MELODIC PERCEPTION AND ANALYSIS

Melodic Perception and Analysis

Revised

(Third Edition)

A MANUAL ON ETIC-EMIC ANALYSIS OF ETHNIC MELODY

by

Vida Chenoweth

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PREFACE TO THIRD EDITION

This book originated as a manual for field workers familiar with the concepts of etic and emic analysis of languages. Parts I through III present a method for applying those linguistic principles to the analysis of music systems. Part IV presents ideas taken from a wide range of reading in aesthetics, semantics, and the psychology of music, and it is especially directed to the musically creative person. The bibliography includes works which serve as references and which are requisites to the full understanding of this manual.

This manual does not set forth lessons on how to compose music in the system under study; it merely presents a method of analyzing that music system. Just as a generative analysis in linguistics in no way guarantees that the analyst will be a poet in the language he analyses, so a generative analysis of a music system does not presume to equip the analyst with all that is required of a composer. The manual keeps music before the student as a self-contained whole. At the same time, it examines music from many viewpoints. Music constitutes a synthesis, and analysis of it is not to be regarded as an end in itself; nevertheless, it is a paradoxical truth that we understand the whole only as we know its parts, and conversely, the parts make sense only in terms of the whole.

When I reflect upon the minds who have influenced this small book I am overwhelmed at the thought of giving due credit to each one. I am indebted to every teacher, composer, and performer who has helped to teach me something of the meaning of music. Many of these are included in the bibliography. Along with musicians, there are linguists, theorists, philosophers, and psychologists. I am especially indebted to my colleagues of the Summer Institute of Linguistics, through whom I was first exposed to a systematic method of analysis applicable to music as well as speech.

As this book's first edition went to press, many were grieved at the sudden death of Darlene Bee, the most loyal champion of my work, my closest associate for seven years, and the one who proposed the writing of this manual. It was intended that she do the final proofreading since she understood its contents, having shared in the birth of each idea presented, and having made valuable contributions to most of them. Instead, its publication will serve as a memorial to her. To linguists, especially those associated with her academically at the University of Hawaii, University of Oklahoma, University of North Dakota, Indiana University, Gordon College, and the Summer Institute of Linguistics in Auckland, New Zealand, where she served as Principal, her own writings in linguistics will constitute a memorial befitting the endless creativity of her intellect. To ethnomusicologists, this manual will serve as a memorial to her interest and contributions in their field. It was her profound belief that every tongue, both linguistically and musically, was needed to adequately praise God. And so this little book is dedicated to the memory of my very gifted partner and complete friend, Darlene L. Bee, Ph.D.

Bee and Chenoweth 1969

PART I

PROLOGUE

1 MUSICAL TALENT

Of all the varied kinds of language man uses, music and speech are most pervasive. We need speech for explicit communication. What does music speak of? One only has to reflect on the ubiquitous use of music in our own culture to realize the importance of its presence. But music's usage still does not tell us what music says. We are prone to think that the association of music with an event, a time, and a place is all there is to music's meaning, but music's meaning is more than associative. It is the ineffable language of feelings and differs from every other communicative behavior of man. Visual arts, for example, are dependent on a model and signify something explicit. When they seek to portray pure feeling it is inevitable that they be accompanied by verbal explanation. The same is true of the dance. Even words are symbolic, standing for something. It has been thought by some in the past that all forms of behavior were the realization of linguistic thought, but this is not true of music. Music is born of tones, not linguistic thought. Nor does this conflict with the truism that where words fail, music succeeds. Is there a person who has not at some time been rendered speechless by emotion too intense, too deep to verbalize? Such a condition has been the impetus of profound musical works that measure the depths of ecstasy, love, grief, worship, and even bitterness.

Perhaps the only parallel in the linguistic endeavors of mankind is poetry, the great literature of a few. Speech is a universal phenomenon, but profound authorship is given only to the few. By the same token, profound authorship in music originates with a small minority. This is true even in non-literate societies, many of which do not recognize the fact that it is a small minority from whom the tribal repertoire has come. Even though all participate, few compose anything lasting. Why?

1 MUSICAL TALENT

Currently there are music teachers who advocate a program of teaching music to the very young, even infants. While this unquestionably enriches the life of the child and places him technically beyond others of his age who have not been taught early, I believe the premise that all are created musically equal is incorrect. Nor do I for a moment believe that Bach attained the stature of a colossus in music because of his early training. I believe rather that the seed already within him demanded music that early. There are countless examples of those who graduate from music colleges and conservatories and yet who make no major contribution to music, even on a local level. Most “geniuses” are largely self-taught or even untaught. Their nature craves music as a fish craves water. I speak here mainly of the very creative mind. Other children have a craving to express themselves through music by performing, but these are not necessarily the composers of tomorrow.

So, while early training is valuable in enriching appreciation for music, in giving a mode of emotional expression beyond speech, and in granting a head start professionally, training alone does not determine artistic merit or creativity. Some who have spent many years testing aptitudes believe that the determining factor is drive or motivation. Again, one has only to reflect upon conservatory students whose frantic effort and long hours simply resulted in mediocre standing. On the other hand, two men suddenly come to mind, both concert pianists. One had no formal musical training until late adolescence. He had an early love of music but no encouragement from his family. His eventual success as a performing artist is indisputable. The other man, world famous, was given every opportunity for music study and squandered much of it. Until his late twenties, he merely dabbled in music. Near the age of 30, he began to practice seriously for the first time! His stature is incontestable in the music world today.

1 MUSICAL TALENT

What is musical talent's special ingredient? Is it the just-right mixture of the necessary aptitudes - physical co-ordination, tone memory, emotional sensitivity, structural understanding plus discipline? Is the admixture inherited? History shows a definite leaning toward the inherited factor as do present studies of tribal cultures. But how do we account for two children in one and the same environment, having identical training and the same parents, when the one shows every promise of musical creativity and the other very little?

Notice that I do not say “none at all,” for I believe that any normal being can participate enjoyably in some kind of music and derive deep satisfaction from it. Returning to the original question, where does musical potential come from? Is it by chance selections in one's inheritance potential? Only one thing can be said with certainty. It cannot be formed exclusively by training and environment nor by simply possessing the inherited propensity which we vaguely term “talent.” I know a businessman who was a child prodigy with an aural memory beyond comprehension. Moreover, he was imaginative as a composer and could handle orchestration easily because he could hear from paper every combination of pitches along with their timbre. To those who knew him as a boy, it is bewildering and wasteful that he is not a musician today. Why isn't he if he possessed to the fullest the aptitudes of a musician? Because he did not choose to be a musician. An artist, a composer must recognize that he possesses the right aptitudes and then choose the responsibility of developing them. Discipline is not an aptitude, but for the musician, aptitude is of no value without it. Sometimes a youngster knows when no one else does that he possesses the requirements for developing into a musician, as in the case of the pianist whose first formal musical training was after he was well into adolescence.

1 MUSICAL TALENT

In my own studenthood I am indebted to Socrates for the teaching that part of wisdom is knowing one's limitations and admitting them. Thousands of music school graduates in Performance or Composition are crushed in morale and embittered when they realize that after years of training they have the craft but not the creativity necessary to their profession. Had they recognized their limitations sooner, they might have found a satisfying career in another field of music.

In summary then, musical leaders - particularly composers - first must possess the unusual combinations of aptitudes demanded of their work and second, they must possess in addition the combinations of attitudes which will foster the development of aptitude. Encouragement, training, and knowledge of all kinds feed the attitudes and mark the differences in all kinds of successes and failures. A polar difference in the musician-by-nature and the musician-by-training-only is that when that inevitable period comes when the musician is discouraged and asks himself, “Do I really have talent?” the latter may give it up whereas the musician-by-nature cannot give up music. He may change instruments, he may rest awhile or change interests within the field; nevertheless, he pursues music in the face of discouragements, for music is necessary to his existence. As Rudolph Ganz* said once, “Only death can put down a genius”.

The musician-by-nature, by combination of aptitudes, can live without speaking, but he cannot live without music. It isn't of prime importance that he is

* A noted pianist, composer, conductor and teacher, Dr. Ganz was born in Zurich (1877). He was conductor of the St. Louis Orchestra in America (1921-7) and became President of Chicago Musical College (1934) where he continued as President Emeritus until his death (1972).

approved, or even heard; he must make music. It is an inner compulsion in his "mother tongue."

The possession of physical and mental aptitudes in right combination we call "talent." Where does it come from? Until it can be proven wrong, I will accept the acknowledgement of nearly all the giants of the music of Western civilization that it is God-given.

The ethnomusicologist who expects to analyze the musical elements of a non-Western music system needs a combination of musical talent and technical training. These introductory remarks on musical talent will help the reader to decide to what extent he can best participate in musicological investigation, and they should also help him to recognize his talent.

2 THE ROLE OF ETHNOMUSICOLOGY

Ethnomusicology is the study of the musical practices of a particular people. It is becoming increasingly popular to investigate the customs of peoples whose culture differs from our Western civilization. While there are many motives for anthropological study, how may we account for increased interest in ethnic musics? Several reasons come to mind. First, there is the scientific research motive with secondary motivation such as earning graduate degrees, publications, stocking museums, collecting material for the teaching of ethnomusicology or for historical reasons, and the like. Other reasons for collecting the music of little known peoples include its commercial and entertainment values.

2 THE ROLE OF ETHNOMUSICOLOGY

Music is language to those who are within the culture and unintelligible to those outside it. All of us belong to a culture that produces music and we all participate to an extent. The composers, performers and teachers of music understand music at a level different from that of sailors, chemists and lawyers, generally speaking. This is not to say there are no exceptions, nor that the music-makers necessarily enjoy music more than an avid listener, but they do understand it at another level by nature and/or by training. Within his particular culture, the composer knows how to organize tones in a logical, pleasing, culturally acceptable way. Many composers, because of an innate ability to perceive musical structure and to imagine new combinations within that structuring, have learned the rudiments of composition by reading music or by merely listening to it! On the other hand, some whose training is commensurate with, or more than, that of a composer, may be helpless to imagine new ways of tonal organization that still are intelligible musically.

