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Tim Souster

Not so long ago, the name 'Tim Souster' could be seen flashing onto the television screen as the arranger of the theme tune to the popular BBC science-fiction fantasy *The Hitchhiker's Guide to the Galaxy*. By contrast, those members of the British music fraternity who are wont to tune in to Radio 3's Music in our Time will remember the much-talked-about broadcast in 1980 of his Sonata for cello, piano, seven wind instruments, and percussion (1978-9).

Souster was educated at New College, Oxford, where he studied the history of twelve-note technique with Egon Wellesz (a pupil of Schoenberg); he later had composition lessons with Richard Rodney Bennett (a pupil of Boulez) in London. He then entered the BBC as a Radio 3 music producer; this position gave him his first contact with Stockhausen, as well as Barraqué, Berio, Cardew, Feldman, and Henze. He left the BBC in 1967 and, with the help of an Italian scholarship, spent part of 1968 composing in Siena. In 1969 he became composer-in-residence at King's College, Cambridge. During the period after he left the BBC he made his first experiments with electronics, and wrote a rather adventurous piece for soprano, three choruses, three orchestras, piano, and harp, which went under the remarkable title of *Tsuwamonodomo* (1968).

Intuitive music

Souster's position at King's College gave him the opportunity to form, with fellow-composer Roger Smalley, the live-electronic ensemble Intermodulation, in which they enlisted two music undergraduates, Andrew Powell from King's and Robin Thompson from London. (Powell later left the group and was replaced by Peter Britton.) Souster had conceived the idea of forming such a group as far back as 1966 after attending performances of Stockhausen's *Prozession* and *Kurzwellen*. He revived the plan in 1968-9 as a result of taking part in two realisations of Stockhausen's *Plus-Minus*, one of which, organised by Gavin Bryars, reflected the influence of the Fluxus movement; other inspirations came from the work of Soft Machine, Cream, and The Who, a performance of Smalley's *Pulses for 5 x 4 Players* at the QEH, and the partnership between John Cage and the dancer Merce Cunningham. In what amounts to a mini-manifesto, published as part of an article on Intermodulation in *Contact 17*, Souster states that 'the group ... was formed with the intention of developing techniques of integration and intercommunication in the field of live-electronics', and that they always played 'a wide range of music,

from semi-improvised pieces, with only a few instructions given by the composer in advance, to pieces with fully notated scores. This stems from the ... belief that ... exclusivity is futile'.¹

Taken in a broader context this last statement seems to sum up Souster's own artistic philosophy, for in the course of his career he has worked in very diverse areas and with a wide range of materials. This openness—characteristic of many English experimentalists in both music and the visual arts—is reflected in his response to different conceptual stimuli. He has found room in his work for all sorts of cultural cross-fertilisation, denying that the codified forms of 'establishment' culture, or for that matter any individual 'culture', should be dominant, or that there is any validity in the outmoded idea of a 'selected tradition'.² His style draws on a large number of musical sources, employing 'multitudes of conflicting sounds',³ by means of which he can work indirectly on the attitudes and listening habits of his audience. He acknowledges the influence not only of composers such as Delius, Stravinsky, Wagner, and Schubert, but also of the Grateful Dead, Charlie Parker, and Charles Mingus.

Intermodulation's repertory contained much intuitive music, including Souster's own *Chinese Whispers*, *Break*, and *Aubade* (1969-74), which together he called 'an anthology of intuitive music', and Stockhausen's 17 texts for intuitive music, *Für kommende Zeiten* (1969-70), Souster's English translation of which was published with the score in 1976. Like those of Stockhausen, La Monte Young, and others, Souster's intuitive pieces are usually based on a short text which, in Roger Smalley's words, 'stimulates players by means of analogy'.⁴ In *Break* Souster asks his performers to 'survey [their] past' in musical terms and then to 'continue only when [they] have found a new way'. The first half of Intermodulation's performance of the piece was acoustic; the second half made use of electronics—an apt realisation of conversion to the 'new way'.

