Sydney Symphony Orchestra
Guidelines for student composers

Congratulations on having your music played by the Sydney Symphony Orchestra. We are delighted to be working with you and we hope that it is an enjoyable and rewarding experience for you. The musicians and the staff of the Orchestra are all completely committed to ensuring that your music receives the best workshop and/or performance possible. Our hope, in working with composers, is that the orchestral repertoire will be enriched through the creation of new works which have a life after this process, and which go on to give pleasure to audiences for years and decades to come.

1. AIMS

The first audience for your new piece is not the ticket-buyers in the concert hall: it is the musicians on the stage. They meet your piece not by listening to it but by reading and playing it. The purpose of a score and set of parts is to communicate to them, instantly, what you mean.

It’s worth remembering that big symphony orchestras are busy. They get through an enormous amount of repertoire, which changes every week, and which musicians have a limited amount of time to learn. It is wise, then, always to couch one’s musical ideas in the most conventional notational language possible.

This is emphatically not a suggestion that your music itself should be dumbed down. But the more effort you put into expressing it with the same notational grammar that the musicians are used to seeing day-in, day-out, the easier it is for the musicians. To put it another way: we don’t want the players to be deciphering your notation, we want them to be playing your music.

It is an odd paradox – music that fills the soul is nevertheless an intensely practical thing. This guide aims to assist with the practicalities.

2. RECOMMENDED READING

• Elaine Gould, Behind Bars: The Definitive Guide to Music Notation, Faber 2011
  
  This is necessary for anybody who wishes to be taken seriously as a composer. There are a few areas where I don’t quite agree with Gould and these are noted below. But if you stick with what Gould says you basically can’t go wrong.

• Hector Berlioz (revised Richard Strauss, translated Theodore Front), Treatise on Instrumentation, Kalmus 1948 (Dover reprint)
  
  Although there have been advances in instrument design since Strauss revised the book (and even more so since Berlioz wrote it), it’s useful to have a sense of the history of the instruments the musicians will be playing. Apropos the point above about the volume of work played by big orchestras, it is also worth remembering that the bulk of the orchestral repertoire is of Strauss’s time and earlier.

  
  This happens to be a book I’ve found useful, but any good ‘graphic design for dummies’ is going to be helpful. Scores and parts are, after all, objects of graphic design, and broader design principles can often help with thinking about knotty problems.
3. SCORE LAYOUT

3.1 Brackets and score order

- Entire families of instruments (i.e. wind, brass, percussion, strings) take a heavy bracket.
- Barlines follow the heavy bracket.
- Timpani never takes a heavy bracket unless there are multiple timpanists: it is essentially treated as a separate section (like harp and piano).
- Identical instruments (i.e. two clarinets) always take a light bracket if they use more than one staff. It’s OK to have auxiliary winds enclosed within the same light bracket.

```
yes       OK       but not

   Fl. 1  Fl. 1  Fl. 1
  Fl. 2   Fl. 2  Fl. 2
 Picc.   Picc.  Picc.

   Fl. 1  Fl. 1
  Picc.   Picc.
```

- For doubling instruments, the LH margin must always give the instrument playing at the time (not ‘Flute 3/Picc’).
- Harp is properly placed above piano/celeste (although, admittedly, there are plenty of scores which don’t observe this). This is because standard score order is wind, brass, timpani, percussion, harp, [anything else], strings – harp, one might say, is the last on the ‘standard’ list.
- See also Gould pp. 507ff.

3.2 Sharing staves

- Especially for large orchestras, it is helpful to have staves shared where possible. Where to share staves depends on the level of complexity. Homophonic writing is perfectly clear on one staff:

```
yes

   Fl. 1
```

but more complicated music would be better split onto two staves.

```
no

   Fl. 1
```

See also Gould pp. 525ff.

