

‘HOLLYWOOD SOUND: PART ONE’

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Abstract

Film industry, or more specifically *Hollywood*, convergence within game development has arrived. It's happened fast, and in a very big way. The next generation landscape promises even more integration and spectacle in this direction. In this three-part feature we will take a look at how the three different aspects of game-audio, music, sound effects and dialogue, are affected by that arrival.

We begin with an overview of music, taking a look at the opening of the interactive world to Hollywood composers and the record industry, and how that content is becoming integrated into video games.

New Musical Structures: Communicating Interactive Structures to Traditionally *Linear* Film Composers

Migration *from, not to* Hollywood

For designer, producer or sound director, working with composers, not to mention big name Hollywood composers, can be a challenge. Here we consider the inherent differences between content and structure in both cinema and video game music.

It is often said that the games industry is perceived by composers as a stepping stone, where one can train, or at the very least *get paid*, until film or *real* work comes along. Over the last five years the stepping stone has transformed and now offers far easier navigation in the opposite direction. Being a small budget game composer has never really represented a clear path into linear post production of mainstream cinema, whose roles and employment hierarchy are rigidly defined after over 100 years of industrial history. The most talented Hollywood film composers are instead migrating to games, larger audio budgets enable publishers to bypass the 'sample based' and employ the best composers, arrangers and orchestras working in Hollywood. This allows the games industry unprecedented access to the highest quality of cinematic music.

Danny Elfman's recent work on Big Blue Box's 'Fable', and the more recent mention of Howard Shore's involvement in Webzen's 'SUN' instigates a trend for name composers that is equally becoming established for Hollywood voice talent, sound effects creation and screen writing. Hollywood's finest actors for example are now lured to games by the fact that, among other incentives, rather than embarking on a year-long training and pre-production schedule, and rigorous and tiring location shooting on a film, they can earn similar money for doing a few day's of voice work in a comfortable sound studio.

There is a proven economic advantage to employing name actors and name composers on a video game; it gives Public Relations a hook to grab onto and to generate much larger PR budgets, this directly equating to increased revenue. Ask any producer how sound can sell more copies of a game and you will get the same answer: Big name voice talent. Now that the score is moving into that realm - it is time for the composers in our industry to integrate on a much larger scale. The 'Name composer' (1)

The incentives for the Hollywood composer are evident. Working on a game actually affords the composer a temporal luxury in that the development time on a large game far outstrips the small amount of time they would have to work on a feature film. Traditionally a feature film commission requires that the entire score is written, arranged and recorded as soon as a temp edit of the film is created. There are exceptions to this, the film composer Gabriel Yared works exclusively on a film title from day one of a project until it is completed; however, not many composers have this luxury. A final edit may result in a few changes to the timings and structure of the piece, but that period of time between the temp edit and the final edit is pretty much all the time the composer has to fully flesh out the score. So let's take a look at the videogame / film music landscape.

Bill Brown, composer for videogames such as 'The Incredible Hulk: Ultimate Destruction' and 'The Lord of the Rings: The Battle for Middle Earth' as well Motion pictures such as Michael Mann's 'Ali', Oliver Stone's 'Any Given Sunday', and recently the television series 'CSI New York', suggests:

"First, I think something that is worth sharing is how qualitatively speaking, games, films, and TV music are merging. Over the past 10 years, we have been slowly bringing the consciousness of the value of live orchestra (that is taken for granted in films now) into games. [...] Another thing that comes to mind is the 'cinematic' approach to video games. This to me means more attention is being paid to how music is working to support the narrative of the game - music is now taking the next step in gaming to become a deeper part of the story-telling experience. Game developers are truly interested in the depth and dimension music brings to their product and are willing to invest more now than ever to take their project to that next level. Developers are really understanding that a 60-90 piece orchestra sounds better than orchestra samples and that makes a difference in the impact of their game. Triple A titles and A-List films are enlisting some of the same players today. Howard Shore, one of my favorite composers, is included in that new cross-over group of artists. This concept of cross-over artists is becoming more and more the standard for our industry." (2)

The fact that names like Howard Shore's or Danny Elfman's are mentioned with such excitement in game music circles reveals a great deal about music in games, especially as Elfman only wrote a main theme for 'Fable'. Why aren't we talking about the other composers on 'Fable' who adapted, fleshed out and integrated this 'theme' into the core mechanics of the game? This is again representative of the way that games are marketed, in a similar way to films. There is probably little difference in terms of quality the 'non-name' composers on 'Fable' and the work that Elfman did; however, Elfman's name is the currency. It is *his* name that is used as an index of quality in the public mind.

