Listening Spaces: Audiophiles, Technology and Domestic Music Listening

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Listening Spaces: audiophiles, technology and domestic music listening

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This paper examines the interrelationship of technology, space and identity as exhibited in the domestic music listening practices of the audiophile. Music listening in domestic contexts provides both a physical and imaginary space of cultural consumption. The paper describes work in progress into phenomenological aspects of listening, practices of audio technology use in domestic contexts, and features of identity formation based on a qualitative study of hi-fi listeners.

Technological and cultural change in the production of aural soundscapes and processes of reception provide the backdrop to the current study. Three main issues are addressed. Firstly, the promise of digital technology to provide ubiquitous and enveloping forms of musical experience is described. Secondly, the distinctive aesthetic experience of music listening is examined through accounts of listening spaces. Finally, music listening is located within the material culture of the home and identified as a cultural practice providing a central element in the constitution of subjectivity for music listeners.
Introduction

This paper explores aspects of the relationship between technology, space and identity in some contemporary music listening practices, specifically the practice of audiophile or hi-fi music listeners who recreate sonic or musical soundscapes through technological means in domestic contexts. The paper presents work in progress and some preliminary findings from a wider research project into music cultures and listening practices. It stems from an interest in the role of the sensory formation of the aural in music consumption and set out to examine how emerging technologies of audio reproduction have impacted on listening practices. It offers observations on the kinds of technological and sonic environments created by audiophile listeners, explores listening practices as forms of engagement with music, and attempts to identify emerging trends from the perspective of the listener in home audio consumption.

Three main issues are addressed. Firstly, the paper reviews the promise of digital technology to provide ubiquitous and enveloping forms of musical experience. This is placed in the context of ‘hi-fi’ or high end home audio which sets out to create the highest levels of audio quality, allowing ever greater levels of realism in audio reproduction.

Secondly, music listening is located within the material culture of the home and identified as a cultural practice providing a central element in the constitution of subjectivity for music listeners. Hi-fi listeners accounts of listening spaces are used to identify some of the principal elements involved.

Thirdly, the distinctive aesthetic experience of music listening is examined through accounts of listening practice in which respondents describe the contexts and characteristics of listening experience and the pleasures derived from high end audio listening.

The study is part of an ongoing project into music listening practices examining issues of the technological mediation of cultural consumption in domestic contexts. Data in
this instance is derived from a survey of members of the Hi-Fi Forum, an online discussion forum based in Dublin, detailing different aspects of hi-fi audio listening practice. Further research in the area will involve focus groups and interviews with forum members as well as ethnographic data collection.

**Locating Listening**

A focus on media consumption and forms of audience behaviour has been a distinctive and prominent characteristic of media research for many years (Gray, 1987; Morley, 1992; Moores, 1993 to name but a few). Perhaps not surprisingly, television as a mass medium dominates such research and the attempt to reveal insights into the ‘real world’ of television audiences has been a dominant theme (Ang, Lull, 1990). Changing technology and the deployment of new ICTs in domestic contexts have joined this as a focus of enquiry (Silverstone and Hirsch, 1992). There is an assumption within such research that all such media are primarily of an audio-visual nature – the television, the computer, interactive gaming – and implicitly the visual dimension will continue to be emphasised as semiotically significant at the expense of the aural. While advances in visual culture studies represent one of the important achievements of this whole research paradigm, it sits uneasily alongside the pervasive presence of sound and music across contemporary electronic culture.

It is only more recently that work in the audio domain has begun to challenge the dominance of the visual in academic research and the assumption that listening is a passive and secondary element in the consumption of electronic media. Radio studies (e.g. Hendy, 2000) counterposes the field of television studies and seeks to map processes of production and reception onto the radio broadcasting landscape. Despite its ubiquity, radio continues to be viewed as a ‘secondary medium’. Bull and Back (2003) fills a significant gap in presenting auditory culture as a distinctive field challenging the dominance of the visual and places both phenomenological and anthropological aspects of sound as central features of auditory studies.
Within the context of both radio and music listening practices, much emphasis has been
given to its temporal, diachronic role as an accompanying soundtrack to everyday life
(Scannell, 1988). What has received less attention is the spatial dimension: where and
how recorded music locate us as listening subjects and what spatial relationships are
involved in the listening situation. Berland (1988), provides an interesting illustration of
the spatial context of listening and our lack of attention to it. She describes listening to
radio driving on a highway between two major Canadian cities, and contrasts the two
dimensions of the experience in the following way. On the one hand it is the temporal
that appears to dominate: it is time that links the driver/listener and their destination.
Radio, helpfully, organises that sense of time and punctuates each stage in the journey
as the listener moves ever closer to her destination. However, there is a certain
misapprehension or studied inattention in this, argues Berland, in that our senses are
insufficiently attuned to the dominance of space around us. While driving we appear to
stand still, waiting impatiently to reach our destination. We don’t experience that we are
hurtling through space, crossing the landscape at high speed. This is suppressed in
favour of the temporal, the tedium of waiting and the sound of the radio marking out
stretches of time.

