

44. Jerry Goldsmith

Planet of the Apes: The Hunt (opening)

(for Unit 6: Further Musical Understanding)

Background information and performance circumstances

Biography

- Jerry Goldsmith was born in 1929.
- Goldsmith was a prolific American composer of scores for films and television series.
- Three of his most successful collaborations were with the director Franklin J. Schaffner with whom he worked on Planet of the Apes (1968).
- Goldsmith was particularly noted for his experiments with instrumental sound. In his score for Alien he used a shofar (a ram's horn used in Jewish services), as well as a steel drum and serpent (a large curved type of bass Cornett).
- He also enthusiastically embraced the use of new electronic instruments, though he liked to use a full symphony orchestra where possible, often in conjunction with ethnic and electronic instruments. This can be seen in his score for *Planet of the Apes* though...
- ...electronics in music were not yet at a very advanced stage.
- Goldsmith died in 2004.

Goldsmith's use of devices

In the hunt scene of the film, armed apes on horseback are chasing a group of stranded humans.

Goldsmith uses a variety of devices to emphasise a sense of terror, including:

- Unconventional instruments and techniques; prominent use of percussion instruments (see performing instruments).
- Dissonance (see harmony notes).
- Avoidance of traditional tonality; suggestions of serialist chromatic music (see tonality)
- Harsh driving, often syncopated rhythms (see rhythm and metre).

All these features are frequently found in 20th Century music as a whole.

Performing Instruments and their handling

- Large symphony orchestra with a number of additions.
- Triple woodwind including bass clarinet and double bassoon.
- Unconventionally, all oboe players are required to play cor anglais at times, eg. Bar 1.

- Similarly, all flute players are required to play piccolo at Bars 64-5 and elsewhere.
- Usually there would be only one cor anglais and piccolo in a large orchestra.
- There is a standard brass section of 4 horns, 3 trumpets and 3 trombones, but no tuba.
- Unconventional additional ethnic instruments include a ram's horn and a Tibetan horn – both used to suggest primitive/other-worldly aspects of the apes.
- Percussion includes 'ethnic' instruments, including boo-bams, Bar 10.
- Electronic instruments include an electric harp – essentially a normal harp using a standard microphone. There is also an electric bass clarinet in Bar 52.
- Strings play a relatively minor role, though the long notes in the violin eg. Bar 11 is important.
- The piano is one of the most important of all the instruments, with its own solo motif in Bar 4, as well as having driving ostinatos based on the same figure at eg. Bar 11.
- Brass use a variety of mutes eg. wood mute for horn in Bar 10 straight mutes for trombones at Bar 23, plunger mutes for trumpets at Bar 55.
- Violins have false (stopped) harmonics – Bar 68-9, played by pressing down the string on the fingerboard with one finger, then lightly touching the same string with the little finger while the string is bowed. This produces a note of very high pitch.
- Percussion instruments are particularly important in this piece:
 - They reinforce the sense of terror.
 - Timpani used on 1st beat of bar at beginning, doubled by piano to give powerful rhythmic impetus.
 - Ethnic instruments are used to convey the sense of strangeness of the apes, eg. boo-bams (Bar10).
 - Unusual instruments eg. vibraslap (Bar 74).
 - Piano used for ostinatos/riffs (Bar 11).
 - Fragmentary xylophone motifs important (Bars 13-14).
 - Side drum roll crescendos build climaxes (Bars 84-91).

Texture

- Frequently, complex textures are built over riffs.
- Begins homophonically with a homorhythmic theme in woodwind with rhythmic reinforcement in timpani, piano and lower strings.
- Heterophonic texture Bar 10 with violas and 'cellos having a more elaborate version of the double bass and bassoon 2 and 3 music. These instruments in turn have a more elaborate version of the minims in the bassoon 1, bass clarinet and horn parts.
- The texture from Bar 11 is typical of the texture of much of the extract: a riff in the piano accompanies long held notes (here in the violins), leading to a dissonant chord and fragmentary melody (here a 3-note motif in xylophone, flutes and piccolo).
- At Bar 23 the woodwind take over the ostinato (riff).
- There is a tutti climax at bar 42 with powerful cross-rhythms, but essentially a homophonic texture accompanying a three-note figure in the trumpets.
- Polyphony begins to build up as we approach the next climax. From Bar 52, there is a two note chromatic rising figure in the bass, with a rising 5th figure in Ram's Horn and additional rhythms in the percussion.
- There is polyrhythm (multiple simultaneous rhythms) from Bar 55. This is the polyphonic climax of the piece.
- There is a slight change in the riff texture from Bar 59, where there are now rapid repeated notes in thirds in the violas.
- There is a new two part contrapuntal texture in the strings from Bar 74 featuring free imitation between upper and lower strings.
- The extract ends with several simultaneous ostinati (from Bar 84).