Garry Schyman, composer of music for both games 'Destroy All Humans', 'Voyeur', and films 'Lost In Africa', 'Horse Player' and 'The Last Hour', argues,

"When truly creative opportunities present themselves composers, even Hollywood's most famous, will want to get on board. Games have evolved to a point where game music has become as important an element to games as it is to films, and the quality expected by game companies is very high now. I think game music is the place to be at the moment for any composer interested in plying his or her trade. What is likely is that composers will cross over back and forth between the two genres." (3)

This idea of a crossover artist is something that both Bill Brown and Garry Schyman see as clear for the future of composers. A future where there will be no categorization of either 'game' or 'film', but simply 'composers.

There are some interesting reasons why the games industry would look to a composer of Elfman's caliber. It can be viewed as a sea change for game composition that breaks down some previous boundaries - in the eyes of gamers, critics and the composers themselves, games are becoming recognized as serious cultural artifacts. This is intensified by the huge sales the medium is generating, not to mention the maturing and stratification of the overall core demographic of gamers and game creators.

Structure

There are vital structural differences between the music required for a motion picture and the music required for a video game. Nonetheless, both film music and video game music are aesthetically close.

Garry Schyman,

"In film music you are writing to underscore and enhance the action or emotional experience the scene creates or perhaps you are even finding a deeper meaning to the emotions the actors are portraying. But with films, or television for that matter, the scene and the music accompanying it, once locked, never changes. Additionally, in a film score repetitive music can be an attribute, as the score will likely only be heard once. In games repetitive music can get turned off. Because a game the players' choices determine the experience to a significant degree, what the player is seeing and experiencing is somewhat unique each time they play. This means that music is rarely accompanying the exact same visuals twice and can easily get boring if repetitive, or hard to listen to if abrasive. So I find that the approach is quite different, though there is the obvious similarity that you are using music to enhance the emotional experience of the viewer or player." (3)

Bill Brown ,

"Structurally, where film is static and games are dynamic, the two can share most other aspects [aesthetically] speaking. The score can follow an overall arc in both mediums, it can develop themes, underscore action, communicate exotic locations, and add dimension to the emotional landscape of either medium using similar tools." (2)

From a technical and structural perspective, delivery formats in games and film are also moving closer together.

Garry Schyman

“With films and television the norm is to deliver a Pro Tools session with the music placed in time locked to picture. Music could be mixed as stereo tracks (still common in TV) or 5.1 mix (in nearly all films). Additionally, music could be delivered with separate stems (still Pro Tools session locked to picture) with various elements of the music separated out, giving the mixing stage the option of increasing or decreasing the volume of a particular musical element. With games it is common to deliver individual stereo WAV files that the audio lead will mix into the game. 5.1 mixes are beginning to be more common as well. Finally, it is common to deliver the music broken into separate musical stems so that different elements of the score can be brought in and out as game play dictates.” (3)

Bill Brown,

“Even the formats delivered to the developer and dubbing mixer can be the same. I deliver stems (separate instrument groups in tracks for each cue) to both my music editor for films and TV, as well as to some developers for use dynamically in games. This also gives them both an opportunity to mix in 5.1 where applicable” (2)

Working with a solid system and a solid implementer is critical to the success of any interactive score. Garry Schyman continues.

“It is my experience that in games the music implementation has become a critical element in how you write the score. Film music implementation was settled 75 years ago and has changed little since. But I’ve found that with games the implementation creates challenges and can literally dictate the approach one takes. Music must be flexible enough to change with the players experience and yet it is not possible to write and implement dozens of hour’s worth of music to fit every possible game scenario. The audio lead is often the first person you will play music for as you are writing the score. Because they have most likely been involved from the games inception they have a very good idea of the style and approach that the developer is looking for.” (3)

Bill Brown,

“In film, I work most closely with the director, film editor, and my music editor. Ideally, the director has a clear vision that he or she can communicate to me as we collaborate on the project, and/or an open sense of creativity and collaboration that we use to the advantage of the film. This isn’t always the case, so sometimes producers are involved creatively as well - hopefully, the conversation stays positive, creative and focused. My intention is to bring as much harmony to that process as I can for myself and others, because the more cooperation there is on all fronts, the better the end result will be - not to mention how much easier and more graceful the process will be for everyone.