During this active period with Intermodulation, Souster completed, in 1970, a second version of his *Triple Music*, which reveals his ideas about intuitive music at that time. The original version of *Triple Music* was an environmental work that used coloured slides of food, footballers, and political events. *Triple Music II* (commissioned for the Proms) is concerned with the spatial distribution of sound and is scored for three orchestras, one of which is amplified; here Souster's interest lay in transforming the symphony orchestra rather than developing it historically. The idea behind *Triple Music* is that it should be a

working out of the instruction 'make triple music'. The number three is central to the piece. In *Triple Music II* there are three musical elements: melody, regular rhythms, and irregular rhythms, with which the three orchestras make interplay. There are three orchestral groups: strings; woodwind and brass; and a hybrid, amplified group of two pianos, vibraphone, two harps, two organs, and electric bass guitar (these are given an electric cadenza). The piece uses Fibonacci proportions (further evidence of Stockhausen's influence) to determine, for example, the number of pizzicato chords to be played by the string group; the harmony is based on the same proportions. Included in the music are quotations from, among other works, Schoenberg's *Pierrot Lunaire*, Debussy's *Jeux*, and Stockhausen's *Gruppen*, though Souster claims that 'nobody has traced their presence up to now'.⁵

Triple Music II is intended to be educative: Souster hoped that in it the symphony orchestra could be 'transformed in the heads of the players'. The work embodies his belief at the time in the political role of improvisation.

It's my musical conviction that playing semi-determined and intuitive music will up-grade the player (and indeed the listener) in musical life so that all links in the musical chain will be of equal importance. (*Triple Music II* ... is dedicated to this end.)⁶

Souster saw the necessity for performers to develop an aural tradition rather than to rely totally on notated directions, which brings into question all the accepted roles in the composer-performer-listener relationship.⁷

Since the completion of *Triple Music II* (which was itself withdrawn and revised in 1974), Souster's interest in intuitive music has altered, partly because he found that this type of playing tended to have set stylistic consequences. (Whatever Souster's later reactions may be, recordings from the 1970s of his improvisations with Smalley and co.—in *Break* for example—reveal some highly inventive and sensitive playing.) He has come to the revisionist conclusion that

no matter how strong the empathy between players there is still no substitute for a widely accepted and understood musical framework, or culture against which intuitive playing can be understood as a coherent statement.

Developments in electronics seem also to have contributed to this change of views: 'the precision of digital transformation processes has deflected composers' attention away from intuitive processes'.⁸ So, although he has not repudiated 'free' playing, he sees it as an element that is best employed in an appropriate compositional context.

Tape works

1974 saw the completion of *World Music* for tape and four musicians, which was written for Intermodulation; the instrumental sections were composed in 1971 and the tape part was realised at the studios of Westdeutscher Rundfunk, Cologne. (The piece was revised for tape and eight players in 1980.) The structural proportions of the tape part in *World Music* are determined by geography. Souster drew three 'orbits' around the globe and each division, physical or political, over which an orbit passes sets off a musical reaction. Each of the three orbits is associated with a particular instrument and musical tradition, and takes as its departure point a place with which that tradition is closely connected: the electric guitar is associated with rock music and Seattle (the

birthplace of Jimi Hendrix, to whom the piece is dedicated); the viola with Classical music and Vienna; the gong with Oriental music and Bali.

In the same year he composed in Berlin what was to be his last piece for Intermodulation—*Zorna* for soprano saxophone, tape-delay system, and 'three perambulating drummers'. Like many of his works, *Zorna* is about sound in real space, a concern that has now become part and parcel of electronic music. The three drummers add an important element of music theatre to the piece: with their drums strapped about their waists (like military musicians) they start from the back of the hall, playing different and unsynchronised rhythms. While they gradually move around and through the audience on their way to the stage, the soprano saxophone—which imitates the nasal quality of the Turkish shawm, or 'zurna', a recording of which was one of the sources of inspiration for the work⁹—freely creates its own dialogue with a tape-delay system, giving four different versions of the same material, often with only microtonal changes; because of the freshness of the saxophone's role, the familiar and predictable results of conventional tape-sequencing processes are avoided. By the time the drummers arrive on stage their rhythms are synchronised both with those of one another and those of the saxophone. The composer is insistent that the piece should be performed very loud.

A work in which the music-theatre element is even stronger, and which benefits from a theatrical director, is *The Music Room* for trombone and stereo tape. It was commissioned by the trombonist Jim Fulkerson and first performed by him at the Wigmore Hall in December 1976. Paul Griffiths, writing about *Zorna* in *The Times*, rightly noted that the work 'carries a social message ... expressing vehement protest';¹⁰ that message, though, is transmitted in code. The political statement in *The Music Room*, on the other hand, is explicit. The trombonist wears a boiler suit and a black bag over his head—suggestive of the garb of a torture victim; his assistant is dressed as a military doctor and carries a stethoscope. The tape bombards the trombonist with white noise, which builds in intensity, and a combination of very high frequencies producing beats. This material comments on and imitates the use in the late sixties by the British army in Northern Ireland of techniques of sensory overload to weaken prisoners, and the broadcasting of very high frequencies by riot police on the Continent to disorientate participants in political demonstrations. The trombonist improvises in response to the tape, which gradually begins to play the regimental march *Lilibolero*. The work ends as the trombonist is dragged off the stage. (Souster used the same combination of solo brass instrument—this time tuba—and tape in another, though rather less elaborate, music-theatre piece, *Heavy Reductions*, written in 1977.)

