Chapter Three

Minimal music

This chapter begins with a brief outline of minimal music in the United States, Europe and Australia. Focusing on composers and stylistic characteristics of their music, plus aspects of minimal music pertinent to this study, it helps the reader situate the compositions, composers and events referred to throughout the thesis.

The chapter then outlines reasons for engaging students aged 9 to 18 years in composing activities drawn from projects with minimalist characteristics, reasons often related to compositional or historical aspects of minimal music since the late 1960s. A number of these reasons are educational, concerned with minimalism as an accessible teaching resource that draws on students’ current musical knowledge and offers a bridge from which to explore musics of other cultures and other contemporary art musics. Other reasons are concerned with the performance capabilities of students, with the opportunity to introduce students to a contemporary aesthetic, to different structural possibilities and collaboration and subject integration opportunities. There is also an educational need for a study investigating student composing activities to focus on these activities in relation to contemporary art music.

There are social reasons for engaging students in minimalist projects concerned with introducing students to contemporary arts practice through ‘the new tonality’, involving students with a contemporary music which is often controversial, and engaging students with minimalism at a time of particular activity and expansion in the United States and in Australia.

3.1 Minimalism

Minimalism is an aesthetic found across a number of different art forms – architecture, dance, visual art, theatre, design and music - and at the beginning of the twenty-first century, it is still strongly influential on many contemporary artists. In
visual art and music, early minimalist events were very similar. Writing of the late 1950s-early 1960s pieces of George Brecht and La Monte Young, Jonathan Bernard (1993) asked: “Is there anything, really, that categorically distinguishes Brecht’s Fluxus pieces from La Monte Young’s of about the same time? This impersonal quality is noticeable even as one recognizes the vigorously, almost aggressively distinct and original aesthetic that underlies them as their common ground” (93). Visual artists such as Donald Judd and Frank Stella adopted various strategies which Bernard finds have much in common with minimal music:

1. the minimization of chance or accident;
2. an emphasis upon the surface of the work, by means of the absolutely uniform application of color - as if the ideal were an industrial paint job – or by other techniques that produced an exceptionally smooth, “machined” finish;
3. a concentration upon the whole rather than the parts – that is, upon arrangement rather than composition – and a concomitant reduction in the number of elements, resulting in a spare, stripped-down look (95-96).

Some minimalist paintings, for example, Brice Marden’s Choice (Back Series) (1967), have no formal frame and could potentially extend forever, a characteristic reflected in the abrupt, ‘uncadenced’ ending of a process piece such as Music in 12 Parts (1974) by Philip Glass. Tomlinson Court Park (1959), the black minimalist painting by Frank Stella, is mesmerizing, a characteristic reflected in one of minimalism’s many names, ‘trance’ music, and heard in Terry Riley’s A Rainbow in Curved Air (1969). Bernard’s strategies resonate in Schwarz’s (1996) description of the opening of John Adam’s Nixon in China as music “marked by lack. There is no dialectical relationship between keys that propel, sustain, slow down, speed up the music; there is no regular phrase structure, there is no binary opposition between foregrounded melody and accompaniment; there are no predictable, large-scale structural markers” (277).
3.2 Minimal music

3.2.1 Precursors of minimal music

Minimal music, like other important movements in music history, has had compositions identified from earlier periods as ‘prototypes’ or ‘precursors’. Minimal music’s precursors have included *Tabuh-Tabuhan* by Colin McPhee and musics of many Asian cultures (Schwarz and Godfrey 1993:201), *Five Pieces for Orchestra* op.16 by Schoenberg (Watkins 1988:572), Klein’s *Monotone Symphony* (1947 or 1949) (Strickland 1993:124), 4’33” by Cage (Campbell 1990:22) and Kramer (1988) identifies the effect of ‘vertical time’ in *Vexations* by Satie and *In the Night* by Charles Ives (386). Many of these compositions relate to ‘repetitive’ minimalism, a direction which does not reflect the sounds of the first composers identified with the minimalist aesthetic. Philip Corner, an early member of the Fluxus group, and composer of a series of pieces entitled *One Note Once* feels Messiaen’s music can be viewed as minimalist because of the sense of repetition, timelessness, non-developmental aspects, a long sense of patience and time (Corner interviewed in Smith and Smith 1995:87).

Within this thesis, repetitive minimalism is the primary focus although the line between minimal music with repetition and minimal music without repetition is extremely fine, if a line exists at all. For Rosalind Bandt (1983):

> repetitive music exists by definition when there is sufficient continuity in enough parameters to be audibly proceeding by repetition rather than by chance (354)...Generally, the greater number of musical parameters set as constant, the continuous the audible result, and in works where only one or two parameters are worked in repetitive ways, the processes tend to be easily recognizable and the repetition tends to occupy the foreground of the listener’s perception. When variables are introduced in greater number or at a faster rate, the impact of repetition and continuity is reduced as the attention gravitates to the change factor rather than the constant (362).

For her, an element such as the drone is immediately identifiable to the ear as having a repetition function in the music of composers linked with the minimalist movement,
and she noted that fast repeating tones (that is, a pulsed drone) and long sustained
tones have been used extensively by a number of these composers (354).

3.2.2 La Monte Young

In an interview with William Duckworth (Duckworth 1995), Young talked of the
influence of Cage on his musical thinking at the time:

…The sound sources, the radical way to play string instruments, the various
glissandi, and the idea of picking the sounds and the durations out of that and
tying them together randomly (in Young’s Trio for Strings) – that’s where
Cage comes in…(233). It was after [George] Brecht saw my word pieces that
he also began to pare down his word pieces so that compositions that had more
going on, or were taking a lot longer to describe, were getting reduced to
events where you turned on a light, lit a match, or did something that was
more singular in focus (234).

While Cage can be viewed as the source of the minimalist aesthetic, Young was the
composer whose work with drones and repetition influenced other composers whose
work came to be associated with the term minimalism. The pieces making up
Young’s Compositions 1960 (1960) encapsulate many directions minimalism has
taken since the 1960s and many characteristics which help define minimal music.
They mark a transition from conceptual art to minimal music, a border which
Strickland finds as tenuous in music as it is in the performing arts (Strickland
1993:139), and they reflect aspects of music often considered to be ‘precursors’, or
‘prototypes’ of Minimalism.

Young writes of the single focus of Compositions 1960 through a minimal use of
musical material as “…reaching back to haiku” (Young interviewed in Duckworth
1995:233), with the musical material “…crystallized down into this haiku-like
essence – focusing on one event…” (234). In Compositions 1960 #9, this focus on
one event is seen and heard in its graphic score in the form of a straight line drawn by
Young on a plain index card. It resembles the minimalist art of the 1950s, yet is also
quintessentially minimalist music in that it sustains a single tone in performance.
# 15 “is little whirlpools in the middle of the ocean” and was appropriately dedicated to one of the original Dadaists, Richard Huelsenbeck, yet also, depending on how it is performed, relates to the minimalist ‘precursor’ work by John Cage, 4’33” in its potential for ‘silence’ or ‘silound’¹ as an integral part of the performance (Strickland 1993:138).

Several pieces are concerned with aspects of theatricality. #2, “Build a fire in front of the audience”, incorporates audible, visual, and potentially theatrical, components. In #4 and #6 Young collaborated with, and subverted, the audience by turning lights off then on, indicating when the performance (that is, the audience’s participation) was over, and making the performers onstage observe and mimic the activities of the audience. These pieces reflect the purposes outlined by George Maciunas of Fluxus, an anti-art movement of the late 1950s-early 60s which attempted to “…create a close, unbreakable link between art and life” (Mertens 1983:21). #5 is a performance piece, concerned with visual and musical aspects, in which the performer is directed to turn one or more butterflies loose in the performance area. It inhabits the same Fluxus space of concept art as works of Duchamp, later Cage, and later again, of visual artists George Brecht and Robert Morris (Strickland 1993:262).

#7 is the only piece with standard musical notation, a perfect fifth, b to f#, above middle C, with the instructions “to be held for a long time”. Young talks of this piece as “…being extraordinarily minimal” (Duckworth 1995:238) while Strickland astutely argues for it as conceptual art – “an image of harmonic perfection” (Strickland 1993:139) – and once played, moving into the realm of minimal music. Its performance by a string trio in 1961 projected to the attentive listener a perfect fifth plus an inner world of fluctuating overtones, combination tones, and acoustic sounds found in later work of Young, and in works of Glass and Reich. It also displayed

¹ David Cope’s term for “those very quiet sounds that are revealed only when we are trying to be silent” (Schwartz and Godfrey 1993:317)
Young’s focus on minimal sound material, and depending on the performance, his interest in drones resulting in a sense of ‘timelessness’ or ‘vertical’ or static time.