In games, I most often work directly with the head sound producer and several of the people from the creative team on the project like designers, artists, and writers which helps me get a feel for the overall vibe of the game - similar to the creative process I have with a film editor and director.” (2)

Scott Morgan, the Sound Director for Radical Entertainment who worked with Bill on ‘The Incredible Hulk: Ultimate Destruction’ in order to implement his score into within the game, concurs,

“As Sound Director and music implementer I really bookend the music production process. I cull as much information as possible about the game, its story, characters and structure from the design team. With this information I provide the composer with a framework within which to work. I also act as a bit of a filter for the composer, ensuring he/she is not inundated with too much information or information that may not be critical to his/her process. After this, I have little impact on the music other than providing both technical and aesthetic feedback. Once the music is written, I then begin the process of implementation, which is comparable to the role of music editor in film. I edit and arrange the music to fit within the dynamic of the game, mostly sticking to the agreed upon framework set up at the beginning of the process, but occasionally grabbing from other pieces or requesting additional elements from the composer to make it all work within the interactive nature of the game.” (4)

Roughing out the system.

The following example system can be applied to seasoned game audio composers or linear film composers unfamiliar with game work alike, and is intended as a suggested guide for working with composers of any caliber.

An often overlooked factor in quality interactive music is not through the musical language itself, i.e. not through the rests and semi-quavers, not through any serialist aesthetics or even any electronic timbral breakthroughs, but a clearly defined and communicated stylistic and structural language based on the content and the systems of the game. This is exactly the way that music for films constantly manages to be different, bold, and perhaps one of the most critically fertile grounds for contemporary music today. It is the stylistic and structural language which differentiates film music from other musical forms such as opera, the symphony, the pop song or the oratorio, all defined by structure rather than style. In terms of video games, a sound lead will work with designers, Code and AI code teams to realize, solidify and communicate this structure on a game per game basis back to the composer.

This process is more complex than simply coming up with a structure, talking to the composer about it and then taking delivery of the music.

A Hollywood Production Model.

The structure in question will require an initial design, but this does not mean that the design will remain intact for the length of the project's life. In fact, due to the metamorphosing of the game and its inherent game play systems, the structure used for music should be fully expected to fundamentally change two or three times during the project's lifetime.

Fundamental game play systems will be designed, tested, scrapped, re-designed, scrapped again, re-designed again and finally re-implemented and re-tuned. During the course of these changes the music is expected to be there and functioning. It may not be evident how the final music should really be structured at all until the final tuning stage of the game. As has been discussed in many game audio articles, having the composer come on board right at the last minute is not an acceptable solution - although it would be the correct time in terms of getting final implementation locked down.

So, why bring in a composer early onto a project if the system isn't designed, if it's all going to change and if it does feel like it's just going to be a nightmare of re-doing the same work over and over again?

There need to be three points of contact on a project for a composer. I have used four phases with filmic production analogies below (fig.1) to describe a project's lifetime. The Primary (Pre-Production) phase is where the stylistic parameters are evolved; this is also known by the composer as 'getting the gig'; a particular style of music is required for the game, driven by the content and the style of game play. You will notice there is no work mentioned for a 'Secondary Phase of Pre-Production' period of the project, as this is where the fundamental design and system changes make it frustrating and, in fact, almost impossible for the composer to get a clear idea of how to present their content in terms of structure. Structure is also of equal importance to Style. However style is not at as much risk as structure in game development. It is unlikely that the entire notion of what the game is will be changed during the Secondary period. Although, let's face it, it *can* and *has* happened to many developers, but it is less likely than the manifold structural ripples that will occur within a games development life.

