

philharmonia orchestra

PERCUSSION IN MESSIAEN

David Corkhill, Philharmonia Orchestra Principal Percussionist:

The vibraphone, together with the chimes: this is considered for him in this piece to be a keyboard instrument, and associated with the ondes Martenot, the celeste and so on. It was a jazz instrument of course, that's what it was known as, it was imported from the USA: but he doesn't use it in a jazz way, he uses the idea of a motor which opens and closes the resonators to give a vibrating effect in some of the slow melodies. Here's the sort of thing I mean – *example* – that vibrating effect. It seems to me that a lot of the writing, not only for the vibraphone but for the rest of the percussion, has this rather hypnotic repetitious effect, as if he's trying to create some other sound, some other culture. There's a passage around about Figure 12 that he gives the vibraphone along with the other keyboard instruments – *example* – so the same pattern repeated several times across the beat, across the bar, as if there is no particular pulse, just repeated sounds.

It's not just in repeated rhythmic patterns that Messiaen uses the vibraphone: he also uses it in a very slow *sostenuto* manner, when you can really hear the sound vibrating and you hear the opening and closing of the fans quite quickly actually. *Example*

It's part of the problem of listening now, that at the beginning of the twentieth century this is all new. It must have been astonishing, it almost had a pungency about it, this kind of music, and trying to really recreate in ourselves the kind of effects that it had on an audience then, it's extraordinary, quite extraordinary.

The tam-tam is part of the official percussion collection in *Turangalila*. He's very specific about note length: this happens quite a lot during the whole piece, it's crucial to the way his percussion melodies work out. You can see it in some of his writing: he actually gives the numbers of semiquavers of how long a note is, and there are parts where the tam-tam has to be damped – he doesn't say that but it is clear from the score that it should only last a bar and then stop, so rather than just letting something ring on – *example* – as one might expect, he's quite specific, Messiaen, and he wants it damped. *Example*

Perhaps more conventionally, although nonetheless I think quite unusual for the time, is this idea of using percussion in a massive *crescendo*, and the tam-tam is particularly good at this. There are one or two passages where the tam-tam and bass drum have this almighty *crescendo* which stops suddenly, and it is quite devastating. *Example*

So there are a lot of high frequencies with the tam-tam which you can hear very clearly in that very loud *crescendo*, but there are a lot of low frequencies as well, and he often uses the tam-tam to support the low instruments like the bassoon, the cello, the bass. It's particularly noticeable in a later work, *Et expecto resurrectionem mortuorum*, quite a few years later actually, where he uses the tam-tam and its deep sonority and great profound sound to underpin the orchestral texture.

It's an extraordinary instrument, it fascinates me how cymbals could ever be considered as part of any kind of musical ensemble, because they have no pitch, they have no harmony, they have no melody, they seldom have rhythm, they're usually just a single note. Nevertheless it seems that composers, when everything else is complete, they have to have cymbals as well, and for this performance we're doing with Esa-Pekka I'll be using quite a small suspended cymbal. There's been a fashion over the last few decades to use quite large suspended cymbals for the big effects in Mahler and so on, but he asks not only for what he calls *cymbale suspendue*, but he also asks for a small Turkish cymbal. It's difficult to know exactly what he meant but we think – I think – that it's a

small, quite heavy instrument, sounding rather more like this: *example*. In a sense with a Turkish cymbal there's less of a splash and more of a note, it's more a ringing sound.

He uses a third suspended cymbal, this time a Chinese cymbal, which is a quite different sound again. *Example* The difference in the shape is certainly crucial: it has a dome in the normal way, it has a curved edge like this, and this rather curious little thing at the top here. I suspect also it's to do with the way the profile of the cymbal is shaped from the centre, which is quite thick, to the middle, which is possibly even thicker, and then a hammered section, and then quite thin at the edge.

Part of the effect is in the different pitches that the cymbals give, but also the different timbres that they give. He achieves the balance and the differentiation between the cymbals by giving them, like the tam-tam, very specific lengths, so one sound isn't ringing above another sound which isn't ringing above another sound. *Example* So simply what I've done there, as a new cymbal is played I've immediately damped the previous one, and as I played the last one I immediately damped the second one, so they take over from each other in close proximity to give a kind of edited sound. There's a real sense of pitch, and duration also.

This is very similar to the effect you have in gamelan players for example, where one note is played and immediately the previous one is damped. Where that's done with one player we'll be using several players, which has its own problems because of coordination and so on and so forth, but nevertheless it seems to be a similar effect. There are very specific layers of sound and pitch in his percussion writing, it's very clear from the score.

So in addition to the suspended cymbals – the Turkish, the Chinese, the conventionally suspended cymbal – there's an even more conventional pair of cymbals, *cymbales frappé*, he calls them, struck together. In some places in the score in the part they're called *choc*, choked: I believe this is more to do with the kind of effect he wants, a sudden stopping of the sound. *Examples* So that's much more of the conventional sound that one might be used to in a Tchaikovsky symphony for example, where there's almost an indeterminate length; it's to do with the effect of the cymbals themselves. And again we will be using rather smaller cymbals for Esa-Pekka's performances than the kind of larger instruments which have developed over the last few decades, simply to re-create that kind of more miniature sound of percussion rather than the overblown sound that it's become.

