

soundtoys home news artists journal about contribute links tags Audio Art in the Deaf Century by: douglas khan (2005/07/25) Art photography is commonplace, but an art phonography? When compared to the photographic arts, the phonographic arts are retarded. There are innumerable contributing factors, beginning with the privileging of visuality in Western societies -- what has been called the "regime of the visual." One territory of this regime is comprised of the technological, institutional and discursive precedence, both chronological and conceptual, of photography over phonography. Recording and disseminating the scope of the visual world began as a nineteenth century affair while it wasn't until the sound film of the late-1920s that a corresponding panorama of the aural world -- speech, music, and sound/noise -- became socially audible. Furthermore, the wide acceptance of early photography resulted largely from the tenure of other mass reproduced forms. The photographic mode of literacy, in other words, was predisposed long before the widespread availability of photography proper and, therefore, its social embeddedness preceded phonography to an even greater extent. Photography submerged the mark of the hand (by exiling it outside the frame, outside the product and into the production) which the graphics of lithography and etching had routinely carried to millions. It created a rupture in modes of representation to be sure, but as a resolute culmination of an analogical form to which visual art had long aspired to. Phonography was further disadvantaged by being received among the social commonplace of the mechanical recording per se brought about by photography. Edison would talk of a "phonographed sound." Except for the reproduction of music, no corresponding aural forms preceded phonography; it lacked a proper introduction. The major candidate, telephony, displaced someone else's voice and only then spatially whereas phonography displaced temporally as well. Phonography returned a self-same voice. As Malraux has said, "You hear other people in the ears, but your own voice in the throat." Phonography wrenched the voice from its production in the throat, in a dual act of violation and theft, but then lodged it, like an echo without a landscape, in a mechanical memory. Sound was stolen only to be returned to its owner over and over again. Thus the surprise of Edison upon hearing the first recording -- "I was never so taken aback in my life." His voice had moved from his throat to his ears. Another factor: social spaces for performance and distribution were monopolized by a limited number of powerful artistic and political interests, and subaltern spaces where a countering production could have inhabited were left undeveloped. Mass distribution of photographs was commonplace by the latter-half of the nineteenth century while it wasn't until the turn of the century that phonography, after it had been put at the disposal of business, was mass distributed and except for scattered novelties, only in its capacity to reproduce music. Within the arts, photography spread out among an increasing number of venues and across cultural practices, battling for a position of legitimacy and ultimately gaining such a position. A possible art of phonography suffered primarily at the hands of music which, like painting's relationship to photography, was culturally dominant enough to easily declare and domesticate its heretics.[f1] As a further complication, the phonographic arts are retarded because there hasn't been a phonographic art. This is not necessarily an undesirable state. Just the opposite. It signals an expanse of artistic possibility in a situation where other arts battle exhaustion. Elsewhere there may be talk again of endgame. Here it's a season opener. Before proceeding, let me dispel an immediate objection. What follows is not another modernist call for a media art based upon a perceived set of the medium's discrete properties. Well, I take that back. It is, that is to the extent that the essential characteristic of phonography is to replicate the entire world of sound, including those sounds arising from other art forms. Thus any essentialism is dispersed and becomes contained in the din. It's most at home elsewhere, in transit and transformation. Without anchor, its competency relegated in a moment of candour to the idiomatic understanding of understanding: having an ear, lending an ear. The problem has been that phonography has not migrated over the expanse of sound, but has been limited to the reproduction of existing aural cultural forms -- music, poetry and literature, theatre, reportage -- when it could reproduce all these forms at once, inhabit their conventions and break them open to the general aural environment. In the audio-visual forms of film and video, sound recording has suffered from a subsumption under the visual and, within a hierarchy of sound itself, of a full range of sounds under speech. The absence of a developed artistic practice of phonography is perceivable through yet another comparison between photography and phonography. Comparing the artistic utilization of the mechanical recording of the objects of the two major senses, that is sight and hearing (what John Cage calls the public senses), we can note a remarkable historical lapse: approximately 100 years between the eyes and the ears, a rather severe mutation that has neither cultural nor physiognomic (hat size?) equal. In the mid-nineteenth century, as photography moved to the plasticity of paper, artists were quick to take the knife, pen and brush to it. Not until after WWII, with Pierre Schaeffer's late-40s *musique concrète* pieces in Paris, did anything of similar scale occur in phonography. In the late-40s the visual stigma remained, for example tape recorders were commonly referred to as "sound mirrors," in accord with the brand name. Technology The incidence of post-WWII phonographic activity is almost always wrongfully attributed to the availability of magnetic audio tape. Although audio tape may indeed have brought about an increase in activity, the first *musique concrète* works were produced on phonograph disc cutting equipment. Pierre Schaeffer was, in fact, reluctant to give up this equipment for audiotape recorders. Technologically, Schaeffer's first works could have been produced on similar equipment available in the mid-1920s. Likewise, the magnetic audiotape works from the 1950s could have been realized in the early-1930s when optical sound film became widely available. Optical sound film's plasticity, its continuous linear editing, was very close to the capacities of magnetic audiotape. Harry Potamkin, in an article from 1930, recounts a meeting with the Russian filmmaker G. V.

