Harvest Kitchen

4 Works by Christopher Bailey

(The *Harvest Kitchen* pieces may be played in either order).

NOTE ABOUT MASTERING AND COLLABORATION:

In 2017, this album was about to be released. Augustus Arnone had heard some of the pieces and asked me if he could just take a quick stab at doing some mastering/sound-sculpting work on them. I figured, why not take a few weeks to work on the sound a bit? …. and thus began a 2½ year journey, perfecting the sound of the pieces on this album—Augustus would work on the sound of a layer and/or section of a piece, send me a sample, I would send back comments, we'd argue a bit, try again, rinse and repeat. This was in many ways, a deep sonic learning process for me. I am grateful to Augustus for the massive amount of time he invested in these pieces, truly bringing them to life. If not for him, the pieces would be in a considerably more raw, un-inviting and (at some points) downright painful state. Instead, the high frequency peaks pop without causing hearing loss, the bass punches, and the mid-range stays out of the way unless needed.

**HARVEST KITCHEN: AN ACOUSMATIC SYMPHONY**

Harvest Kitchen is in 2 parts. Part 1 and Part 2 can come in either order. The ends (and beginnings) of the pieces are made to link up to one another.

The 2 parts are contrasted from one another; in particular, Part 1 consists of mostly un-processed ("raw") *musique concrète* sounds, and Part 2 consists of material that is much more processed, granulated, filtered, and so forth.

Harvest Kitchen began with the idea of thinking about 4 pairs of speakers (arranged around the listener in a "shoebox" or square/rectangle shape) as 4 'ensembles'— interacting, co-existing, conversing to form a multi-ensemble, multi-layered composition. I thought of this as a contrast to acousmatic works involving spatialization technology (ambisonics, etc.): something that bothered me about such pieces (as observed on several listening occasions) is that they seemed to privilege the "sweet spot" (center of the hall) for the listener—a privilege that only a few could truly enjoy. (In many listening spaces, in fact, there is a central non-seating aisle in the hall, so that *nobody at all* is actually able to enjoy this privilege.) Instead, I wanted to provide an experience where a listener anywhere in the hall, even in the far corner, or way over to 1 side, would have an interesting and rewarding experience.

For this release, I provide both a stereo mix-down of the 2 parts of *Harvest Kitchen* on the album itself, as well as "bonus tracks": the 4 stereo-pairs (X2 parts of the piece), in case the listener wants to listen to the components individually, or play the 4 pairs through an 8-channel setup.

For both Part 1 and Part 2 of *Harvest Kitchen*, I call the 4 pairs "Front/Solo", "Rear/Water", "Side Human", and "Side Earth/Land". These names explain the pairs' positioning in the 8-channel shoebox setup, as well as something about the character of their materials. (Note that the 2 "Sides" can be arranged either way (Human on the left, Earth on the right, or vice versa)).
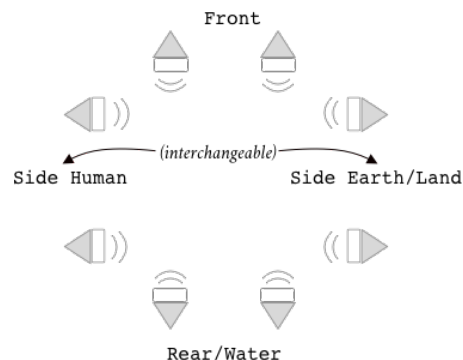
Rear/Water: The sounds on this track are usually either water-based in origin, heavily filtered to remind of such, feature wave-like envelopes controlling density, or the like. Some of my favorite moments involving this stereo pair are 5:50-ff. in Part 1, the opening 2 minutes of Part 2, and especially at 18:49-ff. in Part 2, where the Rear Pair acts as a "water shadow" of the Front Pair. (It may be difficult to hear this in the stereo reduction, consult the individual stereo pairs (Front and Rear in this case) to really get an idea of what I am talking about here.

