

# Contents: Pure Data

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**Basic Elements** = Objects // Messages // Numbers // Symbols //  
Comments // Arrays // GUIs // Bang // Toggle // Sliders // Radios

## Introduction

**Syntaxis** = Libraries // Order // SubPatch // Int. Patching // Abstractions // Locality

**Audio** = Volume // Output // Input // Recording // Monitoring

**Subtractive** = Oscillators // Waveforms // LFO // Filters //  
Envelopes // Hard & Soft Sync

## Sound Synthesis

**Additive** = Sine // Cosine // Harmonics // Arrays // Organ

**F.M.** = Vibrato // Exponential // Linear // Phase Modulation // Ratio

**Physical Modeling** = Comb Filters // Impulse // Karplus-Strong // Modal Synthesis

**Granular / Wavetable** = Arrays // Window // Grain // Density

### Modulation

- Tremolo
- Ring Mod.
- Vibrato
- Chorus
- Flanger
- Phaser

### Filters

- Low Pass
- Band Pass
- High Pass
- Shelf
- Bell
- Notch
- AllPass
- Comb Filter

### Waveshaper

- Distortion
  - Soft Clipping
  - Hard Clipping
- Compressor
- Bit Crusher
- Wavefolder

### Audio

### Effects

#### Time-based

- Delay
- Stutter
- Granular Delay
- Reverb

**Sound Analysis** = Deterministic Signal // Harmonics //  
Comparison AB // iZotope RX // Sonic Visualizer

## Sound Design

### Instrument Design =

**Tonal:** Mono-Poly // Bells // Bass // Plucks // Strings // Leads // Pads // Keys

**Percussions:** Bass Drum // Snare // Hihat // Clap // Cymbal // 808

### App Integration with Mobmuplat (Smartphone) y Camomile (Plug-in) =

Interface Design // Generation and Installation // Parameters

**Generative Music** = Rhythms // Melodies // Chords // Random //  
Seeds // Euclidean // Quantization

## Algorithmic Composition

**Reactive Visuals (GEM)** = Image // Video // Oscilloscopes