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Sound Design and Electroacoustic Music: Practices or Perspectives?

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Abstract

Sound recording and reproduction technologies enable a wide range of creative practices. Among those is the relative neologism ‘sound design’—a descriptor often associated with dramatic and visual media productions. While there appears to be broad agreement that sound design can play an essential role in those productions, there is less consensus about what it actually ‘is’. From a structural perspective, sound design might be seen as the sonic equivalent of other functional design responsibilities—costumes, sets, or lighting. But its artistic implications are less clear.

In film, a sound designer’s artistic responsibility could range from creating specialised sounds (e.g., invented creatures, futuristic weapons) to overall responsibility for the sound track’s tone and content. Similarly, in theatre, they may be responsible for any combination of playback system design; diegetic and non-diegetic sounds; and choosing pre-show, transitional, or post-show music.

For electroacoustic composers, the question is: where do we fit?

In a conventional production hierarchy, the title ‘composer’ probably means what we would expect—someone responsible for the ‘score’. But while the title may seem clear, the role can be considerably less so, depending on the production context, and the style and materials of the contribution.

For instrumental composers, there is usually an assumption that the ‘score’ will meet the traditional expectations of ‘music’, and be reasonably distinguishable from other sonic layers. Some productions may encourage exploration within that paradigm, but the role is still usually clear. In contrast, an electroacoustic ‘score’ for a dramatic or visual media production may readily be conflated with ‘sound design’. After all, apart from projects where all sound is produced in real-time, both roles involve working directly with concrete sound materials on fixed media—and both potentially have at their disposal the full range of sonic possibilities, rather than a familiar subset of instrumental resources.

In some production contexts—particularly more adventurous or inherently collaborative ones—the creative result of this ambiguity may be very positive. If a single artist takes on both roles, they may have considerable creative freedom. And if the roles have been assigned to two different artists, they may find common ground, while also supporting each other’s specialisms. But it is equally possible that the overlapping materials and range can encourage confusion about what is expected from each role—and about how to credit the resulting creative contributions.

To examine this situation, we briefly review several related creative activities, then consider specific production contexts, with some thoughts from composers who have engaged in sound design work in those contexts. While definitive answers may be elusive, we hope the discussion will offer electroacoustic composers useful viewpoints on potentially rewarding creative opportunities.

Introduction

In 2012, I taught a short workshop on sound design for film, to a group of non-composers. My focus was “A Compositional Approach to Sound Design”. The participants seemed to adapt willingly to this approach (apart from the one who immediately quit).

Most electroacoustic composers have clear—if somewhat divergent—ideas about what ‘electroacoustic music’ is. But the definition of ‘sound design’ seems considerably less clear—and, since teaching that workshop, I have become more aware of the diversity of ways the term sound design is used, and of the potential confusion about what it might mean.

Let us first quickly examine a few of those possibilities.

Points of View

Activities

Specialised SFX creation. Specialised cinema sound effects are probably the most publicly recognised form of sound design. Some early iconic examples are the weapons and non-human vocal sounds in the *Star Wars* films. This work often involves a combination of field or studio recording, and studio manipulation—an interesting parallel to the initial phases of electroacoustic composition.

Replacing the role of SFX editor. Sound effects editing is a long-standing specialism in the film world—but in some production contexts that title seems to be gradually shifting to sound designer. In parallel, many online forums or businesses that describe their focus as *sound design* appear to be primarily contexts for sharing information about *sound effects*.

Audio system design. Audio system design, as a component of sound design, relates particularly to live theatre, specialised performances, and installations. In those contexts, the sound designer will be responsible for the selection and placement of loudspeaker systems—which will have significant artistic implications for the production. In theatre, loudspeaker placement will also have diegetic implications—supporting (or deliberately disrupting) expectations of narrative-related localisation.

Sonic artistic direction. Many sound designers see overall sonic artistic direction as part of their role. In larger projects, the role may be supervisory—coordinating teams of creative specialists. But in smaller productions, it may require taking the position that everything sonic associated with a production is ultimately part of a kind of *macro-composition*. And, not surprisingly, that can easily lead to conflation of artists’ roles, ambiguity about expectations, or confusion about credits.

Sound effects and sample library creation. While they differ in construction and deployment, sound effects libraries and sample libraries are both curated collections of sounds, intended for re-use in another production—and those who produce them increasingly call themselves sound designers too. The growth in these libraries has led to a remarkable expansion in the availability

of sonic resources for creative purposes (though there will likely always be some who believe that an electroacoustic composer who does not record his or her own sound materials is somehow ‘cheating’).