Side/Human: The sounds on this track are frequently either human voices (see especially the long stretch of such materials undergirding the rest of the *concrète* counterpoint in Part 1, from ~8:20 - 10:30), instrumental sounds (especially held chords, as in the section from ~4:25 - 5:25 in Part 1), or march-like ("french overture") rhythms (for example right at ~5:25 morphing out of the aforementioned chordal texture, or at the beginning of Part 1, or ~22:35-end of Part 2).

Side/Earth/Land: The sounds on this track are usually grungy, dirty, "earthy", sometimes metallic (especially percussively hit) sounds, or else what I think of as "mountain chords" — akin to Varese's "skyscraper chords", arpeggiations of wide-interval but dissonant, crunchy sonorities, painting musical portraits of vast mountainous landscapes. You can hear the latter at the beginning of Part 1, or at 11:00 in Part 2, and many other places in between and beyond; the former at Part 1 ~1:52 - 4:30, or Part 2, ~18:50-ff.
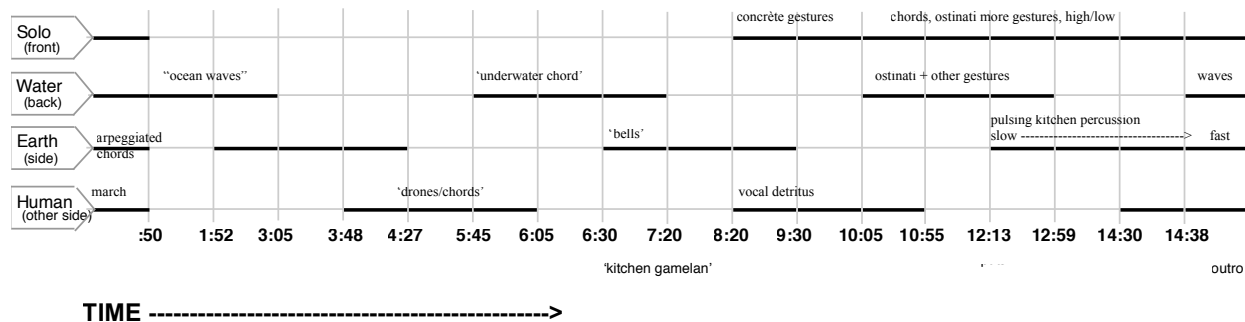
Front/Solo: A grab bag of heterogenous concrete sequences (composed with the Concrete Gesture Engine, which I first used in *Sand*), as well as borrowing materials from the other 3 pairs. In a certain sense, Front's role echos that of a concerto soloist. In Part 2, the *Concrete Gesture Engine* (first used in *Sand*) gave me sequences of sounds, picked according to various criteria. Here is an example, covering the passage from ~11:01-12:03 of Part 2. In this passage, the Side/Earth/Land pair instigates a series of gestures or phrases, each time with an arpeggiation. In the Front/Solo pair (mirrored by the Side Human pair) I used the Gesture Engine to create sequences. I would pick a couple of parameters. One of the parameters would change according to a "7-digit-row" of numbers, the other parameter would either stay put, or move slowly from a value of 7 to 1 or vice versa. This happens 6 times—6 gestures or phrases. Each time, the stereo pairs Side/Human and Front/Solo respond with sounds picked using the *Gesture Engine*, and carefully processed. Both of them used the *Gesture Engine* to find sounds with the following criteria, moving forward in time from left to right:

