

## CHAPTER 8

### COMBINATION OF INSTRUMENTS

#### 8.1 Introduction

During the course of this chapter opposing views on the effects of combining the oboe and cor anglais with various other orchestral instruments will be discussed. Only unison combination will be dealt with because references to other combination possibilities and chordal structures would demand a separate study. Due to the nature of this chapter the examples used will make many references to the full score. Transposing parts such as of the clarinets (E-flat, B-flat, A, D) and trumpets (B-flat, D, E-flat) will be mentioned with each example. The following standard transposing instruments will not be explained with each example: the cor anglais and horns sound a perfect fifth lower than written, and the bass clarinet sounds a major second lower than written.

#### 8.2 Unison tutti

The Italian word *tutti*, when used in connection with the orchestra, generally means the simultaneous use of all the instruments. In this case the word *all* is relative. It would be profitable to describe tutti sections in two ways (Korsakov 1964:101; Adler 1982:410):

- the *partial* tutti, using most of the instruments; and
- the *full* tutti, where all instruments are playing simultaneously.

The orchestral unison, a combination of all the many tone qualities, is a powerful and effective sound which involves the creation of mixed timbres. The mass of mixed timbres presented by the full orchestra, in spite of its magnificence and grandeur which capture our attention, lacks the subtle nuances of the solo instrument or voice, which may hold our attention over very extended periods of time. (Blatter 1980:292.)

### 8.3 Unison and octave doubling

According to Piston (1982:421) melodic lines may be doubled in unison or in one or more octaves with instruments of the same type or with different instruments. Unison doubling involves the creation of mixed timbres at the same pitch and is used to obtain new tone colours and to alter the tone colour of the instruments which dominate the combination. Two instruments playing in unison reinforce each other, but at the same time each tends to cancel some of the intensity of the other's tone. The unison of two instruments of the same kind possesses somewhat less than twice the tone weight and carrying power of one.

Piston (1982:359-360) states that very few instances of real unison doubling exist in orchestral literature because of the range limitations of some of the instruments. An orchestral tutti in which all the instruments are taking part cannot be regarded as being in unison, but rather in unison with octave doubling. With octave doubling the orchestra is distributed over a few octaves, so that each instrument may participate in its best range.

Shostakovich makes extensive use of unison writing throughout his symphonies with very interesting and novel instrument combinations (which will be discussed later in this chapter). Shostakovich's use of unison tutti's is only briefly prevalent in Symphonies No. 3, 5:1, 6:2, 11:2 and 13:3.

An excellent (and also the first and largest) example of an orchestral tutti in unison with octave doubling can be found in Symphony No. 3 (Ex. 8-1). Although loud and forceful the unison melody for the two oboes is in a comfortable middle-upper range together with the trumpets and second violins. The flutes, clarinets and first violins share the high F which is reinforced an octave higher by the piccolo in m. 666. Even though the dynamic level is *fff* for the entire orchestra throughout the 44 bars, the brass (horns, trumpets, trombones and tubas) produce the predominant tone-weight. "The full dynamic power of the brass is a dominating force capable of obliterating the sound of the rest of the orchestra. The limit of loudness and tone-weight of strings and woodwinds is a physical fact. Orchestral balance in great climaxes is an impossibility unless the brass volume is measured by the sonorous

capacity of strings and woodwind” (Piston 1982:222). The octave doubling in the trombone and tuba parts gives extra weight to the bass line of the orchestra. All four horns have been scored in unison and the two trumpets are doubling an octave above them from m. 666. The trumpets sound a major second lower than written.



#### 8.4 Oboes/cor anglais and strings in unison

The woodwind choir is often called upon to double the string choir, especially in tutti sections. In the 18th and 19th centuries doubling of winds with strings “at pitch” in unison was very popular. Today, however, we feel that octave doublings are more successful (Adler 1982:228.) Woodwinds may double a string section at the octave above or below. This usually sounds well in soft nuances, but when loud it is necessary to double the woodwind part so as to balance the strings. The unison doubling of strings by woodwind is common. All combinations are good, wherever the ranges coincide. In general, when a single woodwind is added to a string part it serves to strengthen the string tone, and if the dynamic level is fairly loud its own colour will be more or less absorbed. (Korsakov 1964:58; Piston 1982: 426.)

