The Contrabassoon as a Pedagogical Tool

Michael Burns
Greensboro, North Carolina

In my position as a college bassoon professor I offer not only lessons on the bassoon but also on the contrabassoon to my students. Over the years I have found that students taking lessons on the contra have had some areas of their bassoon playing improve as a result and wanted to offer this article as a documentation of my observations.

As anyone who has played both contra and bassoon can attest, while the two share a family background and many similarities, the contra is not merely an oversized bassoon. I advocate to my students that they approach it foremost as a totally new and different instrument and then celebrate as a bonus any similarities when those are found. At the end of this article I have included a listing of what I consider to be the most essential differences for a bassoonist to note between the bassoon and contra.

In many regards the contrabassoon exaggerates issues also found on the bassoon:

- **Pitch/Tuning** is variable on the bassoon and must be accounted for to play in tune but the contra takes pitch variability to a much higher level with many fingerings able to produce notes within a range of a minor third or more! Also, because the sounding pitches of the contra are so low they often go well beyond a players' singing range so they need to learn to still mentally 'sing' the notes they wish to play (in fact it is perhaps even more crucial than on the bassoon) but they have to employ displacement of an octave or perhaps several octaves above where the contra will sound. I find this to be a really important skill and also one that I employ on the bassoon despite my own voice matching the range of the bassoon fairly well.

- **Voicing** is important on the bassoon (in my opinion) to help focus pitch and tone, to facilitate slurs and leaps, and to differentiate registers. All of these issues become amplified, larger and more critical on the contra.

- **Low Register** playing on the bassoon requires the player to have an 'open' setup in their voicing, embouchure, etc. in order to not accidentally jump up into harmonic partials instead of the fundamental. This also is more pronounced on the contra. As the contra's role is usually to play as the bass and lowest voice of the woodwinds (and often of the entire ensemble) this ability to truly 'center' the low notes is crucial.

- **Flicking/Venting** on the bassoon is considered by many to be an extremely important element of technique to clarify the notes at the top of the bass-clef staff. As the contra does not have a hole in the Bocal and a whisper key to help facilitate these notes the keys on the wing joint above the C# key are not for flicking or venting but actually become true octave keys, often referred to as octave keys one and two (OK1 and OK2—with OK1 being the lower one immediately above the C# key and OK2 above it.) These MUST be held down for those notes to function (vented) as opposed to just touching and releasing (flicking.) of course, neglecting to do anything with the octave keys will almost certainly not produce the desired response for these notes. Incidentally, just as the flicking/venting system is under further investigation on the bassoon with such innovations as the Weisberg no-flick system, the contra has also been investigated in a similar way with systems to address the issue by Arlen Fast, contra player in the New York Philharmonic and by Allen Savedoff in California.

- **Counting!** Contra parts are often less active and more sparse than bassoon parts so counting rests and being aware of what the parts surrounding the player are doing also becomes more crucial. Contra players also learn that bringing a good book to rehearsal can be advisable!

- **Alternate fingerings.** On the contra, many notes need to have altered fingerings to facilitate tuning, response and stability (see below.) These changes can alter with different reeds, bocals, instruments, etc. and a contra player needs to become quite flexible and even sometimes creative in their fingering choices to suit the conditions present at any point in time in the music.

- **The bassoon has a big bore.** The bore of the bassoon is large and it requires a lot of air to play—
particularly to play loudly in the low register. The Contra bore is even larger and longer and requires a LOT of air.

All of these elements listed above combine to make the contrabassoon a challenging instrument to play and especially to master, yet, it can also be a lot of fun. I see again and again that when a bassoonist takes on these challenges that on the contra are so pronounced and obvious that there is a corresponding improvement in those areas on the bassoon where they may have been somewhat more subtle. Their sensitivity to pitch is often improved and sometimes they have had to learn new strategies to deal with pitch issues on the contra that they then find they can apply on the bassoon (the octave-displacement mentioned above as a possible example.) Their level of voicing usage and control is also often enhanced on the bassoon after dealing with the more critical issues on the contra. Their low register clarity is usually improved. They often become better and more consistent about flicking and venting on the bassoon after the necessity of holding down the octave keys on the contra. They learn to count and listen more actively and can also become more flexible if alternate fingerings need to be employed on the bassoon for some reason. Finally, the air management skills required on the contra for its large bore can also be really beneficial on the bassoon.

All of these benefits were side-effects of learning to play the contra but all of them also enhance the students’ bassoon playing in my experience. I have reached the point that I may introduce contra playing to students that exhibit any of these problems listed above on the bassoon so that by experiencing the issue in its more exaggerated form they can become more aware of it, learn to deal with and overcome it and then reapply this same knowledge to the bassoon.