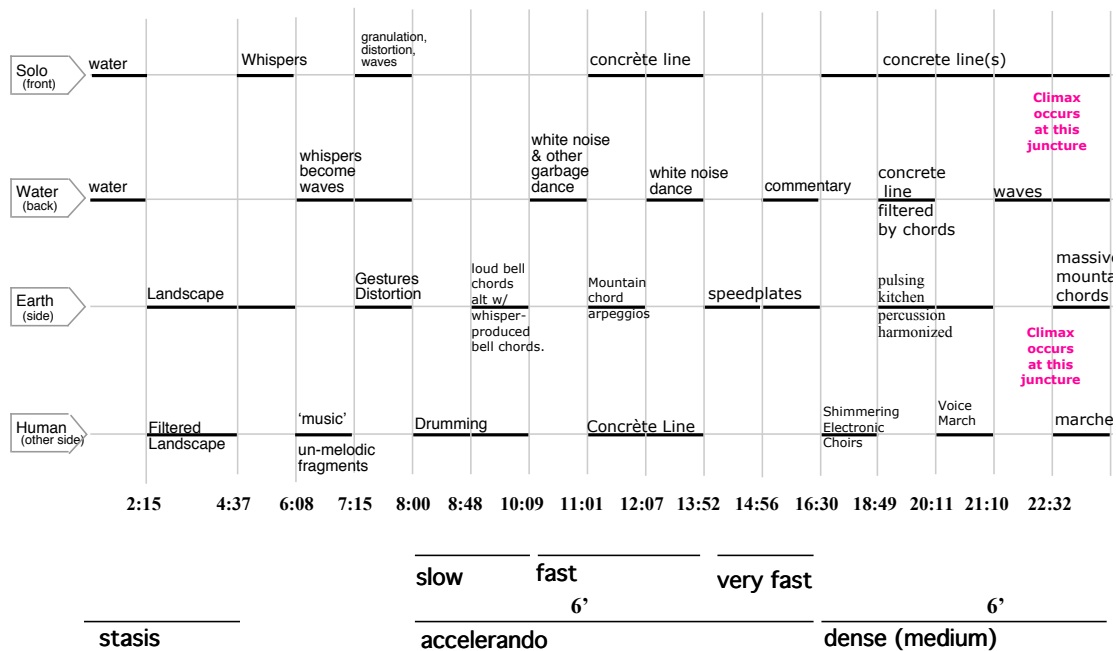| Loudness	2	5	3	4	6	1	4	7	7	7	7	7	7
Attack Hardness	7	7	7	7	7	6	6	6	5	4	3	2	1

In other words, over this whole passage, the loudness varies wildly at first, and then stays at loud; at the same time, that first bunch of sounds has hard attacks, but but as the passage winds down you will hear more and more softer attacks.

Through the pieces, the 4 stereo-speaker-pairs, or ensembles, are combined in all possible combinations, with some repetitions. (This draws on Milton Babbitt's "animation of lists" technique used throughout his work.) Part 1 and Part 2 do this in different ways. The following pages are charts of these combinations. Note that during sections where a stereo-pair is not officially "present", it might still occasionally "comment" on the other material occurring at that moment, or material in the other pairs sometimes "spills over" into the entire 8-channel field. An example of this happens at ~8:30-8:45 in Part 2, where the sounds of ripping drums expand out from a "solo" of the Side/Human pair to fill the whole space.

Harvest Kitchen I --- rough form diagram

Solo (front)								concrète gestures		chords, ostinati more gestures, high/low					
Water (back)	"ocean waves"			'underwater chord'							ostinati + other gestures				waves
Earth (side)	arpeggiated chords						'bells'					pulsing kitchen percussion slow ---------------------------------->			fast
Human (other side)	march			'drones/chords'				vocal detritus							

:50 1:52 3:05 3:48 4:27 5:45 6:05 6:30 7:20 8:20 9:30 10:05 10:55 12:13 12:59 14:30 14:38

