Chapter 2. *Listen and Learn*

Progress is always…a matter of creative destruction.[1]

-Robert A. Beauregard, *When American Became Suburban*

The "Nuke York, New York Exhibition" that took place at Cornell University in September 2011 advertised, "…depictions of a nuclear attack on New York City are as emblematic of the atomic age in the United States as is the mushroom cloud."[2] "Nuke York, New York" curators posited that the images were educational, based upon the real threat posed by the Soviet Union, which had announced its successful detonation of an atomic bomb in 1949. These visual depictions of charred ruins also "functioned to shift the perception of the United States to that of potential victim of nuclear attack rather than the perpetrator of an actual nuclear attack."[3] Scenes of urban destruction, such as the posters in the "Nuke York, New York" exhibit, were linked with a migration from the pluralistic, ethnically diverse cities to the suburbs by the growing middle class and a privatization that stood in contrast to communist ideology.[4] These spectacles, which aesthetically rendered settled land disposable, also helped justify the geopolitical

[1] Robert A. Beaurgard, *When America Became Suburban* (Minneapolis and London: University of Minnesota Press, 2006), 92.
[2] "Nuke York, New York: The Exhibition, Cornell University" < http://www.nukeyorknewyork.com/Welcome.html> accessed 02 March 2012.
[3] Ibid.
[4] Civil defense literature occasionally linked urban evacuations to the daily evacuation of the city of commuters, explaining that it was possible. The move to the suburbs was known as "white flight." In 1950, the National Security Resources Board, in response to President Truman's creation of the Federal Civil Defense Agency, submitted a report on "the sociological problems of civil defense from the field of morale." In this study, "the consultants were particularly troubled by the effects of a nuclear attack on an ethnically complex city such as New York, Chicago, or Detroit…The consultants anticipated interethnic violence, assaults by members of different religious groups on one another, and race riots." See Guy Oakes, *Imaginary War: Civil Defense and American Cold War Culture.* (New York: Oxford University Press, 1994), 38-9.

acquisitions of the United States, a Cold War superpower that maintained an "exceptionalist" narrative of progress. Surviving urban ruination promised—even necessitated—conquering and expanding the modern frontier: the West, the Pacific, and ultimately outer space.[5] Postwar conditions of economic advancement, technoscientific development, and militarization thus shaped the broader Cold War sensorium—the grounds on which the nuclear threat was perceived as real.

Anthropologist Joseph P. Masco analyzes the visual culture of nuclear ruination in the essay, "Engineering the Future as Nuclear Ruin," and links it to Americans' contemporary sociality that invests and takes "pleasure in making nuclear ruins and then searching the wreckage for signs about the collective future."[6]:

> Has any nation-state invested as profoundly in its ruins as Cold War America? While many societies have experienced moments of self-doubt about the future…it took American ingenuity to transform ruination into a form of nation-building. In this regard, the invention of the atomic bomb proved to be utterly transformative for American society…For U.S. policy makers, the Cold War arms race transformed the apocalypse into a technoscientific project and a geopolitical paradigm...[with] a new social contract…[based] on the national contemplation of ruins. [7]

We might consider this transformative ruination as a process of creative destruction. Economist Joseph Schumpeter coined the phrase "creative destruction," or more specifically, "the process of creative destruction," in 1942. [8] According to

[5] Authors have related the atomic age to the space age. Specifically, in regards to sound and music, see, Timothy D. Taylor *Strange Sounds: Music, Technology, and Culture.* (New York: Routledge, 2001.). Also, I distinguish here the "modern frontier" from the frontier of Frederick Jackson Turner's notion of the frontier as "closed" in 1890. His thesis does not account for the frontier mentality of American imperialism and geopolitical investment that I see as central to the Cold War "frontier mentality" of progress that is linked, conceptually, with the technoscientific developments and futuristic aesthetics (aforementioned).
[6] Joseph P. Masco. "Engineering the Future as Nuclear Ruins." In *Imperial Debris: On Ruin and Ruination.* Edited by Ann Laura Stoler. (Durham, NC: Duke University Press, 2013), 252-286: 277.
[7]Masco. "Engineering the Future as Nuclear Ruins," 252.
[8]Joseph Alois Schumpeter. *Capitalism, Socialism and Democracy*. (New York: Harper & Row, 1962.) [1942]

Schumpeter, the process of creative destruction is the driving force of capitalist growth, and therefore, he noted, economic, social, and political change. Technological innovations replace (displace) older technologies and improve the quality of life and the market, albeit for some sectors of society. "Creative destruction has to be seen in a wider context of innovation and entrepreneurship," Dieter Bögenhold explained. "Entrepreneurs are treated as agents to introduce new inputs into the economy. [Schumpeter] defined an entrepreneur as a person who comes up with 'new combinations' (new goods, new methods of production, new markets, new sources of supply, new organizations of any industry, or combinations of these items), which are commonly called *innovation*."[9]

Atomic weaponry required innovation on a large organizational scale with many programs aimed at bolstering civilians' psychological defenses. Masco identifies Americans' investments in nuclear ruins and new beginnings with the civil defense "preventative" project of what Guy Oakes termed "emotional management," which aimed at transforming nuclear terror into a productive fear.[10] Civil defense planners circulated apocalyptic images via mainstream media to "normalize nuclear crisis" and avoid panic as well as apathy. "The goal," Masco writes, "as one top-secret study put it in 1956, was an 'emotional adaptation' of the citizenry to nuclear crisis, a program of 'psychological defense' aimed at 'feelings' that would unify the nation in the face of apocalyptic everyday threat."[11] Citizens were taught that survival was possible if they

[9] Dieter Bögenhold. "Creative Destruction" in *Class in America: An Encyclopedia*. Edited by Robert E. Weir. (ABC-CLIO, 2007). 175-176: 176. Italics in original

[10] Oakes, *Imaginary War*; Andrew D.Grossman. *Neither Dead Nor Red: Civil Defense and American Political Development During the Early Cold War*. (New York: Routledge, 2001). *Laura McEnaney. Civil Defense Begins at Home: Militarization Meets Everyday Life in the Fifties.* (Princeton: Princeton University Press, 2000.)

[11] Masco. "Engineering the Future as Nuclear Ruins," 257. Masco cites the Panel on the Human Effects of Nuclear Weapons Development. *Human Effects of Nuclear Weapons Development.* 1956, 9.

learned the correct skills and purchased the proper goods. Those psychologically and physically equipped to withstand enemy attack would form the "postnuclear remainder," who would "inevitably reconstitute the social order."[12]

Scholars have grappled with the affective components of imagining the future as a task of the present. According to Ira Chernus, "this marked a subtle but crucial shift in focus, from public emotion during a war to prewar public emotion [where] the difference between the empirical reality of war in the present and the imagined reality of war in the future was blurred, if not erased." [13] As Medard Boss, commenting on Heidegger's "Zollikon Seminars", has described the temporal conflation of present and future as a matter of the atomic bomb:

> The present world is arranged and organized around the possible threat of an atomic bomb explosion. Accordingly, what has been [the past] is seen as being 'incapable' of confronting this fact, as the world that is still incapable of this confrontation [the present], or as the world in which all this is being prepared [the future]…*Everything begins with the future*![14]

For anthropologist Veena Das this "temporality of anticipation," occurs when "one's access to context is lost," and "promotes [an] ecology of fear."[15] This fear is, according to Brian Massumi, the driving force behind capitalism; and we cannot forget that it was capitalism that lay as the fundamental condition of possibility of war and of nuclear conflagration.[16] Postwar listening spaces, technologies (e.g. radio, hi-fi records), and

[12] Masco. "Engineering the Future as Nuclear Ruins," 268.
[13] Ira Chernus. Eisenhower's Atoms for Peace. (Texas A&M University Press, 2002), 22.
[14] Medard Boss speaks to the impact of the threat of the atomic bomb in commentary on Heidegger's Zollikon Seminars in Martin Heidegger, *Zollikon Seminars*, ed. Medard Boss. trans. Franz Mayr (Evanston: Northwestern University Press, 2001), 159. (italics in original)
[15] Veena Das, *Life and Words: Violence and Descent into the Ordinary* (Berkeley, Los Angeles, and London: the University of California Press, 2007), 9.
[16] *Politics of Everyday Fear*, ed. Brian Massumi (Minneapolis: The University of Minnesota Press, 1993). Stylistic indices of trauma take shape in systems that are relatively similar to those of modernity such as

practices of music making and consumption helped people identify with this uncertain present and invest, affectively, in new conceptions of futurity, which often aesthetically entangled elements of myth and reality as well as survival and destruction. By training one's ears to hear war sounds (i.e. air raid sirens, broadcast interruptions) in a time of "peace" as threats to affluence and life, many fears and desires became articulated to the past (tradition/nostalgia) and future (progress/anticipation).

Studying visual culture, then, can only go so far to account for the personal and financial investments Americans made, and continue to make, in this postwar form of nation building that collectively contemplates ruin to forge new frontiers. After September 11, 2001, images of national ruins saturated the media, and Americans bonded over scenes of domestic destruction, which became ideological emblems of support for the development of Homeland Security, geopolitical interventions in the Middle East, and new biopolitical security practices. Scholarship on post-9/11 politics of audition, where the ear and listening practices allowed for certain types of knowledge and were articulated to specific forms of power as the Global War on Terror took shape, exposes socio-sonic productions and regulations as working on both an intensely intimate register and throughout a widely public domain; the entanglement of these spaces, we learn from Cold War domestic militarization, is crucial to the emotional management of a nation in crisis.[17]

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fragmentation, but it also departs from the "progress" of modernity through repetition and rehearsal. However, repetition and rehearsal drive progress in consumerist logic insofar as repetition and rehearsal (a micro-temporality) "begin with the future" (the macro-temporality).

