9 Descent into the pentagonal garden

The simplified style which characterised this new, 'third period' in Takemitsu's creative output was no adventitious development, but one whose roots can be traced in his work from the preceding years. In particular, the ground had long been prepared for the emergence of its more overt tonality by his engagement with a modal harmonic vocabulary which, though usually disguised somewhat by the dense textures of his 'pantonal' chromaticism, occasionally – as in the score of Green – had surfaced with surprising directness. There had also been sporadic excursions into conventional tonality in these years, such as the Abiyoyo quotation in Wind Horse and the Bach chorale in Folios; while outside the sphere of the composer's 'serious' work – in his film music, in the a cappella songs of Uta, or in the arrangements of pop 'standards' that formed Twelve Songs for Guitar (1977) - unapologetic tonal expression was flourishing shamelessly. The gradual emergence of the latter into the mainstream of Takemitsu's 'serious' composing activity was thus far from a sudden stylistic rupture, but more in the nature of an inevitability for which the soil had been carefully nurtured over a number of years.

While elements of his new style are certainly palpable in works such as *Quatrain*, in the author's opinion it is with the orchestral work *A Flock Descends into the Pentagonal Garden* (1977) that Takemitsu first gives clear and unambiguous expression to the new stylistic preoccupations with which he is henceforth to be concerned. Moreover, if one grants this score a key role in Takemitsu's stylistic transformation, then a particular line of descent for certain aspects of the 'late style' which emerged as a result begins to suggest itself. The present chapter concerns itself – albeit speculatively – with tracing the ancestry of these traits through three key works of the 1970s: *In an Autumn Garden* (1973/79), *Garden Rain* (1974) and *A Flock Descends into the Pentagonal Garden* itself.

The story of *In an Autumn Garden* begins in 1970, with the decision by the National Theatre of Japan to commission a series of new works by contemporary composers for that most venerable of traditional Japanese musical institutions, the *gagaku* ensemble of the Imperial Household. The first beneficiary of this new policy was Toshirō Mayuzumi, whose *Shōwa Tenpyō Raku* was performed in October 1970, and over the years that followed, a number of other distinguished composers were to contribute to

this ongoing project: the Japanese musicians Toshio Hosokawa (Tōkyō 1985), Maki Ishii (Momotarō Onitaiji, 1988) and Toshi Ichinyangi (Jitsugetsu Byōbu Issō-Kōkai, 1989), as well as the Europeans Karlheinz Stockhausen (Hikari, 1977) and Jean-Claude Élois (Kansō no Hono-o no Kata e, 1983). Takemitsu, it would appear, also received a commission to provide a work for the series at the same time as Mayuzumi, but his own score was to have a rather more extended period of gestation. It was not until 30 October 1973, in fact, that his single movement Shuteiga - 'In an Autumn Garden' – received its National Theatre première, but even this proved to be far from the end of the story. Over the course of the next six years, Takemitsu would build five additional movements around the centrepiece of this original score, eventually producing Shuteiga – Ichigu ('In an Autumn Garden - Complete Version'), first heard at the National Theatre on 28 September 1979. With a total running time of fifty minutes, the full version must count among Takemitsu's most ambitious works, and certainly represents his most thorough investigation of the possibilities of traditional Japanese music: Poirier refers to it as 'probably the furthest removed from the West of any work he had written'. The titles of the six movements - which Takemitsu initially conceived in English before supplying them with Japanese equivalents – are:

- I. Strophe
- II. Echo I
- III. Melisma
- IV. In an Autumn Garden (the original 1973 movement)
- V. Echo II
- VI. Antistrophe

The loose symmetry of this scheme is immediately apparent: Takemitsu was to recall it seven years later in the final version of *Gémeaux*, in which movements bearing the same titles as the outermost pair of *In an Autumn Garden* frame two inner movements ('Genesis' and 'Traces') in somewhat similar fashion. It is a symmetry also emphasised in the score in various ways, both by literal repetition and less exact forms of recollection. For example, the whole of the passage from letter 'F' to the end of letter 'G' in the final movement is a repeat of the material between the same rehearsal letters in the first movement; while at the end of the previous movement (*Echo II*), 'birdsong'-like interjections for *komabue*² and five *ryūteki* recall – without literally quoting – the similar bird sounds with which the equivalent movement in the arch-like scheme (*Echo II*) had begun.