'kitchen gamelan' outro

TIME -->

Harvest Kitchen Part 2

Solo (front)	water	Whispers	granulation, distortion, waves		concrète line			concrete line(s)				**Climax occurs at this juncture**
Water (back)	water		whispers become waves		white noise & other garbage dance	white noise dance	commentary	concrete line filtered by chords		waves		
Earth (side)	Landscape		Gestures Distortion	loud bell chords alt w/ whisper-produced bell chords.	Mountain chord arpeggios		speedplates	pulsing kitchen percussion harmonized			massive mountain chords	**Climax occurs at this juncture**
Human (other side)	Filtered Landscape	'music' un-melodic fragments		Drumming	Concrète Line			Shimmering Electronic Choirs	Voice March	marche		

2:15 4:37 6:08 7:15 8:00 8:48 10:09 11:01 12:07 13:52 14:56 16:30 18:49 20:11 21:10 22:32

slow   fast   very fast
        6'   6'

stasis   accelerando   dense (medium)

SAND:

Sand was a project, composed around the turn of the century, that incorporated nearly all of my divergent compositional interests at the time. I spoke at length about these in my dissertation paper (Which you can access here: http://christopherbaileymusic.com/sand/diss.title.cont.htm), but I will summarize some of those thoughts here. (You can download a full score of Sand at http://christopherbaileymusic.com/sand/SandFullScore.pdf)

Flat Form: One of the ideas stemmed from my thoughts on "flat form" in music. "Flat form" is what I call it when a composer deliberately decides to eschew obvious climaxes or "kinetic form", textural differentiation of "sections" of a piece of music, or other aspects of musical form that typically act as an aid to orienting a listener. If a listener can "get the general idea" of what's going on in a piece (e.g., "OK, now we have 2 minutes of build-up to a huge climax", or "now for the 32-measure pizzicato syncopated section" or similar), then they can, to some extent, ignore the details. By creating music without these formal/structural orientation aids, (or where the sections or buildups or what-have-you are too short to take a free ride on), a composer creates an experience that is all detail; the listener must either attend to that detail . . or simply not listen. There is no middle-ground.

This way of thinking has it's pros and cons, and is certainly a difficult ask for a listener, for a large-scale work of music. In my own case, I came to realize that the best way to approach presenting this kind of piece, was to treat it like an art installation—I don't necessarily need to listen to the whole piece, in order, at one sitting. I can spend 15 minutes focussing on the first 2 minutes of actual music, playing and re-playing them, getting to know them.

I imagined a situation where, in addition to this kind of capability, a listener could also peal back the layers of music—listen to only particular instruments, or only listen to notes of a particular loudness, or only listen to notes that occur at a particular point in stereo space.

To achieve this, I realized *Sand* with a "listener interface" in mind. A way of turning what is a complete piece of music, into an endlessly explorable audio installation. Listeners can access the interface (and accompanying audio files) here: http://christopherbaileymusic.com/sand/sand_interface.zip

Microtonality: I had been delving into microtonality for just a few years at the point I began writing this piece, and I chose to work in a combination of 19 equal-divisions-of-the-octave (edo), and some Just Intonation. In the piece, I work with 19-edo in a serial manner—using a polyphony of 19-tone rows partitioned into 19-tone aggregates arranged in an "array" of 66 different partitional shapes. (A web page regarding the latter can be found here: http://christopherbaileymusic.com/sand/19t.ETarray.html)

Drones and Virtual Drones: Throughout the piece, the serial counterpoint is underlaid by, and interacts with, a series of slowly-unfolding drones. The drones are sometimes chords, sometimes single tones, in different registers. The drones also manifest in a "virtual" way in that their overtones (or inharmonic partials) frequently infiltrate the serial counterpoint itself. On the score, I notated these "virtual drone notes" in blue. A nice example is this exchange/hocket between the Wave and Piano Instruments, at 10:00, on page 72 of the score, which I was able to make extra florid by mixing in the virtual-drone notes with the serial counterpoint (these pitches are harmonics of the 3-note chord in the Drone Instrument, C#-E-Eb.)

