

## Guitar Hero World Tour: a Creator of New Sonic Experiences?

By Matthew Ingram

The academic literature for sonic media and gaming is – too frequently – separated by method, politics and approach. To increase the dialogue between gaming and sonic discourses, this paper discusses the impact of the drum controller (for use with the Guitar Hero gaming software) and the potential for new auditory experiences and literacies. Sonic media is often more volatile than screen-based platforms. The advent of MP3s and the iPod has ensured that sound is the carrier for changes in media and meaning. There has been an evolution of technology which has subsequently configured a convergence or revolution in sonic media. Concurrently, there has been a growing trend in the gaming industry to replicate instruments into alternative controllers for rhythm games as a form of interactive entertainment. Generally, these input devices are considered as part of rhythm play rather than music generation. Predominant in this group of devices is the Guitar Hero® franchise where a controller is shaped like a guitar. While it does not feature strings, it has buttons that are pressed as part of the use of such controllers. In 2008, drums were added to this equation for the current seventh generation of consoles (PS3, XBOX 360, and Wii) with the release of a drum controller for the games Guitar Hero World Tour (GHWT), Rock Band (RB) and Rock Revolutions (it is worth noting that PS2 a sixth generation console is also supported to some extent). Whilst there have been previous instances of drum controllers with sixth generation consoles (Donka Konga, Game Cube), these have been limited. The latest incarnations have the potential to be electronic drum kits in addition to games controllers. This is a significant shift in controller potential. This capacity in the drums controller is reflected in GHWT and RB. GHWT also has the capability for the user to generate and share music through a platform known as GHTunes in a “music studio” mode. Rock Revolutions also has a limited music studio however the ability for sharing generated tracks is not available. The complexity of using GHTunes, the music generation tool in GHWT and the quality of the resulting songs has been questioned by some reviewers, however despite these reservations it is still a platform for music generation and sharing. Therefore it is useful in terms of developing the sonic media literature and to look at what has been achieved with the alternative controllers to date as the potential for this format in the future. The argument that the drum controller is now a musical instrument will be proffered. In addition their uses have a symbiotic effect with the uptake of traditional instruments.

There has been an international increase in the popularity of rhythmic and musical performance games since the late 1990s. This in part has led to the interface of alternative controllers for games consoles. Initially, the input could be described as being specifically intended for rhythmic play (Blaine 2005) rather than music making. However with release of *Guitar Hero World Tour* (GHWT) this perspective needs reevaluating. GHWT along with *Rock Band* and *Rock Revolutions* were the first titles released for the domestic market that had a realistic drum controller. The guitar controllers featured are an evolution of the already established controllers that involve the pressing of buttons as opposed to strings. There have been attempts to incorporate parameters such as tapping, they are still distinct from actually playing a guitar. The shapes of these instruments range from the iconic Stratocaster format to a Gibson Les Paul. The plots of these games are as simple as the title suggests. Essentially, single users can play along to the tracks in either a career-type mode or a quick play. Multiple players can use the various instruments in a band mode arrangement allowing for social interaction. The connectivity of the internet is fully incorporated into these games in a range of activities. GHWT is differentiated from the other two titles in this paper due to the fact that the drum controller is significantly more advanced than the other two. Whilst there have been previous instances of drum controllers with sixth generation consoles (*Donka Konga*, *Game Cube*) these have been somewhat limited. Other attempts at deploying drum controllers have included removing the pads. These have included *Wii music* where the remote controller and nunchuk are used to simulate drum sticks. However this is not an attempt to simulate real drumming so is therefore excluded from this paper.

GHWT features the ability for users to generate music through a “music studio” mode and disseminate it. This ability to share music and online gaming has been aided with the ease at which fifth generation consoles can connect to the internet combined with storage capacity either in the form of a hard drive or solid state media (it is acknowledged that the PS2 can also connect to the internet but it is not an integrated function of the console). This paper probes these advances and the subsequent combination of output that this has produced.

### **Importance of the drum controller for GHWT**

The drum controller on GHWT was designed to be realistic, with the inclusion of elevated cymbal pads, responsive pads and sticks. These inclusions in the design process were reported at the bequest of notable drummers; however this information may have been released as part of the marketing

machine. The controllers of GHWT have received positive reviews. The drum controller that is supplied with the Guitar Hero package still looks like a toy and is non customisable unlike a traditional drum kit but the user is able to interchange between left and right handed drummers within the game software. It has evolved from the simple devices associated with generation six consoles (Donka Konga, Game Cube). However is it a musical instrument? The drum controller is no different to an electronic drum kit and hence could be classed as an instrument that can make music. However it may be inferred that the supplied drum controller is effectively a jumped up toy, simply based upon its appearance.