What's in a name?

With such diverse yet often inter-related activities connected in some way to ‘sound design’, we might well ask: if all the work we are considering is ‘sonic’, and if we view it all as some form of ‘art’, why don’t we just call it all ‘sonic art’, and be done with it?

These multiple viewpoints do seem consistent with Trevor Wishart’s well-known use of that term, which he explained as a way to “encompass the arts of organising sound-events in time” (Wishart, 2000: 4).

But Wishart also reminded us that such a definition is merely a “convenient fiction for those who cannot bear to see the use of ‘music’ extended” (*ibid.*). Perhaps even trying to distinguish between electroacoustic music and sound design simply plays into that “fiction”.

More tellingly, he also noted that “in future, it might therefore be better if we referred to ourselves as *sonic designers*...as the word ‘composer’ has come to be strongly associated with the organisation of notes on paper” (emphasis in original; *ibid.*, 5).

Common Ground

While differences between electroacoustic music and sound design are not always clear, there are some obvious areas where they do have elements in common.

Medium and delivery. Both are normally delivered to audiences from fixed media, via loudspeakers. In contexts that incorporate live performance, audiences may hear a combination of amplified and acoustic sources. However, a loudspeaker will still be the means of delivery for electronic sources.

Materials. Both have at their disposal a potentially unlimited range of sound materials. Obviously, not every artist will have access to that full range—and the creative work or production context will certainly suggest (or even dictate) limitations. But it seems clear that the *possible* range of available materials is no different between the two activities.

Acousmatic stance. Both acousmatic electroacoustic music and sound design elements presented from fixed media are acousmatic in their delivery—coming from an unseen source. Of course, for diegetic sound that directly supports on-screen or on-stage action, we are expected to suspend our disbelief and *re-attach* that sound to whatever image or action we see—but the original source is physically absent.

Narrativity. Sound design elements used in dramatic media may sometimes be purely diegetic—supporting the narrative or story—rather than symbolic or abstract. But our view of electroacoustic music typically includes narrative or quasi-narrative works, such as radiophonic compositions or sound walks, which suggests that there is no fundamental difference related to narrativity.

Space. The exploration of acoustic space is typically an important consideration in electroacoustic music—both internally within a work, and in its concert performance. But sound designers also produce work that incorporates spatialisation. The parallel is not perfect—for example, spatialisation in film, TV and game audio is usually confined to commercial standards. But spatial considerations are clearly important in both areas.

Contexts

To shed more light on the distinction between electroacoustic music and sound design in current production situations, I solicited comments from fourteen composers with a broad range of experiences in varied related contexts, using a private online survey. The responses were thoughtful and informative, and provided essential perspectives for much of the discussion that follows.

Film and TV

Major film productions. The term ‘sound design’ is generally accepted as having first found traction in association with Hollywood films in the 1970s, with two names cited particularly often: Ben Burtt and Walter Murch.

Ben Burtt is particularly known for his work, beginning in 1977, creating unique sounds for the *Star Wars* films—films that he believed “began a new interest in creative soundtracks in motion pictures” (Burtt, *n.d.*).

He also explained that he adopted the title ‘sound designer’ because his work blurred the boundaries of three conventional film sound roles: production recordist, sound editor, and sound mixer. Some of Burtt’s activities as part of that role included advising on what should be recorded, directly gathering potentially useful sounds during the filming, and pre-emptively ‘manufacturing’ sounds he felt would be needed later (*ibid.*).

Following *Star Wars*, he continued to create iconic sounds for many well-known films, including *E.T.* and the *Indiana Jones* series.

Walter Murch, whose sound credits include such cinema classics as *The Godfather* and *Apocalypse Now*, is perhaps best known in the electroacoustic music world for his foreword to Michel Chion’s *Audio-Vision: Sound on Screen*. In that foreword, Murch reminds us that the development of practical recording enabled us to hear sounds “liberated from the original causal connections” and to then “re-associate those sounds with images of objects or situations that were different” (Murch, 1994: xvi).

That observation may seem rather self-evident to acousmatic composers. But it is a reminder that sound in visual media always has the opportunity for *re-association*—and that the power of that visual re-linking is further creative territory for composers and sound designers working in those media.

Music in sound-designed film. In the materials I consulted, early Hollywood sound designers did not articulate concerns about potential conflict between their work and the film score.

