

An Introduction to Music from a World Music Perspective

EXPLORING THE WORLD of MUSIC

SECOND
EDITION

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Chapter

1

KEY WORDS

amplitude
duration
dynamics
frequency
fundamental
overtone series
reception
sine wave
syncretic
timbre

Learning Objectives

After successfully completing this unit, the student will understand that:

1. While every society has some form of musical tradition, the meaning, role, and functions of music differ markedly from culture to culture;
2. At the basis of all music is vibration;
3. The physical environment has an enormous impact on all aspects of musical practice;
4. In traditional agrarian and pastoral economies, music is often linked to perceptions of the physical environment and the natural world;
5. The urban environment with its diversity of people and cultures affects musical practice in many ways. Urban mixing of local and external musical practices has resulted in many new genres.

Television Program

Sound, Music, and the
Environment

Audio Selections

1. "Sjajna Zvezdo." Mirjana Laušević,
Donna Lee Kwon, and Tristra Newyear.
2. Imitation of Dog Sound, Tuva
3. Throat Singing in Cave, Tuva

Sound, Music, and the Environment

*"There's music in the sighing of a reed;
There's music in the gushing of a rill;
There's music in all things, if men had ears:
Their earth is but an echo of the spheres."*

LORD BYRON

We can analyze music on many levels, beginning with the laws of acoustics. The frequency, amplitude, duration, and timbre of sound waves, acting upon our eardrums, give us music. But in order to have meaning, these sounds must be organized so as to communicate and affect people within their sphere. Every culture in the world has some kind of musical tradition. But while music seems to exist in every human society, its meaning, forms, and functions differ from culture to culture. In this chapter, we examine music as an important component of culture, beginning by asking the question, "What is music?" We then look at sound and the underlying physical laws of all music in order to understand how music is produced and perceived. Finally, we examine the importance of context and the relationship of music, society, and the physical environment.

ACTIVITIES: EXPLORE ACOUSTICAL ENVIRONMENT
Inventory Soundscapes
Journal
Listen w/ Intention

Music seems to exist in every human society, but its meaning, roles, and functions differ markedly from culture to culture. Different societies, and even individuals within a single society, often disagree about what music is. Some languages don't have a word that corresponds exactly to the English word "music." Differences in forms, techniques, instruments, aesthetics, languages, and environments have yielded a wealth of musical styles. How then, from a cross-cultural perspective, can we define music?

MUSIC DEFINED

We begin by defining music as patterns or sequences of sound, organized by human beings, that are somehow distinct from ordinary speech or everyday sonic occurrences. These musical structures have meanings that must be understood with reference to the societies that produce them. According to ethnomusicologist Anthony Seeger, "music is much more than just sounds captured on a tape recorder."¹ Music is an intentional construction that can be described in many aspects, including its structure and form, its emotional meaning, and its perceived cultural value:

Music is an intention to make something called music (or structured similarly to what we call music) as opposed to other kinds of sounds. It is an ability to formulate strings of sounds accepted by members of a given society. . . . Music is an emotion that accompanies the production of, the appreciation of, and the participation in a performance. Music is also, of course, the sounds themselves after they are produced. Yet it is intention as well as realization; it is emotion and value as well as structure and form.²

Like language, music is a system of communication that is embedded in the community, group, or culture from which it arises. Not only must its structures, forms, and rules be understood, but also its function, value, and expressive meaning. Like food, music seems to answer a universal human need. But just as particular foods are esteemed by some cultures and not by others, musical meaning is not a universally agreed upon phenomenon. People around the world make, participate in, and listen to many forms of music for a variety of different reasons. What may seem like noise to one may be deemed the most beautiful music by another.

Depending on its cultural context, music has the power to evoke strong feelings and memories, to intensify religious experience, to bring people together, to move them physically through dance, and to entertain them. As Bosnian ethnomusicologist Mirjana Laušević suggests, music is both a personal and collective creative experience situated within a particular time and place:

I guess if you try to answer the question what music is, you need to figure out from whose perspective you're looking at. For different people, music means different things. If I need to define what music is for me, it is an expression of life and it is an expression of culture that happens in time and in space. It happens with, around, and for people that you are with, and it cannot be separated from that experience. As an art form that happens in a very specific time, place, and context, it is an interaction. It is a creation that expresses your being.³

For jazz musician Josh Redman, music is also a creation that expresses his innermost emotions. To a performer, one of the most exciting elements of music is its expressive power to move performers and listeners in ways that cannot be described in words:

Music for me is a unique and moving experience which is connected to reality, but also transports me outside of reality. I mean, music is transcendent and that is one of the reasons we can never accurately and completely describe what music is. . . . In other words, if everything about music had a word or an idea or an analytical concept that we could attach to it, then in a sense there would be nothing mysterious or magical or transcendent about music. For me, it's that transcendence, that spiritual involvement and journey in music which makes it so special.⁴

Music can be just as vital for the listener as the performer. As one contradancer in New England states, "Music is as important as air to breathe with," or another, "When the music soars so do I. It inspires me. It's greatly satisfying. . . . At its best, I'm lost in the music—transported." Listening to music—once reserved for live performance situations—now can take place anywhere that recording technology exists. People use music to relieve stress, to pass the time while driving, during work-outs at the gym, while doing housework, or getting to sleep. Cassette and digital culture allows people to create listening worlds for themselves apart from their immediate surroundings. Listening can be a passionate experience, a passive one, or somewhere in between depending on the focus of the listener and the context for the music making.

While music conveys meanings, feelings, and images that are understood and valued differently from group to group and culture to culture, the physical laws of sound are universal. Ethnomusicologist Mark Slobin explains that vibration is at the root of music:

One way to think about music is as a physical fact. Music exists. You don't see it, but it's there. It has waves that go through the air and hit your ear and do complex physical things. What we do is translate it; we translate this energy into a number of its component parts. . . . Waves going through the air over and over again sketch the same patterns if you put them on a screen. . . . This doesn't tell us anything about what it means to anybody. But it does tell us a lot about how we understand it, how we perceive it.⁵

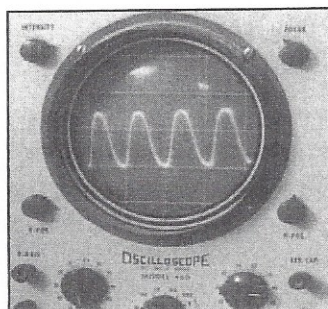
THE TECHNOLOGY OF SOUND: FREQUENCY, AMPLITUDE, DURATION, AND TIMBRE

In the 2007 feature film "August Rush" the title character, an eleven year old musical genius speaks out about his inspiration for composing music. He says, "Music is all around us. All you have to do is listen." And after all, what is sound anyway?