To this end, a third party drum controller has been produced and that is marketed as a premier 'pro' version (Drum Rocker) which has the ability to move the pads and therefore appears similar in appearance to a traditional electronic drum kit. As the premier kit, it has a premier price. Therefore, it is unlikely it will replace many of the "toy" like controllers, however its existence means that it is a defence against those who argue that the interface is not a real instrument. In addition to the aesthetics it has the ability to be converted to an electronic drum kit and is marketed as :

Drum Rocker delivers the most realistic drumming experience available to any gamer, better than any other system on the market. That's because it was built by real electronic drum engineers from one of the largest manufacturers of professional electronic drums, Alesis.

#### Drum Rocker

They go further to stress the fact that it can be used as an instrument:

When you're ready to move from playing Rock Band to playing in a real band, you can swap the game controller module with one made by Alesis.

#### Drum Rocker

With these grand statements of playing in a "real band" via the Drum Rocker, it is feasible that some gamers will evolve into seasoned musicians and may even encourage the uptake of "proper musical instruments" this is subsequently discussed. Perhaps more importantly this shiny new bit of technology has the potential for a new use: the generation of real music. The inclusion of a "pro" kit may give the drum controller the needed kudos associated with the characterisation as an instrument. For the purposes of this research, it is assumed that the reader is comfortable with the notion/argument that the drum controller, be it the pro version or the toy like version, is now an instrument.

## **Music generation in GHWT**

GHWT contains a studio mode where users can create their own music GHTunes. This inclusion of the capability of being able to generate music is at the heart of GHWT. This is from one of the designer's perspective.

We give the players the tools to compose music...people might even find hidden talent they didn't know they had. "I can write music! Oh, I didn't know...I can write music in the game." I think it's opening it up to a lot of people. It'll be very cool.

Flores, 2008

They also appear to be very excited regarding the possibility of this.

Maybe become an Internet superstar of writing music in Guitar Hero

Flores, 2008

GHTunes has had significant criticism by reviewers regarding its complexity and the quality of music generated and yet there has been a massive uptake in writing songs and releasing them via this interface.

Debates around electronic music and whether software engineers are in fact musicians will rage probably until the end of electricity. GHTunes allows drum tracks to be effectively created in a "software" fashion. Beats can be added one at a time and endlessly looped. A drum track can also be laid down live. I believe this to be significant as it would hold true to many ideologies – particularly within the rock discourse - regarding live performance. Whilst that "live" performance is then captured by the software and can be altered and changed the fact remains it was 'real' to begin with.

## **Not the finished product**

GHTunes has the ability to act as a live recording studio and also has the ability to act as a multi-track recording studio and includes the experience of software manipulation. Multi-track recording has revolutionised the recording process. Brian Eno the renowned performer and producer described the introduction of the multi-track studio as:

Now this is a significant step, I think; it's the first time it was acknowledged that the performance isn't the finished item, and that the work can be added in the control room or in the studio itself.

Eno, 2004

For people who are cynical regarding multi-track recording, there is an irony that the creator of the multi-track recorder Les Paul is also the creator of the iconic Gibson "Les Paul" to which the GHWT guitar controller emulates. The natural evolution of multi-track recording was to move into software-based technology as opposed to hardware-based productions, which further emphasises the debate around musicians/composers who use software to generate music. The use of such software and synthesisers has been commonly described as part of electronic music or electronica. Although some theorists and musicians treat this instrumental formation as different to other types of music, theorists are noting a decline in such demarcations and divisions (Holmes 2002). Holmes also suggested that due to the technical nature of producing electronic music, the composer/musician does not purely focus upon the nature of composition. The functions within GHTunes have the power to have similar editing abilities to many of the popular domestic software such as Audacity (Audacity) and Mixcraft (Mixcraft). Potentially the drum controller interface has the ability for the musician/composer to move past the technical issues discussed by Holmes, however the use of GHTunes may still have the same technical issues associated with traditional music generation software. Once a user has created a track, they can choose to keep it for their own use or share via the internet.