[17] Following 9/11, Clear Channel communications, banned (or strongly recommended), that songs, which might be too emotional for people, be censored from radio airplay. Musicians took an active part in self-censorship. See Martin Scherzinger, "Double Voices of Musical Censorship after 9/11" in *Music in the Post-9/11 World,* ed. Jonathan Ritter and J. Martin Daughtry. (New York: Routledge, 2007): 91-121. Suzanne G. Cusick also provides detailed accounts of how music was used by interrogators in "Music as

For each image of nuclear destruction, we must consider the entire aural network of attack warnings, air raid sirens, and radio broadcasts that afforded some skilled listeners the opportunity to survive in shelters or via evacuation. In this chapter, I explore the structural, motivic, and affective parameters and developments of civil defense sound design, popular songs, and commercially available survival records from 1951, when the Federal Civil Defense Administration (FCDA) became an official government agency, through 1961, the year the Soviet Union resumed atmospheric testing.[18] I propose an uneven, yet robust sonorous repertoire emerges in response to the aural demands for alertness and emotional management programs of the FCDA.[19] Following atomic historian Scott C. Zeman, I coin this period "high atomic listening culture" because, in addition to heightening Cold War tensions, like any form of "high culture," only certain segments (target areas) of the American population learned how to properly cultivate their ears to discern often-coded atomic sound signals.[20] Though surveys that measured the effectiveness of civil defense listening tests show a high rate of "failure," I argue that more people heard, and even listened to, civil defense messages than these surveys suggest. By "listening atomically" to influential popular songs, a more nuanced version of Americans' aural investments during the postwar takes shape. I register processes of creative destruction in the musicians' innovative acoustic imprints of atomic explosions,

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torture/Music as weapon." *Transcultural Music Review* 10 (2006): 1-13. and "'You Are in a Place That is Out of the World…': Music in the Detention Camps of the Global War on Terror." *Journal of the Society for American Music* 2.1 (2008): 1-26.

[18] Nuclear testing had ceased periodically in 1958 due to a moratorium agreed upon during talks for a Comprehensive Test Ban Treaty. After two years of extensions, the Soviets resumed nuclear testing.

[19] The Office of Civil Defense supplanted the FCDA in 1958.

[20] *Atomic Culture: How We Learned How to Stop Worrying and Love the Bomb*, ed. Scott C. Zeman and Michael A. Amundson (Boulder: University Press of Colorado, 2004), 3-4. Zeman writes that the era "High Atomic Culture" is from 1949–1964, but I modify the focal period of time for the purposes of detailing specific developments in atomic listening cultures. "Target areas" refers to the people living in cities and towns that were thought to be targets for nuclear attack and received

civil defense sounds, and attempts to depict the aftermath of nuclear devastation. I conclude by analyzing commercial survival recordings, which were collaborations between the Office of Civil Defense and popular record labels, to consider how these various "survival sound systems" offered a counterpoint of myth and reality as resonances of a conditional postnuclear world.[21]

Listen and Learn

In January 1951, as a response to the Soviet Union's first successful detonation of a nuclear weapon sixteen months earlier, the FCDA received official status as an independent government agency under President Harry S. Truman.[22] Laura McEnaney explains that the FCDA was implemented to alert the public on the nuclear threat as well as to "track and mold public opinion on nuclear matters."[23] McEnaney reveals that the FCDA's "planning for World War III proceeded along two tracks, one the secretive and bureaucratic world of defense planners and policymakers, the other in the public sector of schools, civic clubs, and media."[24] The FCDA had as its task the education of 160 million people in terms of civil defense, and this was "the most extensive program of its kind undertaken by the government in peacetime," according to the *Federal Civil Defense*

[21] In Chapter 1, "Freedom Has a New Sound (1945–1950)," I explore various "myths" central to American geopolitical involvements in the postwar era, including the frontier myth and the myth of American exceptionalism. I connect the sights, sounds, and early censorship of the tests in Nevada with the tests at the Pacific Proving Grounds (Marshall Islands) that were heard through radio broadcasts. Chapter 3 "Leader of the Pack (1962–1964)" focuses on new sonic repertories that contributed to the shifting nuclear sensorium marked by the Cuban Missile Crisis.
[22] On December 1, 1950, Truman organized The Federal Civil Defense Administration, and, through the Federal Civil Defense Act of 1950, it became an official government agency in 1951.
[23] McEnaney, *Civilization Begins at Home,* 31. The FCDA was the precursor to Homeland Security.
[24] Ibid. 3

Annual Report of 1953.[25] The report recognized civil defense "as a permanent, integral part of the total defense of the Nation."[26] The FCDA was a vast organizational complex, and it worked with local and state entities to ensure the dissemination of educational programming.

The FCDA's broad reach and the development of more powerful weapons and advanced delivery systems necessitated "widespread and effective systems of warning the public of enemy attack."[27] The organization of the nationwide attack warning system is shown in Figure 2.1. The Air Force Air Defense Command was responsible for protecting the nation against air attack. After an enemy aircraft was observed or picked up by radar, the Air Defense Control Center received the information and passed it through key channels to local civil defense headquarters. The local civil defense director would, based on information received, decide to sound an attack (or take cover) warning or issue an alert warning signal. The attack warning lasts for three to five minutes, and it was either a warbling tone that initially rises in pitch or a series of short blasts (on a whistle, horn, or other device). This warning meant that attack was imminent, and people were instructed that they should go immediately to a shelter and remain there until informed otherwise. The directions would come from government officials over the Control of Electromagnetic Radiation (CONELRAD) system. Jointly developed with the Federal Communications Commission and the U.S. Air Force, the CONELRAD broadcasting system, which was the forerunner to the Emergency Broadcast System and,

[25] *Federal Civil Defense Annual Report for Fiscal Year 1957*. (Washington DC: United States Government Printing Office, 1958), 67.
[26] Ibid. 67
[27] *Federal Civil Defense Annual Report for Fiscal Year 1954*. (Washington DC: United States Government Printing Office, 1955), 57. [hereafter: *FCDA Annual Report 1954*]

later, the Emergency Alert System, began to operate on May 13, 1953. The alert signal oriented listeners to the CONELRAD radio station, set at 640 or 1240 AM, where they would hear instructions concerning possible evacuation. [28]

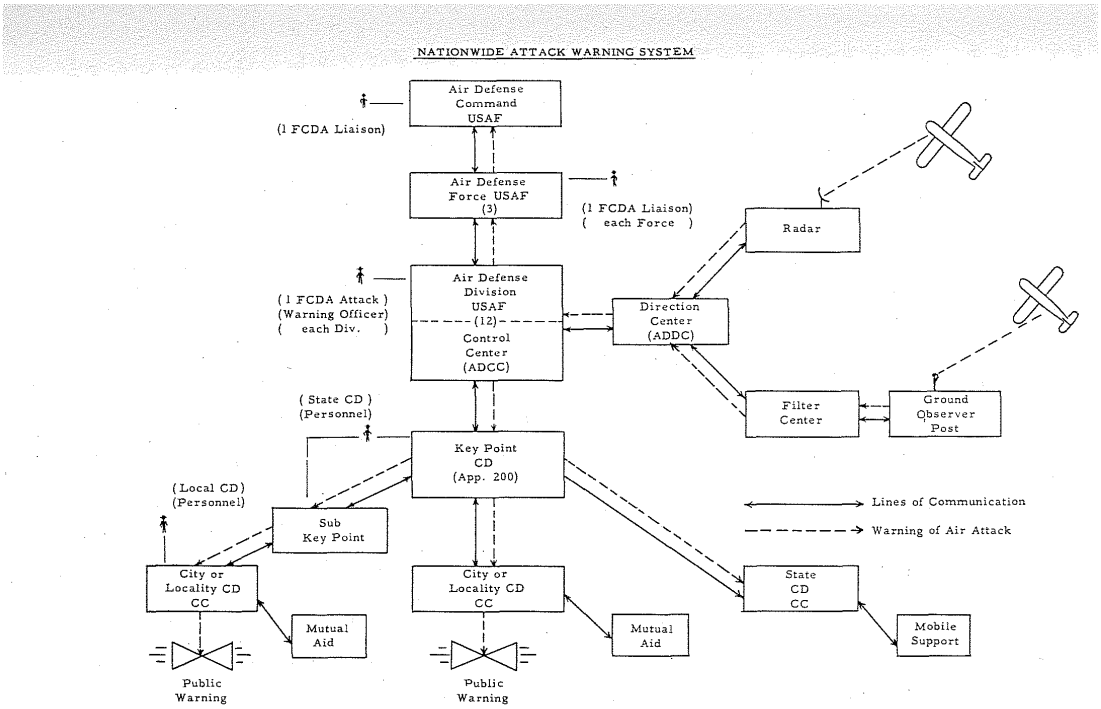

Fig. 2.1: Nationwide Attack Warning System 1954[29]

A major component of the FCDA was radio broadcasting because it reached substantially more people than television and with an immediacy that print did not have.[30] CONELRAD gave the U.S. government control over all radio stations nationwide for the purpose of alerts and defense. CONELRAD mandated that all radio stations nationwide

[28] A third, all clear signal, was discontinued in 1955 because the presence of insensible radiation would pose a danger.
[29] *FCDA Annual Report 1954*, 65.
[30] In a May 1953 study conducted by the FCDA in cooperation with the Advertising Research Foundation of 11, 020 households in 140 counties, it was revealed that 94.7 percent of all households had radios of working order, and 58.1 percent had televisions in working order. (*FCDA Annual Report 1954,* 95.)

(including amateur stations and Ham radio operations) fall silent on alert of an attack or test of the system.[31] A handful of remaining stations would switch over to 640 or 1240 AM radio. The in-use stations would then pass the signal from station to station. This technique was designed to confuse adversarial aircrafts by interrupting transmissions with radio silence. From 1953 through 1963, all radios manufactured were required by law to have the CONELRAD frequencies marked with the Civil Defense triangle symbol.