Sound is vibration. On a physical level, it is a result of a disturbance of the medium that carries it, which may be air (or other gases), water, or solid media such as wood and metal. When carried in air, the vibrations actually cause changes in atmospheric pressure. A minute disturbance of the pressure, such as drawing a bow across a string or singing a tune, creates vibrations or waves, which are transmitted through the air in all directions. These sound waves are picked up by the ear, transmitted to the brain, and given meaning. Composer Gerald Shapiro sums up how sound is perceived:

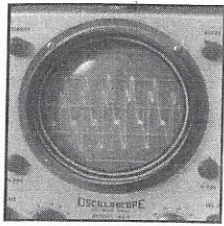
In order to have a sound you need three things. You need some object which is vibrating, some physical object, such as a flute or a cello. . . . Then you need a medium to carry that vibration, usually that's the air. But we all have the experience of hearing sound underwater or of hearing sound when we put our ear to the door. . . . Obviously, the metal of the door can carry the vibration of the sound. A wonderful example is the tin can and string telephone that kids make, where the sound is carried along on the string between the two tin cans. And finally, we need an ear, an eardrum, and a brain to hear the sound and to turn it into something that's meaningful to a human being.⁶

The simplest kind of sound is called a sine wave. The initial vibration creates a curve, which rises smoothly to a peak, then subsides, and then dips in a curve equal to the initial rise creating the shape of a backwards letter "S" drawn on its side. However, sound is rarely as simple as a single sine wave. Instead, there are many sine waves occurring simultaneously.



Sine Wave

Four Parameters of Wave Patterns

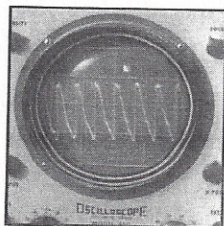


Frequency

1. The first parameter is the *frequency* or rate of vibration in time of the sine wave. Frequency is measured in cycles per second, and our ears perceive frequency as a specific pitch—the highness or lowness of the sound. In the Western system, pitches are given letter names and each has its own frequency. For example, the “A” that an orchestra tunes to has a frequency of 440 cycles per second. This was not always the case. Up until the 20th century, there had been no agreement about what actual pitch (in cycles per second, now called Hertz) would be heard when A above middle C was played on a fixed-pitch instrument. In the 17th century, for example, the player of a fixed-pitch instrument such as a flute or clarinet who played in an ensemble in Paris, where A was generally pitched at around 404 Hz (a little below our current G#) would have found it difficult, if not impossible to travel to Vienna, where the A was approaching 460 Hz (close to our present A#). In the early 1830’s, a mechanical device was invented in Germany which could accurately measure pitch, and the way was cleared for standardization.

Because music sounds “brighter” or more “exciting” as the pitch is raised, some orchestras and organ builders kept pushing the pitch of A higher and higher, which led to a large number of complaints from singers, as the new pitches started creating vocal strain. In 1812, the Paris Conservatory ruled that all of their fixed-pitch instruments and orchestras would tune to A 440, however, in the winter of 1859, the French government passed a law which set A at 435 Hz. Obviously, an international agreement was needed, but it was not until 1939 that an international conference agreed on a standard of A440. That standard was upheld in 1955 by the International Organization for Standardization as ISO rule number 16. It is still possible to hear, in some places, music played at slightly different pitches. Orchestras in Germany and Austria, for example, often tune to A445. Musical ensembles which specialize in Baroque music normally tune to A415, to more accurately represent the music as it would have been originally heard.

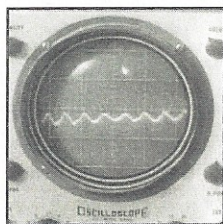
When several pitches are played together, they form an *interval*. Several intervals played together form what we call a *chord*. When pitches are played one after the other, they form a *melody*.



Amplitude

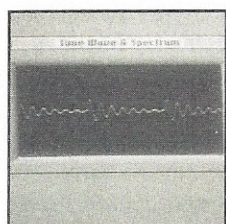
2. The second measurable parameter of the waveform is its height and depth. This parameter measures the strength of the vibration and indicates the *amplitude*, the loudness or softness, of the sound. In musical terms, amplitude refers to dynamics. Musicians use many different levels of volume, ranging on a continuum from extremely soft to extremely loud. Dynamics are an element of musical expression that are determined partly by the acoustical properties of an instrument or voice, the number of musicians playing or singing, the use of amplification, and the mood that a musician wishes to convey.

continued



Duration

3. The third parameter refers to the *duration* of the sound. How long does the sound last? All music takes place in time, and duration is an essential quality of musical sound. Just as melodies are constructed from successions of pitches, rhythm is created by durational patterns of sounds and silences



Timbre

4. The fourth parameter refers to the complexity and shape of the sound waves—how many waves go into making up the sound and what is their relationship and proportions. This parameter determines the tone color or *timbre* of a sound—why a flute sounds differently from a violin or an oboe. Every sound has a distinctive timbre because of the acoustical phenomenon of the overtone series.

Each individual tone consists of a fundamental pitch and a simultaneously sounding series of progressively higher overtones, also called partials or harmonics. The fundamental pitch is the actual note sung or played and it is usually the tone we can identify and hear most clearly:

The lowest frequency of the sound, the fundamental of the sound—it's a sine wave—is what we hear as the pitch of the sound. And we say this note is B or a C because it is a certain frequency for its fundamental. Now then, above that fundamental is a string of overtones, and they are simple multiples of the fundamental. . . . Within any individual note there actually are a whole series of higher, ever higher overtones which make the timbre of each individual tone or sound.⁷

The particular overtones of the series that resonate along with the fundamental pitch determine the timbre of the sound. Each instrument has its own timbre based on the particular overtone structure that it generates. For example, metal flutes sound high and bright because their shape and material emphasize only the second harmonic, one octave above the fundamental. Clarinets have a very different sonority because their cylindrical tube construction largely eliminates the even numbered harmonics. Overtones are not usually heard as distinctive pitches in their own right, rather, their presence and proportion give a sound its characteristic quality.

These waves can be measured using an instrument called an oscilloscope, which turns sound into visible patterns. When thinking about the musical properties of sound, these wave patterns have four different parameters from which they can be analyzed.

Acoustical principles provide a common basis to musical systems around the world. However, the Western terms used to describe these ba-

sis elements of music—melody, rhythm, dynamics, and timbre—are not indigenous in many cultures. They provide a common vocabulary because they have been exported all over the world as basic concepts, but they do not necessarily describe how people think about their own music.

While some cultures have few *explicit* rules governing their musical traditions, most have very definite *implicit* grammars that control the forms that music takes and the way music is performed. Western music theorists, instrument makers, and sound engineers adopt a technological perspective in which ratios and measurements are an important concern. But even in societies where acoustical principles are not articulated and measured as such, musicians are very aware of how music should be created and manipulated so that it “sounds right” to themselves and to their audiences. These concerns include technical considerations—how instruments are correctly constructed, tuned, and played.

Technological concerns and the physical properties of sound production answer only certain questions about what music is. There are many unmeasurable and unpredictable aspects of music that have to do with its performance, function, and meaning within an overall culture. Because musical creation and reception are based on individual experience, no two perceptions of musical meaning will be exactly the same. Nevertheless, musical practices are strongly rooted in the history, politics, and social forces of any given culture. Therefore, as ethnomusicologist Timothy Rice suggests, in order to study music, one must understand “how music is individually created and experienced, how it is historically constructed, and how it is socially maintained.”⁸ Musicologist and composer Gunther Schuller, in a conversation with one of the authors in 1987, expressed his dismay at the speed at which radio, television, records, tapes and CD’s are corrupting and altering the music of many of the cultures of the world. At some point in the not-too-distant future, he said, it will be almost impossible to hear music which has not been adulterated by influences from outside these cultures.