- For a triple wind orchestra the standard layout for shared staves is:

  - flutes 1 and 2 shared
  - piccolo/flute 3 * on its own
  - oboes 1 and 2 shared
  - cor anglais on its own
  - clarinets 1 and 2 shared
  - bass clarinet on its own
  - bassoons 1 and 2 shared
  - contrabassoon on its own
- horns 1 and 2 ^ shared
- horns 3 and 4 ^ shared
- trumpets 1 and 2 shared
- trumpet 3 on its own
- trombones 1 and 2 shared
- trombone 3 and tuba shared
- timpani on its own

* If it doesn’t double, piccolo goes on the top staff (i.e., the highest instrument in the winds). If it
doubles third flute, it goes on the lower staff (i.e., where the third flute goes). See also 6.2 below.
^ Horns are always 1+2 / 3+4 (see 6.3 below).

3.3 Copyright
- It is suggested that an unobtrusive copyright notice be placed on the first page of score and parts. It
should read:

Copyright © Jeff Kennett 2019. All rights reserved

For more information, see www.copyright.org.au.

3.4 Transposing score
- The SSO requires a transposing score for this project. Some composers prefer to write in C but almost
all scores are transposing and this is therefore what conductors expect and are used to.
- The octave transpositions for piccolo, double bass and glockenspiel are standard and therefore don’t
require comment. I wouldn’t bother with a transposing clef either: they’re not necessary and it’s an
extra fiddly thing to keep track of.

3.5 Instrumentation list
- All instruments should be listed on a separate page. This should include all percussion instruments,
and a percussion key if necessary [see 6.4 below]. This should be as unambiguous as possible: prefer
something like:

Flute 1
Flute 2
Flute 3 doubling piccolo

rather than:

3 flutes doubling piccolo

3.6 Multiple ensembles
- Each ensemble must be treated as self-contained. Consider:

<table>
<thead>
<tr>
<th>Ensemble 1</th>
<th>Ensemble 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarinet 1</td>
<td>* Clarinet 3</td>
</tr>
<tr>
<td>Clarinet 2</td>
<td>Clarinet 4</td>
</tr>
<tr>
<td>Bassoon 1</td>
<td>Bassoon 3</td>
</tr>
<tr>
<td>Bassoon 2</td>
<td>Bassoon 4</td>
</tr>
<tr>
<td>Violin I</td>
<td>Violin III</td>
</tr>
<tr>
<td>Violin II</td>
<td>Violin IV</td>
</tr>
<tr>
<td>Viola</td>
<td>Viola II</td>
</tr>
<tr>
<td>Cello</td>
<td>Cello II</td>
</tr>
<tr>
<td>Double bass</td>
<td>Double bass II</td>
</tr>
</tbody>
</table>

The musician asterisked above, taking a part labelled ‘Clarinet 3’, will not unreasonably wonder why
they are sitting in the first chair, and where the Clarinet 1 and Clarinet 2 players have gone. Better:
• A stage plan is essential. This needs to be detailed enough to explain what you need (the stage crew needs to know broadly what spatial or other effects you’re after). It also, however, needs to be flexible enough to accommodate venues other than the one where the work is given its première. It’s helpful to give the plan used in the work’s first performance, even if the exigencies of different venues mean it may be impossible to reproduce in subsequent ones.

3.7 Rehearsal figures and bar numbers

• Rehearsal figures should fall at major musical landmarks – i.e., places where the conductor is likely to want to stop or start rehearsing sections. It’s preferable to have more rehearsal figures rather than fewer. The figures themselves can be either numbers or letters. They should be obvious but not overly large, as this can be distracting.

• Rehearsal figures are positioned horizontally centred over the barline. In the first bar of a system, rehearsal figures are positioned over the (nonexistent) left-hand barline, i.e. between the key signature and the first note of the bar.

• It is helpful if rehearsal figures are in a distinctly different font to the rest of the score; e.g., if the text in your score is in Palatino, putting the rehearsal figures in a sans serif font tends to make them stand out a little more, but without being obtrusive. Again, see above: the rehearsal figure is in a sans serif font, but the text is in a serif font.

• Bar numbers should be included. They go above the topmost staff, in the first bar of every system (except the very first page). There is no need to number each bar, nor to put a bar number above the top string staff like a tempo indication.

