
The Soundscape of New York City in the 1930's

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Abstract The Noise Abatement Commission was formed by the Commissioner of Health for the City of New York in October of 1929. The purpose of the commission was to study noise and determine its effects on people and to propose ways of eliminating unnecessary noise in the city. This paper summarizes the Noise Abatement Commission's final report in 1930.

Table Of Contents

- [Introduction](#)
 - [The Effects of Sound on Humans](#)
 - [The New York City Soundscape in the 1930's](#)
 - [1930's Noise Laws and Regulations in New York City](#)
 - [References](#)
-

INTRODUCTION

It is hard to image the New York City area without people and it is even harder to image the area covered in lush green forests untouched by man. Before the Europeans arrived, the peninsula, now called Manhattan, flanked on the west by the Hudson River and on the east by the East River was a deciduous forest with bears and deer. West of the Hudson River on the New Jersey shore was marsh lands filled with birds and cattail. The soundscape was predominately composed of natural sounds produced by animals, birds, insects and other living organisms. Also present were abiotic sounds such as thunderstorms, rain, rushing rivers, and wind. When the European settlers arrived they not only cut down the trees and killed the animals but they introduced the axe splitting wood sound and rifle shot to the soundscape. Today the New York City soundscape consists primarily of man made sounds. Only a few of the abiotic sounds can be heard over the constant hum of machinery.

Machinery means progress and therefore noise means progress," we were proud of the hubbub we stirred up with our enterprise and our machines; we considered that noise spelled progress and success." [Brown, 1930] Therefore, for many years the noises created with our new machines were acceptable, an unavoidable cost in the name of progress. Not until it became apparent that worker efficiency rates went down in the presence of noise did the attitudes start to change. Street noises had become unbearable and because of the lack of noise proof construction homes provided no relief.

Complaints about noise in the city were rising; people were writing articles, groups were organizing noise committees and new noise ordinances were being proposed. In October 1929, the Commissioner of Health, for the City of New York, Dr. Shirley W. Wynne, created and appointed The Noise Abatement Commission. The purpose of the commission was to "study the complex noise situation in New York City with a view to finding ways and means of eliminating unnecessary noise and of determining the effect of noise in general on the inhabitants of a metropolitan center like our own." [Brown, 1930]

This paper reviews the work done by the Noise Abatement Commission in New York City in

the 1930's. There is a brief introduction on the effects of sound on humans, a catalog of noises heard in the New York City soundscape and a short discussion of noises heard daily by New York City residents. The paper is concluded with a review of the regulation that was present in the 1930's and the regulations that being proposed.

THE EFFECTS OF SOUND ON HUMANS

Audible soundwaves are measured in decibels, with the softest sounds that people can hear being around 10 decibels. Sounds become painful to the human ear around 120 decibels, but the human's endocrine and nervous system starts responding to noises at levels as low as 70 decibels. The human physical reactions to noise are similar to human alarm reactions; the blood pressure rises, the heart rate increases, gastric juices are reduced, adrenaline levels increase, the pupils dilate, and muscles contract. Prolonged exposure to noise can lower our productivity and reduce the nutrient value we derive from food. [Steinhart, 1984] Noise can also be detrimental to sleep, especially noises that are abrupt or are unfamiliar. According to London's Sir Robert Armstrong-Jones "... the most disturbing noises to sleep are unusual and sudden horns, exhausts, drills, vibrations, whistles, and milk can deliveries." [Brown, 1930]

The noises that we encounter everyday are at levels that were previously rarely heard. Prolonged exposure to noise or extremely loud noises can cause hearing loss. "When a person is exposed to noise that exceeds the damage level, the initial effect is likely to be a temporary hearing loss from which there is complete recovery within a few hours after leaving the work (noisy) environment. If repeated exposure continues over a long time, then irreversible damage to hearing can result." [Niebel 1988] Hearing loss is a growing problem in the United States and other industrialized nations." The Environmental Protection Agency estimated that in 1974, "80 million people suffer some significant disruption of life by noise...(and) about 17 million suffer from hearing loss." [Steinhart, 1984] Table 1 lists common noises and their decibel levels.

Just Audible	10
Whisper	20
Quiet Neighborhood	45
Intrusive	45
Vacuum Cleaner	80
Train	85
Lion's roar	87
Grinder	95
Very Annoying	100
Riveting Machine	115
Train	85
Painful	120
Jet Aircraft	120 - 155

In 1930, the Noise Abatement Commission of New York City summed up the most prevalent effects of noise on humans:

1. Hearing is apt to be impaired in those exposed to constant loud noises.
2. Noise interferes seriously with the efficiency of the worker. It lessens attention and makes concentration upon any task difficult.
3. In the attempt to overcome the effect of noise, great strain is put upon the nervous system, leading to neurasthenic and psychasthenic states, and necessitating frequent recuperation in the country to maintain mental efficiency and alertness.
4. Noise interferes seriously with sleep, even though in some cases it appears that the system is able to adjust itself so that wakefulness does not result.
5. It is well established that, in addition to these other evil effects, the normal development of infants and young children is seriously interfered with by constant loud noises." [Brown, 1930]