The context for music making has a great influence on its performance and reception. From the production of a single sine wave in an electronic music lab to the performance of an Italian opera in a concert hall, music exists within and creates its own time and space. This context is both a physical and social space—rooted in place, but imbued with social meaning:

All music is local and has its local understandings. So it is connected to place. Any place that music is made is a special place in terms of how it’s being used and what its importance is to the local people. . . . At this level of context we’re talking about actual physical local-

Basic Elements of Music

Melody
Rhythm
Dynamics
Timbre

ity: [for example,] the dance hall. It's a musical space; it's also a musical context that has rules. When you are in a place where there is music and you are dancing, all kinds of rules apply about behavior between the sexes, about how loud the music should be, about what is the point of the music, about how long it should go on . . . it's a setting, it's an understanding, it's a sensibility . . . so each context of music may be an actual physical space, but it's also a spiritual space or an emotional space as well.⁹

The spaces or contexts where music is made, whether indoors or outdoors, formal or informal, sacred or secular, provide crucial information for understanding musical meaning and the role of music in society.

MUSIC IN THE NATURAL ENVIRONMENT

The word "environment" implies all the conditions and influences surrounding and affecting a person and/or group. On the broadest level, we can look at environment as a whole ecosystem, including the entire landscape, soundscape, and social realm in which a person lives. On a more microcosmic level, the word can refer to "worlds" that people are able to enter and leave, such as the shopping mall, university classroom, concert hall, or restaurant. Often these are "artificial" environments which build temporary communities of participants as opposed to natural environments. As urban dwellers, people are capable of entering a variety of such worlds every day. Music is often an essential part of the decor of interior consumer spaces, consciously manipulated to create atmosphere and to sell products.

Environment can be extremely important in how people relate to their music. The actual physical environment in which a people live determines many aspects of their music, along with their total culture. In many traditional rural economies, the natural environment is the governing force in everyday life, providing the means for sustenance and survival. In such cultures, the importance of nature is often reflected in musical practice, including the construction and use of musical instruments. Ethnomusicologist Ernest Brown gives one example:

The environment has a lot to do with the kind of music that people make. It determines what natural materials are available. For example, if you're talking about a rural society, that society is going to be limited by the material resources that are available. Among the Kung Bushmen from Botswana and Namibia for example, there are some ankle rattles that they use made from the cocoons of a particular kind of caterpillar. If those caterpillars aren't available, if

it's a bad year for some reason and the caterpillars die off, then you don't get any leg rattles.¹⁰

Not only does the environment play an important role in the kinds of instruments the Bushmen use, but also in the style of their musical performance. As a hunter and gathering people living in the harsh surroundings of the Kalahari Desert in southern Africa, the Kung must work together very closely for survival. Their overall social structure is reflected in their music:

The music depends upon interaction and cooperation between a large number of people who make a whole. It's a kind of indivisible whole that they create. When you listen to the music, you can't very easily pick out the individual parts, but it is the whole that makes an impression upon you. And their society is the same way. That is, you won't survive in that environment unless you cooperate and work together very closely and in a very coordinated way with other people.¹¹

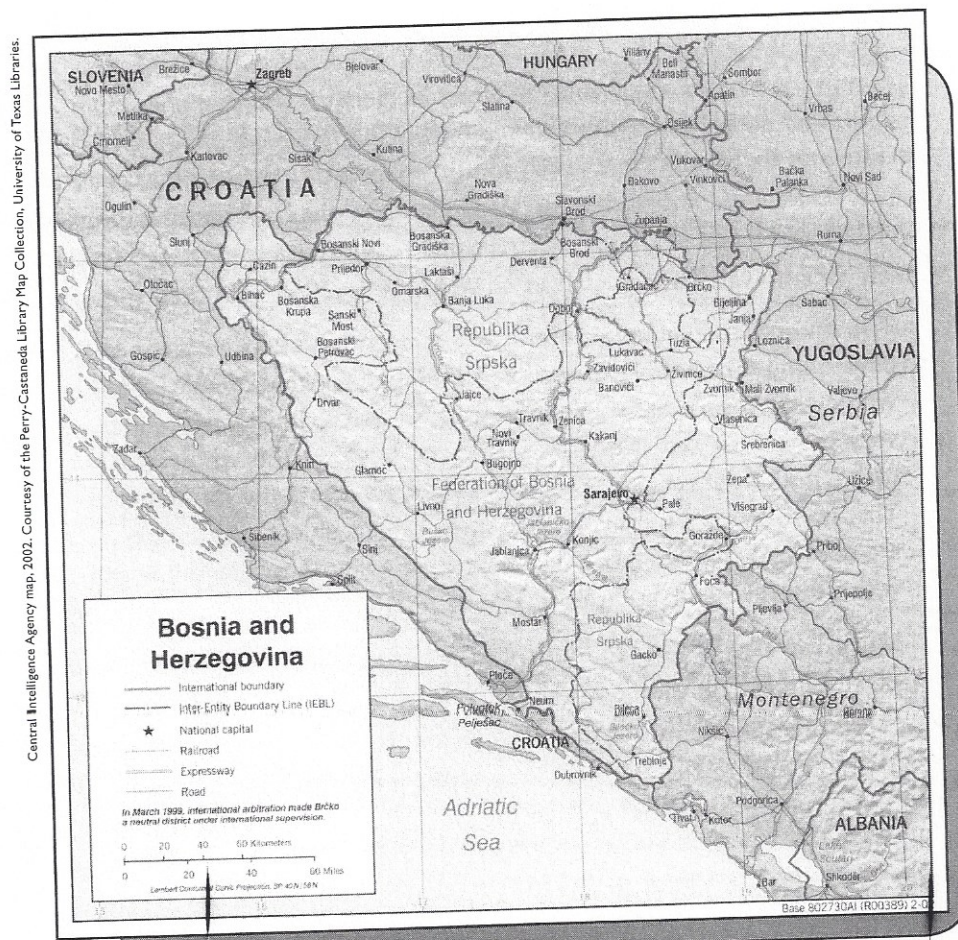
Music can also be used to influence the natural world. In writing about music among five Shoshone women in Wyoming, Judith Vander describes how certain songs are meant to revitalize nature and promote health. Texts about water ensure the abundance of water which in turn nourishes and sustains ongoing plant and animal life.¹²

The Bosnian Highlands Ganga and Bećarac Song Genres

In the mountain highlands of Bosnia, the environment also plays an extremely important role in social life and musical practice. According to Mirjana Laušević, the physical surroundings very much affect daily life and the ways in which people communicate:

In Bosnian Highlander culture, specifically in Mount Bjelašnica (pronounced "Byel-ahsh-nit-sa"), people will spend a lot of time outdoors since it is a herding culture. They will spend a lot of time on the meadows up in the hills all alone. And they would be up in the hills looking down into the valley. And if somebody is passing through the valley, they certainly want to be heard. And even though they can't be seen, they will voice themselves. They will, in a way, acknowledge their existence.¹³

This rugged and isolated environment makes demands on men and women in different ways, but strength and being fit are valued by both genders. The need to make oneself powerfully heard is reflected in the singing styles—singing loudly means being strong:



And being strong means being beautiful, being right, being the member of the culture. . . . It is very important to show your strength in that vast space in which people are settled, to conquer space with your voice. So in a way, you cannot separate the environment from the culture or from the music.¹⁴

Ganga. The song genre that is thought to carry the furthest is called *ganga*. This type of group singing is characterized by very close harmonies which cause the voices to acoustically beat or clash against each other. This loud and powerful music is meant to be sung outdoors by groups of either men or women. A leader starts the song and is then joined by his or her fellow singers, whose accompanying parts are essential to the song. The *ganga* ends with a scream or sigh which is an integral part of the performance. The singers stand in a semi-circle, often touching shoulders. Their long extended breaths, as well as their powerful voices, are thought to reflect strength. People are not singing only for an audience, but rather to and for each other. The setting for *ganga* singing might be a village fair:

You will have a number of groups of people that will be located in different parts of a meadow. And one group will start singing, just independently. . . . And maybe at the same time, or maybe right after, another group will start singing from wherever they were at that moment. And often groups try to out-sing each other—one group will try to be louder than the other.¹⁵

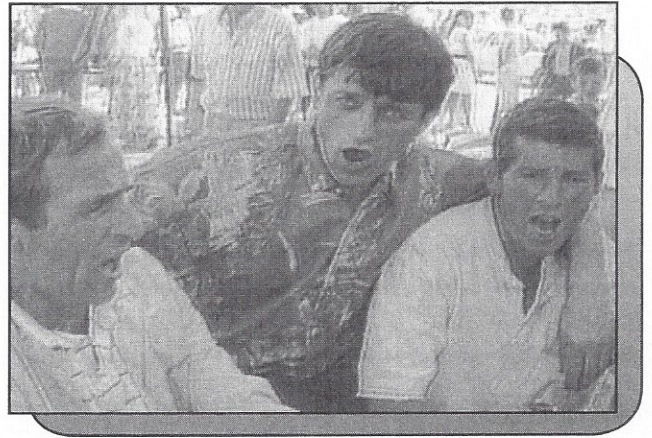
Often the natural landscape will be used to augment the sound. For example, singers will face into the valley while singing in order to achieve more resonance.

The different singing styles of men and women reflect both the physical and the social landscape—what it means to be a man or woman. Attributes of masculinity include power and strength achieved through competition and individualism; attributes of femininity involve cooperation, coordination, and neatness. The manner in which songs are performed indicate these gender differences:

Women are expected to sing very neatly. Men are much more loose in the way that they can express their strength. They can express their strength with full volume of their voice. But they can be much more sloppy. Comments that people would make after female singing would be “You embroidered that really nicely,” which reflects a certain demand for precision, for neatness, and for beauty that is organized. In male singing what you are exhibiting is strength and endurance. But how you come by that strength and endurance is not necessarily through precision.¹⁶

Bećarac. Song lyrics also reflect gender differences contextualized within the physical environment. Men’s songs are often about men who are rascals or rogues in matters of love. Women’s songs may be about the burdens of love or the difficulties of married life, and they may use more natural imagery. One example is called “Shining Star,” in a singing genre called *bećarac*. *Bećarac* emerged as a new genre (circa 1940s) that was influenced by Western tonal harmony, but was still very much in the Highlander idiom. The first verse of the song is translated as follows:

Shining stars, do any of you know
where my darling is tonight?
Shining stars, wandering through the sky;
On the earth, my darling and I.



▲ Bosnian Ganga Singers



◀ Žabe i Babe Trio

Mirjana Laušević describes her experience hearing this song for the first time standing on top of a mountain at night with a group of Highlander girls. This experience enabled her to understand more clearly the relationship between the social and physical environment and musical practice in traditional Highlander culture:

We were standing on top of the mountain underneath the stars. And the stars on the mountain are extremely visible, and there are millions of stars right above you and they seem very close. And there are these girls singing. They were singing about a particular man who did not come and they do not know where he is, and he is the boyfriend or the potential boyfriend of one of the women who started the song. It suddenly made so much sense and became so clear—this connection that people find with what is closest to them. And in that case it was the stars. And also this fact that there is nobody else that you ask. . . . In a way it was very symbolic of their experience of the universe, their experience of the environment, and their relationship between environment and their own relationships within that environment.¹⁷



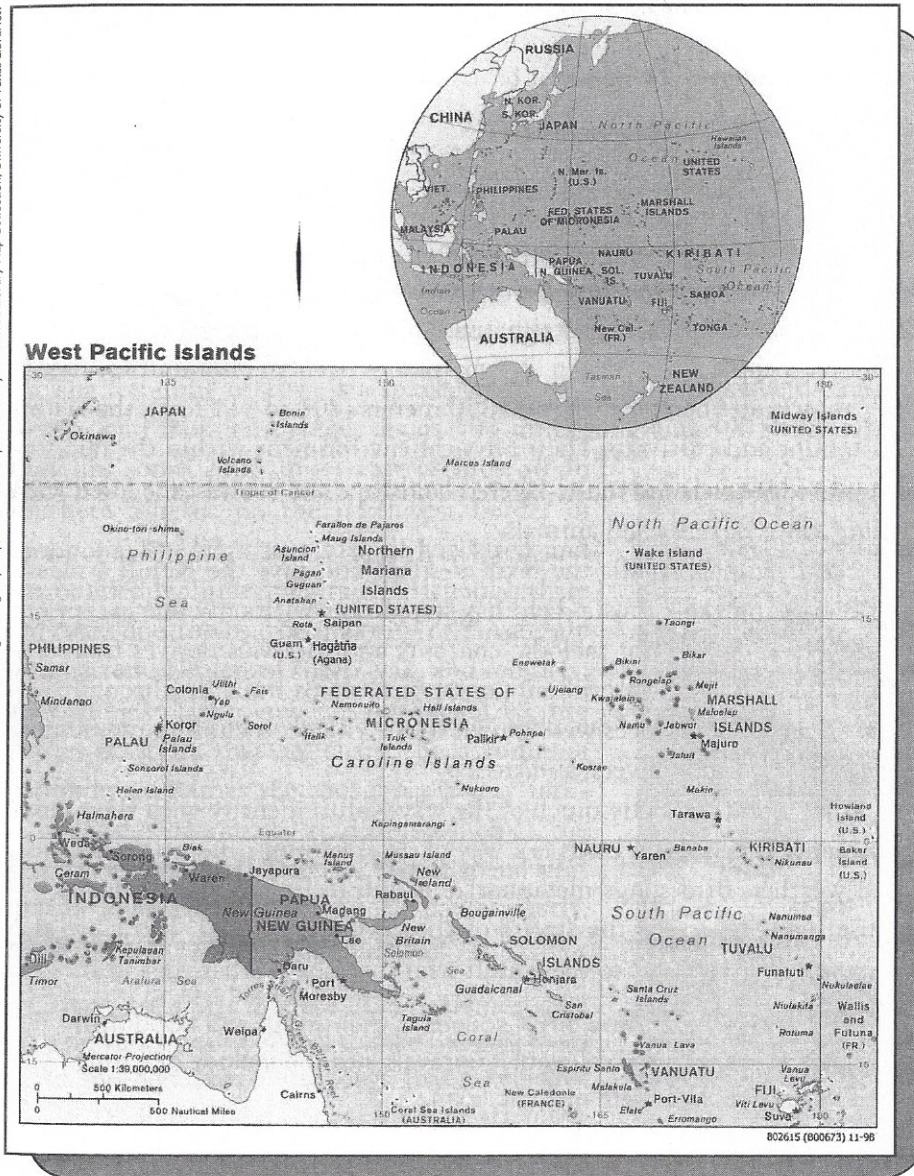
"Shining Star" sung by
Žabe i Babe.

