

Interview with Barton McLean on FEED in the Seamus Journal:
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HOW WOULD YOU LIKE TO BE CHARACTERIZED IN THE REVIEW? MEDIA ARTIST? EXPLORER OF THE SUBCONSCIOUS MIND? ETC. ETC. WHAT KIND OF LABEL(S) WOULD FIT?

Just artist would be fine, audiovisual composer would fit too. I was drawn to the arts because the field generally seemed to stand for an interdisciplinary approach. In doubt I am a generalist, rather than an expert in just one particular area. I think part of an artists identity is to build up and combine various skills, both in understanding one's environment as well as in producing work reflecting on such environment. The term media artist in that respect feels too narrow. It's based on technology hype and I have come to increasingly dislike it. Artists always worked with media. Over time, media come and go and are added to the fabric of society and the tool set of cultural production. I do believe however that in a time of technological breakthroughs, like we are living in, it's crucial to be literate about technology. This is in order to stay in tune with the world, while equally increasing one's capabilities. The question here is one of balance, the term "new media art", which is often used describing art work based on cutting edge technology, establishes a fatal hierarchy, first comes the "new", then the "media" and last we find the somewhat anemic "art". I for one believe that cultural production is about an emotional and/or philosophical statement rather than about the media used, the engineering of surfaces or interfaces.

HOW HAS YOUR STUDY AND EXPLORATION OF FIELDS OUTSIDE OF THE ARTS INFORMED YOUR ARTISTIC WORK, PARTICULARLY FEED? (ARCHITECTURE, SCIENCE OF THE BRAIN AND PERCEPTION, ETC.)

I started off studying architecture, before switching to Visual Arts. At the beginning of my art career in 1984 I built nonfunctional objects, partly absurd machines, with programmed light, kinetic and sounding components. I think my early affiliation with architecture still shows in my work. It becomes obvious in the way I use sound, as both a spatial and sculptural element of my work. With sculptural element I mean the spatial effects of sub low bass for instance, which create a kind of invisible but very physical fabric in a given space. It creates a shifting virtual architecture of sorts, resonating with the actual space where in it unfolds. This concept generally applies to the way I use sound in my work, its equally about "painting" with sound than composing along a timeline. My other big interest lies in concepts of perception, the way we experience the world, specifically space and time - how perception is such an individual- and highly malleable matter. Emotion seems to be at the core of reading what our perceptive organs tell us. Depending on our state of mind, in borderline situations, what comes across as pleasant one day might pain us the next.

TO WHAT DEGREE DO YOU WRITE THE SOFTWARE THAT YOU USE? IF NOT, PLEASE DESCRIBE THE DERIVATION AND IF IT IS AVAILABLE COMMERCIALY (SEAMUS PEOLLE WILL APPRECIATE THIS).

I use, whenever I can, off the shelf, yet customizable software, because, by today's achievements in mainstream software, it covers all I need in 90% of my productions. I work with Logic Audio for 10 years, with Max/Msp only recently, Final Cut Pro, since it came out (Avid and Premiere before), a DMX interface / software solution called LanBox, great little thing from Holland, which allows me to control theatrical lights from Logic, synced to sound and video. As for my 3D work, I use Unreal Tournament as a real-time 3D engine.

Which brings me to one of those moments every couple of years when I decide to start an engineering process and build something myself, or have it built for me, because I can't find it on the open market. When I did my second project with the Unreal Tournament engine for the "Cave" at Ars Electronica Center, Linz, I was drawing on the inbuilt audio options, which really are sample playback and 3D placements and mixing of such samples in a 3D environment. No synthesis, no modulations, no real event synchronization, other than common start points etc. From today's standards very disappointing and so I pretty much decided on the spot to work on a custom connection between the engine and external standard audio software. More in my answer to the next question.

The other example for developing a unique system leads back to 1997, when together with my then partner in Granular-Synthesis we developed a mono video / audio sampling software called varp9, which ran on PC and allowed us to re-synthesize video in real-time, controlled through Midi from Logic Audio. This was a successful attempt to apply the concept of granular synthesis to a mono video/audio sample. Every sample was a max 128 video frames long (about 5sec in PAL) and through program changes a maximum of 48 samples (limit set purely by ram prices then) could be addressed. It turned out to be a very capable flicker engine; two individual AV streams could be dynamically intersected. I refrained from engineering for years after that, it took about 2.5 times as long as initially estimated, even though we worked with a capable programmer, who quickly managed to build the backbone of the software.