An alternative approach, Berland recommends, is to identify how space is created
between sound at its origin and the listener. What is the process, she asks, by which we
objectify ‘location as that which contains a specific means of reception, the car, room or
bar where the music is heard, the physical site within which one is surrounded by
sound’(1988: 83). We tend not, in listening situations to ‘place ourselves or the sounds
in a spatially conceived map of diachronic and synchronic movement, evaluate where
we are being addressed from, consider how we are being positioned by the instruments
that bring that touching address to our ears’(p.83). What is required, she suggests, is a
re-evaluation of the conquest of space by electronic media and our highly fractured
place within it, using the significant relationship between space and listening as a
starting point.

Much useful work has been done on the nature of auditory perception emphasizing the
role of the auditory in the constitution of spaces, the powerful emotional experiences
and associations with sound images, and the relationship between sound and perceived events all demonstrate the potent power of sensory formations other than the visual (Thorn, 1996). The fact that aural experience is frequently mediated and recreated by electronic media is significant and less well represented in literature and provides the starting point for the current study.

**Hi-fi audio technology**

High end or hi-fi audio represents a relatively specialised listening experience that is technologically mediated and constructed to produce a certain kind of auditory effects. Hi-fi as a particular approach to music listening has its origins in the 1950s culture of consumer electronics when technological developments provided a variety of products that rapidly improved and expanded the home as a site of privatised cultural consumption (see Atwood, 2002). The digitalisation of all aspects of sound production and reproduction and the promise of an all digital audio landscape now give hi-fi a new impetus and create the conditions for new models of distribution and reception. Yet this must also be seen in the context of the historical development of such technologies that socially construct and shape domestic music listening practices.

The technology of music recording is one of a series of mechanical/electronic and optical technologies developed in the late nineteenth that brought scientific innovations to bear on domestic forms of entertainment (Chanan, 1995; Sterne, 2003). Of the main media forms that emerged at this time - radio, telephony, cinema – the gramophone is perhaps the oldest form of electronic media with a relatively unbroken line of development from Edison’s first recordings in the late nineteenth century to current format wars between rival disc systems. The first successful recording patented by Edison in 1878 as the phonograph was rapidly exploited for its potential to make voice and music recording available and reproducible. Emile Berliner’s rival disc-based gramophone system, patented 10 years later, proved more versatile than Edison’s cylinder based system and rapidly developed into a large industry supplying both hardware and software for the gramophone system. The success of the gramophone
over the phonograph also marked the triumph of domestic music consumption over the
novelty, fairground-oriented phonograph, with the emergence in the first years of the
twentieth century of prestige recordings of classical music through such vehicles as the
Victor company’s Red Seal series of artists such as Caruso and Jan Kubelik and events
such as opera from Covent Garden.

However, to paraphrase Raymond Williams (1974), the invention of gramophone or
recorded music technology was no single event or series of events. For one, the
emergence of phonograph and gramophone technology was just one of a number of
alternative potential forms of audio distribution for which applications were not
necessarily immediately apparent. The three main forms might be labelled disc, wire
and wireless forms of distribution. In the late nineteenth century the telephone
diffusion system was, according to Marvin (1988), a proto-broadcasting system. It had
the potential to extend the primary audience of individual theatrical, musical or other
kinds of events. As a means of musical distribution, it met with poor success due to the
familiar technical limitation that with every increase in subscriber traffic on the
network, the quality of the overall signal diminished. However, it was not clear at this
time either just what the difference might be between telecommunications and the
emergent mass communication medium of wireless radio broadcasting, as the President
of AT&T admitted in 1921:

Nobody knew in 1921 where radio was really headed. Everything about
broadcasting was uncertain. For my own part I expected that since it was a form
of telephony, and since we were in the business of furnishing wires for
telephony, we were sure to be involved in broadcasting somehow. Our first
vague idea, as broadcasting appeared, was that perhaps people would expect to
be able to pick up a telephone and call some radio station, so that they could
give radio talks to other people equipped to listen (in Marvin, 1988: 231).

Marvin speculates that had wire diffusion had been allowed to develop at its own pace,
it would have developed into a series of private networks providing a service to suit the
needs and interests of a privileged minority and only slowly filtering down to the wider
population. As it is, radio emerged as the mass medium, wire diffusion of live or
recorded events was abandoned and recorded disc based technologies became the norm for home consumption of serious music.

