

# The centre of attention

If sound is an increasingly important tool in differentiating programming, then broadcast sound engineers need to pay special attention to the centre channel, argues **DENNIS BAXTER**.



Let's take a moment to consider the landscape of sound for television. There is mono, stereo, surround sound, and soon 3D. Along with each format comes divergent opinion about anchoring the soundfield to the picture. The centre channel is critical to the surround sound experience and contributes to the viewer's perception of realism and should be a major consideration in the soundman's creative planning.

The use of the centre channel varies depending on the material that is ultimately televised. TV programming, such as movies, sitcoms, and scripted dramas, use the centre channel in a different way to factual programmes such as sports, news, and talk shows. Variety programmes, such as *Idol* and the Olympic Opening Ceremonies, sometimes use the channel without definition and consistency.

The film industry generally considers the centre channel as the anchor speaker for the picture. Essentially, anything that makes a noise is routed to the centre speaker to localise the action. In a theatre setting, a centre speaker is supposed to be in the middle and behind the screen. With television, the obvious problem is that there is no good place to put a centre speaker.

Factual productions such as sports and news usually place the commentators and voice packages directly in the centre channel. Sports production practices vary among broadcasters in using the centre channel for sports and field of play (FOP) sound, however it is common practice to use the centre channel with packaged music.

Entertainment and music productions sometimes mix the vocals to the left and right channels — often with processing — while the script or commentary is mixed directly to the centre. But what about the phantom centre? Is it competing for listener space with the centre channel?

Some producers and commentators want the voice spread out from the centre channel into the left and right channels and there are some mixing consoles that have a built in feature to do this.

Finally, some viewers want a strict use of the centre channel which would let them adjust the level or even eliminate the commentators.

My colleague, Michael Nunan at CTV Canada, believes that the centre channel is not strictly a dialogue channel and questions why the commentators are in the front. He cites figure skating: the viewer is watching skaters front and centre, but hears the commentators coming from the screen. Why shouldn't the commentators be in the surround channels where they are sitting beside you?

First, you would hear the action better without so much acoustic soup in a single spatial plane. Surround sound is a wonderful opportunity to open up a mix and take advantage of the human brain's ability to select, discern, mask and mix specific bits of audio information.

Certainly movies, news and drama should use the centre channel for dialogue as well as front and centre action. But for sports, consider this concept — move the commentators into the side soundfield. You see the commentators at the top of the show and sometimes during the show, so why should they be in the centre channel? By placing the voice in the side channels, you can completely change the acoustic soundscape of sports.

However, inconsistent use of the centre channel may be distracting to the viewer and this could be a problem for set-top downmixing. So what are the issues we need to consider?

Programming is now and always will be presented across many platforms. Sometimes

a programme is up-converted or downmixed to conform. The reality is that sound must be produced to match the picture through the delivery scheme. Just like the theatre that is designed to reproduce the experience, the home theatre should be properly set up as well.

In an age when competition for viewers is keen, sound should be considered a differentiator as well as a product enhancement and high standards should be applied for all methods of production and delivery. The sound practitioner should consider using everything from enhanced psychoacoustics processing for 'ear-buds' to surround 5.1, 7.1 or more.

At the consumer level, there is a growing audience with a good sound setup, therefore delivering the experience is necessary to keep viewers happy, and advertisers buying time.

Back to the question: do we need a centre channel? I think we do because dramatic presentations benefit from its use. Film and drama have years of experience at soundtrack creation, while television is still finding its way. As the picture becomes dimensional, 3D sound will be requisite to complete the experience.

Sports are a significant part of any broadcaster's survival strategy and the presentation is increasingly important for all levels of viewers. The Masters Golf Tournament in Augusta, Georgia, will be simulcast in HD and 3D courtesy of Sony. But what is 3D sound? I cannot find any real definition and I wonder what CBS network has in mind for it? Hmmmm, do you need special headphones ...?

As the landscape of sound for television changes, the soundman's challenge becomes greater. A combination of creative interpretation, technical intuition, and black-box electronic technology is the future. Accordingly, the broadcast community needs to listen, evaluate and channel the sound of the future. ■