But, in their world, both production budgets and audiences often number in the millions—and the productions also have a long association with tuneful orchestral music or contemporary popular music. The likelihood of any significant creative overlap between score and sound design in those productions thus seems relatively low.

In contrast, independent, lower budget, or artist-driven film and television projects can provide more flexible opportunities for composers and sound designers—while digital distribution now allows those productions to easily reach very large audiences.

Beyond Hollywood? British electroacoustic composer Danny Saul is part of the creative team for a successful ongoing television series. His observations support the idea that there is increased flexibility, and reduced territoriality, in productions outside the Hollywood umbrella:

In my experience I have found the composer's role to encompass both musical (metered/tonal) materials and abstract materials. There seems to be an increasing shift away from scoring for film and TV as simply 'writing melodies'...to a focus on sound materials.

Similarly, Canadian media composer Lukas Pearce deliberately takes on both sound designer and composer roles, so he can "freely move between one or the other"—and he finds the distinction between the two "hazy and interesting". However, Pearce is also careful to note that this ambiguous line is not necessarily as positive in situations where he is performing only one of those roles.

Gaming

Gaming is a specialised medium, usually addressed to a very focused audience with high expectations about how everything should function. I consulted with two electroacoustic composers with extensive experience in video game sound, who confirmed that the roles of sound in gaming tend to be quite conservatively delineated.

Ian Chuprun is a sound designer with a Canadian video game company. He explained that gaming audiences are "very clear about the differences between 'music' and everything else...For everything that is not 'music' the player needs to see the object making the noise (no acousmètre allowed)." Greg Dixon, who teaches game audio at an American college, agrees with that perspective: "Sound design is for player actions and music is for setting mood, creating drama, [and] heightening experience."

Chuprun also highlighted the broader curatorial role of the game sound designer—in some ways a parallel to Ben Burtt taking responsibility for film sound roles that had traditionally been separated: "Sound design is everything that concerns the sonic component of an audio-visual work. Music is one part of that sonic component."

It seems clear, then, that the gaming industry largely operates similarly to major films, with little confusion or conflation of music scoring and sound design roles.

Theatre

When we move to the world of live theatre, however, things become less clear.

Theatre productions can sometimes be more exploratory and less conservative than major movies or gaming. And theatre performance venues may offer some opportunities for inventive spatialisation. But producers still seem to struggle with how to deal with music that is not conventionally instrumental or vocal.

Two well-known books on theatre sound—one American, and the other British—even offer the view that the sound designer simply incorporates whatever music is provided to them, into their overall sound design (Kaye & LeBrecht, 2000; Leonard, 2001). If that music is instrumental or vocal, there may be some merit to that view. But both books seemed to overlook the possibility that the sound designer might actually be *creating* 'music'.

In contrast, most survey respondents—whose theatre experiences range from the 1980s to very recent productions—observed that they consider any non-diegetic or abstract sound *part of their musical composition*, with only diegetic or directly narrative sound effects attributable to the sound design.

Canadian composer Robert Normandeau takes an even more protective (and proactive) stance, reporting that he usually refuses to do sound design, while actively trying to make producers

aware of the distinction between that work and his role as an electroacoustic composer.

However, one artist—an American composer with a strong electroacoustic background (who wished to remain anonymous)—took the position that instrumental music he composed for a play was part of his sound design—and that the overall ‘composition’ was the play itself.

Clearly, then, there is room for diversity of views about what the artists’ roles are, and how to describe the results. And an artist’s understanding of their own responsibilities is obviously critical. But even though that understanding may be clear in their own minds, most electroacoustic composers working in theatre did report experiencing confusion about roles and work expectations, and inappropriate credits.

Two specialised contexts

Finally, we look briefly at feedback from two artists who are involved with creative contexts outside of conventional visual or dramatic media.

Jeff Reilly is a Canadian instrumental composer/performer who recently began creating ‘mixed’ compositions, incorporating fixed media into his performances and recordings. His view—likely informed by his parallel career as a radio producer—is that he is both sound designer and composer for these works.

But while there is no ambiguity in Reilly’s own mind about his dual roles, his expectations for audience recognition of that duality are quite low. He notes that audiences still have limited understanding or awareness of what is involved in creating non-instrumental sound materials that become part of more recognisable (to them) forms of music:

The sounds are just ‘there’ and the more skilful the designer (or composer) the more integrated and natural they seem, which makes any recognition of the craft and creativity even less likely.