FCDA annual reports and publications by private audio electronics companies detail the vast amounts of money and time invested in constantly improving the elaborate warning and communications systems. In 1952, H.S. Morris of the Altec Lansing Corporation argued for voice sound systems to replace bells, whistles, horns, or sirens—"coded signals." Morris enumerates what he understands to be the failures of the coded alert system, which "depends upon the listener being previously instructed on the code, that he remembers the code, and that he correctly interprets the code, even under conditions of great mental stress."[32] Morris then shares concerns that people familiar with the drills might become desensitized to the alert tones, while those unfamiliar might have an "uncontrollable psychological reaction to the wail of the siren, the clang of the alarm bell, and the startling staccato of frenzied whistle blasts."[33] Having emphasized the failures of the contemporary coded signals, Morris outlines how the local defense director would benefit from an ideal "Voice Sound System."[34]

[31] Barry Mishkind, *Broadcast History*, authored March 22, 2009, <http://www.oldradio.com/current/bc_conel.htm.>
[32] H.S. Morris, "No Coded Signals." *Audio Engineering*. October 1952: 40-44:40.
[33] Ibid. 41-42.
[34] The Altec Lansing Corporation designed the "Voice of the Theatre" line of loudspeakers that have been used in various venues, including at Woodstock 1969.

> A loudspeaking electronic system capable of transmitting the standard Alerts, plus Voice and Music, is required in every good-sized building to discharge the safety responsibilities of this new Atomic Age. Sound Systems designed to perform this special service have been dubbed "Survival Sound Systems"—not a warning system, not a disaster system, but a system designed for Survival. [35]

Morris proceeds to detail the requirements and specifications of "Survival Sound Systems," which have greater demands than regular sound systems, and he stresses that modification of existing sound systems is possible in a "profitable" manner. This study exemplifies how, in addition to showcasing the advances made in acoustic technologies related to defense, technical reports participate in the discursive construction of a psychologically stable population as always alerted, or drilled.

PSAs and broadcast alerts, whose messages emphasized that the public's survival depended on the development of particular aural skills, such as learning how to recognize distinct air raid sirens, and disciplined listening practices, such as tuning into the radio frequencies 640 and 1240 AM to listen for instructions, reached radio stations throughout the United States as part of the method of emergency broadcasting. Exemplified by the slogan delivered by Johnny Cash in a 1959 Public Service Announcement (PSA) "listen and learn through civil defense," FCDA governmental sound design emphasized that listening was central to survival, and survival was imperative to protect freedom at home and the expansion of freedom abroad.[36] Cash's pre-recorded PSA is without reverb, and his vocal timbre sounds unprocessed. The closeness and dryness of the recording produce an urgency and stark severity to the announcement. As Cash continues from the command to "listen and learn," his tone heartens slightly with an earnest sincerity, a

[35] Morris, "No Coded Signals," 42.
[36] Johnny Cash Civil Defense Spot, "Help Ourselves," Federal Civil Defense Administration Public Service Announcement, 1959. From Geerhart and Sitz, *Atomic Platters* (CD Box Set, disc 4 track 27).

concerned inflection: "I'd like all of you to remember that America can withstand enemy attack if we support the emergency plans of our community and learn to help ourselves."[37]

As American citizens increasingly took on the roles of civil defenders, their defensive practices depended on the hyper-vigilant ear, termed as such for the FCDA's focus on aural alertness *at all times* and *at all places*. The FCDA cultivated an art of listening, in Foucauldian terms—a technology of the self, an ethical aesthetics that had as its aim a silencing of the subject in the interest of civil society's new aurality.[38] The injunction to remain alert at all times in American high atomic culture demanded an openness to sensorial receptivity and sensory input of all kinds through the "survival" mediums such as the radio, which included programming replete with advertisements for products and remedies (self-help and otherwise) for the anxiety necessary to animate such defensive alertness.[39] The hyper-vigilant ear, as a technology of the self, was a result of the FCDA's radio communications and tracking system and a marketing effort that linked hyper-vigilance to survival. While Foucault's model of governmentality does not help untangle the aesthetics of socio-sonic productions, the process of creative destruction, as an analytic tool, is productive in thinking through the relationship between the economic

[37] Ibid.

[38] Michel Foucault, "Technologies of the Self," *Technologies of the Self: A Seminar with Michel Foucault*, ed. Luther H. Martin, et.al. (Amherst: University of Massachusetts Press, 1988). In "Technologies of the Self," Foucault considers how the individual relates with others and relates to his-/herself via the development of an art of listening that arises during "the culture of silence," 32. Foucault follows Plutarch, who early on deems an art of listening, silencing oneself, and reflecting on the content of the lecture (on *logos*) as integral to parse truth from falsity. Foucault notes, "This is the art of listening to the voice of the master and the voice of reason in yourself."

[39] For an interesting analysis of preemptive strategy, counter law, and the "disturbing consequences for social justice" (here, specifically, in reference to mitigating the risk of terrorism), see Richard V. Ericson, "The State of Preemption: Managing Terrorism Risk through Counter Law," *Risk and the War on Terror,* ed. Louise Amoore and Marieke de Goede (New York: Routledge, 2008), 57-76.

and the affective infrastructure of U.S. national security as it emerged during the Cold War. Working at the affective level as it is realized in acoustic formats and musical forms, we can further hear the parallels of 'alertness' (hyper-vigilance) and 'creative destruction' as historical, collaborative processes—politically structured, economically motivated, and central to the "emotional management" and survival of a population "in a new Consumer's Republic."[40]

Alert America

In June 1951, the FCDA commenced its "first marketing effort," Alert America.[41] With the "general aim to promote the program of nuclear crisis management by dramatizing the danger of the Soviet threat and convincing Americans that civil defense was necessary for their survival," the FCDA's Alert America campaign flooded the airwaves, record shops, bookstores, newspaper, comics, and television programming.[42] The emotional management of the FCDA's Alert America was affectively communicated in civil defense radio spots and specifically with the popular slogan "alert today, alive tomorrow." [43] Alertness, through these PSAs, was composed semantically and structurally. This "structure of survival" has three parts that parallel the FCDA's emergency instructions. First, civilians are told to discern which alert they hear and act accordingly, then listen to the radio for information (warning), and finally, remain alert and in anticipation of future directions. It is through the sonorous component of PSAs

[40] Timothy D. Taylor. *Sounds of Capitalism: Advertising, Music, and the Conquest of Culture.* (Chicago and London: University of Chicago Press, 2012), 107. Here, Taylor cites Lizabeth Cohen. *A Consumer's Republic: The Politics of Mass Consumption in Postwar America*. (New York: Knopf, 2003).
[41] Oakes, *The Imaginary War*, 82.
[42] Ibid. Oakes also notes the white supremacy of the leadership of the Alert America campaign.
[43] The slogan appears in many Civil Defense PSAs. For more information, see Geerhart and Sitz, *Atomic Platters*.

that a temporality of anticipation is sustained and an affective structure of survival is realized: Alert, Warning, Alert (Reprise).

I. **Alert:** Conveys urgency. Grabs the listener's attention. Some dramatic increasing of intensity, such as a rising in pitch (e.g. melody, air raid siren), heightening of volume, or interruption of one voice over another voice (or line, such as a ticking clock). *For PSAs: approx. 1/4 of the entire running length.*

II. **Warning:** Provides information and/or direction. The information is usually about the dire situation. The directions include how one should act and what one should buy, for example. *For PSAs: approx. 1/2 of the entire running length.*

III. **Alert (Reprise):** Anticipation and uncertainty. Repeats, occasionally in an altered form, some aspect of Alert Section, to emotionally animate the listener.

The 1953 PSA, "Alert Today," follows this "survival structure" (Fig. 2.2). Two men anxiously inform listeners that their lives depend on being "alert" and following civil defense instructions.[44] A cliffhanger musical device delineates the three sections and imbues each statement with a paradoxical ominous weight and the air of a theatrical spoof, creating a highly anticipatory aural space (Fig. 2.3).[45] With its syncopated opening, the musical gesture exposes its framing silence (the unheard downbeat) and "[arrives] a bit earlier or later than scheduled," heightening the temporal unfolding of anticipation.[46] It became a regular sonic installation at the beginning of various FCDA PSAs, codifying an aesthetics of alertness and anticipation. In describing the FCDA sound design as a governmental composition of the high atomic age, I will refer to it as the "alert motif" in subsequent discussions.

[44] See Geerhart and Sitz, *Atomic Platters*.
[45] Draft transcription by Adam Adhiyatma (contact for permissions prior to sending to press)
[46] "…a syncopated opening is heard as either a contraction or expansion of a silent duration by a musical sound effected before or behind the temporal line constituting the expected boundary of that duration." Thomas Clifton. "The Poetics of Musical Silence" *The Musical Quarterly*. Vol. 62. No.2 (April 1976): 163-181. (170)

I. Alert (0-3")
Speaker 1: "Alert today, alive tomorrow"
Alert motif (fades as speaker 2 begins talking)

II. Warning (Information and Directions) (4-13")
Speaker 2: "Plan now with your family for civil defense emergency action. Some day it may save your life."
Speaker 1: "Join, work and share together with others this knowledge of self-help."

III. Alert (Reprise) (14-17")
Alert motif (fades as speaker 1 begins taking)
Speaker 1: Civil defense—an American tradition.