PLEASE COMMENT ON THE SPECIFIC SOFTWARE INVOLVED IN FEED (FLOATING BODIES AND GRANULAR SYNTHESIS)

I began working with Unreal Tournament in 2004, in preparation for a collaboration with the French Ballet Preljocaj. I needed a real-time tool for visualization of human motion, something that neither required editing or rendering, thus would allow, once setup, for intuitive access. As said above, the limited sound capabilities of Unreal quickly became a point of frustration; generally all game engines are putting their emphasis on visualization.

I started to connect Unreal to an external audio engine in early 2005 together with the help of Michael Ferraro, who did the reverse engineering part on the TCP ports of Unreal (no real documentation there unless you have a developer license). He also built in Max/Msp a receiving and analyzing patch, partly custom modules, to interpret the incoming data into Midi controller data. Midi because its actually moved on to Logic where its finally controlling software synthesizers. Kind a convoluted but makes sense in my system, Logic being my central command post. So now all those floating bodies in my unreal world trigger, when moving, each a software synthesizer in Logic and I have full control of my little orchestra. Plus, I can control, in the other directions, with a midi controller the motions of the bodies in Unreal, thus being able of improvising with the system.

In more detail, each of the 3D bodies has 5 “active bones” or joints, which are tracked throughout a piece of calibrated virtual space. As they move in that space each bone/joint is sending out 4 values, x,y,z coordinates and a dynamic sum, delta, which measures momentum, how much overall has the sum of x,y,z changed within a time unit?

For 8 bodies that results in $8 \times 5 \times 4 = 160$ constantly updated control data streams transmitted from within Unreal. After processing in Max/Msp and being handed over to Logic Audio, 160 Continuous Controllers can now freely be allocated within a custom built Logic environment to control 20 individual parameters per software synthesizer. The synthesizers, ES2's, of the virtual analog kind, run almost identical patches, micro tuned to each other. Each synthesizer is in unisono mode, using 4 voices. The resulting sound can be described as a drone, punctuated by Note On swells whenever one of the bodies jerks or convulses. Spatial location of each body within the given 3D space is expressed by translating the root bone's x-axis value to define basic panorama and its z-axis value to increase, decrease basic loudness and thus the front<>back position. Bodies close to the front are therefore more prominent.

Generally, this being a procedural setting, the multiple bodies' individual motions are rendering ever changing combination of motion paths and therefore an indefinitely changing sound-scape / drone. A basic script gives out kinetic startup points, in between those points of instruction the bodies are “on there own”.

IN FEED, TO WHAT EXTENT AND EXACTLY HOW (IF YOU CAN) DOES THE MUSIC SOFTWARE INFLUENCE THE VISUAL IN BOTH AREAS OF THE WORK? HOW DO YOU FEEL ABOUT DIRECTLY CONNECTING THE TWO AND/OR ABOUT PARALLEL CONNECTIONS (OR NO CONNECTIONS AT ALL LIKE JOHN CAGE)?

As laid out above, in the first part of FEED, the “concert for a flock of human bodies convulsing in zero gravity”, there is a direct connection between the sound and the visuals on screen. In addition to that I run some loop based audio textures and fields, which fill in both on the high- and low end, with the bodies, sound-wise, occupying the midrange. The add-on material is partly rhythmic, in

the widest of senses, more pulse than beat.

As for the second part, the “strobing fog world”, there is an equally syn-esthetic component, which I build around the stroboscopes and PAR pulse lights. Both are emitting sound from their filaments and I pick up those sonic artifacts, Using a pick-up piezo mic for the standard lights and a mini solar panel for the strobes (thanks to Chris Musgrave), which gives a feedback free clear on/off voltage / sound right on. Three pick-up’s in total, 2 for the independent strobe lines, one for the Par’s. These signals are then fed into 2 effects processors, adding reverb and delay, and are massively cross fed back with each other in the mixing desk. The system is tuned so that before the beginning it’s already on the verge of self oscillation, as the show picks up momentum the sonic response is ever more increasing in intensity and resonance. I tweak it so that it has enough room to “breathe” without freaking.