3.8 Time signatures

• The standard format for time signatures (as below) is fine for scores and parts. Conductors are used to it. Large floating time signatures aren’t necessary in the score; in the parts they actively impede legibility, as does the system where the note itself is given rather than a numerical denominator (e.g. $\frac{4}{\flat}$ rather than $\frac{4}{4}$).

• Be careful that there is enough space between the barline, the time signature, and the notes:

  yes

  no

  Sibelius seems to think the latter is acceptable. It’s not. See also Gould pp. 41ff.

4. NOTATION

4.1 Accidentals

• It is essential that the standard convention for accidentals be observed. This is, that accidentals apply throughout the bar; in the case of notes tied across barlines, the accidental applies to all notes covered in the tie, but in the following bar the accidental must be restated for any repetition of the
note. The notation where accidentals only apply to the note they precede is not at all standard and should be avoided. Its employment will result in your hearing notes as accidentals which you mean to be naturals, and it is likely to stop the rehearsal.

- Sibelius has a function which puts courtesy accidentals on tied notes over system breaks: this is nice but isn’t really necessary.
- See also 4.7 below.

4.2 Dynamics – font
- It is preferred that a standard dynamics font be used. Musicians are used to looking for \textit{f} and \textit{p} rather than \textit{f} and \textit{p}, even if the latter be consistent with fonts used elsewhere in the score. (Really, \textit{f} is a graphic symbol, rather than a lower case letter F.)

4.3 Dynamics – positioning
- Sibelius has a nifty function which places dynamics on a uniform distance from the notes. Don’t use it. Dynamics need to be as close as possible to the notes to which they refer:

\begin{center}
\begin{tabular}{c}
no \\
yes
\end{tabular}
\end{center}

See also 5.1 below.

4.4 Crescendo/diminuendo
- Hairpins are preferred for no more than a couple of bars; for a crescendo lasting more than a few bars, use ‘cresc.’ or ‘dim.’. An extended hairpin can be visually confusing because it is almost, but not quite, parallel to the staff lines.
- Hairpins should begin and end about half-way up the x-height of the dynamics, i.e.

\begin{center}
\begin{tabular}{c}
yes \text{"f"} \text{"p"} no \text{"f"} \text{"p"}
\end{tabular}
\end{center}

- When hairpins aim for a dynamic on the first beat of the following bar, they should stop before the barline. The first example is standard notation for the crescendo continuing up to the E:

\begin{center}
\begin{tabular}{c}
yes \text{"p"} \text{"f"} no \text{"p"} \text{"f"}
\end{tabular}
\end{center}

The second example isn’t standard and if it’s over a system break it creates bits of leftover crescendo.

4.5 Glissando
- The rule above re crescendos aiming for the first beat of the bar also applies to glissandos.
- A straight line is fine for glissando: there’s no need for a ~~~~. There’s also no need to write ‘gliss.’, unless the horizontal space is so constricted that the clarification is necessary (for instance, on the Mahler 1 part, see p. 11, fifth bar of fig. 10).
- It is helpful to make the line slightly thicker than a staff line.
- Glissandos should aim for the notehead:

\begin{center}
\begin{tabular}{c}
yes \text{\textsuperscript{\textbullet}} no \text{\textsuperscript{\textbullet}}
\end{tabular}
\end{center}

(The second one is OK if the horizontal space is unavoidably constricted, but generally better avoided.)
• They must never collide with noteheads, ledger lines or accidentals:

![Images]

- yes
- no
- yes
- no

• Glissandos are always assumed to begin glissandoing at the beginning the starting note. If not, write something along these lines:

![Images]

4.6 Grace notes

• Stem always up: slur always under. It’s always preferable to have it slurred in.

![Images]

- no
- no
- yes
- OK but not preferred

• Gould (p. 130) says [a] is OK: I would counsel the more conventional [b].