Structure

1-10: Dramatic introduction of two of the main motifs (Bar 1- C in piano and timpani, then C-C#C#-F# in woodwind) – don't forget cor anglais sounds a perfect 5th lower than written. This bar of music occurs no fewer than 6 times in the first 7 bars. Bar 4 chromatic piano motif in 8ves (extended in Bars 8-9 to cover all 12 chromatic notes of the scale). A single link bar featuring heterophony (Bar 10), leading to:

11-22: Piano motif in the form of a riff, now on G instead of C. Two more important motifs introduced for the first time: long held violin note with a crescendo to a discord (Bar 13) and rapid three-note figure on xylophone, flutes and piccolo. The ideas are repeated over the same riff from Bar 15, with varying long violin notes. A new cross-rhythm is introduced on the conga

drum at Bar 16. The three-note motif's rhythm is at the end of Bar 17 and then in a new triplet form at the end of Bar 21.

23-37: The riff is now taken over by woodwind, while the long notes move to the trombones. The tonal centre is now E flat. There is a new bass line in lower woodwind and double bass. The opening motif returns at Bar 26, now on the strings, with the initial timpani note reinforced by the snare drum. All these ideas are then repeated.

38-44: The music now rapidly builds up to the first main climax. The riff is treated in rising sequence in Bars 38-39. A wide-leaping descending chromatic quaver line (Bars 40-41) leads to a climax at Bar 42. The high pitched trumpet music here is another variation of the rapid three-note figure, now starting on the beat instead of the up-beat.

45-51: The riff now returns to the C tonal centre from the beginning of the piece. The long held notes are on the horns for the first time. Isolated, fragmentary notes on xylophone, create an almost pointillist texture.

52-58: The music then builds rapidly to the second climax. Two-note, rising semitone phrases are heard in the bass, with rising and falling fifths in the ram's horn. There are new percussion figures and a pedal E flat in the harp. The climax at Bars 55-58 employs the whole orchestra in a number of simultaneous ostinato phrases.

59-73: The riff returns, now based on G, with a new semiquaver repeated note accompanying motif in the violas. At Bar 63, the long notes appear on muted trumpet which also plays the rapid three-note figure returns much as it occurred first, but now on the trumpet as well (Bar 64-5).

74-83: New passage for strings in two-part dissonant imitative counterpoint with the vibraslap the only other instrument. The music alternates between rapid rising scales, long notes and wide leaps.

84-end: The final climax of the extract. There is a new insistent ostinato in the bass with jarring repeated notes in the upper strings and woodwind, accompanied by a side drum roll. The bass ostinato is finally doubled in long notes by the lower woodwind, creating heterophonic effect I (Bars 88-end).

Melody

The piece is built up from a number of short, fragmentary ideas, many of which don't last longer than a bar.

- The opening motif consists of 5 notes only. Note the importance of the rising semitone and then a leap. Repetition is important - the phrase is played no fewer than 6 times in the first 7 bars.

Example 1

- The second motif in the piano, Bar 4, is derived from the main theme of the film. The motif combines wide leaps with semitones.

Example 2

- The piano motif of bar 4 is extended to encompass all twelve chromatic notes of the scale in Bars 8-9, thus forming the 'prime' of a 12-note row. The two following notes lead back to the starting note C (Example 2).
- The motif returns as a riff, now on G at Bar 11 (see notes on structure for information on other transformations).
- The next main ideas are grouped together. The long held violin note beginning at Bar 11 leads to a loud discord and a group of three rapid notes (C-E flat-D), ie. rising minor

3rd and falling semitone (note again the importance of this latter interval). The motif is an inversion of the first three notes of the piano ideas in bars 4 and 7, with octave displacement (i.e. C A Bb in bars 4 and 7 becomes C Eb D in bars 13-14).

