Landscape, music and the cartography of sound.

GEORGE REVILL

Senior Lecturer in Geography, The Open University,
INTRODUCTION

It's not much to look at, the stretch of road between the Helensburgh roundabout and Luss, on the west side of Loch Lomond. But that small section of the A82 resounds with music for me - to be precise, the scherzo from Anton Bruckner’s Ninth Symphony. The first time I listened to that piece, in Eugen Jochum’s recording with the Berlin Philharmonic, that’s where I was, travelling in the back of my family's car. The shock of the music, its intensity and its stark beauty, burnt itself into my memory, and is forever etched into the landscape at that precise point of the journey north from Glasgow (Service 2010).

From film soundtracks to folk song, music is often thought to invoke particular landscapes, their moods, textures, beauty, grandeur and tranquillity. As might be understood from the quote above such associations can be highly personal and private, or communal and public shared by audiences and musicians at concerts and festivals. The apparent naturalness of sound and it’s defuse and pervasive character seem to echo the perceived naturalness of landscape itself. Yet the relationships between music and landscape are not nearly as simple and direct as record promoters and cd packaging designers would like us to believe. Powerful as the associations seem to us, only since the mid-nineteenth century has music been written in direct depiction of landscape. When this has been the case, it has most frequently been informed by complex historical and political ideas and ideologies. In the history of ‘serious’, ‘art music’, depiction of people, places and environments so called ‘extra musical associations’ have conventionally been frowned upon as irrelevant to the development of musical expression founded in the working of abstract form, melody, harmony and structure. Only in the twentieth century have landscape and music become increasingly closely connected, it is possible to understand this in terms of two related sets of changes, one related to developments within music itself and the other to issues of technology and media. Firstly, the development of musical romanticism in the mid-nineteenth century (works such as Mendelssohn’s *Hebrides Overture* Op.26 1830) and subsequently varieties of musical impressionism and the tone poem (see for example Strauss’s symphonic poem *An Alpine Symphony* Op.64 1915 or Bax *Tintagel* 1919) forged increasingly explicit connections between landscape and music. Secondly, the development of recording technology and broadcast media has brought landscape and music together in a variety of new cultural forms (Bull 2000; Connell and Gibson 2003). These range from the cinematic experience of film which brings together music and moving images and outdoor music festivals which rely on amplified sound, to the soundtrack provided by personal music systems in
cars, and whilst walking, jogging or taking public transport. Today landscape and music interpenetrate in so many ways as taken for granted divisions break down, for example between classical and popular, performer and audience, environmental and composed sounds, music and noise. Site specific works, installations and interactive performance juxtapose music and landscape in ways which challenge established ways of understanding relationships between the two. This paper examines some of the ways scholars in musicology, social science and the humanities have understood the relationships between music and landscape. It concludes that we need to address the specific qualities of sound in music to engage with music and landscape in terms which connect directly with both.

NATURE, CULTURE AND THE CARTOGRAPHY OF SOUND

Most frequently music is connected to landscape through the lyrics and words of songs, the soundtracks to movies or drama, scene setting and libretti of operas and musicals. Providing an appropriate setting for words, the sounds of music often reflect and invoke landscape at a distance, supplying rhythm, melody and harmony to support and set the scene for description in words, narratives and images. Because music appears, as Chanan (1994) says, to be a 'semiotic system without a content plane', great difficulties present themselves when trying to relate the meaning of musical sounds to the environments and social practices which produce those sounds. Meanings and practices seem to be held apart in a state of flux and indeterminacy by the multiple and contingent qualities of musical meaning. One key area in which this ambiguity has been played out is in the relationship between natural and musical sounds which map through complex sets of value judgements on to constructions of nature and culture. In a key text Jacques Attali (1977) examined these relationships in music through painting in what he called a cartography of sound. Landscape has proved important for marking out this terrain. There are analogies here with what Richard Leppert has called the struggle between authorized and unauthorized sound (Leppert 1993: 18). In his essay on seventeenth-century Netherlandish landscape painting, Leppert examines Abel Grimmer’s painting Spring (1607). This shows labourers working on the garden of a wealthy estate. In the middle-ground beyond a river the musicians play for an aristocratic couple who embrace in a boat on the water. The aristocrats lie in stillness contemplating the music. In this image music represents the culture of civilised leisure, the embodiment of rational contemplation. Whilst in the foreground the physical exertion of the workers exists in a non musical world of physical, natural and bodily noises insensitive to the cerebral pleasures of music. In this way Grimmer shows how sound is spatially ordered in the landscape as music as opposed to noise, at the same time he implies a whole
series of judgements on social status, the designed landscape and appropriate behaviour (in Leyshon et al 1998: 294).