1) Primary Phase: Pre-Production. The initial contact and the establishing of the stylistic parameters. The creation of several 'core' pieces of music which can be exported in many different ways (either delivered as beat mapped stems, or as a full session that can be chopped up by the sound implementers)
2) Secondary Phase: A Secondary Phase of Pre-Production. Little content required from the composer. Fundamental design changes. Sound implementers change the ways the core pieces are exported and made functional in the game. By the end of this phase the structure will be solid enough for the composer to be informed on the structure. Both the structure of the emotional and game play narrative, and of the micro structure (which will be introduced in the next section)
3) Tertiary Phase: Production. The creation of the large bulk of content, based on a quantifiable amount of levels or missions and created to fit the micro structure
4) Quaternary Phase: Post Production. The tweaking and re-exporting of final content. Writing final themes and transitional elements for a fully 'presentational' pass of the music

Fig.1

If a composer is involved in the project right from beginning to end on a daily basis, more often than not, their work will need to be redone and reworked so often that there would be a great danger of overexposure, a feeling of lack of creative control, and loss of job satisfaction, not to mention the frustration of working exclusively in one style for quite an extended period of time.

Notes on Interactive Microstructures.

Music in cinema, despite its sophistication in terms of content, is rigidly defined by, primarily, the film's stylistic aesthetics, and secondly its editing structure of the visual track; this is why so much frustration can be experienced by composers who have to rework their content to accommodate a new edit of a scene. However, once the edit and structure is locked and the information about the emotional content of the scene is communicated by the director, the composer's work is relatively straightforward.

Structural systems represent different concerns to those of musical language, and defining and communicating the structure to the composer beforehand is essential to success in game audio. With cinema, the editing language is more transparent. In games, it is not so easy for an outside composer to instantly understand the systems that might be in place under the hood of the game - it is through neglect of this that many scores fail to be truly interactive. Of course, scores fail in many other ways too - by being poorly technically executed, by being too literal, even by being too interactive.

In film music, the editing structure of a scene controls the length of the music required, the action even dictating the pace and the tempo of the music, dividing the score up into scenes and phrases therein; there is no real difference to applying the structures of interactive music to a composer's commission, merely a few more structural units which require the composer's initial understanding.

Here are some examples of elemental 'states' and 'units' of interactive music's micro structure that need to be communicated to, and understood by, composers.

Narrative State.

A 'narrative' state is a piece in which plays straight from beginning to end without the need to be interrupted by user input. A good example of this would be a cut-scene movie in a game, as these sections work in a predictable and linear fashion, the old rules of film composition can be applied: the exact timings and lengths of events, once locked, are predictable.

Continual State.

The second type of state, the Continual State, is basically a piece of music that needs to keep playing until a user input interrupts it. A good example would be a simple static theme on a menu awaiting input, or a particular section of a game in which the length of time for that section is an unknown parameter dependant upon many other factors.

Evolving State.

The third, which is an evolving state, is slightly more complex, and can consist of several stems of differing intensity. Here building intensity across stacked layers rather than linear temporal movement is required. In linear narrative terms this state is an unknown quantity: the length of time this music is to play for could be anything from ten seconds to an hour - the same as for the simple continual state. However, there may be many game-side factors which influence this piece of music. A good example would be a combat situation within a game. Entering the combat would trigger the continual state related to this, but then variables of how well or badly the player is doing in combat could be required to give audio feedback to the player and modify the music. If the fight is joined by two more enemies, the music may need to become more intense, and if the player runs to the side of the arena away from the fight to recover for a few moments, the music could again be required to reflect this less intense period of activity.

Transition to **Narrative Specific Units** or **Objective Specific Units** may also occur within an evolving state, if an objective is accomplished, such as collecting a critical piece of a puzzle. Transition to a short appropriate piece of music may be required to underscore the importance of that event.

Transitional Unit

The transitional unit is a short piece of music that bridges the two differing evolving states together. It may consist of a drum roll, a build up of some kind which allows smooth exit of any piece at any time and into the next unit.

Inaugural & Resolving Units

The Inaugural and Resolving Unit is a short transitional piece, usually only played once which can be played at any time during the looping continual or evolving states and which signifies an end to the particular piece of music. If the player is successful in combat the combat music will fade out while the triumphant ending to the piece is played over the top, if the player was unsuccessful then a more tragic piece could be played. What you hear and when you hear it, is therefore totally dependant upon the way the user interacts with the system.