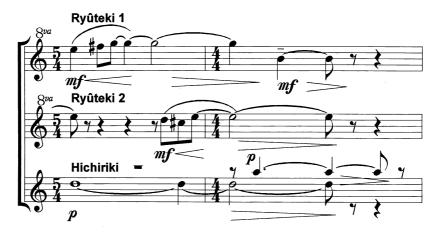
Takemitsu employs the titles of the outermost movements in this archlike scheme in their original, antique Greek senses: *Strophe* and

Antistrophe refer, respectively, to the music sung by the Chorus as it turns to the left to mount the stage, and when it turns to the right to depart, at the beginning and end of the ancient drama. Interestingly, the works comprising the traditional kangen and bugaku repertories of gagaku music are also subdivided into 'left' (sahō) and 'right' (uhō) groups, but Takemitsu here does not appear to be referring to this distinction. Rather he relates these Greek terms for promenading choral performance to the ancient conception of gagaku as 'a kind of strolling music for playing outdoors such as while strolling in a garden'. To be sure, no such actual perambulation is undertaken by the musicians during a performance of In an Autumn Garden, but, nevertheless, this is another Takemitsu score in which the spatial distribution of the instrumentalists plays a crucial role, contributing to an overall 'spatial and temporal discrepancy of sound' which the composer obviously considers close to the spirit of the original outdoor style of performance. This spatialisation is already present in the 1973 version of the work, which is scored for a foreground ensemble of nine players (the 'Autumn Garden') and, upstage of them, an 'echo' ensemble of a further eight musicians (the 'Tree Spirits'). However, for the 1979 score Takemitsu added two more groups of 'Tree Spirits' to left and right at the rear of the auditorium, bringing the total number of players to twentynine. By means of this physical separation of the performing groups, he was able to offer a metaphorical interpretation of the work's title in the shape of another 'multiply-focused sound garden' of the type found in the orchestra of Arc; although, at the same time, he was not above offering more literal, anecdotal interpretations of the title too – in the form of the birdsongs already referred to, or the chimings of the wooden boards (mokushō) with which the work begins and ends, and which, according to Akiyama, create 'an echo similar to the chopping of a tree deep in a forest'.⁴

The arrangement of the two rows of musicians in the 1973 scoring – nine in the foreground, eight to the rear – is remarkably close to that of *The Dorian Horizon*, with its downstage group of eight 'harmonic pitches' supported in the distance by nine 'echoes'. The similarities to that earlier work do not end here either, for according to Akiyama – and very much in accord with the 'classical Greek' overtones suggested by the titles of the outer movements – Takemitsu composed the work 'mainly in the Grecian Dorian mode'⁵ rather than in traditional *gagaku* scales. The accuracy of this observation would appear to be borne out by such passages as the haunting melody with which the fourth movement opens (Ex. 87), which uses all the pitches of the mode beginning on the supertonic of a D-major scale, i.e. of a 'Dorian' E minor.

At the same time, however, Takemitsu's writing here may not be so

Ex. 87 In an Autumn Garden IV, A/3-4



remote from traditional gagaku practice as Akiyama, or indeed maybe the composer himself, seems to think. Gagaku music uses two heptatonic scale-types, $ry\bar{o}$ and ritsu, which correspond more or less to the Mixolydian and Dorian modes of Western theory, and Takemitsu's 'E-Dorian' mode is identical with one of the three transpositions of the ritsu scale, $hy\bar{o}j\bar{o}$. While this congruence might not have displeased Takemitsu, who in this work was in part seeking to rediscover some of the origins of gagaku in Byzantium and the Middle East, it does nevertheless rather neatly illustrate in nuce one of the most striking features of In an Autumn Garden: the degree to which – despite the composer's best efforts to create a new musical language for gagaku – the old traditional idioms still managed to assert themselves in the finished composition, so intimately bound up were they with the performing techniques and indeed the very physical construction of the instrumental resources.

