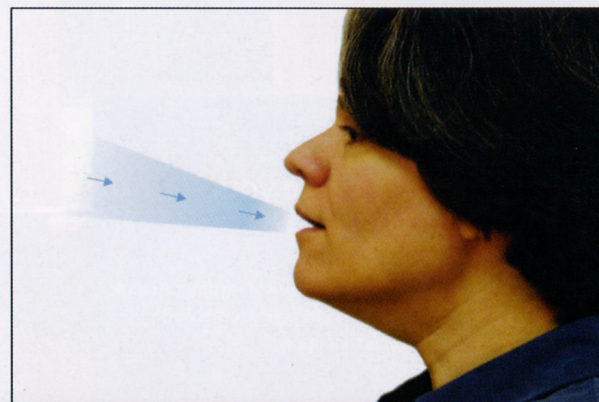


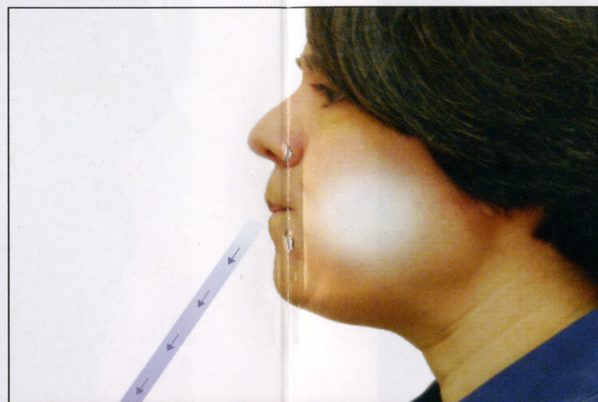
A STEP-BY-STEP GUIDE TO CIRCULAR BREATHING FOR WIND PLAYERS



Step 1: Breathe in



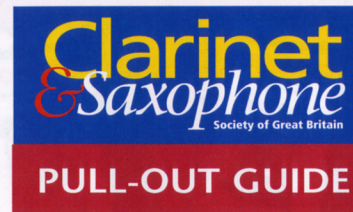
Step 2: Blow into instrument



Step 3: Start storing air in cheeks while blowing



Step 4: Close throat (tongue touches soft palate so air cannot come out of lungs)



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Logo and graphics by Adam Baumgartner, Digital Media Consultant, Advanced Learning Technologies at Miami University (Ohio). Photos and graphic superimposition by Yvonne P. Yau, Digital Media Specialist, Advanced Learning Technologies at Miami University.

Circular breathing is a technique used for different purposes throughout musical times. Middle Eastern double reed players produce a drone with continuous and uninterrupted airflow, and Scottish bagpipers use an air sack to store air to create a continuous sound.

Technically, circular breathing is the production of a continuous sound on a wind instrument by using the cheeks as an air reservoir and breathing through the nose while the stored air is forced from the mouth into the instrument. In traditional repertoire, it is almost always possible to find a place to breathe, although some long virtuoso passages could be played with this technique. Circular breathing also produces spectacular effects in contemporary music.

A good way to master this challenging task is to practise spitting water in a steady stream while inhaling through the nose simultaneously. The cheek and tongue muscles control the output of the water while the lungs inhale through the nose. To apply this to a wind instrument, it is necessary to develop a series of abilities beforehand. First, gather the following items:

- 1 plastic coffee stirrer (with two small openings at each end)
- 1 narrow drinking straw
- 1 large glass of water
- 1 kitchen sink (or a backyard)
- 1 wind instrument
- 1 healthy dose of perseverance

First and foremost, it is important to understand which muscles will be doing most of the work. The first muscles to train are the tongue, cheek, and throat muscles. These muscles will be working independently from the lungs, so it is

crucial to learn how to move them separately. With the tongue, close the throat (as in the last part of the word "gig") and breathe in and out through the nose several times. This is easy! Then, still breathing from the nose, open the mouth and move the tongue in various directions while inhaling and exhaling. Still easy. The next muscles to be aware of are the cheek muscles that act as an air sack to control the airflow.

Now you will need a glass of water and a coffee stirrer. Take as much water as possible in your mouth, then close the throat and puff your water-filled cheeks. Hold the coffee stirrer between your lips. Over a sink (or outdoors), forcefully push the water out of the stirrer, creating a strong and even flow with your cheeks and tongue. The water should come out as a straight long spurt with no interruption. This water flow simulates what will later become the airflow in your instrument while you breathe, so try breathing in and out as the water flows out in a straight line. Try the same exercise with a narrow drinking straw. The straw's opening is larger than a coffee stirrer and therefore offers less resistance, thus emulating wind playing more realistically. Then, remove the straw and do the same exercise with the lips only, spitting water in a straight long line, while inhaling. The stronger the cheek and tongue muscles contract, the less chances the water will slow down and drip down the chin instead of spurting straight forward.