![Images]

OK according to Gould

preferred

4.7 Microtones

• Please use Gould’s ‘arrow’ notation on p. 94ff (♭ b ♭ ♯). This is for a few reasons:
  - it’s instantly clear. There’s no need to learn a new symbol, for the accidental is simply modified in the direction of the arrow (figuring out and assimilating the difference between ♭, ♬, ♯, or ♬ always holds up learning the part);
  - enharmonics can be written much more easily; and
  - it is helpful for musicians to think in terms of modifying an existing note, rather than playing an absolute pitch which falls in the cracks. This is closer to the way that musicians think about quartetones. Because they spend so much time playing with as precise intonation as possible, it’s easier for them to think in relative terms (’a bit sharp of A natural’) rather than absolute ones (’the note precisely between A natural and A sharp’).

4.8 Two-beat rests in three: three-beat rests in two

• As a general rule, two-beat rests don’t exist in bars or beats of three:

![Images]

- yes
- no
- yes
- no
- yes
- no
- yes
- no
- yes
- no

• The same also goes for triplets:

![Images]

- yes
- no

[etc.]

• Three-beat rests are not used in bars or beats of four:

![Images]

- yes
- no
- yes
- no

You need to keep an eye out for these, as they’re the sorts of things which the notation software will helpfully autocorrect when you don’t want it to. It’s also easy to miss when editing. Say we had written 3/4 but then decided to delete the dotted minim: the software will write 3/4 , which isn’t what we want.

See Gould pp. 166ff for more on this.
Additive rhythm

- Additive rhythms (5, 7, 10, 11 etc.) are always notated as combinations of three beats and two beats. A bar of 5/4, for instance, is either written $\frac{\text{3}}{\text{4}} + \frac{\text{2}}{\text{4}}$ or $\frac{\text{2}}{\text{4}} + \frac{\text{3}}{\text{4}}$, never $\frac{\text{2}}{\text{4}} + \frac{\text{1}}{\text{4}}$.

It may be helpful to think of a bar of 5/4 as being a bar of 3/4 next to a bar of 2/4, but with the intervening barline having been dissolved. So, although (A) might seem correct at first glance, it is preferable to think of (B) or (C), depending on the underlying rhythm, and then write either (B1) or (C1):

\[
\begin{align*}
\text{(A)} & \quad \text{(B)} & \quad \text{(C)} & \quad \text{(B1)} & \quad \text{(C1)} \\
\frac{\text{3}}{\text{4}} + \frac{\text{2}}{\text{4}} & \quad \frac{\text{2}}{\text{4}} + \frac{\text{3}}{\text{4}} & \quad \frac{\text{2}}{\text{4}} + \frac{\text{3}}{\text{4}} & \quad \frac{\text{2}}{\text{4}} + \frac{\text{3}}{\text{4}} & \quad \frac{\text{2}}{\text{4}} + \frac{\text{3}}{\text{4}}
\end{align*}
\]

This applies to rests as well as notes:

\[
\begin{align*}
\text{(A)} & \quad \text{(B)} & \quad \text{(C)} & \quad \text{(B1)} & \quad \text{(C1)} \\
\frac{\text{2}}{\text{3}} - \frac{\text{3}}{\text{4}} & \quad \frac{\text{2}}{\text{3}} - \frac{\text{3}}{\text{4}} & \quad \frac{\text{2}}{\text{3}} - \frac{\text{3}}{\text{4}} & \quad \frac{\text{2}}{\text{3}} - \frac{\text{3}}{\text{4}} & \quad \frac{\text{2}}{\text{3}} - \frac{\text{3}}{\text{4}}
\end{align*}
\]

- It is essential that the same beat pattern be observed in all instruments. For instance, for a bar of 2+3:

\[
\begin{align*}
\text{no} & \quad \text{yes}
\end{align*}
\]

Tuplets

- Where possible and appropriate, consider grouping tuplets by the beat, e.g.