Alexandrov, in which they discussed his short experimental film *A Sentimental Romance*. The film investigated sound manipulation techniques taken up much later by musique concrète. He has done in this film a number of things I have thought basic in "playing with sound," such as: running the sound track backwards, inscribing or designing the sound (sound is after all only inscription). He cut the sound inscription.[f2] Elements within the common structure of a sound, say its attack, could be removed by removing the attack's visual representation or the sound could otherwise be manipulated to alter the characteristics that make a particular musical instrument or someone's speech recognizable as such. Speech itself "may be clipped, stretched, broken into stutters, made to lisp, joined with all sorts of sound combinations either in discriminate mélange or in alternating, repeating motifs." [f3] He also pointed out that companies were well on their way to cataloguing sounds, one of them having a "library of several thousand records and hundreds of reels of sound on film." In his book *Radio*[f4] Rudolf Arnheim championed the use of sound film strips and sound archives for use in radio art or, more precisely, what he hoped would evolve into a distinct radio art. Starting in the late 1920s Moholy-Nagy made explicit proposals for experimentation with sound film and, by stating that sound should be experimented with apart from and prior to its integration with the visual images, effectively proposed a phonographic art.[f5] In the early-40s John Cage, following the suggestions put forth in Carlos Chavez's *Toward a New Music: Music and Electricity* (1937),[f6] attempted to found a "centre of experimental music" which would utilize film strips: people didn't think about using tape recorders, but "film phonographs." With the help of this particular kind of camera, we thought we could save certain sounds, building libraries of them and composing on the basis of these catalogued elements.[f7] In the history of cinema, despite some innovative early uses of sound, such explorations were necessarily couched in a framework of visibility and not, as Arnheim called it, in blind hearing. Likewise, while early phonographic proposals by Dziga Vertov, Guillaume Apollinaire (discussed below) and Moholy-Nagy were keyed specifically to opening up a future practice, Arnheim lamented the lack of a radio art taking advantage of the new resources. Chavez noted a similar void from the vantage point of music; and Cage was to postpone his experiments until after being exposed to those of Schaeffer and company. In other words, there were proposals and the technology for developing a phonographic art, but no phonographic art. From the mid-1920s to the beginnings of a phonographic art, that is from the availability of electric recording, amplification and broadcast to the post-WWII years, and certainly with the development of optical film sound, there were relatively few technological obstacles preventing the development of an audio artform. The relationship of acoustic phonographic technology to artistic development prior to this period, however, becomes more problematic. Phonographic cylinder and disc production was in full swing at the turn of the century and commonplace by the time of the avant garde explosion, circa 1910. And, although there was a continual argument over reproductive fidelity to the original, there was enough satisfaction to build an industry and enough resolution to gain tolerance from the tender ears of major composers. For instance, after one recording session, Ferruccio Busoni chose to complain about the time constraint and not the fidelity of the sound.[f8] Whatever the perceived shortcomings in resolution they need not have been suffered. They could have instead been valorized through the avant garde's preference for ragged surfaces and raucous environs, especially as the 1910s proceeded and as brutisme raged from all quarters of the continent. According to Tristan Tzara, for instance, Dada was capable of an "elegant and unprejudiced leap from a harmony to the other sphere; trajectory of a word tossed like a screeching phonograph record." [f9] Nevertheless, there were problems with remote recording and with editing, problems that apparently stifled Dziga Vertov's attempt, to be discussed below, at creating an audio art of montage. With the exception of Vertov, there was no attempt to constitute phonography as the technological basis for an autonomous artform. A qualification here is Walter Ruttmann's *Weekend* which bore the mark of cinema rather than a beginning of a program for a photographic art. There were instances however, where phonography was incorporated into the thought or action of received forms, or was experienced in rather unique terms within the daily life of the period. One of the earliest examples was Alfred Jarry's story *Phonographe* (1884) based "on the technique of a recurring motif, like a record with a scratch on it." [f10] -- a blatant registering of the machine within the arts and a short step from Jarry's use of marionettes. Phonographs, improbable sound, music machines and strange acoustic phenomena carried over into Raymond Roussel's *Locus Solus* and *Impressions of Africa*, a tradition that could be carried further to the sonic ideas of Duchamp and Artaud.[f11] In 1920 Raoul Hausmann used a phonograph in a *Dada-Soir* in Dresden: "The stage was surrounded by a huge green velvet curtain, through whose slit I shoved the gramophone horn and began to play some glorious jazz-music. Behind the curtain we heard the roar of the crowd. From time to time I tossed a couple of firecrackers to the stage." [f12] Iwan Goll, Erwin Piscator and others incorporated phonography amidst other contraptorial wonders into theatrical staging. In the mid-1920s Darius Milhaud experimented with a variable speed phonograph, as did Paul Hindemith and Ernst Toch in the later 1920s; in 1925 George Antheil proposed using a "phoneygraph" to create a phantom orchestra offsetting an actual orchestra in his unfinished *Mr. Bloom and the Cyclops*, based on James Joyce's *Ulysses*. In 1889 Edward Bellamy elaborated a utopia of convenience, including not merely talking but arguing clocks, in *With the Eyes Shut* (a utopia interrupted only by the recorded instructions of wives). While Henri Martin-Barzun argued for simultaneous poetry aided by a phonograph [f13] the female testers of phonographic pressings experienced the simultaneous cacaphony of the company's catalogue. The sound poetry of Ball, Hausmann, Schwitters and many others had an inadvertent precedent when late-nineteenth century phonographically-equipped music boxes, toys and novelties deteriorated. A cigarette dispenser which once asked the opener of the box, "Would you care for a cigarette?" wore down to

“Aahhjjouaaakkmmenn?”[f14] Shortly after the invention of the phonograph one person had the idea to: erect statues of popular speakers in life size, Mr. Henry Ward Beecher for instance, reproduce his speech in tin foil, put a phonograph inside of him (the statue, not the man), and stand him on a platform to repeat the new lecture on the Wastes and Burdens of Society.[f15] The phonographic preservation of oration, besides echoing Jacques Attali's observations in Noise[f16] on phonography's first mission to freeze the speech of societal elites, reminds us of the hairless Siamese cat assisting Danton's severed head, after many years of suspended silence, to speak once again, in Roussel's *Locus Solus*, or Bloom's idea for a funeral phonograph in James Joyce's *Ulysses*, “Kraahraark! Hellohellohello amawfullyglad kraark awfully gladaseeragain hellohello amarawk kophthst.” Moholy-Nagy's film *The Sound of ABC*, which played graphic figures scratched onto the optical sound track (letters, lines and profiles), “I wonder how your nose will sound?”[f17] In a 1950 essay, the Canadian animator Norman McLaren, famed for his drawn sound films, cited among his predecessors a number of investigators at the Scientific Experimental Film Institute in Leningrad and the Leningrad Conservatory in the early-1930s, although their attempts, like Oskar Fischinger's better-known work, were primarily synthetic music, often simply “performing” already written music.[f18] “Writing with sound,” as chronicled by Potamkin, manifested itself in the experiments of Alexandrov and although he vehemently denied it, of Eisenstein as well: Alexandrov, so he told me, has played with the designs of sound by inscribing it directly on the negative and allowing light to make the final registration ... By studying the inscriptions closely one may come to an exact knowledge of these inscriptions and read them as easily as one reads musical notes for sound. The inscription for speech and that of sound differ only in the composition of the intervals and a close student will come to recognize peculiarities of the different impressions. Actually, sound will be created without being uttered![f19] Then there was an event in 1924: “During the planet Mars' closest approach, radios around the world went off the air in order to allow interception of any possible messages from space; when translated onto photographic tape, the signals received produced crudely drawn human faces.”