To compose with audio and video in parallel, so that one reflects the other, Is probably my artistic signature, I started the habit in my video work in the late eighties and expanded on it during my collaboration with Granular-Synthesis during the nineties and the beginning of this century. What I did find out early on was that, not necessarily a clearly established direct connection was the most desirable, that in contrast, a syn-esthetic relation was just another, albeit powerful, aesthetic possibility. I started experimenting (and still do) with elements going in and out of sync and the starting/ stopping of parts intentionally reflecting each other. Matter of fact, we are trained perceiving in (massive) parallel and making sense of incoming expressions all the time, whether they are intentionally linked or randomly happen next to each other. By way of perception and the following process of analysis we constantly combine events that have nothing to do with each other, except we took them in at the same point in time. John Cage’s brilliance certainly was to point this out as awareness as well as a potential waiting to be drawn upon.

In Feed I use both synchronized and unsynchronized modules, knowing that in the minds and bodies of my audience they’ll make perfect individual sense.

IN THE SECOND HALF OF THE WORK, EXACTLY WHAT IN THE INTERACTION OF THE STROBES FORCES THE BRAIN TO PRODUCE SUCH STUNNING PATTERNS? WOULD THEY BE JUST AS INTENSE IF YOU DID NOT USE MULTIPLE RHYTHMS IN THE PULSING AND WENT WITH SINGLE PULSES? IS THE FREQUENCY OF THE PULSING IMPORTANT (OR THE ACCELERATION/DECELERATION)? HOW ABOUT THE COLOR PATTERS AND THEIR CHANGING? WHAT DOES THIS PRODUCE? HOW IMPORTANT IS THE AMOUNT OF WATTAGE OF EACH COMPONENT IN PRODUCING THE PATTERNS? IT SEEMS TO ME THAT THERE ARE MANY WAYS THAT THIS COULD BE TRIED AND FAIL TO PRODUCE AS INCREDIBLE AN EFFECT AS YOU DID. YOU MUST HAVE EXPERIMENTED TREMENDOUSLY BEFORE HITTING ON THE BEST SOLUTIONS. WHAT KINDS OF EXPERIMENTS TOWARD THIS GOAL DID YOU TRY AND THEN ABANDON?

According to my research - which by no means I would claim to be exhaustive - what happens is a clash between the internal brain refresh cycle (of the visual processing parts of the brain) and the external flicker cycles of the stroboscopes. Once the fog part is under way, the strobes fade in at about 8hz, from there, until the end of the piece, they go up to a maximum of about 24hz.

Normally, at the beginning of the fog part, people in the audience will, in terms of brain refresh cycles, have arrived in an alpha state, their brain individually refreshing in between 8-13hz. Now two things seem to happen, A) Generally, stroboscopic flicker in a range between 8-13Hz appears to break down some of the physiological barriers between different regions of the brain and B) The (external) flicker rates of the strobes interfere with the (internal) brain refresh rates of the visual cortex resulting in actual interference patterns. These 2D/3D psychedelic patterns, experienced in such an environment, are differing from individual to individual depending on the respective personal brain refresh rate and other factors linked to imaginative and other predispositions.

There is a very good introduction on the topic in a book called "Chapel of the Extreme Experience - A short history of Stroboscopic Flicker and the Dream Machine" by John Geiger, Soft Skull Press.

The intensity of the patterns changes according to increase / decrease in light intensity of the strobes- and the flicker frequency. It also changes with the intersected pulse lights, which temporarily subdue and reignite the impression. Feed uses two independent sections of strobes, which, when set to differing frequencies, creating interference on their own, all of which is constantly "frustrating" the brain's attempt to properly "see" and thus constantly animating the brain to ever new interpretations of the reality at hand.

Generally the brighter the flicker and the more filling one's entire field of view, the more instantly the patterns emerge. This relies for the most part on the very dense fog, which erases any idea of physical space, depth of space and resets one's sense of orientation. The fog really brings the flicker to the plane of the retina, allowing no distance or escape from it, the eye is reduced to a basic brightness-, contrast- and color sensor, all the perceived patterns then being "invented" in brain.

I worked with flicker in my video work for about 6 years in an attempt to at least somewhat lifting the video off the flat screen and have it pulsating in space. The light element of video becomes equally prominent when using flicker, but still the inherent flatness of projected video remained a source of frustration. The idea to work with fog and strobes goes back to a couple of intense experiences in fog, both up in the mountains, where walking into a bank of clouds on an otherwise sunny day leads one into this evenly lit serene moment of peace and beauty, as well as finding myself in a hard core techno club in Brussels sometime in the early nineties, which was just packed with fog and sound. Like often with ideas, I carried this one around for years before I eventually started the

research, most of it empirical in nature in my studio. I was thrilled right from the first test, to see that my imagination was surpassed by the early results. From there, through a series of tests and sequences, I started building a vocabulary, which I am still expanding on, still excited. I feel I have scratched just a bit under the surface, so that makes me happy, much more things to find out.