*The Second Dream of the High-Tension Line Stepdown Transformer*, written in 1962, marked Young’s move to electronics. Its foundation is a drone, which combined with other tones, enables the listener to distinguish overtones and combination tones. Performances of *The Tortoise, His Dreams and Journeys, The Second Dream* (an ongoing work inspired by the motor of Young’s pet turtle’s aquarium), and *Drift Studies* (1966) incorporated drones and overtones. Later in *Map of 49’s dream the two systems of eleven sets of galactic intervals Ornamental Lightyears Tracery* (1966), there is a collaboration of light and sound frequencies. Both Young and his wife Zazeela studied Indian vocal pitch techniques with Pandit Pran Nath, in order to master the precise intonation required for their performing, a precision transferred to the piano in Young’s *The Well-Tuned Piano* of 1964.

In *arabic number (any integer) to Henry Flynt* (known also as *[X] to Henry Flynt*\(^2\)) (1960) Young introduced the element of repetition associated with what he referred to as “mainstream or hard-core minimalism” (Young cited in Duckworth 1995: 239). This work is generally realised percussively in performance on keyboard, or gong or by beating “an overturned pan with a wooden spoon some 600 times”, to quote Wiley Hitchcock’s memory of a performance by Young (Strickland 1993:144). Young has stated: “I am wildly interested in repetition, because I think it demonstrates control” (Young cited in Smith 1977-78:4). His musical ideas, collaborations with other artists and performers, and interest in music of other cultures, are all recurring strands that expand and transform in the music of minimalist composers up to the present day.

### 3.2.3 Terry Riley

Riley’s music of the 1960s was influenced by the multi-repetition of Young’s

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\(^2\) Mertens calls the work *X for Henry Flynt* and *Arabic Numeral (any integer) for Henry Flynt*. 
[X] to Henry Flynt. Young was a composer with whom Riley had collaborated. Three compositional traits characterised Riley’s work in the 1960s. The first, electronic sound sources, appeared as tape-loops in *The Five Legged Stool* of 1961, as feedback in the sound track for *The Gift* of 1963, in *Dorian Reeds* as tape delay, and in *A Rainbow in Curved Air*, 1967, electronic instruments and overdubbing.

The second trait was the structural use of cells that are continuously repeated and produce ever-new combinations. Characteristic of this evolving repetition is a dualism which gradually emerges between the micro-structure of the sounds and the macro-structure of the composition (Mertens 1983:40-41). The resulting texture is invariable and static, producing a sense of vertical time or timelessness. In *Dorian Reeds* (c.1965), *Keyboard Studies No. 2* and *In C* of 1964, *A Rainbow in Curved Air* composed in 1967, and *Persian Surgery Dervishes* (1970-71), small rhythmic and melodic cells build into large structures and textures through multi-repetition. In many of these pieces, the effect is hypnotic, trance-like, making associations with the underground club world, and reminding us of why minimal music is also called ‘trance music’. Riley recalls his performance of *Poppy Nogood and the Phantom Band* (1967) and *A Rainbow in Curved Air* (1967) in 1969 at The Electric Circus, a psychedelic rock club in the East Village, New York:

The Beatles’ Sgt. Pepper’s was still hot, because I remember that ‘Lucy in the Sky with Diamonds’ was playing the night of my concert. Inside they were using strobe lights and mylar and projections to create light-illusions. There was this psychedelic sixties’ crowd, a mixture of young people, dope-blowing hippies, and academic types who came to check out new music (Riley cited in Schwartz 1996:48).

Kramer (1988) has referred to the aural result of some music incorporating multi-repetition, constant pulse, combined with minimal pitch and rhythmic change, as ‘vertical time’. He described vertical music as denying “the past and the future in favor of an extended present. The past is defeated because the music is in certain fundamental ways unchanging, nonlinear, and ongoing. It appears to have come from nowhere other than where it presently is”, and mentioned this is how time is experienced by acutely schizophrenic patients (375). When Alfred Frankenstein first
heard Riley’s *In C* performed in 1964 he wrote, in his review, of the ritual element in the work:

This primitivistic music goes on and on. It is formidable repetitious, but harmonic changes are slowly introduced into it; there are melodic variations and contrasts of rhythm within a framework of relentless continuity, and climaxes of great sonority appear and are dissolved in the endlessness. At times you feel you have never done anything all your life long but listen to this music and as if that is all there is or ever will be, but it is altogether absorbing, exciting, and moving, too (Frankenstein cited in Strickland 1993:174).

Bernard (1993) wrote of the ‘absence’ of certain devices traditionally applied to the structuring of time in music that has the potential to disorient, and finds ‘stasis’ the wrong word to describe music which depends so heavily on time as a vehicle (106).

The ‘timeless’ effect on listeners of Young’s long-held drones and his exploration of acoustic and “psycho-acoustic space” have been compared to the effects of taking hallucinogenic drugs (Potter 1993:372), a response echoed in the surreal, hallucinogenic space of the Beatles’s *Lucy in the Sky with Diamonds* from their *Sergeant Pepper* album and in Riley’s hypnotic, trance-like all-night improvisatory performances. Describing a student composition incorporating multi-repetition, Loane (1984) wrote of “…repetitive chanting, innocent of beginnings, middles and ends, [as] often found in so-called ‘primitive’ music” (208).

For Smith Brindle (1987) the ‘Eastern immobility’ (136) of works such as Riley’s *In C*, and *A Rainbow in Curved Air*, Tomas Marco’s *String Quartet* in which one note, middle C, is played in a thousand ways, and the “dispassionate immobility” of Morton Feldman’s music must be influenced by the orient (136). This, again, suggests a link between the effect of vertical time with ritual and trance.

The third compositional trait of Riley’s music stemmed from his improvising. For Mertens (1983), Riley is a performer who composes, rather than a composer in the narrow sense of the word, and he notes, as with other minimalist composers, an increasing complexity in Riley’s music resulting from his continuing improvising experience (44). *In C* by Riley is the work generally considered as the typical pulse
piece (Mertens 1983:41; Morgan 1993:27), which put minimalism on the global map with its 1968 release on disc. It combined Riley’s characteristic use of small pitch and melodic cells, improvisation, multi-repetition, fast continuous pulse, and resulting static ‘vertical’ time, with a tightly constructed process, the latter a characteristic of the work of Reich, Glass and Rzewski.

### 3.2.4 Steve Reich

For Steve Reich, Riley’s work with multi-repetition through tape loops, delay, and his “time-lag accumulator” system, combined with rehearsals for the first performance of Riley’s tonal *In C*, reinforced his interest in, and search for, a personal style using tonality and constant repetition. Composing collaboratively for mime and film productions in the mid-1960s, Reich began using tonality and canon in his music. From early experimentation with tape in 1962, Reich expanded his knowledge and artistry with the medium to produce *It’s Gonna Rain* in 1965, in which tape-looped canons of the words of a young black street preacher phase into thick textures in which a ‘beating’ of microtonal intervals is heard.

With acoustic instruments, these principles of phase shifting were employed in pieces written for ensembles of one instrumental colour - *Clapping Music* (1972) employed phase shifting; *Drumming* (1971) combined phasing with “the process of gradually substituting beats for rests (or rests for beats) within a constantly repeating rhythmic cycle” (Reich 1974:58); and *Piano Phase* (1967) required one of the two pianists to gradually increase the tempo “so as to slowly move one beat ahead of the other” (52). Reich had also considered attempting musical transcription of the implied pitches of the preacher’s voice in *It’s Gonna Rain*, a technique he perfected in 1988 with *Different Trains* (Strickland 1993:185).

Reich studied Balinese Gamelan Semar Pegulingan at the University of Washington in Seattle during the summer of 1973 and also studied music of the Ewe people in West Africa, working with a master drummer at the Institute for African Studies in Accra during the summer of 1970. For Reich, the reasons for studying Balinese and African
music were twofold: “…I love them, and also because I believe that non-Western music is presently the single most important source of new ideas for Western composers and musicians” (Reich 1974:38).

