The Stereo Imaging of "Side Effects" by the Chainsmokers

"Side Effects" is driving electronic track with a breathy vocalist. The song makes effective use of stereo image in subtle ways to increase the overall impact and perception of space for the track.

In the beginning of the track, we hear a synth 'downer' along with a reversed vocal part. The downer appears to have some very light tremolo, it pans between left and right quickly, that gives me a sense of disorientation. The vocal comes into the piece immediately after the downer ends along with a four on the floor kick pattern and thumpy bass guitar. The vocals sit very in front of the mix at this point with some echo at the end of each phrase to give it a sense of dimension. It sounds like there may also be a light reverb applied to her recording, adding depth and pushing her closer to the listener in the mix.

The pre-chorus segment cuts down on the reverb slightly. This reduction in intensity gives the drop into the chorus a greater deal of impact, at which point the reverb and delay are brought back along with some double tracking and harmonization. The harmonization has some panning applied to it along with time delay. The pre-chorus also has some kind of percussive clicking sound that pans hard left and right every 4 beats adding interest to an otherwise sparse segment. These effects repeat when we reach the second pre-chorus later in the song. The synth keys have a bit of reverb applied and seem positioned deeper into the mix. They also appear to be

panning back and forth in 4 beat intervals, much like the percussive sound but with a smoother transition between left and right.

The chorus appears to have a very subtle amount of auto-panning applied to the piano. It shifts back and forth between left and right but never enough to become distracting or jarring. The vocals are still relatively front during the chorus but don't stick out as much as during the verse or pre-chorus. The overall level is brought down ever so slightly so that the chorus has an up-front, in your face, effect. There are some string stabs that strike every so often during the chorus but they appear relatively far back in the mix. Low level and a decent amount of reverb lend to them being support for the mix. Again, not distracting just supporting.

The bass instrument throughout the track is entirely monophonic and commands the entire lower frequency range. It fills out the stereo spectrum providing a foundation for everything else to sit on. A similar statement can be made about the drums. They are relatively quiet in the mix and don't have much stereo information. They appear relatively centered which I believe is a decision made by the engineers to prevent focus from being taken away from the more important parts of the mix, such as the vocals and bass.

Overall, this track makes very good use of it's stereo imaging by not overdoing any single effect or panorama decision. It's a solid demonstration of how subtle stereo imaging can lead to depth and impact in addition to creating interest in a song.