Reilly also notes an interesting contradiction: this lack of recognition is happening at a time when audiences’ exposure to media is generating an increasing “expectation of highly produced, sound-designed environments.”

Stephen Barrass is an Australian artist and professor. Much of his personal artistic work focuses on creative applications of data sonification, such as designing aesthetically interesting sonic outputs that correspond meaningfully to a variety of data inputs, in various creative contexts.

Barrass also points out the existence of an alternative creative sound activity that he calls “musification” or “data sonification for musical purposes”. In that work, composers use data sonification “as a way to generate musical structures in a manner similar to algorithmic or aleatoric musical composition.”

Neither process highlighted by Barrass fits conveniently into our over-simplified duality of electroacoustic music and sound design. At the same time, they clearly illustrate that there are well-considered creative activities in the sonic arts that lie outside of what might have traditionally been considered ‘composition’ not so long ago.

And that seems to support Wishart’s suggestion that we retire the term ‘composer’, and find something that better encompasses the breadth (and depth) of current creative work in sound.

Conclusion

The Elephants

There is an expression in English—‘the elephant in the room’—that refers to important subjects that are being awkwardly ignored, despite their obvious looming presence. And our discussion certainly brings a couple of elephants into the room, whose presence we need to at least acknowledge.

Art - Craft - Design. The first is the (seemingly eternal) debate about ‘art’ vs. ‘craft’ vs. ‘design’. Sonic work is intangible output, of course, as distinct from the physical objects that originally triggered that debate. But a parallel question still prevails: are the differences in meaning of those terms substantive or merely territorial?

It seems likely that any baggage that ‘design’ accumulates in other contexts will be carried forward to ‘sound design’. Those who value or admire visual design may be inclined to take the same view with something titled ‘sound design’—while those who tend to dismiss ‘design’ as something less than ‘art’ will likely be less charitable.

The word ‘craft’ is possibly even more weighted down with unwelcome baggage—baggage with its own very complicated history. Visual artists who work in what are known as ‘craft media’ (such as textiles, metal, or clay) may still be dismissed by those who consider painting, drawing, or sculpture to be more ‘important’ or ‘pure’—often because the latter media are (rather inaccurately) viewed as something other than ‘functional’.

Function. That leads us to our second elephant: ‘function’—and, of course, its dubious offspring, ‘functional music’.

Clearly, we must acknowledge that sound design *is* often overtly ‘functional’. After all, its primary purpose, at least in most of the contexts we have considered, seems to be to serve another medium or a larger work.

But the elephant just sighed rather heavily: is that, in fact, really fundamentally different than the overall role of most music in our lives? Is there really any context in which music is *not* ‘functional’ in some way?

My own view is simply that, even if the conception of a musical work was ‘abstract’, once it is realised as sound, and presented to listeners, it will indeed be functional, in that it will serve to evoke a range of reactions or responses from those listeners.

Thus it seems that we can safely ignore ‘function’ as a potential difference between electroacoustic music and sound design.

So... practice or perspective?

The title of this presentation questioned whether electroacoustic music and sound design should be considered distinct creative practices, or simply differences in perspective on what is largely the same creative practice.

When we reviewed artistic contexts, and feedback from artists working in those contexts, we found a fairly clear divide between how sound design is viewed in relatively larger commercial productions, as compared to smaller scale or more artist-driven projects.

In major commercial productions, the sound designer—regardless of how compositional their approach might be—is typically not viewed as a composer, but rather as a member of the

‘design’ or ‘production’ team. In other words, their output is viewed as a particular production *practice*. But once either the budgets shrink or the creative territories open up, the roles do tend to merge—sometimes confusingly so—and the sound designer role seems more like a malleable *perspective* on the overall task of realising effective sonic content in support of a production.

The question then remains: how should electroacoustic composers respond to this potential confusion?

There is certainly no universal approach that will address every inconsistent credit or confused production role—let alone reliably clarify the distinctions between electroacoustic music and sound design. We can try to correct terminology at every opportunity, and push for appropriate wording in contracts and credits. And, of course, we can certainly attempt to expand the view of any colleagues who might be trapped in the ‘lattice’ (Wishart, 2000: 11).

But when those efforts fail, I try to remind myself that, as an electroacoustic composer, I work in a medium that has the distinct advantage of functioning in a far more chameleon-like manner than instrumental music.

And— unlike our elephants—artistic chameleons can choose to blend in with their surroundings, while still pursuing their own creative goals.

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