In 1968 Reich described his music as a gradual process:

I do not mean the process of composition, but rather pieces of music that are, literally, processes...I am interested in perceptible processes. I want to be able to hear the process happening throughout the sounding music… Listening to an extremely gradual musical process opens my ears to it, but it always extends farther than I can hear, and that makes it interesting to listen to that musical process again” (Reich 1974: 9,11).

He has expressed an acute awareness of “patterns [which can be] understood as psycho-acoustic by-products of the repetition and phase shifting” (53) resulting when four violins play the same repeating pattern out of phase with each other in Violin Phase (1967) and are largely determined by the attention of the listener.

For Steve Reich, 1981 was the year of his first “conventionally-conceived vocal composition”, Tehillim, in which Hebrew Psalms texts were orchestrated with instruments of the orchestra and instruments with Biblical resonances (Schwarz 1996:87-88). In The Desert Music of 1984, a cantata to a text of William Carlos Williams, Reich expanded the resources, length, and structure of the earlier work by using the orchestral idiom with heightened dynamic markings.

Reich’s relationship with popular music arrived late in the 1990s. In Reich Remixed (1999) excerpts from different pieces of his were remixed for the dance club market. In response to a question about whether he had any reservations about his work being commercially ‘treated’ for the 90s pop audience, Reich replied, “No, because it’s clear that it’s not me. I mean, I’m not about selling remixes…I’m very proud that a lot of composers have gotten something from my music; John Adams, Philip Glass, Michael Nyman, Louis Andriessen, Michael Gordon, David Lang. …and here’s a different group of people, a second generation thereof who find something interesting” (Reich cited in Pertout 1999:25).
3.2.5 Philip Glass

After helping Ravi Shankar notate music for a film in 1966, Glass combined his newly discovered knowledge of Indian music with techniques learned from Nadia Boulanger. *Strung Out* (8/1967) for solo violin employs additive rhythmic principles and requires the performer to move around a space to follow the score, while the sound of the amplified violin comes from one direction (La Barbara cited in Kostelanetz 1997:40-41). *1 + 1 for one player and amplified table-top* (1968) combined two rhythmic elements in continuous and regular additive and subtractive processes and is Glass’s simplest additive piece in which the process can be clearly heard and seen. Works such as *Music in Fifths* (6/1969), *Music in Contrary Motion* (7/1969) and *Music in Similar Motion* (11/1969) all employ constant quaver movement with additive process, indicative of what Joan La Barbara has called the ‘Steady State school’ (39). Quoting Morton Feldman, Philip Glass described the essence of his music as not the technique but the choices he makes within the technique: “The system is me. I’m the system” (Smith and Smith, 1995:135-136).

Glass described the temporal continuum and sense of ‘vertical time’ in his *Music in Twelve Parts* of 1974, which lasts 4 and a half hours in performance:

> When it becomes apparent that nothing “happens” in the usual sense, but that, instead, the gradual accretion of musical material can and does serve as the basis of the listener’s attention, then he can perhaps discover another mode of listening – one in which neither memory nor anticipation…have a place in sustaining the texture, quality, or reality of the musical experience (Glass cited in Kramer 1988:376).

Glass has recommended that his recordings be played loudly or be heard over earphones to bring out the psycho-acoustical phenomena that are part of the content of the music – overtones, undertones and difference tones. They can be heard but may not actually be played (Glass cited in Kostelanetz 1997:112).

in 12 Parts (1971-74) marked the end of minimalism for him. In Another Look at Harmony (1975) “I’d taken everything out with my early works and it was now time to decide just what I wanted to put back in – a process that would occupy me for several years to come” (Glass cited in Page 1997:101). De Meyer (1985) has listed similarities between minimal music and pop music – minimal use of melodic, harmonic and rhythmic material, tonality, simplicity and similarity of rhythm, electric piano and unchangingly loud manner of playing. What are not present are the processes of minimalism - phase shifting, canon and additive rhythmic construction (389-390). De Meyer considers Soft Machine’s 1968 song, We did it again, in which five notes and the text ‘I did it again’ is repeated around 125 times, one of the first repetitive rock compositions. He has found Mike Oldfield’s Tubular Bells and Ommadawn to be clearly influenced by repetitive music (391). Among other popular music groups whose music embodies minimalist characteristics he named Throbbing Gristle, The Gadgets, and Crisis in Great Britain; Teenage Jesus and the Jerks, Dark Day and John Bender in America; Kraftwork in Germany; and Franco Fabbri in Italy (393). Dunbar-Hall, Pollock and Hodge (1986) described works by Bryan Ferry, Talking Heads, Kissing the Pink, Kraftwork, Ryuichi Sakamoto and Jean-Michel Jarre (15-16) as using minimalist devices, in particular multi-repetition.

In interviews conducted in 1982, Philip Glass spoke of the thread running through the work of the Talking Heads (a popular music group whose music he finds more relevant than that of many avant-garde composers), Laurie Anderson, John Cage and his own, a thread which was not present in the 1960s. Glass noted the strong influence of repetitive music on disco music, an influence contributed to by the appearance of the minimalists in pop circles (Glass cited in De Meyer 1985:387). His Songs from Liquid Days (1985) is a song cycle with lyrics by Laurie Anderson, David Byrne, Paul Simon, and Suzanne Vega which draws on the performers and vocal styles of popular music. It employs repeated chord patterns, a characteristic of other Glass works such as Music in 12 Parts.
Glass produced the rock group Polyrock and recorded with them, and Michael Nyman has worked with David Cunningham and Flying Lizards (De Meyer 1985:393). Welsh electric violist John Cale introduced the drone into Young’s ensemble, and later moved into the rock group ‘Velvet Underground’, which was affiliated with Andy Warhol. From the release of their first album in 1967, the group’s music borrowed the relentless volume from Young’s drones and harmonic stasis (Strickland 1993:156).

3.2.6  John Adams, Meredith Monk, Laurie Anderson

Within the generation of minimalist composers born in the 1940s, a decade after Young, Riley, Glass and Reich, the music of John Adams, Meredith Monk and Laurie Anderson made an impact in the 1980s and early 1990s. Not a performer/composer in the tradition of the first wave of minimalists, John Adams’ collaboration with the San Francisco Symphony orchestra as composer-in-residence, resulted in the commission of two orchestral works, *Harmonium* (1981) and *Harmonielehre* (1985). In the first work, Adams uses harmonies which have a definite direction but which are “more often brought about by a modulatory process so stretched out in time as to be almost indiscernible” (Schwarz and Godfrey 1993:278), a technique Adams has described as “moving over vast stretches of imaginary terrain” (Adams cited in Schwarz and Godfrey 1993:278). Rhythmically repeated figures are subjected to constantly changing accents.

Adams has referred to compositions of his from ‘the Trickster’ side of his compositional personality including *Grand Pianola Music* of 1981-82, *The Chairman Dances* of 1985, and *Fearful Symmetries* of 1988. These embody his use of humour, sometimes combined with an interest in popular musics. Premiered in Washington DC in 1987, *Nixon in China* was the first of two operas by Adams, along with *The Death of Klinghoffer* of 1991, on contemporary themes.

Composer, singer, actor, choreographer, dancer, filmmaker and performance artist, Meredith Monk embodies the characteristic collaborative nature of many minimalist composers. Her *Book of Days*, released in 1988 as a film, later as a recording, and
Atlas of 1991 represent her work with the music-theatre genre. She is uncomfortable with her work being labelled as minimalist “…because I feel that what I do with the emotional aspect is as ‘maximal’ as you can get” (Smith and Smith 1995:188). Generally working intuitively through improvisation and refinement, Monk draws on repetitive techniques and steady pulsation of minimalism, and infuses them with an increasingly expressive and personal style, what Schwarz has referred to as “post-minimalist” writing (Schwarz 1996:191).

Laurie Anderson is a performance artist who tells stories through her performances. With a background in sculpture, music (violin), art criticism and photography, her performances and films combine aspects of all of these arts to tell stories of fact or part-fact or fiction. Musically, Anderson frequently draws on the procedures associated with minimal music, especially drone and multi-repetition, to support and enhance her stories. Many of Anderson’s works are maximalist in size (United States (1983-84), Song and Stories from Moby Dick (1999) combining a multiplicity of media into what Scheer (1999) has described as Anderson’s brand of postmodernism (86).