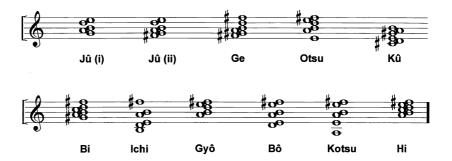
Much of Takemitsu's writing here, in truth, seems incapable of avoiding reference to orthodox *gagaku* models of performance. In a number of places, for instance, the *kakko* drum plays conventional accelerando patterns of the type known in traditional performance as *katarai*, while the patterns given to the *koto* during the repeated 'processional'-like passage at letter 'O' of the fourth movement are rhythmically identical to the type of thing this instrument would play in an orthodox setting. Heterophony, which the composer himself identified as a characteristic texture of *gagaku*, 6 is also widely used throughout the work, although admittedly the 'use of secondary melodic lines which ornament the primary melodic line' may, as Akiyama asserts, equally well have derived from an observation of

gamelan practice. More assuredly of authentic *gagaku* origin is the use of a particular kind of canonic writing, often in combination with heterophonic embellishment of the constituent parts, in which there is no attempt at a harmonious sounding result, but rather at the creation of a raucously dissonant web of voices: a type of texture which corresponds very closely to the kind of canonic performance in the traditional repertory for which the Japanese scholar Shigeo Kishibe coined the delightful neologism 'chaophony'. Passages from *In an Autumn Garden* such as the complex *senza misura* at letter 'D' of the second movement, or the canonic imitation of both a melodic line and its heterophonic embellishment at letter 'F' of the fourth, are good examples of the degree to which Takemitsu had imbibed the spirit of this 'chaophonic' style by the time he came to write his own work for the *gagaku* medium.

From the point of view of Takemitsu's own stylistic development, however, perhaps the most important of these aspects of traditional gagaku practice which contrived to assert themselves, despite the composer's efforts to the contrary, was the matter of the available pitchmaterials. In this respect, different constituents of the instrumental ensemble afforded the composer varying degrees of freedom. For example, wind instruments such as the hichiriki and ryūteki were not only fully chromatic, but even allowed the composer the possibility of microtonal embellishment of his basic melodic lines. The plucked string instruments also permitted the possibility of bendings of pitch, and additionally Takemitsu prescribed an unorthodox tuning for the koto which enabled it to produce eleven out of the twelve pitch-classes of the total-chromatic (although, at the same time, the strings of the biwa are tuned according to the traditional pattern of rising fourths, F#-B-E-A, known as banshikichō). The small mouth-organ known as the shō, however – whose delicate, 'metaphysical' sounds Takemitsu had already employed in his Distance - was totally intractable to any kind of extension of its basic gamut of limited pitch-materials. It could produce only the pitches of an A-major scale, plus one C\(\pi\) and one G\(\pi\); furthermore, the fingering of the pipes had been designed for optimum facility in the production of eleven standardised vertical types as shown in Example 88, which formed the harmonic basis of the traditional gagaku repertory.

In *Distance*, Takemitsu had ignored the traditional harmonic style with which the *shō* was associated, exploiting as best he could the limited gamut of pitches to produce more dissonant, freely chromatic vertical forms – even bringing the player's voice into play at one point as a means of extending the instrument's chromatic possibilities. The *shō* writing of *In an Autumn Garden*, however, comes much closer to the traditional variety; on

Ex. 88 Standard chords of sho



one or two occasions, in fact, the vertical forms Takemitsu assigns to this instrument are identical with forms found in Example 88 – for example, in the 'processional' passage of the fourth movement referred to above (letter 'O'-'P'), where the first and last chords of the sho's repeated harmonic cycle correspond to the fourth (otsu) and seventh (ichi) of the chords in Example 88 respectively. And even when not limiting himself to the traditional harmonic vocabulary of the shō, Takemitsu here seems to accept the inherent limitations of the instrument, and build up similar-sounding modal clusters of his own, rather than attempt to go against its traditional function as he had done in Distance. Furthermore, this accommodation of the instrument's limitations somewhat circumscribes the pitches which Takemitsu is able to assign to the other instruments without creating a 'polymodal' texture. In this respect, it is revealing that in the most 'chromatic' passage of the work - the complex melismata of the third movement – the composer is obliged to eschew the harmonic support of the shō entirely.