The combination of woodwinds and strings in unison is used extensively by Shostakovich throughout his symphonies. There is, however, a noticeable progression in the combinations between the earlier and later works as Shostakovich gradually scores parts for the less common instruments such as the E-flat clarinet and contrabassoon. The oboe is most commonly scored in unison with the first and/or second violins, but seldom in unison with the violas. The combination of oboe, clarinet and violas is often used in the earlier symphonies, in particular Symphonies No. 1-4. Symphonies No. 7 and 11 include the most examples of unison writing between the strings and woodwinds.

The following is a typical example of the woodwind and string combination found in Symphony No. 7. This example of woodwind and string unison is 19 bars in length and the dynamic indication is *fff* throughout. In Example 8-2 only 5 bars are shown. The addition of the xylophone doubling in unison with the clarinets and second violins adds to the unusual timbre created in this example. The oboes, cor anglais and violas are scored in unison an octave below the clarinets, second violins and xylophone.

Example 8-2: Symphony No. 7, first movement, mm. 408-412



48

Pico.

Fl.

Ob.

Cl. ingl.

Cl. picc.

Cl.

Cl. b.

Fag.

C.fag.

Tr-be

Tr-nl e

Tuba

Timp.

T-ro

Cassa

Sil.

49

Archl.

408



A splendid example of actual unison between the lower woodwinds and lower strings is found in the stately opening theme of Symphony No. 6 (Largo). Shostakovich created a dark though rich timbre by effectively combining a cor anglais, 2 clarinets (which sound a major 2nd lower than written), 2 bassoons, violas and cello's in unison at a *f espressivo* dynamic level. The B-natural in m. 1 scored for the cor anglais is the lowest note the instrument can play. It is not technically as difficult to articulate low notes on the cor anglais as it is on the oboe. The cor anglais, however, is at its most beautiful in the lower part of its range.

Example 8-3: Symphony No. 6, first movement, mm. 1-4

Largo  $\text{♩} = 72$

Piccolo

2 Flauti

2 Oboi

Corno inglese

Clarinetto piccolo (Es)

2 Clarinetti (B)

Clarinetto basso (B)

2 Fagotti

Contrafagotto

Largo  $\text{♩} = 72$

Violini I

Violini II

Viole

Violoncelli

Contrabassi



## 8.5 Oboes/cor anglais and woodwinds in unison

The normal vertical arrangement of woodwind instruments from highest to lowest and that which produces the most natural resonance when doubling in unison is the following: flute, oboe, clarinet and bassoon. Departure from this natural order creates an unnatural resonance occasioned by the confusion of registers, the instrument of lower compass playing in its high register and vice versa (Korsakov 1964:47). The lack of proper relationship between the different tone qualities become apparent. (Piston 1982:421.)

Orchestration manuals offer opposing views on the effects of certain woodwind combinations. According to Burton (1982:342) the oboe and cor anglais, rich in overtones, do not blend so well with other woodwind instruments because they tend to assert their particular nasal quality, especially in combination with each other. Korsakov states (1964:47) that when the oboe and flute are combined in unison the tone quality is fuller and sweeter, and when played softly the flute tone will predominate in the low register and the oboe in the upper register. Adler (1982:207) on the other hand suggests that the flute will neutralise the nasal quality of the oboe.

Korsakov (1964:47) writes that the combination of oboe and clarinet results in a quality fuller than that of each instrument alone. The dark oboe tone will dominate the low register but the “bright, chesty” quality of the clarinet will dominate in the high register. Burton (1982:343) simply states that the oboe tone will dominate the clarinet and will result in a penetrating sonority. Adler (1982:206), however, disapproves of the combination oboe and clarinet in unison for three reasons:

- The oboe with its nasal quality will overshadow the clarinet,
- The conductor will have to balance the two by having the oboe play softer,
- The clarinet and oboe will have great difficulty staying in tune with each other.

Much has been written against combining similar wind instruments in unison, yet despite the statements against this Shostakovich very frequently makes use of like instruments in combination, especially in Symphonies No. 8, 10 and 11. Brahms, Glazunov, Glière and



many other contemporaries seldom double the two oboes in unison, but rather in thirds and sixths.