- The figure is then transformed twice. In bars 17-18 it becomes a falling major 2nd followed by a falling major 6th. In bars 21-2 it is made into a triplet figure with an extra note added in front and transposed up a perfect 4th.
- At Bar 23, the riff is heard in oboe, clarinet and harp in E flat, the long note motif is heard in trombones, and the bass line is a retrograde of the 12 note row heard in Bars 8-9. [NB the version in bassoon is correct; the second F natural in the double bass should be an F#.]
- At Bar 27, the bass line of Bar 23 is inverted (i.e. retrograde inversion of Bars 8-9, notes 1-12).
- Bar 32 in bass clarinet, bassoons and double bass: Bars 8-9 heard in inversion, but this is only exact up to the G# in Bar 34.
- There is a further transformation in Bar 42, this time of the three-note motif first heard in Bars 13-14. The original rhythm is retained but there are now two consecutive semitone intervals, beginning on instead of before the beat (trumpet).

Tonality

- The music is not tonal in the standard sense. Nevertheless it uses a system of tonal centres in which the central note is repeated frequently at the beginning of a bar, often as an articulated pedal, eg. C Bars 1-4.
- The tonal centre moves to G in Bar 11, then E flat in Bar 23.
- The modulation of a 3rd from G to E flat and later from E flat to C (called a tertiary modulation) is common in film music and was first used extensively in the Romantic era.
- The emphasis on semitones (see notes on melody) helps destabilise any sense of tonality.
- One of the most chromatic passages occurs in Bars 8-9 when all twelve notes of the scale are used. This hints at serialism, though it isn't serial music in the manner of Schönberg.
- Goldsmith uses verticalisation of the row to destabilize any sense of tonality (see below).

Harmony

- The harmony is dissonant through most of the extract. The opening chord on beat 2 of Bar 1 has an A in the viola clashing against a B flat in the 'cello.
Where there isn't dissonance there are often bare octaves, eg. Bar 1, 1st beat, and Bar 4.
- Verticalisation of the chromatic melodic notes forming the 'series' adds to the dissonance. For instance in Bar 1 the two string chords outline the first 8 notes of the 12-note idea heard in full at Bars 8-9 (see Example 1).
- The chord on beat 3 of the first bar could be described as a 13th chord.
- The harmonic interval of a semitone is as important as the melodic interval. The climax of the long held violin note at Bar 13 and elsewhere ends with a loud semitone clash.
- At Bar 26 this interval is expanded to form a 3-note chord, including a diminished 5th (C to G flat) with the trombones. The diminished 5th is again a harmonically destabilising interval.
- The interval of a semitone is inverted to form a major 7th in the piano part in Bar 84.
- Some of the most dissonant harmony of all is found in the first climax at Bar 42. The chord at the end of the bar includes all twelve chromatic notes. The notes of this chord are introduced one by one from Bar 40 in the order of the retrograde of Bars 8-9.

Rhythm and Metre

- Hard, driving rhythm is an essential ingredient in chase music.
- There is an almost continuous quaver rhythm in the opening 7 bars, with strong emphasis on the first beat of the bar provided by timps and piano in octaves.
- This rhythm becomes continuous semiquavers at Bar 11 in the piano riff.
- There is then a quaver on every single beat from Bars 23 to 41.
- There is a cross-rhythm in the conga drum at Bar 16 which is effectively playing first and second beats in 6/8 time over the 3/4 riff.
- Syncopation is frequent, eg. the emphasis on the last fortissimo quaver of Bar 13.
- Cross-rhythms become more intense at the first climax at Bar 42 when there is a triplet crotchet motif in the strings set against repeated quavers in the woodwind and a semiquaver phrase in the trumpets.
- The isolated notes and fragmentary phrases in the xylophone at Bar 46 onwards create a pointillist effect.
- The most complex rhythm occurs at the climax at Bar 55 with septuplet scales against triplet crotchets, semiquaver and quaver percussion, etc.
- There are sextuplet scales in the strings at Bar 74.

- Meanwhile, the time signature changes frequently. This helps create the sense of unease required by the film drama at this point. The music begins in triple time ($3/4$) but changes to quintuple time ($5/4$) for the link bar (10) at the end of the first brief section.