Highlands composers in preliterate New Guinea tell me the best songs “come to them in dreams.” These folk have no method of writing music and no conscious understanding of the theory behind their oral tradition, yet they say melodies “come to them in dreams” (i.e. to a few) as Western composers speak of inspiration. None of these Highlanders can explain what music is, which or how many tones they sing or how the tones are organized into melodies, and yet each melody is unmistakably local in sound and structure. Their understanding is subconscious, unable to be verbalized. What is the source of this inward ability and understanding? What determines the “dream” that will become the inspiration for a composition that will survive for generations, even centuries? Was Bach giving us the answer as well as his dedication when he wrote across his music “to God be the glory”?

2 THE ROLE OF ETHNOMUSICOLOGY

As I see it, ethnomusicology's greatest purpose is to understand and to foster creativity in music throughout our world. While any halfway inquisitive music lover can appreciate the fact that musics of other cultures are valid, it remains for the musicians to analyze other music systems in order to understand not only their social significance and any connotative meaning, but also the internal structuring of the system.

A music system can be said to have been analyzed thoroughly when a description of it enables a foreign musician to understand its theory sufficiently to compose intelligently in the system.

This, then, is the thrust of this manual: to provide guidelines by which a Western musician can come to grips with the music system of an oral tradition. If there is reason to live with people of another culture, it is reasonable to adapt ourselves to that culture, rather than to overlay that culture with our own.

Failure to respond to the dynamism of tones as they comprise a melody is called “tune deafness” (Révész 1953, ch.16); and all of us are tune deaf in a foreign music system, although this is surmountable. Within one's own music system, no one is truly tone deaf, but some are “tune deaf.”

Like language, music is ordered and operates within a closed system. Just as the descriptive linguist can ferret out the grammar of a speech system in oral tradition, the ethnomusicologist can discover a distinctive grammar in the music system of a people. By “grammar” is meant the significant elements of a music system and their distribution in relation to each other and in relation to the larger units. There is no universal grammar in music.

2 THE ROLE OF ETHNOMUSICOLOGY

> “The word and its meaning are two independent things. Here is the word - a complex of sounds or signs; there is what it means ... The tone and its meaning, on the other hand, are connected in a far more intimate way ... What tones mean musically is completely one with them, can only be represented through them, exists only in them… hence it is possible to translate from one language into another, but not from one music into another . . . ' (Zuckerkandl 1956: 67-8).

It is therefore futile to try to “adjust” (transliterate) melodies from one music system into another and retain any of the original musical meaning. Every tone of a music system has dynamic tendencies toward or away from the others. This is a significant part of music's grammar, as it is this quality - together with rhythmic tension and relaxation - which gives the impression of forward “motion” in music.

3 PRELIMINARIES

Our problem, then, is to set forth principles and procedures for the purpose of analyzing music's grammar. Undeniably, there will be occasions for amplifying or omitting details of these procedures to accommodate one music system or another. Nevertheless, they serve generally as useful tools in melodic analysis and have been successfully employed in the analysis of some 70 systems to date. No harmonic analysis has been made under the present method, and it is hoped that some enterprising ethnomusicologist will undertake one when such is encountered.

Only a sentence or two here will serve as a reminder that indigenous song is neither a vernacular text put to a foreign melody nor a foreign text put to an indigenous melody. Rather, indigenous song is the integration of vernacular text and melody composed as an organic whole with words and music conceived as a single unit. This is, musically speaking, the definition of “song.”

The first step toward understanding and/or analyzing an ethnic music is to collect and transcribe a representative corpus of music. Musicologists differ in their notion as to what composes an adequate sampling. My own notion is that adequacy lies not so much in the quantity of songs collected, but in the certainty of having included all the styles within the music system.

This total is not easy to ascertain even after having lived for years among a people. However, the occasions for all or most of the various styles of singing occur out of the natural course of events during a period of roughly five years. This is not to say that the collector (who may or may not be the one to analyze the data) should

collect nothing but the music as the occasion naturally occurs, but that he should always do that in addition to other methodical collecting. It is advantageous to read any available documents about a people before actually confronting them. Anthropological papers especially may reveal special occasions for music such as planting and harvest time, weddings, funerals and the like. Any celebrations, religious or social, should be noted as being a potential time and place for music.

Many field workers, and especially anthropologists and linguists, are the first outsiders to live with a people. Often this situation is monolingual so they must be ready at all times for the unexpected. Until the day when they can converse with the people in the local language, they will not be able to anticipate events, nor will they be able to elicit song types, but one extremely important thing that will guarantee a good collection can be done from the outset. This concerns attitude.

From the instant that the indigenous music is heard, the outsider should react positively. Showing approval and encouraging performance will bring music to the doorstep, literally. The collector must never recoil from the local music. In more cases than I can count, what began as a genuine interest on the part of the foreigner, although initially the music was not pleasing to him, in a few years became a positive pleasure. With increased exposure came gradual understanding of the significance of the occasion and the emotional content of the music. As the outsider gains familiarity sufficient to participate in the singing, he finds a close identity with the people and by then has learned to love both them and their singing.

Transcribing the material collected is a specialized undertaking not to be minimized even by trained musicians. It is tedious and demands complete concentration. (Nevertheless, reward does follow ultimately.) There are publications

that adequately cover symbols extra to Western musical notation (Nettl 1964:98-129). Often an alternative choice of symbols is possible, but this is not a problem to the reader if a key to the symbols is provided. As previously mentioned, the transcriber may be transcribing material he had personally collected or materials collected by someone else. Someone who speaks the language can best collect texts that should be translated and marked as to stress, tone (if a tonal language), intonational features, etc.

Perhaps this is a good place to caution collectors against expecting much in the way of results when asking the local singer for value judgments about music or about music theory. People whose music is an oral tradition, and especially those in remote areas, have no idea what the separate features of music are, nor how they fit together. Questionnaires drafted by ethnomusicologists “at home” often yield ludicrous results or none at all. In interviewing two Usarufa (New Guinea) men whose language I speak, it was soon evident that music was not subject to philosophical thinking or aesthetic evaluation but was an integral part of life just as speaking and eating. Any attempt to learn from them their idea of good and bad music, for example, achieved nothing but bewilderment at the question. I soon dropped the matter when I observed that they, thinking they should know the answer, felt uncomfortable.

I had anticipated times when taping indigenous music might be looked upon as an infringement of privacy, but I have never experienced this reaction. Granted, there are occasions that prompt the collector to proceed with caution. He must be inconspicuous at times but never sneaky. The recording of funeral songs may have to be done at long distance or even abandoned at the risk of offending. Secret rituals

should be recorded only by permission, and the right to ask may require a degree of mutual trust, which is only built up over a period of years.

What does the isolated act of collecting music accomplish? It may be a means of preserving a people's cultural identity. In these days it is a common complaint of young nations who have long been taught by foreigners living among them that they used to have their own music, but now only a few of the old people remember it, or else no one at all. Even when another culture's music is excitedly embraced, it follows inevitably that when the old is gone, the irrecoverable is lamented. Sometimes blame is angrily directed toward the foreigners whose predecessors were the cause, in a time when there was no portable tape recorder with which to collect music. Today we have a certain obligation to collect it for them, because they will eventually want it. Not now, perhaps, with all the trinkets and tokens of “civilization” luring them, but later, after it is gone.

In addition to preserving their identity in history, collecting the music of ethnic minorities bolsters their confidence in themselves as having a pleasing contribution acceptable to those outsiders whose culture - in their eyes - may seem superior. I believe that the Usarufas[*] are representative of most oral traditionalists when they register wonder mixed with delight that they have music which the outsider finds so interesting that he not only records it all but spends endless hours writing it down on paper. This is significant to them.

[*] A people group located in the Eastern Highlands of present-day Papua New Guinea, where the author and her partner Darlene Bee worked together for 7 years.

3 PRELIMINARIES

Speech, music, and other modes of expression are the intimate possessions of non-literate societies, and they need never be supplanted or discarded for they have the capacity to accommodate new concepts. Where diversity of language is a problem, many governments now advocate bilingualism in preference to an attempt to supplant the mother tongue. In the case of music, can a second system be introduced without disrupting the first? The answer depends upon whether the society under consideration is highly literate or non-literate in music. Where music theory and repertoire have become a written tradition, another music system might be introduced with little threat of the loss of indigenous music. But in a non-literate society, should the introduction of a new music system cause a break of just one generation in the transference of music by oral tradition, the indigenous repertoire and music system would be lost forever. It is necessary to remember that music of an oral tradition is more in jeopardy than its speech in that everyone speaks, but few create the music in any given society. When a foreign music system is introduced, local composers find themselves in a transitional vacuum, helpless to create in the new idiom, and the populace is left with mimicking another culture's music. The question here is not whether some can learn to mimic another people's music system, but are we justified in imposing a new speech or music system on a people? Doesn’t every noise contribute something unique to the fullness of creation?

Some will be thinking, “Why not let them choose what music they want?” That is well and good for a people whose musical heritage is documented in recordings and scores a thousand times over. Their musical heritage cannot be lost. However, in oral traditions, music can be annihilated in a very short time if it is not performed. Oral traditions haven't the historical perspective to realize what may be the consequences of their choice. Others may believe that two music systems can be combined, but two musical grammars cannot co-exist any more than a language can have two different

grammars. One will supersede the other, and history shows that it is the music of the more powerful culture that characteristically dominates.

The more productive action on the part of the foreigner is to record the oral tradition. This produces confidence and furnishes the people with a repertoire that can be consulted at any time. It leaves them with their identity intact, and at the same time, encourages further creativity in a system the composers understand. Furthermore, it offers recognition to a people for the unique contribution they make to the world's music.

From the viewpoint of the collector, probably no single act short of learning their language would ingratiate him more with a people. Collecting music has scientific value too, as the collection makes musical study possible among theorists, anthropologists, philosophers, and anyone interested in the thought concepts and aesthetic creativity of man. The specialized task of transcribing the music makes it performable by the musically literate as well as providing data necessary to any analysis of the music.

4 COLLECTING AND LABELING DATA

It is well to have recording projects outlined beforehand. It is easy to prepare for special events. Knowing the time and place and probable duration helps the collector to estimate what recording materials are needed and what kinds of sociological information he is apt to acquire. One technique for preparedness is to ask in advance what is going to happen and to write this down, to be checked later with notes of what did happen and with a second account of what happened from the viewpoint of a local spectator.