Fragmentation of the Familiar: "I still believe in the laws of acoustics and the innate structures of human musical cognition but for some reason I'm going to create music based on a system designed to negate them, but then try to hack that system so it at least maybe sort of still embraces them." In a recent argument about the music of Donald Martino, someone penned this excellent attitude summary. I'm not sure it really reflects how Martino thought about things, but it's a perfect statement of my own credo when I'm writing atonal/serial music. Thus there are many moments in this piece where triads come to the fore (for example, 3:31, or

in the bass at 9:58, or the cadence at 6:53-6:56, or where simple things like, say an ascending scale (17:01-17:06) or a descending series of quasi-suspensions (7:29-7:32 and 7:52-7:56) either guide the texture or are brought out as prominent aspects of it. There are also quotations, such as the Copland quote mentioned above, or for example a squished version of Schoenberg's *Piano Piece Op 11 #1* (17:16 - 17:19). Even moments like the lovely pentatonic chord that opens out from the Drone Instrument at 6:46 .

Virtual Instruments: Like many computer-music composers, I chose, in this piece, to work with a few 'virtual instruments' that I could write 'notes' for in a more-or-less traditional fashion. I constructed computer programs that would make each note, taking an instruction like "A 440, at an *mf* dynamic" and building a sound that would give back what I asked for, with a certain kind of timbre, but with lots of inner life and slight randomness built into the sound, like one would get from real, live performers.

WAVE — Wavetable, (but where the individual partials are controlled and may vary in frequency so that an initially harmonic sound can drift into inharmonicity, for example.) The most obvious "electronic" sounding sounds in the piece.

PIANO — Some notes (recorded on the same "shitty piano" as my work *Composition for S#!+ +√ Piano With Drum Samples, Concrète Sounds, and Processing*) are rendered into a "dirty sampler" of piano sounds. "Dirty Sampling" is like a sampler or soundfont , but it:

1) Has a very uneven set of samples . . for example, 10 samples in one octave, and only 2 or 3 in another octave. Loudnesses also vary somewhat randomly.
2) The samples typically come with some room noise, reverb or other aspects that "place" them, as contrasted to the rather lifeless, ultra-clean samples one finds in a professional sampler.
3) When the composer asks for a note in a particular register, at a particular loudness, the sampler might choose a source note that's close to what you asked for—or it might choose something random and far away, and then try to process it to make it sound like what was asked for, which can produce interesting and unexpected results. (And the note can always be re-realized if the note is not to my liking.)

FILTER — This instrument produces notes using filtered noise, arranged in a small variety of attack-types (Fade-In, Sweep-Punch, etc.), a scale of "noisiness" from 0 to 5, and possible vibrato, glissandi, and so on.

CONCRETE — The concrète layer/instrument in this piece marks the first time I used the Database Gesture Engine. (Also used extensively in *Harvest Kitchen*, *Composition for Sh__y Piano..*, and the *Divertimento*.) The basic idea here is that I have a collection of several hundred or thousand sounds, catalogued according to a few basic parameters in a database. then I construct abstract musical/sound gestures by asking for sounds that meet certain requirements. (For example, "3 sounds with hard attacks, followed by 4 sounds in a high register of short duration, followed by 4 simultaneous hard-attack sounds with more definite pitch".) Then the Engine selects sounds from my database. It gives me a few combinations, I make some substitutions, and then I put the mix of sounds into a DAW, make adjustments to timing and processing, and I've got a musical gesture.

You can read more about the Database Gesture Engine at this link: http://christopherbaileymusic.com/sand/ConcEngine.pdf

DIVERTIMENTO IN Eb:

This was a small piece, composed relatively quickly in 2009-2010, that utilized the same source sounds as in *Harvest Kitchen.* It is a relatively straightforward, highly gestural concrète composition for 2 channels of audio. I used the Database Gesture Engine to, among other things, find sounds that were tuned on or near Eb. Or, other harmonic sounds that I could transpose to be so. Or, inharmonic sounds that I could process, filter and whatever else to be so as well.