The concomitant ideas of transformation and unity have long interested Souster and they are neatly encapsulated in another work involving tape—*Song of an Average City* (1974) for small orchestra and natural sounds (the title derives from Delius's *Paris, Song of a Great City*, which made a strong impression on Souster when he heard it at the age of 13).¹¹ At the time the work was written Souster saw transformation as the key device for demonstrating unity in music: 'it has become a habit of thought, a mannerism. It has come to imply: if everything is one, why bother to change anything?'¹² He came to the conclusion (reminiscent of Stockhausen) that the function of music is 'to hasten the achievement of the ultimate oneness in things, musical and otherwise, by heightening our consciousness of the divisions in our

experience'.¹³ Techniques of transformation are used in the work for the surreal illustration of opposites—taped sounds of a guillotine turn into those of a road leveller, a cash register into a gun. These and other musically useful concrete sounds employed in the tape part are categorised as personal sounds, group and domestic sounds, and mass public and natural sounds. A direct link between tape and orchestra is achieved through the rhythmic structure of the piece—the rhythm of a diesel pumping engine, for example, is exactly imitated by the orchestra. In all respects Souster is concerned with drawing parallels between the instrumental and 'natural' sounds, and the principle of pulling diverse, unlikely sounds into a legitimate compositional context is strongly at work here.

Live-electronic and computer works

Souster is in his element when writing for small ensembles or solo instruments in conjunction with live electronics. The most successful example is his intriguing *Spectral* for viola, live electronics, and tape-delay system (1972).¹⁴ The piece is an evocation of the humpback whale:

The title *Spectral* relates not only to the sound/colour spectrum used in the music, but also to the ghostly character of the song in which the whale seems to be singing of its own passing.¹⁵

It is a colourful soundscape, with a profusion of electronically transformed glissandos, harmonics, tremolos, and melodic gestures. At times the sounds of the viola are bare and crudely gestural; at others they are thick-textured and hauntingly melodious.

Spectral was written as the result of Souster's coming across a newly available recording of the calls of the humpback whale at the time when he began experimenting with electronic effects on the viola. His first move was to listen to the whale-song and notate its frequencies. He then took these numerical values and used them as the frequencies of light waves, which provided him with colour equivalents of the original sounds. Applying this 'coding' he notated the whales' songs or 'arias' and a series of echoes (to be created on tape) suggested by 'the whales' submarine acoustic environment'.¹⁶ The result is a score that consists chiefly of a multi-coloured graphic notation which is not so much a prescription for improvisation (though of course it is intended to be realised) as a transcription of the music of the whales; it resembles the notation of Cage's *Aria*, and like that cannot be 'read' in the usual sense. The work is in 28 sections, which make up an aria, six 'echoes', and a final 'decay'; Echo IV and the Decay are the only conventionally notated parts of the score. Technically *Spectral* is an exercise both in extended methods of playing the viola and in electronic manipulation of the instrumental material. The electronic circuit includes low-pass filters, digital harmonisers, band-pass filter, ring modulator, envelope shaper, digital delay, and sine-wave oscillators. The range of the viola is extended by tuning the C string down to G; the resulting sounds are then transposed further by digital means.

In its use of live electronics *Spectral* again shows the influence of Stockhausen. That this should be so is hardly surprising because at this period (1971-3) Souster was Stockhausen's teaching assistant at the Staatliche Hochschule für Musik in Cologne. While he was there Souster and Intermodulation took part with Gentle Fire and several German musicians in the first performance (in June 1971) of Stockhausen's *Sternklang*, an environmental ('sacred') piece for five groups, intended as a 'preparation for beings from

other stars and for the day of their arrival'. As in many of Souster's own works, physical movement and separation of sound sources in space are important ingredients of *Sternklang*: a carrier transports musical ideas between the five spatially separated groups and the listeners move among them too. (One of the reasons why Souster was involved in the work seems to have been his knowledge of electronics and the reliability, proven on tour, of Intermodulation's sound systems.)