A chronological breakdown of the happenings of this large event was what I had anticipated in eliciting advance information on my first New Guinea “sing-sing” (Melanesian Pidgin for the mass singing and dancing of New Guineans celebrating either socially or ceremonially). Imagine my surprise when the sing-sing leader replied, “Wait! You will see!” Later I came to understand that the surprise element, especially in the entrance of costumed dancers, holds the most dramatic weight of the event. Probably the leader didn't himself know what was to occur since the costumes made for each occasion are not seen before the performance, but to know and disclose the information would have detracted considerably from the drama we were all to witness. Elicitation techniques are not foolproof.

A project may be a task of long and interrupted duration such as the methodical collection of all the songs remembered by the population. In aiming for what is close to an exhaustive collection, it is well to begin with the oldest songs. Elicit first all the music remembered of those composers who are no longer living. Sometimes it is difficult to find out who the composers were, either because it is not

remembered, or because some languages make it difficult to ask. For instance, in Usarufa there is no word “to compose.”

The equivalent is “to say on behalf of.” Unfortunately, this may also mean “to sing a song.” It may also mean “to inspire.” In asking who first made the song, the only definite way to differentiate between the person they first heard sing it and the composer of it is to ask what the basis of the song is. In the account of how the song came about, the identity of the composer usually emerges.

Often some songs are so old that authorship has been lost. These are the songs sung by “our ancestors.” Collecting these is important. Often in comparing them with later songs, discoveries are made as to the development and theory behind song styles. Unless songs are collected in categories, this comparison is not possible. The oldest songs may be retained by a handful of old folk, maybe even by only one individual. The danger in losing these songs by oversight is obvious. It would be a permanent loss.

For a depth study, songs may be collected in two ways: first by subject matter using a checklist, and then by author. The first method furnishes data for ethnic styles pertaining to custom and usage, region, and sub-cultures. The second method furnishes data by which music can be categorized historically and according to individual style.

This is the place perhaps to discuss style. Music styles within the general music system must be determined if we are to comprehend an oral tradition. The members of a culture respond to musical style, consciously or subconsciously,

though the analyst must respond to it consciously. Specifically we may mean one or any of the following when we speak of “style.”

The use of “style” may refer to one of the following:

(1) A period in history, e.g. Baroque music.
(2) Regional music, e.g. German versus Spanish, although both belong to the same Western music system.
(3) Demonstrative music associated with custom or usage, e.g. patriotic marches versus children's games.
(4) The personal idiom of a composer (Wagner versus J. Strauss) or performer (Mahalia Jackson versus Marion Anderson).

Having enumerated kinds of styles, it is now in order to define music system. By music system is meant the musical universe of a culture whose organization of musical elements is determined by its tradition. All styles should be accounted for in the thorough analysis of a music system. A check- list of some potential types is helpful in this respect as it enables one to focus on one thing at a time methodically.

The checklist to follow was made for linguists in Papua New Guinea who were interested in eliciting song types. It presupposes conversational ability in the vernacular and does not pretend to be exhaustive; yet this list has prompted the memory of villagers and investigators alike to include additional types. It has proven to be a satisfactory tool in that, to our present knowledge, no major song type has been overlooked in Papua New Guinea.

Checklist for Initial Investigation

1 Event

1.1 Human
1.1.1 Birth (birth announcement, lullaby)
1.1.2 Childhood (funny or nonsense songs, games, teasing or taunt songs)
1.1.3 Puberty (girls' songs, boys' songs, initiation)
1.1.4 Courting (love songs, courting songs, proposal of marriage)
1.1.5 Marriage (wedding, men's songs, women's songs)
1.1.6 Death (funeral, mourning)
1.2 Historical
1.2.1 Commemorative (disasters, honors, first outsiders, changes in leadership or government, first road, first vehicles, wars)
1.2.2 Legend (creation, mythology)
1.2.3 Local news

2 Activities

2.1 Work (cutting timber, hunting, fishing, road making)
2.2 Fighting (preparation for battle, battle, victory, defeat)
2.3 Dancing (male, mixed, social, ceremonial, solo)

3 Ceremonies

3.1 Magic (planting, harvesting, fertility, power, prophecy)

3.2 Social (greeting, farewell, wedding, funeral, completion of an endeavor such as the making of a warrior or communal clearing of the land)

4 Nature

4.1 Animals (pets, wild animals including birds, fish and reptiles)

4.2 Places and things (mountains, rivers, forests, trees, plants, the heavens including clouds, sun, moon, stars, and sky)

Song data should always be accompanied by texts and their translation. Even vocables sung should be phonetically transcribed. Incidentally, translation of the text does not ensure that one outside the culture understands the meaning of the song. At a later date, when there is fluency in the language, or at the time of translating the text, one should ask of a local expert, “And what does the song mean?” Often song texts use different vocabulary and grammar from ordinary speech. Then again, text and context are two different things. In Papua New Guinea for example, an innocuous song about a child asking for salt may actually be about adultery. Admiration of a bird in flight may refer to spirits' powers. The members of the culture need no explanation, because on hearing the text they recall the context. Only one outside the culture has to learn the meaning apart from the song (Young 1968: 213-16).

Elicitation will no doubt disclose some overlapping of categories. This is often of value. For instance, whereas songs having magical power (such as those used in

hunting) are difficult to obtain, eliciting by animal name may inadvertently result in the discovery of magic songs pertaining to that animal. Or, eliciting “songs that only the men sing” may obtain for the collector songs of warfare, initiation, male rites and so forth. The situation for elicitation must be as comfortable as possible for all concerned. Where it is normal to sing in a group rather than solo, group singing should be collected. If the natural conditions for singing are at night and around the fire, comply with the norm.

The subject of instrumental music is not the focus of this manual, but it cannot be entirely excluded for two good reasons. First, a collector should seize whatever musical opportunity presents itself, as it may be a unique occasion. Second, the principles of melodic analysis apply to all melody, vocal or instrumental. Sometimes the vocal and instrumental systems are the same, as in Western culture, but in traditions without fixed pitch, they are often separate systems. A list for eliciting information about musical instruments in an initial investigation is given below.

(1) What instruments are played? (Give vernacular as well as English name.)
(2) Who plays them?
(3) Who makes them?
(4) What instruments are played in ensemble? Solo?
(5) Do instruments accompany singing? Dancing?
(6) Have instruments any unusual cultural significance such as magical power, personality, male or female distinction, importance in history or legend?
(7) Photograph, measure and describe the instruments and how they are played.
(8) What instruments have been introduced from neighboring cultures or foreigners?

Anyone should be able to record and answer the above, provided he has conversational ability in the language of the people whose music is under investigation or access to an interpreter. Classifying instruments in accordance with the Sachs-Hornbostel classification should be attempted. This does not require musical ability but merely observation as to how the sound is produced and what materials produce it. The broad categories are:

(1) Idiophone: sound produced by resonant solid material, e.g. sticks, shells, hollow logs

(2) Membranophone: sound produced by vibrating membrane, e.g. drums, tambourines

(3) Aerophone: sound produced by vibrating column of air, e.g. pipes, flutes, horns

(4) Cordophone: sound produced by vibrating string, e.g. harps, bows

Classification of some more complex instruments may be ambivalent or may necessitate a combination of categories. Instrumental music is outside the realm of this particular manual, although instrumental melodies are certainly analyzable by the procedures to be presented.

In addition to noting on the recorded materials any features that will identify the music collected, it is advisable to speak this kind of information directly onto the tape. Who recorded it, who was recorded, where and when and what was the occasion? If the reader were to speak aloud the information below, he would see by his watch that it requires about eight seconds.

'Elicited and recorded by Darlene Bee and Vida Chenoweth, Usarufa language. Kaagú village, November 1965. Sung by 15 older men led by Nókae.'

This is eight seconds well spent in the face of someone else trying to identify it or with intervening years making it virtually impossible to recall who, where or

when. Much material, which could have been invaluable to ethnomusicology, is useless because of insufficient identification.

References have been made in previous chapters to a music “expert” who helps to relay information about music, or who performs the music upon request. There may be one individual serving both roles, one individual in each role, or better still, several who fill one or both roles. There will need to be input from both sexes if there are men’s songs and women's songs. Children can usually be recorded in the natural act of singing children's songs. It is valuable to have several viewpoints but wise to have among them the man (and/or woman) who knows the most about music in the culture. Composers are a good source of information, as are song leaders.

How does one recognize who the leader is in group singing where no individual's presence is conspicuous? One way is to observe. Even though there may not be a specialized role of song leader in the culture, by careful observation one begins to notice that as the repertoire begins to be exhausted, there are one or more who are still leading out. They have retained more repertoire than the rest. Often this retentive ability is the reason for the undesignated role of a leader in oral tradition rather than by creative ability or outstanding voice. These individuals are the living library in oral tradition, and one is likely to find that they are biological relatives (rather than classificatory relatives). Another direct means of obtaining good music information is to ask for the “expert.” The people can identify him/her either directly or indirectly. In questioning individuals at random about music, they may advise, “Ask so and so, he knows!” Or the investigator may find that his assistant goes to a specific source for more information. It is that source that is wanted, and often the assistant will bring his source directly to the investigator to

spare himself the extra legwork. One thing is nearly certain; a delegate will not be sent who is a poor representative of the local musical scene. The caution here is to beware of selecting as expert one who “sounds” best, as too often the investigator subconsciously makes his choice on the basis of a store of preconceived standards rooted in his own culture.