\[
\frac{\text{3}}{\text{4}} \hspace{1cm} \frac{\text{4}}{\text{4}} \hspace{1cm} \frac{\text{5}}{\text{4}} \hspace{1cm} \frac{\text{6}}{\text{4}} \hspace{1cm} \frac{\text{7}}{\text{4}} \hspace{1cm} \frac{\text{8}}{\text{4}} \hspace{1cm} \frac{\text{9}}{\text{4}} \hspace{1cm} \frac{\text{10}}{\text{4}} \hspace{1cm} \frac{\text{11}}{\text{4}} \hspace{1cm} \frac{\text{12}}{\text{4}} \hspace{1cm} \frac{\text{13}}{\text{4}} \hspace{1cm} \frac{\text{14}}{\text{4}} \hspace{1cm} \frac{\text{15}}{\text{4}} \hspace{1cm} \frac{\text{16}}{\text{4}}
\]

This is less cluttered and also better represents where the beat lies.

Tuplet brackets

- Convention is that tuplet bracket goes on the stem side. However, it is often better to have the tuplet bracket on the top of the bar, regardless of stem direction: as much as possible it is good to avoid the eye leaping about to follow the information.

\[
\begin{align*}
\text{technically OK, but} & \quad \text{perhaps better}
\end{align*}
\]

Tremolo

- The $\sharp$ character is something with which, alas, notation programs do not deal terribly well. Care needs to be taken that it does not collide with noteheads, ledger lines or the tails of quavers/semiquavers etc. One way to make it a little easier to fit the $\sharp$ s in (especially with quavers and semiquavers) is to make the character itself a couple of points smaller:

\[
\begin{align*}
\text{24pt (default)} & \quad \text{20pt}
\end{align*}
\]
• For notes without stems, the # character is placed where the stem would have been, and is centred horizontally:

no yes

4.13 Slurs
• If a phrase is less than a bar or two, and:
  - the stems are all in the same direction, the slur is placed on the notehead side.
  - the stems are in both directions, the slur is placed above the noteheads.
• If the phrase is longer than two or three bars, the slur always goes above the noteheads regardless of stem direction.

4.14 Mutes
• The convention is that the player is instructed to put on the mute at the first muted entry, and to remove the mute at the first unmuted entry. Players will of course pencil in the instruction to add/remove mute as soon as possible after the previous entry, but they don’t expect this to be in the part and it in fact adds confusion to find it there. Where the second phrase (beginning on A) is to be played con sord:

yes no

4.15 Changes of technique
• Similarly, instructions to change playing technique or style are placed at the first entry to which they apply, rather than as an advance warning. Again, for example, where the second phrase is to be played pizzicato:

yes no

This applies to any instruction to change technique (sul tasto, col legno, etc.).

5. PARTS

5.1 A well laid out part – Mahler 1 violin part
• If in doubt about how to notate a given bar, have a look through the part to see if there is something similar.
• Musicians need to assimilate as much information as possible as quickly as possible: they are always reading ahead of what they are actually playing. Wide spacing in either direction slows this process down. The spacing, then, is incredibly tight.
  Horizontally, white notes take up much less space than the amount of time they represent. A bar of a minim and four quavers is spaced , rather than a more literal ; a bar consisting of one semibreve takes no more than a third of the horizontal space of a bar consisting of eight quavers. Multiple-bar rests are much narrower than the default on notation programs.
  Vertically, the staves themselves are quite close together, usually a little less than two staff-heights apart. All dynamics and performance directions are as close as possible to the staff.
• Collisions between accents, accidentals, noteheads and slurs are avoided.
• It’s worth looking at slurs; these are often rather flatter than the software will want to draw them.
• As an exercise you may find it useful to try to reproduce a page of the Mahler, to get a feel for how the engravers have solved the layout problems which you’ll be facing in your own work.

5.2 Parts layout
• A4 parts are OK for commercial music (i.e. pop stars) where the musical text isn’t very complicated. But for anything more complex than the occasional semiquaver, larger sizes are necessary.
• Published orchestral parts come in a glorious multiplicity of sizes, but most Australian orchestras prefer B4 JIS (257mm x 364mm).
• The important thing is that the systems (a in diagram) should be between 20cm and 21cm wide: this is true of almost all published orchestral parts, and a staff becomes difficult to read if it’s much wider (i.e. if it stretches right to the edge of the page). On B4 this means a left-hand and right-hand margin (b) of about 2.5cm. Top and bottom margins (c) are less critical; say about 3 to 4 cm. The page should not be totally covered with music.