BEFORE PRODUCING FEED, HAD YOU DONE ANY SMALLER EXPERIMENTAL STUDIES IN WHICH YOU WORKED OUT THE CONCEPTUAL AND TECHNICAL CHALLENGES?

Other than my prior work with video flicker and my stroboscopic light work as part of my collaboration with Ballet Preljocaj, I started working in this particular way in 2005 for Feed. I guess you could say, in the course of a longer working career one builds up skills and experiences, which later on allow to be combined into further leading enterprises. That's what it felt like.

WHAT ARE YOUR FUTURE PROJECTS AND WILL YOU BE TOURING IN THE USA SEEKING ENGAGEMENTS? I'LL BE HAPPY TO INCLUDE ANY PUBLICITY BLURB KIND OF MATERIAL YOU CARE TO INCLUDE AT THE END. YOU COULD WRITE IT IN THE THIRD PERSON IF YOU WANT. BE SURE TO INCLUDE URLs AND EMAIL ADDRESSES THAT YOU WOULD WANT PUBLISHED.

Currently working on 2 new projects, both long term, one is an opera sort of called "SplendidVoid" a one actor (in the flesh) show which deals with the topic of immortality and omnipotence fantasies, enabled through technological progress as we know it. Part high tech spectacle, part primal performance, scheduled for 2008/09.

The second project is an installation called "level", which installs typical artifacts found in game environments into an actual space, a maze brimming with audio loops, animated visual textures, remote video feeds, flickering lights and a choir of disorientated avatars / bots, a kind of contemporary "Gesamtkunstwerk".

Feed is invited to Montreal, at the Elektra Festival 10-12th of May, otherwise no north American gigs so far this year – gladly taking offers.

My website is: www.hentschlagelager.info (which includes access to the Granular-Synthesis site)

WHAT IS THE VARIABILITY OF RESPONSE TO THE AUDIENCE'S PATTERN GENERATION IN FEED? DO SOME PEOPLE EXPERIENCE NO PATTERNS AT ALL? ARE THERE SOME RESPONSE TRAITS COMMON TO ALL?

From what I hear back from my audience everybody sees patterns, some of them see purely geometrical or abstract ones, others see realist forms embedded, animated scenes, etc. The individual response I believe depends entirely on one's predisposition and brain state.

IF ONE EXPERIENCES MORE THAN ONE PERFORMANCE OF FEED, CAN THEY GROW WITH THE EXPERIENCE IN BEING MORE CONSCIOUSLY PROACTIVE IN ELICITING THEIR OWN BRAIN RESPONSES (I KNOW THAT IN MY ONLY EXPERIENCE WITH FEED, I WAS PRETTY MUCH JUST OVERWHELMED, BUT IF I HAD A SECOND EXPERIENCE, AND IN ANTICIPATION OF WHAT WAS TO COME, I MIGHT TRY TO DIRECT MY BRAIN TOWARD CERTAIN RESPONSES. IS THIS POSSIBLE)?

This I could not answer, lacking proper statistics. I myself usually am too busy during the show with delivering it. The show is never the same in the first place, I improvise vastly in the second part, to keep it fresh for myself and therefore you would have a different experience the second time in any case.

HOW DO YOU FIND THE USA IN TERMS OF PROFESSIONAL OPPORTUNITIES (COMMISSIONS, GRANTS, TOURS, PERFORMANCES) WHEN COMPARED TO YOUR WORK IN EUROPE (IN MOST CASES IT IS THE AMERICAN ARTIST WHO MIGRATES TO EUROPE IN SEARCH OF THESE OPPORTUNITIES, AND IT IS MORE RARE, I THINK, TO DO WHAT YOU ARE DOING).

Well, in good years I make about 25% of my income here, after living in New York for 8 years now. And yes, I am touring in Europe and Asia, as most of my American colleagues. In that sense I have truly arrived. I say this without a sense of bitterness. I have gained much insight, experience and friends immigrating to the US and continue to be intrigued by the ambivalent cultural forces at play. Its by no means a comfortable resting ground for artists, unless, that is, one finds good representation. Being this place of extremes and often contradicting dynamics between utmost individualism and fundamentalism, I find living here, from an artist's point of view, extremely attractive.

I understand also that to continue staying here in the long term I either need to find a teaching post or alternatively win in the lottery. Both are options worth considering.