

Basics

make sound	d1 sound "bd" or s "bd"
different sample	bd:1 or # n "1" or \$ n "0 2" # sound "arpy"
compile: one line	shift + enter
compile: multi-line	ctrl + enter
patterns	"bd sd" bd*4 bd/4 "[bd hh] sd" (can nest) or bd hh . sd (easier to type)
layering	[bd bd, hh sd hh]
different cycle	"bd <arpy:0 arpy:3>"
make quiet	d1 silence solo \$ d1 mapM (\$ silence)[d1,d2,d3] hush
* / on groups	[bd sd]*2 cp if you don't get through a whole subpattern in a cycle, it will start where it left off with the next one. Imagine each group is a little tape loop that plays while it is its turn
polyrhythms	{bd hh cp}%4
Bjorkland	bd(5,8) or bd(5,8,1) bd([5,3]/2,8) e 5 8
Tempo	cps 1 cps (140/60/4)

Stochastic

degradeBy	degradeBy 0.9 removes events from pattern 90%
scramble	scramble 2 sampling with replacement
shuffle	shuffle 2 sampling without replacement

Sample

loopAt	loopAt 4 makes sample fit the given number of cycles
gap	
chop	chop 16 granulator granularizes every sample in order
striate	striate 16 granulator interlaces all samples together striate' 32 (1/16)
striateL	striateL' 3 0.125 4 loops each sample chunk a number of times (2nd arg), loop count is 3rd arg
stut	stut 4 0.5 0.2 delay 4 echos, each one 50% quieter than the last, with 1/5th of a cycle between them
stut'	stut' 2 (1/3) (# vowel "a e i o u%2") generalised stut for different functions

Compositions

seqP	
cat	cat [s "bd*2", s "arpy jvbass*2"] concatenates a list of patterns into a new pattern; each pattern in the list will maintain its original duration
fastcat	new pattern's length will be a single cycle
interlace	
randcat	cat but picks patterns at random
append	
spin	
stack	d1 \$ stack [sound "bd bd*2", sound "hh*2 [sn cp] cp future*4"]
superimpose	
weave	applies pattern to list and is offset for each pattern d1 \$ weave 4 (pan sine) sound "[jazz:0 hh jazz:0 hh, sn]", sound "casio casio:1"
wedge	

Transitions

```
anticipateIn      t1 (anticipateIn 4) $ sound "jvbass(5,8)"
k    clutchIn
s    histpan
%    jump
e    jumpIn
-    jumpIn'
    jumpMod
    mortal
    superwash
    wait
    wash
    xfade
```

Operators

 $\# \text{ equiv. } \models$

Synth Parameters (or effects)

given by #

Sound

```
sustain
speed
endSpeed
begin
end
loop
pan
```

Envelope

n attack
 hold
 release

hpf

hresonance

Functions

Pattern Transformers

Unless otherwise stated, between \$... \$

Deterministic

brak	squash every other cycle to fit 1/2 a cycle, and offset it by a 1/4 of a cycle
fast, slow	fast 2
fit	
iter	
jux (and juxBy)	jux (rev) applies function to RH only. juxBy 0.5 brings 0.5 closer to centre
linger	linger 0.25 repeats first 1/4 cycle
Beat rotation	0.25 <~ shifts pattern 1/4 cycle
rev	rev
smash	
spread	
toScale	
trunc	trunc 0.75 plays first 3/4 of cycle
zoom	zoom (0.25, 0.75) plays the section from 0.25 to 0.75 of cycle over time period of original pattern

Conditional

someCyclesBy foldEvery	someCyclesBy 0.25 (fast 2) foldEvery 3, 4] (fast 2) equiv. to every 3 (fast 2) \$ every 4 (fast 2)
ifp	ifp ((== 0).(flip mod 2)) (striate 4) (# coarse "24 48") striate on even, coarse on odd
mask	
every	\$ every 3 (fast 2) \$
every'	every' 3 1 (fast 2) d1 \$ sound (every 4 (fast 4) "bd*2 [bd [sn sn*2 sn] sn]")
sometimesBy	sometimesBy 0.25 (fast 2)
swingBy	
when	
whenmod	when remainder \geq
within	

```
lpf
  cutoff
  resonance

bpf
  bandf
  bandq

delay
  delay
  delayfeedback
  delaytime

reverb
  room // size

tremolo
  tremolate // tremolodepth

phaser
  phaserate // phaserdepth

The Rest
  coarse
  crush
  cut
  accelerate
  legato
  loop
  nudge (Should this be here? Or is this pattern)
  shape
  sound
  unit
  vowel
```

Continuous Patterns
between 0,1. sine,saw,tri,square
slow 2 \$ scale 0 2 \$ sine

```
Operators

Utility
  choose choose[2...8] or choose[2,3..8]
  irand irand n generates a pattern random integers
        0 to n-1 "amencutup*8" # n (irand 8)

  pequal
  rand
  run
  scale
  up
```

Combine transforms
[.](# speed
"0.5") . rev

```
Super Dirt
  load own sam- ~ dirt.loadSoundFiles("/path/to/samples/*")
  ples
  change speaker
  output
```

Dirt Samples
808 808bd 808cy 808hc 808ht 808lc 808lt 808mc 808mt 808oh
808sd 909 ab ade ades2 ades3 ades4 alex alphabet amencutup
armora arp arpy auto baa baa2 bass bass0 bass1 bass2 bass3
bassdm bassfoo battles bd bend bev bin birds birds3 bleep blip
blue bottle breaks125 breaks152 breaks157 breaks165 breath
bubble can casio cb cc chin chink circus clak click clubkick co
control cosmicg cp cr crow d db diphone diphone2 dist dork2

dorkbot dr dr2 dr55 dr_ few drum drumtraks e east electro1
erk f feel feelfx fest fire flick fm foo future gab gabba
gabbaloud gabbalouder glasstap glitch glitch2 gretsch gtr h
hand hardcore hardkick haw hc hh hh27 hit hmm ho Hoover
house ht if ifdrums incoming industrial insect invaders jazz
jungbass jungle juno jvbass kicklinn koy kurt latibro led less
lighter linnhats lt made made2 mash mash2 metal miniyeah
moan monsterb moog mouth mp3 msg mt mute newnotes
noise noise2 notes numbers oc odx off outdoor pad padlong
pebbles perc peri pluck popkick print proc procshort psr rave
rave2 ravemono realclaps reverbkick rm rs sax sd seawolf
sequential sf sheffield short sid sine sitar sn space speakspell
speech speechless speedupdown stab stomp subroc3d sugar
sundance tabla tabla2 tablex tacsan tech techno tink tok toys
trump ul ulgab uxay v voodoo wind wobble world xmas yeah

Nice snippets
linger "<1 0.5 0.25 0.125>"
d1 \$ spread (\$) [fast 2, rev, slow 2, striate 3, (# speed "0.8")]
\$ sound "[bd*2 [bd]] [sn future]*2 cp jvbass*4"
d1 \$ loopAt 4 \$ chop 32 \$ sound "breaks125"