5.3 Instruments per part
• Each wind and brass instrument has a separate part. It is not acceptable to have two instruments reading from the same part.
• For string sections it is very strongly preferred that the entire section has one part. It is extremely rare that divisi are so extensive that each desk needs a separate part.

5.4 File names
• File names must include the composer’s name; the work’s title; the instrument/s; and (very importantly) a number, so they sort in score order. So, something along the lines of:
  
  COMPOSER Work title 00 - score.pdf
  COMPOSER Work title 01 - flute 1.pdf
  COMPOSER Work title 02 - flute 2.pdf
  COMPOSER Work title 03 - flute 3+piccolo.pdf
  but mutatis mutandis.

5.5 Size of staff
• Staves should be between 7 and 7.5mm from top to bottom (at x below). Remember they need to be this size in the final copy. If your printer can’t handle B4, we suggest you set the file up as B4; print the proofs on A4; then print the final parts (on another machine) on B4. Prior to extracting parts, it’s wise to print a dummy part to check that margins and staff size are OK. We’re happy to help with this.

5.6 Page turns and pagination
• At the bottom of every right-hand page, enough time must be allowed for the musician to turn the page (five seconds at a minimum). If impossible, solutions include:
  - beginning the part on a left-hand page (there’s no iron rule that it must start on a right-hand page);
  - forcing a page break earlier in the page where there’s a sufficient amount of rest; and
  - inserting a blank page: these should be on the right-hand side of the spread, as the musician will automatically look at the left-hand page after turning.
Fold-out pages are only acceptable as an absolute last resort.
Most issues with page turns can be solved by having another look at the spacing (see above). There’s usually some fat there that can be trimmed.

5.7 Contents of parts

- Parts must include everything which is in the score:
  - all time signature changes;
  - all key signature changes;
  - all rehearsal figures; and
  - all tempo indications. This includes tempo fluctuations, such as rit. and accel., and fermatas (which have an impact on tempo).

5.8 Bar numbers

- should appear in this position at the beginning of each system (except the first). Font should be small and unobtrusive.

![Bar numbers example](image)

There’s no need to number each bar, nor to give bar numbers on multi-bar rests.

5.9 Multiple-bar rests

- Multiple-bar rests must be in the old style:

![Multiple-bar rests example](image)

This is because, firstly, it’s what the players are used to: virtually all orchestral parts use old-style rests. Secondly, although nobody actually reads the little symbols, the fact that a two-bar rest doesn’t look identical to a three-bar rest does in fact help the musician distinguish between the two.

- Note that bar numbering starts at one.
- Font is same as time signature.
- The number is usually positioned only just hovering above the bar, although if necessary it’s OK to shove the number below the bar (see the bars preceding Fig. 2 in the first page of Mahler).
- Multiple-bar rests are broken for:
  - all time signature changes;
  - all key signature changes;
  - all rehearsal figures; and
  - all tempo indications, including tempo changes and fermatas.

5.10 Cues

- Cues are useful for two reasons:
  - indicating milestones so that the player knows that yes, we are up to that stage; only the first entry should be used for this; and
  - to assist with indicating a new tempo. We usually only do this if the player has to come in fairly soon after a drastic tempo change.
- Cues should be used very sparingly. Excessive information tends to distract; don’t forget that the usual way the player navigates is by counting bars rest, and they much prefer to do this rather than essentially follow along with a score.
- Cues should be obvious musical landmarks and should be clearly audible to the player who’s listening out for them.
• Cue notes are about 75% the size of the regular notes. Note that the player still has their rests marked in the part, as well as the cue notes. The instrument (or instruments) playing the cue should be given.
• Cue notes are stem up throughout; articulations go on the outside of the staff. Dynamics (if included) go below the cue notes. These can be superimposed onto the staff if necessary.
• Cue notes should be in the transposition that the player would read it (i.e. in a horn part, a violin cue should be transposed into F).