PART II

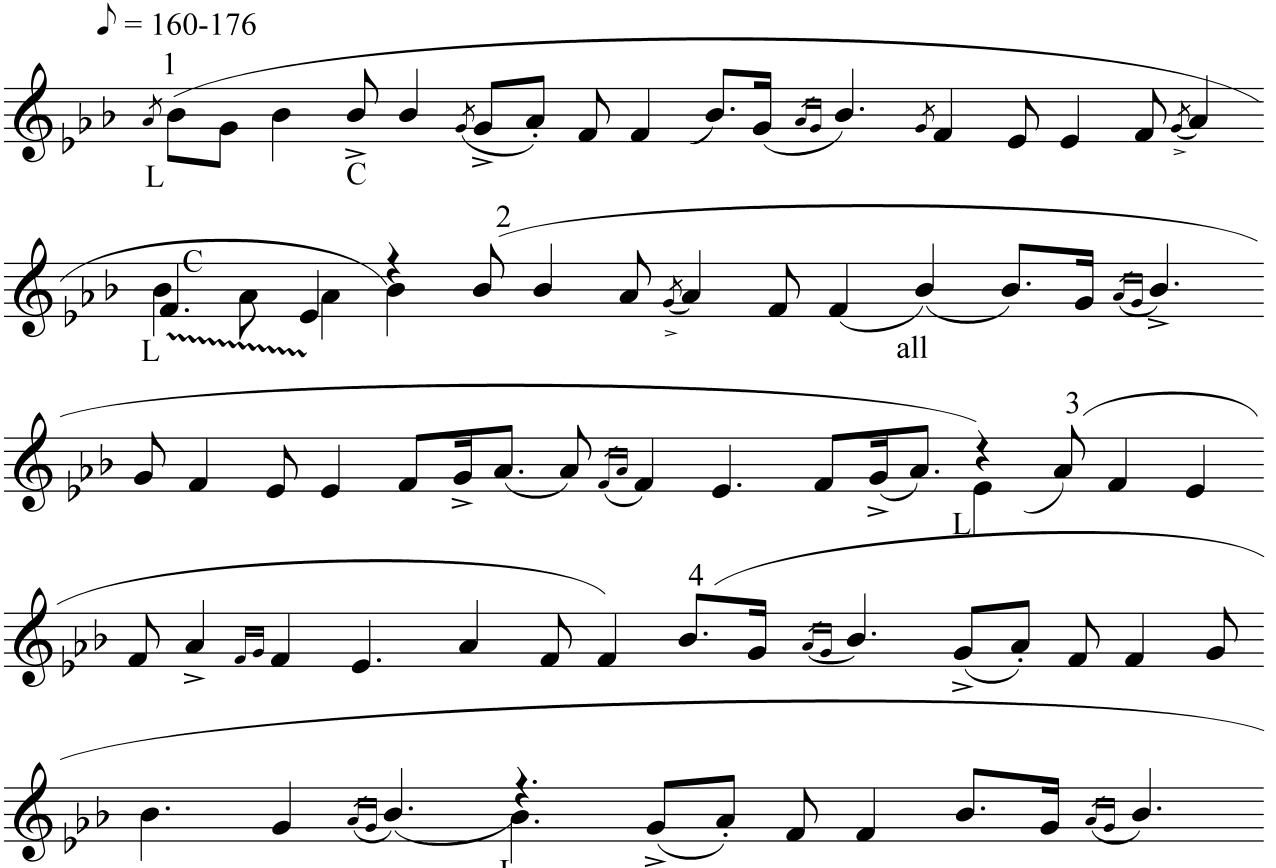
ETIC AND EMIC ELEMENTS

5 TRANSCRIBING

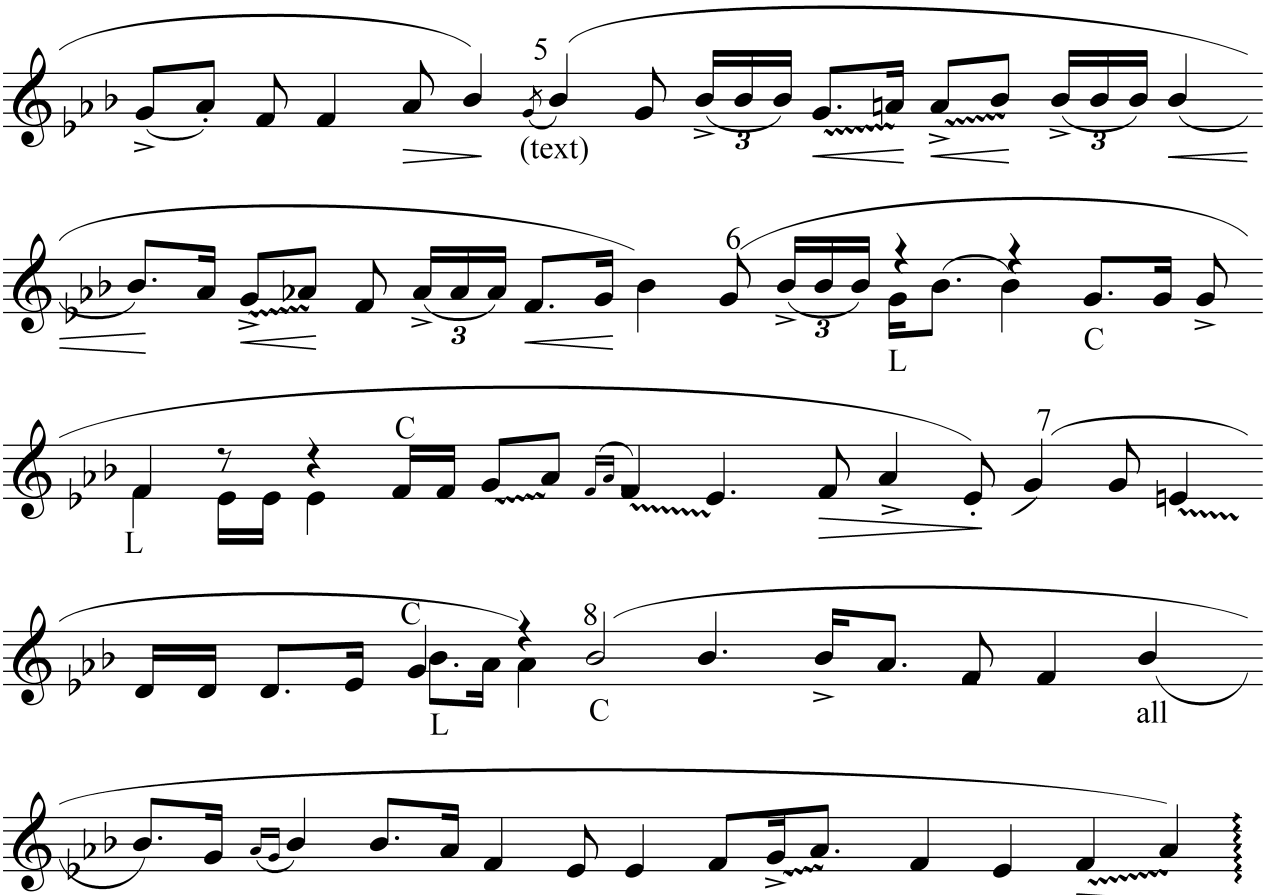
There is little to be said on the subject of transcription that cannot be learned from experience. The initial stages are often tense and frustrating, but it becomes easier. It is somewhat like learning a foreign language for the first time in that the frustrations cannot be anticipated since it is a totally new experience. As one continues transcribing, he gains the ability to approach a second music system with a more relaxed attitude. The tedium is finally reduced to (1) recognizing that discipline will be required, (2) accepting the challenge with levelheaded enthusiasm, and (3) fixing one's efforts to an end goal that will be rewarding. By then transcription is merely taken for granted.

Concentration is easier when using earphones. Not only does this close out extraneous sounds in the room or surrounding area, but also the recorded sounds are heard closer and more accurately. Other factors are involved too. It is disadvantageous to bombard a household or any others within hearing distance of transcription. It is especially annoying to those on the periphery when the transcriber repeats and repeats a recorded passage difficult to notate. There is no reason why others who don't have the benefit of the transcriber's end goal should be subjected to this. Moreover, once the transcriber is confronted with a bystander’s annoyance, the pressures of concentration and difficulty now combined with aggravation put him in an attitude likely to jeopardize his work. It isn't worth it. Use earphones.

Example 1: Victory Song No 1 of the Bena-Benas, Eastern Highlands, Papua New Guinea



L = Leader; C = Core plus Leader (in unison)



Typical of this region, a good performance requires that a leader not only begin the song, but fill in any gap between phrases so that there is no break in the continuum. Notes sung by the leader (L) between phrases are not considered in analysis.

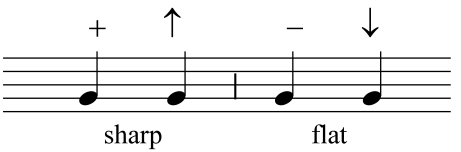
5 TRANSCRIBING

In each ethnic system outside Western tradition it is expected that additional notational symbols will be necessary while others not pertinent to the system can be omitted. For instance, some extra symbols will be needed for designating microtones and various portamenti while in systems that are non-metrical there is no need to notate measures. One must be ever alert to avoid the tendency to force one music system into the mould of another. The European must divorce himself from the major-minor scales and the harmonic practices based upon them. In Example 1 is found the consistent usage of B-flat, E-flat, and A-flat, yet this tonality is in no way related to the Western scale of E-flat major. Notice also that E-flat in the signature is placed where it actually occurs in the song rather than in the fourth space of the staff.

The original transcription will at times include many more accidentals than a second copy made after analysis. If the transcriber marks tentative phrases then he can make a note to the reader that accidentals hold throughout the phrase. Designating the status of each pitch by means of a sharp, flat, or a natural can be difficult to read.

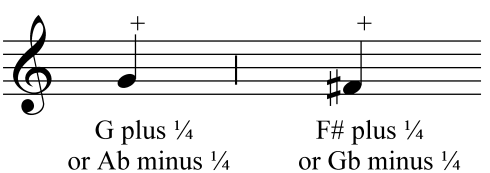
Some features of ethnic systems for which notation symbols are becoming standardized include such common practices as microtones, portamenti, glottal reiterations, spoken-style (*Sprechstimme*) and the like.

Example 2A: Various ways to notate microtones



Transcribers have personal preferences. It is adequate to signal microtones in terms of what is sharp rather than using two symbols, one to designate a quarter-tone sharp and another to designate a quarter-tone or microtone flat. Theoretically, a microtone may be smaller than a quarter-tone, but no pair of ears among my acquaintances hears the acoustical difference, except in isolation.

Example 2B



Signaling only what is sharp is practical, and the reasons will be apparent later in the discussion on what is etic versus emic. There may be preference for the plus sign when arrows are used to show modulation direction, e.g.

½ ↓ = transposition down a half-step

¼ ↑ = transposition up a quarter-step

Example 3: portamenti

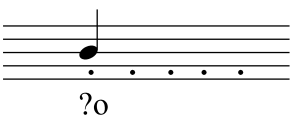
The first portamento (1) is more gradual than the second is. More intervening pitches are heard, and the duration is often, though not always, slower. The second portamento is a legato connection with the two quarter notes receiving their full counts. In (1) the quarter notes receive less than full count to allow time for the intervening pitches. In both examples, a single vowel is sung.

