1

Open Ears

Murray Schafer

We have no ear lids. We are condemned to listen. But this does not mean our ears are always open. 'The violent and the righteous are hard of hearing', said Gunter Grass (1973). In every society it is possible to detect individuals or classes of people whose ears are open and those whose ears are closed. Open to change? Open to obey? Open to criticism? Open to new ideas? Open to the voices of God? Or closed to them.

So far as I know, no historian has ever listened to history, that is, listened to those who were listening, in contradistinction to those who were not, in an attempt to deduce what might have been happening or about to happen as a result of the claireaudience of some and the deafness of others. This is not to imply that listeners have always had an upper hand over non-listeners. Often the situation is reversed, as it seems to be at the present time, when the deaf increasingly rules us. The three questions to ask are these:

- Who's listening?
- What are they listening to?
- What are they ignoring or refusing to listen to?

Countless dictators have fallen because they failed to detect the sounds of revolution soon enough. And probably an equal number have been hurled into power by bawling multitudes who couldn't even hear their own voices. The deaf can lead the deaf just as the blind can lead the blind.

But there are also real flash points in history where something revolutionary was heard for the first time. Big noises like cannons, church bells, steam engines and jets have changed history as much as bold proclamations. So have small sounds, pronounced in whispers at clandestine meetings. In every case someone is listening and others not. What follows are a few examples of significant social changes attributable to sound events.

The Ear of God

The notion of God as an omniscient microphone, hearing or overhearing everything, is at least implicitly present in many religions. When I was a child going to church with my parents, I always felt awkward when the minister said 'let us offer up a silent prayer to the Lord'. Then all heads would bow and all eyes would close. The church was silent until the minister would break the stillness to inform us that God had heard our prayers. He was confident about that. God always heard the prayers of earthly sinners. It amazed me to think that at any moment, millions of people all over the world were speaking to God, and that God could understand all the languages, unscramble all the confessions, and even decipher the silent thoughts of the praying multitudes. Of course, Christianity functioned, and stills functions, on the supposition that nothing can be concealed from God, neither in darkness nor in silence.

But if the ears of God are always open, why do we have to signal when we want to make contact? Why the rattling of the bones, the blowing of the ram's horn or the ringing of the church bells to announce our readiness for communication? Certain tribal societies could explain this simply: the gods were often sleeping and needed to be awakened. Any ritual object has a complex function. The church bell, for instance, is an apotrapaic instrument, intended to sanctify a holy place or holy time. It is centrifugal in the sense that it frightens off evil spirits, and centripetal in the sense that it draws people together for collective religious observance. I have shown how authoritative the bell became in the convent of Bernardines of the Obedience of Martin Verga (1815) from a description given by Victor Hugo in *Les Miserables* (Schafer 1993) Not only did bells announce prayers, but also all activities were directed by their ringing; and this was true wherever there were churches and monasteries.

Quebec City, 1857, Order of St. Augustine

4:00 a.m.	*Reveil.* Bell sounded for the duration of one Pater and Ave.
4:30 a.m.	Thirty tolls on the church bell.
5:15 a.m.	*Les Petites Heures.* Bell sounded for the duration of one Pater and Ave.
5:45 a.m.	Mass, announced by thirty tolls on the church bell. Housekeeping signalled on the monastery bell for the duration of the two Ave Marias.
9:00 a.m.	General lecture signalled by the monastery bell and the hand bell for the duration of the De Profundis.
10:45 a.m.	First announcement of the *Diner des Pauvres* on the monastery bell for the duration of two Ave Marias.
11:00 a.m.	*Diner des Pauvres* signalled by hand bell and monastery bell sounding two Ave Marias, separated by a pause lasting one Sancta Maria.
11:15 a.m.	Examination. Thirty strokes on the monastery bell.
11:30 a.m.	*Diner des Religieuses* announced by hand bell and monastery bell sounding two Ave Marias, separated by a pause lasting one Sancta Maria.
Noon	Angelus. Three times three strokes leaving the duration of a Sancta Maria between each group.
1:25 p.m.	*Chapelet.* Monastery bell and hand bell sounded for the duration of one De Profundis.
2:25 p.m.	Catechism. Thirty tolls on the monastery bell.
2:45 p.m.	*Lecture particulaire.* Announced by the monastery bell and the hand bell for the duration of one De Profundis.
3:10 p.m.	Vespers. Hand bell and church bell sounded for the duration of one De Profundis.
4:45 p.m.	First announcement of the *Souper des Pauvres.* The monastery bell sounded for the duration of two Ave Marias.
5:00 p.m.	*Souper des Pauvres.* The hand bell and monastery bell sounded for two Ave Marias separated by one Sancta Maria.
5:30 p.m.	*Matins.* Hand bell and church bell sounded for the duration of one Pater and one Ave.
6:00 p.m.	Supper for the monks announced on the monastery bell for the duration of two Ave Marias separated by a pause of one Sancta Maria.
6:30 p.m.	Second refectory. The monastery bell sounded for two Ave Marias without pause.