Below are my Contrabassoon Notes, a handout I have developed for bassoonists when they are asked to play contra for the first time covering what I consider to be some of the essential differences to note:

**What are the differences between bassoon and contra?**

1. The contra has no whisper key
2. The contra has no open finger holes (tone holes)
3. The contra has no fork fingerings

The majority of differences in fingerings stem from these three facts e.g.:  

- **Eb** in the staff would be a forked fingering on the bassoon, on the contra you finger D and add a special Eb key. Likewise **E and F** above the staff you play a forked left hand on the bassoon but do not on the contra. The simplest contra fingerings are just to finger a first finger LH e and ‘open’ f (like an octave lower) but with the OK2 held down.

- Because there are no open holes it is **impossible to 1/2 hole**, therefore on the contra you leave off the first finger for F#/Gb and for G natural. For G#/A\# you may also leave off the first finger but it is often more stable if instead you close the first finger and hold down the first octave key (see below)

- Because there is no whisper key you have to remember NOT to hold down the bottom key for the left-hand thumb—it is the C# key!!!!

- Also you can’t open the whisper key for the register above the staff so you must hold down the appropriate octave key (equivalent to the bassoon flick keys) the **first octave key** above the C# key is held down to play Ab, A, Bb, B, and C. The **second octave key** is held down for D, Eb, E, F. On some contras there is an optional little button above the C# key which operates the second octave key to enable you to play the high C# more securely.

The contra is notorious for sounding out of tune and ugly. Contra players have learned some tricks to try and combat this. One is to find **alternate fingerings** that improve intonation, tone, or stability on certain notes. One of the more commonly used techniques is to use the **low D key** as a kind of whisper key replacement. On many instruments this will help stability of pitch and tone on many notes—be careful not to add it when playing a low E though!! Adding low C, B or Bb is also possible and especially helps with playing at softer dynamics or when needing to leap to or from these notes. Another common change is to add fingers of the right hand to notes that normally only require the left (e.g. D, Eb, E, F in both middle octaves) different combinations of fingers may have better results on different notes on different instruments and with different reeds—experiment a little. A good starting point with these notes is to try adding the 2nd, 3rd, and 4th fingers of the right hand, and also the thumb on the Bb key.

Just like on the bassoon the lower jaw has to be really low and relaxed in order to get the contra low notes to come out cleanly. Most people underestimate
how low they need to make the jaw. Really drop it down and lower your tongue position as much as possible but you must also really focus the airstream or it may come out flat and flabby.

Contra has the ability to play with a very wide dynamic range—much larger than the bassoon's. Practice controlling the volume at both extremes, loud and soft, and always focus and direct the airstream. Don't allow the sound to get blatty.

The contra is twice as long as the bassoon—16 feet. Fill it with air!!!

The Contra sounds one octave lower than written (like the double bass).

Michael Burns is associate professor of bassoon at the University of North Carolina at Greensboro, and the bassoonist in the Eastwind Trio d'Anches, the Cascade Quintet and the Blue Mountain Ensemble. He also performs as principal bassoon in the Asheville Symphony, The Opera Company of North Carolina and the Carolina Ballet as well as playing regularly with the North Carolina and Greensboro symphonies amongst others. He has a recently released CD album Primavera: Music for Bassoon and Piano by Bassoonists on the Mark Masters label that is receiving critical acclaim. Previously he has held positions teaching bassoon at Indiana State University, playing principal bassoon in the Midland/Odessa Symphony Orchestra and the Cincinnati Chamber Orchestra. He has also played contrabassoon and bassoon in the Cincinnati and New Zealand Symphony Orchestras. Burns is a Yamaha performing artist. He is also an active composer with many of his pieces being published by TrevCo Music and frequently performed throughout the country and internationally. Burns has published articles and reviews in The Double Reed, the TBA Journal (Texas Bandmasters' Association), the NC Music Educator for which he served as Woodwind Notes Editor, Notes (the journal of the Music Library Association) and on the Yamaha Educator Series online. His mentors include William Winstead, Sherman Walt, Leonard Sharrow, and Colin Hemmingsen. He is archivist for the International Double Reed Society and was co-host for the IDRS 2003 Conference in Greensboro, NC. For more information please see his website: www.michaelburnsbassoon.com

ENDNOTES

1 For a more detailed description of my thoughts on the topic of voicing on the bassoon please see my previous article “Response Issues on the Bassoon” in the Double Reed Vol. 30 No. 4, 2007, pages 71-75

2 This is an oversimplification. There are some possible contrabassoon fingerings that use a fork-fingering.