Among Souster's many other electronic compositions, I shall mention only two more: *Music from Afar* (1977) and *Driftwood Cortège* (1978-9). *Music from Afar* is a short work for a digital speech synthesizer, programmed to simulate human speech in recitations of poems by Keats and Hafiz, and the strange-sounding 'Elfriede's Clockwork Heart'. It is an unusual feat, a mixture of the mechanical with the electronic to produce a rather off-beat, delicate, and whimsical piece. Although the synthetic production of speech was not, even in 1977, entirely new, in the six years since *Music from Afar* was made electronic techniques of voice simulation have advanced so far that the piece now seems something of an interesting oddity.

Some of the sounds in *Music from Afar* are not unlike those of John Chowning's *Turenas* (1972), a computer-generated work realised at the Center for Computer Research in Music and Acoustics at Stanford University, California. *Driftwood Cortège* is the product of Souster's own period of study at the Center in 1978-9.¹⁷ The work is a four-track tape of computer-generated 'instrumental' sounds, some of them percussive. At the outset the index of modulation is such that the precise pitches are distorted, but soon the listener is able to hear the individual voices of eight tonally based harmonies, which articulate the work. A major preoccupation is the slow spatial movement of sound in a very large imaginary acoustic; the electronic medium creates such impressions by means of amplification and transformation, which have the effect of reorientating the listener's perception of the position and proximity of a sound source. Another changing element is that of tone colour and hence texture, which produces different emphases within each of the eight chords as they are repeated.

The rock experience

Souster has always been interested in rock music, and wrote about it from the mid-sixties. Part of the impetus to form Intermodulation came from going to gigs in London by the English bands Soft Machine (with whom he was later to be on the same Prom date) and The Who. In fact Pete Townshend personally installed Intermodulation's first P.A. rig, which dominated the show owing to its massive output.

American rock is a particular interest of Souster. At the First American Music Conference held at Keele University in 1975, he gave a paper called 'The Rock Influence',¹⁸ illustrating the links between the progressive rock of the 1960s and the American avant garde. In the same year a music textbook, to which he had contributed a section on the use of electronics in rock music, was published in Cologne.¹⁹ In Souster, however, the interest in rock music does not seem to go hand in hand with a left-wing stance (as is often the case), or at least if it does, he isn't letting on. At a round-table discussion held at the Keele conference Souster reiterated his interest in seeking out heterogeneous material and using it in his own compositions.

It's possible . . . to take stimuli from far-flung parts of the

world and to gain new experiences in this way. The fact that this kind of cross-fertilisation can happen is something which gives me a certain amount of guarded hope.²⁰

In 1976, after the demise of Intermodulation, Souster formed OdB,²¹ a band that delved into experimental as well as more orthodox types of rock playing. The line-up was synthesizers, mallet instruments, and drum-kit; the other members were Peter Britton and Tony Greenwood. *Song* for instruments and four-track tape (1977), which first appeared in a shorter version as *Surfit*,²² was written for OdB. The source material—an unusual mixture of Beach Boys' songs (*I can hear Music, Do it Again, Good Vibrations*) and model pop riffs and chord sequences—is taken from its normal context and put to work under a different, essentially alien, aesthetic, in the form of harmonic and rhythmic loops. The work

begins with a recording of the voice of Carl Wilson of the Beach Boys giving a radio interview. The tape part shows how arduous a task is involved in multi-tracking in the pop studio (a reminder, should we forget, that 'serious' electronic musicians are not alone in using complex studio techniques), and the layered combinations of riffs create interesting timbral effects. All the same the composition is in many places perversely sterile. Perhaps this is because the pop riffs are put into a formalist structure, as is apparent when one looks at their layout in the score (Example 1). As in *Zorna* and *The Music Room*, movement is composed into the piece: about halfway through, at the climax of the piece, one of the three players walks from the back of the auditorium through the audience to the stage, following a 'meandering path through the hall'.

Example 1 *Song*, p. 3

ca 4'00" (ppp) TACET (1'47") (4'13")