6. SPECIFIC INSTRUMENTS

6.1 Clefs
• For instruments that use more than one clef, phrases which move around in the intersection between clefs will often result in some overlap, but as a rule these are the preferred clefs. What’s important to remember is that isolated notes don’t usually require a clef change unless they come out of the blue, but phrases which consistently sit in the indicated regions do.

- Bassoon: the useful rule is that bassoonists don’t much like reading more than one or two ledger lines for a great length of time. Bassoons never use treble clef.

- Horns: the primary clef for horns is treble clef, and bass clef is really only used for the subterranean regions. Horn players are used to reading three ledger lines below the treble staff. They would never expect to read ledger lines above the bass staff.

- Trombone: much the same rules as for bassoon. Trombonists do read alto clef, but it is archaic: use tenor clef.

Viola: there’s quite a wide overlap between clefs, but stick with alto clef where possible. The player can read four ledger lines without difficulty. Treble clef is OK in the octave above A440 but should never be used below it: for instance, middle C in treble clef would be considered extremely unusual.

- Cello and double bass (the latter 8va bassa): treble clef is very rarely used, and is only employed for music in truly stratospheric range.
• In a score with multiple parts on the same staff, it is occasionally unavoidable that music is forced into the wrong clef:

Bassoon 2 is OK in the score, but would be illegible in the parts so would need reclef ting.

6.2 Woodwind
• Piccolo is always doubled by the lowest flute part. If more than one flute doubles piccolo, the next-lowest flute part takes the next-highest piccolo part, thus:

<table>
<thead>
<tr>
<th>yes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flute 1/Piccolo 3</td>
<td>Flute 1/Piccolo 1</td>
</tr>
<tr>
<td>Flute 2/Piccolo 2</td>
<td>Flute 2/Piccolo 2</td>
</tr>
<tr>
<td>Flute 3/Piccolo 1</td>
<td>Flute 3/Piccolo 3</td>
</tr>
</tbody>
</table>

This is because the principal piccolo player always sits in the lowest-numbered chair.

6.3 Brass
• Horns are always paired as high+low, thus 1+2, 3+4, 5+6, etc. This is because, until the late nineteenth century, horns were natural and each pair would often be in a different key. For instance, horns 1+2 might be in E flat and horns 3+4 in C: this would mean the composer had at their disposal the harmonic series of E flat and of C, and had therefore more notes available. Nowadays horns are fully chromatic (and are always in F), but the division remains. This pairing is always reflected in the score, even though the distinction between high and low parts means that parts are not a straightforward top-to-bottom:

On seeing the second example, a conductor’s immediate reaction is to wonder why the second horn has a higher part than the third.

• Sibelius’s default setting seems to be to call instruments ‘C Trumpet’ or ‘Bb Trumpet’. This isn’t quite standard: although they are discrete instruments, C and B flat are standard transpositions for trumpet, and we simply think of them as ‘trumpet’. The distinction is much the same as that between a B flat or A clarinet: we just think of these as ‘clarinet’. A transposing score should have ‘Trumpet (C)’ on the first page and ‘Tpt. (C)’ thereafter. Similarly, ‘Horn (F)’ rather than ‘F Horn’.

• However, the E flat clarinet (and the D trumpet) really are considered a different instrument. ‘D Tpt.’ or ‘E♭ Cl.’ rather than ‘Tpt. (D)’ or ‘Cl. (E♭)’

• Horns and trumpets are traditionally written without key signature, but with relevant accidentals written in the part, thus:

6.4 Timpani and percussion
• Timpani are traditionally written without key signature, as per horns and trumpets.
• A standard five-line staff (as opposed to a single-line one) and normal noteheads are fine for unpitched percussion.
• It depends very much on context, but in some circumstances it may be helpful to put all instruments on one staff, with a percussion key. There is no standard order or placement of the instruments but generally ‘low’ instruments (e.g. bass drum) would go at the bottom of the staff and ‘high’ ones (e.g. triangle) at the top. It’s OK to have up to one ledger line.