Such moral and aesthetic judgements are informed by complex historical and political ideas and ideologies. In this way Matless examines the sonic geography of the Norfolk Broads as a ‘nature region’ during the 20th century. He asks the questions:

Moral geographies of conduct turn on such questions as: Which sounds should be present in the public open air? Does nature demand quiet? Are certain musics in the regional cultural grain? Which styles of voice belong in the landscape? Does nature make music, noise, both or neither? (Matless 2005:747)

In answer to such questions Matless draws on a range of writings by naturalists, topographers and novelists to show how the increasing leisure use of the Broads bring into hearing a highly political and class divided landscape in which a sing-along to banjo and piano, or popular dance music on the radio is unacceptable, but the performance of folk music and the ‘natural music’ of wind, reeds and bird song become highly valued. These sonic judgements he argues are central to the cultural valuation of this regional landscape. Such controversies continue into the 21st century and are evident in debates about rural tranquillity and the appropriateness of rock, pop and dance music in the countryside; in for example the conflicts sometimes generated by the increasing number of rural festivals such as that at Glastonbury in Wiltshire, or the attempts by government and police during the 1990s to stop rural rave parties, or indeed conflicts over traffic noise.

One of the most enduring sets of conventions which link music and landscape in western culture is derived from the classical pastoral. This has been an enduring ideological resource for the making of cultural landscapes in Europe from its origins in classical antiquity. Through the pastoral, music is located in landscape at the intersection of nature and culture in a manner similar to that highlighted by Attali, Leppert and Matless (Revill. 2000). As Glacken (1967: 17) demonstrates, musical theories of cosmic, material, moral and social order are central to classical science, its imagination and its geography (see also James 1995: 38,53,-54) Throughout the Renaissance and into the Enlightenment music and mathematical science fuse in both theories of cosmic and social order within practical treatises on harmony and counterpoint. The pastoral in music is perhaps most directly linked to classical and renaissance science through the Greek legend of Orpheus, an enduring theme in musical history (Mellors 1987). Thus the pastoral provides a very powerful set of metaphors for ordering and classifying material and spiritual worlds. Unusually, for music the pastoral also provides musicians with a set of symbolic codes which provide relatively unambiguous extra musical
references including: imitation of nature for example, bird song, rain, wind; quotation of idealised rural life for example, folk songs, village scenes; and allegory, for example, use of flutes and recorders to suggest the reed pipes played by Pan, god of musicians and shepherds.

The pastoral has been important for music in a variety of historical periods. Daniels (2006), for example, examines the Beatles’ double A sided single *Strawberry Fields forever/Penny Lane* in terms of a suburban pastoral which for Lennon and McCartney was steeped in layers of idealised personal memory. Whilst the place of landscape within music of the so called British musical renaissance (1880-1940) has formed a focus for study which links musical culture into wider cultures of nostalgia and modernisation linking into a range of important social, economic, environmental and political dynamics (Revill 2000). Though the pastoral may be seen as fundamental to the development of music in its most abstract forms, the traces of realism the extra musical references symbolised in imitation, quotation, allegory and the like have enabled the pastoral to forms a powerful resource within nineteenth-century romanticism and in the schools of nationalist composition evident in Europe and elsewhere from the 1830s (Bohlman 2004). For nationalist cultures, the fusion of idealised realism with the historical symbolism of mythology in the pastoral provide a powerful set of musical resources which map on to the imaginaries of cultural nationalism its poetic spaces and mythic places (Smith 1997). Focused on the memory of a golden age and set within a range of idealised though metaphorically translocatable places, garden, orchard, pasture, city and village, the pastoral provides a range of representational resources suitable for the musical culture of nationalism (see Dahlhaus 1989:52-72). A key work of European national music *Ma Vlast/ My Country* (1874-9) a set of six symphonic poems by the Czech nationalist composer Bedrich Smetana (1824-1884) illustrates this point. *Ma Vlast* depicts a series of key locations and natural landscape features important to the Czech nation, for example, *Vysehrad* the great rock overlooking the river Vltava which guards the entrance to Prague and the river Moldau, a symbol of national integration. The work further grounds its patriotic message through a variety of overtly pastoral references. In the final part of the work the Czech landscape and Hussite history become fused with pastoral conventions of exile, wilderness and the symbolic role of the shepherd as protector of the Czech nation.

