

What is Audio Design?

By Gavin Shepherd with Stephen Turbek 31 January 2001

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“A third of the effect of ‘Psycho’ was due to the music:”

-Alfred Hitchcock

Since the early days of film, sound has been added to increase the richness of the experience. Before there were soundtracks, an organist played a carefully crafted musical score along with the movie. Sound is necessary to tell the story: themes identify the bad guys, warn of impending disaster, and set up jokes. A silent movie would be inconceivable.

Until recently, though, that’s just what the Web experience has been like. A vast, quiet landscape of text and graphics, mute except for the occasional marketing extravaganza, digital art piece, or personal site. In creating effective interactive experiences, the same challenges are faced as in the silent movies: heightening experience, creation and exaggeration of mood and emotion. This report is a discussion of the issues regarding using audio elements and sound tracks in modern interactive environments.



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Sounds and Brand Experience
Sound plays a vital part in brand identification. Whether it is a simple four-note mnemonic or a single chord that evokes warmth, personality and trust, identifying the brand

> **Audio Design adds depth to visuals, connecting user and experience.**

is an essential aspect of an audio designer’s work. If your audience can identify the brand “with their eyes closed”, it has the potential to be successful.

Joint research conducted by Cheskin Research and Thomas Dolby’s Beatnik revealed “the effective use of audio alone can equal the impact of the visual (logo) on brand imagery”. Sound reinforces brand identity and continuity. This becomes particularly important when companies look to extend themselves into the digital space.

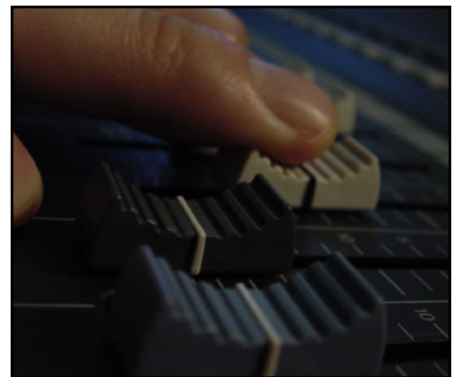
Sound differentiates a site, adding depth for a more memorable visit. The upcoming increased bandwidth will mean increased competition for viewers’ attention. This will bring about sophisticated multi-layered sound environments as digital experiences come in line with music videos and television commercials. Brand creation in the digital space will include the aural with the visual elements. The sound must substantiate the visual and textual content, not work independently.

What is Audio Design?

Audio design can be described as the creation of a consistent and coherent sound style, an audio language, or a set of sounds and soundtracks. This can include background music for a television commercial, sound effects for a movie, user interface effects, and audio logos. Audio logos are small snippets of sound designed to represent an organization.

What Does an Audio Designer Do?

Audio designers in the digital media industry often fulfill many roles due to integrated audio tools and the infancy of the field. It is likely that he or she will be a music composer, a sound effects creator, a computer programmer, a recording engineer, producer and editor. In the film



It’s all in the details.

world, it is almost always the case that different people perform these roles, but digital audio technology affords the opportunity for integrating these roles and putting more control in the hands of a single artist and for reducing costs and speeding production.

What is Audio Design?

How to Integrate Sound

Audio needs to be considered as early as the other elements of an interface. An audio designer will work with all members of the project team to determine how the sound will be implemented technologically, which animations need sound, and identifying where sound will be best used.

Much interface sound work is done using the Flash animation plug-in. Because users' Internet connection speeds vary, syncing audio to animation can be difficult as the audio takes longer to load. Solving this requires a good understanding of how sound and music work, sometimes breaking the soundtrack into very small snippets for intelligent reuse.

Sound on the Web

As sound becomes more prevalent on the Web, user's tastes will become more discriminating, making it more important for each site to invest in good audio design.



Good sound starts with quality ingredients

One wouldn't expect to see a television identity without well executed audio design, and the same will

soon be true online. Although few people are still surprised to hear sound on a site, it is becoming expected on any new entertainment or high-design site. A client has the opportunity to help set users' expectations with audio.

> **'audio mnemonics' are sounds that identify a brand, such as Intel's four-tone logo.**

Sound in Interfaces

Interface audio elements, if executed well, can add a lot of distinction and continuity to a site. Interface sounds should be designed using the same "palette" of sounds as the background music. For example, rollover sounds can be notes in a musical scale that create a chord as the user moves their mouse down the navigation, creating a harmony.

Real World Constraints

The tight bandwidth and the static text-based layout of the Web's early days didn't allow audio to be integrated into the experience. The emergence of media formats such as Flash and Java enables us to see and hear a multi-media experience with interactive sound elements. The relatively large size of audio data means that audio designers will need to think small when designing sound for digital applications. Background sound needs to be designed to compress

well and more emphasis will be placed on the short bits of sound that are used to signify user actions. The emergence of hand-held computing devices means there will always be new technologies that need tiny bytes of sound.

The Future of Audio Design

Audio use on the web, on mobile devices, and future TV platforms will evolve over the next two years as bandwidth becomes less of a restricting factor. Audio design will be less of a bonus feature and instead more of a design essential. When audio is a part of the original scope of a project, it will play the same role it does in other full media experiences, significant in its absence. In the age of universal sound, even silence is a chosen soundtrack.

for more information

Conference on Auditory Display
<http://www.icad.org/websiteV2.0/Conferences/ICAD2000/ICAD2000.html>

Glasgow Interactive Systems
<http://www.dcs.gla.ac.uk/~stephen/research.shtml>

Thomas Dolby on impact of sound
<http://www.cheskin.com/think/studies/Beatnik/sld001.htm>

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