### 3.2.7 Minimalism and composers in Europe and the United Kingdom

Young’s early visits to Munich and Riley’s work in Sweden and Europe brought minimal music to Europe in the 1960s. During the 1970s major European music festivals devoted much time to the performance of minimalist music. Germany, Belgium and Holland, as centres for the commissioning and performing of minimal music through festivals, provided venues for a number of first performances (Bandt 1983: 367-368).

In England, repetitive music grew from community-based projects such as the Portsmouth Sinfonia, with repetitive ideas being drawn from mathematical systems and bell ringing patterns (Bandt 1983:365). Gavin Bryars combined acoustical and tape-loop repetition in the programmatic work for recorded voice and instrumental accompaniment, Jesus’ Blood Never Failed Me Yet (1971). The slight rhythmic irregularities of the recorded voice and the resulting difficulty on the part of the
instrumentalists to keep up, introduce “a feeling of uncertainty” (Nyman 1974:147) to the work. The music of Michael Torke mixes classical and rock characteristics coupled with “the repetitive thrust of minimalist” (Schwarz and Godfrey 1993:330) and employs the instruments of both musics.

For the Europeans Louis Andriessen and Arvo Pärt, born in the same decade as Young, Riley, Glass and Reich, and Michael Nyman, born in the 1940s, the music of Steve Reich was either catalyst or a confirmation of minimalist characteristics in their own writing. During the 1980s and early 1990s Nyman wrote a number of film soundtracks in collaboration with film directors, for example, The Piano (1992) with director Jane Campion, wrote an opera The Man Who Mistook His Wife for a Hat in 1986; and toured with his group ‘The Michael Nyman Band’. This time period saw Andriessen expanding the orchestra in De Stijl (1984-85) to include electric guitars, and ‘heavy metal’ percussion, for what he calls ‘the terrifying twenty-first-century orchestra’ (Andriessen cited in Schwarz 1996:207). Andriessen was influenced by sounds of popular culture and the paintings of Mondrian, a member of the artistic movement from which he took the work’s title, and De Stijl became the third part of a larger work, the opera De Materie of 1984-89, a collaboration with director Robert Wilson. The ‘spiritual Minimalism’ (Schwarz 1996:215), also referred to as ‘faith minimalism’ (Blake 1997:222) or ‘holy minimalism’ (Toop 1995:240) of Arvo Pärt, Henryk Gorecki and John Tavener, presented a serene, spiritual music.

While the ‘serenity’ of ‘new age music’ may be regarded by some as “a marketing concept rather than a musical one” (Bullock, Stallybrass and Trombley 1988:578), its characteristics include “instrumental music…[with a] tendency to avoid extremes…very suitable as a sophisticated form of background music” (578). A new form of new age music emerged in Britain in 1976 which was popularized and named as ‘ambient music’ by Brian Eno who has stated, provocatively, that “New Age Music proved that people can listen to quite boring material” (Eno cited in Thorne 1993:170). New Age music and ambient music share common musical characteristics. Ambient music has been defined as “music that we hear but don’t
hear; sounds which exist to enable us better to hear silence; sound which rests us from our intense compulsion to focus, to analyse, to frame, to catagorise, to isolate” (Toop 1995:140). It “is often very simple, repetitive, even minimal and played at low volume” (Bullock, Stallybrass and Trombley 1988:27). New Age music does not necessarily involve the constant repetition of minimalism, but frequently relies on “a constant dynamic state, consistent slow to medium tempi, and bluntly tonal environments…” (Cope 1993:337). For Thorne (1993:170), Mike Oldfield’s *Tubular Bells* and *Hergest Ridge* were the catalysts from which later New Age electronic compositions of Tangerine Dream, Vangelis, Jean-Michel Jarre and Klaus Schulze evolved (170). *Washing Machine* (1986) by Larry Heard, described by Toop (1995) as a “minimalist machine instrumental” (37) piece with “a repeating, rolling melodic line with unusual intervals, spongy like a rubber ball in texture, bald of recognizable emotion except for occasional moments of musical tension and a slight suggestion of exuberance. Little touches of reverb introduce fleeting suggestions of physical space around the sounds…” (39), was one of the two pieces which “helped to shake British youth into a new phase of hedonism, self-belief and communal dissent” (37). This new phase was the hypnotic sound environment of dance clubs. In the dance music of 1980s and 1990s the multi-repetition of minimal music is an underlying and characteristic feature which drives the music through house, techno and trance and way beyond the confines of the dancefloor and the two step shuffle” (Thornton 1996: 145-146).

### 3.2.8 Minimalism and composers in Africa

Kevin Volans of South Africa and Dumisani Maraire in Zimbabwe utilised indigenous African repetition in their compositions. Maraire’s *Mai Nozipo* (1990) layers the multi-repetition of minimalism and African music with I IV V harmonies brought into Zimbabwean music by missionaries and subsequently integrated into a local sound, and placed back into a Western context by the Kronos Quartet’s performance. In *Mbira* (1980) Volans borrowed the repetitive weaving patterns of the African mbira and gave them to two harpsichord players and percussionist.
3.2.9 Minimalism and composers in Australia

To many Australian composers writing in the 1960s and 1970s the music of the American minimalists was an affirmation and confirmation of ideas already being explored and incorporated into compositions, ideas which came from many different sources which have been, and still are, influences shared by composers in both America and Australia (Blom 2000:35).

Many of Peter Sculthorpe’s compositions from the 1960s drew on the sounds of the Indonesian gamelan, with the small pitch set, narrow register, repetition and the resulting hypnotic effect of what Gerster and Bassett describe as “Balinese borrowings” (Gerster and Bassett 1991:126), first appearing in Sun Music III. Referring to repetition of “rhythmic and melodic patterns” (10) in his Piano Sonatina (1954), “I suddenly felt that if I opened myself to what is around me in this time of industrial progress and mass production, then I would see repetition everywhere..” (10). Sculthorpe’s works and the musics of Indonesia and Bali influenced a number of Australian musicians, composers and ethnomusicologists. String Quartet No.8 of 1969 and Tabuh Tabuhan (1968) for wind quintet and percussion had an impact on Ross Edwards’s compositional language. Edwards’ Antifon (1974) for massed choirs, organ, brass sextet, and tamtams combines repeated canon in the brass and sustained, repeated pitches in the choir. The year of Anne Boyd’s first visit to Bali, 1973, was the year String Quartet No.2 and As It Leaves the Bell were written, both works written after Boyd felt she wanted her music to be “reborn – knowing nothing of Europe” and incorporate a number of characteristics associated with minimal music. They also incorporate “games”, that is, canons, rounds and repeated cantus firmi, repetitive structural processes adopted from medieval Europe and found, later, in compositions by American minimalists. Anklung (1974) for solo piano takes its title, the four-note scale on which it is based and its repetitive construction from the Indonesian gamelan bamboo ensemble. Lloyd’s composition for glockenspiel, two vibraphones and bells, Bhakti, meaning ‘the yoga of love and devotion’, and written from 1973-74, was influenced from hearing and seeing a Balinese gamelan in Sydney.
in the early 1970s. For Lloyd, the most common aspect in his compositional process is a strong rhythmic structure – “…rhythmic cycles played against each other, which you hear in a variety of different types of music. African music has it, Indian music has it, Balinese, and medieval and renaissance music have it, as well as many others” (Lloyd cited in Potts 1995:32).

Other non-Western musics have provided ideas with minimalist characteristics. Edwards traces the repetition and varied repetition in *Maninya III* (1985) for wind quintet to his interest in Sufi music and David Kotlowy names Indian and Far Eastern musics as being the source of modality, rhythmic additions and subtractions in some of his work (Kotlowy questionnaire 1995). Japanese music through its aesthetic and its “present continuous, non-ontological forms” are influences on Rosalind Bandt’s performing and composing. This, plus study on minimalism leading to a degree, combined with an involvement with tape loops, were first heard in her works *5+4* (1978) and *Loops* (1981) (Blom 2000:34-35).

Repetitive aspects of pop and rock music had an impact on the work of Lloyd, Warren Burt, Michael Whiticker, Nigel Westlake, Stuart Greenbaum and Matthew Hindson in especially personal ways, often through performing, as have repetitive environmental sound sources. The continuous rhythms and changing metres of the sounds made by crickets and cicadas have shaped aspects of Edwards’ music. Lloyd and Bandt worked with tape loops and tape recorders. Chesworth listened to bell ringers ringing the small pitch set, repetitive “changes” at the local church for eight years of his childhood and says that this, and perhaps his self-taught piano technique have resulted in the frequent use in his music, of “…pitch and rhythmic sets or cells which continually permute and recombine” (Chesworth questionnaire 1995).