Tragically, due to the war in Bosnia, the Highlanders studied by Mirjana Laušević had their villages destroyed in 1992 and had to be resettled. Therefore, the material presented here is now of historical value.

Australia and Papua, New Guinea: Songs from the Spirit World

Australia. In some cultures, the use of sound and music represent an even closer link with the natural world, as is the case when the non-human order provides a model for music. Among aboriginal peoples in Australia, for example, traditional music and dance are an important link between humans, nature, and the supernatural or spirit world. Songs are believed to have been created and taught by the ancestors or spirits who emerged from the earth. According to Australian ethnomusicologist Stephen Wild,

Central Intelligence Agency map, 1998. Courtesy of the Perry-Castaneda Library Map Collection, University of Texas Libraries.



the ancestors are said to have propagated the world, each spirit creating and populating the landscape of its particular area. They celebrated its creation by singing and dancing. Today Australian aborigines participate in the maintenance of the land by dancing and singing songs tied to sacred geographical sites and the life of the ancestors. Songs are thought to enable performers to draw on powers from the spirits left within the soil. If the songs cease to be sung, then the land will cease to be fertile.¹⁸

Papua, New Guinea. For the Kaluli people of Papua, New Guinea, as described by ethnomusicologist Stephen Feld, birds provide melodic and textual models for human song:

This conceptualization of song as bird song and bird talk is only part of the overall importance of birds as an aesthetic trope. Song is inspired by thinking about birds; when performed, it is sung in a bird voice; men wear bird feathers to make themselves beautiful and evocative; dance is patterned as bird movements. . . .¹⁹

The Kaluli live in a tropical rain forest, north of Mt. Bosavi on the Great Papuan Plateau, in the southern highlands province of Papua, New Guinea. They are one of four groups who refer to themselves as *Bosavi kalu* ("people of Bosavi"). The total population in the 1980s was about twelve hundred people who lived in approximately twenty communities. Residing at altitudes between 550 and 850 meters (201 to 311 feet), the Kaluli both hunt and cultivate. Their physical environment within the rain forest provides a rich and multi-layered landscape and soundscape filled with many kinds of birds and animals.

Natural imagery fills the texts of songs and give the Kaluli a means for discussing their music. Feld has stated that with only one exception, Kaluli terminology for melodic contours and intervals derives from waterfall terms.²⁰ Texts are like topographical maps built up through concrete references to places well known to the village, including mountains, streams, waterfalls, rivers, and trees.²¹

Bird sounds embody much of the way Kaluli identify with their environment. Listening to birds is a way of determining time, space, seasons, and weather. Bird songs metaphorize Kaluli feelings and sentiments because birds represent the spirits of those who have died. Birds are also believed to give songs to the Kaluli who then shape what they hear:

Composers hear these birds' sounds in their heads and flood their inner sense with the call until it unravels into the melody of a song. These birds give them melodic form.²²

Sounds of rainforest recording

The Republic of Tuva: Songs from the Tuvan Landscape

For the Tuvans in Siberia, music is also traditionally linked to the natural and spirit world. Like the Kaluli, the Tuvans chronicle place through song texts, which give detailed descriptions of the physical environment. Ted Levin, an ethnomusicologist who has done research in Tuva, as well as arranged concert tours and recordings of Tuvan musicians in the West, discusses how these “sonic maps” personalize the landscape:

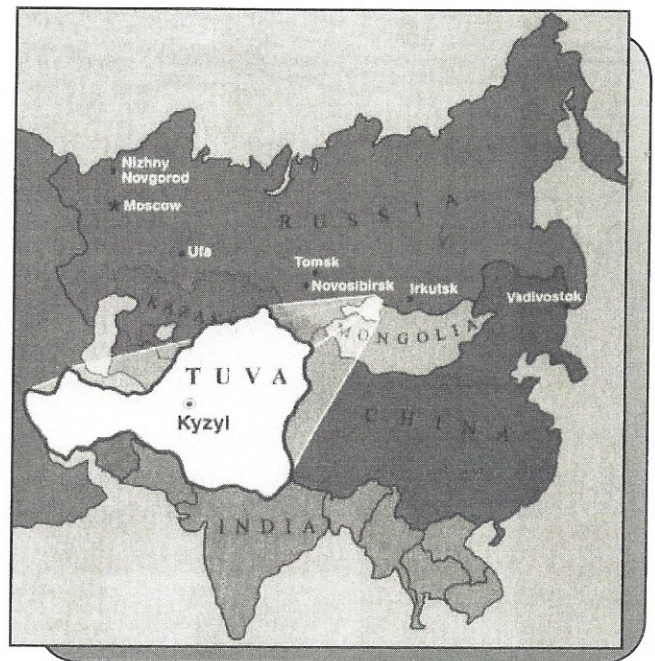
There are a lot of songs that are narratives of places, that create a narrative journey through some territory. . . . The songs are rich with toponyms, that is, the names of particular places. . . . Many of these songs are really little more than inventories or chronicles of travels through these places, and yet, through these simple chronicles, they create a strong sense of nostalgia.²³

The Republic of Tuva is a sparsely settled region of grasslands, taiga forests, and mountain ridges about 500 miles long and 300 miles wide that lies some 2500 miles east of Moscow in southern Siberia, on the northwest border of Mongolia. The landscape is rugged, isolated, and surrounded by high mountains. Although there are cities and towns, the majority of Tuvans are still pastoral herders of sheep, yak, and reindeer. According to Levin, music is not organized into genres or styles that are shared by a common community. Rather the music has a very individualized performance tradition which is the result of the pastoral lifestyle. People spend a lot of time alone with their livestock, consequently, there are many songs about animals:

There are songs that are used to domesticate a newborn young animal to take the milk from its mother. There are songs that a reindeer herder sings to the reindeer. There are many kinds of chants that are used during the hunt,



▲ Tuvan Musicians



joiking of Sami

both to pray to the spirits of the animals that are being hunted and to try to summon those animals to the hunt.²⁴

Horses also play a central role in Tuvan life. The Tuvans learn to ride at an early age and they use horses for herding and transportation. Musicians say that the rhythm of music is filled with the rhythm of horses. Their significance is also reflected in other aspects of musical practice. The *igil*, a two stringed fiddle, is made primarily from the horse: the strings are made from horse gut, the skin covering the top of the fiddle is horse skin, the bow is strung with horse hair, and a wooden head of a horse is placed on top of the instrument:



Tuvan singer imitating
a dog.