In the second movement of Symphony No. 9 Shostakovich successfully uses the combination oboe and clarinet in unison in an expressive solo (Ex. 8-5). The solo is supported by a *pp* string accompaniment. The clarinet and oboe are playing in unison from m. 132 until m. 148 when they are joined by the second oboe and second clarinet to match the strength of the added bassoons and horns.



Example 8-4: Symphony No. 9, second movement, mm. 130-149

The musical score is divided into two systems. The first system covers measures 130 to 149. It includes staves for Oboe (Ob.), Clarinet in B-flat (Cl. (B)), Cor Anglais (Cor.), and a full string section (Archi). The woodwinds and strings play a melodic line with a dynamic range from *pp* to *p*. The Cor Anglais part includes a *pp* dynamic and a *pp* *cresc.* instruction. The string section also starts at *pp* and *cresc.*. The second system covers measures 140 to 149. It includes staves for Oboe (Ob.), Clarinet (Cl.), Bassoon (Fag.), Cor Anglais (Cor.), and a full string section (Archi). The woodwinds and strings play a melodic line with a dynamic range from *mp* to *f*. The Cor Anglais part includes a *senza sord.* instruction and a *f* *cresc.* instruction. The string section also includes a *mp* *cresc.* instruction and a *f* *cresc.* instruction.



The combination flute, oboe and clarinet in unison results in a very full quality. Korsakov (1964:47) particularly states that with the combination flute, oboe and clarinet, the flute will dominate in the low register, the oboe in the middle register, and the clarinet in the upper register. Shostakovich uses the aforementioned unusual unison combination in a solo passage supported by a staccato *ppp* string accompaniment in Symphony No. 6, as seen in Example 8-6 below. The dynamic level of the solo varies from *p* to *fff* over four bars.

Example 8-5: Symphony No. 6, second movement, mm. 336-346

The musical score is divided into two systems. The first system (measures 336-341) features a solo for Flute (Fl.), Oboe (ob.), and Clarinet in G (Cl. ingl.) in unison, marked 'I solo'. The Flute part starts at measure 336 with a dynamic of *p* and reaches *fff* by measure 341. The Oboe and Clarinet parts also start at *p* and reach *fff* by measure 341. The string accompaniment (Archi) is marked *ppp* and consists of a staccato pattern. The second system (measures 341-346) continues the solo for Flute, Oboe, and Clarinet in G. The Flute part starts at measure 341 with a dynamic of *p* and reaches *fff* by measure 346. The Oboe and Clarinet parts also start at *p* and reach *fff* by measure 346. The string accompaniment remains *ppp*.



An example of a very unexpected and novel combination of unison octave doubling is found in the second movement, "Humour" (scherzo), of Symphony No. 13 involving the piccolo, cor anglais and piccolo clarinet (Ex. 8-6). The highest of the three octaves presented is played by the piccolo (sounding an octave higher than written), followed by the piccolo clarinet an octave lower and an octave below that the cor anglais. The piccolo clarinet sounds a minor 3rd higher than written. The witty character is not only achieved by the timbre created by the instruments involved, but also by the accented triplet followed by staccato crotchets. In m. 468 the bass soloist and chorus join the expanding woodwind motive with repeated notes different in character at a *ff* dynamic level. The bassoons and brass have a sustained chord which has been omitted from the example to conserve space.

Example 8-6: Symphony No. 13, second movement mm. 464-469

71

Picc. *p* *3* *cresc.* *mp* *cresc.*

Fl. *p* *3* *cresc.* *mp* *cresc.*

Ob. *p* *3* *cresc.* *mp* *cresc.*

C. Ingl. *p* *3* *cresc.* *mp* *cresc.*

Cl. picc. *p* *3* *cresc.* *mp* *cresc.*

Cl. *mp* *cresc.*

Fag. *p* *cresc.*

C-fag. *p* *cresc.*

Timp.

