since the 1970s and early 80s there has been a reaction against the concept of vibrato as part of the sound. While the adoption of constant vibrato on the oboe is in part responsible for a general beautification of the instrument's tone, it has also suppressed some of the instrument's subtle colouring and expression. Increasingly players are sensing that if vibrato is constant, it depletes their playing of emotional variety. Instrumentalists and singers alike have (re)discovered a more sophisticated handling of vibrato that reflects musical function.

VIBRATO AND THE REVIVAL OF THE BAROQUE OBOE

The debate concerning vibrato and its effect on the purity of sound prominent in the early part of the 20th century was rekindled in the 1960s and 70s in Early Music circles. With the call for a return to "authentic" performance practices, the pioneers of the Early Music movement sought to cleanse music of impurities, particularly vibrato which was stigmatised as

a hallmark of Romantic interpretation that contaminated the purity of early instruments. The paucity of references to vibrato prior to the 20th century was taken an indication that vibrato should have no place in Early Music performance.

Even more than vibrato-less playing, vibrato-less singing - distinguished "authentic" representations of the old masters from the "inexcusable" imposition of personal emotion in "modern interpretations." The "white" voice was, above all, a characteristic of Anglo-Saxon Early Music interpreters (Emma Kirkby is perhaps the best-known exponent of the "natural" (that is vibrato-less) soprano).

But while many of the earliest exponents of the Early Music movement (Dolmetsch, David Munroe, etc.) sought to purge their playing of vibrato, those who pioneered the revival of Baroque winds and in particular the Baroque oboe in the 1960s were less concerned to deny the modern traditions that had nurtured them. Undoubtedly the most influential wind player in the early music movement of that period was the Dutch recorder and flute player Frans Brüggen. In his recordings from the early 1960s, Brüggen used a fast and constant vibrato at the time fashionable amongst modern flute players, but by about 1966 when he had begun playing on original flutes and recorders, his vibrato underwent a transformation. Constant vibrato is no longer a feature of his playing; in its place is a vibrato of constantly varying speed used only on selected notes.⁴⁷ In his mature style, Brüggen's breath vibrato remained generous, but his fundamental sound is always discernible behind the vibrato. He also used finger vibrato for particular effects, particularly in French Baroque music.⁴⁸

The four leading players to take up early oboe in the late 60s and 70s came from diverse musical backgrounds and this is identifiable as much in their individual approaches to vibrato as any other aspect of their playing. The French-Swiss Michel Piguet (1932-) used a rather fast and shallow vibrato whether playing modern or Baroque oboe.⁴⁹ Bruce Haynes (1942-) retained elements of his training as a modern oboist in the Tabuteau tradition.⁵⁰ Ku Ebginge (1948-), whose point of departure was the modern Dutch school of oboe playing, also used vibrato much along the lines of Brüggen's later style but in his case he developed a more pronounced and wider vibrato than Haynes.⁵¹ Unlike the other Baroque oboists mentioned so far, Jurg Schaeftlein (1929-86) the principal oboist in *Concentus Musicus Wien*, played modern (in

his case Viennese) oboe alongside his Baroque instrument. Regardless of which instrument he was playing, Schaeftlein's tone is characterised by the constant, fast, shimmering, vibrato characteristic of Viennese wind playing of the mid-20th century.⁵² The styles of this first generation of Baroque oboists hybridised as each of these players trained younger oboists. For instance, Paul Goodwin, one of the most recorded of the younger generation, combines elements from the modern British oboe school and his training on Baroque oboe with Schaeftlein in Vienna.⁵³

As Early Music becomes increasingly mainstream, it is shifting away from "natural" white voices and vibrato-less playing towards larger voices and instruments enlivened with more "modern" vibrato. This has not meant the wholesale adoption of constant vibrato by early music practitioners, but rather a relaxation of the former prohibition on vibrato, and an enrichment of the application of vibrato in historically appropriate contexts.