7:45 p.m. *Examen.* Seven or eight strokes on the monastery bell, then thirty strokes on the church bell after having rung the hand bell.

8:45 p.m. Bedtime. The monastery bell is sounded for the duration of one De Profundis. (Source: Sonnerie. Ordre des Observances, *Reglements des Religieuses hospitalieres de la Misericorde, de l'ordre de St Augustin.* Manuscript in the Archives du Monastere de l'Hotal-dieu de Quebec.)

In one sense all this bell tolling was intended for God's ears, because the durations were determined by prayers recited aloud or silently by the monks who tolled them. But the more obvious intention was to maintain the regimen of the monastery and, in a broader sense, to regulate the behaviour of everyone living within Christian society. When the authority of Christianity weakened, church bells grew fewer. Perhaps God was no longer listening, or at least wasn't speaking. The many sounds once regarded as divine voices – the storms, the thunder, and the mysterious voices of nature and of dreams – were rationalized differently. God became silent. With God's silence, human vocabulary changed. No more Pater Nostas or Ave Marias. Other ears opened to listen to the human predicament.

The Ear of Dionysius

Dionysius of Syracuse (circa 430–367 BC) was known as a brutal tyrant, although he made Syracuse the most powerful city west of the mainland. His name, or rather his ear, survives eponymously in the famous S-shaped grotto that resembles the cochlea of the human ear in enormous proportions. The cave is about 210 feet long and over 70 feet high with a narrow, uniform channel a few feet wide at the top. The unique sound properties of the cave were studied by the acoustician Wallace Clement Sabine:

> When being shown the grotto from below, one's attention is called to its remarkable reverberation. When above, one's attention is called to the ability to hear what is said at any point on the ground. It is related that Tyrant Dionysius . . . [who] so designed his prisons that at certain concealed points of observation he could not only see everything that was done, but through remarkable acoustic design, could hear every word that was spoken, even when whispered only. (Sabine 1964)

Whether or not the grotto was a prison is not substantiated.

Nevertheless, the Ear of Dionysius is the prototype for all subsequent developments in acoustic surveillance by the state, passing through centuries of architectural curiosities intended to detect treachery through listening tubes (the seventeenth-century versions of which are preserved with faulty acoustics in the vivid illustrations of Athansius Kircher's *Phonurgia Nova*) (Kircher 1966) down to the reality of hidden microphones and wire-tapping in the twentieth century.

The ears of the state have never been more curious and open. Everyone has a voiceprint and somewhere everyone's voice print is on file. The setting of Solzhenitsyn's novel *First Circle* is a top-secret laboratory, committed to research on voice scramblers, simulators and decoders.

'Eavesdropping, censorship, recording, and surveillance are weapons of power', writes Jacques Attali.

> The technology of listening in on, ordering, transmitting, and recording noise is at the heart of this apparatus . . . Who among us is free of the feeling that this process, taken to an extreme, is turning the modern state into a gigantic, monopolising noise emitter, and at the same time, a generalised eavesdropping device. (Attali 1985)

A remarkable example of this is recorded by Milan Kundera in *The Unbearable Lightness of Being*: during the communist era, Prague police evidently broadcast tapes from bugged apartments over the state radio as a public incrimination of the inhabitants.

Not all of this listening is carried on in secret. This is no longer necessary once mechanisms are created for society to express itself openly on every possible issue. Then all that's necessary is to monitor the radio phone-in shows and opinion polls to know where to release and apply pressure. Music is probably more informative. I refer, of course, to pop music, which is really the only kind permitted in the free world. (Any other kind of music might be, and on occasion has been, considered conspiratorial.) Listen closely to its tempo, its beat, its vocal machinations and song texts and it tells you all you need to know about the mood of the people.