### **GHTunes and the internet**

Within the current software of GHWT, players can link via the internet to partake in 'battle of the bands' or simply play tracks together, part of the attraction of music has been to play in a group and create music. The uptake in the creation of tracks and sharing has been substantial (community). Players can only initially upload five songs and if those songs are rated highly by other members of the community, players can upload more. This feature will allow the community to allow expansion of players who create songs that are acceptable to that community. There will surely be power imbalances associated with this and possibly the case of "if you rate my song I will rate yours" although peer review has often been used as a fair system in many online fora. Currently the songs generated using these systems have come across critics but as the format matures the potential of

“quality” might be achieved. However with some careful selection perfectly playable/listenable user generated content can be enjoyed.

### **So should everybody be Guitar Heroes?**

Hell yes! Well only if they want too. As with many Web 2.0 activities, there have been calls that this will revolutionise our total existence, but how many blogs exist that have never been read and are of questionable quality. On the counter attack has been authors such as Andrew Keen, whose book “Cult of the Amateur” (2008) puts forward the argument that Web 2.0 type activities are killing professional material in an age of user generated content. Whilst this argument may hold true with some Web 2.0 activities - a blogger on Manchester City football club may never have contemplated writing a book on the area and all the necessary paperwork in getting a book published - amateur music production as a form of entertainment/enjoyment is as old as time itself. This activity is therefore a natural extension of traditional activity such as Karaoke or playing in a local pub band and can be further extended by looking at the professional in such areas. A professional journalist may have gone through higher education then joined a newspaper and worked his way up after serving a pseudo apprenticeship, however a professional musician may have been self taught, never reading a note of music and had a lucky break whilst playing in a local pub band. This presents the extreme of the arguments but it is hard to ignore artists such as Eric Clapton who have followed this route. However these arguments eventually unpack with the realization that technology is no replacement for talent. It has been argued by Florida (2004) that ‘creators’ need “technology, talent and tolerance to develop the creative industries”. This is further echoed in by Théberge (1997) that musicians have become reliant upon technology and have formed a consumer relationship with electronic instrumentation. In addition the use of music as content for computer games has no harmful connotations or repercussions such as the first person ‘shooters’ or Grand Theft Auto. The worst that could happen is it could inspire a person to make some really poor music. There might be a possibility that the music could be played at excessive volumes and cause a public disturbance.

### **Benefits of GHWT**

There have been many links associating the benefits of playing computer games and musical instruments (Bittman 2005) for the individual/groups so combining the two might have a synergy previously unexplored. To date the first study on health benefits of using a drum controller has involved a notable drummer from the band Blondie and a research unit committing to investigating

the health benefits (Blondie). They are investigating the potential impact on relieving stress, obesity, autism and strokes. These are truly noble causes and will no doubt results in many scholarly outcomes. We are at the infancy of this type of technology and therefore we could make grand hypothesis about uniting the world through GHTunes and ushering a new age of world peace. We could then chose to remind the world of these hypotheses only if they came true and if they did not removed them from our untended blogs. But what might happen in a less headline grabbing way? In a more modest fashion, the first prediction that we must make is that this type of technology using a similar, if not more advanced interface will still be here. It is likely that benefits to individuals might be similar to those benefits of playing a “normal” instrument such as stress, physical workout, and better discipline. Maybe even Alan Flores’ hope that “people might even find hidden talent they didn’t know they had. “I can write music!” might come true. Putting aside the discussion of fame and fortune the most important consequence of GHWT is that it opens up a new form of leisure and pleasure. The fact that with GHWT you can do it:

- 1) With or without the internet.
- 2) With or without friends.
- 3) With or without creativity.
- 4) With or without talent.

### **Is Guitar Hero making ‘us’ less musical?**

Other computer/web based activities that are used in place of traditional media have come under some criticism, Nicholas G. Carr argued in his article, "Is Google Making Us Stupid?: What the Internet is doing to our brains" that using web based alternatives to traditional form of media could have “detrimental effects on cognition that diminish the capacity for concentration and contemplation”. This has been refuted by many workers such as Aaronovitch (2009). Carr ‘s argument is that reading on the internet is somehow shallower than being locked away with a good book and having a deeper form of reading. Similar arguments have been put forward by Brabazon (2006) with her work with undergraduates not effectively researching issues and relying just on whatever Google presents, based upon a few miss spelt words. So if one chose to put a few semi appropriate words in to Google such as “guitar hero drums difficult real instruments” there would be many articles, blogs, Youtube video putting arguments for and against the fact that the Guitar Hero franchise is not as difficult as playing a real drum. However I do not intend to do this mainly due to