Early music and mainstream traditions continue to follow their own separate paths. Players of the modern French oboe often voice strong resistance to the principles advocated by Baroque specialists and differences become ideologically charged. One need go no further than the pages of this journal to find representative opinions. Baroque oboists are so often labelled as purists, and this assumption (false or not) blinkers appreciation for what they actually do in their playing. Take Ku Ebginge's performance of the oboe music of CPE Bach. It would be hard to call this the playing of a purist. While his use of vibrato may not match the way it is deployed in some schools of modern oboe playing, it is a valid musical approach and arises from a strongly grounded technique. This is a modern musician's take on historical practices. Ebginge uses vibrato regularly, but not constantly, and it never seems accidental. Rather it is calculated to enhance the line of the phrase, and to draw attention to melodic details - appoggiaturas and syncopations.

Instead of being resistant to different styles of vibrato and criticising the technique of other players because their musical instincts differ from our own, should we not acknowledge the variations that enrich our musical experiences? As Sara Bloom has written,

"As to what really was done by 18th century musicians, you can be sure it covered the gamut, as it does today, from straight, white tones, to wobbles, to glottal bleating, to lovely pure tones with expressive vibrations that carried the emotional message of the phrase."⁵⁴

FROM WHENCE SPRINGS THIS VIBRATO? IN QUEST OF THE BREATH VIBRATO

So far, I have intentionally avoided discussing the mechanism used to produce breath vibrato on wind instruments. Although so closely bound with the musician's physicality, the actual mechanism currently used by singers and wind players to produce vibrato is strangely elusive. Some players think of vibrato as a mysterious grace, a result of "proper" tonal placement and support. Allan Vogel writes of Robert Bloom's teaching of vibrato.

"When the wind is of sufficient intensity, and the embouchure holds the reed perfectly, a vibrato comes naturally into the sound, almost as if to reward the player for doing everything so well. This is the column of air vibrating. Vibrato after all is natural: the sound of a gong playing in a large room pulsates. No part of the body has to make the vibrato. It may be generated in the good support of the abdominal muscles and diaphragm, but all parts of the body should be flexible enough to be vibrated by the column of air."⁵⁵

Notice how, in Vogel's recollection, Bloom did not identify the source of vibrato but that he taught a holistic approach to tone production and vibrato that engaged the whole body, with the origin of vibrato fixed to no particular point.

Goossens was equally at a loss to describe vibrato in concrete terms. He mentioned "mobility of embouchure" and "abdominal support," but admitted that the "real control rests with the diaphragm." His general remarks muddy the waters still further:

"*Vibrato* is a quality which defies close analysis in any useful sense, nor indeed can it be induced by exercises and explanations. If all the physical conditions of good playing along with freedom from tension are achieved, *vibrato* becomes an expressive inflection of musical personality and sensibility."⁵⁶

Here Goossens is not saying that given certain conditions, vibrato would happen automatically, but that it should *seem* effortless, a supplement to the player's musicality. As for the mechanical means of vibrato production, he was intentionally vague.

Vocal vibrato, widely accepted as a "natural" acoustic phenomenon, has for long been the guiding model for instrumentalists. But if vibrato is a "natural" acoustic phenomenon, the result of a vibrating air column, how is it that singers and instrumentalists can adjust its speed, and turn it on and off? Clearly the modulation of

vibrato requires a very sophisticated - albeit elusive - technique, and this means that it cannot be completely natural. By this I do not mean that it should not *seem* natural. Indeed, that is the whole point: despite being artificially generated and artistically controlled, vibrato must seem effortless and natural, and one of the best ways to promote this is for musicians to divest themselves of agency and convince themselves that it is natural.

The vagueness of the source of vibrato seen in the statements of Bloom and Goossens was probably a response to the numerous confusing theories and contradictory practices that circulate about vibrato. Some claim to produce vibrato with the throat, jaw or even lips, but the majority of wind players associates it with the diaphragm.⁵⁷ Like many oboists, I was taught "diaphragmatic vibrato" and experienced the initial frustration of pulsing with the abdominal muscles while waiting for something to happen. In my case it did, and a "shimmering" vibration took over from the slower regular pulses. The shift felt like a gear change. Where the vibrato came from was impossible to tell. It seemed to be involuntary and to have a life of its own.