A central feature of the development of recorded audio equipment has been the emphasis placed on fidelity and quality of reproduction of the original source as well as increasing the capacity of the medium to convey more information. Early recordings were limited to three and a half minutes on twelve inch discs and recordings were produced through an acoustic rather than an electronic process whereby artists played into horn that directly cut a master disc. Such recordings were obviously extremely limited in dynamic range and frequency response and some instruments such as cellos and double bass simply could not be recorded. It was not until 1925 with the introduction of the microphone that recording became an electrical process with a consequent appreciable increase in quality.

The ‘hi-fi’ possibilities of gramophone recording were seized upon by British Decca with their release of ‘ffrr’, full frequency range recording, in the period after WWII. This, allied to the emergence of magnetic recording in the recording process, as well as the extended capacity of the long playing vinyl record matched the cultural aspirations of home music listening with the technical capabilities of the system. By 1950, two distinct cultural forms had been consolidated with LPs playing 25 minutes a side at 33 1/3 rpm for classical and jazz recordings and the 7 inch 45 rpm for individual popular songs. Stereophonic recordings, available initially only on the serious audiophile format of magnetic tape recording, added a new dimension to the listening experience and by 1958 had begun to be released by the major record companies.

It was during this period that a specific discourse of ‘hi-fi’ listening emerged, facilitated by the consolidation of a technology and widespread availability of recordings on the extended long playing format. It is also significant that the emergence of hi-fi listening as a cultural practice occurred with the revolution in popular culture associated with rock and roll, a movement that is more closely associated with street-based and jukebox oriented culture. What hi-fi attempted by contrast was to ‘reproduce music in the home
with the clarity and realism of the concert hall.' Hi-fi as a distinct cultural form combined a technical sophistication over and above that required for normal musical reproduction with a musical taste for high production values associated with classical and later jazz recordings.

From a technical and an aesthetic point of view, the period from 1950 to 1980 saw very little change in an industry that had largely consolidated around the production of music for a mass market with the recording of classical music as a significant prestige element of the industry. The analogue format and the recording and production techniques that evolved from this period until the digitalisation of the industry in the 1980s changed little over the period. Experiments and the launch of a number of rival multi channel quadraphonic systems in the 1970s raised the possibility of a different form of listening experience but was not commercially successful. The transition to a digital platform began with the introduction of digital recording techniques in the late 1970s and early 1980s. Initially championed by small independent companies such as Telarc for its audiophile quality, the commercial release of Compact Disc arguably brought audiophile sound quality within the reach of a mass market and subsequently raised new forms of debate about the fidelity and authenticity of its sound.

The promise of digital technology to offer complete transparency between listener and the original recorded source is one of its frequently repeated selling points. When released initially, audiophiles sought to distinguish traditional analogue recording forms and means of reproduction as being superior by virtue of fidelity to the ‘warmth’ of the original sound. The digitisation of the sound source was said to produce a clinical sound which, while extremely accurate, was unrealistic. In theory, the digitising process was able to reproduce all audible frequencies and was limited only by the quality of the components used in its conversion back into analogue form. Subsequent higher sampling rates and increased resolution have made such criticisms redundant and an apparent limit has been reached in the perfection of recording processes. High end audio, from a technical point of view, is now focussing on different forms of

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1 Time Magazine Dec. 22, 1952
distribution with increased capacity and multi channel forms of reproduction. Rival disc systems such as SACD (Super Audio CD) and DVD-A and intermediate forms such as HDCD (High Definition CD) offer steps to a multi channel surround sound future which again promises to change and revolutionise home listening (Hirsch, 1997). At the same time, there is the suggestion that disc-based distribution is also facing obsolescence against forms of network distribution and exchange of audio information.

Futurologists of sound suggest that by 2010 commercially packaged or consumer owned media will be redundant and instead listeners will connect through national or global broadband networks to access vast libraries of music and audio-video sources (Cordesman, 2001). Rare recording and specialist outlets will be replaced by hundred of specialised network sources for classics, jazz, audiophile recordings etc. The core of the audio home system by 2010 will be an audio processor providing access to the internet, wireless connectivity within the home, and storage and database facilities that allow users to replay music according to their own tastes and requirements. The other aspect of future home listening likely to be affected by new technological developments will centre around means of amplification, optimising the listening experience to the environment in which it takes place. Digital processing which allows for frequency correction in individual rooms will optimise acoustic performance to ensure a smooth, flat audio response regardless of context. Equally, flexible utilisation of different channels with multiple speakers distributed across different rooms will allow users to modify the audio performance to an unprecedented degree. Development of transparent radio frequency signal handling will allow the deployment of unobtrusive wireless, amplified speakers to facilitate an intelligent ubiquitous sound reproduction that follows the listener rather than fixing fixed listening positions.