Example 4: slurs

These slurs carry no rhythmic weight of their own. An x-note indicates the termination point of the slur. When the terminus is indeterminable, the x-note is

omitted altogether and the tail of the slur mark quits at the nearest approximation of a terminus.

Example 5: glottal reiteration

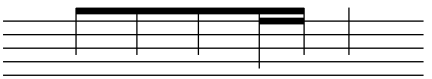


The dots signify glottal stops sung rapidly on a single vowel, here the vowel *o*. This manner of singing sometimes substitutes for what would be a vocal vibrato in Western music.

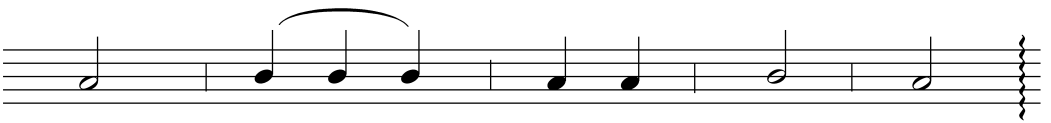
Example 6: spoken-style (*Sprechstimme*)

These pitches are spoken instead of sung. This style is for special effect, often in religious incantations. A Duna war leader uses the style to incite men to battle (Chenoweth 1969:229). Another method of notating a style with indefinite pitches is to omit the head of the note: the stem quits at the place of the approximate pitch:

Example 7



Example 8



Full bar lines designate meter; partial bar lines like the above signal a rhythmic subdivision or pulse rather than meter. A wavy line at the end means the melodic illustration is a fragment.

In addition to the careful notation of the musical elements themselves, the transcriber should include the notation of anything in the performance that would make a reading of the music authentic in style.

A metronome marking is advisable for each change of tempo.

In addition, the labeling of each page of music as to ethnic group and the item transcribed - by title or description - as well as the page number is important. Accidents can happen at any time, and the dismay after dropping a folder of unlabeled transcriptions on a windy day is a lesson for life! The task of reorganization can be monumental.

When several transcriptions have been made of each style within the system, a tentative analysis should be attempted, keeping separate for the time being each category thought to be a style. A category judged to be a separate style before actual analysis proves it to be, we will call an “etic” style. “Etic”

means a distinction based on the investigator's experience and intuition. After analysis, should we find that there is a style distinction to which the ethnic musician responds (whether or not he recognizes the formal differences) we can speak of "emic" styles. This may necessitate regrouping the original etic guesses. For the terms and concept of etic versus emic we are indebted to the American linguists Kenneth L. Pike (1967:37-68) and Darlene Bee (1973:167-9).

From here on, the manual will take the form of a textbook. If it is adhered to chapter by chapter, the investigator should achieve a generative analysis of a given music system. What is meant by "system"? It is the network of controls that by tradition govern musical syntax and grammar.

6 INTERVALS

Melodic intervals measure the acoustic distance (proportional difference in frequency) between tones that follow one another. The first step in analyzing a transcribed melody is to list the succession of melodic intervals for each song.

Example 9: Succession list from melody in Example 1

(Phrase 1) M2a, m3d, m3a, u, u, m3d, u, m2a, m3d, u, p4a, m3d, m2a, m2d, m3a, m3d, M2d, M2d, u, M2a, M2a, m2a, m3d, M2d

(Phrase 2) p5a, u, M2d, m2d, m2a, m3d, u, p4a, m3d, m2a, m2d, m3a, m3d, M2d, M2d, u, M2a, M2a, m2a, m3d, m3a, m3d, M2d, M2a, M2a, m2a

(Phrase 3) u, m3d, M2d, M2a, m3a, m3d, M2a, M2d, M2d, p4a, m3d, u

(Phrase 4) p4a, m3d, m2a, m2d, m3a, m3d, m2a, m3d, u, M2a, m3a, m3d, m2a, m2d, m3a, m3d, m2a, m3d, u, p4a, m3d, m2a, m2d, m3a, m3d, m2a, m3d, u, m3a, M2a

(Phrase 5) m3d, m3a, m3d, m3a, u, u, m3d, M2a, u, m2a, u, u, u, u, m2d, M2d, m2a, m3d, m3a, u, u, m3d, M2a, m3a

(Phrase 6) m3d, m3a, u, u, m3d, m3a, m3d, u, u, M2d, u, u, M2a, m2a, m3d, m3a, m3d, M2d, M2a, m3a, p4d

(Phrase 7) M3a, u, m3d, M2d, u, u, m2a, M3a

(Phrase 8) m3a, u, u, M2d, m3d, u, p4a, m3d, m2a, m2d, m3a, u, M2d, m3d, M2d, u, M2a, M2a, m2a, m3d, m3a, m3d, M2d, M2a, m3a

The commas in Example 9 only serve to clarify the separate items in the series. The key for the symbols is as follows:

p = perfect M = major m = minor A = augmented	u = melodic unison (a pseudo-interval of a note plus its repetition) 2 = second 3 = third 4 = fourth 5 = fifth and so forth	+ = raised a microtone	a = ascending d = descending

Although Western terminology is generally to be avoided in describing another ethnic system, the Western tags for intervals are retained. These tags do not refer to any combinatory theory such as scale or chordal formations, only to acoustic distance.

In the case of instrumental music, it is of more consequence to measure the correct vibration of each pitch than it is in the case of vocal traditions. The pitches of instruments are often measured with a view to comparing like instruments for historical reasons. In the songs of oral traditions, absolute pitch is seldom important; there is rather a tonal center to which the other pitches are related. The tonal center is not a fixed pitch but lies within the range of possible transpositions. It has proven practical, therefore, to devote more attention to the distance between pitches than to the pitches per se.

Once the succession of intervals has been listed, a chart should be made for each song. Horizontal and vertical axes will be alike and are best arranged in graduated sequence of smaller to larger intervals. Example 9 would necessitate these axes:

Example 10

preceding interval \ following interval	u	m2d	m2a	M2d	M2a	m3d	m3a	M3a	p4d	p4a	p5a	rest*
u												
m2d												
m2a												
M2d												
M2a												
m3d												
m3a												
M3a												
p4d												
p4a												
p5a												
rest*												

* Rest marks the beginning and end of song

The next step is to fill the cells of the chart, or matrix, in accordance with the list of interval succession, with a mark for each occurrence. Line one of Example 9 is read:

a major second ascending is followed by a minor third descending (place a mark in the cell at the intersection of row M2a and column m3d),

a minor third descending is followed by a minor third ascending (place a mark in the cell at the intersection of row m3d and column m3a),

a minor third ascending is followed by a unison (place a mark in the cell at the intersection of row m3a and column u),

a unison is followed by a unison (place a mark in the cell at the intersection of row u and column u),

a unison is followed by a minor third descending (place a mark in the cell at the intersection of row u and column m3d),

a minor third descending is followed by a unison (place a mark in the cell intersecting row m3d and column u),

a unison is followed by a minor second ascending (place a mark in the cell intersecting row u and column m2a),

a minor second ascending is followed by a minor third descending (place a mark in the cell intersecting row m2a and column m3d), and so on.

The finished chart of Example 9 will be seen in Table 1. After a chart has been made for each song, a composite chart should be made as in Table 2.

Table 1: Occurrences of interval succession in Bena-Bena song 1

preceding interval \ following interval	u	m2d	m2a	M2d	M2a	m3d	m3a	M3a	p4d	p4a	p5a	rest
u	𝍸𝍸	𝍸	𝍸	𝍸	𝍸	𝍸	𝍸			𝍸		
m2d			𝍸	𝍸			𝍸					
m2a	𝍸	𝍸				𝍸		𝍸				
M2d	𝍸	𝍸	𝍸	𝍸	𝍸	𝍸				𝍸	𝍸	
M2a	𝍸		𝍸	𝍸	𝍸	𝍸	𝍸					
m3d	𝍸		𝍸	𝍸	𝍸		𝍸					
m3a	𝍸				𝍸	𝍸			𝍸			𝍸
M3a	𝍸						𝍸					
p4d								𝍸				
p4a						𝍸						
p5a	𝍸											
rest					𝍸							

Table 2: COMPOSITE CHART of succession

(cells contain song

Preceding Intervals \ Following Intervals	u	m2a	m2d	M2a	M2d	m3a
u	1-222	4,5,7-9, 13, 14, 16,20	5, 7-10, 14-18, 18, 20	1, 3-12, 14, 18, 20-222	1, 2, 4-18	2, 4-9, 11, 12, 15-20, 22, 222
m2a	5-9, 11, 14, 17, 18-20	7,18	4, 5, 10, 11, 14, 16-19	6, 11, 13-16, 20	8, 11, 13, 14, 20	9, 14, 15
m2d	5, 7, 8 10, 11, 13, 17-20	11, 14, 15, 17, 18, 20	5, 8, 18		5, 9, 13	5, 13, 14, 16-18
M2a	1-222 (excl. 19)	3, 4, 11, 14, 15, 17	20	2, 3, 9, 10, 14, 22, 222	3, 4, 8-11, 14-18, 20, 22, 222	2, 4, 9, 10, 11, 15-17
M2d	1-222 (excl. 13 19)	18, 20	4, 5, 7, 9, 18, 20	1-4, 8-11, 14-18, 20, 22, 222	1, 3, 8, 9, 14, 17, 21	2, 4, 6, 11, 13, 15, 16
m3a	4, 6, 8, 9, 11,12, 15-17, 20	6	4, 7, 13	2, 3, 6, 11, 15-17	2, 4, 5, 9, 10, 14-18	2-9, 11-19
m3d	2, 4-18	4, 6, 11, 13, 15, 16, 20	11, 13,19	8, 12, 15, 16	3, 8, 9, 11, 15-17	3, 4, 6, 9, 11, 14-17
M3a	5, 7-9, 12, 16, 21	9		10		9
M3d	8-10, 14, 22, 222	5-7, 13		3, 5, 9, 15, 22, 222	3	
p4a	1, 2, 6, 8, 9, 11, 12, 15, 17, 22, 222			2	8, 15	4
p4d	1, 2, 6, 8, 9, 11, 12, 15, 17, 22, 222			11, 12, 15		11, 15
A4a	8, 10			10		
A4d	6, 10	10				
p5a				10		
p5d	12	10				
m6a	8, 10					
m6d						
rest	1, 2, 5, 7-9, 14, 15, 18, 19, 21, 22, 222	12, 13, 20		10		4, 11, 16

of melodic intervals in Usarufa songs

numbers where they occur)

m3d	M3a	M3d	p4a	p4d	A4a	A4d	p5a	p5d	m6a	m6d	rest
3, 4,6, 8-17, 20	9, 21, 222	8-10, 22, 222	2, 4, 8, 9, 15, 22, 222	2, 8, 11, 15, 22, 222	8	6, 10		10, 12	8		1, 5, 6-9, 11-222
3, 15, 17	5, 7, 12, 16	15									
	8, 10, 13	5, 7			10				10		10
2, 6, 16, 20		3, 14	9	8, 11, 12, 17		10					3, 4
4, 8, 9, 15+17	4, 8, 21	9	8			10					
2-9, 11-19				11, 17, 22, 222		15					
3		222	8								
4		13									
			222								
				6, 9							2
8			2, 6								
							15				
15											
3, 16, 17											