"Diaphragmatic vibrato" is, of course, a fallacy. The diaphragm cannot be responsible; in reality it is the abdominal muscles that do the work. But, even still, is this the source of woodwind vibrato? It is physically impossible for the abdomen to move at the speed required for vibrato (5-7 cps).⁵⁸ In fact studies have demonstrated that the diaphragm is stationary in the production of vibrato, and that it is the larynx that is responsible for the production of vibrato.⁵⁹ The diaphragm may act as a catalyst to initiate the oscillation in the air column, but a fully developed vibrato technique calls on other muscle groups. It is probably through the control and balance of these abdomen, larynx and lip muscles that wind players are able to modulate the speed and intensity of their vibrato. Different players have either found it beneficial to either focus on one area of the body, or to leave the source of vibrato intentionally elusive.

Why then talk about "diaphragmatic vibrato"? By focusing on the diaphragm the player's attention is drawn away from the throat and lip area, and this helps to avoid an unpleasant "nanny goat" bleating (*chevrottement*) which, although fashionable in the early decades of the 20th century, became the subject of ridicule amongst the next generation. With the diaphragm as the centre of attention, vibrato is identified with the muscle that is both directly

associated with breathing and at the same time one of the most intangible muscles of the body.⁶⁰ The diaphragm cannot be felt or touched, nor can its movement be easily detected, but its function is nevertheless essential to modern wind technique (“supported sound”). While it may not be an accurate explanation of the physics of vibrato, the concept of diaphragmatic vibrato facilitates the integration of the body in the process of sound production by associating vibrato with the source of breath that brings life to music.