Admittedly, a limited possibility exists for producing more chromatically dissonant forms by the simultaneous sounding of $C\sharp$ and $C\natural$, or $G\sharp$ and $G\natural$, and – as he had done in *Distance* – Takemitsu duly exploits this loophole in one or two places. For the most part, however, he not only contents himself with diatonic forms, but even models some of his harmonic types on transpositions of those contained within the instrument's traditional set of eleven. For example, in addition to the 'panpentatonic' chords on G and D found in the latter, the available pitches also permit the construction of other pentatonic verticalisations on pitches either side of this pair in the cycle of fifths – i.e. on G, G, and G and G which are duly exploited by Takemitsu in the course of the work.

The significance of such practices lies in the implication that, far from finding himself frustrated by the harmonic limitations of this instrument,

Takemitsu instead found the sounds it produced so satisfying that he was encouraged to construct his own harmonic forms on the same basic principles. And the wider significance of this discovery lies in the fact that very soon he would be constructing similar harmonic types in works for other, more conventional instrumental media – modal verticalisations which, it is true, had formed part of his basic harmonic vocabulary since the very earliest years, but which in recent times had seldom been presented in such undisguised clarity as they were shortly to be.

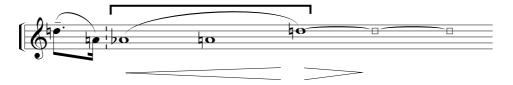
One such work for conventional Western instruments – many of whose features owe much to the example of *In an Autumn Garden* – appeared in the year following the first version of the latter. *Garden Rain* for brass ensemble takes its title from that of a *haiku* poem by an Australian schoolgirl, Susan Morrison, which appears in the preface to the score:

Hours are leaves of life. And I am their gardener. Each hour falls down slow.

It is amusing to reflect how this unknown eleven-year-old unwittingly started something big by giving this evocative title to her work. Not only did it inspire Takemitsu to produce another work in the ongoing series of 'garden'-inspired pieces that had begun with *Arc* in the previous decade; Morrison's title also granted to *Garden Rain* the privilege of being (with the possible exception of the early tape piece *Water Music*) the first work in another series of Takemitsu compositions linked by a common extramusical theme, and one which was to assume much greater importance in his works of the succeeding few years (as chapter 10 will reveal): the 'Waterscape' series. *Garden Rain* proclaims its membership of the latter in particular by the inclusion of a three-note motif that was to appear repeatedly in later works sharing an aquatic reference: the 'S–E–A' motif, which we have already encountered in the score of *Winter*. In Example 89, the motif is heard in the transposed form Ab–A–D, preceded by, and overlapping with, a statement of its own retrograde form.

Besides glancing forward to the 'waterscape' obsessions of the following decade, however, *Garden Rain* also looks backwards to *In an Autumn Garden* in certain respects, most obviously in the spatial disposition of its instrumental forces. Like the ensemble required by *In an Autumn Garden* in its first version, that of *Garden Rain* is divided into 'upstage' and 'downstage' groups, in this case each composed of five instrumentalists. This means, of course, that the work's on-stage layout recalls that of *The Dorian Horizon* as well, and once again there is also a common ground with the

Ex. 89 Garden Rain, p. 7



latter in the use of modality. Takemitsu is less explicit about the exact nature of this modal construction than he was regarding his 'Grecian Dorian mode' in *In an Autumn Garden*; but nevertheless one is able to gather that 'in this instance' he 'chose a mode with many possibilities – a mode that, beginning as a wide stream, will divide into many branches', and in which 'the perfect fifth, even if not always present in sound, is at the core of my musical perception'. Certainly the modal basis of much of the musical material here is apparent enough at the surface level, both horizontally and vertically – in the latter dimension, most conspicuously perhaps in the closing bars of the work, which tend towards (without ever unambiguously stating) a 'panpentatonic' conclusion on a B final.