**Cars / Trucks /
Buses /
Motorcycles**

Horns, Brakes, Cut-outs, Gears, Defective Mufflers, Exhaust Whistles, Rattling Parts, Rattling Loads, Sirens, Bells, Doorman's Whistles:

**Trolley Cars /
Trains (Subway,
Elevated,
Railroads)**

Turnstiles, Brakes, Rattling Wheels and Bodies, Defective Switches and Joints, Wheel Impact, Whistles, Bells, Steam & other Exhausts, Shifting Cars

**Building
Operations**

Pneumatic Drills & Riveters, Exhausts from Steam & Gasoline Hoists and Shovels, Pile Drivers, Blasting, Unloading, Loading, Shouting, Compressors

Homes

Loud Speakers, Piano's, Phonographs, Musical Instruments, Late Parties, Barking Dogs

Streets

Radio & Music from Stores, Peddlers, Loiterers,

Streets	Garage & Taxi Stands
Harbor & River	Whistles, Bells, Sirens, Motor Exhausts, Horns
Collection Deliveries	Ash, Garbage, Milk, Papers, Food, Mail, Express
Miscellaneous	Airplanes, Factories, Restaurants, Amusement Halls, Church Bells
Natural Sounds	Birds, Thunderstorms, Rain, Wind

THE NEW YORK CITY SOUNDSCAPE IN THE 1930's

In 1930, New York City residents did not wake up to the sounds of birds chirping but rather the sounds of milk being delivered and the collection of ash and garbage. To some these may be the soothing sounds of home but for most they are sounds they can do without. New Yorkers are bombarded by noises throughout the day, starting on their way to work.

Transportation is one of the biggest noise makers in the city. Be it by cars, trucks, buses, motorcycles, trolley cars, boats or trains including subways, elevated and railroad the noise is constant and loud. " The regular, standard din of street traffic, ...varies from 60 decibels in some locations to 80 decibels in others." [Brown, 1930] A local subway train " ... clatters by with a noise equal to 88.5 decibels", [Brown, 1930] while the express train measures 94 decibels as it passes local underground stations. In addition to the noises the vehicles themselves make the accessories that come with them are also disturbing. The turnstiles in the subway during rush hour provide a constant din of 83 decibels. Car and truck horns produce equally annoying sounds, " various squawks, hoots, shrieks, and trumpeting of our innumerable traffic warning signals. It is even possible that there is no one source of noise in the city causing greater annoyance." [Brown 1930] Steamships docking in the New York harbor, have whistles that average 93 decibels. No matter what form of transportation one took it was inevitable loud.

As stated earlier, the noise of construction was often permitted as an unavoidable consequence of progress. In 1930, construction was booming and during the month of May alone 789 buildings were being built or altered in Manhattan. The two noisiest construction tools were the pneumatic drill and the riveters with decibels ranging from 95 to 99 decibels. The excavations of cellars, streets, subways and building foundations added to the drone with the sound of shovels, rock drills, pneumatic and steam hammers, hauling apparatus and hoisting machinery. For many of the workers, the excessive noise was desirable because it was a sign to their bosses that work was being done, but to the construction site neighbors the noise was disturbing.

A walk down the street to the local markets was anything but quiet. Peddlers advertising their wares by voice were soon surpassed by loudspeakers playing outside stores to attract

attention, "...the commercial street loudspeakers must be operated at great intensity to be effective. The noise therefore rises above the street traffic level. It is sometimes equivalent to that produced by an automobile horn going continuously at full blast." [Brown, 1930]

One might think going to the theater would provide an escape from the city noises but the "... street noises - like great tropic vines - find their way into the auditorium through leakage - by way of the fire doors, through the lobbies and foyers, through the ventilating systems, and even from the stage." [Brown, 1930] Only 65% of the performer's spoken words were heard by the audience.

Noises didn't stop at night, either. Due to increases in street traffic during the day, night trucking and deliveries became a practice. In addition, sleepers were disturbed by " loud conversations of taxi-drivers waiting at all night taxi stands, the singing of Sweet Adeline and other favorites by front-stoop choruses, the unnecessary honking of automobile horns, the blowing of doorman's whistles, the clanging of street cars, the squeaking of brakes, the collecting of ashes, the delivery of milk." [Brown 1930]

Quiet spots in New York City were hard to find in the 1930's, but the Noise Abatement Commission recommends three places to get away from the noise. The quietest outdoor place they found was on the Mall in Central Park. They also found that the " first stories above the setbacks in the modern type of skyscraper, (and the) interiors of city blocks - that space formed by the combined backyards of many buildings" [Brown, 1930] were also quite comforting to the ear. The attribute these three spaces had in common was that they were shielded from traffic sounds.