In the middle of the ensemble there's some quite small instruments: there's a woodblock, there's a tambourine, triangle, maracas, temple blocks. Each one has got a very specific sound, it sounds like no other instrument. The woodblock, it relatively would be unknown. Again it's an Oriental instrument, it's the sort of sound that people might have heard in a Shinto temple. What's interesting in Messiaen's writing is how he gives duration to these notes: a woodblock has just got a single note, it's gone in a flash (*example*) so the sound is gone in a split second. But he notates the woodblock as he does for the snare drum, the *caisse claire*, with quite long notations, dotted minims, quite long durations – actually it makes it easier to read. One of the occasions when the woodblock features, in a sense – it's not the only instrument playing, there are many other instruments as well – but one of the occasions where it features is in a duet with the snare drum, with the *caisse claire*, they have identical rhythms. *Example* Played like that it sounds a bit random and seems to have no pulse, no metre: when everything else is playing, the rest of the ensemble has strict semiquavers, and it makes complete sense.

Now, the tambourine: well, who knows where the tambourine comes from? It's most famous I guess in Egypt, the Middle East generally. Messiaen uses it not specifically as a solo instrument but more as a general orchestral colour, prominently as part of a *crescendo* effect. *Example*

The triangle again would have been very familiar to Messiaen's audiences. It's a very old traditional instrument, it was known in medieval England for example, certainly it was known in Turkish janissary bands, so a really familiar instrument but with definite cultural associations. In this piece, in *Turangalila*, Messiaen uses it rather like he uses the other instruments with durations – the

cymbals, the tam-tam – unlike the woodblock and definitely unlike the tambourine. *Example* And in the same way as the cymbals, the snare drum, the tam-tam, he allocates rhythms, very specific rhythms to the triangle. *Example* So although it sounds rather random and really not to do with pulse or metre, when the rest of the instruments are playing in this very rigorous 3/16 metre there's a real sense of this being almost an alternative pulse.

I think the most unusual set of instruments in the whole set are the maracas. They're traditionally from Latin America and yet somehow Messiaen finds space in his orchestration to use these instruments. It's quite difficult with these instruments because they're quite quiet – *example* – and he does use this sound when the entire orchestra is playing big big *crescendos*, followed by just a quiet swirling sound (*example*). So putting the two together: *example*. But the dynamic he reaches is *fortissimo* and it's just impossible with these instruments. We might very well end up using these rather larger maracas which produce a rather bigger sound (*example*). But even these are perhaps a little bit inadequate, they may not be heard above the entire noise of the orchestra. So I'm really not sure how I'm going to be able to accommodate these demands by Messiaen for these massive volumes on the maracas when the orchestra is playing really really loudly. There's even a section later on where the only percussion instrument playing are the maracas with an enormous *crescendo* with the orchestra playing full out and just doing a *crescendo* swirling kind of sound. *Example*

These temple blocks are interesting I think. They more closely represent the instrument you would see in a temple even now in Japan. They're shaped like fish, the head of a fish. It's a much more hollow sound than the woodblock that you heard earlier. *Example* And there's almost a sense of pitch I think about these instruments, it's very interesting, but Messiaen doesn't use them in that way. But what he does do, rather like some of the other instruments, he allocates duration to them; and like the woodblock there is no duration, the note is gone in one moment (*example*), but he gives lengths to the notes as if he wants them to ring on, as if he imagines in his head there's some kind of duration. *Example* And each one of those notes has got a long tie connected to it, the notes go on, there are semibreves, whole bars are full of this single note, as if Messiaen wants you to imagine that these notes have got a long duration, they're not just single sounds in the middle of nothing. There's undoubtedly a psychological effect when a composer writes a short note, lots and lots and lots of rests, a short note, lots of rests, to make the piece feel energetic, no matter how slow the piece itself is; but if he or she writes lots of long notes, so-called – minims, semibreves, tied notes – no matter almost how fast the music is, there is a tendency to play very *legato* and give it space and give it time.

I would say one of the most familiar instruments in the entire percussion section is the snare drum, the side drum – Messiaen calls it the *caisse claire*. It's a drum in the conventional sense – there's a metal snare underneath, a series of metal strands, which give it a rather crisp sound. Without the snare on it sounds like this – *example* – and with the snare on it sounds like this – *example* – which is the sound I think we conventionally associate with the instrument. So along with the less conventional instruments – the Turkish cymbal, the temple blocks, the maracas, and so on and so forth – Messiaen isn't afraid to use a conventional instrument like a snare drum. But not in a conventional way that you would expect from a Russian ballet – he uses it very much in the same kind of rhythmic way that he uses the woodblock, the cymbals and so on and so forth. *Example* What's interesting about this particular passage is the articulation Messiaen ascribes to the notes. Some notes have *staccato*, some have accents, some have *tenuto* – it all contributes to an overall sense of the phrasing and the pulse and the metre of the music.

This for me in many senses is possibly the most interesting of the instruments in this entire collection for Messiaen's *Turangalila*. It's a *tambourin provençal*, it's a Provençal drum, a traditional French instrument. We've had instruments from Turkey, from Egypt, from China, from all over – this is a French instrument which he specifically wants. Normally it would be played with snares just like the ordinary snare drum has, but he asks in this piece for it to be without snares, so it just sounds rather like a tenor drum. *Example* And like the other instruments he gives specific durations, quite long notes in order to achieve some kind of lyrical effect, and he even in the score tells the

conductor how many semiquavers value each note is – 14, 17, 13, 3, whatever. And this particular passage for the *tambourin provençal* is no exception. *Example* Those were, in order according to the number of semiquavers value each note had, 14, 17, 6, 1, 2, 3, 7, 5, 4. I hope I was rhythmic!

The bass drum, rather like the tam-tam in some respects, is used to reinforce big dynamics, to really give a sense of real climactic *crescendos*. *Example*

Again grouped with the vibraphone, along with the keyboard glockenspiel, the celeste, and the piano, another keyboard instrument as far as Messiaen is concerned, separate from the percussion instruments – the tubular bells, *cloches*. Again he uses them very specifically melodically, and rhythmically as well, giving each note a certain duration usually to do with the number of semiquavers that it lasts. *Example*