The music of minimalist and ‘pre-minimalist’ composers in the UK, Europe, Australia and the US influenced several Australian composers. For Boyd, Morton Feldman was a “subliminal” influence in his use of dynamics, especially softness, and how he uses the threshold of audibility (Blom 2000:34). The first two works of Riley to be
released on disc and Reich’s process pieces of the 1970s were especially memorable for many Australian composers. Chesworth has named Erik Satie, the English composers Bryars, Nyman, Hobbs and White, Fluxus artists and the English Neo-Tonalists and for Michael Smetanin, Stravinsky, Andriessen (with whom he studied composition) and Xenakis were influential on his early development. Kotlowy mentioned the tape delay work of Robert Fripp and Brian Eno and Greenbaum singled out *Alef* for solo piano by Belgium composer Wim Mertens.

Matthew Hindson has used characteristics associated with minimalism which include repetition of rhythm patterns on a small and large scale, frequent use of an unchanging pulse, use of tonality and tonal centres in the harmonies he chooses and clear structures. For Hindson these can be from the integration of aspects of popular music into his compositions, specifically techno and death metal. *Speed (Minimum Dose)* (1997), an orchestral work renamed *LiteSPEED*, blends a tonal, often triadic harmonic idiom, with fast repetitive rhythmic writing producing “the energy peculiar to more ‘hard-core’ forms of techno” (Kouvaras, 1995 no page number). The fast pulse and repetitive patterns of techno are produced easily by technology such as sequencers, and a MIDI rather than acoustic drum kit drives the tempo and ‘feel’ of the orchestra. The title and tempo play with an association with drugs such as speed/ecstasy, substances which are often present within the world of techno music, and rave and underground dance parties – associations such as “invincibility/ indestructibility, ecstasy, hyperactivity, paranoia, and …stamina” (Kouvaras 1995 – no page number). One is reminded again of the club performance venues of American minimalism in the late 1960s, of Riley’s remembrance of a 1969 performance of two of his works at The Electric Circus psychedelic rock club in New York, quoted earlier in this chapter, and why minimal music is also called ‘trance music’.

### 3.2.10 Summary

Minimal music has moved through four decades of change. In the 1960s, obsessive repetition often of a single note, drones held over extended time spans and the
provocative foreground issues of endurance, perception of details, musical expectations and boredom were challenged, putting “composition back on the drawing board” (Bandt 1983). Through the 1970s a number of repetitive processes were explored and through the 1980s the “abstract, material-centred artform became more personality based” (Bandt 1983:370). In the 1990s composers have returned to earlier techniques, combining and transforming them into multi-media works, popular music through techno has returned minimalism to some of its trance induced origins, and composers whose works embrace characteristics of minimalism are writing in Western and non-Western countries.

In music, minimalism has become a permanent part of the musical vocabulary of composers around the world in around 40 years. As Schwarz (1996) has noted: “If the importance of a style may be judged by its resilience, its influence, and its ability to withstand innumerable transformations, the minimalism has proved to be very important indeed” (192). This ability of minimal music, from the 1960s to the late 1990s, to transform itself and continue to expand ideas - from the tightly controlled processes of the 1960s and 1970s, through to the ‘maximalism’ of instrumental resources and genre, and the fracturing of these processes during the 1980s and 90s - is the essence of the expansion of ideas sought within the student compositions of this thesis.

A number of approaches and characteristics are common to the work of many minimalist composers. An exploration of vertical time, psycho-acoustical phenomena and trance are heard from the 1960s works of American composers to works of the late 1990s written by Australian composers. The spirit of cross-art collaboration with artists within and outside of the discipline of music has been a recurring aspect of the work of minimalist composers since minimalism’s origins in the early 1960s and is a strong thread in the work of composers in Australia. Musics from non-Western countries have played an important and influential role on many composers. Between popular music and the minimalist composers and performers there has always been a healthy exchange of ideas and people, from Glass’s collaborations with popular
musicians to Hindson’s exploration of heavy metal and techno in an orchestral idiom. These approaches and characteristics have potential in an educational context and are discussed below as reasons for my choice of minimalism for this study.

3.3 Educational reasons for choosing minimal music in this study

3.3.1 ‘Common ground’

Through their interest in popular music, plus music heard at school and at home, most students are familiar with tonality, tertian harmonies and repetitive structural procedures. Drawing on a number of studies concerned with the musical preferences of students at preschool to tertiary education level, Fung (1995) noted that the following musical characteristics were most preferred:

1. regular rhythmic pulse
2. fast tempo
3. instrumental timbre rather than vocal timbre (except in popular music)
4. woodwind timbre rather than brass timbre (for young children)
5. bright timbre (for non-Western musical styles)
6. loud (if the listener liked, or was used to, loud music)
7. more different pitches
8. tonal melodies
9. consonance
10. optimal complexity level in an inverted-U curve (37).

Compositions by minimalist composers embody a number of compositional procedures, devices and musical elements familiar to students and while not all of these are found in all music labeled minimalist and by themselves do not necessarily constitute a minimalist characteristic, they are an integral part of much of the minimalist repertoire, and help define the style. Johnson has written that when two or more of these features are in a piece, it would suggest that “…the minimalist technique is a compositional feature of that piece” (Johnson 1994:751). These musical features include a tonal centre, tertian harmonies, small pitch sets, repetition, ostinati, repetitive structural procedures and an interface with aspects of technology.
with which many students at secondary level are familiar (electronic keyboards, tape loops and microphones, and example). Minimalism is therefore associated with seven of the characteristics listed by Fung (pulse, tempo, instrumental timbre, brightness, loudness, tonality and consonance), but usually employs small pitch sets. The woodwind timbral finding has ramifications for composing for recorder and woodwind in schools, however Fung’s complexity finding gives few musical style and composition names and it is, therefore, difficult to predict the relationship between the tenth characteristic and minimal music. In music of non-Western cultures, Shehan (1986) found students more likely to give a positive listener response or high ranking to examples of music with “rhythmic dynamism” (African and Japanese instrumental music), and repetition (African and Hispanic pieces) (160), both characteristics of minimal music.

At upper secondary level, an unpublished survey I conducted of original compositions submitted for the New South Wales Higher School Certificate examination in 1991, revealed 10 of the 430 original compositions submitted were tonally based, and another 10 used aspects of time, pitch and/or structure in a minimalist way. Brogden (1973), arguing for rock as a music worthy of study in Australian universities, quoted an experiment in which Richard Letts introduced high school students to the study of form in pop music before applying this knowledge to classical music (65), thus moving from the familiarity of popular music through aspects in common to classical music. Stowasser (1979) introduced students in late primary, early secondary level to the sounds and concepts of popular music of the 1970s.

For English composer Maxwell-Davies, it is tonality and triads which form a strong connection between student knowledge and the new: “It would be useless to deny the basic chord patterns at the very roots of our musical experience, which form the basis of so much of our musical communication. If in order to create a freedom from tradition as certain elements would have it, we deprive our pupils of the common denominator of experience and communication, they have no common ground from which to start out, reassured, towards a natural individuation” (Maxwell Davies cited
in Owens 1986:350). Campbell (1990) echoed these sentiments, noting that “less-sophisticated listeners welcomed the return to tonality and even t tertian harmonies [in minimal music], and applauded the recognition by ‘serious’ composers of the validity of pop music – its high-tech keyboards and repeating melodies, rhythms and harmonies” (17).

The pitch, time and structural features of minimalism have appeared in resource literature for composing activities at all educational levels. They are often directly related to the works of minimalist composers (for example, Paynter 1982 and 1992; Russo 1983) or not identified as minimalist (for example, Chatterley 1978; Thoms 1987; Crook et al 1981) and are discussed further in Chapter Four. The familiarity of many of the musical features of minimalism provides ‘common ground’ from which teachers and students can explore the aesthetic and less familiar features of minimalism. For educational philosopher Elliott (1995), the music of Glass and Reich are at the ‘easy’ end of art music’s “challenge continuum” (163). The project material of this study was designed as a bridge between students’ knowledge and a contemporary art music style which was probably new to them. The material was to be an exploration, expansion and extension of the familiar into the unfamiliar. This contrasted with the ‘exploration of new sounds’ approach of the 1960s and 1970s where students worked with less familiar time, pitch and structural characteristics.

