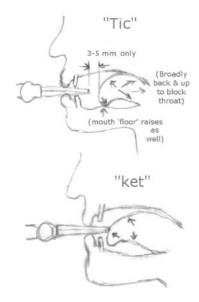
## Philip Sumner's double tonguing method

The tongue stays very wide, broad and fleshy in both the front and back positions. Opening your mouth to check both positions should show the tongue filling up most of the mouth, looking straight in. The air passage follows the barely visible narrow top curve of your palate. There is little front to back movement between the 2 positions - 5 mm at most. An overall 'reshaping' of the tongue shape/profile is most important. 'Normal' tonguing usually has the tongue flatter on top and more pointed at the tip / not as arched and broad as for double tonguing. The reed may need to be withdrawn slightly (by 3-4 mm), particularly if you normally hold most of the blade (nearly up to the 1st wire) in the mouth. Also, more lip pressure may need to be applied, in order to close the gap between the blades. These may allow the reed to respond quicker to a smaller quantity of air than normal. This all depends on the type of reed and responsiveness of reed you are currently playing on. There will be a 'sweet' spot or appropriate position for each reed, which you will learn to 'feel' is just right, after a while.

Keep the diaphragm pressure full on all the time when playing — but not necessarily as full on when learning the 2 moves (with or without the reed and/or bassoon). The tongue back position blocks the throat completely - you shouldn't be able to breathe at all. The front position obviously blocks the reed tip and therefore the air flow too, although without a reed in, likewise the tongue would continue to curl up even further and seal right around and behind the inside edge of the top and bottom teeth and also prevent breathing. Flip between the 2 positions as fast as possible. They should take about the same 'time' to execute - try not to let the return 'Ket' movement take more time to make. The 'mechanical/physical' sound of the action alone will 'sound' like Tic and Ket without having to 'say' them. Don't vocalise the 2 sounds at any stage. If it isn't obvious, the Tic action starts from where the Ket action ends up and visa-versa.



You are simply trying to create a rapid 'gate' of compressed air to vibrate the reed between 2 fixed and stopped-breath positions. With this 'method', the pitch at the end of notes shouldn't drop and the second (return) action shouldn't be delayed or held in the throat, unlike other methods that I've tried or heard about. I recommend, as part of the learning stage, to hold your hand's flat palm in front of the lips. Without a reed, two fairly equal 'spits' or bursts of air should be felt while practising the 2 actions. Whilst this hand test is very helpful in providing some feedback, you should be aware that the return 'Ket' may be somewhat less in pressure and control than the 'Tic' because the tongue tip has to move back up to a higher and more forward position and everything can feel more laboured, mechanical and unequal than when a reed is inside the mouth. A reed catches the rise of the tongue earlier, blocking the air flow further back on the tongue than at the tip. The overall double tongue actions should feel more positive and more economical in movement with a reed than during the hand testing stage. This may be because the reed (and bocal/crook) helps introduce resistance or back-pressure to the whole process.

Practise on repeated single notes before trying to coincide moving fingers (eg. playing scales) with the 2 actions. Although the duple Tic-Ket-Tic-Ket...etc. is utilised most often, I find triplets helpful in 'even'-ing out the two actions eg. Tic-Ket-Tic, Ket-Tic-Ket, etc. (accent the first of each group with an extra push of air), as well as freeing up and/or accelerating the speed of the tongue. This triplet 'variation' is obviously ideal for playing triplets or music written in compound meters, where a true duple pulse may actually hinder your ability to play a fast passage of notes. Double tonguing isn't so good in the lowest 5th of notes and those above middle C, although up to G (or Bb) will get better over time and regular application/use. Sometimes substituting the less aggressive 'Dah-Gah...' (or 'Dah-Gah-Dah...') is useful and more blending for rapid tonguing in quieter and 'dolce' passages. It doesn't seem to block off the air flow quite so much but should ONLY be practised, then utilised, once you have mastered the more articulated Tic-Ket method first, in order to understand the differences between the two (e.g. less arched tongue shape etc).

It is not unreasonable to expect to be able to 'articulate' semiquavers (16th notes) up to 240-260 beats per minute, often called for in Mozart or Haydn Symphonies and Overtures etc. One school of academic study suggests that few, if any, bassoon players of the 1800's actually played what was written, even though we try to achieve this today (using double tonguing if your single tonguing isn't extraordinary, which mine is certainly not). Although the classical composer or their copyist (often following shorthand indications) regularly gave bassoons the same bass line as the strings, the musician (apparently) would simply interpret any fast passages as longer (ie. less numerous) or held notes, according to often unwritten customs or practices of the time. Despite this possible historic anomaly, you would do well to also practise double tonguing at much slower tempi (eg. 140-160 bpm) and everything in-between, otherwise you may only learn how to coordinate tongue and fingers at only one flat out, breakneck speed and not be able to change down a gear if requested by a conductor or at one's own will. Even if, ultimately, your return 'Ket' may be somewhat less in pressure and control than the 'Tic', don't fret too much trying to get both perfectly equal, as this usually coincides with most music having stronger onbeat notes than offbeat ones. However, an evenness of rhythm should always be your goal even if pressure may need further work. The final stream of rapid notes should hopefully be considered so impressive that no one will notice too much else.

I wish to thank Mark Popkin for showing me this method during a masterclass he gave at Auckland University in the early 1990's. I had struggled since I began playing bassoon with a slow single-tongue speed, almost fearing any repertoire or solos which required fast tonguing. I'd used some techniques to 'fake it' (eg. breath attack the first of each group of 8 notes to rest the tongue) but this double tonguing method felt 'right' (for me) within minutes of learning it and was immediately useful within days of practising the technique. The complex actions and rapid changes between the front and back positions do become more fluid and performed 'on a roll' after many years, and not deliberately thought about, but you must start with slow, specific movements first and try not to rush into adding this technique or learning to co-ordinate tongue and fingers too soon into your playing in public. First, annoy your neighbours at home for several months, at least!