Heuristic for Applying Dynamics Processing, Panning, and Equalization

By Mathew Gomes

Technique	Where is it in Audacity?	Why? What does this help me do?	Ask Yourself…

Monitor Headroom	Playback Meter Toolbar	• Evaluate the loudness for listeners and your soundwriting process
		• Identify sounds that contribute to overall sense of loudness
		• Identify moments with clipping
		• Anticipate playback, especially:
		  ○ Effects of loudness on arrangement
		  ○ Effects of loudness on affective response
		  ○ Effects of loudness for listeners/soundwriters well-being
		  ○ Effects of loudness on playback hardware
			Which sounds most impact available headroom?
			
			How do sounds sound relative to one another?
			
			Which sounds should be foregrounded? Which should be background?
			
			Is important sonic information "masked" by less important information?
			
			Does the soundwriting include opportunities to characterize sounds in terms of their relative proximity? (ie. fading away) Does it benefit from adjustments to relative levels of sounds?
			
			Should there be changes in foreground and background sound information over time? Why?

Dynamics Processing	Amplify Gain Slider	• Adjust the amplitude of individual or groups of tracks • Reduce or increase tracks' contributions to overall amplitude in all channels and all frequencies • Create additional headroom in all channels and all frequencies • Prioritize or minimize sounds • Detail the relative proximity or loudness of sounds	How does reducing or amplifying specific certain track levels affect your purpose and message? How does reducing or amplifying specific certain track levels affect the vividness of sonic detail? Are there other ekphrastic or mimetic effects that might be achieved by applying dynamics processing, which can enhance the purpose of your soundwriting?
Panning	Pan Slider	• Reduce or increase tracks' contributions to amplitude in left or right channels and all frequencies • Prioritize or subordinate sonic information • Detail the relative proximity or movement of sounds	Which sounds most affect the available headroom in the left and/or right speaker channels? Which sounds should be central or most audible? Would this sound benefit from a "center" panning (ie. equal distribution to left and right speaker channels?)

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Technique	Where is it in Audacity?	Why? What does this help me do?	Ask Yourself…
			Which sounds should be peripheral? Would these sounds benefit from panning to the left or right channels?
			How could changes in panning between the left and right channels over time affect the priority of information in your soundwriting? Are such changes appropriate? Why or why not?
			Are there other nondiscursive or mimetic effects that might be achieved by applying panning, which can enhance the purpose of your soundwriting? (ie. the sound of something moving?)

Monitor Frequencies	Plot Spectrum	• Evaluate loudness
		• Identify frequencies that contribute to overall amplitude
		• Identify frequencies that clip
		• Anticipate playback, especially:
		  o Effects of frequencies on arrangement
		  o Effects of frequencies affective response
		  o Effects of frequencies on perceived loudness
		• Detail the character Imagine or invent possibilities for detailing the soundscape
			Which frequency ranges most affect the available headroom?
			
			Which frequency ranges contain sounds that are most significant for the purpose of your sound writing?
			
			Are there frequency ranges which should accommodate greater or lesser amplitudes of sound? Why?
			
			Are there affective or mimetic qualities you are trying to achieve?

Signal Processing (Equalization)	Equalization	• Reduce or increase the amplitude of specific frequencies • Select specific frequencies • Adjust the amplitude of audible frequencies in individual or groups of tracks • Detail the relative pitches of sounds	What are the effects of reducing or amplifying specific certain frequency ranges? What affective or descriptive qualities you are trying to achieve? Which frequency ranges are implicated? Could changes in EQ curves over time affect the priority of information in your soundwriting? How? Are such changes appropriate?