**A discourse of hi-fi listening**

Music listening practices, digital and otherwise, are as varied as the means of reproducing music and will continue to be as diverse as the circumstances in which they are used. However, the audiophile listening experience provides an insight into some of
the spatial, design and user-interface issues of future sound applications. The following features of audiophile listening describe the listening practices of hi-fi enthusiasts who make home listening to music on high end audio equipment a prominent feature of their cultural consumption.

Audiophile listening is clearly delineated as a social practice by the technical, media and commercial structures that support it. Like many hobbies it is supported by specialist magazines, specialist dealers and manufactures supplying specialist components and products, and increasingly, it is also an activity supported by dedicated websites and internet discussion forums with music listening as a central focus. As such, a quite rich discourse of sound and music listening developed over many years is available for the researcher. The following outlines briefly some of the distinctive features of this discourse.

A basic principle of the audiophile approach to music listening is that of transparency, that of minimising or eliminating the artefacts of technological mediation in music reproduction and allowing the listener to get closer to the music. The aim of hi-fidelity, as the name suggests, is a faithful reproduction of the music source, to make the means of reproduction disappear and recreate a life-like depiction of sound as it might be performed. As one audiophile description has it:

> What is high end audio? What is high end sound? It is when the playback system is forgotten, seemingly replaced by the performers in your listening room. It is when you feel the composer or performer speaking across time and space to you. It is a physical rush during a musical climax. It is when the physical world disappears, leaving only your consciousness and the music. That is high-end audio. (Harley, 1998: 7).

There is an underlying essentialism in its approach to music listening, frequently articulated as the desire to reproduce what the artist originally intended or recorded. Jazz pianist, Keith Jarrett describes it as the experience:

> I would play a concert, hear the tape afterward, and wonder what was missing. I would remember incredible things in the concert that just weren’t on the tape.

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2 See for example Future Sound Technologies
The notes were there, but notes are not music. Where was the music, the intention? (in Harley, 1998: 5).

The purist audiophile approach is commonly characterised by an obsessive concern with the individual components of high-end audio systems, with their accuracy, fidelity and lack of distortion in the processing of audio signals. The highest quality components are used – silver, oxygen free copper, expensive electronic elements, to minimise artefacts produced by mass produced components. Yet total technical accuracy in the reproduction of audio signals is not always the issue either and audiophiles insist on the musicality of a true listening system – a quality that is not measurable in technical terms but is defined in the quality of the musical response and ability of the system to convey the timbre of the musical experience.

Much of the intention of audiophile listening practice is dedicated to the reproduction of a highly realistic, spatially defined but imaginatively realised, soundscape expressed in terms such as soundstage, presence, depth, body and precision. The soundstage produced by audio is defined as the ‘physical size of the musical presentation with the physical properties of width and depth presenting a sense of size and space in the listening environment. A well defined sound stage is said to present images of sounds and instruments as if they were objects hanging in three dimensional space within the recorded acoustic. Realised as such, the musical experience is one which draws the listener in and positions them at an idealised point, equidistant from each sound source and optimised for the lifelike presentation of each sound image element.

The reproduction of an impressive and forceful soundstage has been a core value of hi-fi audio listening since its inception and for which stereophonic reproduction has been a foundation. Stereo presents two channels of information, left and right, and through relaying distinct audio signals creates a phantom image or soundstage. The development of quadraphonic systems in the 1970s was the first short-lived challenge to the aesthetics of stereophonic listening. The future of multichannel audio is now more assured by digital alternatives but continue to be a source of ongoing debate in audiophile circles. Audiophiles ask whether multichannel reproduction of audio is desirable even if it is technically and economically feasible. It is argued that
multichannel systems present unrealistic and gimmicky approaches to audio which
instead of presenting a soundstage to which listeners are spectators, place listeners in an
artificial position in the middle of a musical experience that is disorientating and
uncomfortable. On the other hand, it is argued that multichannel reproduction of audio
if used to recreate real acoustic environments with realistic imaging, depth and timing,
represents the future of audio, expanding the horizons audio listening and creating a real
dimensionality that is at present imaginatively created by listeners in stereophonic
systems.

**Hi-fi listening practices**

The current research is based on a qualitative study of audio enthusiasts and draws upon
a variety of methods for data collection including survey, analysis of forum discussion,
interviewing, focus groups and ethnographic observation in seeking to represent issues
in music listening practices. For the purposes of this research, members of the *Hi-Fi
Forum*, a discussion list hosted by one of the leading suppliers of high end audio
technology in Ireland were approached and invited to participate in a study of home
audio listening practices. Following permission from the moderator, the study was
launched by an invitation to participate in an on-line survey of home audio in which
respondents were asked to identify their interest and involvement in hi-fi as a hobby,
their listening practices and opinions on future trends in home audio.