It is also perhaps feasible to suggest a direct shō influence on some aspects of the distinctive brass style of Garden Rain. Such a relationship would certainly not be without precedent: Takemitsu had, after all, explicitly acknowledged that the massed strings of Arc represented the 'most suitable instruments to express the continuous sounds of the $sh\bar{o}'$, 10 and a similarity between the senza vibrato string chords of The Dorian Horizon and the sounds of the shō had also been commented on by Akiyama. A thoroughgoing attempt to analyse the pitch-material of Garden Rain in terms of subsets formed by 'partitioning' of the traditional repertory of shō chords has actually been attempted by one commentator on the work, 11 but it may be the case that the style of instrumental writing offers a more obvious reflection of such an influence. For much of the time, the brass instruments of Garden Rain are preoccupied with quiet, long-held chords, typically with very low bottom notes, notated by means of squareheaded symbols whose durations are given by figures shown in boxes above them. These figures are to be understood only as relative to one another, with a unit value greater than 1"; in effect, therefore, the absolute durations of these chords in performance will be more or less a function of the instrumentalists' breath capacity, relating the style of execution to that of the shō whose power, Takemitsu believed, was 'inherent in its relationship with man's breathing'. 12 The static quality achieved here, a distinctive feature of Garden Rain's sound-world, is in fact equally apparent in those sections of the work which, on paper at least, would rather tend to suggest a dense and complex polyrhythmic chaos formed from simultaneous irregular subdivisions of the beat; as Wilson observed, the overall effect of such rhythmic superimpositions is so complex 'that the ear tends to fuse it into a certain homogeneity creating a new sense of stagnation clearly related to the opening, sustained chords'.¹³

Garden Rain obviously recalls In an Autumn Garden also on account of the common metaphor shared by the two works' titles, but there is a suggestion in the later work that Takemitsu is beginning to apply this metaphor to his compositional process in a manner somewhat different from heretofore. Wilson mentions hearing the composer give a lecture at the Eastman School of Music in 1974, in which he compared the structure of Garden Rain to that of a Japanese rock garden. 14 If Wilson's memory is accurate, then Takemitsu's revelation is highly significant, for it represents an acknowledgement that the 'garden' metaphor is here being translated into musical equivalents other than, or at least additional to, those by means of which the composer had interpreted the image in such earlier works as Arc. In Arc, there had been an attempt at offering parallelisms between the 'time-cycles' of various components of a Japanese garden – rocks, grass, trees and sand – and the speeds of activity of various elements in the instrumental texture: in other words, the garden analogy operated largely by virtue of the vertical aspect of the music, in terms of Takemitsu's 'pan-focal', stratified treatment of the orchestra. Takemitsu's remarks about Garden Rain, however, suggest that in this case it is the overall form of the music that is modelled on a Japanese garden: the metaphor is now related to the horizontal aspect of the music, the actual contents of the piece as it unfolds in time, of which the term 'structure' is descriptive.

The importance of this change of emphasis resides in the fact that the latter application of the metaphor proved the more enduring of the two, and eventually became the norm in Takemitsu's third and final period. This in a way is hardly surprising: the dense stratifications of different textures by means of which the image is interpreted in such works as *Arc* belong emphatically to the 'avant-garde' style which Takemitsu was subsequently to abandon, and it was appropriate that in his simplified later manner the composer should prefer another interpretation of this evocative theme. Thus in works of later years such as *Fantasma/Cantos* for clarinet and orchestra (1991), which the composer claimed was inspired by viewing a Japanese 'tour' garden, the 'formal' interpretation of the 'garden' metaphor becomes the dominant model: it is as if the soloist, and vicariously the listener, were wandering through a series of fixed musical 'objects', some of which may be viewed in a different light, and some of

which may be revisited – as, typically, at the end of the work, in which via a literal repetition of material the music usually arrives back where it began. Takemitsu himself appears not to have drawn attention to this inconsistency, or at least slight discrepancy, between his interpretation of 'garden form' in works of his middle and late periods, but it has not gone unnoticed by other commentators: Akimichi Takeda, for instance, observes that while in the earlier works 'landscape gardening' was taken as equivalent to 'pitch organisation', in later works (like *Fantasma/Cantos*), the latter concept has been completely replaced by the notion of a 'site for walking'.¹⁵