$\text{♩} = 96$

Ped

pp ← mf

$\text{♩} = 62$

Attack, wah

Org: BG

$\text{♩} = 108$

Perc only

$\text{♩} = 96$

Org: BG, lower octave only

$\text{♩} = 75$

Perc only

Another rock-influenced piece, *Arcane Artefact* (1976) is experimental in a different, perhaps less radical way. Souster felt that the avant garde had become far too involved in 'aperiodic, discontinuous rhythmic structures',²³ *Arcane Artefact* is a determined attempt to move away from this extreme compositional position. It opens with a montage of the sounds of a steam-driven pump (from the old Brighton and Hove pump-house), which is phased into a typically jazz-rock, busy bass line, alternating between 24/16 and 8/16 (this is on the tape, but it can be played on the synthesizer; Example 2). The purpose of this *perpetuum mobile* bass line is to act as an 'autonomous, machine like music'. (More interconnections: the application of montage in *Arcane Artefact* is similar to the opening of *Song of an Average City*; the *perpetuum mobile* idea first appears in *Waste Land Music* (1970), and a similar ostinato occurs in *Sonata* (1978-9)). *Arcane Artefact* was partly composed by Souster and partly worked out in conjunction with the percussionist of OdB, Tony Greenwood; but Souster was intent on using rock and jazz rhythms 'in a way that perhaps rock musicians wouldn't consider'. Souster's declared purpose in adopting the rock idiom was to 'engage a wide range of listeners, familiar with popular forms'. With the solo marimba in a rock setting and the snappy changes in time signature, the sound is quite similar in places to recent Frank Zappa material. But there is a lot more space and a different concern for compo-

sitional needs than are found in rock music. The work is not the essence of rock music, but a sort of hybrid, as Souster is aware; in fact at the time of its first radio broadcast in 1979 he spoke of it as moving in the direction of some 'new fusion . . . a new harmony'.

New fusions

Souster, then, is motivated by a deep interest in cultural cross-fertilisation, which leads inevitably to the need for reconciliation by compositional means of the disparate elements in his material. In one way or another this challenge, 'the integration of many different kinds of highly contrasted music into a new unity',²⁴ has intrigued Souster since his Inter-modulation days, but in recent works his eclecticism has taken new and more copious turns, and the problems of fusion have become correspondingly more acute. Critics have levelled at Souster the accusation that though his ideas are powerful his music never matches them in strength and effectiveness. No such discrepancy between theory and practice exists, however, in the most attractive production so far of Souster's new aesthetic of fusion—the exciting *Sonata* (1978-9) for cello, piano, seven wind instruments, and percussion.²⁵ The *Sonata* was the first piece that Souster had written for exclusively acoustic forces since his *Two Choruses* of 1971 for the BBC Chorus. Although it is written for a chamber ensemble, the work is not structurally a

Example 2 *Arcane Artefact*, part of the opening ostinato

The musical score for Example 2, *Arcane Artefact*, is presented in five staves. The top staff is a grand staff (treble and bass clefs) with the title '(montage of steam-driven pumps)' above it. It features a complex rhythmic pattern with a tempo marking of 'cresc. poco a poco' and a time signature of 24/16. The second staff is for drums, with a tempo marking of 'P2' and a time signature of 16/8. The third staff is for synthesizer, with a tempo marking of '(f' 164)' and a time signature of 16/8. The fourth staff is for marimba, with a tempo marking of 'et simile, with variants' and a time signature of 16/8. The fifth staff is for piano, with a tempo marking of 'et sempre sim.' and a time signature of 16/8. The score includes various performance instructions such as 'cresc. poco a poco', 'et simile, with variants', and 'et sempre sim.'. The piece concludes with a tempo marking of '(machine sounds fade)' and a time signature of 16/8.

Example 3 Sonata, opening

Adagio espressivo (♩ = 60)

Classical sonata; in fact the title derives again from a memory—this time of Souster's experience as an undergraduate of playing Beethoven's cello sonatas with Christopher van Kampen (who was the cellist with the Nash Ensemble in the original BBC recording of Souster's piece in 1980.)

The influences at work in the Sonata are multifarious. It contains a great deal of contrasting consonant and specifically 'non-tonal' material, much of which originates in the 'vocabulary' of American popular forms. The piece was composed partly in Manhattan and partly in California: Souster's reduction of heterogeneous elements to fit a common frame of reference has some parallels with the familiar image of the USA as a 'melting pot'. Numerous stylistic references flash by—to American repetitive music, for instance (at one point Reich's Octet comes to mind), and jazz (a fleeting echo of Duke Ellington's *Mood Indigo*)—and there is great textural and timbral variety.