The methodology of conducting online surveys has been subject to some debate (see
Hewson *et*, 2003). Offering advantages of economy and ease of access as well as
efficiency in data analysis, there are issues of appropriateness and suitability to the topic
concerned as well as the more issue of representativeness for the population as a whole.
In this instance, as the population concerned is defined by membership of an internet

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3 The Hi-Fi Forum was established in September 03 and currently has 168 registered members. The site is
hosted by Cloney Audio, a leading supplier of high end audio technology at:
http://www.cloneyaudio.com/

4 The on-line questionnaire is available at: http://www.formdesk.com/homeaudio/form1
community, conducting an online survey represented an obvious and useful means of introduction for the researcher to the community. It is limited by the fact that the survey population is likely not to be representative of audiophiles in general, or other hi-fi listeners. However, as the emphasis of the project is on findings of depth and detail rather than of being representative of a larger population, it was decided that the advantages of access to the hi-fi community via a self-declared forum overweighed its disadvantages.

The survey was conducted in June 2004 and a 35% response rate, or submissions from 58 of the total 168 membership were received. The following briefly characterizes the key features of the group under research:

The group is exclusively male, a feature often noted and commented on in hi-fi related discussion (see Keightly, 1996). There are a number of female members of the forum; however, they did not respond to the survey. The age profile is evenly divided between the 25-34 and 35-44 year old age groups with some older and some younger exceptions. The sample is a highly educated one and 70% have qualifications at higher level. About 45% of the group live with partner and children and 40% with partner and no children. A majority, over 80%, of the sample group live in Dublin city and county.

The average investment in hi-fi equipment for this sample is over 5,000 Euro and a significant number report having equipment valued at over 10,000 Euro:
The high costs involved are frequently commented in discussions on the forum and it is acknowledged that there is no limit to the amount that can be spent on certain specialised pieces of equipment. Some members will justify these costs by reference to other major kinds of expenditure such as a house purchase or buying a car, underlining the importance and the priority that the hobby has for them:

it's pure ignorance that most people don't appreciate a good hi-fi system and spending more than 300 euros on it seems crazy, yet they would buy a house for 300,000 euros, a car for 40,000 euros that they would change every two years losing thousands ..but that is ok...

[Male. 25 – 34. Completed Third Level. Site manager in Semiconductor. Living with spouse or partner with children at home]

A wide variety of music sound sources are used, reflecting the number of alternative formats available, but also indicating the clear predominance of CD. When asked what was the source most frequently listened to, CD has near universal adoption as the principal source for recorded music:
Many of the systems represented incorporate surround systems, either as part of a home cinema system or for music listening purposes, and incorporate floorstanding speakers and subwoofers. Other forms of listening include mid-range monitors and headphones:

There is a large variation in the constitution of different systems and much debate takes place on the forum about the merits of different configurations. In addition to the various source format choices available, different amplification choices include solid state integrated amplifiers, separate pre and power amplifiers and high end valve
amplifiers, valued for their sonic fidelity and characteristic warmth of their sound. Among the other elements deemed essential to audio systems are a range of accessories including specialist leads connecting components and speakers which are deemed to have a crucial impact on the quality of the sound, as well as various forms of isolation equipment including stands and isolation cones protecting equipment from interference and vibration.

Respondents were asked to identify where in the home their system was located and for the majority it is described as the living room with a small number describing a dedicated listening room as the location:

![Location Diagram](image)

Probed a little further and asked if locating or situating their home audio involved any significant disruption or rearrangement, answers provide some insights into the kinds of reorganization around listening spaces undertaken. For some, properly locating hi-fi equipment is a priority and is a determining factor in initial house or apartment purchase or rental choices:

When we bought our house, the hifi location was thought out first as it takes up a lot of space. We have all our home ent. kit along one wall and the sofas on the opposite side.

[Male. 25 – 34. Engineer. Living with spouse or partner with children at home]
when I chose this apartment (rented) it was mainly because it could suit my system. I ruled out a lot of them because the Living room was too small or couldn't position the speakers the way I wanted.

[Male. Site Manager in Semiconductor. Living with spouse or partner with children at home]

I have always had some sort of hi-fi set-up since I bought my first house and have always had it as a priority.

[Male. 45 – 54. Stock controller. Living with spouse or partner with children at home]

Similarly, hi-fi equipment is given priority in furnishing and room organization or used as the centre piece around which other elements of the room or home are organised:

I recently moved into new house (with girlfriend) and so introduced my hi-fi into what was effectively an empty room. New furniture was bought on the following basis:

1) Best location for hi-fi was first chosen - in consultation with girlfriend. This resulted in limiting the configuration of furniture (2 + 3 seater as opposed to 3 + 1 + 1)

2) Had to be suitably sized to easily fit in around hi-fi.

3) Then pick best looking, most comfortable furniture with this in mind.