1930's NOISE LAWS AND REGULATIONS IN NEW YORK CITY

Noise means different things to different people. Noise has been defined as "... unwanted sound", "any loud sound", and " disturbance in any signaling system" [Schafer, 1977]. A sound that is a noise to one person, may not be a noise to another and therefore the classification often becomes arbitrary. Also, sounds may be desirable during certain times or places but in other situations they may be a nuisance. Americans seem to believe that the freedom of speech also includes the freedom to make noise. When these freedoms should be regulated is a hard question to answer. Noise regulation has been implemented over the years in order to protect the public's health and their freedom of quiet.

Over a period of two years Dr. E. E. Free surveyed and reported on noise in New York City. His findings were published in Forum Magazine (February 1926, March 1928). He felt that the following laws should be created to control some principle sources of noise:

1. The owner of any automobile or truck, street car, or other vehicle found, on inspection, to be emitting unnecessary noise because of loose parts or bad adjustment shall be subject to heavy fine.
2. Loose joints in street rails, wide gaps at rail crossings, or other noise-producing breaks in the rails are prohibited.

3. No automobile horn or other warning signal shall be blown on streets equipped with traffic lights or provided with traffic officers (horn signals then being totally unnecessary) and horn signals on other locations shall be limited to a single sound lasting not over one second." [Brown, 1930]

During the same time period, The National Safety Council developed a committee to deal with "The Elimination of Harmful Noise". After conducting surveys the committee narrowed its scope and in 1929 became the "Committee on the Relation of Noise to Accidents". Noise was becoming a major concern in New York City in the late 1920's therefore the Noise Abatement Commission was formed.

A survey was conducted by the Noise Abatement Commission to determine what noises were annoying residents the most. The results of the survey are listed in the following table.

36%	Traffic:	Trucks, Automobile, Horns, Cut-Outs, Brakes, Buses, Traffic Whistles, Motorcycles
16%	Transportation:	Elevated, Street Cars, Subway
12%	Radios	Homes, Streets & Stores
9%	Collections & Deliveries	Ash, Garbage, Milk, Ice
8%	Whistles & Bells:	Fire Department, Locomotives, Tugs, Steamboats
7%	Construction:	Riveting, Pneumatic Drills
7%	Vocal, Etc.:	Newsboys, Peddlers, Dogs, Cats, Noisy Parties
3%	Other Sounds	

At the time the Noise Abatement Commission was conducting its analysis it found that there were provisions already in The New York Code of Ordinances with respect to noise. Motor vehicles were required to have mufflers, exhaust horns were prohibited, and the use of an automobile horn at an unreasonable or unnecessary time was prohibited. There were "provisions against unnecessary noise in hospital or school streets, ordinances prohibiting the maintenance of a noisy bird or animal" [Brown, 1930], and regulations forbidding newsboys'

and peddlers' cries before 8 am and after 9 p.m. except on Saturday nights. There also were laws specifying the way iron or steel objects were transported and other general provisions governing nuisances. The main problem in noise regulation was not in providing new laws but enforcing the laws already in place. " Under the present system the only way these statues and ordinances can be enforced is by court proceedings." [Brown, 1930] The average citizen didn't have the time or money to take nuisances to court.

One group of citizens annoyed by the noise of loudspeakers did take a store owner to court. " First Loudspeaker Operator Convicted here (NYC) Under Law against Unnecessary Street Noise", read one headline in the New York Times. The store owner played the loudspeakers from 4 to 10 p.m. everyday. The citizens protesting had to appear in court and provided a psychiatrist statement describing the effects the noise had on the citizen's. They won the verdict but most citizens don't want to go court to get a neighbor to turn down their stereo.

The procedure of being fined for breaking certain laws is common in today's society, but this idea was just beginning to take place in the 1930's. One of the Noise Abatement Commission committee's proposed a law that is currently in place today. " We have drafted an amendment to the Greater New York Charter which would apply not only to noise but to other offenses. This provides that in the case of minor offenses " not involving serious danger to health, morals, safety or public welfare," the head of a department may make and publish a schedule or list of these offenses with a fixed fine for each, which shall in no case exceed \$5.00, to be paid at the nearest police station house by those who confess that they have violated the regulation and do not ask for a trial in court." [Brown 1930] This provision would allow police to reprimand violators without taking them to court, saving police and citizens, time and money.

REFERENCES

City Noise. Ed. by: Edward F. Brown, E.B. Dennis Jr., Jean Henry, G. Edward Pendray. The Academy Press, New York City, 1930.

" First Loudspeaker Operator Convicted here Under Law Against Unnecessary Street Noise" . The New York Times. June 5, 1930.

Niebel, Benjamin W.. Motion and Time Study. 8th Ed. Richard D. Irwin, Inc. 1988.

Schafer, R. Murray. The Tuning of the World. Alfred A. Knopf, Inc. 1977.

Steinhart, Peter. " Quiet, Please." Audubon. May 1984.

Biographic Statement

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An interesting web site related to: [Ten Quiet Places in New York](#)