T-ro

Basso solo *ff* *p* *cresc.*

Coro *ff*

464

Он му-жест-вен-ный че - ло -

Он му-жест-вен-ный че - ло -

Shostakovich frequently makes use of unison with octave doubling including all the woodwind instruments. The following example, however, from the first movement of Symphony No. 12 is very unusual due to the pitch distribution. The first and second oboes have a unison line and the third oboe is doubling in unison an octave higher. This is unusual because the third oboe is normally placed below the first and second oboes. The other winds are in the usual distribution.

Example 8-7: Symphony No. 12, first movement, mm. 74-77



The musical score is presented in two systems. The first system contains the woodwind parts: Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), and Bassoon (Fag.). The second system contains the string parts (Archl). The woodwind parts are written in a 4/4 time signature and feature a complex rhythmic pattern with many sixteenth notes and slurs. The oboe part is particularly notable for its unison with octave doubling. The string parts are written in a 4/4 time signature and feature a complex rhythmic pattern with many sixteenth notes and slurs. The score is in a key signature of one flat (B-flat major/D minor).



## 8.6 Oboes/cor anglais and brass in unison

In the event of the combination brass and woodwinds, the woodwinds are generally placed above the brass where they can strengthen the upper partials and where they have a better chance of being heard. Woodwinds placed amongst the brass, especially in loud passages, tend to lessen the brilliance of the brass without lending any strength or colour of their own (Burton 1982:343). According to Korsakov (1964:56) the trumpet is the instrument most frequently doubled in unison by the oboe, yet Shostakovich very seldom uses this combination. Shostakovich seldom combines the oboe and cor anglais with the complete brass section in unison although more frequent use is made of the combination oboes and/or cor anglais and horns, especially in Symphony No. 11. Tchaikovsky in his tutti passages, well known for their clearness and sonority, frequently doubles the trumpets in unison with the oboes. This procedure adds bite and edge to the trumpet tone without in any way detracting from its powerful and impressive quality. (Jacob 1982:79.)

An exciting example (Ex.7-8) of the cor anglais in unison with the entire brass section in octave doubling is found in Symphony No. 8 in what can be described as a forceful onslaught at the beginning of the Finale. The cor anglais joins the clarinets, bassoons, brass and strings in m. 3 in a unison melody with the excessive dynamic marking *fff* *espressivo*. It seems most unlikely that the cor anglais will be heard above the powerful brass and one can only assume that the reason for the addition of the cor anglais and strings is to soften the harsh tone of the brass.



Example 8-8: Symphony No. 8, fourth movement, mm. 1-4

112 Largo  $\downarrow = 50$  rit. a tempo Fl. ploc. II muta in Fl. gr. III

2 Piccoli  
2 Flauti  
2 Oboi  
Corno inglese  
Clarinetto piccolo (Es)  
2 Clarinetti (B)  
Clarinetto basso (B)  
3 Fagotti  
3 Trombe (B)  
4 Corni (F)  
3 Tromboni e Tuba  
Timpani  
Tamburo  
Piatti I  
Piatti II  
Cassa  
Tam-tam  
Silofono  
Violini I  
Violini II  
Viole  
Violoncelli  
Contrabassi

In Example 8-9 below the cor anglais is used in a fascinating ensemble involving the bass clarinet, bassoons, trombones and tubas. This unremitting rhythmic accompaniment-like figure relentlessly surges ahead at a *ff marcato* dynamic level, and is interrupted by *ff* solo trombones and horns in mm. 158-160.

Example 8-9: Symphony No. 8, third movement, mm. 147-160



The musical score is presented in two systems. The first system covers measures 147 to 153. The instruments listed are C.ingl., Cl. b., Fag., Tr-ni e Tuba. The second system covers measures 154 to 160. The instruments listed are C.ingl., Cl. b., Fag., Tr-be, Cor., Tr-ni e Tuba, and Timp. The score includes dynamic markings such as *ff*, *marcato*, and *solo*. A rehearsal mark [S7] is present above measure 157. The tempo is marked *ff marcato*.

