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Travels through the Electronic Music Timescape

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Walking into Ftarri Records, I was surprised to find myself not in the present, but the past. The owner opened a box of AMM CDs from 1997, gleefully exclaiming, “Wow, these are really old. No-one will buy these – cool!” Yet Toshimaru Nakamura played with me that night using an Eventide harmonizer pedal – something unimaginable in the starkly minimalist days the shop strove to emulate.

If one were to leave Detroit in 1988 for Stockholm in 2010, the transformation of experimentation in Techno would astonish any time traveler.
In early 1993, Cassette Mythos comes out – a sonic pre-internet holy grail where plunderphonics is a newly minted genre of tape experimentation mapping a temporary autonomous zone between Factsheet 5 and the Whole Earth Catalog. (James, 1993)

In the mid-nineties, Boston Noise is forming. with it's mix of experimentalism and technical prowess, as self-taught iconoclasts coalesce around the Red Room in Baltimore. Across the ocean, Fylkingen and EMS orbit 'round the cusp of outsider experimentalists and institutional researchers.

The musicians in these aesthetically striated scenes experiment with electronic, electro-acoustic and intermedia work long after the hey-day of the well-known electronic music studios, first founded in broadcasting houses and institutions, has become a known quantity in the landscape, often far from any of the “original” sources of these experiments and techniques.

The circling constellation of tradition and innovation is ever-unfolding. Did the musicians in these scenes fall to one side of the tilt-a-whirl, or ride it into new territory? And can broadening our map of musicians experimenting with sound lead us to a wider world of new territories?

**What is "experimental"?**

Electroacoustic music demands an experimental approach because its instruments are new, unpredictable or eternally re-purposed. Experimentation often takes form in dialogue, in dynamic communities localized by proximity or common cause.

Some of these definitions will be familiar to those at the conference the last days. The term “experimental” is addressed right off the bat by Pierre Schaeffer in his *Treatise on Musical Objects*:

“…the term electronic is still attached to such musics, which are in reality electroacoustic. I should, for my part, have preferred the term experimental, inasmuch as no one putting together on the tape recorder instrumental and vocal sounds, and those that come from acoustic bodies as well as electronic generators, can deny that he is in full experimental mode.” (Schaeffer,
This approach emanates from a broadcast engineer's ethos, where experimentation is as much a facet of engineering as an artistic act.

Bob Gilmore’s musicological audio paper, *Five Maps of the Experimental World*, includes definitions from John Cage, James Tenney and Michael Nyman. Schaeffer’s definition fits well with Tenney's: “By analogy to a research scientist, a composer could test or verify a hypothesis through the medium of music.” (Tenney, 1984, in Gilmore 2014) And both fit well with Cage’s definition, which we heard here at the conference recently: "An experimental action is one the outcome of which is not foreseen" (Cage, 1961, in Gilmore 2014) The definition Gilmore refers to by Nyman, "Experimental music is all the interesting new music which isn't avant-garde." (Nyman, 1999, in Gilmore, 2014) is illuminatingly problematic. This limits experimentation to a particular niche of time, genre or technique, rendering the question of where the actual act of experimenting or honing skills lie moot. Such a definition is one to consider, however, when contemplating experimental music communities – be they institutional or the most fairy dust of grassroots.

Schaeffer is writing in the thick of his work, while Gilmore is looking back from a musicological perspective. But all these definitions tension the paradox between the individual act of experimentation or developing technique, and the indication of sub-genres, scenes and ideological stances. Rather than commandeering the term to categorize approaches, I propose a definition simple enough to be inclusive:

*Experimentation in music is to ask what a material, process or instrument will produce through the act of making it sound.*

What is "technique and skill"?

In 2016, KOMA electronics produces the Field Kit Electroacoustic Work Station. This machine encapsulates established techniques and traditions of several decades in a single box. Returning to Gilmore: “Some of what gets called and packaged as experimental music today. . . fits neatly within now-familiar techniques and practices of the experimental tradition” (Gilmore, 2015).