Living room/dining room are of good size so this was quite possible. When seriously listening to music (nobody else in room), I move an 'easy chair' into centre of room which is normally stored in corner.

[Male. Telecommunications Engineer. Living with spouse or partner with no children at home]

Substantial reorganization is often undertaken by members in attempting to create optimum conditions for listening, or as a means of creating alternative spaces in the home where there are competing demands:

We setup one of our guest bedrooms as a dedicated music room. It is not perfect but the sitting room looks a lot less like a recording studio than it did!!!

[Male. 45 – 54. Finance Specialist. Living with spouse or partner with no children at home]

Had to get rid of my bed and buy a Futon, knock down a built-in wardrobe
and buy 2 sets of drawers to fit in the little space left.

[Male. 15 – 24. Electrician. Living with parent(s) or other relative(s)]

With regard to the amount of time spent listening to music, the average time spent is between 1 and 2 hours per day at evening times between 6 and 10 pm:

![Weekday Time of Listening](image)

Most listening in fact takes place at the weekends and the lack of time or the desire to have more time available to listen is frequently cited:

![Weekend Time of Listening](image)

Music tastes are predictably eclectic with Rock/Pop (95%), and Jazz/Blues (75%) as broad categories predominating. Classical or operatic music was cited by 55% of respondents and the remainder listed diverse genres including: electronic, dance, film soundtracks, folk, choral music etc.
In relation to other media technologies and other media activities, ownership of DVD and home cinema technology was widely reported and when asked to rank the importance of various media activities on a scale of 1 to 5, watching home cinema was the next most important activity after music listening. Significantly, most of the activities cited are of a home-based nature and other options such going out to the cinema, or theatre were given less significance. The exception, seeing live music, is also cited as an important activity:

![Other media activities chart]

When asked if they listened to music alone or with partners or friends, most listening was in fact reported to be alone:
As a follow-up, respondents were asked whether their partner or other members of their household shared their interest in hi-fi audio. Responses indicate that few share the same enthusiasm for audio, though nearly half say their partner/housemates are somewhat interested while most others are indifferent or uninterested:

The survey offered a number of opportunities for respondents to describe the listening experience of their home audio system, the kinds of pleasures derived and how, if they had the opportunity, they would improve the system or the listening experience.

The most frequently reported attributes of a good quality system were those of fidelity, detail and the experience of audio virtual reality. This, for most respondents, was the defining feature of a high end audio system:

It sounds like listening to real musicians playing music in the room. It does NOT sound like a Hi-Fi system!!!
What listeners seek is experience of a sound with substance and detail, often articulated in technical terms, but which has the effect of providing an immersive experience:

- The immediate effect is that of the large 'size' of the sound. The sound stage is very wide and deep with a sense of enveloping the listener. Bass is powerful but not overwhelming and with great definition. Midrange is quite neutral and well integrated. Top end is remarkably airy with great sparkle.
  - [Male. 25 – 34. Telecommunications Engineer. Living with spouse or partner with no children at home]

- There is lots of detail and excellent frequency range and response. SACD/DVD-A source material provides a noticeable improvement in clarity and definition over conventional CD.
  - [Male. 25 – 34. Software Developer. Living with spouse or partner with children at home]

- Amazing. As loud as a club with the resolution of a top notch studio.
  - [Male. 15 – 24. Electrician. Living with parent(s) or other relative(s)]

Similarly, when asked to identify what they felt were their system’s weaknesses, it was a lack of subtlety or an impression of harshness that was most often identified:

- Natural sounding for the most part, but lacking in bass, and with an occasional tendency towards harshness when things get complicated.

- Sound is on the side of warm yet has a slight mid range harshness. Bass is taught rather than deep. From listening over the years I now feel I have "caught up" with the kit - I can now hear its weaknesses more.
  - [Male. 25 – 34. Engineer. Living with spouse or partner with children at home]
Asked what improvements they would make to their system, respondents looked for enhancements in detail and resolution, and the elimination of harshness as the most desirable:

Currently upgrading the Phono stage. It will give me a cleaner more detailed sound from my vinyl, with a blacker background. This should allow the instruments to hang in place within the sound stage. (If I had a bigger room I would have bigger speakers)
[Male. 35 – 44. Office Supervisor. Living with spouse or partner with children at home]

Replacement of front l/r standmounts with floorstanding three-way speakers for even better cohesion. This would allow the elimination of sub-woofer for music playback and allow the inclusion of a separate hi-fi audio amplifier for two-channel use. Difference would be improved fidelity for stereo material, more detail and less harshness at the top-end.
[Male. 25 – 34. Software Developer. Living with spouse or partner with children at home]