• Similar instruments should be on adjacent spaces or lines:

yes

no

• The same space or line must not be used for more than one instrument:

no

See Gould pp. 278ff for more on this.

• It is preferable to be reticent with instructions about mallet choice. If you indicate (for instance) *pp misterioso*, the percussionist will choose the most appropriate sticks to create this effect. The only time it is necessary to specify mallets is when you want something unusual, i.e. a tamtam scraped with a triangle beater. Otherwise percussionists really prefer not to be given mallet instructions. (As a comparison, nobody would dream of telling a brass player which mouthpiece to use.)

• It is wise to avoid using the Ghent pictograms such as \(\) and so on; these are very difficult to decode at speed, and in any case they are so infrequently used that nobody knows what they mean. Write it out in full.

6.5 **Harp**

• The harp part should always be notated on two staves. The only exception is, in the parts, where there is an entire system of rests; it’s OK to have one staff here.

• Harpists prefer that the top staff always be treble clef, and bottom staff always be bass clef. This is because it is more easy to immediately see where a note lies on the instrument. The only exception is if putting each hand on a separate staff is helpful for clarifying potential confusion. In the example below, (a) is ambiguous (which note is the harmonic?), whereas (b) is OK, but (c) is completely clear. (d) is what you’d write if both notes were harmonics.

(a) \[\] (b) \[\] (c) \[\] (d) \[\]

• Avoid putting notes on ledger lines below the treble or above the bass staff: harpists prefer to work out themselves which hand plays what notes.

no \[\] yes \[\]

• There’s no real need to write pedal indications; as long as you’ve ascertained that the part is not unpedallable, harpists strongly prefer to write in their own.
• Preferred notation for glissando is:

![Glissando notation example](image)

• This example assumes we want an A flat major gliss. Subsequent glissandos can be indicated with the line only until the next change of pedal setting:

![Multiple-bar rest example](image)

• Multiple-bar rests are only used when both hands are resting (same for keyboard instruments as well). It’s ideal to have a single number covering both staves, if the notation software can be persuaded.

![Multiple-bar rest comparison](image)

### 6.6 Strings

• It’s not necessary to put bowings in the part unless it’s a special effect (like the *Dances of the Young Girls* from *The Rite of Spring*). Slurs should indicate phrasing but the musicians will inevitably bow the part as it works best in performance. The printed bowings in the Mahler part were devised by Arnold Rosé, Mahler’s brother-in-law, and the concertmaster of the Vienna State Opera. They are not, then, authentic Mahler, but they’re the next best thing and they were written by someone who knew his stuff. See how often they are ignored!

• Avoid abbreviations:

<table>
<thead>
<tr>
<th>Use</th>
<th>Not this</th>
</tr>
</thead>
<tbody>
<tr>
<td>sul tasto</td>
<td>S.T.</td>
</tr>
<tr>
<td>sul pont.</td>
<td>S.P.</td>
</tr>
<tr>
<td>molto sul pont.</td>
<td>M.S.P.</td>
</tr>
<tr>
<td>col legno</td>
<td>C.L.</td>
</tr>
</tbody>
</table>

• There’s usually no need to distinguish between col legno battuto and col legno tratto: just write ‘col legno’. The first two bars are inherently tratto, and the last two inherently battuto: there’s no need for the extra clutter.

![Col legno example](image)

### 7. SOME BROAD SUGGESTIONS

• Simple is good; try to avoid the musical substance being obscured.

• Writing to the instruments’ strengths is generally more effective.

• Special effects tend to become less special and less effective the more they are used.

• Using non-standard notation, or one’s own invented notation, always causes confusion. Avoid it; try to keep notation as familiar as possible so the musicians can concentrate on the music itself.

• Don’t write outside the brief (this includes deadlines).
Please feel free to contact me if you have ANY questions. I don’t necessarily know the answers, but I can find out.

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