This is not by any means a *definitive* system; it is intended as a simple structural guide for building a 'music map' of the game system. It should encourage communication of these structures to composers who are in fact more than familiar with such structures than one may think, although under a myriad of different names. The key here is communication of the music structure. This can only be done when that system is locked down, and that lock down can only happen when the game itself has been locked down. There may be an initial communication of style, but there should be a communication of structure only when there is confidence that it will not change.

Once the system and design has been defined and laid out (during the 'secondary' period of production), the scope of the score structure can be communicated to the composer in these or similar terms and this can even happen in terms of a template. The states and units mentioned here will of course evolve over time, yet they do form the core units for any interactive piece of music or ambience. From this a map of the musical scope can begin to emerge. This is where the choice of composer will pay off – he/she should be able to fully realize the score according to the system. Although the 'secondary' period will catch most of the design changes in a

game, it is not always the case. Any further changes need to be communicated as soon as possible to the composer, in the same way as in the changing edits of a film. If a major character were to be cut or changed, the composer should know, as this would potentially affect the entire score.

Film composers have long had their music defined by a predetermined structure. Every film has a different structure and a different musical approach and these differences are defined even more clearly and stylistically through genres. Video games function in much the same way.

If it 'Aint Baroque, Don't Fix It

Once style and structure are understood, there is very little else the composer needs other than the talent to deliver. If a game requires something innovative and different in terms of its score, it will be evident. The project itself must make these decisions. Game structures will prove the primary evolutionary force in redefining music for games. The structure and styles will evolve with the game play and emotional content needs of the project, emerging as new genres emerge, as before with cinema on a film to film basis.

The interactive arts may not represent the great breakthrough in the stylistic avant-garde some seem to be pushing for. The extant models of interactive music and their relationship with content, or 'image', have already been solidified into a mainstream phase. This is of course not to say there will always be stylistic and structural alternatives to any notion of a mainstream. Hollywood composing talent seems currently restricted within an exclusively orchestral context, and is arguably an initial phase of attaining critical currency on par with the film industry. Everywhere in the industry this push for 'equality' is prevalent, through specific BAFTA interactive awards, and in Grammy categorization. This will, in turn, open up more opportunities for established and successful composers from other media to enter the game development environment.

The Music Industry: Licensed Content

In much the same way that bigger name composers are being enticed into the interactive realm, the potential to make use of big-name licensed music content is also gearing up as the next-gen platforms all promise on-line compatibility. Hollywood films have, for many years, succumbed to the inclusion and cross promotional value of licensed music material, as in Flashdance's 'High Concept' marketing marriage of both film and music content (5). Licensed music can, of course, be used extremely artistically, in the case of Scorsese's 'Goodfellas' and the majority of Woody Allen's filmic output. However, this does often happen as an artistic decision, but more a decision on the part of executive promotional pressure on a project.

Licensed music content already has a similarly chequered history within the video game industry.

Garry Schyman,

"Licensed music makes sense in games when it is appropriate. In sports games and racing games it's an obvious choice – it works and sounds right. In any game that needs source music, it would make sense to license the songs rather than have the composer write new ones. What I think is a big mistake is thinking that 'kids' will buy a game because this or that band has contributed tracks to it. If a game is good they will come and if the songs actually are wrong creatively for the game then putting them in will make the game less appealing. Kids are smart and know intuitively when they are being condescended to. Songs do not entice people to buy a game and filmmakers have learned that lesson over and over again. When you look at the top 100 box office films over the last twenty years the list is nearly entirely populated with films with lush orchestral scores that droves of kids paid money to see." (3)

Used again as a predominantly promotional tool, licensed music has often sat uncomfortably within the video game's interactive content realm. The idea that the tracks were not interactive or 'reactive' to game play could be espoused as a reason why they would not survive. With the dawn of the I-pod came the notion of *user-defined* play lists and *user-defined* music content, notions already opened up by the x-box. There is now a whole universe of downloadable content waiting to be hooked up to your interactive experience.

The structural potential to adapt music content to game play is huge. Players become creators. We can use the analogy of a DJ, within the sampling and podcast culture, re-appropriating cultural content as the user sees fit, in order to create new un-intended (at least on the part of the original creators) juxtapositions, in order to illustrate where this phenomenon fits in a cultural context.

A game's soundtrack can be totally user defined and totally user controlled. Having a play list for combat, a play list for stealth, a play list for stunts, for pause menus, for any type of game play that the user wishes to define. This actually establishes a completely new realm of music for games whereby the user becomes partially a creator of the content they play.