FOOTNOTES

- 1 *The Oboe Book* (Kenosha, Wisconsin: Leblanc Co, 1954), 10.
- 2 “‘Space-Sound,’ Vibrato, Radio, etc.” (1931), quoted in *Style and Idea, Selected Writings of Arnold Schoenberg* (London: Faber and Faber, 1954), 150.
- 3 “‘Space-Sound,’ Vibrato, Radio, etc.” (1931), *Style and Idea*, 149.
- 4 “Vibrato,” (1940), *Style and Idea*, 346.
- 5 Quoted in John Potter, *Vocal Authority: Singing style and ideology* (Cambridge, New York: Cambridge UP, 1998), 57.
- 6 See Rushmore, *The Singing Voice* (London: H. Hamilton, 1971), 190.
- 7 *Voice Building and Tone Placing* (London: D. Appleton & Co., 1909), quoted in Rushmore, *The Singing Voice* (London: H. Hamilton, 1974), 158.
- 8 2000, personal communication.
- 9 *La Revue Romande*, 3/10 (1919): 10-13.
- 10 *In Search of Beauty in Music, A Scientific Approach to Musical Aesthetics* (New York: Roland Press, 1947), 62.
- 11 *Ibid.*, 59.
- 12 This view remains in place in many musicians’ thinking. Frederick Neumann, for instance, writes that “vocal vibrato must be ageless because it develops spontaneously in most mature and in all artistically trained voices” (“Authenticity and Vocal Vibrato,” *American Choral Review*, [1987]: 13-18).
- 13 See Hans-Moenan *The Revised New Grove*, “Vibrato.”
- 14 Delusse, *L’Art de la flûte traversière* (1760, facsim. ed. by G. Moens-Hanen, Buren, NL: F. Knuf), 9; Geminiani, *The Art of Playing on the Violin*, London: 1751, facs. London: Oxford, [1952], Ex. 18¶14.
- 15 Letter from Salzburg, 28.v.1778. Emily Anderson, *The Letters of Mozart* (London: Macmillan Press, 1985), 799.
- 16 Letter from Vienna, 4.iv.1787, Anderson, *The Letters of Mozart*, 907.
- 17 *Die Kunst des Flötenspiels* (op.138, ed. R. de Reede, repr. of 1844 ed., Buren: Uitgeverij F. Knuf, 1990), 81-2. Fürstenau’s examples show them used to intensify *sforzati* and *crescendi*, and to add colour to *fermati*, 79-83. James Alexander also described breath and finger vibrato on the flute in his *Improved Preceptor* (1830) (see Dwight Manning, “Woodwind Vibrato from the 18th century to the Present,” *Performance Practice Review* 8/1 (1995): 67-72; repr. in *DR* 18/3 (1995): 73).
- 18 *Die Kunst des Fagottblasens* (Mainz, 1841).
- 19 *Méthode théorique et pratique pour le basson*, Paris, c.1847, reprinted up to 1869, 50-1. “Ce n’est point un ornement dicté par le goût, mais bien le résultat d’un sentiment profond exprimé sur l’instrument.”
- 20 1847 & 1872 eds. collated & edited D.V. Paschve, Da Capo NY, 1975: 66.
- 21 *Méthode raisonnée* (Paris, 1800, facsim. repr. in Hautbois: Méthodes et Traités, Dictionnaires, “Méthodes et Traités” 3, Série I France 1600-1800, Paris: Fuzeau, 1999): 11.
- 22 *Méthode de hautbois* (unpub. MS, s. 1825, F-Pn), art. 3 “On the Embouchure.” A complete translation is forthcoming in my *Premier Hautboïste d’Europe: Gustave Vogt Virtuoso Oboist, Composer, Teacher*.
- 23 Review of Czerwenka’s performance of an oboe concerto and *Potpourri on Russian Airs* by Maurer in Berlin, March 2nd, 1819 (AMZ, 21 (1819): 250-1: “Er zeichnete sich aus durch Sicherheit des Ansatzes, Stärke und lange Haltung des Tons, des Crescendo, Vibrieren und die zarte Lieblichkeit des Tons, so wie durch inniges Gefühl im Vortrag des Adagio.”)
- 24 H.C. Koch, rev. A. von Dommer, *Musikalisches Lexikon* (Heidelberg, 1865, “Bebung”).
- 25 Sara Lambert Bloom, *The Robert Bloom Collection, Collected Preface* (Cranberry Isles, Maine: The Robert Bloom Collection, 1998): 71.
- 26 Sir George Grove (ed.), *A Dictionary of Music and Musicians* (London: Macmillan, 1880-90), “Vibrato.”
- 27 *Early Recordings and Musical Style: Changing tastes in instrumental performance, 1900-1950* (Cambridge University Press, 1994), 234.
- 28 *Violinschule* (Berlin, 1905), II: 94.
- 29 *Die Kunst der Violinspiels* (Berlin 1923-8), trans. by F.H. Martens as *The Art of Violin Playing* (New York, 1924-30): I: 40.
- 30 Philip, *Early Recordings*, 106.
- 31 Preface to Lionel Tertis, “Beauty of Tone in String Playing,” quoted in Philip, 101.
- 32 Hector Berlioz, *Treatise on Instrumentation* (1st ed. Berlin, 1904, enlarged and rev. R. Strauss, trans. T. Front, New York: E. F. Kalmus, 1948), 183.
- 33 *Comment j’ai pu rester en forme* (West Brattleboro, VT: M. Moÿse, 1974), n.p. “Le vibrato? C’était pire que le Choléra!”
- 34 Nora Post, “Interview with Gillet, 1978,” *DR*, 5/3 (1982), 36.
- 35 Discussed by Laila Storch in “Georges Gillet – Master Performer and Teacher,” *IDRS*, 5 (1977): 16.
- 36 Victor DM1118, 1947.
- 37 Goossens and E. Roxburgh, *Oboe*, (“Yehudi Menuin Music Guides,” London: MacDonald & Jones, 1977), 87.
- 38 Radio interview recorded for the BBC 1979.
- 39 DB 2915-1919S, transferred to LP Angel COLH 35, 1957.
- 40 1929, re-released on RR 541.
- 41 With Philharmonia Orchestra, cond. A. Galliera (2XEA, 2457, CLP 1698, 1947, reissued EMI SH243; TEST SBT1009, 1977, regretfully not yet re-released on CD).
- 42 Kincaid was a second generation Taffanel pupil who was a member of the orchestra from 1921-60.
- 43 Poulenc’s direction *sans couleur* in the Oboe Sonata of 1962 can be interpreted as “non vibrato.”
- 44 See, for instance, Goossens’ description of his teacher at the Royal College of Music, William Malsch in “Léon Goossens