3.3.2 ‘Vertical time’ – a new aesthetic in Western music

While a number of minimalist characteristics are familiar to most students and teachers, others are likely to be less familiar. These include harmonic stasis, multi-repetition, structural processes in which structural procedure and form are integrated, gradual change, a fast continuous pulse, psycho-acoustic phenomena resulting from repeated patterns and phase shifting, and an equality of line (opposite to the melody and accompaniment paradigm). With its embrace of a non-Western sense of timelessness, or ‘vertical time’ – “the concept of the expanded present” (Kam cited in Bandt 1983:5) - minimalism offers teachers and students an effect, and an aesthetic different from, and therefore challenging to, those frequently encountered in the
classroom. Discussing minimal music in a music education context, Paynter (1992) referred to “wave-like forms” and “trance-like effects” (171), and Russo (1983) wrote of “the experience of Eastern timelessness” (207). This effect is the result of a combination of minimalist characteristics including multi-repetition, fast tempo, static harmony, minimal change in dynamic level, pitch set, harmonic movement, register and constant pulse.

Sims’s (1987) study of the effect of tempo on children’s preferences found that the tendency of students to base preference decisions on tempo discrimination and to prefer fast tempos (citing LeBlanc and McCrary 1983) is probably acquired by Grade 4. She agreed with previous research findings (citing LeBlanc 1981; LeBlanc and Cote 1983) which suggested that “…in order to increase the probability for student acceptance of new styles or genres of music, it would seem logical to begin with examples that reflect characteristics of music associated with positive affect, such as fast tempos” (25). This was especially true for Grades 4 through 6 students, but not for kindergarten aged students (24-25). This has implications for minimal music as fast tempo is a characteristic of many compositions using repetitive minimalist techniques. Campbell (1990) also found that despite the seeming simplicity of minimalism, “…listening skills must be fine-tuned if students are to appreciate the subtleties of the shifting rhythms and floating melodies” (23). She advised limiting young students’ (presumably primary level) exposure to minimalism, first of all, to small doses, "...which can be increased as students become familiar with the concept of minimalism and its techniques [and predicted that] the preponderance of repetition as a compositional device can easily obstruct young listeners' attention to changes that occur, as they tune inward in trance-like states” (18).

In a resource text for senior high school music students, Stowasser (1989) posed the question “What sort of effect does the constant repetition of the title words have upon the listener?” to students listening to Robert Ashley’s She was a Visitor. She answered the question in the teacher’s handbook by predicting probable responses ranging from ‘boring’ to ‘hypnotic’ (137). A link between the hypnotic-ecstatic experience often
associated with minimalism’s repetition and the ‘conflict-free’ society based on the pleasure aesthetic was discussed in Chapter One of this thesis.

3.3.3 Process, construction and structure in minimal music

Many minimalist composers have employed tightly constructed processes in many of their pieces during the 1960s and 1970s. As in canon, the process which Kostka (1990) used to describe Riley’s *In C* (157), construction and structure are bound together into one audible process (*arabic number (any integer) to Henry Flynt* (1960) by La Monte Young, *In C* (1964) by Terry Riley, *One + One* (1968) by Philip Glass, *Les Moutons de Panurge* (1969) by Frederick Rzewski and *Clapping Music* (1971) by Steve Reich, for example). In the late 1960s Reich wrote of the objective and impersonal unfolding of the processes in his music: “Though I may have the pleasure of discovering musical processes and composing the musical material to run through them, once the process is set up and loaded, it runs by itself” (Reich cited in Schwarz 1996:70).

Johnson’s (1994) discussion of minimalism as an aesthetic, as a style and as a technique, referred to earlier in this chapter, was based largely upon aspects of structure. Specifically, Johnson drew on the expansion of the tightly constructed processes of the 1960s and 1970s with which minimal music was identified through such works as *In C* (1964) by Riley, *Clapping Music* (1972) by Reich, and *1 + 1* (1967) by Glass, into less tightly constructed processes, for example *Cadenza on the Night Plain* (1984) by Riley, *Different Trains* (1988) by Reich and *Concerto for violin and orchestra* (1987) by Glass.

Six of the minimalist projects designed for this study are centred around these processes and structures. They include an explanation of each process and structure and a number of short pieces which incorporate the process for student analysis and performance and as models for composition. This approach to construction and structure is different from that experienced by students through popular music, the frequently encountered song and accompaniment form, most art musics of previous
centuries and soundscapes, graphic scores and improvisatory forms frequently included in resource material for students engaged in composing activities. A number of studies on student composing activities reviewed in Chapter Two found students aged five years and upwards to be concerned with aspects of musical construction and structure, manipulating materials to reshape aspects of structure.

When music education resource literature has drawn on minimalist composing activities, aspects of construction, structure and process are usually addressed. These have included phase shifting, accelerando phase, canon, isorhythm, rhythmic and melodic cells, the process of Riley’s *In C*, stratified or layered construction and ostinati; examples of this literature are reviewed in Chapter Four. The processes of minimalist music may offer teachers and students a different approach to thinking about and using construction and structure in music.

### 3.3.4 Challenging rhythmic and metric combinations

Many minimalist processes result in challenging rhythmic and metric combinations. The additive processes in many of Glass’s compositions involve constantly changing metres while the phase process of some of Reich’s works present the performer with rhythmic complexities caused by layers of different rhythms; Riley’s *In C* requires the performer to play to a pulse within an improvisatory time scale, while surrounded by other performers playing other material. Rhythmically, Marsh found that “…children can easily manipulate polymetres and cross rhythms in their playground composition…” and suggested that educators should reconsider the appropriateness of using limited musical materials for classroom composition and performance (Marsh 1995:8). By third grade (age 8 years) Dittemore (1970) noted that children could work with unusual metres and two-part music, and that “students with high or average musical aptitude evidence a higher-level capability for performing” these and other musical tasks. This suggested a "... need for new and more challenging musical literature in the elementary school" (31). Minimalism, therefore, has the potential to involve students in rhythmic and metric challenges as composers and performers.
3.3.5 Performing minimal music

Discussing the repertory of minimalism and other contemporary tonal art musics, Campbell (1990) found school ensembles were capable of performing many of the works written for small ensembles (15). However, studies have indicated that primary aged students have difficulty playing a steady pulse over a long time and may find it difficult to play pieces in the adult minimalist repertoire. Petzold (1966) noted that children could tap a fast pulse more easily than a slow one. He found there was a general tendency for students in grade levels one to six to tap at a faster tempo than that given by the metronome. Specifically, tempos of 92 and 60 beats per minute were more difficult to maintain by tapping than the faster tempos of 120 and 152. The slower tempo of 60 was especially difficult for Grades 1 and 2 (ages six to eight) (Petzold 1966; Franklin 1969). By age nine, Serafine (1975) saw evidence of a final stage of conservation, whereby the subject could tell if a pulse remained constant or became faster or slower, if the division of the beat changed into, for example, crotchets, then to quavers, minimis, and so on. These findings all have an impact on how students at different ages would be able to play minimalist compositions.

Even for professional performers, preparation for the recording of many works in the minimalist repertoire can take a long time to achieve the tempo, precision and accuracy required for ‘vertical time’ to result. Rehearsing for Drumming by Reich took “almost a year of weekly rehearsals” (Reich 1974 cover notes). How teachers and students handle the challenges of fast tempo, precision, multi-repetition and accuracy when playing minimalist compositions is part of the investigation of this thesis, for minimalist student works and some pieces in the minimalist repertoire offer students a new experience in performance.
3.3.6 Collaboration

Collaboration and integration are often referred to positively in music education writings (Long 1992:12; Moore 1990:440-442; Stubbs 1988:81; Tillman 1989:172-173). Since the 1960s there have been strong collaborations between minimalist composers and artists and producers in many different media and arts, plus occasional integration of minimalism with events outside the arts. For many minimalist composers collaboration has often involved them in a joint role of performers and composers with artists in theatre (Young, Glass, Reich, Monk, Anderson, Greenbaum), dance (Glass, Reich, Monk, Lloyd), writing (Glass, Reich), publishing (Glass, Reich), video (Reich, Anderson), light (Young, Anderson), film (Glass, Anderson) and graphic art (Riley, Glass, Reich). Young, Reich and Glass have worked in collaboration with their wives through light, graphic art and video and along with Monk, Anderson, Lloyd and Nyman all lead their own ensembles or teams of performers.