## 8.7 Oboes/cor anglais and chorus in unison

Melodic doubling of voices by orchestral instruments (in unison or octaves) is of frequent occurrence in orchestral literature, but incessant duplication for an extended period of time should be avoided, although it is permissible in isolated phrases. The most natural doubling in unison for women's voices is performed by violins, violas, clarinets and oboes; that of men's voices by violas, cellos, bassoons and horns. Doubling in octaves is usually done in the upper register. Uninterrupted or too frequent duplication should be avoided not only because the operation deprives the singer of full freedom of expression, but also because it replaces the rare characteristic qualities of the human voice with a mixed timbre. When limited to a few special phrases, doubling supports the voice and endows it with beauty and colour. (Korsakov 1964:122-123.)

Lighter scoring is required for male voices than for a mixed choir, and an even lighter scoring is required for female voices (Korsakov 1964:126-128).

Shostakovich makes use of the chorus in Symphonies No. 2 and 3, and although he intended to include choral sections in Symphonies No. 6, 7 and 9, it was not until Symphonies No. 13 and 14 that voices again found place in his expressive needs on a symphonic level (Blokker & Dearling 1979:55). Towards the end of Symphony No. 2 the choir features considerable unison and two voiced singing, but no unison or doubling is found with the oboes. A very interesting discovery was made when the author, working with two sets of scores for Symphony No. 3, found the first example of unison and unison doubling with the oboes and chorus in Symphony No. 3, as seen in the following example (Ex. 8-10a). The one score is a *Kalmus Miniature Score* published by Belwin Mills, and includes an example of the oboes doubling a passages with the sopranos, shown in Ex. 8-10a. The second set of scores is the *New Soviet Edition of Shostakovich's Collected Works*, published in Moscow, which includes the same passage, yet with no doubling of the soprano line by the oboes (see Ex. 8-10b). The works published in Moscow are in accordance with the last editions which appeared in the composer's lifetime and contain all the latest corrections to the symphonies. Shostakovich therefore chose to revise the passage in Symphony No. 3 deciding against the



oboe doubling the soprano part. A possible reason for the change could be that Shostakovich, having heard the Symphony No. 3 performed, decided that the effect of the oboe doubling the soprano part seemed either too Baroque or emphasised the soprano melody too much.

Example 10a is taken from the *Kalmus Miniature Scores* and includes the unamended version of a passage in Symphony No. 3 where the woodwinds share a unison passage at a *forte* dynamic level with the sopranos and tenors. The two oboes are doubling the soprano part in unison virtually throughout the passage except for a brief diversion in m. 872 when the first oboe momentarily doubles the soprano part an octave higher until the first beat of m. 873. The author of this dissertation speculates that, had it been a later symphony, Shostakovich would not have hesitated to score a high F for the first oboe on the first beat of m. 873. For reasons of conserving space the brass and strings have been omitted from Example 8-10a.

Example 8-10a: Symphony No. 3, mm. 864-875



The image displays a musical score for measures 864-875 of Symphony No. 3. The top section shows the woodwind parts: Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), and Bassoon (Fog.). The bottom section shows the vocal parts with Russian lyrics and their German translation. The score includes dynamic markings such as *f* and *mf*, and articulation marks like accents and slurs. The woodwinds play a unison passage, with the oboes doubling the vocal melody. The vocal parts are in Russian and German, with the German text being a translation of the Russian lyrics.

864





108

868

64m . me . ro 6y . zy . mo . my      6 r 2 2 . 3 2 .  
 kom . men . den Te . ge . spijt uns      der . Ma .

64m . me . ro 6y . zy . mo . my      6 r 2 2 . 3 2 .  
 kom . men . den Te . ge . spijt uns      der . Ma .

64m . me . ro 6y . zy . mo . my      6 r 2 2 . 3 2 .  
 kom . men . den Te . ge . spijt uns      der . Ma .

64m . me . ro 6y . zy . mo . my      6 r 2 2 . 3 2 .  
 kom . men . den Te . ge . spijt uns      der . Ma .