The 'garden' metaphor is evoked again in the title of A Flock Descends into the Pentagonal Garden for orchestra (1977), although at the same time this piece also belongs to another series of works which make common reference to an extra-musical theme: the series referred to by Takemitsu as 'Dream and Number'. The allusion to 'dream' refers to the circumstances of the work's inspiration: after seeing a photograph by Man Ray of the artist Marcel Duchamp, in which the latter's head had been shaved to leave a bald patch like a five-pointed star, Takemitsu dreamt of a flock of white birds, led by a black bird, descending into the 'pentagonal garden' of the title. Using this dream as a starting point, Takemitsu sought musical equivalents for its imagery via the mediation of an unusually rigorous precompositional process – an application of the science of 'Number'. The work's apparently cumbersome title is thus an accurate reflection of both its extra-musical inspiration and internal musical processes; yet, despite being carefully worked on in consultation with the composer Roger Reynolds, it has not been immune from ambiguous interpretations. In particular, at performances in Scotland and Australia – to the composer's surprise – audiences assumed it referred to a flock of sheep!¹⁶

As suggested above, Takemitsu's translation of the contents of his initial dream into sound is achieved with a certain precision, even if of a somewhat idiosyncratic kind. The 'black bird' is represented by the central pitch of the pentatonic scale formed by the 'black notes' of a keyboard, $F_{\#}^{\#}$ – a note Takemitsu refers to as his 'favourite pitch . . . whose sound is like a mountain peak with surrounding vistas'¹⁷ (a similitude apparently deriving from the central position this pitch occupies in the octave C–C). Moreover, Takemitsu also revealed that 'in German that pitch [i.e. $F_{\#}^{\#}$] is F_{is} , which sounds like the English "fix"; and with the intentional pun in mind, I use that $F_{\#}^{\#}$ as a fixed drone'. ¹⁸ The last part of this statement is interesting because Takemitsu here explicitly acknowledges a practice which has often been remarked upon by his commentators: the emphasis placed on specific pitch-classes by means of pedal points or drone-like

devices. This emphasis may be achieved either by repeatedly attacking the same pitch-class throughout a section, or by means of a 'pedal point' in the more traditional sense of a sustained pitch; the insistence on F# in A Flock Descends involves both types of practice. Thus at letter 'M' of the score, where Takemitsu simply sets out a series of six chords which he has derived from the pentatonic scale by means of the 'magic square' referred to below, the 'fixity' of 'Fis' in his precompositional scheme guarantees that this pitch appears in at least two octave registers, and sometimes three, in each subsequent chordal attack. Elsewhere in the piece, on the other hand, there are numerous references to this same pitch-class in the form of sustained pedal tones: as in the passage from letter 'I' to 'K', where F# – here stabilised in the octave above middle C – is sustained throughout.

Takemitsu's starting point for the musical realisation of the 'pentagonal garden' into which his 'black bird' descends is – unsurprisingly – the 'black note' pentatonic scale on F#. 'In music the number five makes us think of the Orient and Africa', he commented; 'to explain it simply, it is the scale of the black keys of the piano'. 19 It is revealing that Takemitsu here speaks of 'the Orient' as if, like Africa, it represented some musical 'other'. Although by this time he had long been reconciled to traditional Japanese music, he still regarded it somewhat from the 'etic' standpoint of a composer primarily in the Western tradition, and thus did not elect to mention here – as he might well have done – that this pentatonic scale is also the $y\bar{o}$ scale of traditional Japanese music, 'light' counterpart to the 'dark' in scale which he had used in his very earliest compositions.²⁰ In A Flock Descends, Takemitsu refers to this scale primarily in a vertical sense: 'panpentatonic' superimpositions of the entire collection, of the kind usually heard only intermittently in his work to date, now assume the importance of fundamental referential sonorities, and additionally furnish the work with that specific signifier of final closure that was to become something of a trademark over the course of the next few years. Of frequent occurrence, too, are vertical forms based on the addition of extraneous pitches to pentatonic collections; Example 90 illustrates an extreme case, where the 'blacknote' collection within the bracket forms the core of a massive orchestral sonority whose pitches contain the total-chromatic. The passage where this event occurs, incidentally, provides a good example of a gesture typical of Takemitsu's musical rhetoric: a climax which – in contrast to the gradual accumulations of energy typical of Western music - takes a form described by one commentator as 'a sudden, brief outburst which immediately subsides'.21 The manner in which this climax is preceded by a dramatic sounding of the double pedal point, C-C#, in the bass prior to the unleashing of the full orchestra, is also highly typical of the composer.