the fact that primarily these drum controllers are allowing individual/groups access to types of instrumentation that was probably unavailable to users for a variety of reasons such as cost/space and noise pollution. So games such as *Guitar Hero* are probably not making us less musical they are just changing or expanding what music is. Could this interaction transform a previously non musically person into a musician? Many fora are suggesting this. We are seeing the first generation of this technology and to see if someone decided to become musical after playing GHWT remains to be seen. In addition, the reverse is also true where a real ‘musician’ could decide that creating and playing music within the GHWT platform is more desirable than playing real music in the real world and we could potentially have a shortage of real musicians and a surplus of plastic guitar heroes. This argument has echoes from the introduction of the synthesiser where the guitar and drums of real bands survived that onslaught there is no reason to suggest that they will not survive GHWT and probably coexist in harmony although data can always shed a glimpse on the future.

### **Our survey says:**

In an initial attempt to quantify the issues around the migration between games and musician, the American guitar retailer “Guitar Center” conducted an online survey and the key findings from the 7,000 participants are summarised below.

Of the *Guitar Hero* and *Rock Band* players that do not currently play a musical instrument, two-thirds (67%) indicated that they are likely to begin playing a real instrument in the next two years.

Nearly three out of four (72%) musicians who play games like *Guitar Hero* and *Rock Band* have spent more time playing their real instrument(s) since they began playing these games.

Eight out of 10 (81%) of the *Guitar Hero* and *Rock Band* players that have been inspired to play an instrument because of the games would like to receive a musical instrument as a gift this winter holiday season.

Sales of gear for first-timers at Guitar Center has surged along with the peak in sales for *Guitar Hero* and *Rock Band*. In the holiday selling season in the last quarter of 2007, Guitar Center saw a +20.7% jump in comparable store sales for beginner-level electric guitar & amplifiers. This surge grew even stronger through the first nine months of 2008, when Guitar Center's cumulative comparable store sales for the category increased +26.9%.

Gamedaily



This initial survey suggests that coexistence for mutual benefit may indeed be possible for the game based (plastic) rock and the real rock. Dr Larry Livingston the Musical Director at the USC Thornton School of Music is quoted as saying:

These games are a painless and fantastically seductive entrée to playing music. They engage your mind, body and soul, creating a whole sense of the movement of music.

Having tasted the experience, players may want to move from the simulated to the real. Therefore, it's no surprise that these games have whetted the appetite for the real deal.

Livingston, 2008

We are in an emerging period of this new technology and that once there has been a bedding in period it is possible that new data will have a more meaning full measurement into the status quo of this coexistence.

If we take the argument of Livingston forward, that this type of game involves a significant number of users moving from the simulated to the real instruments will these users ever become virtuoso musicians? To either prove or disprove this we will have to let time tell as these musicians emerge and to see if they receive the critical acclaim and perceived quality associated with virtuoso performers. Although it could be said that if the current generation of games inspires musicians of whatever quality then the benefits associated with that activity are positive.

### **Future of GHWT type games**

Currently there are plans to provide links between the analogue guitar and rhythm-type games (Guitar Rising 2009), whilst this currently does not interface with the current generation of GHWT, presumably it is a natural evolution of the format and a replacement for the controller type guitars. This evolution of the guitar controller into a real controller may aid the symbiotic relationship discussed previously. This integration would surely please many past masters and dearly departed users of electronic and instrumental music (Stockhausen, 2004) The keyboard is already in an electronic format so should potentially be easy to incorporate, however many of the forums associated with GHWT suggest the keyboard will not be the next instrument this may in part be due to the complexity of creating a game format for a typically five octave instrument or the lack of iconography associated with the keyboard. Although vocals are already in the game play of GHWT, they cannot be deployed in studio mode. This addition would potential open up GHTunes to the mainstream as the majority of music contains a vocal component.

## **Generated music dissemination?**

Although the current quality of generated tracks is questionable, many of them are greatly used by the GH community and we accept that this format is in its infancy and it is expected to improve. But could a track ever break out of the GH world? Currently the software has no ability to add vocals which is probably the limiting step, but with this reservation aside if a suitable body of tracks was generated that had mass appeal the music industry would surely find a clever way of stripping that material from the GH world, unless the generators were savvy enough to broker a deal with the industry that left them in control. It is possible that it could be used as a scaffold for a musician or group of musicians into the mainstream industry and traditional music generation. The potential is there but is the talent?

