

Gone Sailing – Melodyne Editing Process

Melodyne was used, within Reaper, to extract 5 discrete audio tracks from a solo acoustic guitar piece by Soft Machine called “Gone Sailing”. The purpose of this is to allow for separate timbralisation and spatialisation to be applied to each track, creating an immersive spatial experience.

Melodyne’s Direct Note Access (DNA) feature allows for individual notes to be edited within a polyphonic performance. In this instance, notes are only edited by either muting them or leaving them unmuted.

Creating a “MIDI Visualisation”

First, Melodyne is used to create MIDI data which is used to provide a visual reference for how the track will be edited.

An instance of Melodyne is added to an audio track that features the song, inside of Reaper. By enabling “transfer” in Melodyne and playing the track, Melodyne will calculate a sequence of notes corresponding to what was played in the song. Then Melodyne’s “Export to MIDI” is used and the resulting MIDI file is placed on a track in Reaper.

In the MIDI editor for this data, the “Color” option is set to “Channel” (see Figure 1). Then, the MIDI channel for each note can be manually assigned, and this will affect the colour that that note appears in the editor. The channel for each note can be chosen depending on its pitch. In the case of “Gone Sailing”, 5 channels were used, as the piece rarely utilises 6 notes at once.

This MIDI data has no functional purpose and is only used to provide a visual reference for the future editing process.

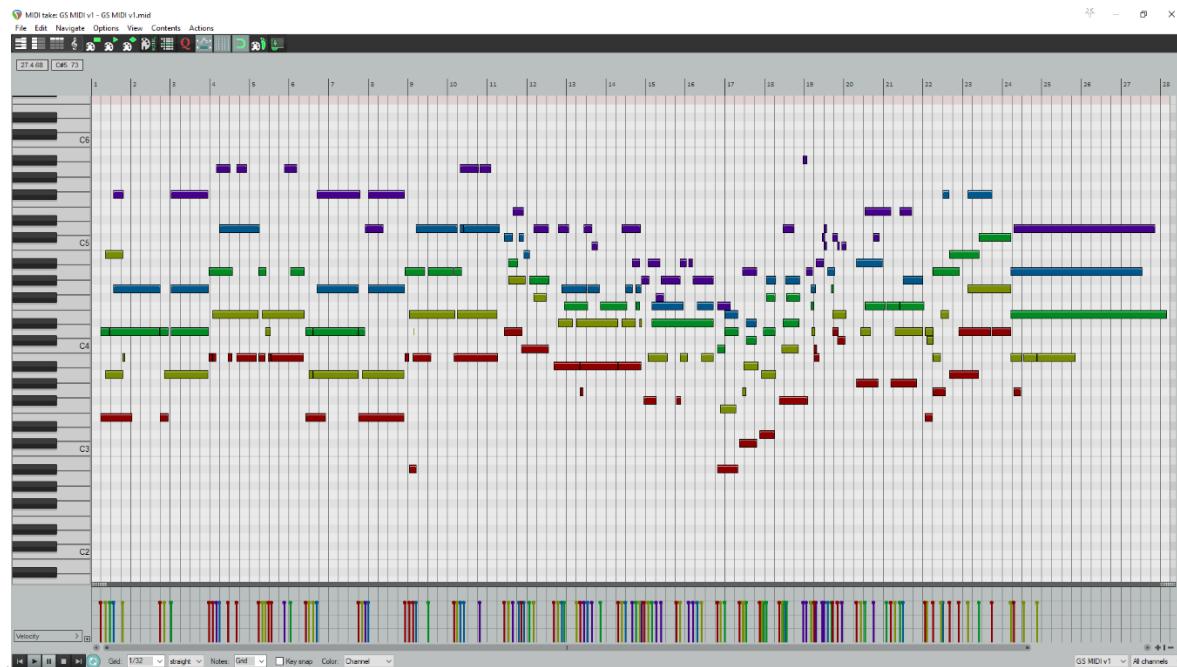


Figure 1: The MIDI visualisation in Reaper's MIDI editor

Separating the Audio

Now that a MIDI visualisation has been made, the audio can be separated into tracks.

Multiple audio tracks can be made, each containing a copy of the original track and having an instance of Melodyne as an insert. The musical data should be inputted into Melodyne as before (by enabling “Transfer” and playing the full track).

To mute notes, the user needs to select the notes to be muted in Melodyne, then click “Note Off”. This should be applied to all notes that aren’t intended to feature on the track in question. The user should consult the MIDI visualisation here. For example, the highest pitches were assigned to MIDI channel 5 in this instance, which is displayed in the MIDI editor in a purple colour (see Figure 2). When editing the 5th audio track in Melodyne, the user should compare the data in Melodyne, and the MIDI editor and they should mute all notes that don’t correspond to purple notes.

Once this is applied to all audio tracks, the song has now been separated into 5 tracks that can be played together to create a full piece.

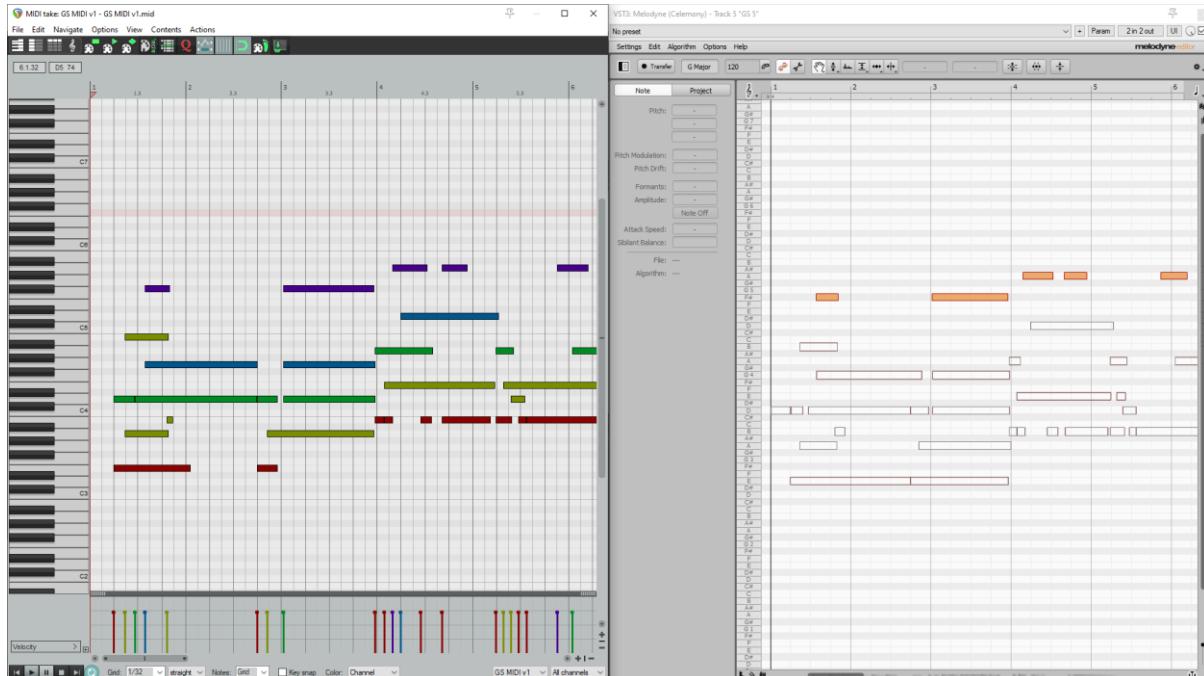


Figure 2: A comparison between data in the MIDI editor and Melodyne