> The music of a well-ruled state is peaceful and joyous and its government is orderly; that of a country in confusion is full of resentment and anger and its government is disordered; and that of a dying country is mournful and pensive and its people are in distress. (De Bary et al. 1960)

> or rather all impossible – attempts to seduce him. To rule out anything similar, once and for all, Freud moved from his earlier position to the opposite end of the couch. (Gardiner 1971: 142)

The darkened room and invisible analyst perpetuate the confessional booth and the hidden priest, but the couch put the analysand in a more comfortable position to encourage free disclosure. It is well known that Freud spoke little during sessions with patients, but he listened intently, almost the way a music teacher listens to a pupil's performance; and, like a music teacher, he saw Freud attached great significance to slips of the tongue (Freudian slips) and to other spontaneous or inadvertent sounds such as harsh breathing and the tapping of foot or fingers, sounds that he believed recalled the 'primal scene' of coitus between parents heard during infancy, and a frequent cause of later neuroses (the best study of Freud's listening habits is Lecourt 1992). That spontaneous or uncontrollable sound-making had important implications and could be deciphered like a secret language was a revelation. It was as if the human being was signalling in one way through controlled grammatical speech and in another way in the accents and accidents that surrounded conscious communication. Yet Freud, and later Jung, failed to realize the implications of the acoustics of the unconscious, both in dreams as well as in music. Neither Freud nor Jung seems to have been particularly musical. There are a few references to music in Freud's letters but none in his theoretical writings. Nor are there in the writings of Jung. This made them particularly unsuited to deal with patients who had obsessions with sounds, musical or otherwise. A tune, for them, could only be analysed through the words that accompanied it. I have elsewhere mentioned the unsatisfactory manner in which Jung dealt with the acoustic contents of his patient's dreams (Schafer 1993). Freud once denied the auditory dimension of dreams altogether, 'for, in dreams we see images but we hear nothing' (Freud 1950). At other times he admitted that we might hear voices in dreams, which he quite dogmatically considered memories of conversations from the previous day. The only accommodation he made to sounds was to acknowledge that occasionally an external sound, overheard by a dreamer, might signal a change in a dream – that church bells, for instance, might take a dream in a religious direction.

The indifference of early psychiatrists to sounds in dreams is unusual, and rather sets them apart from other interpreters of psychic experiences. Most of the big dreams of the Old Testament were aural or had important aural elements. Among the North-American Indians, the

prophet's song comes out of a dream and is sung immediately on waking. Even in nineteenth-century Europe, aural dreams seemed significant, at least in the lives of musicians, as E.T.A. Hoffmann's Tales indicate.

> As I was in the realm of dreams a thousand fears and pains tormented me. It was night and I was terrified of the leering masks of the monsters who dragged me one moment into the abyss of the sea and the next raised me on high. Rays of light came through the night, and the rays of light were tones which surrounded me with their serene purity. I awoke from my pains and saw a great, clear eye, which stared into an organ; and as it stared, tones arose and wound themselves into more shimmering and majestical chords than I had ever thought possible. Melodies poured up and down and I swam their current and wanted to drown. (Schafer 1975)

Vivid acoustic dreams recounted by Nietzsche, Thomas Mann and other German authors rather fly in the face of Freud's assertion that we dream deafly. Freud evidently did not benefit from Novalis's suggestion that medicine is a musical art, even though passages like the following were quite well known during Freud's day: 'Every disease is a musical problem – the healing a musical solution. The shorter and more successful the solution – the greater the musical talent of the doctor.'

Novalis believed that the rhythms of the body move in harmonic order, and disease can be detected as a dissonance in the harmonic ordering. Paracelsus would have understood that, as would practitioners of holistic medicine today, but not the tone-deaf psychiatrist. In her study of Freud's listening habits, Edith Lacourt makes the case that Freud was actually envious of the musical talent of others (for instance of Mahler, who briefly consulted him), talents he would gladly have developed had he possessed them. But, as I said at the beginning, history has been as dramatically shaped by closed or impaired ears as by open ears. Twentieth-century practice has concentrated on the visual content of dreams leaving the aural territory for others to explore.