Generically it's called a horse head fiddle. And in fact, a lot of the music that's performed on that instrument is about horses. There are legends and stories about horses that imitate the sounds of horses, so that any Tuvan listener who hears the music can follow the story. It's not a story that is performed with words, but through the melody itself. And a Tuvan listening to that story responds emotionally at the proper time, and it's very common for people to weep if they hear those melodies because they're sad stories.²⁵



Tuvan throat singer
in a cave.

The Tuvans use imitation of natural sounds, including animal, insect, and water sounds as a basis for their music making. In some cases, they try to imitate the sounds as literally as possible, a technique that Levin called "iconic imitation." In other styles, they use natural sounds as inspiration for a less literal and more imaginative interpretation. Levin believes that throat singing or overtone singing is a result of the Tuvans' search to imaginatively use vocal production to imitate the sounds of nature.

Known as *khoomei* in Tuva, throat singing involves a single vocalist who is able to produce two (and occasionally three) distinct notes at the same time. By adjusting the shape and movement of the lips, tongue, mouth, and larynx, singers can produce one or two overtones as well as the fundamental pitch. As stated earlier, we normally hear only one fundamental frequency, while other overtones or harmonics serve to "color" the sound, but in throat singing, the overtones can actually be louder than the fundamental. This practice is discussed in more detail in Chapter 7.

Traditional Tuvan music, like Tuvan culture in general, is in a period of change after the break up of the Soviet Union. Tuva was a feudal kingdom under the Manchus in the last century, but by 1921, became a socialist republic known as Tanna-Tuva that was drawn into the orbit of the Soviet Union. In 1944, it officially became part of the Soviet Union, and according to Ted Levin, it was not only drawn in politically, but also culturally:



◀ Tuvan Musician

The kind of European models of cultural life that were important to Soviet cultural strategists were imposed on Tuva from the outside. And so the kind of traditional performance life, wherein people really perform for themselves and the spirits of the natural world was replaced by orchestras of folk instruments and choirs and singing in harmony, which is something the Tuvans had never known. It was almost always either a solo tradition or people singing in unison.²⁶

This situation lasted until 1991 with the breakup of the Soviet Union. Tuva was then no longer just a pastoral herding culture, but one with towns and a city of sixty thousand. It was at this time that young Tuvan musicians began to try to recover their musical roots and their own identity. Many are now actively keeping alive old styles and learning from older Tuvans who remember music that is no longer performed. Levin is an active proponent of this work, which he describes as partly empirical, partly intuitive, partly recreated, and strongly linked to the physical environment. He says that music is really the icon of the relationship between the Tuvans and their land:

And so by helping them recover that music which was such an important medium of communication and of identification and emplacement of the land, I hope and I think my Tuvan friends and co-workers hope that they can really give something back and infuse that culture with a new sense of what it had and perhaps what it lost.²⁷

As we have seen in the examples above, nature can have an enormous impact on all aspects of daily life, including artistic expression, in traditional rural and pastoral societies. However, even in complex industrialized and urban cultures, the natural world often serves as a source of inspiration for musicians, even though their actual physical environment may be completely separated from the rhythms of rural or pastoral life. In the North Indian classical tradition, for example, many ragas are based on the seasons and texts use natural imagery to express emotion. In Afghanistan, performers of classical music sometimes like to bring caged birds on stage. Ethnomusicologist John Baily states, “the sound of music plus the singing of birds responding to it constitutes the height of musical enjoyment.”²⁸

Composers in the Western classical tradition have imitated and interpreted nature in numerous orchestral and choral works. Antonio Vivaldi’s famous *The Four Seasons* is an early example of music meant to evoke the rhythms and sounds of nature. In *Spring*, the first of the four concerti, he imitates bird song, breezes, gentle streams, and thunder. Many works inspired by nature and man’s relationship with the natural world followed, including Franz Joseph Haydn’s oratorio *The Seasons*, Ludwig von Beethoven’s Sixth Symphony (*Pastoral*), Claude Debussy’s *La Mer* (The Sea), and Igor Stravinsky’s *The Rite of Spring*.

MUSIC IN URBAN ENVIRONMENTS

The urban landscape is a complex site for music making. Whether on a street at a festival, parade, or political rally, or indoors in a living room, concert hall, or recording studio, music and musicians are highly influenced both by the physical space and the social environment in which they are situated.

The influence of particular urban cultures has often been noted by historians of Western classical music. Cities like Vienna, Paris, and Florence seem to have played roles almost as important as those of the composers and musicians who flourished there. Some Western cities have become centers for popular musics as well. In various developments, cities like Detroit, Nashville, and Liverpool have become famous for their “sound,” spawning widespread transformations of popular music around the world.

But cities, including non-Western ones, have a more far-reaching influence on musical development than just the nurturing of certain professional practices. As the American ethnomusicologist Bruno Nettl has pointed out, a city can be seen as involving an overall musical system. It is not difficult to see the operation of a musical system in a small village.

One can investigate all of the music made there, identifying basic elements of indigenous music making, influences from outside, and so on. This becomes a challenge when dealing with a large city: "the musical 'system' of a city is far more complex, defying quick comprehension."²⁹

It is not simply the size of the city which makes it a different musical environment from the village—it is also the diversity of cultural elements. In his landmark collection of essays, Nettl described this difference:

What is it that sets urban musical culture off from that of villages, small towns, and nomadic life? It is wealth, power, education; it is the interaction of different and diverse population groups, rich and poor, majority and minorities, recent migrant and long-standing urbanite; it is the ease of rapid communication, the mass media, literacy; it is crowding and enormous divergencies in living standards and styles. Translated into musical culture, it is in many cases—though by no means in all cities for all repertoires—the patronage of wealthy aristocrats and of government agencies. It is the specialization of the professional musician. . . . Perhaps most of all, it is the coming together of different musical styles and genres from many sources.³⁰

As Nettl noted, such features are not absent from non-urban cultures, "but the frequency with which they occur in the countryside is low in comparison with what is almost an inevitability of these characteristics in the city."³¹

Urban mixing of local and external musical practices has resulted in many new genres. In the United States, for example, rural Appalachian music—once derided as "hillbilly"—was fashioned in big cities like Nashville into the vastly popular genre now known as "country" music, but with lyrics that reflect more rural ideals, values, culture. Blues, the music of poor southern African Americans, developed in cities like Chicago into an urban sound which became the basis for the rhythm & blues of Detroit and other cities, eventually spawning the multifaceted world of today's rock music. Many other developments have also arisen from urban-based mixtures, such as the blending of jazz and east European folk musics now known as "klezmer" music, the combination of jazz with Latin American musics now called "salsa," and so on.