[f20] The connection between sound and inscription inaugurated by phonography, or rather, the phonograph that preceded it, took on poetic ramifications for Rainer Maria Rilke in his 1919 essay *Primal Sound*. [f21] In this essay he first recounts a childhood classroom project of constructing a crude phonograph, and then, some fifteen years later in his study, seeing out of the corner of his eye a jagged line much like that inscribed by the phonograph. The line was that of the coronal suture atop a skull he had acquired for contemplative purposes. If the line inscribed by a phonograph could be retraced to return the voice/sound that had created it, what sound would be returned from the coronal suture or, for that matter, any line along any contour in the visible world? Once this idea is taken out of the ridiculous it works very nicely on the sublime to suggest ways to proceed aurally, with sonic/semiotic animation, amid the spatialization of not merely the visual world but the conceptual world as well.[f22] To my knowledge, the first instrument that actually exploited the mimetic capacities of phonography, in other words, the first sampler, was Frederick Sammis' 1936 photoelectric *Singing Keyboard*. Built in Hollywood for commercial purposes, it used loops of optical sound film. Besides instrumental music and “new voice qualities and choral effects,” Sammis, who worked in RCA's sound film operations, had the following ideas for his instrument: Let us suppose that we are to use this machine as a special purpose instrument for making “talkie” cartoons. At once it will be evident that we have a machine with which the composer may try out various combinations of words and music and learn at once just how they will sound in the finished work. The instrument will probably have ten or more sound tracks recorded side by side upon the strip of film, and featuring such words as “quack” for a duck, “meow” for a cat, “moo” for a cow ... It could as well be the bark of a dog, the hum of a human voice at the proper pitch, or the twaddle indulged in by some of our tin pan alley song writers.[f23] It is no accident that today's purveyors of pastiche are inspired by cartoon sound tracks of the 1940s, which were supplied to the image through live performance -- as if Spike Jones were on a foley stage. One wonders if there were ever performances on the *Singing Keyboard* for its own sake or, for that matter, on the sound effects organs and machines used in theatre, “silent” film and radio plays. These were the immediate precursors of Sammis' instrument: the *Noisograph*, the *Dramagraph*, the *Kinematophone*, the *Soundograph* or the *Excelsior Sound Effect Cabinet* ... from whose keyboards and associated equipment came galloping horses, railroad whistles and bells, rooster crows, cow bawls, canary chirps, mockingbird calls, tugboat whistles, auto horns, cowbells, anvil strikes, marching feet, gun shots, tom-toms, thunder, temple bells, castanets, frog croaks, slide whistles, tambourines, telephone bells, glass crashes, auto chugs, water splashes, and the blowing of noses.[f24] *An Art of Mimetic Sound* The absence of an artistic utilization of phonography during the period from the invention of phonography through the early avant garde was kith and kin to the absence of an art of mimetic sound. The capacity for overt mimesis is, after all, what phonography shares with photography and what it doesn't share with music. Such an art could have laid the ground for a phonographic art. Walter Benjamin's well-known statement on premonitory art -- the “abundant barbarisms in Dadaism” as a latent cinema -- is applicable to the aural arts in questions here: The history of every art form shows critical epoches in which a certain art form aspires to effects which could be fully obtained only with a changed technical standard, that is to say, a new art form. The extravagances and crudities of art which thus appear, particularly in the so-called decadent epoches, actually arise from the nucleus of its richest historical energies.[f25] The difference is that, when Benjamin speaks of a form that is perceived as debased, one must speak of debasement in the form of absence, dismissal, suppression of an art form; a total debasement that leads to a remarkable lack of activity when a “changed technical standard ... a new art form,” should have been conceived, especially the moment it was made possible by that changed technological standard. An observation of an absent practice

may seem a bit unorthodox. However, it is no different in spirit than Attali's perfectly plausible description of the silence imposed by music. As a matter of fact, it was, first and foremost, conceits within musical discourse that silenced an art of mimetic sound and a phonographic art. For Attali, it was the fact of the phonographic mass reproduction of music which functioned, practically and emblematically, to silence music and to mute social transformation. On the other hand, it was received musical notions, separate from factors of repetition, that silenced a phonographic art capable of operating strategically within the new environs of mass reproduction.[f26] Silence can have as much presence as anything. It accepts all adjectives: it can be deafening, malleable; pauses can be pregnant. Examples of the musical silencing of sound can be found at the core of modern art. An explicit example occurs with Italian Futurism the very instant an expanded notion of sound was introduced into the avant garde, i.e., with Luigi Russolo's "art of noise." Although there was other bruitist activity throughout the early avant garde, Russolo's was the first, most systematic and stood as the source of inspiration, if not emulation, of what followed. It was also less marginal, playing to thousands throughout Europe and drawing critical and practical response from individuals of central stature among the twentieth century arts: Marinetti, Diaghilev, Mayakovsky, Stravinsky, Vertov, Mondrian, Prokofiev, Varèse and others. He cogently laid out his ideas through the course of several manifestos, designed a whole class of "noise-intoning" instruments, the *intonarumori*, and even created a new system of notation. Throughout, at every point in his practice, from the way he conceived of his artistic raw material at a molecular level to the reception of his works by others, received notions of music suppressed a truly radical art of sound. Russolo's practice of an art of noise, as proposed in his 1913 manifesto *The Art of Noises*,[f27] was explicitly cast in terms of music. In particular, he understood it as a "great renovation of music." Nevertheless, the manifesto preserves a deep-seated tension on the question of whether the art of noise should be an independent art or whether it should be dependent upon music. Since it is resolved unproblematically for music, this tension manifests itself as a schism, and a continual source of contradiction and hesitation for Russolo in the conceptualising of his project. A rather obvious contradiction exists in the manifesto's historical scenario. He placed the art of noise at the culmination point of the historical trajectory of music: music, he says, was born of a separation from the world of sound, from the world itself, a separation that eventually became the source of a fatuous transcendent power, detached from the momentum of life through the ages and an impediment to cultural progress. Music, in fact, was guilty of purveying a "fantasy superimposed on reality." The historically recent noise from the "growing multiplicity of machines" no longer allowed such superimposition. It instead imposed itself onto the protected domain of music, broaching the separation between life and art. In other words, the mechanistic sounds of modernism, the city and warfare, mandated the art of noise. However, once he embraced these sounds, he immediately denied their basic mediating trait: imitation. Anything which belies an attachment to the phenomenal world of sound, must be avoided; a noise's signature was to be timbral, that is sonic not fully semiotic. The culmination of the trajectory of music was supposed to remain musical. Even his idea of art in general conformed to the nonreferentiality of music: art is of the emotions and mimesis has no business in the emotive depths of the psyche. Also, Russolo wants the artist alone to be in control of the material to a degree which, in our post-Cagean era, seems impositional. This desire