Fig. 2. 2: Survival Structure

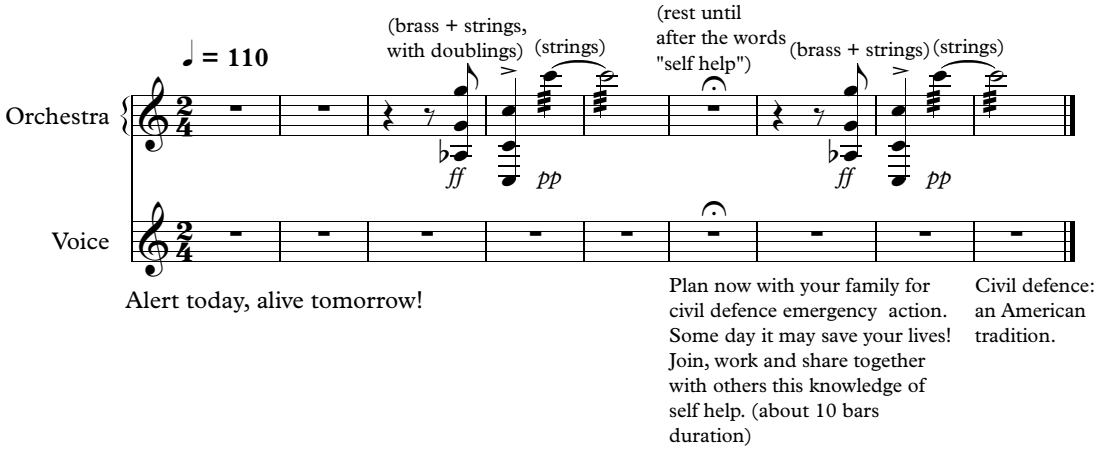

Fig. 2.3: "Alert motif"

The "survival structure" unfolds throughout each of the three PSAs in a 1951 series titled "How Much Time Do We Have?" The noise of a ticking clock aurally introduces the PSAs content, and the speaker's voice overtakes the sound of the ticking, suggesting an aesthetics of temporal demise and human victory over the machine (e.g. the clock, the metronome counting down to zero at test sites). There is an unabashed alignment of capitalist ideals with the atomic bomb: the workday, the alarm clock, etc. For example, the PSA "How Much Time Do We Have? (Keep Working)" is exactly one

minute long, and it begins with the grace note effect of a ticking second hand stopwatch (150 bpm) (Fig. 2.4). The announcer enters with an urgent tone: "How much time do we have, minutes, days, months, years? We don't know. But this we do know—Civil defense is everybody's business!"[47] After 10 to 12 seconds, the ticking fades. The announcer continues speaking backed by silence for the remainder of the PSA.

I. Alert (0-12")
Ticking clock sound (fades as speaker talks)
Speaker: How much time do we have? Minutes? Days? Months? Years? We don't know. But this we do know: civil defense is everybody's business.

II. Warning (Information and Directions) (13-50")
Speaker (*tone of voice becomes more paced*): Just what is civil defense? It's your answer to beat the A-bomb. Civil defense is the way of saving lives and property. It's the way to protect you and your family in case of enemy attack on the United States. It's the way of helping you to keep going in spite of attacks with atomic or biological warfare or chemicals or conventional weapons. The aim of the enemy would be to make you and me and others quit our jobs so that our defense plants would have to shut down. Our aim then is to keep working because we must give to our armed forces the things they need to win. We must prepare now.

III. Alert (Reprise) (51"-1'00")
Silent pause
Speaker: How much time do we have to prepare? We don't know. But this we do know, civil defense is everybody's business. It's your business.

Fig. 2.4: "How Much Time Do We Have? (Keep Working)"

The process of creative destruction is at work within the structure of survival. National security depends on an alertness and willingness to work, which affords the military resources to "beat" the A-bomb. The FCDA's PSAs, which creatively cohere new defensive markets and displace other advertisements from the air, present aural scenes of imminent destruction as preemptive emotional management. The potential of

[47] Civil Defense Spot, "How Much Time Do We Have? (Keep Working)," Federal Civil Defense Administration Public Service Announcement, 1951. From Geerhart and Sitz, *Atomic Platters* (CD Box Set, disc 1 track 11).

urban ruin is heard most clearly on "How Much Time Do We Have? (Disaster on a Big Scale)" (Fig.2.5).

I. Alert (0-12")
Ticking clock sound (fades as speaker talks)
Speaker: How much time do we have? Minutes? Days? Months? Years? We don't know. But this we do know: civil defense is everybody's business.

II. Warning (Information and Directions) (13-50")
Speaker (*tone of voice becomes more focused*): It's a big job getting civil defense organized to operate efficiently. But then, atomic attack is disaster on a big scale. We can and must get the job done if we are to survive. Just imagine if only one atom bomb were to be dropped on an American city—say it's your city. Thousands of persons would be killed instantly—trapped or buried in wreckage. Streets would be blocked by rubble. Great fires would start, dozens of fires in a matter of minutes in many places at once. Then too a large part of the city's food supply might be knocked out. The water supply might be cut off. Communications might stop. Certainly normal transportation would.

III. Alert (Reprise) (51"-1'02")
Silent pause
Speaker: How much time do we have to prepare? We don't know. But this we do know, civil defense is everybody's business. It's your business.

Fig. 2.5: "How Much Time Do We Have? (Disaster on a Big Scale)"

The message is clear that survival is big business, and it is everybody's business. In "How Much Time Do We Have? (Fortress Main Street)," the danger is at home, and everyone is instructed to "remain alert day and night" because "Civil Defense is a national insurance policy."[48] Risk depends on the premise that one has something to gain at the expense of a potential loss, and there is an implicit acceptance of civil defenders disposability (of their time, labor) to support the persistence of the nation (which represents freedom) (Fig. 2.6).

[48] Civil Defense Spot, "How Much Time Do We Have? (Fortress Main Street)," Federal Civil Defense Administration Public Service Announcement, 1951. From Geerhart and Sitz, *Atomic Platters* (CD Box Set, disc 4 track 1).

I. Alert (0-12")
Ticking clock sound (fades as speaker talks)
Speaker: How much time do we have? Minutes? Days? Months? Years? We don't know. But this we do know: civil defense is everybody's business. It's your business.

II. Warning (Information and Directions) (13-49")
Speaker (*tone of voice becomes more serious*): Recently, Miller Caldwell, Administrative Federal Civil Defense Administration said, 'Our danger at home is fixed an constant. This moment every major city in the United States is within reach of Russian bombers.' We know that Russia has atomic bombs. We know that Russia has the facilities to wage biological warfare. We know that Russia is supplied with all the modern war gases. As long as these things are true, and every one of them is true, Fortress Main Street must be on the alert day and night. Civil defense is a national insurance policy.

III. Alert (Reprise) (50"-1'01")
Silent pause
Speaker: (*heightened tone; more dramatic*) How much time do we have to prepare? We don't know. But this we do know, civil defense is everybody's business. It's your business.

Fig. 2.6: "How Much Time Do We Have? (Fortress Main Street)"

Beatriz Colomina presents a detailed accounting of this new mode of space, a hyper-interiorized domestic space, that "would be both nuclear powered and a defense against nuclear attack."[49] Thousands of families had fallout shelters stocked with canned goods, water, pills, and, of course, a radio. The home, or domestic space, was advertised as being under the purview of women. Since their defense was at home, it became a woman's responsibility to listen to the radio at all times not only for civil defense instructions but also on instructions how to make their homes more efficient with the postwar domestic technologies: washer-dryers, dishwashers, and different types of entertainment (news) systems. Women, as the civil defenders of the home and the family, were instructed in specific ways to take care of the children. The gendered coding of the home is prevalent in FCDA PSAs, and they are telling of the tension in modernity: progress and tradition that reinvents a tradition to accommodate progress. The most

[49] Beatriz Colomina. *Domesticity at War*. (Cambridge: The MIT Press, 2007), 282.

famous is "Take the Step (Grandma's Pantry)" from 1953.

The PSA opens with the alert motif. The voice of the son is marked as a young teenager, his voice still carriers a youthful register but is inflected by the strain of puberty. The mother sounds like a mother, her mature voice lacks the sultry, sexy, breathy air of the bombshells we have previously encountered (cf. Chapter 1). She is staunch in her speech as the good domestic civil defender, and, listening to her son and the radio, she never had to leave the home. The characters' voices fade and are overtaken by a strong male voice—the announcer who explains that to "assure the future" we must follow, and prior to this last time the alert motif is played again, "Civil Defense—an American tradition."[50] Gender roles here are survival mechanisms that are linked to tradition and progress, domesticity and the frontier, the past and future.

For all the monetary and creative resources that went into FCDA warning systems, communications technologies, and PSAs, there were limits to belonging to this high atomic listening culture. Jacques Ranciére describes the distribution of the sensible as "the system of self-evident facts of sense perception that simultaneously discloses the existence of something in common and the delimitations that define the respective parts and positions within it."[51] The distribution, or redistribution of the sensible defines both the shared modalities of sensing and also the sensible as partitioned; that is, who can access what of the sensible and who can manipulate accessibility to the sensible depends on sociopolitical hierarchies and positions within the culture. Those who were deaf, lived in rural areas or outside of principal cities in target areas, and people who did not have

[50] Ibid.
[51] Jacques Ranciére, "The Distribution of the Sensible: Politics and Aesthetics" in *The Politics of Aesthetics*. ed. and trans. by Gabriel Rockhill (New York: Continuum Publishing, 2004), 12.

radios at home or in their cars could literally not hear the warnings. Depending on state and local educational programs, some civilians were better trained in understanding and responding to the coded signals, which were to remain as the primary system of alerting the public.

In 1954, the same year that the United States detonated its most powerful nuclear weapon at Bikini Atoll in the Marshall Islands, the FCDA committed $4,624,929.00 ($40.1 million in 2013) for communications in cities, counties, and states. Another $2 million (17.3 million in 2013) went to control centers. Data from the *4th Survey of Public Knowledge and Attitudes Concerning Civil Defense* (March 1954) shows that only 59 percent of those interviewed were in areas with public warning devices, and only one-third of those with a public warning system knew the signals (Fig. 2.7).