Yet in addition to providing a set of representational codes for music the pastoral also reaches right to the centre of the problems of music conceived as a form of expression or language which depicts or represents a reality external to the music itself. Vaughan Williams’ Pastoral Symphony (Symphony No 3. Completed 1922) was derided by the music critic and composer Constant Lambert as the
‘creation of a particular type of grey, reflective, English-landscape mood’ which ‘has outweighed the exigencies of symphonic forms’ (Lambert 1948: 107). However as Vaughan Williams himself said, the work had nothing to do with what he described as ‘lambkins frisking about’, rather it reflected on his personal experience serving in the Royal Army Medical Corps on the battlefields of France during World War 1 (Saylor 2009). Whilst in his study of the Norwegian nationalist composer Edvard Grieg, Grimley (2006) warns against simplistic one to one readings of the depiction of landscape in his music. He concludes ‘the association between Grieg’s music and the Norwegian landscape is not a natural one’ but rather a kind of complex spatial and temporal space in which history, biography and politics come together to produce something synthetic, inward looking and abstract rather than pictorial and representational.

The relationships between abstraction and depiction in music continue to shape the ways in which conceptions of nature and culture are brought together in musical landscapes. This highlights both the complex chains of association by which music represents landscape and the way in which the ambiguous relationship between music and nature suggested by the mathematics of harmony and proportion call into question the process of composition. As Grimley (2005) shows in his consideration of the music and writings of the Alaskan based composer John Luther Adams, whose book and CD Winter Music was published in 2004 about the time the re-election of US President George Bush reawakened fears of oil drilling in the Arctic National Wildlife Refuge. Adams describes how:

In Western music melody and harmony are the equivalents of figure and ground. Together they constitute a kind of musical perspective, which evolved parallel to that in Renaissance painting. In the musical textures of Clouds of Forgetting, Clouds of Unknowing I wanted to loose musical perspective, to blend line and chord into a single sphere of musical space...

Figure becomes ground in dense clouds of expanding rising lines. Ground becomes figure in the glacial movement of large harmonic clouds, which (as the listener enters the suspended time-frame of the music) begin to sound melodic – like exaggeratedly slow chorals. (Grimley 2005: 670)

Grimley shows how for Adams, like the Finnish nationalist composer Jean Sibelius 1865-1957) known for drawing inspiration from landscape and history, landscape is not purely concerned with patterns of association, or with purely visual modes of perception, but with deeper structural resonance between music and environmental processes. These have intellectual origins in nineteenth-century romantic approaches. Here Adams draws on avant-garde composer John Cage’s (1912-1992) dictum that we have much to learn from nature ‘in the manner of her operation’ (pp28 and 79). Relating
musical creativity to nature Sibelius’s claimed: ‘When I consider how musical forms are established I frequently think about the ice-ferns which, according to eternal laws, the frost makes into the most beautiful patterns’ (Hepkoski 1993: 22) In this context the composer is in some senses reduced to the function of a transmitter or communicator through which the music speaks, Thus as Grimley (2005: 671) argues, the composer becomes the shamanistic guardian of a natural truth or spiritual order. Music thus becomes divine inspiration, the voice of the animating spirits of water, rock, and air speaking through the agency of a privileged human presence (see also Rehding 2009)