The minimalist aesthetic has crossed into many disciplines, a characteristic discussed earlier in this chapter. As one of the few art aesthetics which has been and remains influential across music, visual art, dance, theatre, interior design, architecture and cuisine, minimalism crosses boundaries. It allows and, through teachers, has the potential to encourage students to explore collaborations and integrations with other arts and other subject areas within their school environment.

3.3.7 Crossing musical boundaries

Minimalism also crosses boundaries in relation to other western musics and between western music and musics of other cultures. For many, minimalism is a bridge to other musics. Russo (1983) wrote of his own interest in “…populist music, music that uses all the minimalistic procedures, but with more heart and passion than in avant-garde music, and more wit and wisdom than in popular music”. He found that “…minimalism can lead you to avant-garde music or to popular music… [and can be a way]… into various other sonorities of twentieth-century art music” (216) for
students and teachers. Through analysis of works by the minimalists, it may help in “…bridging the gap between their familiar high-tech world of rock music, and the challenging and creative art music of composers descended from the likes of Bach, and Mozart…” (Campbell 1990:23). Campbell described how the minimalists “…appear to be receptive to the many musical possibilities that exist in the world at large as they choose a technique or idea from pop or African or medieval art music and build a structure around it” (17). By widening the acceptance of musical styles of students and teachers, she noted that minimalism helps close the audience gap between a period of isolation for contemporary art music composers, to one of growing audience acclaim, with public attitudes towards the music of serious composers in the post-modern era undergoing change (17).

Minimalism has been richly influenced by musics of other countries and genres - Balinese gamelan, African drumming, Indian classical music and popular musics. This ‘crossover phenomenon’ beginning in the 1960s (17), invites teachers and students to: extend their musical boundaries into musics of other cultures and stylistic blends; to listen to both popular and art musics, hearing and observing commonalities and differences; to develop an interest in western art musics of other periods and other contemporary styles; and to become aware of the artificiality of western society’s habit of formatting music into carefully named styles when musical boundaries are usually non-existent.

Drawing on the ideas of a number of educationalists and anthropologists, Swanwick (1988) sought ‘transcendental musical experiences’ (to quote Blacking) which could break through the confines of strong and socially embedded idiomatic traditions, whether they be the assumption that all young people prefer popular music or the ‘authentic’ music of a tribe (106). Music education in a pluralist society, Swanwick argued, should be: “creating ‘new human values’ (Margaret Mead); extracting the ‘powerful tools for organizing thought’ (Jerome Bruner); promoting cultural ‘transcendence’ (John Blacking); facilitating ‘self-transcendence’ and stimulating ‘imaginative criticism’ (Karl Popper)” (107). And this can occur when cultural
products, such as music, gain autonomy and are freed “…from the chains of local cultural ownership, media labelling and territorial signalling. Time and use are able to unlock these chains and teachers would do best to avoid strongly culturally loaded idioms until their context has eroded, leaving behind what there is of musical value” (111). Minimalism for many is culturally loaded, especially in relation to America in the 1960s as discussed in Chapter One, yet it has existed and travelled long and far enough, and borrowed and influenced other musics enough, to be both viewed as cross-cultural and an individual aesthetic. If, in the classroom minimalism can be introduced and understood within its cultural context and for its inherent musical characteristics, then student composers can be encouraged to shape compositions drawn from their own contexts.

3.3.8 Minimalist composers and improvisation

For some minimalist composers improvisation is an integral part of their process and product, resulting for some works to be produced through recordings and videos but having no notated scores. The multi-media collaborative works of Laurie Anderson ‘exist’ on video and in recordings. Many of Riley’s works reflect his experience as an improviser. A Rainbow in Curved Air (1967) was played using overdubbing and in Poppy Nogood and the Phantom Band (1967) Riley “realized” (Mertens 1983:44) “electronically altered improvisations…on saxophones, keyboards, or both” (Schwarz and Godfrey 1993:327). Working through ‘empirical composition’, Meredith Monk says: “I’ve always resisted notating my music until I’ve performed it for quite a while, and am satisfied with the form” (Monk cited in Briscoe 1997:204).

3.3.9 Minimalism as a music resource

The music of composers in the twentieth century represents a great diversity of musical style, very different from composer to composer and therefore difficult to explain and encapsulate in project material for students. One exception is serialism. Like minimalist processes, serial techniques can be explained as discrete characteristics and processes, but the dissonant atonal pitch world of serialism is far
away from the tonal background of most students. Viewed as a music resource, the musical characteristics of minimalism, especially the less familiar structural processes, have been presented for composing activities in ways able to be understood by teachers and their students.

Russo (1983) introduced a composition game similar to the structure of Riley's *In C*. Working with layers of repeated ostinati, he discussed and explored the experience "...of Eastern "timelessness" from which this type of accompaniment is derived. Using an approach to composition largely based on minimalist procedures: “the cell, the row, and the use of Basic Note Values...” (199), Russo introduced isorhythm, pointillism, heterophony, ostinati and ‘kaleidoscopic ostinatos’ which use the principle of isorhythmic overlap with specific scales (199-217).

Paynter (1992) used *In C* as a model for two assignments, one totally improvised, the other with ten short figures composed, both with a steady pulse (165). In an earlier publication, Paynter (1982) presented Reich’s phasing principles, rhythmic canons, African drumming techniques, Indian classical music and Balinese gamelan music as models for improvising and composing with pulse and rhythm. Using Reich’s *Clapping Music, Pendulum Music, 4 Organs, Phase Patterns* and *Piano Phase* as models, Paynter proposed two assignments, one of which incorporated phase shifting, the other accelerando phase (Paynter 1992:165).

Working within a minimalist style, Campbell (1990) chose Riley’s *In C*, Reich’s *Music for a Large Ensemble* and *Clapping Music*, Glass’s *Facades* from *Glassworks*, and Olympian – *Lighting of the Torch*, and Cage’s ‘4’ 33”’ (a work named by Campbell as one of minimal music’s precursors, discussed earlier in this chapter) as background listening for the performance and composition of music in the minimalist mode and for musicology/analysis experience. A pattern of sing/play or experiment, listen, play emerges from the work, the order and sequence varying according to the piece. She found the creative exercise undertaken by students in small groups became a listening exercise for the large group of students and a measure of their
ural skill development. Strategies for student composition within a minimalist style involved the class in inventing motifs for a piece ‘In G’ modeled on Riley’s *In C*, writing a piece based on four pitches, to be layered, manipulated in various rhythms, interspersed with silences and played by various instruments, and a third strategy proposed that in small groups, students could compose a work of three measures, to be repeated as many times as it takes the entire class to learn it on their instruments (22). Composition became a reinforcement of conceptual understanding, just as knowledge of a musical style is increased through creative work with its elements, and students discover “…the internal workings of musical style most directly through the creative act of composing” (22).

Without naming minimalism as a style, but calling the project ‘Wallpaper music’ in reference to Satie’s minimalist ‘prototype’ work, *Vexations*, Chatterley (1978) outlined a composition project built around ostinati layers. Students cut out pictures of design interiors from magazines and were to ‘find’ a musical motif that fits some aspect of the picture’s mood. These motifs become ostinati which are repeated over and over, with or without a repeated silence between playings. Students are to decide on how many layers are needed for an effective texture, and Chatterley comments on the aural effect by pointing out that the listener should be able to distinguish the motifs aurally in the same way that one can distinguish wallpaper motifs visually (31-32).

Adopting a similar layer ostinati approach, but combining visual art, dance and music composing activities collaboratively, with ‘line’ as an impetus, Thoms (1987) described a project where high school aged students first listened to models of music incorporating line, then asked students to create a one minute musical line concentrating on one element of music. The students were to employ an eclectic group of instruments including Fisher-Price xylophones, glasses, Casio keyboards, classical guitar, harp, piano and Hammond organ, and combine the one line works into an extended multimedia work in a style “…in vogue these days in light of the collaborative works of Philip Glass and others” (29).
My Name is – (1967) by Steve Reich, in Silver Burdett Music Book 6 (Crook et al 1981), encouraged experimenting with tape recorders and ‘repeating’ or ‘endless’ cassettes in the manner of his tape loop pieces It’s Gonna Rain (1965) and Come Out (1966). Reich’s score was assembled in front of the audience and this process was part of the performance. Another minimalist piece, Coming Together by American minimalist Bob Becker, presented for student performance in the same book, has phase shifting rhythms of unequal length and when they come together the rhythm changes (238-239).