runs counter to imitation which, he says, reminds people too much of their own encounters with the world, and such mnemonic activities are out of the composer's reach. The instruments were also rife with contradiction. For having ostensibly resulted from an artistic response to the din of mechanized modernism, the design of the *intonarumori* drew not from contemporary technology but from the technology of traditional musical instruments -- the drum, hurdy-gurdy, lion's roar, organ, etc. What they actually sounded like is a matter of speculation at this time, for none of the original *intonarumori* have survived. It is difficult also to discern what they may have sounded like from the accounts of *intonarumori* concerts and demonstrations. What is interesting about these accounts, however, is the self-same split on the question of imitation and music. Russolo acknowledged that the *intonarumori* were quite capable of "misleading" but wanted no part of it. Most of those who took up his ideas, in whatever manner, asserted an intractability of imitation and, consequently, found the art of noise incommensurate with music, and since music was understood as the sole art of sound, incommensurate with art itself. Where its influence was felt in music, say in the music of Varèse, even the sonic breakthroughs were domesticated to assure a renovation of Western art music. The art of noise itself was either dismissed as a vulgar case of sound effects or put to work as sound effects. Russolo persevered the attacks on his art of noise, both those critical attacks and the abuse of the *intonarumori* for sound effects. However, after many years he internalized the opinion that the nature of his art was in fact imitative. In the 1920s he began to design instruments along imitative lines, culminating in the *Russolophone*, a keyboard instrument so capable of imitation it was used to accompany silent films. In this respect, he had arrived at an instrument that served the function occupied for years by sound effects organs. And along with the sound effects organs, it was rendered obsolete by sound film. If Russolo's art of noise had been conceived and carried out taking into account the mimetic aspect of worldly sound, instead of being forced into the reductive mold of music, the return of the mimetic repressed would not have taken the trivialized form of sound effects and his art would not have been so easily savaged by the new technology of sound film. If Russolo would have integrated mimesis into the very material of his art instead of thinking of sound as a physical phenomenon and noise as its complex (dis)organization, an identification with music would have been difficult to maintain. The momentum of the historical trajectory of music would have bridged over into something else. Similar opportunity was encountered and likewise suppressed during Cubism. Analytic Cubism's dissolution of representation was performed under the sign of music. Music provided a

model for moving toward nonreferentiality and for constructing a system of relationality per se, through figures of polyphony, rhythm, counterpoint, harmony, melody, etc. Simultaneity, for instance, was child's play for music. Consequently, if there would have been a practice of sound based upon Analytic Cubism it would have been indiscernible from music. Synthetic Cubism was a different story. Its incorporation of actual objects would have led to a substantially different practice of sound. We may ask, in fact, with each instance of collage in painting, sculpture, photography and literature during the early avant garde, where was the corresponding practice of sound? Remembering that what was, and is, fancied as musical collage, is restricted to a patchy, quodlibetical mode of organization of different spheres of musical culture. There was an actual attempt within Cubism to begin to introduce sounds on this level of signage. It occurred during production of *Parade*, Serge Diaghilev's Ballet Russe production of the collaboration among Jean Cocteau, Leonide Massine, Erik Satie and Pablo Picasso. *Parade*, one of the key moments in the arts of the twentieth century, was conceived as an extension of Cubism outside its painterly and literary confines, into those of theatre and dance. And its extension remained limited to these areas. Two different times Cocteau proposed unorthodox, non-musical uses of sound that, through their appropriative character, could have easily been celebrated as cubist. The first proposal was rejected and the second was reduced beyond recognition. Picasso seems to have been the person who confronted Cocteau to persuade him to abandon his ideas. Satie shared Picasso's opinion but didn't have similar sway over Cocteau. Diaghilev, on the other hand, while residing in Italy had been introduced to the idea of Russolo's art of noise and considered it an "idea of genius," but he didn't play a central role in the artistic side of the collaboration. Apollinaire, Cubism's most eloquent champion, wrote an article on *Parade* in which he snubbed Cocteau's contribution. Perhaps he was unaware of Cocteau's frustrated attempts, for these attempts at dealing with sound found similar expression in Apollinaire's own proposal for a phonographic poetry in his November 1917 lecture *The New Spirit and the Poets*. Or perhaps he was aware of Cocteau's attempts and considered them ill-conceived, too loosened from their associative meanings, or in need of phonographic realization, for in his essay he states: it would be absurd, if not dangerous ... to reduce poetry to a kind of imitative harmony that would not even have the excuse of being exact. Conceivably, imitative harmony might play a certain role, but it can serve as foundation only for an art that will make use of machines. For instance, a poem or a symphony in which the phonograph will play a part might well consist of noises artistically chosen and lyrically combined or juxtaposed; whereas I, at least, cannot conceive of a poem consisting merely of the imitation of a noise that cannot be associated with any lyrical, tragical or emotional meaning.[f28] It can also be asked where was the aurality of Surrealism, a question that cannot be dealt with adequately in this essay; a few leads will nevertheless be suggested. The absence of music among the Surrealists and even antagonism against it has been cited often but never dealt with satisfactorily. Man Ray, in his autobiography, has an anecdote on the topic. In my studio I installed the radio, which played while I worked, except when I had a visit from one of my Surrealist friends. The Surrealists disapproved of music -- there were no musicians in the group -- since they were considered of an inferior mentality ... Later, when I received another radio from a friend, I gave the old one to a Surrealist poet who became very attached to it but pretended that he listened only to the news: would turn it off abruptly when I was around. When it broke down, he begged me to find a repair man to put it in order again.[f29] Two recent essays on Surrealism and music have circumvented the historical problem by looking for the Surrealist "poetic spirit" in blues and contemporary creative Black music; categorical subsumption of musics not generated among Surrealist ranks proper is seen for some odd reason as a thing to do.[f30] Instead of looking for a music to call its own in retrospect, it seems more important to explain Surrealism's disowning of music.[f31] Music was never totally absent, of course, from the daily lives of the Surrealists -- many had their popular favourites -- but it's true that they they never invited practitioners of the Western art music variety into their ranks. The social structure of the arts at the time did not make things any easier. Not many composers populated the vicinity of the Surrealists. There was a gulf between musical modernism and the artistic/literary avant garde. The milieu that could support the industrial scale of technology of an orchestra, barely overlapped with the less rarified reaches of the avant garde where the attendant technologies -- pen and paper, paint and canvas, etc. -- were less capital intensive. Coffee and capital attract two different crowds. The stifling effect on music was expressed in 1924 by Edgar Varèse, one of the few composers who belonged more to the bohemian ranks, when he said: There is little hope for the bourgeoisie. The education of this class is almost entirely a matter of memory, and at twenty-five they cease to learn, and they live the remainder of their lives within the limitations of conceptions at least a generation behind the times.[f32] The question at this point could be generalized from asking why there was no Surrealist music, to why was there no Surrealist sound practice of any type. It could be that the required move was too unprecedented. The Surrealists were in an important respect not prone to dwell in the unprecedented. Their move toward mimeticization (of the unconscious) was in fact set against the overall tendency of the avant garde. What, for instance, would have been an automatic writing of sound? Andre Breton, Phillipe Soupault, Rene Crevel, Louis Aragon, Robert Desnos and others, informed by French dynamic psychiatry, hypnosis and mediumistic writing, had engaged in a quasi-scientific transcription of the voice/body of the unconscious, while with the automatic drawing of someone like Andre Masson, the unconscious was ostensibly inscribed through the body of the arm/hand. Such automatic activities, for Breton in the 1924 Manifesto of Surrealism, rendered participating individuals as "modest recording instruments," a variant of the term "simple recording instrument" derived from a psychiatric account of individual free-association, or "autoanalysis." [f33] With both recording and mimesis central to the Surrealist project what, therefore, would it sound