SOUNDSCAPES, VISUALITY AND ACOUSTIC ECOLOGY

As shown in the previous section, for critical musicology, cultural history and geography, the relationship between music and landscape is rarely one of simple depiction. Rather, it is a complex of overlapping musical and extra musical elements, traces and influences. However, more direct approaches to music and landscape which explore the spatiality of sound draw concepts and terminology directly from the study of visual landscape. Following the pioneering work of R. Murray Schafer, soundscape studies suggest an easy translation of the conceptual schemas of landscape directly into sound. The term 'soundscape' was coined by Murray Schafer in the mid 1960s, and developed by him and those involved in the World Soundscapes Project through the 1970s resulting in a large number of individual studies and a wide range of publications. The study of sonic landscapes if not the term itself does, however, have a longer history. Porteous traces the idea of sonic geographies back to the work of the Finnish geographer Grano (1929, 1997 edition) for his work on the sonic landscapes of agrarian environments (Porteous 2000:5: Rodaway 1994:87).

As formalised by Schafer in his 1977 book The Tuning of the World the vocabulary of soundscape studies or acoustic ecology as it is otherwise known is adopted from visual landscape enabling researchers to account for the spatiality of sound. Background sounds are defined as "keynotes" in analogy to music where a keynote identifies the fundamental tonality of a composition around which the music modulates. Foreground sounds intended to attract attention are termed "sound signals". Whilst, analogous with landmarks, "soundmarks" are sounds that are particularly regarded by a community and its visitors. Natural examples of the latter include geysers, waterfalls and wind traps while cultural examples include distinctive bells and the sounds of traditional activities. (Schafer, 1977). Schafer's terminology helps to express the idea that the sound of a particular locality, its keynotes, sound signals and soundmarks, can express a community's identity in parallel
with local architecture, customs and dress, to the extent that settlements can be recognised and characterised by their soundscapes.

The term 'soundscape' is also used in the context of anthropological studies which focus on the phenomenology of environmental experience. In this context the term soundscape is drawn more broadly from specific environmental experiences. Amongst the most notable use by anthropologists concerned with the relationship between means of communication, social organisation and ways of worldmaking. Feld, for example, shows how, for the Kaluli people of Papua New Guinea, the auditory represents a primary means of ordering the world. He shows how the aesthetic organisation of their musical practices represented by the idea of 'lift up over sounding' is both derived from the practical experience of living amid tropical forest and is used to expresses and justify a cultural disposition to the world which connects aesthetic preferences to established modes of social organisation (Feld 1996:62). For the anthropologist, the idea of soundscape provides a useful way of addressing the engagement between auditory experience and sonic communication. It appears particularly appropriate when applied to societies where the relationships between the means of material existence and social and cultural practices appear relatively easy to draw. The auditory makes sense and is made sense of within a nexus of ritual and work routine, dance and gesture which are as much visual and somatic as they are aural. In fact, as Stokes suggests the way forward for an engagement between anthropology and the auditory would be to stress, for example, musical practices as integral to social organisation, 'music not just in society but society in music' (Stokes 1994:52). However, it is primarily an environmentalist agenda concerned with fragile biotic and cultural ecologies which provides common ground between soundscape studies in ethnomusicology and acoustic ecology.

For Schafer soundscapes are a way of reclaiming the auditory environment from what he perceives as the descent of the sonic experience from pre-modern, or rather early modern 'High Fidelity' to modern 'Low Fidelity' environments. The former is typified by church bells, bird song, folk singing, town criers and is valued as a high quality and desirable auditory set of auditory experiences. The latter is typified by piped musak, the background hum of traffic, air conditioning systems, mobile phones and is considered as low quality and undesirable. The former denotes an area ‘possessing a favourable signal-to-noise ratio’, with ‘discrete sounds’ clearly heard above a ‘low ambient noise level’, the latter an ‘overdense population of sounds’ where ‘perspective is lost’ (1977: 43). As Matless (2005) suggests, Schafer deploys the distinction in part to idealise a particular rural soundscape and criticise the racket of the city. These ideas are largely in keeping with both
`conservative' traditions in music and cultural criticism and defenders of modernist authorial authority and high art such as Theodor Adorno (Labelle 2008:203). Schafer’s project is modernist and technocratic, it seeks to aestheticise the auditory environment, to give it a formal and technical vocabulary as the basis for a profession of `sound architects' working within a new discipline akin to landscape architecture. He posits a whole range of `educational' measures including `earcleaning' in order to rescue sound from the ‘apex of vulgarity’ and develop appropriate aesthetic responses to sound in the ‘general public’.