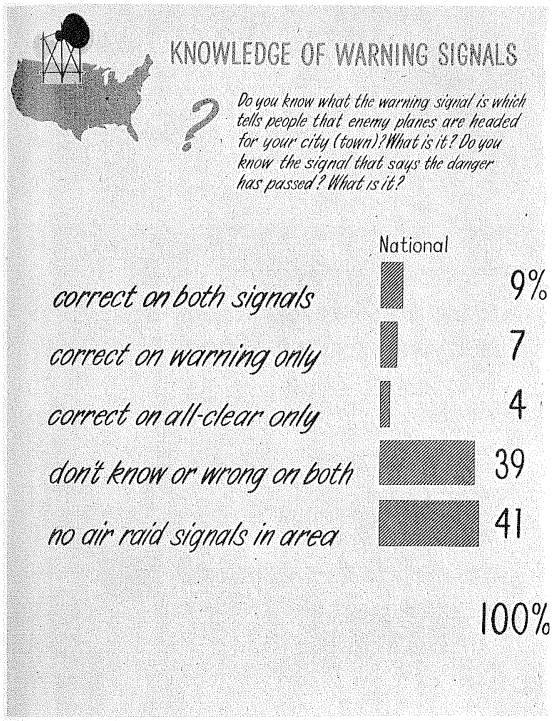

Fig. 2.7: Knowledge of Warning Signals, FCDA Annual Report (1954)

When it came to radio broadcasting, the FCDA survey illuminates telling information on how many people listened to civil defense messages. The *FCDA 1954 Annual Report* commends radio stations and networks for "impressive public service contributions to mass civil defense education" in 1953. The report states, "FCDA officials and technical specialists appeared on more than 50 nationwide and regional radio network programs during the year. Most of these programs, scheduled during the early morning and afternoon when the radio listening is at its peak, reached an audience numbering in the millions."[52] Despite this touted success, the figure below shows that only 35 percent of those surveyed would correctly tune into the radio, and of the 35 percent, many people were still unclear to which station they should listen (Fig. 2.8).

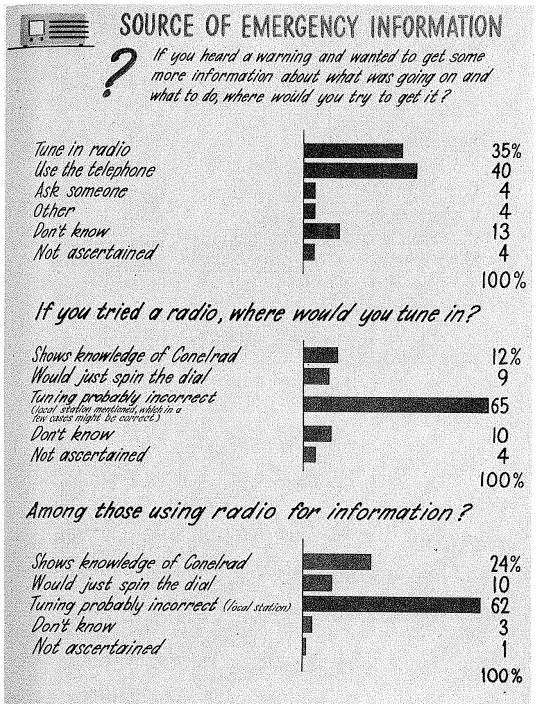

Fig. 2.8: Source of Emergency Information, FCDA Annual Report (1954)

[52] *FCDA 1954 Annual Report*, 94.

From the survey, we know that 84 percent of people did feel that Americans were in danger of enemy attack, and most everyone knew about the atomic bomb. So, why were people not listening? Or, if they were listening, how were they listening, and to what were they listening? Looking more closely at CONELRAD gives insight into the demands placed on the broadcasting stations' resources and how these demands, and the competition with television, shaped programming practices and perhaps listening practices. While all stations were required to monitor one of the 75 key stations, which would receive an alert call from an Air Force installation, service was voluntary. The broadcasting stations had "no compensation for staff time, for special equipment required, for operating expenses, or for advertising revenue that might be lost during CONELRAD test periods."[53] Also, airtime given to news bulletins had declined in the postwar era and the sentiment to keep news and entertainment separate was prevalent among Americans. Radio programming was often geared to compete with television sales, as Corey Flintoff has noted:

> The 1950s saw the rise of radio stations playing the best-selling (usually Top 40) songs from various genres…The arrangement, which provided discrete segments of the audience to advertisers boosted sales for record companies, turned out to be immensely profitable. To make room for more and more advertising and more music, commercial radio companies began reducing their news and public affairs programming to the bare minimum required by the Federal Communications Commission (FCC).[54]

[53] Theodore Wang, et al. Air Raid Warning in the Missile Era. No. ORO-TP-1. Research Analysis Corp. Mclean VA, 1960, 19.

[54] Corey Flintoff, "The Public's Radio: All Things on the Dial," in *Radio Cultures: The Sound Medium in American Life*, ed. Michael C. Keith (New York: Peter Lang Publishing Inc., 2008), 171-188: 173. Flintoff cites Radio Formats (2007) in this passage.

Songs that have been associated with the bomb—Top 40 hits—from this era of high atomic listening, through their tropology or explicit lyrical content, play with scenarios of destruction to creatively secure a place on the radio (survive market competition), express conceptions of futurity and anticipation, and employ civil defense listening techniques. Popular music and radio broadcasts also gave voice to those often left off of the civil defense visual and survival records, such as African Americans.[55] The following two songs from 1954, "Sh-Boom (Life Could Be A Dream)" by The Chords and "Thirteen Women (And Only One Man in Town)" performed by Bill Hailey and His Comets, played important roles in defining the history of rock and roll, a musical genre that we might consider as a form of "nation building."[56] These songs, I suggest, share an atomic mode of listening where "the listener in some way selects, structures, and experiences a part of the sound environment as music."[57]

Listening Atomically

"Sh-Boom (Life Could Be A Dream)"

"Sh-Boom," written and recorded by The Chords, an African American group from the Bronx, New York, placed in the Billboard R&B Charts on July 3, 1954 and

[55] In 1954, there was a strict racial division in the music industry that was reflected in Billboard Charts. African American musicians had primarily African American audiences, and their songs would place on the Billboard R&B Charts. Often, white musicians would cover a song originally sung by an African American group, and the song would place on the Billboard Pop Charts. There are many examples of how African American music would make its way to white audiences via a white performer. The most famous example is perhaps Elvis Presley's cover of Big Mama Thorton's song "You Ain't Nothin' but a Hound Dog." Thorton's version appeared on the Billboard R&B charts and Presley's appeared on the Pop Charts (including the R&B and Country and Western Charts, showing his wide appeal).

[56] The Chords. "Sh-Boom." Mercury Records, 1954. Bill Haley and His Comets. "Thirteen Women (and Only One Man in Town)." (Dickie Thompson). Decca 45, 1954. Also in 1954, disc jockey Alan Freed was hired by the New York radio station WINS and popularized the term "rock and roll" to describe the rhythm and blues influenced genre of music broadcast at the time.

[57] Keeping Score, 144. Footnote 5

stayed on the charts for fifteen weeks, reaching the #2 spot. More importantly, however, is that it placed in the #5 spot on the Billboard Pop Charts, usually reserved for white musicians, making The Chords the first R&B group in the 1950s to have their song place in the top ten of the Billboard Pop Charts. Given this crossover success, some people consider "Sh-Boom" to be the first rock and roll song.[58]

"Sh-Boom" was one of the first songs to employ nonsense syllables in the style that is now characteristic of doo-wop music. Nonsense syllables made a special appearance in doo-wop where, unlike scat music and jazz, the nonsense syllables constituted a significant amount of the lyrical component with accompanying instrumental music. As opposed to being substitutions for the instrumentation, the nonsense syllables were actually substitutions for the referential text (words). The song's broad success popularized the incorporation of nonsense syllables into American popular music, and it contributed to the growing popularity of nonsense syllable usage in doo-wop music.[59] For example, in *The Complete Book of Doo-Wop*, Anthony J. Gribin and Matthew M. Schiff discuss how the Chords "spurred imitation" as evidenced by later songs that utilize "boom" as nonsense stand-in for lyrical content and song titles.[60]

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[58] Marv Goldberg, "The Chords," *R&B Notebooks*. Online publication. 2003, 2009. < http://www.uncamarvy.com/Chords/chords.html> Marv Goldberg is an important music historian of rhythm and blues, and his writings are primarily based on interviews with the musicians themselves. The Crew Cuts, a band comprised of Euro-American members, covered the song, and their version reached the #1 spot on the Billboard Pop Charts in August 1954 and stayed there for nine weeks through September 1954.

[59] While nonsense syllables have become associated with doo-wop music, they are used in many genres of popular music today such as rap music, rock and roll, and pop. An example would be "Sha-la-la-la-la" used by Van Morrison (1967) and Counting Crows (1993), among others.

[60] For more information refer to Anthony J. Gribbin and Matthew M. Schiff, *The Complete Book of Doo-Wop* (Iola, WI: Krause, 2000). "With "Sh-Boom as a headliner, the 'Boom' family is colorful one (33)." The authors include a list of 40 songs with "boom" in the title from "Bim Bam Boom (1956)" to "Zoom Boom Zing (1959)." Interestingly, the authors admit the influence of "Sh-Boom" on these songs, but they claim the songs from this period are "almost exclusively [about] innocent love [with] almost no politicizing or social commentary (46)."