7 ETIC VERSUS EMIC

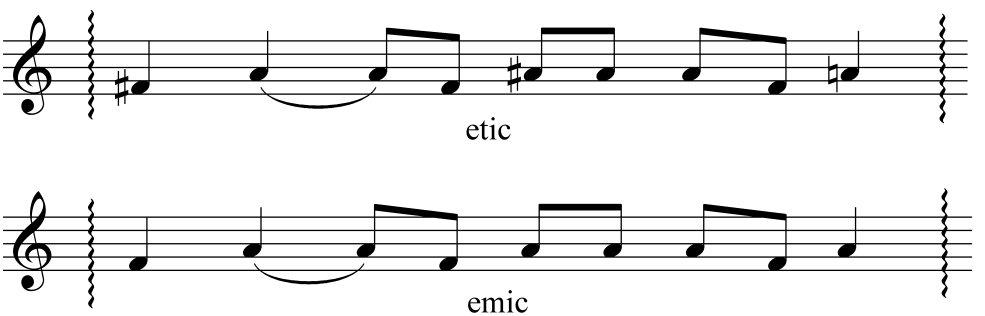
In the sound systems of languages, linguists make a distinction between an etic and an emic viewpoint (Pike 1967:37-68). There are sounds which contrast, signaling a difference in meaning: for instance, /p/ and /b/ contrast in /pig/ and /big/. There are also sounds which are non-contrastive variants of a single sound unit: for instance, the aspirated [p^h] in /pit/ and the unaspirated [p] in /topsoil/. Both are variants of /p/ and do not contrast with each other. The native speakers of a language hear as "different" any two sounds which signal a difference in meaning, but two sounds which are non-contrastive variants of a single sound unit they hear as "same." On the other hand, the foreigner does not necessarily respond in this way. He may hear /p/ and /b/ as "same" if they happen to be non-contrastive variants in his own mother tongue, or he may hear [p^h] and [p] as "different" if they happen to contrast in his own language.

Although the concept of "etic" and "emic" units originated within the field of descriptive linguistics, its application to other behavioral disciplines has been productive (Dundes, 1962). In this manual, the etic-emic principle was first applied to music. Musical elements may exhibit contrast with one another; they may vary in pitch and/or duration and/or timbre. In this chapter, the etic-emic concepts and procedures are applied to the analysis of melodic intervals.

Any etic observation is immediate. A first transcription of a musical composition is etic. What is heard is notated without insight into that culture's musical universe. That is, the transcriber writes what he hears as different pitches, intervals,

rhythms, and so forth; but he hears them from the point of view of one outside the culture. To illustrate, a Western musician, because of his background that differentiates between major and minor thirds, will notate these as different when transcribing another culture's music. If he discovers that within the system there is no differentiation between the thirds, then he need no longer classify or write them as different; rather, he will choose one or the other to symbolize both. Only the outsider could observe the thirds as major and minor; the insider has always viewed them as the same. In this case, the etic transcription of Example 11 would be emically notated:

Example 11



In general, one would expect to have fewer emic than etic intervals, as what is transcribed by the trained outsider initially is apt to include more detailed differences than the insider responds to as significant in the system.

7 ETIC VERSUS EMIC

Although initial song transcriptions are unavoidably etic, it is important to determine their emic status within the music system. After evidence has been presented demonstrating whether similar etic units operate as variants or separate units in the system, songs may then be rewritten emically.

Any interval in a song chart that has rare occurrence needs further examination as it may be found to be a variant of another interval. All variants should be accounted for in a description of a music system. A rare interval may be a fluctuation acceptable in the culture; for example, some music systems interchange thirds indiscriminately because no significant difference is heard between the two.

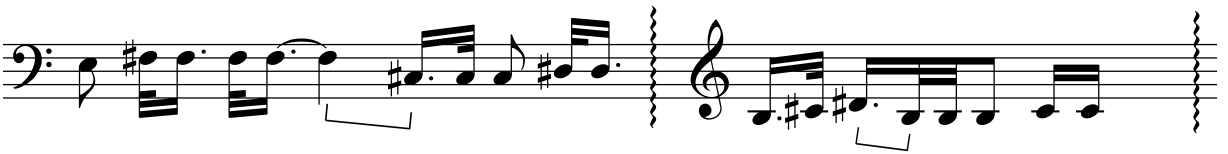
Sometimes rare intervals are vocal slips, and - alas - at other times they are errors in transcription. To confirm whether a unique occurrence is a singer's variant, attributable to either his singing style or an error, the same song should be recorded with another singer and the two versions contrasted. Two renditions, by the way, should never be compared in the presence of performers, as they are likely to assume that they are being criticized personally. The analysis of language or music is a specialized task, and to view one's own language or music system objectively is extremely difficult.

Not only are rare occurrences suspected of being variants, but also all similar units should be grouped together and examined in order to ascertain whether each is a separate entity or whether some are etic variants.

Pike postulates some basic tenets for separating units that are etic (perceived) from those that are emic (conceived). Examples will be drawn from music of Papua New Guinea peoples.

(1) Two similar units that are found in contrast in identical environments in two different songs are two separate emic units.*

Example 12:

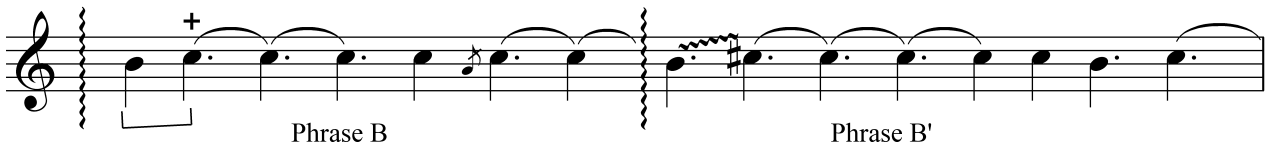


These two passages from two different Usarufa songs show a perfect fourth descending and a major third descending in identical environments, preceded by a major second ascending and followed by a major second ascending. (Note that the identical environment has to do with intervals rather than pitches.) This example may be substantiated by several others and the presence of unison does not affect the environments. Hence, a perfect fourth descending and a major third descending are separate emic units in this system, recognized and responded to as being different in kind.

(2a) Two similar etic units found in free (unrestricted) fluctuation, where one may substitute for the other without qualification and in all circumstances, are variants of a single emic unit.

* The form of Pike's (1947:73-96, 122-125) tenets presented here is based upon Bee's (1971) rephrasing that includes any kind of emic unit.

Example 13: Binumarien song “Maarirana”

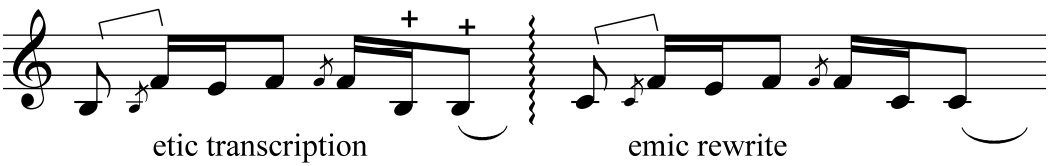


In Example 13 and throughout Binumarien song, a minor second raised a microtone [m2+] fluctuates with a major second [M2]; these two intervals are never found in contrast. The allowable margin for error set by this system conditions the ear from childhood to interpret freely fluctuating etic units such as [m2+] and [M2] as the “same.”

(2b) Two similar etic units found in conditioned (restricted) fluctuation, where the two are mutually substitutable for each other under certain conditions and where the two do not contrast in any circumstance, are variants of a single emic unit.

Example 14 is taken from an Awa song (Chenoweth and Bee 1971:775). It shows a perfect fourth fluctuating with a diminished fifth in the environment of an initial phrase. The two do not contrast anywhere in the data, so a diminished fifth is interpreted as a variant of the perfect fourth.

Example 14: Awa song 5



In Gadsup song (Chenoweth 1966:287-8), there is a characteristic tendency for the tonal center to gradually shift upward. During the transition from one tonal center to the next, successive unisons or any undulating interval fluctuates with its expanded counterpart; so [u] fluctuates with [u+], [m3] with [m3+], [p4] with [p4+], following the initial interval in a phrase and until a new tonal center is established.

(2c) Two similar etic units found in conditioned (restricted) fluctuation, where the two are mutually substitutable for each other under certain conditions and where the two are found in contrast elsewhere, are two separate emic units despite the fluctuation. (When songs are rewritten emically, one would choose to represent such fluctuation by the commonest interval.)

Example 15: Bena-Bena song 16 (Phrase B^1)

In the two renditions of phrase B^1, a minor second [m2] fluctuates with a major second [M2]. This kind of fluctuation is conditioned by rhythm and is common. Notice that it occurs with the shorter note of a dotted pair. The rapidity with which it is sung, coupled with its weak rhythmic position, contributes to pitch instability. In stronger rhythmic position /m2/ and /M2/ contrast in the Bena-Bena system, but here they are emic intervals in fluctuation.

In music systems in general, the initial interval of a song is likely to exhibit fluctuation between emic intervals. Any vocal starting point tends to be less stable than subsequent intervals for which a basic tonality has been established.