The Ear Within

The ear of the dreamer, the ear of the shaman, the ear of the prophet and the ear of the schizophrenic have this in common: messages are heard, but no matter how clear or compelling they may be, there is no evidence of a verifiable external source. The transmission seems intracranial, from an interior sound source to an ear within the brain. Julian

Jaynes (1976) attempted to explain how we hear voices that are heard by no one but ourselves. Jaynes tried to demonstrate that, while speech is normally a function of the left hemisphere of the brain, the right hemisphere may, at one time, also have had a speech-producing function, a freer, more hallucinatory activity, vocalizing that he called 'the language of the gods' – messages that were passed from the right hemisphere to the left by means of an 'anterior commissure', to be heard as audible voices.

The whole of the *Iliad* is directed this way. Apollo speaks to Hector; Athena speaks to Achilles. As Jaynes explains it, 'the Trojan War was directed by hallucinations'. The formula 'Yahweh said to Moses', repeated throughout Exodus and again in Leviticus, where the laws are dictated, might be interpreted in this way, although some believers might prefer a god who shouts from on high to one who inhabits the head. What cannot be denied is that exclusively Moses heard the voice of Yahweh. 'Speak to us yourself', they said to Moses, 'and we will listen; but do not let God speak to us or we shall die' (Exodus 20: 19). There is a parallel here with Zaroastrianism, where Srosh, 'the genius of hearing', interprets the message of Ahura Mazda for the faithful.

At some point (Jaynes dates it at about 3,000 years ago) the commissure connecting the brain hemispheres was weakened, and the voices began to be stilled. Jayne's theory has been criticized, although it has not been replaced by any more convincing explanation of why voices were heard with such astonishing force in ancient times, or that their presence has diminished today and is only found among people society regards as mad. The steady development of consciousness and rational thought has transformed the inner voice into a symptom of psychic disorder. A person might ask: have they really disappeared or were they merely suppressed because they are too frightening or irrational for the modern mind? Even in the time of Joan of Arc one could be punished for the arrogance of claiming to hear them. 'During her trial, worn out with questions and scholastic subtleties, she is asked whether she still hears her voices. "Take me to the woods", she says, "and I shall hear them clearly".'

Ear Muffs

Rationalism extinguished the rich treasury of imaginary voices that once existed in Europe and still exist in many less civilized parts of the world. The empirical Greeks often referred to sound in their writings. Pythagoras created a musical system based on harmonics derived from

listening to the heavenly spheres in motion. Socrates took counsel from his 'demon', an interior psychic voice that warned him about danger and evil. In his *Problemata,* Aristotle asked many questions about sounds and attempted to answer them. In *De Rerum Natura* (*On the Nature of Things*) the Latin poet-philosopher Lucretius has a vigorous discussion on vocal sound and acoustics in general. But by the time we reach St Augustine, philosophy was beginning to settle into a quieter mode, for, as he said, 'It might be contended that, though we utter no sound, we nevertheless use words in thinking and therefore use speech within our minds' (St Augustine, 'The Teacher', in Shapiro 1964). Logic, ethics and aesthetics became silent disciplines and remained so for centuries until Schopenhauer proclaimed music and noise as indispensable ingredients of philosophical speculation – noise because it can 'instantly shatter the power of thought', and music because the 'combined, rational, numerical relations set the brain fibres themselves vibrating in a similar way' (Schopenhauer 1966). Still, a reader of Western philosophy might conclude that everything worth serious discussion exists in a silent vacuum: war, revolution, all social enterprise, and even the universe. This repudiation of sound passed over into science as well where major theories (the space-time continuum, the atomic structure of matter, and the wave-corpuscular theory of light) were construed as silent, as were the instruments used in their measurement (the telescope, the microscope, equations, graphs, statistics and numbers). It is almost as if the great achievements of Western philosophy and science were produced in a huge anechoic chamber. Myriads of books written in silent rooms and read in silent libraries. But has the world become more quiet and peaceful for it?

A person suffering from acousmata is taken to a psychiatrist. A person found mumbling in a public place is considered dotty. But we all hear voices in the mind and may converse with them out loud when alone, just to fill the solitude. A musician may also hear musical sounds, and while unmusical people often express astonishment that a composer could hold the contents of a whole symphony in the head, playing it all through at will while shaping and reshaping details, there is no doubt that this skill can be learned, and has been learned by countless musicians. A legend says that Mozart wrote the overture to *Don Giovanni* only hours before the premiere. In reality, he had accumulated it in his mind throughout the writing of the opera and needed only a few hours to write it down. (Closer to home, Glenn Gould spent fewer hours practising than most pianists, but he spent many more hours studying scores and silently memorizing them.)