872

МАЛЧУЌИ БИМЕЧЕМ НА ПРА ИХ ИМ СОВМЕЧЕ . ЗНАЕМ НА МЯ МЯ  
 ist un - ser Land be - reit . Er - de ge . hirt den Ar . beite rn , ik - nen ge . hort die

МАЛЧУЌИ БИМЕЧЕМ НА ПРА ИХ ИМ СОВМЕЧЕ . ЗНАЕМ НА МЯ МЯ  
 ist un - ser Land be - reit . Er - de ge . hirt den Ar . beite rn , ik - nen ge . hort die

МАЛЧУЌИ БИМЕЧЕМ НА ПРА ИХ ИМ СОВМЕЧЕ . ЗНАЕМ НА МЯ МЯ  
 ist un - ser Land be - reit . Er - de ge . hirt den Ar . beite rn , ik - nen ge . hort die

МАЛЧУЌИ БИМЕЧЕМ НА ПРА ИХ ИМ СОВМЕЧЕ . ЗНАЕМ НА МЯ МЯ  
 ist un - ser Land be - reit . Er - de ge . hirt den Ar . beite rn , ik - nen ge . hort die



The following example is of the amended version as published by the *New Soviet Edition*. The entire woodwind section has been changed to a regular rhythm from mm. 864-866. Compare mm. 867-869 of Ex. 8-10b with mm. 867-869 of Ex. 8-10a. The string parts remained unchanged.

Example 8-10b: Symphony No. 3, mm. 864-869

The musical score is divided into four systems. The first system contains woodwinds: Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), and Bassoon (Fag.). The second system contains brass: Cor (Cor.), Trumpet (Tr-bu), Trombone (Tr-ni), and Tuba. The third system contains the Chorus (XOP) with two staves and Russian lyrics: "Но-вы-е кор-пу-са - но-ва-я по-ло-са" and "Но-вы-е кор-пу-са - но-ва-я по-ло-са". The fourth system contains the Archi (string) section with two staves. The score is marked with a double bar line at the bottom left.



Fl. cc.

Fl.

Ob.

Cl.

Fag.

Cor.

Tr. be

Tr. ni  
e  
Tuba

Timp.

Ma - я, ог - ня - ми бь ю - ще - го бу - ду - ще - му в гла - за.

ХОР

Ma - я, ог - ня - ми бь ю - ще - го бу - ду - ще - му в гла - за.

Archl

867

Symphony No. 13, scored for bass soloist and male choir, involves a blend of economy, directness and simplicity that Shostakovich himself considered ideal. Nowhere is this quality more evident than in the choral writing of Symphony No. 13: the 40-100 voices prescribed in the score sing in unison throughout the symphony. Whether stark and defiant or warm and tender, this unanimity is in itself a powerful image and does much to establish the tone of the work. It is with the words that the music begins. The word-setting for soloist and chorus alike, is always simple and invariably syllabic. (Ottoway 1978:57-58.)

An excellent, and also the only example of unison doubling between the cor anglais, bass soloist and choir is found in the second movement of Symphony No. 13 (Ex. 8-11). A magnificently rich timbre is the result of this unusual combination involving the cor anglais, clarinets, bassoons, bass soloist and chorus in unison doubling. Notice how the cor anglais only enters on the first beat of m. 385 and m. 387 and not on the previous beat with the clarinets, bassoons, bass soloist and choir. The reason for this is that the cor anglais would have had to play a B-flat which is lower than its lowest note B.





Example 8-11: Symphony No. 13, second movement, mm. 382-391

Picc.

Fl.

Ob.

C.ingl.

Cl. picc.

Cl.

Fag.

C-fag.

Timp.

T-no

T-ro

Basso solo

Coro

чер - та два у - да - лось. Ре - шет - ки и сте - ны ка - мен - ны - е он

382

385

*p cresc.* *ff* *p cresc.* *ff* *p cresc.*

*p sempre* *p sempre*

Ob.

C.ingl.

Basso solo

Coro

про - ходил на - сквозь. От кашли-вался про - сту - жен - но, как ри - до - вой бо -

387

*p cresc.* *ff* *p* *ff* *p*



## 8.8 Concluding remark

Shostakovich reveals specific timbre preferences by combining the oboe and cor anglais in unison with other instruments. Although combinations are at times unusual, the result is always pleasing, and impressionable. Throughout the analysis the author has been increasingly convinced that Shostakovich's colourful and imaginative orchestration for the oboe and cor anglais is undoubtedly one of the most attractive features of his orchestral style.