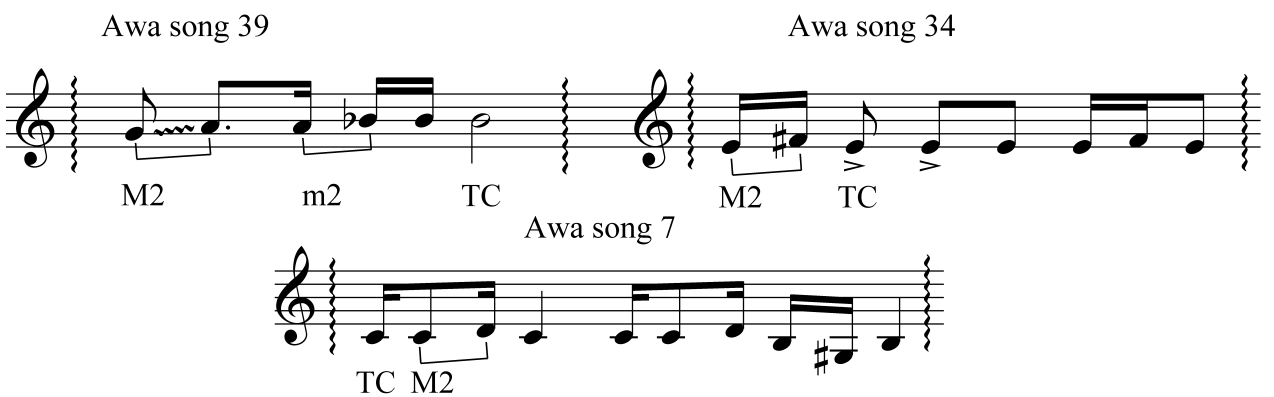
In the music system of the Dunas (Chenoweth 1969:223), it has been postulated that below tonal center there is fluctuation between minor and major thirds, whereas above tonal center these two intervals are in clear contrast.

Variants, such as a gradual rise in tonality and/or increase in tempo that deviates from the norm, may be caused by emotional excitement on the part of the performer/s.

(3) Two etically similar units found in complementary distribution, where one occurs in an environment different from the other, are variants of a single emic unit.

In Awa song, major and minor seconds are in complementary distribution. Minor seconds occur only directly below the tonal center, while major seconds occur either below minor seconds or above the tonal center but never directly below tonal center. Emically then, there is a neutral second manifested as a minor second when directly below tonal center and as a major second elsewhere.

Example 16



8 ANALYTICAL PROCEDURES

Three information sheets are indispensable to analysis.

(1) The listing of interval succession enables one to locate the specific environment of any interval.

(2) The charts of interval succession by song are then united into a composite chart showing frequency of occurrence and co-occurrence, enabling the analyst to observe what etic units should be examined for evidence demonstrating whether they are systemic, that is, to determine which units are regarded in the culture as “same” or “different.”

(3) The transcriptions themselves need to be referred to continually to observe environments more inclusive than adjacent intervals, and to trace any errors which may have been made in listing or charting the intervals.

The frequency of occurrence pertinent to each etic interval is an aid to analysis. This information is obtained by simply adding the strokes in each column of the song charts. To illustrate from the chart in Table 1, adding each column reveals the most common to least common interval occurrences to be:

interval:	m3d	u	m3a	m2a	M2d	M2a	m2d	p4a	M3a	p4d	p5a
number of occurrences:	39	36	22	19	18	18	8	6	2	1	1

The tabulation above indicates that one interval occurs twice and two intervals occur only once in the song transcribed in Example 1: Victory Song of the Bena-

Bena. This should induce one to return to the transcription to check for error. If there is more than a single occurrence, then an emic supposition will necessitate a look at whether the intervals in question are in strong rhythmic positions. As it happens, the major third ascending occurs once as a link between phrases 6 and 7 and once at the end of phrase 7. Perfect fourth descending ends phrase 6, where there is a tonal shift downward, though only briefly. (A second recording would help to show if this was unintentional.) Perfect fifth ascending ends the first phrase when leader and choral parts cross.

So, based on this one song, these are spurious intervals that, with more data, might be found to occur in more solid environments. Sometimes rare occurrences foreshadow an extension of musical vocabulary. One of the advantages of a composite chart such as Table 2 is that questionable intervals may appear in other songs, reinforcing their credibility. Such is the case in this instance.

Summary of Procedures for Determining Emic Intervals

(1) For each song, chart all etic intervals and their co-occurrences.

(2) From the above, make a composite chart to reveal the probability of emic intervals.

(3) Using the composite chart:

(a) Investigate all similar intervals to see if their distribution is predictable (check major intervals against minor,
fifths against fourths,
fourths against thirds,
thirds against seconds, etc.)

(b) Total the number of occurrences (columns) of each interval and the number of environments (rows) in which it occurs to find which are characteristic of the system.

(c) Re-examine rare occurrences to see if they are etic variants.

What is emic in music has to do with the conception of it, while what is etic has to do with the perception of it. Any emic units in the system are discoverable through application of the tenets proposed in Chapter 8, although this chapter has dealt solely with emicization of melodic intervals.

9 CHECKING THE ANALYSIS

All emic propositions should ultimately be checked with a local music expert. Several kinds of check may be employed. The emicized version of a song might be sung by the analyst for feedback, without indicating in advance what places in the song are under scrutiny. In this way, the local expert is not liable to focus unnaturally, or perhaps even on the wrong issue; he may want to correct tempo, rhythm, voice quality, or any number of things while the analyst is focused upon something structural in the music. While all information given should be regarded, it offers the analyst a more objective testing to refrain from making a local expert overly conscious of the music. It is fair to assume that glaring errors in an outsider's rendition will produce a reaction.

Another method of testing would be that of asking a local singer to sing along, making sure that his voice is the one leading, so that divergence can be detected easily.

Still another self-test is to compose a song in the emicized system and have a local singer repeat it. It should be done casually, by mimicry rather than by correction and repetition. In a day or two when he is singing it without the aid of a recorder or the analyst, observe what, if any, changes he has made and compare them with emic suppositions tentatively reached. Any variation should offer a clue as to what is emic. In short, if a song has to be taught by extensive drilling it is atypical of the system.

9 CHECKING THE ANALYSIS

Finally, this method of analysis has been tested by teaching a class of Usarufas to become literate in their own music system. As rhythmic notation was introduced and later coupled with the emic intervals, no problems were encountered. Beginning with the commonest interval, others were introduced one at a time. In four weeks' time each of the five students - all offspring of Usarufa composers - were able to sight-read any combination of rhythmic units consisting of

and four melodic intervals, about one-half the total inventory of emic intervals.

Once emic intervals are established, etic transcriptions should be rewritten in terms of them.

PART III

GRAMMAR OF MUSIC

10 PHRASES

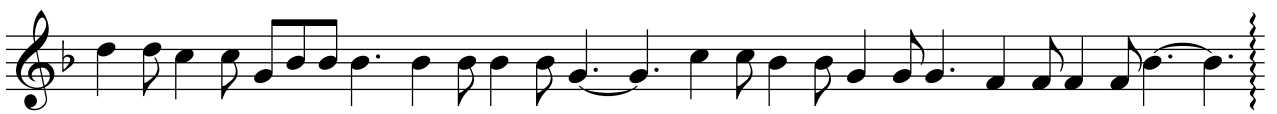
Every musician intuitively recognizes a musical phrase although he may be at a loss to define one precisely. How can a musical phrase be identified? It is a melodic segment whose borders and content are definable. It is probable that our biological habits in speaking and singing transfer to instrumental music as well, so that any instrumentalist phrases intuitively like the singing voice. Etically, intuitively, a phrase is equated with breathing, and its borders are transitional lapses between exhaling and inhaling. In Western notation this kind of phrasing is enclosed in an arc as a clue to performance. It designates relaxation points in the singer's breath control, the wind players breathing or the bowing of string players; to percussionists it designates relaxation points for the arms and hands which will not interrupt continuity of the music.

In gamelan music where the gongs' melodic line may extend to phrases lasting several minutes, limitations have to be set by pattern repetition, as there is a limit to how long a phrase can be and still be absorbed mentally. Also, the principle of tension-relaxation is at work. A phrase that is too long causes unfulfilled expectation in the listener. Composers have employed this very device to intentionally create suspense. Paganini's “Moto Perpetuo” is an example. The rendition of Baroque instrumental music in the strict-pulse tradition of the period may also cause a casual audience to become tense if the internal structuring is not understood whereby relaxation points might be observed, as in the recognition of motival repetition, sequences and the like.

10 PHRASES

Phrases signal structure. They are the essence of wholeness even though they are part of a larger whole. Phrases cannot be performed with indiscriminate relaxation points without destroying coherence. For this reason, patterning in a melody aids in discovering phrase boundaries. Where are the phrases in the illustration below?

Example 17



The number of phrases is 4 or 2, depending upon whether the analyst divided the two longer ones. The tied notes terminate the two longer phrases, and the dotted quarters separate the two longer phrases into two shorter ones. What principles were followed in making these divisions? Chiefly, the recognition of repeated structural patterns, both rhythmic and tonal. Five useful criteria for identifying a phrase are:

(a) Recognition of terminal points.

In Example 17 phrases conclude on notes of long value. This is common, as a long terminus enables the performer to breathe without distorting the formal plan of the melody. Ingressive air may thus signal the end of a formal unit, usually a phrase. Rests, instead of sustained notes or ingressive air, may likewise define phrase boundaries.

(b) Recognition of structural pattern.

Structural features determine phrases, and all forms of repetition should be sought. All compositional devices are forms of repetition providing both unity and variety. Duplicative repetition or “strict” repetition is the most obvious kind of repetition. Among other obvious types are those which make only minimal changes, such as melodic sequence, transposition, ostinato and tempo. Variation is at a minimum when neither the syntax nor its constituents are disturbed. When the syntax or serial arrangement of the constituents is interrupted, variation is less obvious. Some devices go a step further and retain the constituents while re-organizing the syntax; and least apparent among compositional devices are those which combine syntactic re-organization with additions and/or omissions in the original. Thus, recognition of a new treatment of old material will establish pattern boundaries. In the table of compositional devices, set 1 includes those devices that retain the original syntax; set 2 includes those which interrupt the syntax by additions and/or omissions; set 3 includes those devices based upon re-organization of the syntax; and set 4 includes combinations of treatment that combine two or more devices, always holding at least one musical element constant. The minimal constant would be the reduction of both melody and rhythm to similar waves of pitch and stress, but this treatment is rare.