like? What would be an aural equivalent of Breton and Soupault's venture into automatic writing, The Magnetic Fields, now that we have magnetics? The Desired Audio Arts It is true that in the pre-WWII avant garde an art of mimetic sound or a phonographically-based art of sound was left undeveloped. This does not mean that an attempt was not ventured. We can find this with the Russian Dziga Vertov, best known as a revolutionary filmmaker in the company of Eisenstein, Shub, Pudovkin, Kuleshov and Alexandrov. In fact, he did not set out to become a filmmaker but, instead, attempted around 1916, after gaining background in writing and music, what would now be called audio art. As a boy Vertov wrote energetically in many genres and when he reached age sixteen he entered a conservatory for three years to study violin, piano and music theory. In 1916, while attending the Psychoneurological Institute in Petrograd, he was introduced to some of the major players of the Russian avant garde, including Brik, Rodchenko and Mayakovsky. The combination of a background of writing and music, amidst the adventurous imperatives of the avant garde: turned into an enthusiasm for editing shorthand records (stenographs) and gramophone recordings, into a special interest in the possibility of documentary sound recording. Into experiments in recording, with words and letters, the noise of a waterfall, the sounds of a lumber-mill, etc.[f34] Toward the end of 1916, Vertov attempted to realize his "Laboratory of Hearing," as he called it, with a 1900 or 1910 model Pathephone wax disc recorder: I had the original idea of the need to enlarge our ability to organize sound, to listen not only to singing or violins, the usual repertoire of gramophone disks, but to transcend the limits of ordinary music. I decided that the concept of sound included all the audible world. As part of my experiments, I set out to record a sawmill.[f35] It is assumed he became frustrated with the poor sound quality. Indeed, he spoke of his transition to film in terms of an inadequacy of phonographic technology: returning from a train station, there lingered in my ears the signs and rumble of the departing train ... someone's swearing ... a kiss ... someone's exclamation ... laughter, a whistle, voices, the ringing of the station's bell, the puffing of the locomotive ... whispers, cries, farewells ... And thoughts while walking: I must get a piece of equipment that won't describe, but will record, photograph these sounds. Otherwise, it's impossible to organize, edit them. They rush past, like time. But the movie camera perhaps? Record the visible ... Organize not the audible, but the visible world. Perhaps that's the way out?[f36] [my emphasis] In this respect, the famed Kino-Eye, the fetish of much post-WWII avant garde film, seems to have been the result of a frustrated ear. An inability to "phonograph these sounds," in Edison's words, resulted in a desire to "photograph these sounds." As mentioned before, this inability should not be immediately equated with lack of sound quality. The deficiency instead most likely came about in relation to Vertov's desired montage organization of the acoustically recorded material. Without the electrical recording and amplification that was to become available in the 1920s, he would have been unable to re-record without debilitating generational loss. Despite his thwarted early ventures in sound, once he embarked upon a career in cinema he did not wait for proper sound film technology to begin realizing his ideas of sound. From the moment he began filmmaking until his first sound film, *Enthusiasm* (1931), he engaged in virtual sound, to prepare for the inevitable advent of sound in Russian film. He did this, by the way, before sound had come to American film. He introduced this "implied sound" into his films, argued theoretically concerning sound, championed an expanded concept of radio and argued against the dogma of asynchronicity between sound and image set forth by Eisenstein, Alexandrov and Pudovkin -- A Statement. He also argued against the "theory of caterwauling." In 1929, while Vertov embarked upon *Enthusiasm*, the film critic Ippolit Sokolov wrote in *On the Possibilities of Sound Cinema* that the natural world of sound was not conducive to recording.[f37] The outdoors and the remote, the sounds of work, industry, celebration, public gatherings -- that is a large part of the domain of documentary -- was not "audiogenic": Agitational and scientific films will be produced not in the lap of nature, not in the noise of the streets, but within the soundproof walls of the film studio, where no outside sound can penetrate. The sound movie camera will least of all film "life caught unawares." The unorganized and accidental sounds of our streets and buildings would become a genuine cacophony, a literally caterwauling concert.[f38] Vertov understood Sokolov's "theory of caterwauling" to be "anti-newsreel," i.e., very much within the mold of formalist critics who preferred only actors and acting upon the screen -- in the vernacular: played films. Vertov also understood it as a symptomatic of an exclusivist conceit derived from music. everything which is not "sharp" or "flat," in a word, everything which does not "doremifasolize" was unconditionally labeled "cacaphony." [f39] Vertov considered the true refutation of Sokolov's "theory of caterwauling" to be *Enthusiasm* itself. There was nothing do-re-mi in the "setting of din and clanging, amidst fire and iron, among factory workshops vibrating from the sound." [f40] Vertov "penetrated into mines deep beneath the earth," much like Nadar in the catacombs, and rode atop "the roofs of speeding trains" lugging twenty-seven hundred pounds of recording equipment, developed specifically for the film, and: for the first time in history recorded, in documentary fashion, the basic sounds of an industrial region (the sound of mines, factories, trains, etc).[f41] Vertov may have rejected Sokolov's music-like exclusivity but he didn't reject music, nor could he with his background and approach. He often referred to his role in filmmaking, not as director, but as composer.[f42] He called *Enthusiasm* a "symphony of noises" and the film's second name, under which it is known in Russia, is "Symphony of the Donbas." "Symphony" as a figure is, in one of the many aurally reflexive moments of the film, extended to signal the "harmonic" organization of the activities of the Five-Year Plan in the Don Basin region, and its parallel in the structure and process of the film itself. In a note sent to Vertov from London (Nov. 1931), Charlie Chaplin wrote: Never had I known that these mechanical sounds could be arranged to sound so beautiful. I regard it as one of the most exhilarating symphonies I have heard. Mr. Dziga Vertov is a musician.[f43] Vertov invoked musical metaphor without the reduction, regularization or aestheticization it had come to