The software is currently at generation 1 for music generation, future iterations will add more and more capability than we ever dreamed a reality, and other possibilities for the future could include an online talent competition for groups of individuals to compete for a recording track, maybe Simon Cowell will make it to the Guitar Hero world.

## **Conclusion**

There is a strong case to believe the drum controller can be a real instrument that can generate real music. This will never be uniformly adopted. Is the generated music any good? Well, how long have we got and possibly life is too short to debate if any generated music is any good? If it works for the players then what is the harm? Using initial data it appears that the use of GHWT and similar games support the uptake of traditional musical instrument, it is yet too early to say if this will result in any virtuoso performers or if the line between gamers, software engineers and musician will become too blurred to be able to differentiate.

The future of GHWT and its successors is sure to be great. It is suggested that a real guitar will be added to the next version; it is possible that the seventh generation consoles may have a hard time coping with that. After the guitar, surely the vocals will migrate into the GHWT studio. Maybe five years down the line the first live gig by musicians linked via a GHWT type interface will be possible. Maybe 10 years down the line the most popular track downloaded from iTunes will come from GHWT type genera. The next logical step is for a perceived piece of “quality” media to be generated from this type of software and then wait for the star to emerge.

For the causal user maybe this will not even register on their radar and they will just be having fun jamming with their new friends from Africa or West Bromwich.

Me? .. I am off to play “Go your own way” and hopefully these genera will too.

## Reference

Aaronovitch: [http://www.timesonline.co.uk/tol/comment/columnists/david\\_aaronovitch/article4517674.ece](http://www.timesonline.co.uk/tol/comment/columnists/david_aaronovitch/article4517674.ece) accessed 15/5/09

Audacit: <http://audacity.sourceforge.net/> accessed 15/5/09

Bittman B, Berk L, Shannon M, Sharaf M, Westengard J, Guegler K, Ruff D. “Recreational music-making modulates the human stress response: a preliminary individualized gene expression strategy.” *Med Sci Monit* 2005; 11(2):BR31-40

Behrendt F. “From calling a cloud to find the missing track: artistic approaches to mobile music,” 2005, [http://www.viktoria.se/fal/events/mobilemusic/papers/Behrendt\\_mmt05.pdf](http://www.viktoria.se/fal/events/mobilemusic/papers/Behrendt_mmt05.pdf) accessed 1/5/09

Blondie: <http://blogs.mirror.co.uk/science/2009/02/blondie-drummer-launches-study.html> 1/5/2009

Brabazon T. “The google effect: Googling, Blogging, Wikis and the Flattening of Expertises” 2006, *Libri* 56 157-167

Community: [http://community.guitarhero.com/gh\\_tunes/leaderboard](http://community.guitarhero.com/gh_tunes/leaderboard) accessed 15/5/09

Drum Rocker: <http://www.iondrumrocker.com/> accessed 1/5/2009

Eno B. “The studio as compositional tool,” in C. Cox and D. Warner (eds.), *Audio Culture*, (New York: Continuum, 2004), 127-130

Flores: “Interview with Alan Flores“ <http://interviews.teamxbox.com/xbox/2304/Neversofts-Alan-Flores-Interview/p2/> accessed 15/5/09

Florida R. “The rise of the creative class: and how it's transforming work, leisure, community and everyday life” (Basic Books, 2004)

Gamedaily: <http://www.gamedaily.com/games/rock-band-2/xbox-360/gamenews/guitar-hero-rock-band-players-showing-increased-interest-in-real-instruments> accessed 15/5/09

Google stupid: [http://en.wikipedia.org/wiki/Is\\_Google\\_Making\\_Us\\_Stupid%3F](http://en.wikipedia.org/wiki/Is_Google_Making_Us_Stupid%3F) accessed 15/5/09

Guitar Rising: <http://gizmodo.com/352800/guitar-rising-for-real-guitar-heroes> accessed 23/4/09

Holmes T. “Electronic and experimental music”, (New York: Rutledge, 2002)

Keen A. “The cult of the amature”, (Doubleday Business,2008)

Livingston: <http://www.lup.com/do/newsStory?cId=3171507> accessed 18/5/09

Mixcraft: <http://www.acoustica.com/mixcraft/> accessed 15/5/09

Stockhausen K. "Electronic and instrumental music," in C. Cox and D. Warner (eds.), *Audio Culture*, (New York: Continuum, 2004), 370-380

Theberge P. "Any sound you can imagine: music making/consuming technology", (Hanover: Wesleyan University Press, 1997)