.... is the soundscape of the world an indeterminate composition over which we have no control, or are we its composers and performers, responsible for giving it form and beauty? (Shafer 1977: 4-5)

Drawing inspiration from Schafer’s provocative assertions, soundscape studies or acoustic ecology have also formed a productive territory for creative musical composition using samples and recordings made in specific landscapes, environments and places. Two themes dominate this work firstly the recovery, documentation and preservation of what are perceived as high quality sonic environments of the past; and secondly the exploration of place identity created through characteristic sound worlds. Exemplifying this twin focus are the Five Village Soundscapes made during a European tour of the World Soundscape Project led by Murray Schafer in 1975. This work mapped and recorded the sonic environment of five rural settlements in Europe including Finland, Italy and Scotland using a variety of sonic and graphic techniques and strategies. The villages in Finland were revisited in 2009 in order to chart changes brought by ‘urbanisation’. However as Hildergard Westerkamp, a founding members of the World Forum for Acoustic Ecology, says; practitioners of soundscape studies need to recognise that their practice is culturally creative rather than simply a form of empirically neutral description and documentation. For Westerkamp sampled and recorded environments are always creative even if only for the reason that a recording of a specific place and time ‘can only speak specifically of that moment and place’. However she also acknowledges the aesthetic judgements made by soundscape composers who bring their own aesthetic musical language and to meet the language of recorded sounds, ‘in the process of composing.’ (Westerkamp 2002; see Labelle 2008: 201-15). For Westerkamp, soundscape composition is an environmentally sensitive and sensitising art form which ‘can and should create a strong oppositional place of conscious listening-that is, in the face of wide-spread commercial media’ (Westerkamp 2002: 53).
In this context soundscape studies are a normative practice which reinforce the sort of commonsense and conventional divisions between music and noise, culture and nature examined in the previous section. Yet the complex relationships between music, landscape, sound and the making of modernity still pose a range of important questions concerning the ways in which landscape is experienced and valued. Some of these issues are explored in studies which draw on the vocabulary of Schafer’s soundscape studies but connect this to a critical examination of the moral cartographies of sound described by Leppert and Matless. Emily Thompson’s study of New York’s soundscapes during the early twentieth century is concerned with both technology and modernity and explores the ways in which sounds and noises become designated musical and non-musical. Although she uses the term soundscape, Thompson’s work is closer to that of the historian Alan Corbin, whose study Village Bells (1998) traces the sonic spaces of cultural and political change in rural France. Corbin shows how by the end of the 19th century church bells were physically louder because of new design and casting technology, but ironically much quieter in terms of their local social and cultural meaning. For Thompson (2002: 2), like Leppert and Matless, a ‘soundscape, like a landscape, ultimately has more to do with civilisation than with nature’. Thompson’s study centred on New York examines the transformation of urban sound through its legal control, technological measurement, architectural and electronic design, through battles between noisy neighbours, the endeavours of scientists, engineers, broadcasters and city officials. She shows how increasing human management and control of the soundscape simultaneously distanced and clarified sounds transforming an unmanaged sonic landscape into the packaged and controlled urban soundtrack typical of modern life. To this extent Corbin and Thompson tell stories which are congruent with the worst fears of Murray Schafer. Yet as Thompson also shows in her discussion of Charles Ives symphonic work Central Park in the Dark (1906), music has increasingly engaged with landscape in order to celebrate rather than simply reject the sounds of modern life. In this work orchestral instruments represent the cacophony of the urban street, its shouts, whistles and car horns profoundly questioning the relationships between noise and music in the experience of landscape. This work helped set an agenda for generations of twentieth and indeed twenty-first century composers who continue to question and explore the boundaries of music and musicality, transforming taste and listening practices in the process. Ironically such work, for example represented by the use of found and extra musical sounds in ‘music concrete’ have paved the way for precisely the sort of soundscape compositions championed by the World Forum for Acoustic Ecology.
CONCLUSION: SOUND, PERSPECTIVE AND THE REFIGURING OF LANDSCAPE