This should not be an unfamiliar concept to the PC mod community who for years now have taken an active role in the games they play by sharing custom built levels, skins, and sound content. The next-gen consoles, to some extent, make this possible within the console market. Customization, skinning, modding, and user freedom is something wholeheartedly embraced by the Xbox 360's pre-release campaign.

Further to this, one can imagine a situation whereby the content of a piece of music can be scanned and 'beat mapped' by the console. It would be able to put the tracks into categories based on tempo, key or on 'genre' fields for certain categories of game play. It could even transition seamlessly from track to track in much the same way the DJ software (such as Native Instruments' Traktor DJ) currently allows the user to overlay tracks of similar tempos.

The sound implementers can be clever about how they set up the structures for any customizable content to fit into the game. They could automate the breaking up of any track into the interactive components mentioned above in the structural composition section. Identifying intros, outros, high intensity looping sections, as well as calmer sections or sections from different songs in the same key, musically educate the console to transition in a 'musical' way from a track in the same key to a related key. Programmatic stripping of audio data into useable chunks and re-appropriating of that data, is ripe for exploitation in online consoles that allow for user defined musical content to be used in any game. The old notion that licensed music wasn't adaptive will become a long forgotten adage.

Same game, Dual content.

In terms of music content, this could mean that the soundtrack a game ships with is only given a cursory listen before the user decides to utilize their custom content. This, in fact, makes it more and more critical that the user is given a hook on the music that is included in the game. Big name composers and exclusive licensed content may be the only way to do this. The notion that a game is a complete cultural artifact, a *gesamkunstwerk* (or 'totally integrated work of art'), in that its music, sound, performances, and visual style are all part of the experience has yet to be seen. One cannot imagine, for example, removing Howard Shore's score from such a fully integrated work as 'The Lord of the Rings' movies and replacing it with user defined content. Maybe this is because the very interactivity of a video game encourages a variety of individual playing styles, problem solving techniques, tastes, and is in direct contradiction to the experiencing of a story being told in 'one way'.

The sense is that future games will offer an 'authentic' experience with score and visual styles intact, as well as a modified option of the same game which offers users total freedom via customizable content. We are, indeed, already seeing these shifts being made in this direction.

Where next?

While game sound and more broadly speaking, video games in general, begin to adopt a Hollywood action genre model, both in terms of content and marketing, one can only hope that the games industry will truly mirror the film industry, in that there has always been an independent and underground vein which the mainstream feeds off. Where this will come from in the post-goliath, publisher-centric battlefield remains to be seen. Most independent games companies currently exist to be groomed and bought up by the big publishers. Only time will tell how the 'independent video game' will compete with the giant publishers, and how their musical needs will be serviced and created by a Hollywood or Independent sound production sector.

Next; a long overdue, in-depth look at Hollywood and mass entertainment convergence in Surround Sound, not only from the traditional technical perspective, but from the aesthetic and historical parallels of IMAX and Ride Film.

Notes:

- (1) This is not to say that 'name' composers will be doing all the work. In the model used by Big Blue Box on 'Fable', Danny Elfman provided a theme which was elaborated on and worked into the game by the in-house composers.
- (2) Bill Brown Interview by Rob Bridgett, July 2005. <http://billbrownmusic.com> / <http://composer4film.com>
- (3) Garry Schyman Interview by Rob Bridgett, July 2005. <http://www.garryschyman.com>
- (4) Scott Morgan, Sound Director for Radical Entertainment, Interview by Rob Bridgett, August 2005. www.radical.ca
- (5) 'High Concept: Movies and Marketing in Hollywood'. Edited by Wyatt, Justin. Schatz, Thomas G, (University of Texas Press, 1994)

Rob Bridgett was one of the first to complete the Master's degree in Sound Design for the Moving Image at Bournemouth University in 1999. He has since worked on several interactive guides for museums and art galleries while at Antenna Audio in London. Work for games includes sound effects for Dreamcast title 'Vanishing Point', followed by a 2 year in-house stint at Climax in the UK providing audio for 'Sudeki' and 'Serious Sam: Next Encounter'. Since 2003 he has worked as Sound Director at Radical Entertainment in Vancouver, Canada.

www.sounddesign.org.uk