Ex. 90 A Flock Descends into the Pentagonal Garden, F/3



One could speculate that the addition of all seven 'white notes' to the five black ones here is some kind of reflection of the 'flock of white birds' that follow the black one in Takemitsu's initial dream image. Whatever the actual derivation of the pitches in Example 90, however, it is unlikely that they were arbitrarily arrived at, for A Flock Descends – as hinted above, and explicitly acknowledged by the composer himself – is written according to an unusually rigorous 'system'. 'Sometimes I change my previous plan with my intuition', Takemitsu observed, 'but A Flock Descends is written with a very strict row. It is programmed, controlled.'22 Takemitsu's account of this precompositional process, which appears in his monograph Yume to Kazu ('Dream and Number'), is actually the most candid explanation of his secret technical workings that he ever made public, and as such has been eagerly seized upon by scholars of his music: as Poirier has observed, it is not simply a matter of chance that this work and Quatrain are among the most commented upon of Takemitsu's entire œuvre.²³ For this very reason, I have decided that it would be supererogatory to add my own description to those already available, and the reader interested in finding out more about the 'magic squares' and other arcana by means of which Takemitsu derived the basic pitch-materials of A Flock Descends should turn to the appropriate sources.²⁴ At the same time, however, anyone who expects to find an exhaustive analysis of the work in question should be warned that they are likely to be disappointed by Takemitsu's description. While the composer certainly reveals how, retaining F# as a 'fixed pitch', he subjected the remaining notes of the black-note pentatonic scale to transposition operations by means of 'magic squares' to derive the basic harmonic fields of this work, many of the graphics and musical quotations

with which he illustrates his argument seem to stand in a merely decorative relationship to the text, being referred to only obliquely or sometimes not at all. As a result, the reader's curiosity on a number of points still remains tantalisingly unsatisfied. For instance, one of Takemitsu's diagrams hints that, in addition to those used to derive the pitch-materials, there is another 'magic square' of numbers (marked 'rhythmic construction series'), the sum of whose rows and columns is always fifteen, which appears to be used to generate the durational values of the work from various pairs of figures whose sum is always five. Kuniharu Akiyama certainly takes the hint, observing of the work's rhythmic aspect that 'various shapes are derived from cells whose rhythmic construction is related to the number five: 3+2, 1+4, 2+3, 4+1 '; 25 but, since Takemitsu's text almost provocatively fails to make any explicit reference to this intriguing diagram, such observations are doomed, in the last analysis, to remain somewhat speculative in character.

These 'magic squares' of Takemitsu's constructional system may also constitute a secret reference to the 'garden' metaphor of his title. At all events, Poirier has suggested an intriguing analogy between the two: the distribution of stones in a traditional Japanese rock garden, he notes, is determined by the rhythm 7-5-3, which are also the central numerical values in a Taoist 'magic square' whose columns and rows all add up to fifteen – just like those in Takemitsu's own square of 'rhythmic construction series'. 26 At the same time, the 'garden' reference of Takemitsu's title is almost certainly interpreted musically in both senses Takemitsu more habitually attributes to it: referring both to the 'pan-focal' orchestral texture, and to the overall patterning of the work after the form of a Japanese garden. Admittedly, this latter suggestion appears to be contradicted to a certain degree by the composer's own remarks on the work, which imply a different structural model, and one whose linear, sectional nature seems at first sight incompatible with the idea of a rambling, circular stroll. It is a model not unlike the 'eleven steps without any special melodic scheme' of November Steps, but in this instance the number of 'dan' in Takemitsu's scheme would appear to be thirteen: 'Each section of this piece has a special story: maybe, thirteen small sections, thirteen variations - not variations in the Western sense, rather, like a scroll painting. So when I composed this piece I made up a story, a picture, like a scroll painting.'27

The 'maybe' with which Takemitsu qualifies his description is apt, recalling Ohtake's remarks about the 'eleven ambiguously separated sections' of *November Steps*: it is indeed as difficult to arrive at any definitive partitioning of the later work as it was of the former (although, once again,

