



Composers Desktop Project and HITHER GATE MUSIC present

About CDP Workshop 2

How to compose with CDP Texture

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About the CDP Texture Programs

The Texture Workshop focuses on the CDP Texture Program Set created by Trevor Wishart. It has 21 fully documented example textures that unfold compositional possibilities step-by-step.

The Texture Program Set creates **multi-event sound textures** from one or more soundfile sources, with many time-varying parameters as shaping controls, including segment length, density, transposition, amplitude, and spatial position. Events can also be 'snapped' to a pre-defined chord, or several chords over the time of the texture being created. Of special importance is the way that you can use and balance both defined and randomised musical components. In a broader context, they enable direct connections to be made between visual and sonic patterns.

Here are some of the many musical results which can be achieved with this set of programs:

- many ways to work with note events whose parameters are selected at random within (time-varying) user-defined limits.
- texture densities from widely-spaced to tight 'granular'
- timing scatter or quantisation controls
- able to use the whole length of the input sound for each note event
- multiple soundfile inputs accepted
- can 'snap' granular densities to user-defined chords – or a changing set of chords
- able to write legato or staccato melodic motifs
- able to create canonic (imitative) effects
- able to create motifs and attach them to pre-defined melodic lines
- able to use a rhythm as the basis for a texture
- can repeat rhythmic templates on which short motifs, melodic phrases or groups of note-events take place
- you can work with groups of note events within the overall texture
- most parameters accept time-varying contours

- comes into its own when texture designs are matched to transformed sounds in order to create new (and sometimes serendipitous) sound complexes

In brief, the Texture programs **combine aspects of mixing, sequencing, granulation and collage**. You can shape and reshape your textures quickly by making use of the Preset or Patch facilities in the GUIs. Interesting and endlessly varied textures can be created in a way that is much faster and more flexible than normal mixing or sequencing.

Contents of the Texture Workshop

The Texture Workshop has a comprehensive Manual in HTML. This includes sections on setting up your working environment, a detailed explanation of the 21 examples, and a complete Playlist. Working from the Playlist is the easiest way to use the Workshop: you can play an example, and then, from the Playlist, link back to the files that created it and the explanatory text.

The 21 worked examples illustrate the various possible textures in several groups:

- focus on one pitch
- work within a pitch range
- use Harmonic Fields or Sets
- make use of additional time-varying options
- attach motifs or ornaments to a pre-defined tune or rhythm

The Playlist examples are set up in a 5 x 4 grid plus one final example. If you go across the columns, you see how different programs can handle that group, e.g., 'focus on one pitch'. If you go down the columns, you explore how (mostly) the same program can handle the different groups.

All the settings that make the examples are saved as Presets (*Soundshaper*) and Patches (*SoundLoom*). You can load these, alter the parameters and begin to explore the possibilities for yourself.

The following summarises the range of information provided in the Workshop. Item 1 is a 'note data file', the primary (text) input to the Texture routines.

1. Sample note data file (key text input file for the texture programs. It may be just a single line, the reference pitch, or, as in this example, a fully defined melodic motif. The parenthetical annotations are not part of the file; they are used here for explanatory purposes.

60	(reference pitch)
#10	(Motif will be defined in 10 lines)
0.00 1 60 90 0.5	(<i>StartTime, Instrument, Pitch, Amp, Dur</i>)
0.25 1 62 60 0.5	(Note that the duration field can cause overlaps with the
0.50 1 63 50 1.0	next start time, creating legato-type effects.)
1.50 1 65 70 0.5	
2.00 1 63 90 0.5	

2.25 1 65 70 0.5
2.50 1 67 75 1.0
3.25 1 70 90 0.5
3.50 1 69 80 0.5
3.75 1 67 70 0.5

The above Motif is shown below in musical notation. The relatively higher amplitudes (80+) are shown as stress accents. The note events start times begin at time 0.00.



2. All note data and breakpoint files used for the examples
3. Play lists with input and output soundfiles and all parameter data,
4. Play list for comparative listening for all examples
5. Batch files for quickly realising altered versions of groups of files (e.g., with different source soundfiles or parameter settings)
6. Included: a *Soundshaper* Presets data file and a set of *SoundLoom* Patches so you can load the parameter data for a specific example into a GUI and ring some changes on it

[Archer Endrich – 18 November 2021]
~ Composer Tools for Sound Design ~