I would also like to upgrade speaker cable which I believe might clean up some clutter in the midrange. I believe that using some type of decoupling device for the floorstander spikes might also achieve similar gains in the midrange.
[Male. 25 – 34. Employed full-time. Telecommunications Engineer. Living with spouse or partner with no children at home]

One of the other main constraints commented on in realizing the full potential of a high end audio system is in fact the system’s physical location or room in which it is situated. The topic of acoustics and the limitations of most living situations for good quality audio reproduction is a much debated topic within the forum and was reiterated in the survey in relation to improvements respondents would make if they could:

Move to a house with no volume restrictions!
[Male. 35 – 44. University lecturer. Living with spouse or partner with no children at home]

i would like to make it 7.1, to do this properly would need to change current configuration of room not practical but if i was building new home i would design it so that home audience system was main design consideration
[Male. 35 – 44. Director. Living with spouse or partner with no children at home]

Room treatment - to reduce the echo in my room and improve the bass.
A dedicated listening room. It would greatly improve the sound by isolating the system from the rest of the family :-) The room acoustics would also be a huge improvement of course.

A key objective of the survey was to identify the kinds of pleasures listeners derived from listening to home audio. Listeners were asked to articulate in an open-ended question what enjoyment or pleasure they got from listening to their system. The responses identified two broad dimensions of active and passive listening. Listening passively or with less concentration is for purposes of relaxation, yet the nature of listening depends on the mood of the listener and the level of engagement they require:

I get a sense of relaxation and involvement with the music depending on how I want to listen. I can listen passively or actively.

Very relaxing. Helps to transport you to all those alternate dimensions your mind can create.

That's a difficult one...relaxation, goose bumps, excitement, thrill....I guess I go through a lot of emotional phases, depends on the music.

Relaxing and stimulating at the same time.

As suggested, active listening consists of engagement and involvement in the music, attending to the detail of the soundstage produced:

I like to hear how a song is produced, how it is layered together. I like to see how certain instruments or sounds are used and organised.

When I hear a well recorded track, with good tones, separation and dynamics with clever scoring and use of instruments which has been mixed
and produced well, I'll love it!

[Male. 25 – 34. Engineer. Living with spouse or partner with children at home]

I listen right into the music to each sound or instrument and pick up exactly how it was put together. I intend eventually to make my own music.

[Male. 15 – 24. Electrician. Living with parent(s) or other relative(s)]

The experience of good hi-fi playback is that it is also revealing, that it reproduces sounds that are not otherwise available, providing a compelling, even a surprising listening experience, that demands attention:

at its most enjoyable when I hear something in a piece of music I have not heard before.

[Male. 25 – 34. Software Engineer. Living with spouse or partner with no children at home].

Having a system with the ability to reproduce the recording faithfully provides significantly increased insight into the music and the performance that might otherwise be possible with "normal" music playback systems.

[Male. 25 – 34. Software Developer. Living with spouse or partner with children at home]

I particularly enjoy being able to hear delicate percussion in jazz and popular music.

[Male. 35 – 44. Lecturer in Radio. Living with spouse or partner with children at home]

Best of all, acoustic, jazz, etc. draws you into the music so much that you forget about whatever else went on in the day. You find yourself wondering much more acutely what the song writer was thinking at the time etc. It can completely drown out whatever else is going on around you.

This is why I think hi-end hi-fi is worth it - the music experience is so much more convincing that it really gets to you. Listeners tend to 'shut-up and listen' rather than just considering it to be background.

[Male. 25 – 34. Telecommunications Engineer. Living with spouse or partner with no children at home]

A concluding item on the survey asked respondents to comment on emerging issues and trends within the hi-fi audio sector. There was little doubt that home audio itself is undergoing rapid technological change and that it will increasingly involve convergence with PC technology and wireless networking:
The coming together of hifi, HT and PC. Convergence of formats (i.e. DVD for audio, video and data).

[Male. 25 – 34. Engineer. Living with spouse or partner with children at home]

file sharing and music distribution will reshape the music industry, and is doing so at the moment. HiFi will also move into this area, with harddrive systems becoming the norm. The worlds of the PC and the HiFi will merge along with numerous other entertainment technologies. Wireless broadband communication will be key to this new entertainment system. Sony and Microsoft are emerging as the main players and will dictate how things go.

[Male. 25 – 34. Software Engineer. Living with spouse or partner with no children at home]

Easy - wireless audio / video devices: e.g. Musiccast, Kiss Players

[Male. 25 – 34. Tech. Consultant. Living with spouse or partner with no children at home]

mp3, using a pc as the home-entertainment center

[Male. 25 – 34. IT Project Manager. Living with spouse or partner with children at home]

An issue of concern, however, was the wide acceptance of lesser quality formats such as mp3 as well as the issue of design superceding function and compromising quality:

Sad to see proliferation of low-fi formats such as mp3.