This machine encapsulates the 90s noise scene in a single product. It standardizes years of diffuse, individual experimentation in places ranging from well-endowed national institutions
to storefront galleries and squats, with cottage-produced emulations of hand-made contact mics, salvation army speaker cones and re-purposed answering machine microphones of the previously cobbled-together, tabletop object sets of yester-yore. But if someone chooses to experiment with this instrument, they will have, at the very least, a different sort of process than those original experimental musicians the Field Kit mechanically attempts to encompass.

Technique in electroacoustic music has been taken up by a host of authors, from the above-mentioned seminal work of Schaeffer to Allen Strange’s 1972 synthesis manual to more recent writers like Nicolas Collins work on hacking, *The Supercollider Book* and a myriad more besides. These particular examples share the premiss that technique derives from *sound* above all. The formation and eventual refutation of traditions mirrors that of technique and skill – vital processes to building and breaking experimentation into new forms. So the definition I propose is the compass compliment to that of experimentation:

*Technique, or skill, in music is to learn how to produce and reproduce specific sounds through an material, process or instrument.*

Traditions of technique often form in “experimental” music scenes. Returning to Gilmore:

“. . . once a scene is in place, quite a lot that can flourish within it loses sight of the original impulse that led to its creation. Some of what gets called and packaged as experimental music today . . . fits neatly within now-familiar techniques and practices of the experimental tradition”.

(Gilmore)

This situation can certainly lead to technique overtaking the experimental, or the experimental being mistaken for technique, in the effort to categorize things into groups more useful to the tradition at hand, than to the act of making music and sound work. Both this issue, and the inter-dependance of these definitions of technique and experimentation, are exemplified materially in the above mentioned KOMA “Electroacoustic Field Kit”.

In 2018, Boston Modular holds regular gatherings for musicians using devices that, in the 90s and 00’s, were extraordinarily rare and expensive in the area’s electronic and experimental music ethos. It is unlikely that every user of these now widely available instruments will lean entirely towards either an experimental or a technique-based approach. Such communities are forming in many cities, and have a great potential to become inter-relays for the creation of new work.

**Geographies of Experimentation**

In the 1960s, the landscape of early electroacoustic music spans major production centers of the broadcast spectrum in Europe, and research institutes in the USA. The BBC Radiophonic Workshop is running, where composers like Daphne Oram, Delia Derbyshire and Brian Hodgson also work with tape and concrete sounds. Though their work is as purely experimental as that going on in any of the new electronic music studios in broadcast and research facilities throughout Europe, their job is to refine techniques to make commercial work (most famously for Doctor Who). From *musique concrete* to plunderphonics, as canons form, geographies contemplate – or complicate – one another. In 2018, these musicians are now firmly included in experimental electronic music histories in some circles, while categorized away in others.

Music in shared locales and environments often shares qualities or histories. Electroacoustic music and its descendants spread to a vast range of environments whose musicians both
experiment and hone techniques with instruments from the high-end to the hacked together. Communities are “localized” by geographies of place, or by geographies of aesthetics.

The plethora of electronic music scenes in different cities form criss-crossing, aesthetic locales. Electroacoustic music and its descendants spread to a vast range of environments. Virtual geographies also take form online, in ways more rapid than seems possible to learn about. From the early BBS and email groups of the late 80s and early 90s, social media, GitHub, online magazines, podcasts, blogs, video channels and forums take on the roll of spreading the local word. Then there are geographies of method and practice, where local sub-genres and movements are floating points on ephemeral maps of sonic pursuit, some becoming known, others remaining under the radar. Music cultures are richer, not poorer, for their inter-developed aesthetics. They yield new techniques through community iteration, and illuminate the multiple trajectories of experiments from which the music evolves.