The overriding characteristic of the Sonata is not, however, that the composer uses fragments of different types of music, but that he exploits culturally conditioned systems of expectations to produce particular moods and effects. The temporal proximity of disparate material, the implying of other codes, and the importance given to timbre (to which at times tonality is subservient), work together to create a unique and surprisingly accessible form of expression, in which diverse elements come to fruition within a single framework. Expectations are relentlessly dashed: for long stretches, material is mulled over at leisure, only to be interrupted by a burst of activity; where one anticipates development or elaboration of a melodic idea, for example, there is instead an abrupt halt and, with a 'sudden dramatic gesture', the piece turns into a cross between a Stockhausen 'moment' and the Chicago Art Ensemble in busking mood. The music swings to and fro between states of dynamism and stasis—so violently, indeed, that it has been referred to as the music of a schizophrenic. This kind of sudden change is of course a characteristic of purely minimalist compositions, but Souster uses it to achieve his own, rather different and idiosyncratic compositional ends. Keith Potter suggests that it is important to Souster 'to be able to surprise listeners in ways which they can comprehend, as opposed to baffling them with the manifold complexities of an avant-garde approach'.²⁶ Souster achieves the 'comprehensible surprise' by playing with codified and familiar forms, but there is still a problem as to how one should respond (after acknowledging the initial shock) to the juxtaposing of these blocks of diverse material, for in this music there are no compositional 'rules' governing degrees of musical difference. Michael Nyman, in discussing a sudden change of musical material in his own minimalist piece *Think Slow, Act Fast*, disputed phlegmatically that such moments are more 'meaningful' than any other.²⁷ This contrast of musical

textures in Souster's work may be a product of the 'Stockhausen experience' as Potter dubs it, but the importance of timbre is something that he probably also owes to the rock experience.

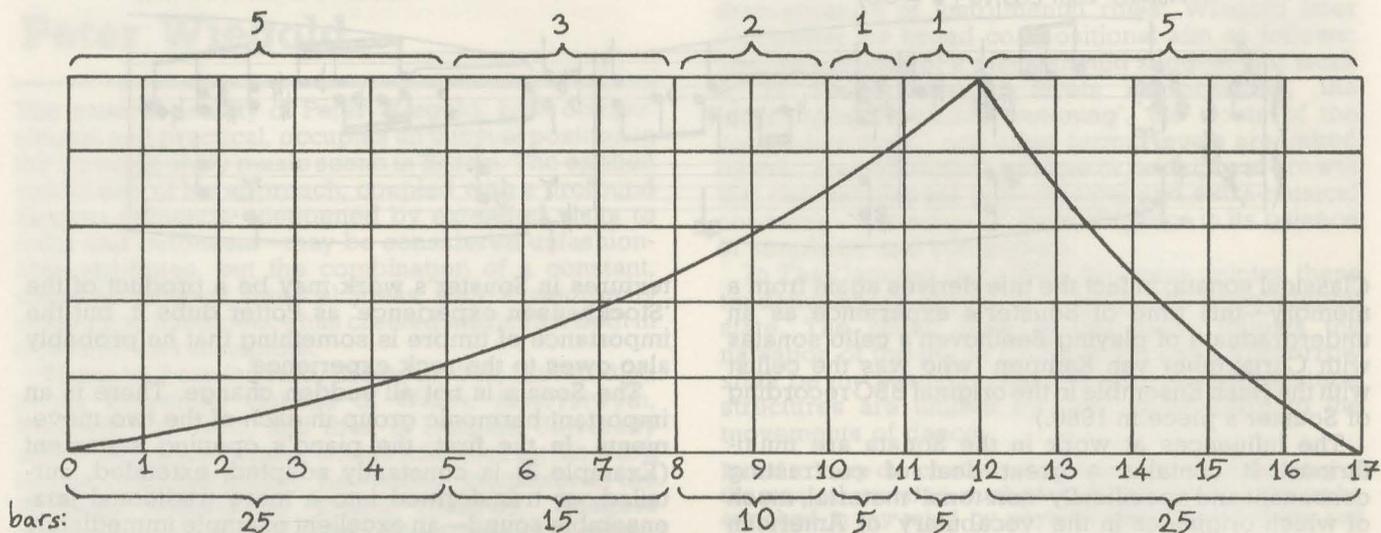
The Sonata is not all sudden change. There is an important harmonic group in each of the two movements. In the first, the piano's opening statement (Example 3) is constantly adapted, extended, curtailed, or transformed into a more traditional jazz-ensemble sound—an excellent example immediately precedes the cello cadenza. The harmonic basis of the second movement is a ten-note chord (Example 4), the source of which is 'the magnificent "apocalyptic" chord in the first movement of Mahler's 10th Symphony'.²⁸ It first appears before the soulful jazz-style variation in the first movement, just mentioned; but it is not fully exploited until the second movement, where it is gradually encouraged to reveal itself, slowly emerging out of the basic interval of a 5th. Even the violent section (the one described above as being in 'busking' style) has piano clusters derived from the chord. The attractive flashback 'disco' coda, based on a keyboard ostinato that is first heard in the cello cadenza, derives all its harmonic expansions from the dissonant chord, and includes a glorious chromatic shuffle down from a C sharp tonal area to C minor, which first appeared with the third melodic idea of the movement; the harmonies used in this final section originate from the chord sequence in *Driftwood Cortège*.