On at least two separate occasions, the lead tenor of The Chords, Jimmy Keyes, related the nonsense syllables "sh-boom," which both act as the song's title and structure the lyrical content, to the atomic bomb. In a 1988 CNN interview, he explained that the band was sitting around watching television and became captivated by the 1954 explosion that took place at Bikini Atoll. The group began to throw around an idea: "Wouldn't it be amazing to sound something so awesome in a song?" With collective affirmation, "Sh-Boom" was born.[61] Keyes recalled, "'Boom' was the slang word. If you were standing on this block for five minutes, you'd hear that slang word fifteen times or more. We would take the 'boom' and make it sound like a bomb: 'shhhhhh-BOOM'."[62]

With this in mind, we can listen "atomically" to "Sh-Boom" as an attempt to sound the awesomeness of the bomb, while putting the potentially devastating, morbid effects of the bomb under erasure through its upbeat tempo and simplistic, idealistic lyrics.[63] This is exemplified in the title, where "Sh-Boom" is prominent and "Life Could Be a Dream" is parenthetical. In this reading, "Sh-boom" is a musical gesture of privileged anticipation over underlying anxiety—the American dream of upward mobility masking existential fear. The lyrical content expresses this anticipation with the positive language as meaning in the conditional future tense: "life could be a dream/ if I could take you up in paradise up above" in a tension with the negative, meaningless nonsense of "sh-boom." In contrast, "sh-boom" is the refrain. It returns as a mechanism of interruption,

[61] Richard Aquila, *That Old Time Rock & Roll: A Chronicle of An Era, 1954-1963* (Chicago: First Illinois Paperback, 2000).
[62] Goldberg, "The Chords."
[63] For an additional take on the relationship between the song "Sh-Boom" and the atomic bomb see James M. Salem "Sh-Boom and the Bomb: A Postwar Call and Response," *Columbia Journal of American Studies* 7 (2006): 1-31.

"territorializing" the chorus, in Gilles Deleuze and Félix Guattari's terms. [64]

In many instances, the musical content privileges anticipatory gestures as well. "Sh-Boom" begins a cappella with five male voices harmonizing on an F major chord, singing the words "Life could be a dream." The harmony changes to a D minor chord on the word "dream" as the lead tenor slides up from C to D. The voicing of the D minor harmony that follows the F major chord privileges the ascent in pitch, and the listener is more attuned to the affective rising than the switch from a major chord to its relative minor. The immediate reiteration of "life could be a dream" also privileges ascent as the pitch D in the G minor7 chord progresses to E, the third of a C7 chord, on the word "dream," heightening anticipation.

The a cappella section is interrupted by the introduction of a triplet drum roll on the downbeat of the third measure. The musical affect of the drum roll grounds the listener momentarily from the light, airy, timelessness of the opening a cappella. The introduction of the percussion seems to command the iteration "doo, doo, doo, doo sh-boom." Already, tension is created between the expansive a cappella introduction delivered through speech and the grounded, temporally regular space of nonsense words. Linguistic meaning seems limited by the temporality it attempts to express—a possibility—while meaninglessness remains purely of the temporal now (an imminence). A rapid guitar lick slides into the upbeat verse "life could be a dream (sh-boom), if I could take you up in paradise up above (sh-boom)" (Fig. 2.9).

As quickly as the listener becomes attuned to speech, she has to become aware of the nonsense syllables and their failed communicative import. The nonsense syllables

[64]Gilles Deleuze and Pierre Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Vol. 2. (U of Minnesota Press, 1987).

"sh-boom" occupy a space that connects and envelops language as both sensible representation and language as sensible nonsense. Musically, "sh" is placed on the last eighth-note of a measure, and "boom" is articulated on the downbeat of the next measure, having fallen a third (at times a fifth), and in a registrally distinct location, it becomes a disruption of the register of the 'main' lyrics. The syncopated gesture of this parenthetical incursion bestows its own silent quality on the song, having remained mute prior to its audible entry, and heightens anticipation. Throughout the song, the words that fall on the downbeats of measures with the most regularity are "life" and "boom." "Paradise" also falls on a downbeat. "Sh-boom" becomes a kind of the intermediary between stability and instability and the nonsense existing between the meaningful "life" and "paradise."

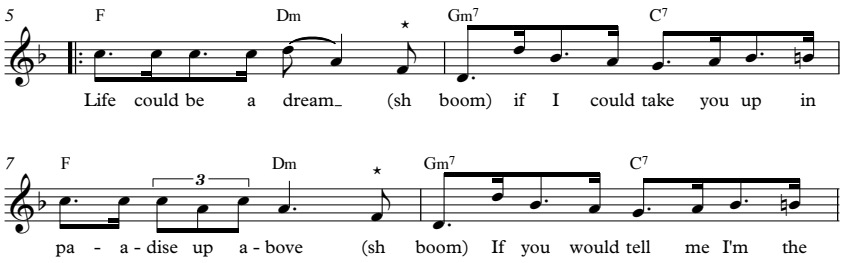

Fig. 2.9: Mm. 5-8 of "Sh-Boom." [65]

Heard as such, the aftermath of the bomb is none other than the promise of paradise. This imagined paradise is sounded in the bridge of the song that incorporates a Pacific islands surf sounding guitar lick. Are the musical gestures hinting at the location of the "sh-boom," the bomb, in the Pacific? Perhaps. But as David Samuels reminds us in his 2004 article on language, modernity and doo-wop, "we should not confuse

[65] "Sh-Boom (Life Could Be a Dream)." Unichappell Music Inc., 1954. The instrumentation on the commercial recoding consists of a vocal quartet (two tenors, a baritone, bass), guitar, drums, and saxophone.

interpretability with meaning, which is, in a straightforward lexico-semantic sense, absent."[66] So, while one can interpret the nonsense syllables "sh-boom" as referring to an onomatopoeic rendering of a nuclear explosion, the meaning of these nonsense syllables remains a secret, and so does whatever ethical import the song may have. While "sh-boom" is audible noise, the nonsense syllables are not words and as such they are silent. And yet, "sh-boom," like the explosions and specter of the bomb, might be considered a "territorial motif," of creative destruction in the atomic age.[67] As such, the lyrics, in their formulation, would act as a sonorous "geomorphism" in a way relative to that of the changed topographies caused by atomic testing in the United States (Nevada, New Mexico, Alaska, Mississippi, and Colorado) and the Pacific (Marshall Islands) as well as the nuclear threat (i.e. placement of fallout shelters, air raid sirens).[68]

"Thirteen Women (and Only One Man in Town)"

"Thirteen Women (and Only One Man in Town)" begins with a narrative aftermath of an atomic detonation. The song, performed by Bill Hailey and His Comets, was the original A-side to the exceptionally influential and widely popular song, "Rock Around the Clock." In the 1950s, 45 rpm or 7-inch vinyl records were released with one song on each side, and the A-side was ranked over the B-side in terms of projected popularity. The A-side of the record was assigned "single status" by the record company. This meant that the record company would distribute the 45s to radio stations with the intent of having the song on the A-side become the hit that would generate revenue for

[66] David Samuels, "Language, Meaning, Modernity, and Doo-Wop," *Semiotica* 149–1/4 (2004): 312.
[67] Gilles Deleuze and Pierre Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Vol. 2. (U of Minnesota Press, 1987): 318.
[68] Ibid. 319

the label.[69] The B-side was a song that did not make the final cut of the full-length album, but was put on 7-inch records to provide customers with the feeling that they were getting their money's worth.[70]

Dickie Thompson wrote "Thirteen Women." Thompson performed the first version of the song, but it was pulled from the radio given what was deemed risqué lyrical content (thirteen women attending to one man). In the original lyrics, the H-bomb is not mentioned. Apropos of the attentiveness to which listeners would listen for the bomb, the inclusion of the hydrogen bomb as central to the narrative was only included to make song more listener/radio friendly. Dickie Thompson recalled the song's trajectory after it was banned:

> The publisher, Dan Fisher of Fisher Music, took it over to Milt Gabler and Milt wrote a verse to it: 'Last night I was dreaming, dreamed about the H-Bomb', blah, blah, blah. He changed a couple of lines that I had and then they took it over to Bill Haley who had a session and needed another tune. They got him to do '13 Women' and from what I understand, '13 Women' came out on the 'A' side and 'Rock Around The Clock' was on the back. Then the movie, 'Blackboard Jungle', came out and they used 'Rock Around The Clock' in it and that song became a big hit. They released it and made 'Rock Around The Clock' the 'A' side and '13 Women' the 'B' side.[71]

"Thirteen Women," is a fantastical story of a hydrogen bomb explosion leaving one man, the sole male survivor, in the company of thirteen very attentive women. They cater to him by "buttering his bread," "giving him money," "making his clothes," and "dancing the mambo" for his entertainment.

Last night I was dreaming, Dreamed about the H-bomb,
Well, the bomb went off, And I was caught,
I was the only man underground.

[69] Record labels made the most income by 45 rpm record sales in the 1950s.
[70] Peter Marland, *Since Records Began: EMI: The First Hundred Years* (Portland, Oregon: Amadeus Press, 1997).
[71] Dan Kochakian, "Thirteen Women Was a Moneymaker!: Interview with Dickie Thompson," *Blues & Rhythm Magazine #216*. (February 2007): 4-5.

CH: *There was thirteen women, And only one man in town,*
Thirteen women, And only one man in town,
And as funny as it may be, The one and only man in town was me,
Well, thirteen women, And me the only man around.

The song opens with a double bass and saxophone swagger elevated by light, consistent drumming: "Last night I was dreamin', Dreamed about the H-bomb." After the word "bomb," a plucked guitar chord whines in descent as its bent position is slowly released. Haley continues, "Well the bomb-a went off, and I was caught. I was the only man underground." This final line of the opening verse marks Haley as being the only "alerted" man who had been prepared and made it "underground" to a fallout shelter.

The musical elements of the song, performed in the style of the lounge genre, expressively build Haley's post-nuclear sensorium. Throughout the song, the drums, double bass, and saxophone pulsate, and the guitar is less stable. It flirts with the musical foundation of the song, chiming in with jazz style runs after the refrain "thirteen women and only one man in town," accentuating other lyrical references to post-detonation remnants. A lengthy guitar solo bridges the second chorus and the third verse, "I had three girls dancing the mambo, three girls balling the jack." With the first line of the third verse, and the word "mambo," a soft jangle of a lounge piano enters the sound space, and it drops out abruptly before the iteration, "three girls balling the jack."