MOUTHPIECE EXERCISE

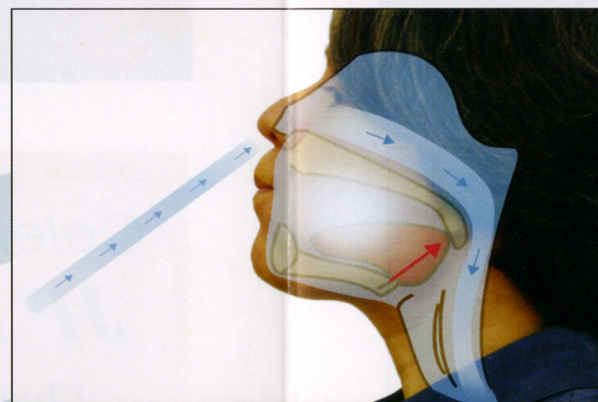
After gaining control of the cheek and tongue muscles, play a note through your mouthpiece only, or, for clarinet or saxophone, through the mouthpiece and

barrel or neck. The idea is to play a note without using air from the lungs. While closing your throat and forming your embouchure, puff the cheeks and try 'throwing' air into the mouthpiece. Remember to close your throat so that you won't be tempted to use the air column. At first, it might seem virtually impossible to create a sound using only the air stored in your cheeks. Imagine pronouncing the letter 'p' in a popping manner. Compress the air in the cheeks while almost blocking the air from the mouthpiece opening with the lips, and then free the opening so that the air is forced in the instrument to create a rather harsh and unattractive tone, but a tone nevertheless. In time, the notes should become longer. Later, do this exercise with the entire instrument, choosing comfortable notes at first.

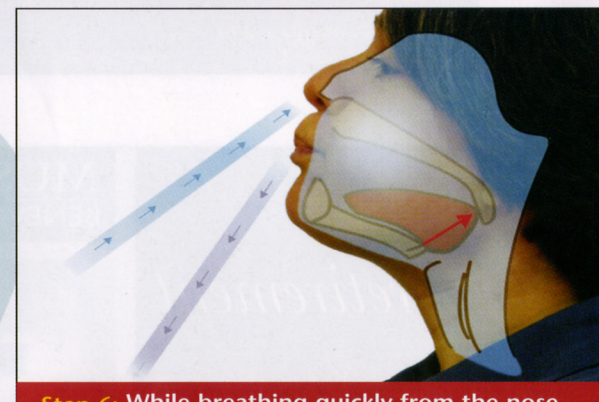
ALMOST THERE

You are now ready to combine all movements described above. While playing and sustaining a comfortable note, gradually puff your cheeks until they are stored with extra air. Close the throat and push the stored air into the instrument with your cheeks and tongue, as you did earlier with the water and straw. While you empty your cheeks, inhale through the nose. Gently restore the natural airflow by slowly and gradually reopening the throat without

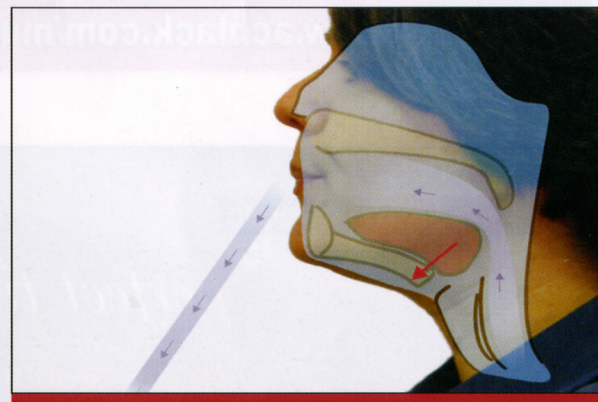
The following steps no. 5 and no. 6 are done simultaneously:



Step 5: Breathe quickly from the nose; throat is still closed



Step 6: While breathing quickly from the nose with your closed throat, compress cheeks and throw air stored in cheeks into mouthpiece



Step 7: Slowly reopen throat, start releasing your air very lightly at first to avoid 'bumps' in your sound, then resume normal blowing

creating a "bump" caused by quickly forcing the air out of the lungs.

After practising circular long tones, try with various scales and trills. It is wise to choose to circular breathe during technical passages to camouflage any imperfections. Some instruments where the air column resistance is naturally greater (i.e. oboe) make this technique more feasible, whereas instruments with low resistance (flute, clarinet) demand more cheek control and practice.

WATER BUBBLES

A good preparatory exercise is to practise blowing constant bubbles in a glass of water with the stirrer and later with the straw, or combining all steps while spitting water before attempting it on your instrument.

In time, the movements should be done more quickly and smoothly, with nearly

imperceptible puffing of the cheeks.

The general steps for circular breathing described above (except for the mouthpiece exercise) are demonstrated on clarinet by the author online at:

www.academic.muohio.edu/mus142/circular/index.html

On this website, you can click on various options to help you learn circular breathing. The options are:

Steps: This will take you through the step-by-step process of circular breathing. You can practise each step as we go through them together.

Circular breathing demonstration: Video demonstration done by the author.

Spitting water: Practise this in your own backyard with various-sized coffee stirrers

and straws (start with smaller diameter at first and increase the difficulty level with larger straws).

Making bubbles: Try these water bubble exercises with various sized coffee stirrers and straws (start with smaller diameter at first and increase the difficulty level with larger straws).

Quiz: Put the steps in order! Click on the various pictures and place them in correct order. If you fail, you will be prompted to try again by an interesting creature. If you succeed, a surprise awaits you!

For those who do not have online access, here are graphics to illustrate each step. The following examples are for clarinet but can be done on virtually any wind instrument. Good luck!

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