Takemitsu's score suggestively provides thirteen rehearsal letters, 'A'-'M'). Perhaps one should not be too surprised at such an outcome, if the work is in fact patterned after the continuously unfolding sequence of 'boundless' images in a Japanese *emaki*, as the composer claims. However, as suggested above, this interpretation of the work's formal outline does not necessarily militate against its simultaneous apprehension as an example of Takemitsu's 'garden form' – the network of interpenetrating repetitions in the score, both literal and less accurate, implies that this might not be inappropriate. That these two simultaneous interpretations of the same form may not be incompatible is certainly suggested by the composer's remarks, many years later, about *A Bird came down the Walk* (1994), a work for viola and piano based on the same materials as those with which *A Flock Descends* opens: here 'the bird theme goes walking through the motionless, scroll painting like a landscape, a garden hushed and bright with daylight'.²⁸

Takemitsu's 'pentagonal garden' is also self-evidently in a direct line of descent from the 'autumn garden' of the gagaku piece on which he was still working, and it may be appropriate to conclude discussion of A Flock Descends with some speculations on the degree to which the experience of writing for gagaku may have influenced the style of the orchestral piece and, by implication, the whole 'third-period' aesthetic of which it constitutes one of the earliest clear expressions. One such possible source of influence may have been of a kind that operated on the composer's subconscious, furnishing part of the dream-content which was the initial impetus for A Flock Descends' composition: anyone who has attended a performance of In an Autumn Garden, surrounded by the spatially separated instrumental groups, cannot but be reminded by this experience of sitting in the midst of a 'triangular garden' of the five-sided one which Takemitsu saw in his dream-vision. Without indulging in amateur psychology, however, it is also possible to discover links between the two works in the shape of more concrete, musical similarities. Most obviously, the starting point for Takemitsu's 'magic-square' chords – the verticalisation of a pentatonic scale – is identical with the construction of five out of the eleven standard vertical forms played by the shō in its conventional context. Transpose the first chord of Example 88 down a semitone and you have the 'black-note' pentatonic chord with which A Flock Descends opens; orchestrate it for wind instruments, add further vertical forms of similar construction, and you have the very passable simulacrum of shō-like chords of the work's first few bars. Furthermore, add to this a melodic line, the 'theme of the flock . . . based on the same pitches [as the accompanying harmonic progression]',29 assign it to solo oboe, and you have something like the orchestral equivalent of a *hichiriki* melody to counterpoint this movement of ethereal harmonies. Or – as at letter 'M' of Takemitsu's score – colour the basic six 'magic-square' chords on which *A Flock Descends* is based with silvery, 'overtone'-like formations for muted trumpets and divided strings, add crescendo–diminuendo dynamic envelopes to the latter, and the orchestration as a whole begins to shimmer with the magic, celestial timbre of the *shō* itself.

It thus seems highly plausible that Takemitsu's experience with the limited harmonic range of the shō was one factor determining the more obvious preference for verticalised modal forms, and for 'panpentatonic' chords in particular, that is such a conspicuous feature of his later work. In this sense, his 'descent into the pentagonal garden' - apt metaphor, perhaps, for those who view his abandonment of avant-gardisme as some sort of decline in standard – may therefore have been prepared for by his experiences in the 'autumn garden' of his gagaku piece. Other aspects of his later style, too, such as the increased emphasis on melos, or the simplified textures with their reliance on instrumental doublings rather than complex layerings, may also owe their origins in part to the same creative stimulus. Yet it would be going too far to suggest that the experience of writing In an Autumn Garden alone was responsible for such a wholesale transformation of Takemitsu's style. The sources of Takemitsu's late manner were manifold; this chapter has only related the story of one, albeit important, element in the mix.

Another influence that was to become of especial importance in the succeeding years, for example, is already hinted at by the second work considered in this chapter: the extra-musical influence implied by the second half of the title *Garden Rain*. In 1978 Takemitsu returned to this theme, complementing the earlier work with a similar aquatic allusion in the title of *Waterways*, and in the subsequent decade this motif was to become something of an obsession with him, referred to again and again in a series of works which steered the former 'avant-garde' composer definitively in the direction of what he called his 'sea of tonality'. It is this route towards the consolidation of Takemitsu's 'third-period' manner that will be examined in chapter 10.