Example 4

A different and in some ways more conventional type of fusion technique is used in *Mareas* (1980), a work for four voices and four-track tape based on the texts of two poems by Pablo Neruda—*Mareas* (Tides) and *El mar* (The sea).²⁹ The structural proportions of the work are governed by numerical values derived from measurements of the speed, height, and duration of the *tsunami* tidal wave. The source of Souster's data, and indeed of the whole concept of such a structure, was a book by the American Willard Basconi, *Waves and Beaches—the Dynamics of the Ocean Surface* (1964), which was recommended to him by Gordon Mumma.

The contours and duration (17') of Souster's model wave not only shape the overall form of the piece (*Mareas* reveals rather holistic tendencies in

Figure 1 The relationship between the tsunami tidal wave and the structural proportions of the first section of *Mareas*



Souster) but the internal proportions of some of the sections. The first section, for example, is based on the number 17 (the duration of the tsunami) divided into two segments at the point where the wave peaks (12 + 5). The first segment is then further divided according to the Fibonacci series to create the proportions of the subsections (Figure 1), which are articulated by the vocoder part on the tape. In each subsection the ebb and flow of the wave are more loosely reflected in the slow piling up of repetitions of the same interval to cover a wide spectrum, before a quick dissolution (Example 5). The basic interval is reduced in successive subsections (perfect 4th, major 3rd, minor 3rd, major 2nd, minor 2nd) and the final cluster covers an accordingly narrower range.

Example 5 *Mareas*, bars 1 and 10

♩ = 60
nebulous calm

tape

ppp b^{\flat} σ

bar 1 → bar 10

Example 6 *Mareas*, opening bars of the soprano part

♩ = 60 dreamy, liquid

ppp a - e - a a - e - a

Example 7 *Mareas*, bars 180-86

f, but intense

the sea comes and brings our lives — to-ge-ther

The voices likewise begin the section with open 5ths and end it with semitones (Example 6).

The rising and falling waveshape pervades the work in other less integral ways as well. The transition from section 1 to section 2, for instance, is made by a synthesised noise cluster which dissolves slowly upwards, the low frequencies being eliminated first; this is answered later by a cluster that dissolves slowly downwards, the high frequencies being eliminated first. Much of the intervallic material, particularly in the central, unaccompanied section of the piece, also reflects the waveshape (Example 7).

The use of language in *Mareas* is interestingly varied. In the first section of the work the voices begin by singing only the vowel sounds of selected words: 'a e a' from *mareas*, 'o u o' from *molusco*, 'a o a' from *sal rota*, and so on. Not until the fifth subsection do they make tentative moves towards whole words and only in section 2 does anything like conventional text setting begin. Another element is the prominent part accorded on the tape to a vocoder, a device that modifies a human voice (it is much used in the pop world, for example by Herbie Hancock and Laurie Anderson); the vocoder 'speaks' Neruda's poetry alternately in the original Spanish and in Souster's English translation—the single text opening up two different sound worlds. In places both taped and live voices are modified electronically, and at one point sea sound effects are produced by filtering the slow singing of the word 'motion' by the mezzo-soprano.

Souster's most recent work was commissioned especially for an Arts Council tour, Electronic Music Now, early in 1983, which he and trumpeter John Wallace fronted. *The Transistor Radio of St Narcissus* is a flamboyant work for flugelhorn and live electronics. It takes its title from a passage in Thomas Pynchon's novel, *The Crying of Lot 49*, in which the heroine experiences a moment of insight into the inexplicable correlation between the appearance of the lay-out of circuitry in a transistor radio and the design of a Californian settlement estate. Souster interprets this moment musically by creating 'nodal points' (in several cases, tonal triads) which are arrived at from a diversity of sound textures.

As usual the influences on the work and consequently the components of the musical material are from several sources: short scalic melodic gestures, reminiscent of Miles Davis's jazz-rock experiments of the 1970s are incorporated; particular emphasis is placed on the overtones of the harmonic series—an idea stimulated by a recording session in which Equale Brass worked on Souster's *Equalisation* (1980);³⁰ and the by now familiar gamut of extended playing techniques called for from the flugelhorn player. The score offers a healthy combination of extreme precision with improvisation: the horn player has an active role in deciding the exact timing of some of the material, though the order is given; and at certain points he sets in motion electronic processes such as pitch transformation, digital acceleration, and other electronic modifications of the sounds he produces.