Boston

In 1998, Jason Lescaleet fills clubs and galleries with freakily looping tape machines, striding angrily through them to adjust the careening webs. What happens to this machine associated with delicate work when it is played at dangerous volumes and run in unpredictable conditions? How are techniques developed to usher the chaos?
In 2002, Jessica Rylan is building modular synthesizers from scratch, long before they become a common item in live electronics sets, or return to electroacoustic music. She uses them, among other things, to processes whispered, confessional songs whose words are shrouded in audial pyrotechnics of devastating skill.

In 2006, Vic Rawlings lays speaker elements across the floor, sounding by surgically poking the electronic insides of open-backed effects pedals with bits of copper, and playing a cello with
added resonator strings and amplified scrap metal—where every gesture is a compelling paradox between virtuostic exactitude and a question about what the resulting sound will be.

In 2000, these performances and hundreds more play out several times weekly in a motely collection of storefront galleries, independant record shops and warehouse floors, whose addresses shift with maverick agility in the face of the city's sharp regulation of live "entertainment" and brutally increasing rents. The almost austere focus of the scene might pay homage to its physical proximity to the likes of Harvard, M.I.T. and the New England Conservatory— or it might burn forth in spite of these megaliths.
Bhob Rainey's BSC ensemble is a prominent feature of Boston’s experimental music landscape from the late 90s to the mid-2000s. This hybrid between reductionism, electroacoustic theory and harsh noise informs a music wholly unique to Boston. He reflects: “I’m more interested in finding the noise in music – those places where the music…exceeds the music-ness that’s happening…It’s not that it doesn’t make sense but it goes beyond sense. It exceeds the meaning that it’s carrying.” (Rainey).

**Baltimore**

From 1999 onwards, members of the Red Room collective reflect on the weekly concerts of experimental music they produce, cull favorite artists, and program them on the High Zero festival in the riskiest combinatorics they can imagine. The entire premise of High Zero is an experiment in combinatorics. The founder of the collective and the festival, John Berndt, travels regularly to New York to study impossible theorems with Henry Flynt. In 2017, M.C. Schmidt of Matmos takes on the festival together with the large community that has formed around it.

Amongst the cavalcade of projects emerging from the Red Room is Thus, a duo between John Berndt, who drives much of the scene from its inception, with sculptor come instrument inventor Neil Feather, whose instrument we just heard, and whose work with instrument invention is indicative of the experimental music scene here. They span the gamut from PureData synths to wind-up toys, magnet-driven sounding wheels to mic-ed up 8-balls landing on amplified strings, which render “acousmatic” in a whole new light with regard to “objects”
In 2002, Carly Ptak builds a worm-farm in a plexiglass vessel, a meter across and two meters deep. She fills it with soil, populates it with earthworms, and wires it up with contact mics. Over the wide opening of the container, she places a hacked-together sprinkler system, with a red button to turn the water on and off. In this installation, called “Housebound”, the worms are coaxed to “sing” in soft, rattling voices, through contact mics by helping them to imagine the rain – concrete sound sent back to the source. There are no photographs, and the only sonic record is a long since gone CD-R.

She is also one half of the live electronics (and other undefinables, such as “mind”) duo Nautical Almanac. Together with Twig Harper, she runs a space called Tarantula Hill in a rickety old formstone three-decker in a Baltimore slum throughout the 2000s. Electronic – and electroacoustic – live acts and experientialists visit the loft from the world over to play and exchange music, experiments, techniques, ideals and visions of wild abandon.
In 2003, Baltimore has vast swaths of abandoned neighborhoods and even more in conditions of deep trouble and abandonment, reminiscent of, though not as widespread as in Detroit in the 1980s. The city functions as a satellite to Washington D.C. in some ways. In others it is self-contained with the iron surety of places beset with poverty. The scene draws a mix of people from many walks of life, all caterwauling in the adversity and reveling in the self-made ethos which necessarily informs so much of the city's music and arts communities.