The references to sex, gambling, exotic dancing and the bomb echo an imaginary place as well as a real location—Las Vegas. The city of Las Vegas was literally built on risk, and it epitomizes risk society. Gambling was legalized in the 1930s, but the real growth occurred when scientists and staff from the Manhattan Project made their way to Las Vegas. Atomic bomb tourism became a feature of Las Vegas during the 1950s.

Moreover, Las Vegas had become the nexus in linking Salt Lake City with Los Angeles via the railroad, and it therefore played a central role in the development of the modern frontier and movement west. Nevada is the only U.S. state where prostitution is legal. But, in 1951, the U.S. government outlawed prostitution near military bases, and the brothels in Las Vegas had to close. Still, brothels throughout the state continued to operate legally (and illegal brothels continued to operate within the city limits). The fantasy could have been a reality, and the term "balling the jack" neatly encapsulates all of the above associations with Las Vegas, Nevada*:*

> **Balling the Jack:** Railroad slang that meant "going at full speed." It was also the name of a popular dance in 1913, but later became a metaphor for lovemaking used by Big Bill Broonzy in a song during the 1940s. Also known as a slang term for gamblers that refers to risking everything on a single bet.[72]

The atomic detonation, which created spaces of tourism and affluence of the postwar, is cause for celebration, and the work with which it is associated ("keep working") actually disrupts, or interrupts, the pleasant dream of the apocalypse. "I woke up and ended the dream because I had to get to work on time." The atomic specter reveals itself perhaps most prominently at the end of the song when we are reminded that Haley has been dreaming all along and ominously suggests that he will return to this post-nuclear explosion space: "No, I can't tell where I've been, because I kinda think that someday I'll go back again, to those thirteen women and me the only man in town." Haley's post-nuclear soundscape composes its postwar ideological coherence through intrusive instrumental motifs, a narrative arc that disposes of women in constant stream of entertainment, and the individual (man) at the center of it all. The precursor to Haley's

[72] Debra Devi, "The Language of the Blues: Balling the Jack," *American Blues Scene Magazine*, August 17, 2012, http://www.americanbluesscene.com/2012/08/the-language-blues-balling-the-jack.

return, of course, is the hydrogen bomb explosion, and the listener is confronted by his or her own position—waiting in anticipation, anxious and excited, for event of a real nuclear attack—unsure of everything but the tension between the audible, fantastical sounds of "Thirteen Women" and the inaudible potential of the future to be built on atomic ruins.

Just as soon as the nuclear threat became an audible component of Bill Haley's popularity, the fear and fantasy of nuclear war that are on the surface become buried, all but silenced, under the popularity of a song that details partying non-stop, or "around the clock." The first verse gives similar orders to the FCDA's program of aural alertness.

> *One, two, three o'clock, four o'clock, rock/ Five, six, seven o'clock, eight o'clock, rock/ Nine, ten, eleven o'clock, twelve o'clock, rock/ We're gonna rock around the clock tonight.* [73]

Like the bomb is necessary for release from the drudgery of the punch-clock workweek, listening to the song in the context of it as a B-side, it becomes remarkable how necessary the B-side is to the A-side.[74] "Rock Around the Clock" is a song about rocking through the night, or what might be read as partying through the darkest hours. The hyper-vigilant ear is called upon to listen *to* the countdown style commands, "One, two, three o'clock, four o'clock, rock..." and *for* the audible cue that will preempt the being in an out-of-this-world, "When the chimes ring five, six, and seven, we'll be right in seventh heaven."[75]

Survival was dependent on listening at all hours because, according to the FCDA, an attack may happen at any hour of the day or night. In the event of an attack,

[73] Bill Haley and His Comets. "Rock Around the Clock." (Max C. Freedman and Jimmy DeKnight). Decca 45, 1954.
[74] For most Americans, the standard 9-5 business centered workweek is the only way to attain wealth, and it is commonly assumed that the weekend is an escape from the workweek. "In reality, the development of wealth exists only in these contradictions [surplus labour vs. non-labour and surplus wealth]; in potentiality, it is this very development of wealth which makes it possible to transcend these contradictions." In Karl Marx and Frederick Engels. *Collected Works, Volume 28, Marx: 1857-1861* (New York: International Publishers, Moscow: Progress Publishers, 1986), 328.
[75] Recall that shelters were used as party spaces.

CONELRAD would give hourly updates on the radio at "One o'clock, two o'clock, three o'clock," etc. "Rock Around the Clock" engages this atomic age mode of listening. In order to "rock," the listener must continually engage with the audible cues, such as the clock chiming and the band playing. By keeping the listener listening, "Rock Around the Clock" allows the listener to practice audition as a mechanism to continue, or to survive the threat of nuclear attack. By enabling the listener to forget about the nuclear threat and entertain the promise of atomic detonations presented in "Thirteen Women," the song provides the necessary psychological distance to "survive" the reality of a future as (potentially) devastating.

Survival Records

The ear and listening have, up to now, been located as central in the production and transmission of a new Cold War sensorium that engaged new modes of alertness and conceptions of futurity with scenes of atomic destruction. The last example of Bill Haley and His Comet's record exposes this parallel structurally realized in the placement of the songs. We can continue to analyze this emotional management even more concretely in the structural arrangement of "recorded guides to survival," produced by the Office of Civil Defense in cooperation with commercial record labels, on which one could "hear what to do in case of nuclear attack."

Hearing (perceiving sound) and listening (discerning meaning from sounds) are different. A collection of studies on the acoustics and psychoacoustics of air raid alerts and warnings, published by the Operations Research Office of Johns Hopkins University operating in contract with the Department of the Army in 1960, suggested that more

needed to be done to train civilians' ears to the acoustic parameters of atomic attack. The 98-page document, "Air Raid Warning in the Missile Era," included a "siren perception test," which compared "relative signal to noise ratio…required to evoke recognition and some response from unalerted persons occupied with a variety of tasks" to the results of an "alerted group."[76] The report confirms that subjects must be alerted to the possible occurrence (and meaning) of the siren to recognize and respond appropriately to the signal. "Unfortunately," the study reads, "not a single subject [in the unalerted group] gave any overt (or at least recognizable) indication that he had been aware of any warning signal in the background."[77] These tests, and the heightening threat of nuclear attack with less warning time, compelled the Office of Civil Defense to combat "inattentional deafness" with an increasing fervor and more through-composed ear training materials.[78]

Two exemplary pre-recorded commercial PSAs were released in 1961, the year the Soviet Union resumed atmospheric testing. These records, like the PSAs described before, utilize modes of listening that dispose one's ear to the defensive practices and new technologies of the day. However, these records play more explicitly with the emotions and fears of the listener.[79] Emotional management that transformed panic to fear was being composed on the aesthetic level where destruction was afforded generative status though (a) ear training and (b) consumer practices. As was the case with albums of the era, the record companies brandished the acoustic survival guides with the

[76] "Air Raid Warning in the Missile Era," 89.
[77] Ibid. 91
[78] Polly Dalton and Nick Frankel. "Gorillas We Have Missed: Sustained Inattentional Deafness for Dynamic Events." Department of Psychology, Royal Holloway, 2012. The study examines how people miss "salient" auditory events when they are not "alert" or paying attention.
[79] Timothy D. Taylor notes the increasing "emotional appeals" that went into advertising from the 1950s onwards in *The Sounds of Capitalism*.

labels "Hi-fi" and "mirrorphonic sound," playing on the consumers' fascination with a futuristic space age technology while further linking the aesthetic to atomic power. The following analyses share atomic aural pedagogies that operated on the premise that nuclear terror would be perceived (though alertness) and mitigated (through instructive warnings) first and foremost, aurally.

If the Bomb Falls: A Recorded Guide to Survival

If the Bomb Falls: A Recorded Guide to Survival was released in LP record format by the small, budget record label, Tops Records, which produced popular music records. However, it is of note that in 1958, the Los Angeles based label merged with (and became a subsidiary of) Precision Radiation Instruments, Inc. (PRI) also of Los Angeles, which manufactured Geiger counters as its main source of revenue from the late 1940s through the late 1950s. When the radio replaced the Geiger counter as the primary way to detect radiation (or be warned of its presence), PRI purchased the company Radio Craftsman, a company that made radios, and radios were at the top of the list in terms of the most necessary piece of technology should one hope to survive nuclear attack.[80] The obvious interest that PRI had in releasing this cheap, accessible public service announcement provides insight into the relationship between the aural and broader listening technologies of the market, or in the business of atomic age aurality. In fact, *If the Bomb Falls* proved to be Tops' most successful record, passing the half-million mark in the three months after the Soviet Union resumed atmospheric testing.[81] In a press

[80] Mike Callahan, David Edwards, and Patrice Eyries, "The Precision Radiation Instruments (PRI) Story" last updated April 15, 2007, http://www.bsnpubs.com/pri/pristory.html.