Once again both instant contrasts and long-term transformation (from dissonance to consonance, for example) are at work in *St Narcissus*, for it begins as one thing and ends as another. The binding factor here, as in *Sonata* and *Mareas*, is Souster's attempt to 'create a coherent but flexible musical language in which consonant and dissonant intervals are given equal value'.³¹ In fact the work ties up many of the threads that have run through the music discussed here: the intuitive/improvisational element, the jazz-rock experience, the paradox of transformation and unity, the recent Californian connection—'[there's] a Californian myth which I feel that I'm part of'.³² Most significant of all it demonstrates the continuing fundamental importance to Souster of the electronic dimension of sound, under which all the other influences are subsumed:

The magnetic attraction of electronics continues to grow and electronic music can now be said to reflect the influence not only of the avant garde of the Western world but also of Japanese and Indian traditional music, of rock music and jazz.³³

¹ Tim Souster, 'Intermodulation: a Short History,' *Contact 17* (Summer 1977), p.4.

² Raymond Williams, 'Tradition', *Keywords: a Vocabulary of Culture and Society* (London: Fontana/Croom Helm, 1976), p.269.

³ *Composer's Portrait*, BBC Radio 3, summer 1979.

⁴ BBC Radio 3 broadcast, mid-1970s, introduced by Roger Smalley.

⁵ *Ibid.*

⁶ 'Tim Souster Writes about his New Composition for Three Orchestras "Triple Music II"', *The Listener*, vol.84 (1970), p.222.

⁷ Here Souster's approach to the creative and social functions at work in musical performance parallels that of Christopher Small, who has criticised the subjugation of new creative means to traditional notational precepts: see Small, *Music—Society—Education: a Radical Examination of the Prophetic Function of Music in Western, Eastern and African Cultures with its Impact on Society and its Use in Education* (London: John Calder, rev. 2/1980), p.31.

⁸ Letter to the author, summer 1982.

⁹ *Uzun hava* played by Deben Bhattacharya on *Music from Turkey* (Argo ZFB 46).

¹⁰ *The Times*, 31 July 1974, p.9.

¹¹ In a letter to the author (May 1983) Souster speaks of having been 'bowled over' by the Delius work.

¹² From a talk given by Souster on BBC Radio 3 in 1973, quoted in Michael Nyman, "'Song of an Average City'—Tim Souster's Answer to Delius', *The Listener*, vol.92 (1974), p.312.

¹³ Nyman, "'Song of an Average City'", p.312.

¹⁴ *Spectral* was given its first performance at St John's, Smith Square, in 1972, by Intermodulation, with the composer playing the solo viola part. A recording of the piece is available on the album *Swit Drimz* (Transatlantic TRAG 343).

¹⁵ Sleeve note to *Swit Drimz*.

¹⁶ *Ibid.*

¹⁷ Recorded on *New Music from England: Tim Souster* (Leonarda LPI 114).

¹⁸ Tim Souster, 'The Rock Influence', *First American Music Conference, Keele University, England, Friday April 18-21 1975* ([Keele], [1978]), pp.134-41.

¹⁹ Tim Souster, 'Electronics in Rock Music', *Die Garbe*, vol.5 (Cologne, 1975).

²⁰ [Round-table discussion], 'The Americanness of American Music', *First American Music Conference, Keele University*, p.197.

²¹ 'OdB' is a reference level for amplitude of signals in a recording studio. In 1980 Souster started his own publishing company called OdB Editions, which publishes his music, and his own commercial recording studio.

²² Recorded on the *Swit Drimz* album.

²³ This and the quotations in the remainder of this section are from Souster's remarks in *Composer's Portrait* on BBC Radio 3 in the summer of 1979.

²⁴ Souster, 'Intermodulation', p.4.

²⁵ Recorded by the Capricorn Players on *New Music from England*, and by the Nash Ensemble on *Tim Souster* (Nimbus 45020).

²⁶ Keith Potter, 'New Music', *Classical Music* (7 February 1981), p.15.

²⁷ *Music in our Time*, BBC Radio 3, 1983.

²⁸ Souster, sleeve note to Nimbus 45020.

²⁹ The work was commissioned by Electric Phoenix with funds made available by the Arts Council.

³⁰ Nimbus 45020.

³¹ Souster, sleeve note to Nimbus 45020.

³² 'The Americanness of American Music', p.197.

³³ *Music in our Time*, BBC Radio 3, 1978.