

# notes for trumpeters

## *The Studies*

*These notes consider some preliminary approaches to 24 Microtonal Studies by Donald Boustead (with fingering and editing by Stephen Altoft) which are published by Microtonal Projects and available from [www.tutti.co.uk](http://www.tutti.co.uk) price £12. A CD recording of all the studies, played by Stephen Altoft is also available from Tutti, priced £8 (CD MP001).*

## PREPARATORY EXERCISES

In forming the materials on this website, which focus around the publications above, the authors have resisted the temptation to include introductory exercises. Instead, guidance notes are offered below regarding strategy and approach in the early stages of playing microtones.

It is felt that playing potentially mechanical or repetitive patterns (for example, through scales or repetitive sequences) is generally less useful than the practice of considered, small groups of pitches which encourage careful listening (although co-ordination and dexterity exercises may play their part at some stage). One productive and effective method of introducing quarter-tones is by comparing intervals:

- **Choose any 12-division interval (start with the intervals which are easiest to hear such as major thirds and perfect fifths)**
- **Play the interval from a 12-division starting point**
- **Play the same interval a quarter-tone higher; listen, compare, adjust and repeat**
- **Play the interval from the original starting point, then a quarter-tone lower; listen, compare, adjust and repeat as before**

Such repetitions may be 'chained' together as long as the ear remains concentrated.

This approach can be applied to other small extracts of material: a five note scale; a triad; a short phrase of a known tune or an extracted phrase from one of the 24 Microtonal Studies. Over a period of time such exercises can become more ambitious and eventually may be combined to make longer examples which, when the ear is satisfied, could also be used to develop co-ordination and speed.

The following materials are suggested as a means to develop further exercises along these lines:

- **Full chromatic, major and minor scales**
- **Major, minor and other triads or familiar chordal formations**
- **Well-known trumpet solos, or extracts**
- **Random scales which use quarter-tone and standard pitches (devise your own)**
- **Scales, triads and intervals which involve an increasing number of quarter-tone intervals**

# notes for trumpeters

Some of these exercises should be written down. This will help create a greater awareness of quarter-tone notation and may lead to some simple first experiments in quarter-tone composition.

Such an approach is also possible with eighth-tones although neither the player or the composer should be too ambitious with this very small interval until quarter-tones are very well established.

It is possible to adapt more traditional music and scales for 19-division performance – this will become clear after careful study of the section on this tuning system.

Once the player is able to confidently play all the intervals within any particular system from any starting pitch, the *24 Microtonal Studies* will become much easier. It is recommended that players, using the interval charts which are provided, systematically log their progress in this regard. For example, over a period of one week, the player may concentrate on quarter-tone intervals between a major second and a perfect fourth; in a subsequent week from a perfect fourth to a minor sixth, while revising the intervals of the first week. It will be much more effective for the player to organize this progression rather than for us to prescribe such a timetable because ability and aptitude will vary.

Once a certain fluency is established and, for example, the player can play major and harmonic minor scales from different quarter-tone starting pitches, then generating random quarter-tone scales can be helpful. The random element takes away the natural inclination to safety. There are many different ways to do this; a simple idea follows:

- **allocate 6 different intervals to the six numbers of a dice (some quarter-tone intervals should be included)**
- **from a starting pitch towards the lower end of the instrument, throw the dice, then write the new pitch the given interval higher**

This exercise will help cement an association between intervals and their written form and provide a, quite probably, unusual series of pitches which will really test understanding. If such a scale turns out to be interesting, this could then be used as the basis for a study or, perhaps with other such generated scales, a longer piece.

# notes for trumpeters

## HOW TO APPROACH THE 24 MICROTONAL STUDIES

Different players will, naturally, have their own developed practice methods. The following suggestions are, therefore, given as a guide only:

- **Practise the given fingerings for the pitches in each interval group (the interval groups are described in relation to each of the three sections: 19-, 24-, 48-div) and with the valve slide combinations, including the alternatives, where appropriate, using the fingering chart**
- **Compare same-name quarter-tone pitches by octave**
- **Check the tuning of these pitches with an electronic tuner**
- **Play through the studies by pitch only, disregarding the rhythms. Experiment with different fingerings and valve slide combinations where these are available (some suggestions are offered in Studies 1-5; 17 and 18; 21-22).**
- **Gradually assemble the studies, phrase by phrase, incorporating the correct rhythms and phrasing. Continue to check regularly with a tuner until the ear becomes more aware of the less familiar intervals and fingerings**
- **In higher passages, practise the pitches an octave lower as well**
- **Work regularly in developing the ear, perhaps concentrating on particular intervals in melody and harmony**
- **Listen to the CD regularly: the more the sounds of the quarter-tones are absorbed internally, the quicker the ear will respond to lipping and adjustment**

When the studies have reached a certain point of familiarity, a more analytical approach can be applied. The experience, developed over many years, of playing 12-division pitches and intervals is one that can be used to considerable advantage. In Study 7, for example (see *24 Microtonal Studies*, p. 15), the C major scale fragment (bars 12-13) and the repeated minor third intervals (bars 26-7) become clear arrival points which give reassurance and confidence. Similarly, the quick recognition of 12-division intervals in quarter-tone transpositions offers support, particularly when these are in short, repeated groups (such as bars 15-16 in Study 7).

Thinking in a linear way can also be beneficial to pitching and help to clarify the implied quarter-tone harmony. In Study 9 (see *24 Microtonal Studies*, p. 19), the d'' three-quarter sharp in bar 18 can be compared with the d'' sharp in bar 19, and the e'' quarter-flat in bar 23 can lead through to the e'' natural in bar 24.

In the eighth-tone studies stable points of reference are consciously built in to the structure of the pieces to offer pitches or intervals or both which have more familiarity.

As an aid to analysis, see the interval look-up charts in 19-, 24-, 48-div (see Charts).

It is strongly recommended that the abbreviations given (see Manual, Introductory) are, selectively, written into the studies initially; this will help the player to recognize the intervals as written pitches and aurally. Naturally, however, the player should not become dependent on this practice and, as soon as familiarity is gained with any particular interval, it should not be written in but memorized.