impose in general cultural discourse, because the metaphor had to interact within a documentary context that Vertov called an "enthusiasm of facts" and a literary process wherein sounds themselves were scripted; with Enthusiasm, the sound was scripted prior to the visuals.[f44] Since his art of sound was to be caught up in relationships with visual images, we can only feebly speculate what a Vertov audio art, an autonomous practice of recorded sound, would have sounded like. Film historian Seth Feldman says it's possible to infer what a Radiopravda production would have sounded like by sonically animating the titles and implied sounds in Kinopravda No. 23. But what about a pre-Revolutionary work, still caught in the Cubo-Futurist exuberance of the twenty-year old in St. Petersburg? And how might this have developed after October, through the 1920s, or past the Stalinist anti-formalism of the 1930s? The legacy that we have received from him is in the way he approached the new artistic possibilities of sound in a nondogmatic, pan-disciplinary way, along "the line of maximum resistance" as he called it. The latter-half of the 1920s, in the Weimar Republic, saw the meteoric rise of radio, as Kurt Weill wrote in 1926, "Within a remarkably short period of time, radio has become one of the most essential elements of public life. Today, it is one of the most frequently discussed topics among all segments of the population and in all organs of public opinion." It was still too early, according to Weill, to "foresee what new types of instruments and sound-producing devices may develop," but there could be no "doubt that the preconditions for the development of an independent artistic genre of equal stature (with the other arts) are present." Just as radical proponents of sound film warned against using it simply to reproduce theatre, Weill argued that radio must resist "reproduction of earlier artistic achievements" and instead work to develop an autonomous "radio art." [f45] One of the main obstacles for undertaking such a development in Weimar was the control exerted by the political right over the airwaves, to the near total exclusion of organizations of the working class and of radical artistic ventures. Nationalistic, militaristic and anti-Semitic programming aired regularly but programs which spoke to the experiences of the working class were rare, especially when compared to the formidable scale of workers culture in general. Deutsche Welle (German Broadcasting Service) sought to placate the situation by airing the Workers Service which included presentations such as: The German Idea of the State from Frederick the Great to the Present Day The People, the State and the Nation The Duties of the Citizen Towards His State Fundamentals of Politics [f46] Bertolt Brecht, in an open letter (1927) to the director of the Berlin radio station, suggested using radio to broadcast important Reichstag sessions, then gave it a second thought: "Since this would represent progress, there is bound to be a series of laws to prevent it." [f47] In another comment (1930) on the general state of German Radio: I very much wish that this bourgeoisie would add another invention to their invention of radio -- one that would make it possible to record for all time everything that can be communicated by radio. Later generations would then have the chance of seeing with amazement how a caste, by making it possible to say what they had to say to the whole world, simultaneously made it possible for the whole world to see that they had nothing to say. A person who has something to say and finds no listeners is in a bad way. But an audience that can find no one who has anything to say to it is even worse off. [f48] Brecht was looking, rhetorically of course, for a sophisticated phonographic device (one of Weill's "new sound-producing devices?") that would record the German bourgeoisie's use of radio much like Nixon's conversations were recorded in the White House tapes. Rudolf Arnheim had a similar notion but entertained a naive idea that it would lead to a state where "history will speak, and it will be at least a little more difficult to falsify it." [f49] However, if such a device existed, the bourgeoisie could have immediately engaged in self-parody; there would have been no need to wait for their banality to weather away down to an exposed state of criminality. Such a device could have been used to turn actual voices ventriloquistically against themselves, much in the same way John Heartfield used images from photojournalism in his parodic photomontages, or Polish Solidarity used the voice of General Jaruzelski, or the anarchist punk group CRASS used the voices of Thatcher and Reagan. [f50] When members of the German Communist Party interrupted the radio broadcast of Hindenberg's New Year's address one month before Hitler's assumption of power, they could have replaced his message with his actual voice enumerating his crimes, instead of simply broadcasting their own opposing declamations. Perhaps the most concerted avant-gardist proposal to base itself upon the new technological possibilities of electric media, if not primarily phonography proper, was the 1933 Italian Futurist manifesto *La Radia* written by Pino Masnata and F.T. Marinetti, the polemic platform upon which were spawned the radio sintesi (short performances) written and realized in Italy through the 1930s. Undoubtedly, the fact that the sympathies of the fascist government were shared by Marinetti and the third-generation crop of Futurists facilitated these activities. [f51] Just in case anyone had lingering questions, these sympathies were backed up in the very first section of *La Radia* by a number of statements, including a virulently anti-Semitic, genocidal remark. Also in this section was a listing of perceived accomplishments of Italian Futurism from its inception. The second section goes on to propose an overreaching program for a new anti-realist, radiophonic art "that begins where theatre, cinema and narration end." The manifesto's final section contains the most salient artistic ideas including: the "detection, amplification and transfiguration of vibrations given out" by human beings, living and dead, and by materials such as "a diamond or a flower"; "gastronomic music"; an orchestration of sounds and silences that will act as "strange brushes" to spatialize the infinite darkness of radia; the utilization of interferences among stations and of the rising and fading of sounds; the geometric limitation and building of silence; etc. [f52] Digital Phonography Seemingly, following the loose chronology set up here, I should go on to post-WWII activities, when Pierre Schaeffer and Pierre Henry inaugurated *musique concr te*, when Cage and others produced phonographic pieces as part of the Music for Magnetic Tape project, when William Burroughs used his Wollensack to apply his and Gysin's "cut-up

method" to sound, when experimental Horspiel lit up the radios in West Germany. However, I'm going to refrain from commenting on this period, as well as the intervening activity to the present day. Magnetic tape led to a proliferation of work, most of it conforming to the same strictures set forth in the early part of the century, but there are a number of exceptions. To do justice to these exceptions and to characterize the ground they broke, I will wait for another occasion. Instead, I will skip over this period and conclude this essay by proposing one way in which the trends in an artistic (non)utilization of phonography (and mimetic sound) will become manifest. Recent digital sound technology has made an expanded concept of instrument unavoidable. I don't mean more new instruments, but a different way to think about what an instrument is and does. The concern here is with sampling; and sampling, of course, is already being heralded as the source of a whole new family of musical instruments based on recording, over and above ones which have already been supplied by processes of synthesis. From a larger perspective, however, the development of instruments along these lines signals no qualitative change, practically as though there was no significant distinction between recording and synthesis. We find that sampling keyboards and other interactive configurations are geared entirely to the replication of existing musical instruments and accepted musical vocabularies. They may condense a number of instruments to one location, expedite the utterance of certain sounds or deploy whole families of sound not previously available for musical interaction. As such, they promise wonderful things, for example torch songs built on displaced events of actual pain, real country in country music, etc. But they do not, or rather, in usage they have not broken out of the most tenacious of musical missions, the domestication and exclusion of referential sound. The sample length attainable, singularly or in sequence, with most samplers is adequate to elicit sound fragments that retain aspects of worldly meaning from their parent contexts. Of course, the longer the sample capacity the greater the options. This is the minimum requirement to invoke the types of meaning trafficked in poetry, literature, cinema, theatre, and so on; that is as meanings would occur in a perceptual mode of "blind hearing." There would be the potential, furthermore, to migrate freely among all these meanings and to migrate freely among all other sounds as well, music included. That samples are presently equated with fragments that have jettisoned the mark of their previous lives is certainly a result of the exigencies of music, but there are many other factors as well. Each factor is the source of an obstacle preventing a radical reconceptualization of the idea of instrument. Such obstacles promise