Increasingly landscape has formed a terrain on which musical and extra-musical sounds interact transforming conceptions of acceptable and unacceptable musical sounds in the process. These developments have challenged conceptions of music and landscape based in cartographies of nature and culture and approaches derived from visual perspective. Yet composers, musicians and audiences continue to seek ways of using landscape to provide vivid, vital, immediate and immersive experiences of landscape. Amongst the many musicians endeavouring to make these connections is the composer, musician folklorist, Sam Richards. As a former member of Cornelus Cardew’s avant-garde Scratch Orchestra (formed 1969) and a former community arts worker, Richards search was primarily for democratic ways of making music which to draw on traditions of community music making and the experience of life in specific locations. Amongst his musical works the piece *Exmoor Landscape* (1990) follows literally the morphological contours of hill and dale drawn in a straight line from an Exmoor farm where Richards collected folk songs to the sea near Plymouth. Other work for a scratch group including trained and untrained musicians started the compositional process with rehearsals on Dartmoor. Richards (1992: 171) recalls:

The quarry gave a lot of scope for playing with distance, images of falling, resonance and echo, the sound of machinery. I looked at the gouged-out rock face and noticed intricate scarring patterns that had been made by machinery, the years, the weather. This was as suggestive of ways of playing sounds as many graphic scores I had seen or written in the past.

Here for Richards the process of musical composition and performance through direct engagement suggests something of landscape as a complex temporal and spatial place envisaged by Grimley. Yet as Richards continued to experiment with audience involvement, moving performance from location to location and bussing audiences to different performance spaces, he continued to be dissatisfied with levels of interaction between music, people and landscape. Perhaps Richards recognised the sense of distancing and clarification in the face of cacophony noted by Thompson in the making of modern soundscapes. Interpreted as decline and decay this sense arguably animates and informs work in acoustic ecology. Given music’s engagement with previously non musical sounds and the technological recording and projection of sounds noted in the introduction, it is possible to suggest a broad reworking of landscape perspective through sound. Where romantic and nationalist music grounded in the symbolic language of the pastoral provided a sort of affective and emotional closeness mediated through established forms of musical language, the embrace of previously extra musical sounds in more recent music is often dependent on recording and amplification technologies which bring their own form of mediation, distance and closeness. When in the quote
which heads this chapter, Tom Service described the very personal experience of music and landscape whilst travelling by motor car he describes an experience precisely shaped Thompson’s paradox of immediacy, clarification and distancing. Such a contradiction is evident also in Westerkamp’s reflections on soundscape documentary as creative composition. As Labelle has shown, acoustic spaces are shared, conflictual, intimate, animate and energetic, combining points of focus with points of diffusion. Sound he says is:

promiscuous. It exists as a network that teaches us how to belong, to find place, as well as how not to belong, to drift. To be out of place, and still to search for new connection, for proximity. Auditory knowledge is non-dualistic. It is based on empathy and divergence, allowing for careful understanding and deep involvement in the present while connecting to the dynamics of mediation, displacement, and virtuality. (Labelle 2010: xvii)

Perhaps we would do well to recognise the very different properties of sound in relation to vision, rethinking landscape in relation to sound requires us to move away from models grounded in visuality and its symbolic codes and address head on the alterity of sound.

REFFERENCES


Hepkoski, J. Sibelius: Symphony non 5. Cambridge, CUP.


**FURTHER READING**

On music and landscape:

On music, nature and culture:

Soundscape studies:

Studies of sonic spaces and sound art:

**BIOGRAPHICAL NOTE**

George Revill is Senior Lecturer in Geography at the Open University, he is currently writing a book on music, landscape and environmental sound in twentieth-century England.