[Male. 35 – 44. University lecturer. Living with spouse or partner with no children at home]

Most modern speakers are slim, limiting them to small drive units(although some have side firing bass units). You just cannot get proper deep, juicy bass from small drive units even if you have loads of them.

[Male. 15 – 24. Electrician. Living with parent(s) or other relative(s)]

if studios or record labels start to produce lower quality product, or start compromising sound for other issues (e.g. copy protection) I think the hifi enthusiasts will be alienated further. It seems that convenience and portability take precedence over sound for most consumers. What many audiophiles might consider poor sound seems "good enough" for the ordinary man in the street. I suspect, however, that this has always been the case to a greater or lesser extent. What's important is that this view should not extend to studios, producers and labels.

Emerging themes and future research issues

The work in progress presented above represents an ongoing study into sites of media consumption within the context of changing platforms of delivery. The framework for the study embodies a number of thematics which guide the analysis of this and future data, including:

- Consumption convergence via digital technologies
- Spatial, temporal and phenomenological dimensions of media consumption
- The material culture of media consumption
- Media consumption as cultural practice

Within the context of the data presented on listening, a key theme to be further addressed is the space of listening that is produced. In conclusion, some exploratory ideas on the nature of this listening experience are offered.

Schwarz, has described the experience of hearing music ‘all around’ as one of the many oceanic fantasies we can experience (including sex, swimming, being absorbed by a movie, a religious experience etc) in which ‘the boundary separating the body from the external world seems dissolved or crossed in some way’ (1997: 7). The experience, he argues, is a reproduction of the ‘sonorous envelope’, the first pre-natal model of auditory pleasure. ‘and that music find its roots and its nostalgia in this original atmosphere which might be called a sonorous womb’ (Rosolato in Schwarz: 8). Listening space is characterized by a boundary or threshold crossing between a body and enveloping sound, neatly expressed for Schwarz when music has the effect giving one goose bumps on the skin, in the very space between internal subjectivity and exteriority:

In the experience described… I crossed the threshold between my clearly marked-off adult body and a fantasy of a familiar but archaic body less distinctly marked off from the external world than its adult counterpart. Goose bumps at my skin marked the crossing of this sonorous threshold (1997: 8).
Listening in this sense can be described as a particularly powerful fantasy or imaginary space, individual and unavailable in quite the same way to any but the subject of listening, in which we enter into and engage rather than stand back and gaze at the music in question. Such a distinction follows Beleant’s notion of an aesthetics of engagement in opposition to the dominant western tradition of disinterested aesthetic attention. It is an approach that emphasises the interactive flow from art to subject which is realised in its most intense form when one appears to lose one’s self or be completely absorbed in the experience offered by the art object (see Benson, 1993). The aesthetics of engagement argues that such impulses are pervasive parts of human experience, and far more commonplace than traditional aesthetics would like to admit. For Berleant, the most distinctive feature of art is its ‘ever-insistent demand for appreciative engagement’ (Berleant, 1991: 33). The appreciative distance of art and subject simply does not hold given the altered perceptual sensibilities of the modern world. Aesthetic distance has arguably been largely effaced in the age of mechanical and electronic reproduction which, as Benjamin notably observed, is so destructive of the ‘aura’ of art (Benjamin, 1927, reprinted, 1973). Contemporary aesthetic sensibility also demands a different kind of response to that prefigured in traditional aesthetics. Listening to forcefully presented media such as recorded music requires absorption into the perceptual experience. The comprehensive, synaesthetic quality of the listener’s perceptual experience is the very epitome of aesthetic engagement, argues Berleant, which, because it is so comprehensive, so persuasive and so powerful, easily displaces the apparent reality of everyday life and seduces us into entering its domain as silent yet active participants. When it succeeds in drawing us fully into its perceptual universe, it becomes an art of total engagement (Berleant, 1991: 189).

An objective of the current research is to take the commonplace assumption of the cultural construction of subjectivity and trace it in the micro practices of cultural consumption as well as across the macro patterns of social space. While sociological research has made significant advances in mapping structures of taste, largely following

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5 Knizek (1993) is critical of the vagueness of the concept of ‘aura’ in Benjamin’s essay and its supposed withering due to reproducibility. Interestingly, he points that Benjamin failed to consider two of the most
the influence of Bourdieu (1984), the mundane, micro layer remains somewhat unmapped and uncharted territory (see de Nora, 1999). Future research needs to produce much more fine-grained ethnographic data about the production of lifestyles and the place of consumption within this. Of necessity, such a research agenda also needs to locate such practices within social space and produce the maps of consumption upon which future digital landscapes will be based.

important mechanical means of reproduction - that of the phonograph and the book which arguably have been more significant in the popularisation of art in the twentieth century.
References