

Audio

The sound of VR



Back in April, Grand Central Record Studio launched its own VR audio division - GCVRS. Head of VR **Mike Hill** looks at the evolution, and everlasting potential that the trending medium offers in the audio sector

VR has been waiting on the fringes for decades. Reinvention followed reinvention, iteration after iteration, yet it has only been in the last couple of years that we have really seen the technology emerge onto the mainstream.

It's an exciting time, comparable with the way the smartphone evolution dramatically changed how we communicate on mobile devices in the space of ten years. VR and 360-degree video are on the cusp of transforming immersive experiences across a spectrum of industries. But what does it mean for the creatives?

360-degree video and VR both have incredible potential, and whilst they share one huge similarity in offering the viewer a full 360-degree perspective of the action, it is important to note that they are still very much different mediums for brands, agencies and film-makers to explore. 360-degree video offers the viewer a further perspective on a story or environment that they are not used to experiencing in 16:9 view. VR, on the other hand, opens the door to interactive experiences that allow the viewer to be part of the content itself. Both mediums are relatively new but if harnessed correctly, can be used as an extremely powerful storytelling device.

The applications of both mediums also extend beyond advertising, brand-building and gaming. They can be used very effectively in specialist training within both the medical and military industries for instance, and can also serve as an incredibly engaging tool for education. At GCVRS, we worked on a project for the Natural History Museum last year that brought prehistoric creatures back to life in VR whilst highlighting to people the rapid increase in extinction with today's wildlife. It seemed to be a huge success in classrooms across the country, as children watched the content on smartphones within Google Cardboard headsets. The sound for these films is something we had a lot of fun designing, and it was one of the first films on YouTube 360 to feature a fully trackable 360-degree spatial sound mix.

The initial roots of our new specialist division, GCVRS, began taking shape over eight years ago when our VR technical lead, Steve Lane, and technical director, Ivar Taylor, started exploring the possibilities of spatial sound and how it can and cannot be used in the mainstream mediums for advertising and marketing. Spatial sound had limitations in its reach due to the fact that unless you had a swanky cinematic speaker set up,



headphones would always be required to hear the full effect. Fast-forward to today and it is impossible to ignore the ever-growing presence of people watching content on their devices in their everyday lives; from the daily commute to sitting by the pool on holiday, people are constantly watching



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content on their phones/tablets and most importantly for us sound lovers, they are listening with headphones. This gives us the potential to create immersive spatial sound without the need for users to have expensive multi-speaker set ups.

An often frustrating part of working in audio post is that sound is an afterthought in the production process. It can be an incredibly powerful tool when used correctly, but sound is not often given the chance to lead the narrative in traditional AV content. In the world of 360-degree/VR, this paradigm has been flipped on its head: 360-degree/VR gives sound just as important a role in the narration as the visuals. By using spatial sound (i.e. 3D audio, fully trackable within a full 360-degree environment) we not only heighten the immersion of the experience for the user, but we can also direct them to where the filmmakers want them to be looking; for example, audio cues coming from your back left to help you turn around and focus on a particular part of the storyline. Sound has never played a more important role.

Having worked in 360-degree/VR alongside production companies, agencies and brands for the past two years, we realised that while there is a significant difference in the approach to designing spatial sound and mixing in a three-dimensional space, the importance of having an audiophile in charge of the sound rather than a programmer is extremely important.

'These new immersive mediums, no matter how they evolve, are here for the long run – and the race is on to see who will master them first'

Why spend lots of time crafting great sound if the end result suffers because a sound mixer is not implementing the final sound in to the VR build? With 360-degree/VR being increasingly embraced, demand is clearly growing to

generate this content. But as it turns from niche to mainstream, the demand for high-end production is soaring. Therefore, sub-par audio will no longer do. That is why we felt the time was right to fully launch our new division, GCVRS, to specialise in high-end spatial sound design and 3D mixing.

With full support across Facebook, YouTube and Twitter alongside the development of more affordable ways of shooting and watching 360-degree/VR, the consumer reach is expanding rapidly. And as the technology grows and grows, and the hardware improves, this reach will only get bigger. There is an obvious level of scepticism when something new pops up in our industry and it will take time for creative teams to use the medium to its full potential. There are lots of new tricks to learn, new workflows to finesse, and whole new approaches in the way ideas can be exploited but these new immersive mediums, no matter how they evolve, are here for the long run – and the race is on to see who will master them first. ■