In 2013 the Red Room is painted a color most would call Blue- though the collective, descended from an fiercely imagined work of paradoxes, Flynt proofs, Neoism and necker cubes, will studiously tell you that its is, of course, Red.
In 2016, an octophonic diffusion concert is held at Space 2640, a fire-damaged church repurposed by Red Emmas, a local anarchist center. The concert is produced by the High Zero foundation, and features artists from afar. From their vantage point far away in space and time, the program notes open "The frontier for French electroacoustic mystical music has traversed much ground since Pierre Schaeffer shuffled on the past and laid out a map without borders or designated ground. Seventy years in this land of the fried we hear a plethora of Ideas and ongoing potential coming from all corners of the globe" (Kassel, 2017 (Kassel performed on the concert. He later used this same writing in the liner notes to his 2017 LP release).

**Stockholm**

The next generation of electroacoustic composers in Stockholm has a History – in the city's underground Rave scene of the 1990s. They bring IDM (Intelligent Dance Music) and all its experiments and techniques back into Fylkingen, EMS, Audiorama and the Royal Music Academy, and then, transmuted, back out into the wider city again.
In 2003, composer Mattias Petersson is part of a collective of these musicians called “The Nursery”, which produces a festival of experimental, electronic music drawn from these sources. A preview describes the event as “recycled illegal music at the Culture House” (Svenska Dagbladet, 2003)

Meanwhile a new generation of text-sound composers is arriving on the scene, moving sometimes with reverence, sometimes with a change of course, into new territories from the aesthetics of composers like Lars-Bodin, Åke Hodell and Sten Hanson. In the mid-1980s, William Brunson is the producer at Fylkingen, where he premiers an intermedia production of Pandora's Box. In the 2010s, composers Marcus Wrångo and Magnus Bunnskog are running Audiorama, where they and others program new works in this genre.

Guds Sönner, or The Sons of God, forms in 1998 at Fylkingen. One could argue that their work has solidified into something canonical, referencing the “experimental tradition” of the Fylkingen and EMS scenes, which transform with the arrival of new artists only every so often. They often work Sten Hansons's tape and performance composition, “Skärp dig för Fan!” (Shape up, Damn it!), into their slow-motion, anti-ecstatic dance over careening noisescapes built from things like contact-mic-ed industrial sewing machines and thunderous synths.

In 2015, Fylkingen goes through such a sea change, and a new generation takes up the running
of things. For the first time in its 83 year history, Fylkingen is run almost entirely by women. Some take up entirely new pursuits, like running the anarcho-feminist Titwrench festival of experimental music and performance, while others turn to the long, intricate history that groups like Guds Söner emerge from. And some tread the interzone between to new territory.

In one of her solo evenings at Fylkingen, Marie Gavois, who directs the over 80 year old organization from 2015 to 2018, references many elements of Åke Hodell’s classic intermedia work “220 Volt Buddha”, interwaving the harsh spotlights and iconic round sunglasses with tales of her job caring for the elderly, against a backdrop of harsh Buchla frequencies made on her first visit to the instrument at EMS

In 2016, Gavois and electroacoustic composer Alexandra Nilsson form “Sister Loops”, and create a performance based on work by Guds Söner’s performance, in turn taken up from Sten Hanson, replacing the irascible, hypnotically twitching men in suits with aging women, smoking and kicking back beer, rasping a cranky Homage, för fan! by performing an altered version of Skärp dig, för fan!, where they change the words to “Gå hem nu, för fan!” (Go home now, damn it!)
In 2017 a group of composers who all either hold or are earning Masters degrees in Electroacoustic Composition from the Royal College of Music in Stockholm use their excellent electronic music techniques on a new set of objects. Styling an event after the gatherings of “raggare” (A subculture of conservative, Elvis worshipping men who speed about in 1970s American boat-cars doing wheelies and drinking beer in rural parking lots across Sweden), they commandeer a parking lot in suburban Stockholm to hold: Motorave. The music is a mix between flashily executed homages in post-danceable complexity to the 80s pop at "raggare" parties, and electroacoustic pieces made from the sounds of screeching, rumbling old cars, punctuated by intermissions of actual wheelies.