Such musical mixtures may be characterized as *syncretic*. Syncretic musics involve blending congenial elements from different cultures, producing hybrid forms. This practice, known as *syncretism*, is a driving force in cultural developments in any situation where different cultures meet. But again, such processes are accelerated in urban environments where people of various cultural backgrounds find themselves living and working to-

gether. Indeed, syncretism can be a way of expressing and celebrating this fact of urban life.

Cultural Diversity. At the same time, the cultural diversity of cities can encourage a choice to guard one's cultural identity carefully, avoiding fusions with other musics. In some cases, traditions become more conservative in the city than they were in their former home. Nettl described such a situation among Poles who immigrated to U.S. cities in the late nineteenth and early twentieth centuries. "The Poles learned the music of other groups around them, both rural and urban. But for a time they also retained their traditional Polish folk music and indeed tried to keep it from mixing with other musics, holding it intact in stable forms while their kith and kin in Poland accepted change more readily."³²

Westernization and Modernization. Particular forces are in play in the music-cultures of non-Western cities; Nettl usefully differentiated two of these as "Westernization" and "modernization." "If Westernization is the process whereby a music becomes Western through the accretion of Western elements, modernization is the process whereby, through similar additions, a music retains its traditional essence but becomes modern—that is, part of the contemporary world and its set of values."³³ The development of *jùjú* music in Lagos, the capital city of Nigeria, can be seen as an illustration of both processes in succeeding stages.³⁴

The first stage, roughly in the 1930s and 1940s, involved Westernization. *Jùjú* trios and quartets used Western instruments like the guitar and banjo, and vocal harmonies gleaned from Christian musical practices, to entertain their cosmopolitan audiences. This music was not simply an imitation of Western genres—the groups also used traditional Nigerian hand percussion instruments, and sang in local languages (usually Yoruba, the language of the dominant ethnic group). Still, in many ways this was a conscious Westernization of Yoruba music, a syncretic way of putting their music into a Western frame.

In the second stage, roughly from the 1950s onward, *jùjú* became a social dance music with much larger groups and a more traditionally Yoruba orientation. The advent of electronic amplification made it possible to include the Yoruba "talking drums," which would have drowned out acoustic instruments. Traditional principles of Yoruba praise singing and drumming were brought to bear on the musical organization. This syncretic development was less of a Westernization and more of a modernization of the music. While the amplification technology was of Western provenance, the overall musical transformation involved going deeper into traditional Yoruba practices, adapting them to a modern context.

Cities are well known for their concert halls, nightclubs, and other privately-owned musical venues. Another quintessentially urban musical environment is the street itself. For a glimpse of the influence of this kind of context on musical performance and development, we will turn to some examples from New York City.

Modern Minstrels

The idea of street music may be as old as that of the city itself. Street performers plied their trade in the cities of ancient Greece and Egypt, supported by whatever voluntary donations they could generate.³⁵ Such musicians have thrived for centuries in urban environments throughout the world.

Medieval Europe. The cities of medieval Europe were host to varying forms of street music, from the *Gauklers* of Germany to the *jongleurs* of France. Throughout Europe, *minstrels*—singers and poets who performed old and new songs on the city streets, often turning out songs for hire—also sang songs of social commentary. As Patricia Campbell has noted, their lives often depended on the whims of those in power. “The common folk loved them and welcomed the glimpse of magic they brought to their grim lives, but the nobles feared such free spirits and regularly persecuted, jailed, and burned them—although they first chose the best for their own households.”³⁶ Unattached minstrels sometimes moved from town to town, providing cross-fertilization of various local styles and participating in the kind of cultural blending which characterizes so much of urban music.

New York City. The minstrel tradition has continued throughout history, spreading naturally to the urban environments of the Americas. Since 1970, when Mayor John Lindsay abolished licensing requirements, New York City has become known as one of the more open American cities for street musicians. “During their lunch hour, young professionals gather around Andean and jazz bands in Liberty Park in the Wall Street area,” notes American social activist Susie Tanenbaum. “On weekends, young people looking for entertainment with an “edge” congregate in Washington Square Park. Theater and moviegoers cheer breakdancers and standup comics while waiting on line along Broadway in Times Square.”³⁷

These are comparatively specialized places and audiences. By contrast, music in New York’s subway is performed “in an interconnected space traveled by an exceptionally heterogeneous population.”³⁸ This underground rapid transit system, the largest in the world, provides a unique environment for musical experience.

Inventory Tallahassee streets
venues

The acoustics underground, for example, accommodate both intimate and scattered audience circles. And the labyrinthine structure of such stations as Times Square leads to surprise encounters with musicians. . . . Yet it is also a space that demands a considerable amount of standing and waiting. Perhaps it is in this respect that subway music most differs from street performing. It makes the waiting easier for many riders. It relieves their anxieties and even gives them a feeling of safety in their dismal surroundings.³⁹

Like the minstrels before them, New York's street and subway musicians live to some extent according to official whim. Since the mid-1980s, subway venues have been controlled by Music Under New York, a program affiliated with the Transit Authority's "beautification" efforts, which screens musicians and designates performance spaces and times. Some kinds of music receive more favorable treatment from this program than others, leading to a feeling of an official sponsorship/censorship situation.

Street music above ground is similarly endangered. "Decades after Mayor Lindsay abolished street music licenses," Tanenbaum wrote, "city agencies and private sponsors are attempting to contain unsponsored musicians by regulating them, managing them, and replacing them with official events."⁴⁰ Still, as one of Tanenbaum's informants noted, their situation is not entirely as perilous as that of their predecessors:

. . . I found him at our appointed meeting place, sitting on a station bench with his head in his hands. He held out a yellow piece of paper—a summons for using an amplifier on a subway platform. The fine was fifty-five dollars. A moment later, though, he bounced back, as he does when he performs. "Do you know what the equivalent would have been in the tenth century?" he asked me. "Decapitation?" I'd learned my lesson. "Or flogging," he concurred.⁴¹

Also like their itinerant ancestors, these street and subway musicians perform for whoever happens by; any sense of community they create is fleeting. But some kinds of street performances have a great deal to do with place and community. Rap, for example, developed in New York as a local street-music response to a disastrous consequence of urban planning.

Urban "Renewal": Rap Music

In 1959, work was begun on the Cross Bronx Expressway, designed by the prestigious city planner Robert Moses. Slicing through the Bronx to connect Long Island and New Jersey, the project was instituted to benefit commerce and commuters—not the working-class⁵ ethnic communities which happened to lie in its path. Under Moses's convenient "Slum Clear-

ance” program, about 60,000 Bronx homes were demolished, uprooting some 170,000 people. As the American scholar Tricia Rose has pointed out, “These ‘slums’ were in fact densely populated stable neighborhoods. . . . Although the neighborhoods under attack had a substantial Jewish population, black and Puerto Rican residents were disproportionately affected. . . . The newly ‘relocated’ black and Hispanic residents in the South Bronx were left with few city resources, fragmented leadership, and limited political power.”⁴²

Their situation worsened. Like many American cities, New York experienced a decline in social services and employment in the 1970s. Virtually bankrupt in 1975, the city applied for a federal bailout; President Ford’s refusal prompted the celebrated *Daily News* headline, “Ford to New York: Drop Dead.” Poor African-Americans and Hispanics in the South Bronx were among the hardest hit by the deteriorating economic situation. Many businesses moved elsewhere, as did most residents who could afford to.

