Module 7 Supplementary Reading

Stereo Lab - SOS

- 1: Blumlein's intensity stereo is inherently mono compatible
- 2: You can make a fake mid-side recording from a mono recording.

A Case for Ambisonics - Rode

- 1: Ambisonic recordings allow you to create any 360 degree soundscape you want.
- 2: One ambisonic mic can emulate any microphone type, steerable in any direction, if you want.
- 3: Reasons to use ambisonics: 1. Surround sound applications, 2. Projects that need flexibility in post, 4. VR and 360° video productions.

Ambisonics Explained - WAVES

- 1: Ambisonics can be decoded to ANY speaker array. Ambisonic recordings deliver a full sphere complete with elevation.
- 2: Ambisonics uses four channels (WXYZ)

A Crash Course in Atmos - RecMag

- 1: Dolby Atmos is 3D audio. To do it properly you need at least a 7.1.4 system (.4 is 4 speakers above you).
- 2: You can't use bus compression in Atmos.

Why Boom Doesn't Use Ambisonic Microphones

- 1: The only reason to use an Ambisonic mic is if you think it might be better having a surround and VR compatible recording in these scenarios as compared with having only stereo or even mono
- 2: "The quality, character and emotional depth of recordings with Ambisonic microphones was not at all comparable to other recording techniques.

Mixing Atmos - Andy Bradfield

- 1: You mix quieter in Atmos than in regular mixing (around 79 dB SPL)
- 2: Atmos will decode the file to play on ANY system.
- 3: You have to make 2 mixes still... stereo and Atmos.

The Aeronauts Movie

- 1: Mixed in 7.1 for on the ground and then atmos after the balloon.
- 2: Atmos creates a completely fluid pan which makes it possible to spin everything around the listener smoothly.

Written Assignment - Answer in doc or pdf file

1. Please answer this first question for each of the supplemental readings.

What were your two key takeaways after reading the assigned article and why? In other words, what was important to learn?

The following questions can be answered for the seven articles considered together.

- 2. What two significant applications of immersive technique did you notice that were similar or common between articles?
- 1: All of them offered a brief explanation of what ambisonics/atmos is.
- 2: A lot of the articles suggested to mix in 5.1 or 7.1 and then expand to atmos.
- 3. What are two things that were approached differently?
- 1: One of the articles suggested mixing quieter in atmos than doing other mixes.
- 2: The same article suggested that it might be too hard/too much trouble to use ambisonic gear on certain recordings.
- 4. Is there anything in one article that seemed to contradict what was done in another article?
- 1: The Boom article was very critical of ambisonics, and didn't seem to think they were very useful.
- 5. What four things covered in these articles you think are the most important for a mix engineer to remember as you approach a new project?
- 1: You have to make 2 mixes still... stereo and Atmos.
- 2: You can make a fake mid-side recording from a mono recording. I didn't know this!
- 3: To do Atmos properly you need at least a 7.1.4 system (.4 is 4 speakers above you).
- 4: Atmos decodes the files to play on ANY system.
- 6. Is there anything you are confused or unsure about in the content? The more detailed the better.

Nope! This is really cool!