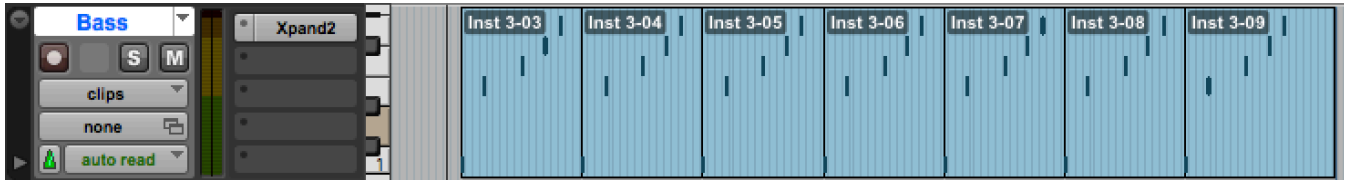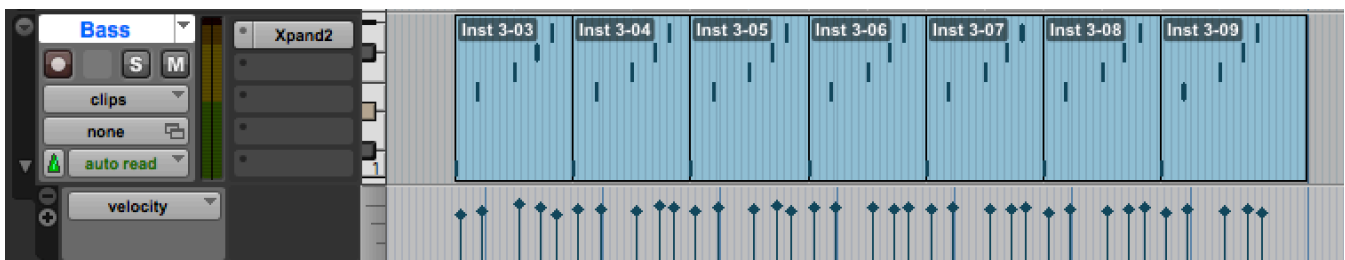# Mini-Lesson #2 – Automation Lanes

The term **automation** refers to the function of recording parameter changes. We can turn a knob with our hand or our mouse, but we can also record the turning of that knob, so we don't have to turn it every time we want to hear the change. This applies to parameters such as volume, pan, mute, pitch bend, velocity, etc.

As in most things digital, there are various ways to approach automation. This method utilizes the **"automation lanes"** within Pro Tools, similar to the Master Fader volumes we have already used.
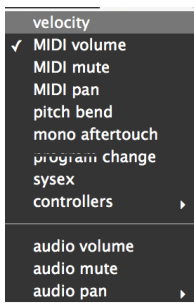
Consider the following **Instrument** track:

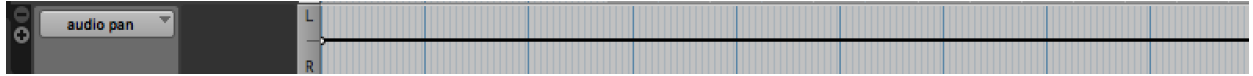Clicking on the triangle reveals the **automation lane**.

For MIDI-based tracks, the default parameter displayed is **velocity**. Velocity refers to the intensity of a MIDI signal, how hard a key on the keyboard is hit. Note that in the image above, the notes were hit at varying velocities (on a scale of 0 – 127). You can click and drag any of these note values and change its volume.

Clicking on the panel that says **velocity** reveals the list of that track's parameters able to be automated through these lanes. Different types of tracks (Audio vs. MIDI vs. Instrument) have different parameters available. Most of them operate the same as the Maser Fader we have used before.
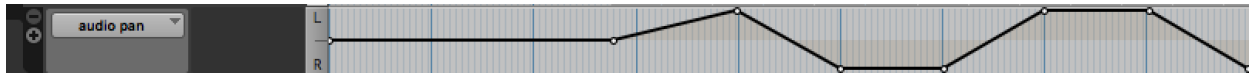
Exercise

1. In the **Edit Window**, choose a track in your session and reveal the *automation lane* for that track and choose the *audio pan* parameter.

The center line represents the sound in the center of the stereo field. Moving it moves the sound.

2. Create an *anchor* by clicking on the line with the **grabber** tool. Create another anchor and drag it to the "left." Create another anchor and drag it to the "right." Add a few to experiment with automated panning.

3. Listen to the movement of your instrument in the stereo field. Switch to your **Mix Window** and watch the **panning knob** on the track.

4. Switch to the *Audio Volume* parameter and draw some fades into that track and watch the **volume fader** in the **Mix Window**.

5. Your session must demonstrate both **volume** and **panning automation**.