The devastated South Bronx became a political and mass-media symbol of urban blight. Outsiders considered it a cultural nightmare, and its residents were seen as lost, lawless, and barbarous. But, as Rose noted, “Although the city leaders and the popular press had literally and figuratively condemned the South Bronx neighborhoods and their inhabitants, the youngest black and Hispanic residents answered back.”⁴³

Rap. Their answer was *hip hop*, a cultural movement which was manifested in many aspects of life—dress, speech, graffiti writing, breakdancing, formation of alternative families known as crews or posses, and a musical genre called *rap*. This cultural movement was rooted in the local urban environment:

Hip hop replicates and reimagines the experiences of urban life and symbolically appropriates urban space through sampling, attitude, dance, style, and sound effects. Talk of subways, crews and posses, urban noise, economic stagnation, static and crossed signals leap out of hip hop lyrics, sounds, and themes. Graffiti artists spraypainted murals and (name) “tags” on trains, trucks, and playgrounds, claiming territories and inscribing their otherwise contained identities on public property. Early breakdancers’ elaborate technologically inspired street corner dances involving head spins on concrete

▼Graffiti



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sidewalks made the streets theatrically friendly and served as makeshift youth centers.

... DJs who initiated spontaneous street parties by attaching customized, makeshift turntables and speakers to street light electrical sources revised the use of central thoroughfares, made "open-air" community centers in neighborhoods where there were none. Rappers seized and used microphones as if amplification was a lifegiving force. Hip hop gives voice to the tensions and contradictions in the public urban landscape during a period of substantial transformation in New York and attempts to seize the shifting urban terrain, to make it work on behalf of the dispossessed.⁴⁴

Rap lyrics often articulate the difficulty of urban life, not as a doleful lament, but as a defiant affirmation of the ability to survive the harsh realities of the city. Declaiming their rhymes over powerful beats, sampled noises, and occasional interpolations of other musics, rappers address the social issues which arise from their place in the world, from lighthearted sexual posturing to dark ruminations on gang warfare.

Although today rap is performed to huge audiences in vast public venues, it retains its crucial sense of place. In other cities, local styles have evolved which reflect their own particular environments. And increasingly, individualized local rap styles are developing throughout the world, mirroring even non-Western urban environments.

The City and Beyond

Like rap, other urban popular music genres characteristically retain their sense of place even when marketed and distributed all over the world. As cultural music theorist George Lipsitz articulates, popular music—from reggae to Aboriginal rock—has local meaning emerging from concrete historical experiences, political struggle, and insider knowledge. It also has the power to transcend geographical boundaries and local social issues, creating new meanings for consumers who may be completely unaware of the original intent of the musicians:

A poetics of place permeates popular music, shaping significantly its contexts of production, distribution, and reception. New Orleans jazz and sambas from São Paulo circulate freely throughout the world, but they never completely lose their concerns and cultural qualities that give them determinate shape in their place of origin. ... Like other forms of contemporary mass communication, popular music simultaneously undermines and reinforces our sense of place. ... Throughout the conduits of commercial culture, music

made by aggrieved inner-city populations in Canberra, Kingston, or Compton becomes part of everyday life and culture for affluent consumers in the suburbs of Cleveland, Coventry, or Cologne.⁴⁵

With recording technology and global marketing, music can serve as an important means of cross cultural communication. Since the invention of the first recording devices (discussed in Chapter 12), ethnomusicologists, as well as for-profit companies, have been recording the musics of the world for posterity as well as profit. Smithsonian/Folkways is an example of a nonprofit source of CD's of music from around the globe, much of it acquired by Moses Asch, the founder of Folkways Records in the 1940's. The Smithsonian Institution in Washington, D.C. obtained the rights to over 2,000 recordings from his estate after his death in 1986. All of these recordings are available on a permanent basis from Smithsonian/Folkways. Putumayo Records is an example of a very successful world music marketer, and the staff has traveled the world over to obtain recordings, and the rights to pre-existing recordings which have become immensely popular as souvenirs as well as a source of study for people interested in music of other cultures. Urban technologies have given us both syncretic musical forms and access to music from all over the globe. But divorced from its own environment, music is often appropriated, appreciated, and understood differently by cultural outsiders. One of the consequences of this intercultural exchange is the creation of new settings and new environments for musical performance and reception which in turn gives music altered meaning.

SUMMARY

We can analyze music on many levels, beginning with the laws of acoustics. The frequency, amplitude, duration, and timbre of sound waves, acting upon our eardrums, give us music. But in order to have meaning, these patterns of organized sound must communicate with and affect those within its sphere. Music is experiential for both performers and listeners. As Anthony Seeger suggests, "Music is an emotion that accompanies the production of, the appreciation of, and the participation in a performance."⁴⁶

Our approach is not to study music in isolation, but rather in the context of the culture in which it lives. As we have seen, music in both urban and non-urban settings is very much linked to a sense of place. In rural or pastoral cultures, the physical environment greatly impacts musical practices. Cities are inevitably more complex sites for the performance and

reception of music, but place is still a vital component. In Chapter 2, we will explore further the relationship between music and culture by focusing on the power of music.

POINTS TO REMEMBER

1. The meaning, roles, and functions of music differ markedly from culture to culture.
2. Music can be defined as patterns or sequences of sound, organized by human beings, that are somehow distinct from ordinary speech or everyday sonic occurrences. These musical structures have meanings that must be understood with reference to the societies that produce them.
3. In order to have a sound you need three things: a physical object which is vibrating, a medium to carry that vibration, and an ear to perceive the vibration and turn it into something meaningful.
4. Wave patterns have four different parameters from which they can be analyzed: frequency, amplitude, duration, and timbre.
5. The physical environment in which a people live determines many aspects of their music, along with their total culture. Topography, climate, natural resources, flora, and fauna impact social structure, occupation, economics, politics, religion, aesthetics, leisure, and artistic expression.
6. Cities are complex and diverse sites for music-making.

POINTS FOR DISCUSSION

1. What are some of the ways that the meaning, roles, and functions of music differ markedly from culture to culture?
2. What is a basic definition of music? Why must music be understood in reference to the society in which it arises?
3. What three things do you need in order to create sound?
4. What are the four different parameters from which sound waves can be analyzed? How do these parameters relate to music?
5. What are some of the ways that the physical environment can impact musical practice?

Good Focusing
Quiz Questions

STUDY QUESTIONS

1. Describe how music is both like language and food.
2. When thinking about the musical properties of sound, what are the four important parameters of sound waves?
3. What is the overtone series?
4. What are some of the ways music relates to both the social and physical environment in Bosnian Highlander culture?
5. What role does the horse play in the traditional music of Tuva?
6. Describe the term "syncretism" and give one example of a syncretic musical style.

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