[81] " If the Bomb Falls 33 1/3 RPM Record (ca. 1961). Oak Ridge Associated Universities, 1999 (last updated 05/24/11) http://www.orau.org/ptp/collection/civildefense/LPifthebombfalls.htm The author references UPI. "Voice of Survival From Phonograph". in the *Valley Independent.* November 27, 1961.

release, Larry Finley, a vice president of PRI states, "We made the album a little over a year ago and shelved it because it looked too scary then. Then [in 1961] for a test, we put it in 200 stores across the country, 25 albums to a store. This was a couple of weeks before the Russians began nuclear testing. Movement was very slow. Then, the day the Russians announced it, we started getting telegrams from these stores saying that they were out and wanted more." [82]

As their titles suggest, (Side A is "What to Do in Case of Nuclear Attack" and Side B is called "Supplied Needed for Survival"), the two sides of the record work together to emotionally direct and sensibly orient the consumer; they affectively structure a relationship between devastation, death, speculation ("*if* the bomb falls"), and monetary and time-based investments into accruing supplies, and engaging in listening activities, for survival. Side A begins with a piercing air raid siren, which rises abruptly in pitch for three seconds. This is the attack warning signal with a warbling tone. The shrill tone slightly waivers for an additional nine seconds. As the siren descends in volume, the wail is accompanied by narration, "The threat of nuclear warfare is a threat to all of us. How can we live with this threat? Our best life insurance may be summed up in four words: Be alert! Stay alert!"[83]

Following the words "stay alert," the siren drops out and the narration continues, "…if you live within a few miles of where one of the bombs strikes, you'll die instantly. You'll also die if you live downwind from where the bomb falls, even a few hundred

[82] Ibid.
[83] *If the Bomb Falls*, Tops Records Public Service Announcement, 1961. From Geerhart and Sitz, *Atomic Platters* (CD Box Set, disc 5 track 1). An interesting side note: just seconds after this quote, the narrator says, "Since we like our foods concentrated and readily available for use, we might label our nuclear weapon "Instant Death."

miles away. It might be a slow, lingering death, but it would be equally as final as the death from the bomb blast itself."[84] The matter-of-fact, dry tone of the male narrator haunts the sound space of the record against the background silence. After the stark exposition that details nuclear death and the necessity of a fallout shelter to protect oneself against radiation, the narrator codifies the steps for survival and begins the ear training exercises. "The first alert is sounding. You hear it in the background. What will you do?" [85] The listener is instructed that evacuation plans across the United States differ depending on the location, and therefore it is imperative that one "listen[s] to Civil Defense instructions…[and]…stay[s] tuned to the CONELRAD channels, 640 or 1240 kilocycles, whichever…can [be] hear[d] better." [86] With the final statement, "Be alert. Stay alert. Then your chances of living longer are multiplied a thousand-fold. Turn this record over," the listener is directed to side B, which reminds him/her of the exponential increase in his or her chances of survival that come with attentive listening.[87]

Side B reinforces the notion that consumerism *is* civil defense. Side B discusses the danger of fallout and the necessity of building and stocking the fallout shelter. In addition to radios, batteries, food, water, and "tranquilizers," the listener is informed that s/he should bring "recreational and spiritual supplies," with the Bible at the top of the list. The closing of side B, and in effect, the closing of "the recorded guide to survival" is the reminder: "No one knows if you'll ever need a shelter, but in this Atomic Age, it's wise to be prepared! The best advice your government can give you is, 'Alert today, alive

[84] Ibid.
[85] Ibid.
[86] Ibid.
[87] Ibid. (CD Box Set, disc 5 track 2)

tomorrow'." [88] The oft-heard concluding statement orients the listener, again, to imagine what that tomorrow might look, sound, and feel like.

The Complacent Americans

The Complacent Americans was released on Cee Dee records and Office of Civil Defense to educate Americans on the deadly consequences of foregoing their responsibilities as civil defenders.[89] The cover art and sonic content of the LP utilize scare tactics to generate a fear that Americans had been consuming, and which had been consuming Americans, for over a decade (Fig. 2.10).[90] Together, both sides of the record—Side 1 is the "Shocker" side and Side 2 is entitled "Survival"—act as a metaphor for the U.S. policy of Cold War emotional management where reality and myth collide.[91]

Fig. 2.10. The front cover of *The Complacent Americans*

[88] Ibid.
[89] *The Complacent Americans*, Office of Civil Defense, City of Los Angeles, 1961. From Geerhart and Sitz, *Atomic Platters* (CD Box Set, disc 5 track 3).
[90] Massumi, *The Politics of Everyday Fear.*
[91] *The Complacent Americans*, (CD Box Set, disc 5 track 3).

Front Cover: Official Civil Defense Survival Instructions
"Because of the 38 sensational and emotional sound effects, including the authentic sounds of an H-Bomb devastating a mythical city: Side One should not be played by anyone who cannot undergo an extreme emotional experience. "

Back Cover
Side One: "Shocker Side"
"Hear the startling and emotional presentation of an American City being devastated by nuclear attack. Although the story is mythical, it could happen."
Side Two: "Survival"
Note: (Should not be played for ten minutes following Side One) Visit many of our defense systems such as NORAD-SAGE-SAC-BMEWS-WHUTE-ALICE, etc. Then Jack Fuller covers all important survival instructions in the event of an enemy nuclear attack.

Side One ("Shocker Side") of *The Complacent Americans* tells the story of the nuclear decimation of Los Angeles. It is told from the perspective of a businessman who, as we later find out, was killed by the atomic explosion because he was a "complacent American" and did not follow the audible alerts and warnings of civil defense procedure. Throughout the almost 40 minutes (both side A and B) of sound on the LP, the soundscape and narrative of the recording play on the aural and cognitive capacities to incite fear. Side One begins with the growing sound of an air raid siren, a sound that was familiar to "alerted" listeners by 1961. The siren provides a constant accompaniment to the announcer who begins speaking three seconds after the siren begins to wail. The announcer's voice has an ambient quality that reverberates with the sirens while retaining a distinct sonic shape. The effect is one of distance and proximity to the nuclear threat. The announcer frames the "mythical" story that "could happen" with a message from President John F. Kennedy that had already happened:

> On April 28, 1961, the President of the United States, John F. Kennedy, in a message to the American public said in part that, '…common prudence demands that we all take the necessary measures to protect our homes, our institutions and our way of life so that they may survive should an enemy thrust war on us.'"[92]

At this moment, the question on the back cover of the record, "Would you know what do you if an enemy thrust nuclear warfare upon us?" is audibly historicized.

The announcer, who speaks over the air raid siren at its sustained highest pitch, continues with a slightly labored tone indicating that he is aware of the sirens that threaten to engulf his voice. The announcer's voice drops out, but the siren's wail continues and becomes part of the sonic tapestry of the Los Angeles soundscape under nuclear attack. The siren's acoustic register is the connection between an acoustic reality and this aural dreamscape. We are rattled when the reality of the announcement turns into the authentic yet mythical destruction of a city via of an atomic roar. The disturbing roar wipes the soundscape clean. After the ten seconds of the rumble, there is a five second caesura—an uneasy silence. Futuristic dreamlike spacey sounds, blips, and swirls doused in a heavy reverb seem to drown a man's stilted, gasping cry, "The H-Bomb! The H-bomb! The H-bomb! Flash of brightness…A tremendous roar!"[93] His voice becomes more forlorn and pronounced, forward as it rises from the textural depth of the space-frontier/futuristic dream-soundscape.[94] "And I, the complacent American, thinking that no one would ever dare attack an American city. And I told my friends that nuclear war

[92] Ibid.
[93] Ibid.
[94] In *Strange Sounds,* Timothy D. Taylor discusses the relationship between the "space-age," futuristic sounds of the 1950s, the atom bomb, and the imaginary of new frontiers.

would never happen...but it did. I always thought I was a good American—patriotic and civic minded. But I was wrong. I failed myself and my country."[95] The man we hear after the explosion and span of silence is, we realize, dead. His nuclear demise has opened the future (space) for us listeners.

Side One orients the listener to the soundscape of a city in the process of nuclear annihilation. As an ear training exercise, the record presents various sounds from which the listener music discern those necessary (here, for survival): an air-raid siren rising in volume and pitch, its resonant wail, the interplay of the background noises as an amplifying chaos, human voices, screams, shouts, murmurs, and nonspecific noises of human crowds in a collective panic. While the human voices come and go, the sound of the siren remains. As the record continues, the survival sound system is built up.

> I see my indifference to the siren going off. Actually, I felt like a great many others felt, irritated, who of course didn't know this was not a joke, but real, the taking for granted test drill was my *first* mistake. It was then I had spoken out loud, criticizing Civil Defense. I had said, 'Now can't those Civil Defense guys sound a test siren some other time?'[96]

The man tells of his own moment of realization that he was in the midst of a nuclear attack when a man with a portable radio walks by him: "I said, 'Hey you, what's that voice saying on the radio? And then the voice saying, This is CONELRAD, Red Alert. This is not a test."[97]

The man's "indifference to the siren going off" and his outspoken disdain, he recalls, were grave mistakes. The dissolution of boundaries between the individual's protection and the protection of the whole of society, or the free world, that maintained

[95] Ibid.
[96] Ibid.
[97] Ibid.

the necessity for a state of exception was reinforced by the de-individualization of subjects (conformity) in the face of nuclear violence, resurgence of religion, the mass culture industry, and the emergent psychology of "self-help" culture. This encouraged individuals to imagine themselves as the source of and potential cure for all unpleasant feelings as well as, ultimately, their survival. Dissent in the public sphere was viewed as pathological or political subversion (both were threats to "freedom"). The man's city was named "Target City, USA." And, by 1961, American citizens had been thoroughly educated that their cities were all "Target City, USA."

Listeners were instructed to take a ten-minute break after they listened to Side One before putting on Side Two, "Survival." Side Two details the many national defense networks, such as NORAD, accompanied by the futuristic sound effects reminiscent of Side One. Following this sonic tour, we hear the "5 basic safety rules" repeated and are clearly given instructions on how to listen to the warnings. After listening to the record in full, according to the Office of Civil Defense, a person should be more equipped to survive nuclear attack. The last statement on the record is, "Follow all of these rules, and you will survive." Survival is conditional, and the ending opens in uncertainty and the need to re-listen and memorize the rules. The unfolding of the emotional shock, pause, and survival information clearly epitomize the survival structure [Alert, Warning, Alert (Reprise)]. Survival—the listener's progress as a civil defender—was only possible as a matter of creative destruction.