to remain because they promote transformations, from the phenomenal world of sound to artistic artifact, that may be accomplished with relative ease and assurance. This sensibility was demonstrated recently in the pages of *Electronic Musician* (December 1986), a trade rag for the studio musician or the aspiring studio musician, by the founder of *musique concrète* Pierre Schaeffer when he said, "From the moment you accumulate sounds and noises, deprived of their dramatic connotations, you cannot help but make music." [f53] The issue's cover announced the interview, which included composer Pierre Henry, as "Schaeffer & Henry: They invented sampling in the 40s...and music was never the same." History is recuperated here in industrial terms. The ambiguities and squandered opportunities of *musique concrète* are submerged, while Schaeffer contributes to guarantee that he has at least presaged a technological order if not an artistic one. Elsewhere Schaeffer repeats himself, faithfully following Helmholtz's scientific categorization of sound in general: You have two sources for sound: noises, which always tell you something -- a door cracking, a dog barking, the thunder, the storm; and then you have instruments. An instrument tells you, la-la-la-la (sings a scale). Music has to find a passage between noises and instruments. It has to escape. It has to find a compromise and an evasion at the same time; something that would not be dramatic because that has no interest to us, but something that would be more interesting than sounds like Do-Re-Mi-Fa. [f54] Schaeffer causally dismisses the referential capacity of recorded sound; it "has no interest to us" and it is caricatured as "dramatic." Dismissing "dramatic" dismisses all that is literary, not from the entirety of a composition for that can be provided by lyrics and libretti, but from the sound material itself. Referential sound has also been dismissed by musical culture in the twentieth century through metaphors of photography. Literature and photography are sensed to be capable of invoking too many aspects of the world, or with too much insistence. As a matter of fact, phonography, of which sampling is a part, has a tension between writing and music historically built into it; a tension which digital sound recording can resolve. From the time of phonography's commercial release to the turn of the century it was primarily put to stenographic use. Edison didn't think of it initially as a means to mass reproduce music; he later had to contend with the fact that this was the main way the phonograph was being socially implemented. In 1913 he awkwardly promised improvements in his phonograph to make it "the greatest musical instrument in the world." To think of the phonograph as a musical instrument is awkward because it bestows an active nature upon a basically passive recording device. You may play your stereo but you don't play it like a saxophone. Even scratch only scratches the surface. The active element in Edison's formulation comes from the phonograph's past in stenography; the activity of inscription involved in writing. The Gramophone Company's trademark was an angel, quill in hand, much in the same way photography was called the "pencil of nature." Today, the same computer monitor can display digital sound editing, photographic manipulation and word processing. Digital has not merely made Edison's phonograph into a musical instrument but an instrument for any cultural process of sound. The immense artistic possibilities now available carry the threat of profound disruption and, thus, create a situation to be avoided, especially by those who gravitate to digital technology for reasons of technological fascination -- mathemusic, psychoacoustics -- in other words, nearly all those who supervise, institutionally and discursively, the equipment. What has been avoided is an aural cultural practice along a greater gamut of signification: sustained, overt mimesis, tones as asemantic as possible, and all points between -- everything polyphonic and polysemic. Such an artistic

practice is firstly social, political, cultural and communicative. It would be open to all those who write, for instance, not just those who solder. It could break down the toys-for-boys climate which still plagues us and begin, from one angle, to democratize the technology. While so many things provide obstacles, the way in which phonography replicates the entire world of sound, including those sounds arising from other art forms, and from other media, provides the most fruitful challenge. It does so by asking the simple question, where and what is the instrument? This is not a simple question. The sound of a musical instrument is contained by the instrument itself; the sound material of a violin may be directly traced to the physical materials and mechanics of the violin. This locates and limits the sound, gives it a presence and supplies the metaphysical comfort of causality. However, the sound of a sampler lies elsewhere, anywhere. Wherever and whatever types of sound are invoked, whether existing or contrived, they determine the discrete basis of the instrument -- an instrument could bear the name of the area of sounds it invokes. In this sense, the instrument is no longer even phonographic. The sampler, in whatever performative configuration, is not the instrument, instead, the instrument is the class of sounds the sampler organizes, and the way that it organizes them. Questions of how sounds may be classed, the nature of the material to be organized, the modes of organization, the types of skills required and other questions of composition and performance, cannot be treated here. It is enough to say, for the time being, that digital sampling has not created a new class of instruments, it has created the possibility for an infinitude of instruments. I am indebted to on-going conversations with Ron Kuivila, Chris Schiff, Dan Lander and Gregory Whitehead for the development of many of these ideas. Notes [1.] For an introduction to the genesis of the "musical conceit," that is, an equation of artistic practices of sound with music, see my address to Der freie Klang symposium, "The Sound of Music" (German/English), in the catalogue for Ars Electronica 1987, LIVA, Linz, Austria, pp. 33-51. A fuller discussion is included in my forthcoming book, *The Sound of the Avant Garde*. [2.] Harry Potamkin, "Playing with Sound," *The Compound Cinema: The Film Writings of Harry Alan Potamkin*, (New York: Teachers College Press, Columbia University, 1977), pp. 86-88. When it comes to film sound, G.V. Alexandrov is perhaps best known as a co-signatory with Eisenstein and Pudovkin of the famed 1928 "A Statement." [3.] *Ibid* [4.] Rudolf Arnheim, *Radio*, (London: Faber & Faber, 1936). [5.] Lazlo Moholy-Nagy, "Problems of the Modern Film," Moholy-Nagy, Richard Kostelanetz, ed. (New York: Praeger, 1970). [6.] Carlos Chavez, *Toward a New Music: Music and Electricity*, (New York: W.W. Norton & Co., 1937). [7.] John Cage, *For the Birds*, in conversation with Daniel Charles, (Boston: Marion Boyars, 1981), pp. 75-78. [8.] From a letter to his wife in Sam Morgenstern, ed., *Composers on Music*, (New York: Pantheon, 1956), p. 354. Other composers were, of course, committed warriors against foe-nography and, later on, of the radio broadcast of music. These types of debates have tapered off, but can still be found in arguments among audiophiliacs over the merits of compact discs. [9.] Tristan Tzara, "Dada Manifesto 1918," in Robert Motherwell, ed., *The Dada Painters and Poets*, (New York: Whittenborn, 1951), p. 81. [10.] Maurice Marc LaBelle, *Alfred Jarry: Nihilism and the Theatre of the Absurd*, (New York: New York University Press, 1980), pp. 26-7. [11.] Raymond Roussel, *Locus Solus*, (London: John Calder, 1983). [12.] Raoul Hausmann, "Dadatour," in Mel Gordon, *Dada Performance*, (New York: PAJ Publications, 1987), pp. 86-7. [13.] Henri Martin-Barzun, *Voix, rythms et chants simultanes*, (Paris: 1913). [14.] Arthur W.J.G. Ord-Hume, *Clockwork Music*, (New York: Crown Publishers, 1973), pp. 281-82. [15.] Roland Gelatt, *The Fabulous Phonograph*, (New York: Appleton-Century, 1965), p. 30. [16.] Jacques Attali, *Noise: The Political Economy of Music*, (Minneapolis: University of Minnesota, 1985). [17.] Sibyl Moholy-Nagy, *Moholy-Nagy: Experiment in Totality*, (New York: Harper & Brothers, 1950), pp. 68 & 97. [18.] Norman McLaren, "Animated Sound on Film" (1950) in Robert Russett and Cecil Starr, *Experimental Animation: An Illustrated Anthology*, (New York: Van Nostrand Reinhold Co., 1976), pp.166-68. [19.] Potamkin, p. 87. [20.] William Levy and William de Ridder, *Radio Art*, (Amsterdam: Gallery "A" exhibition catalogue, circa 1982). [21.] Rainer Maria Rilke, "Primal Sound" in Rodin and Other Prose Pieces, (New York: Quartet Books, 1986). [22.] I find Michel de Certeau's ideas of "spatial stories" useful when combined with the phonographic tracking fantasies of Rilke. See de Certeau, *The Practice of Everyday Life*, (Berkeley: University of California, 1984). [23.] Tom Rhea, "Photo-electric Instruments" in Greg Armburster, ed., *The Art of Electronic Music*, (New York, Quill, 1984), p. 15. [24.] Raymond Fielding, "The Technological Antecedents of the Coming of Sound: An Introduction," Even William Cameron, ed., *Sound and the Cinema: The Coming of Sound to American Film*, (Pleasantville: Redgrave Publishing Co., 1980). [25.] Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, (New York: Schocken Books, 1969), p. 237. The essay on Benjamin's own myopic neglect of aura-licity has yet to be written. [26.] It just so happens that Attali's own received notion of music, as an artistic field of sound that does not admit free play between mimetic and nonmimetic entities, serves to silence radical artistic practices of sound and "noise," no less, and to silence the strategics of a negative deployment of phonography. As a post-mortem Luddite with an infidelity to hi-fidelity, phonography is the wicked steam engine of the present undesirable epoch of "repetition" and in no way (pre)figures into the premonitory activities of the next desirable epoch of "composition" whose attendant aural artistic technology is, for Attali, none other than the traditional music instrument. [27.] This manifesto is translated in Nicolas Slonimsky, *Music Since 1900*, (New York: Coleman Ross Co., 1949); Michael Kirby and Victoria Nes Kirby, *Futurist Performance*, (New York: E.P. Dutton, 1971); Umbro Apollonio, ed., *Futurist Manifestos*, (New York: Viking Press, 1973) and Pontus Hulten, commissioner, *Futurismo & Futurismi*, (Milano: Bompiani, 1986). The main source on Russolo is G.F. Maffina, *Luigi Russolo e L'Arte dei Rumori*, (Torino: Martano Editore, 1978). [28.] Guillaume Apollinaire, "The New Spirit and The Poets" in Francis Steegmuller, *Apollinaire: Poet Among the Painters*, (Freeport:

Books for Libraries Press, 1971), pp.281-2. [29.] Man Ray, *Self Portrait*, (New York: McGraw-Hill Book Co., 1963), p. 175. [30.] Paul Garon, *Blues and the Poetic Spirit*, (London: Eddison Press, 1975). Franklin Rosemont, "Black Music and the Surrealist Revolution" in *Arsenal: Surrealist Revolution*, No.3, Spring 1976. Similarly, J.H. Matthews, otherwise the keenest commentator in English on Surrealism, searches for radio Surrealism in the *Goon Show* and Nicolas Slonimsky, also of great and deserved repute, writes a disastrous article attributing Surrealistic features to damn near every piece of music in the twentieth Century. J.H. Matthews, *Toward the Poetics of Surrealism*, (Syracuse: Syracuse University Press, 1976). Nicolas Slonimsky, "Surrealism and Music" in *Artforum*, September 1966. I am very grateful, and so is the phone company, to have had Chris Schiff to talk to concerning Surrealism and music/sound. [31.] The major exception of entertaining radical uses of music and sound within Surrealism is to be found with Antonin Artaud, to the extent he can be rightfully associated with these circles. A treatment of his contributions will appear in my forthcoming book. [32.] Edgard Varèse, "The Music of To-morrow," in *The Evening News* (New York), 14 June 1924, reproduced in Timothy Day, "The Organized Sound of Edgard Varèse," in *Recorded Sound* (The Journal of the British Library National Sound Archive), No. 85, Jan. 1984. [33.] Jennifer Gibson, "Surrealism Before Freud: Dynamic Psychiatry's 'Simple Recording Instrument'" in *Art Journal*, Vol. 46, No. 1, Spring 1987. [34.] Dziga Vertov, *Kino-Eye: The Writings of Dziga Vertov*, Annette Michelson, ed. (Berkeley: University of California, 1984), p. 40. [35.] Dziga Vertov, "Speech of 5 April 1935," cited in Seth Feldman, *Evolution of Style in the Early Work of Dziga Vertov*, (New York: Arno Press, 1977), p. 13. For an astute comparison to Russolo's work, a source that influenced Vertov, refer to Feldman's comments pp. 12-15. [36.] Feldman, p. 40. [37.] Vertov, p. 112 footnote. [38.] Quoted in Herbert Marshall, *Masters of Soviet Cinema*, (Boston: Routledge & Kegan Paul, 1983), p. 81. [39.] Vertov, "First Steps," p. 114. [40.] Vertov, "Let's Discuss Ukrainfilm's First Sound Film: Symphony of the Donbas," p. 109. [41.] Vertov, p.109, original emphasis. [42.] Jay Leyda, *Kino: A History of the Russian and Soviet Film*, (New York: Collier Books, 1960), p. 177. [43.] Vertov, "From Notebooks, Diaries," p. 170. [44.] Compare Vertov "Sound March," pp. 289-293 and Michelson's comments on p. 327. [45.] Kurt Weill, "Radio and Restructuring of Music Life" (1926) in Jost Hermand and James Stealkley, ed., *Writings of German Composers*, (New York: Continuum, 1984). [46.] Friedrich Knilli, "The Radio Culture of the German Working Class in the Weimar Republic," in Frank D. Hirschback, et. al., ed., *Germany in the Twenties: The Artist as Social Critique*, (New York: Holmes & Meier Publishers, 1980). [47.] Bertolt Brecht, "Radio as a Means of Communication: A Talk on the Function of Radio" and the introductory article by Stuart Hood, "Brecht on radio," in *Screen*, Vol. 20. Nos. 3/4, Winter 1979/80. [48.] *Ibid* [49.] Rudolf Arnheim, *Radio*, (London: Faber & Faber, 1936), p. 119. [50.] Douglas Kahn, *John Heartfield: Art & Mass Media*, (New York: Tanam Press, 1985), pp. 131-32. In Poland, in the fall of 1983, Solidarity retaliated against a tape the government concocted of a fake conversation between Lech Walesa and his brother, with a tape of their own, but which did not attempt to deceive. It was produced from the infamous 1981 broadcast of general Wojciech Jaruzelski declaring martial law. They "ventriloquized" the general to have him say, in an unusual moment of candor, "Citizens, men and women, the following in a nutshell is the truth about martial law. There have come into effect, or shortly will come into effect, laws making a mockery of the principles of morality and justice." Per CRASS, band member Andy Palmer explained the action: We took extracts from speeches by Thatcher and Reagan, put them together with some telephone noises over the top and distributed it anonymously on the continent. A Dutch journalist took it to the States where it ended up in the State Department in Washington, who promptly issued a statement saying that they felt it was part of the "Soviet disinformation campaign." Subsequent to that, the (London) Sunday Times got a hold of it and, acting purely as a mouthpiece for the State Department, printed an article entitled "How the KGB Fools the West's Press." The tape had Reagan and Thatcher commiserating on the Falkland Islands invasion and on nuclear armaments. Eight months later CRASS announced that they, and not the KGB, had manufactured that tape, much to the embarrassment of the governments and press. Perhaps the State Department was quick to accuse because it was informed by the CIA's own background in fraud. "to spread dissatisfaction about the exiled Sihanouk amongst the Cambodian peasantry who revered him, a CIA sound engineer, using sophisticated electronics, fashioned an excellent counterfeit of the Prince's distinctive voice and manner of speaking -- breathless, high-pitched, and full of giggles. This voice was beamed from a clandestine radio station in Laos with messages artfully designed to offend any good Khmer. In one of the broadcasts, 'Sihanouk' exhorted young women to aid the cause by sleeping with valiant Vietcong." -- Bill Blum, *The CIA: A Forgotten History*, (London: Zed Books Ltd., 1986), p. 154. [51.] Recent critical accounts of Marinetti and Futurism's attachments to fascism try to downplay the strength of the ideological alliance by proposing that the disenfranchisement of the Futurists from State centrality constituted a "falling out." We are asked to believe that because the Futurists did not have official recognition from the government that they were distant from fascism. [52.] F.T. Marinetti and Pino Masnata, "La Radia," in F.T. Marinetti, *Teoria e Invezione Futurista*, (Verona: Arnoldo Mondadori Editore, 1968), pp. 176-180. Translated by Barbara Poggi and Douglas Kahn. [53.] John Diliberto, "Pierre Schaeffer and Pierre Henry: Pioneers in Sampling," *Electronic Musician*, December 1986. [54.] *Ibid*. Schaeffer's sad logic came to a head recently in an interview for a British magazine wherein he dismissed his entire career as being futile. "It took me forty years to conclude that nothing is possible outside DoReMe." Interview by Tim Hodgkinson, *R[e-] Records Quarterly*, Vol. 2, No. 1, March 1987. [my emphasis] The responses to Schaeffer's interview throughout the magazine are likewise stymied in the musical problematic. From *Sound by Artists*, edited by Dan Lander and Micah Lexier. Used with permission of the Banff Centre Press. To order, or for more information, visit