In 2017, Stockholm is a well-heeled city which is an oasis of well-funded, state-of-the-art electronic music facilities like EMS, Audiorama, the new studios at the Royal Music Academy and the multi-channel, intermedia stage at Fylkingen. Yet it is now, and in the few years preceding, that the cassette tape makes a comeback, with several short-run labels of electroacoustic music.
Pictured here are releases on Ambitious tapes, many of which are generative compositions, utilizing programs like Supercollider, Audio Mulch and TidalCycles. Reaching back to Cassette Mythos over the new old 'zine medias of the internet, the flywheel of technique, to experiment, to technique continues.

Thus these musicians in different cities speak in sonic tongues over a Wellsian single-point traversal of space through time.

**Traditions and Trajectories**

In the arena of modular synthesis, a progression from broadcast radio equipment to experimentally built machines, becoming high-end equipment and turning back into experiments again, spans the early half of the century to the present. New experimenters are always emerging, new techniques being honed, working from an ever-shifting hybrid of D.I.Y. experimentalism and professionalized skills. These devices thus make a good materially manifested example of the subject at hand.  

*Pierre Schaeffer at the Phonogene in 1963*  
The original Make Noise Phonogene module, released in the 2010s
In the early 1950s, Pierre Schaeffer and Jacques Poullin develop and work on the Phonogene, a machine for playing and manipulating multiple tape loops. In the 2010s, Tom Erbe of the MakeNoise Eurorack company traverses this local geography of experimentation from Asheville, North Carolina – crossroads of Robert Moog’s former workshop and Black Mountain College.

One can also look to Morton Subotnick’s original and more recent renditions of his seminal work *Silver Apples on the Moon*. Originally a painstakingly constructed tape piece, Subotnick tours with a live performance of the work in 2014, wondering to the audience at the sheer possibility of doing so within his lifetime. His live set-up is a fantastic conflagration of tools from every decade, dove-tailing with his remarks at the opening of Stockholm’s Audiorama in 2010: “There is no longer any context in our time.”

*Morton Subotnik performs Silver Apples on the Moon*

*Clara Rockmore, filmed by Robert Moog, playing “classical” music with her sister Nadia Reisenberg.*
In 1977, sisters Nadia Reisenberg and Clara Rockmore play music with technical mastery on instruments looking back to an experimental era long since flown, through the lens of earlier traditions still. They are filmed by Robert Moog as he works on Clara Rockmore's one and only record in her lifetime. They stand on the dusk and pre-dawn of many eras at once, playing this music in what is then still a current-day apartment, Clara's silver headscarf a nod, perhaps, to some futuristic world not yet or past imagined.

There is no maturation point for technique that can force experimentalism back. Modular synthesis displays this in the progression from high-end broadcast equipment to experimentally built synthesizers that again became high-end. Innovators emerged then in a hybrid flurry of D.I.Y. experimentalism and professionalized skills, like the MakeNoise company, with “Phonogene” and “Telharmonium” modules modeled and named after the same, or even machines built to emulate anti-machines, as with Koma's "Field Kit".

There is a limit to experimentation as a sole musical practice. Technique and skill developed from experimentation are desirable, since it is through these that the potential of something discovered can be realized to the most detailed, brilliant and sense-making or -defying manifestation, It is even through this kind of technique-building that the same something discovered can be torn apart and reduced to its components, to be taken up as detritus and inquired of anew It is in the ever-spinning still-point between that sparks fly and wonders are forged.
References


Articles


Recordings/Audiopapers/Recorded Talks


Images


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**Video:**