Adder!, a music game designed by Trevor Wishart (1975), drew on the additive construction technique found in a number of works by Philip Glass (20). George Self (1976/1986) introduced two unidentified minimalist concepts - a rhythm only version of isorhythmic overlap (37) and the additive construction of Frederic Rzewski’s work Les Moutons de Panurge (38).

Several Australian music resource publications have introduced minimalism to secondary level students through performance, analysis and composing activities. In Chinese Funeral Music (1984) layered ostinati are combined with changing instrumentation (Dunbar-Hall, Pollak and Hodge 1986:21). Stowasser (1989) introduced students to Robert Ashley’s She was a Visitor, referred to earlier in the chapter, through listening, aural games, composing and performing activities (137). As an introduction to John Adams’s orchestral piece, Short Ride in a Fast Machine, primary and lower secondary classes were instructed to play the repeating rhythm patterns, improvise around these patterns and then play, when directed by the teacher. These were preliminary activities leading to students shaping their own pieces in groups and attending the Sydney Symphony Orchestra concert featuring the Adams’ work (Sydney Symphony Orchestra 1990:7-8).
3.3.10 Minimalism and studies of student composition

A further educational reason for choosing minimalism as the contemporary art music is the relationship between this study and other studies on student composition. By engaging students and teachers with one form of contemporary art music, minimalism, this study chose to narrow the musical style focus in order to generalize about teachers’ approaches to facilitating composition and about student compositional outcomes across ages 9 to 18 years. In undertaking these investigative tasks the study responds to others which have investigated teachers’ composition teaching approaches and the resulting student compositional product.

However, minimalist compositions do not easily fit into the findings of some studies. In Swanwick and Tillman’s (1986) sequence of musical development and Swanwick’s (1991) criteria for assessing compositions, minimalist compositions are caught between the ‘Vernacular’ and ‘Speculative’ stages. My study narrows the focus on how teachers introduce contemporary art music compositional techniques by placing a restriction on the parameter of musical style and thus on teachers’ and children’s freedom, initially, to determine style. It also combines the issue of student compositions written in a new style or employing compositional techniques which are new to students with the issue of how teachers introduce compositional techniques drawn from a style which is largely new to them too.

Aspects of style are mentioned in a number of composition studies, but they are not the primary aim of the investigation. An awareness of style in music, however, is required in a number of curricula, especially for students at secondary level. The NSW Higher School Certificate course, for example, places an emphasis on musical style, requiring students to “invent, improvise, arrange and notate music representative of the mandatory and additional topics” (Board of Studies NSW 1994c:7). These topics require and encourage students to think about aspects of style in their compositions and to write in styles with a broad focus, for example the mandatory topic ‘Music 1970 Onwards (Australian focus)’, and a narrower focus, for example the additional topic
‘Baroque Music’ (18). While expansion of musical materials in student compositions and investigation of how teachers facilitate this expansion can be undertaken through any given project material in any style, it is possibly most relevant through a contemporary style and, for the reasons discussed above, through minimalism.

3.3.11 Contributing to an historical sense of music

The final educational reason is a need for the student composer to understand and build on the work of established composers. As Ezra Pound puts it, the student composer needs to consider the way of the scientist who “does not expect to be acclaimed as a great scientist until he[or she] has discovered something. He begins by learning what has been discovered already. He goes from that point onward” (Pound cited in Taruskin 1988:153). Richard Taruskin explains: “what is sought is a contribution of something valuable to the common wealth of art. And that means becoming well acquainted with that common wealth, which in turn means knowing history, or, in [T.S.]Eliot’s terms, possessing ‘the historical sense’, defined as ‘what makes a writer most acutely conscious of his place in time’…” (153-154). Through engagement with minimalist compositional techniques drawn from the works of established contemporary composers, students have an opportunity to develop an ‘historical sense’ and contribute to music of the present, contemporary music.

3.4 Social reasons for choosing minimalism in this study

There are social reasons for choosing minimalism for this study, reasons that directly connect the student composer with the society of the classroom and, at times, the larger society.

3.4.1 ‘New tonality’ and music education

Campbell (1990) promotes the study of contemporary art music styles because of their inclusiveness – “Art music of the late twentieth century is an amalgam of all that came before it, and a synthesis of parallel developments in pop, jazz and world
traditions” (23). She has found that “much of the music of our time is both intellectually stimulating and entirely accessible to the public, and yet many of the styles have provoked a yawning chasm that separates the works from their listeners. The school music curriculum may be the key for turning the ear and shaping the attitudes of a young public for music in the post-modern age” (15). By focusing this study on minimalism which is part of contemporary art music’s ‘new conservatism’, ‘new tonality’, ‘post-avant-garde’, or what Nyman calls ‘experimental music’ (Nyman 1974:3), there is an involvement by students and teachers with the contemporary music ‘scene’. This involvement is both educationally strong, through ‘common ground’, and socially stimulating because of the immediate proximity of ‘new tonality’ and its controversial nature.

3.4.2 Minimalism – a controversial music

Minimalism can be controversial. While acknowledging that his own musical style preferences influenced his work as a composer-in-school, Wilks (1989) mysteriously declared minimalism ‘inappropriate’, “among other reasons” (52), perhaps because of future challenges facing the teacher when introducing students to unfamiliar minimalist characteristics. However, it could be a personal disapproval of the style, a disapproval noted by others. For some, minimalism is convivial but simple-minded (Rochberg cited in Dufallo 1989:71). For Terry Riley part of what minimalism is, is “not playing anything that you don’t have to” (Riley cited in Smith and Smith 1995:231), the type of comment which has led many to consider minimalism a not entirely respectable field of academic pursuit resulting in relatively little scholarly investigation of minimalism” (Schwarz 1996:6). Asking students to compose in a minimalist style is not seeking pretty tonal melodies with chordal accompaniments. Campbell (1990) found that “for those who approve of the style, it has restored the historic bond between composer and listener,” (16). Her use of the word ‘approve’ is a reminder that despite its popularity, not everyone enjoys listening to minimal music, or is comfortable with the apparent simplicity of its compositional procedures and resulting sound. Because minimal music can be controversial and involve its
participants in debate and conjecture, it forms a direct connection between music and both the classroom and wider societies.

3.4.3 Minimalism and its relationship with society, in particular that of the 1980s and 1990s

At the time I was approaching teachers with minimalist project material in relation to my study, 1989-1993, minimalism in the United States, England, Europe and Australia was continuing a period of expanding activity. While it was a rich period of writing for American minimalists, it was a time when the music of European and Australian composers who used minimalist characteristics was recorded and performed, and when performances, recordings, articles in the popular press, films and tours saw a rise in awareness of minimalism around the world. This has been addressed earlier in this chapter in relation to the work of Riley, Reich and Glass, of non-Western art musics, performance artists Monk and Anderson, the next generation of composers, Adams, Rzewski, the ‘faith minimalist’ composers of England and Europe, and composers in Australia and Africa. Through the techno works of popular music and its controversial association with dancing and drugs, the element of ritual, ecstasy, mesmerization and trance continue to be an underlying thread in repetitive minimalism.

Yet despite its being an artistic force since the mid-1960s music educator Campbell (1990) was still able to refer to minimalism in 1990 as “…the intriguing new art music of today’s post-modern world” (15). Here the word ‘new’, presumably, reflected minimalism in a music education context and when I approached teachers with minimalist material for the study, minimalism was a term new to many, recognised by some and already used in the classroom by a few.
3.5 Chapter summary

This chapter began with an overview of aspects and characteristics of minimal music in the United States, Europe and Australia, noting the expansion of tightly constructed processes characteristic of minimalism in the 1960s and early 1970s, of collaboration between the arts and the diverse influences on minimalist composers. It moved into the presentation of a number of educational and social reasons why minimalism was chosen for this study.

In Chapter Four, information is sought through a review of literature about the ways teachers and composers in schools facilitate composing activities with students. Information is also sought on factors affecting the roles, approaches and strategies adopted by the teachers and composers in schools.