The Ear of the Imagination

Everyone has the power to imagine sounds; and fairy tales, literature and radio once developed this skill in ways that television cannot. Try this experiment. Imagine the following sounds, taking time to let each resonate in the mind before cross fading to the next:

- a baby laughing;
- a woman weeping;
- a bowling alley;
- Niagara Falls;
- a fish jumping out of water;
- an iceberg slowly melting;
- a giraffe with hiccups.

The technique of imagining sounds was developed with great subtlety by the Japanese haiku poets. Basho's celebrated poem about the frog is a good example.

> Furuiki ya
> Kawazu tobikomu
> Mizu no oto
>
> An old pond
> A frog leaps in
> With a splash

It could be translated more vividly with three words: frog, pond, splash. The diminutive sound of birds inhabiting vast spaces was a favourite of the haiku poets:

> Hark! The voice of the pheasant
> Has swallowed up the wide field
> at a gulp. (Yamei)
>
> The voice of the cuckoo
> Dropped to the lake
> Where it lay floating
> On the surface. (Basho)

The movement of sound was another speciality:

> The sound of an acorn
> Falling down a shingled roof.
> Cold of the night. (Gyotai)
>
> Cricket!
> Although it was next door you sang
> I hear you there. (Issa)

One of the fundamental paradoxes of the listening experience is revealed in this poem. Is sound where it originates or where it is detected? Is it in the soundscape or is it in the ear? The reply 'both' is not satisfactory because we do not hear sound in two places, but only in one. Issa recognizes this and opts for the subjective sensation of sound in the ear as more authentic.

At times an aural phenomenon may merge synaesthetically with the visual:

> The sea darkens
> And a wild duck's call
> Is faintly white. (Basho)

The Japanese also cultivated the suspense of waiting for sound to happen:

> The butterfly rests on the temple bell, asleep.

Of course, the Japanese were not alone in hearing vibrating worlds beyond visual appearances. A striking example by a Western writer comes from August Strindberg, who heard a cricket singing in his pillow:

> Now, assuming that these creatures once sang in a field of flax, do you not believe that Nature or the creator could use the vegetable fibre (of linen) as a phonograph, so that it plays to my inner ear which through suffering, deprivation and prayer has become willing to hear further than before?

Attending to the immanence of sound in silent objects is stimulated by meditation, especially the unfocused meditation of Zen Buddhism.

The composer Toru Takemitsu explains the difference between the oriental and the occidental listener in this way:

> The bells of Westminster Abbey speak in terms of first person singular: they have an individual motive with a distinctive statement. The Japanese temple going, however, speaks without personal identification: its sound seems to melt into the world beyond persons, static and sensual. (Takemitsu 1995)

Sound objects in the oriental landscape encourage peripheral listening, while sounds in the West compete for focused attention – can this be true?

Most of the sounds busy people listen to are signals of activity. This explains their immunity to the sounds of nature. One of the essential differences between the natural environment and the engineered environments in which most people now live is that nature can't be shut off with a button. Things that can't be generated or shut off with buttons or switches attract little attention in the modern world.

The failure of the twentieth century to protect the natural habitats of birds and animals is largely due to the fact that we no longer hear nature or can put names to its voices. If you can't name the birds, if you don't know how to recognize the leaves of the trees by the sounds they make, or hear a cataract down the river, or recognize when a winter wind is bringing in a storm, nature is anaesthetized, and its survival will depend on forces other than human.

The power of technology really comes down to a fascination with buttons and switches in an attempt to modulate information intake. As the twentieth century progressed there were fewer 'off' switches; media-massaged society remained in a perpetual state of 'red alert'.

The cellular phone, which the Germans appropriately called the 'Handy', is the latest instalment in this drama. Answer when you're master calls. Life without secrets, without privacy, without freedom. The latest shackle for the technological prisoner to carry about.

In the 1790s Jeremy Bentham designed his 'panopticon', a circular prison with cells in tiers facing a central rotunda where guards were able to observe all moves of the isolated prisoners twenty-four hours a day. At the time it was considered outrageous; but isn't this what today are tyrants want to achieve: a transparency of the population in which nothing remains secret? The Ear of Dionysius has never ceased to haunt the imaginations of those seeking power in the world. And accordingly we find that power seekers are never very far from microphones.

But no one can hear everything – unless God can. Beyond what fascinates your ear today is something else, incessantly and obdurately present, although you cannot or do not hear it yet – but whoever hears it first has a good chance of inheriting the future.

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