- Interview with Léon Goossens and Edwin Roxburgh, August, 1, 1982," DR, 11/1 (1982), 21 ("like a comb and tissue paper with no vibrato").
- 45 *Oboe Technique* (London, Oxford University Press, 1953), 13.
- 46 *Woodwind Instruments and their History* (London: Faber & Faber, 3rd ed., 1967), 93.
- 47 This transformation can be heard on the recent rerelease of his recordings of Telemann Sonatas (1963) and Fantasias (1969-72) (*Frans Brüggen Edition*, Teldec 4509-93688-2, vol. 1 1995).
- 48 Listen to Brüggen's recording of the Suite for two recorders by J.M. Hotteterre with Kees Boecke (*Franz Brüggen III*, Teldec 6.48075 DT, 1975).
- 49 Compare Piguet's 1954 recording playing modern oboe d'amore in Bach Cantata 170 with Alfred Deller and the Leonhardt Consort (re-released on Vanguard, 08 5069 71, 1994) with his recording of sonatas on an original Rottenburg oboe (HM 589, 1979), and his performances of the Mozart oboe quartet (Telefunken 6.42173 AW, 1977) and concerto with the Academy of Ancient Music (L'Oiseau Lyre, 4144 339-1 / -2, 1985 / 6).
- 50 Listen in particular to the recording of the complete wind sonatas of Handel with Brüggen playing recorder and flute and Haynes on oboe (Seon ABCL-67005 / 3, 1974).
- 51 Ku can be heard as first oboist on recordings of the Orchestra of the 18th century and as soloist in the oboe music of C.P.E. Bach on Erato ECD 75560, 1990.
- 52 Schaeftlein can be heard playing Viennese oboe in the Mozart Oboe Concerto (Teldec 6.42361 AW, 1988, re-released 8.44056 ZS, 1977) and 18th-century oboes on *Original Instruments Oboe: Oboe d'amore: English horn* (Telefunken 6.42110 AP, 1977).
- 53 Listen, for example to his recording of sonatas by Vivaldi on Harmonia Mundi France, 907104 (1993).
- 54 DR, 14 / 2 (1991), 41.
- 55 *JIDRS*, 6 (1978): 27.
- 56 *Oboe*, 87.
- 57 See James Prodan, *Oboe Performance Practices and Teaching in the United States and Canada* (Akron, OH: Institute for Woodwind Research, 1979), Q.24. Georg Müller contrasted the rapid vibrato produced by the larynx with slower diaphragmatic vibrato (*Die Kunst des Flötenspiels* [1954], referred to in Manning "Woodwind Vibrato," *Performance Practice Review*, 8/1 (1995) 67-72 repr. in DR, 18/3 (1995): 74. James Brown, ex-principal oboist of the English Chamber Orchestra puts European and predominantly British oboists in three main camps: "The diaphragm camp (Craxton, Winfield, the Germans, for example); the throats (Goossens, the Stotijns and therefore the Dutch school, Holliger, Bourgue etc); and then the lip camp (MacDonagh, Lord, Black, Hunt)" (private communication, 2000).
- 58 Goossens (*Oboe*, 88). This is close to the 6.5 that Seashore found was average amongst singers (*In Search of Beauty*, 59).
- 59 See Andrew Brown, "A Cinefluorographic Pilot Study of the Throat While Vibrato Tones are played on Flute and Oboe," *JIDRS*, 4 (1976): 49, and Christopher Weait "Vibrato Videotape," *Flutist Quarterly*, 13 (1988): 45 discussed in Jay Light's *Essays for Oboists* (Des Moines, IA: Alborada) 191-6.
- 60 Sprenkle, *The Art of Oboe Playing* (Evanston, IL: Summy-Birchard Co., 1961), 13.