Table 3: Compositional Devices

	Melodic	Rhythmic
set 1	strict repetition canon	strict repetition pulse meter ostinato
	transposition sequence	tempo
set 2	counter-voice/s	counter-rhythm/s
	expansion ornamentation	expansion augmentation
	contraction	contraction diminution
	substitution	substitution
set 3	retrograde	retrograde
	octave displacement	displaced accent syncopation thesis vs. anacrusis mixed meter
	inversion mirror (real) crab (tonal)	
set 4	combinations of the above	combinations of the above
	e.g., inversion + transposition	e.g., displaced accent + tempo change

The reader is reminded that rhythm as presented in Table 3 is rhythm as it constitutes part of melody, and not a separate rhythm that accompanies the melody. Compositional devices need not occur simultaneously in both rhythm and melody. For instance, the rhythm inherent in the melodic line may be retained while the melodic intervals are inverted. Should both the rhythmic and tonal components be in like variation, as in a sequence, the phrase division is the more apparent.

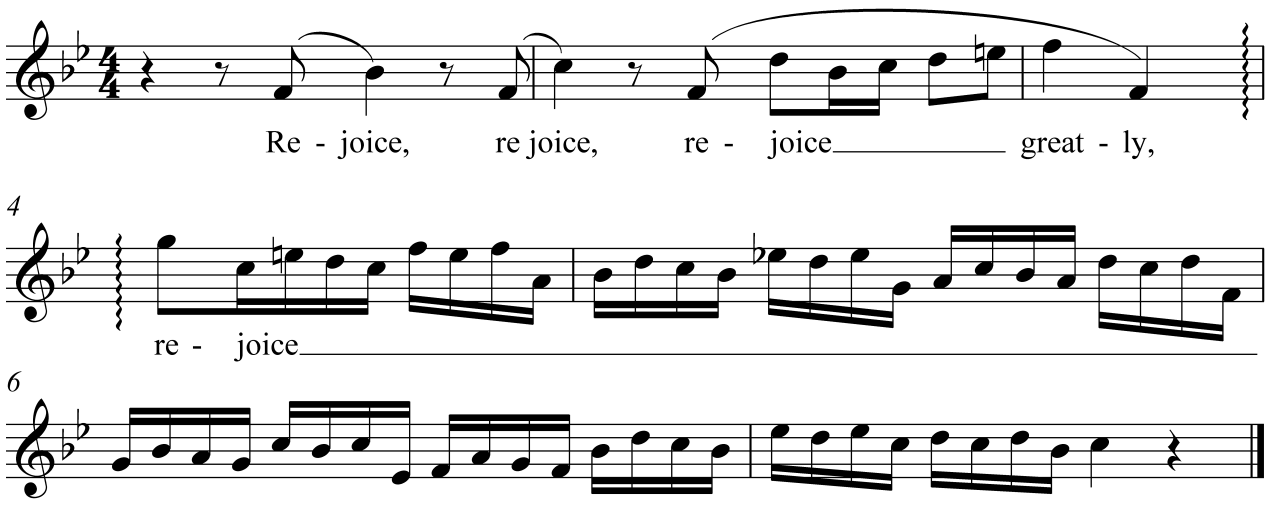
(c) Recognition by text.

Words to a melody determine phrase lengths. As soon as a word or more expresses thought complete enough to be transferred to a hearer, the melodic notes accompanying it may make a phrase. In Example 18 there are four instances of a one-word phrase, pointing up the wide contrast in length that is possible through melisma. A syllabic treatment of the word “rejoice” yields a two-note phrase,* while a melismatic treatment of the same word yields a phrase of extreme length within a breath group.

Any recurring linguistic feature such as non-lexical syllables, vocables, rhyme, or other distinctive phonetic characteristic may indicate phrase boundaries. Melodic phrases are usually coincidental with word boundaries and often with linguistic phrases. But not all words can be musical phrases. Function words such as conjunctions, directionals, demonstratives, and the like are usually too vague in meaning to constitute a phrase. A one-word phrase must communicate a thought.

* Such a minimal phrase is termed a “motif.”

Example 18: “The Messiah”, Handel

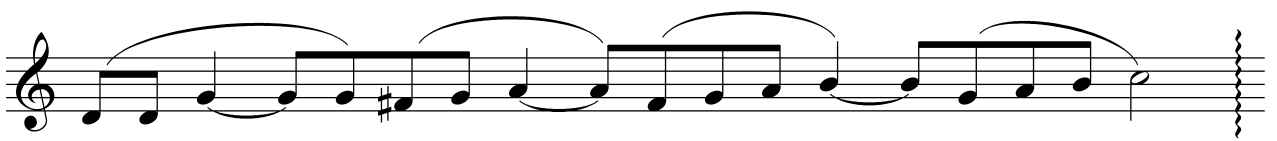


It is interesting to note that musical phrases may be sung to non-lexical syllables, and many examples of this are to be found in the Papua New Guinea highlands (Young 1969); in this case, musical phrases are structured independently of linguistic features just as in instrumental music.

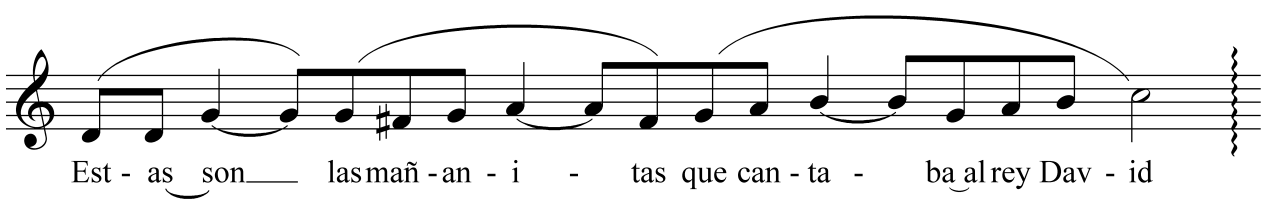
If the musical phrase is not co-terminal with the textual phrase in a song, it would be well to investigate whether the song was borrowed from another culture. In New Guinea it is common practice to borrow songs from neighboring peoples and to sing them in a foreign tongue, with no understanding of what the words mean.

Anyone singing in a foreign language or singing a new vernacular text put to a pre-existing melody runs the risk of distorting phrase structure. Because the textual phrase dictates the shape of a melodic phrase, it is necessary to know the language to sing with understanding. Visitors to Mexico generally make the wrong phrase divisions in the celebrated song “Las Mañanitas” because they do not understand the words. They divide it:

Example 19



instead of:



(d) Recognition of boundaries by textural contrast.

Contrast in texture may be found in the entries of counter-voices, in antiphonal or responsorial treatment of melody, in alternation of dynamics or timbres, and in the alternations of performance technique, such as legato versus staccato or bowing versus pizzicato.

(e) Recognition by accent.

Finally, any stress points, accents, or climaxes should be observed. In linguistics, a phonological phrase is described as having one or two margins and one peak. Musical phrases also may be described as a logical grouping (consistent with the musical “grammar”) having one primary accent. The kind of accent may be one of the following or a combination of them:

tonic accent, a pitch leapt to

agogic accent, long duration

dynamic accent, force

Performers recognize the peaks of musical phrases intuitively and respond to them as phrase climaxes. This trait is often what is meant when a person is referred to as “being musical.” If phrases are very short, the performer incorporates them into a longer, more complex unit, emphasizing one climax and subordinating the other phrase peaks. Such a combination of phrases might be called a “sentence.”

In Western music, to ignore phrase peaks is to render a dull performance; however, the musician is at liberty to suppress their actuation in order to build up tension to be released in a later climax.

Summing up, phrases may be identified by five chief means: (a) by the performer's relaxation points and formal terminal points manifested by hold, rests, or junctures; (b) by compositional devices in the internal structuring; (c) by textual boundaries; (d) by dissimilar textures; or (e) by a single primary accent.

11 TONALITY

It is often said by the foreigner that a people “has a pentatonic scale” or “they only sing two or three notes” or “it all sounds alike”. These responses have, in fact, become a mark of the foreigner, because he does not understand the system in which the melodic and rhythmic units are grammatically related. For the ethnomusicologist, such tentative conclusions should be regarded as etic guesses to be proved or disproved. This manual seeks to provide the technique for doing so.

A superficial aural description of a song or style is often made before analysis. Obvious features such as texture, contour, and dynamics, as well as vocal characteristics can be noted from the beginning. Some idea of pitch range and rhythm - whether metrical or non-metrical, for instance - may also be noticed from the start. However, while such description stimulates the imagination and imparts some vague facts, the kind of description this manual proposes is one that is generative. In other words, it encourages a musical description so thorough that a colleague could, by using the description as a theory textbook, compose idiomatic melodies in any style the analyst has undertaken to describe.

There are several dangers in making a superficial description the first step in describing an ethnic music. One is that the observer is inclined to be content with it on the basis of bulk, for much can be said about music to the neglect of its substance, which is its grammar. Another danger in a superficial analysis is that the analyst may become enmeshed in features not salient to the system's grammar. Transcription as a first step is probably the more objective approach. The third danger is in postponing transcription too long. The outsider may begin to

subconsciously transform what he hears to an approximation of his own music system, with the result that he has greater difficulty in recognizing sound differences, some of which may prove to be crucial.

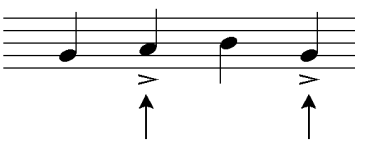
Music progresses by means of steps in which tension is followed by relaxation. Part of the tension-relaxation principle in music results from tonality, part of it is due to the juxtaposition of various melodic elements, and part of it is the result of rhythmic organization. In fact, all the elements of music simultaneously play a part in the tension-relaxation principle. Those within a particular system respond to the principle subconsciously. Some features of it may be responded to universally, but that is more the domain of semantics, to be discussed in the final chapter. Mention of it here is to remind the reader that music's structure and its meaning are inseparable. It is not possible to formulate all those possibilities for creating tension and relaxation in music, as the application of the principle is infinite. It is the product of the composer's imagination, and while imagination can be stimulated, it cannot be taught.

Tonality then is the composer's tonal plan. This plan operates within a dynamic field of a music system and consists of the syntactic and semantic function of each musical unit. The function of each of these units (intervals, motifs, phrases, and so forth) includes their degree of tension and relaxation and the influence each exerts upon the other. Briefly, tonality is the interplay of musical elements within a tonal plan, and identifying tonal centers is one aspect of this plan.

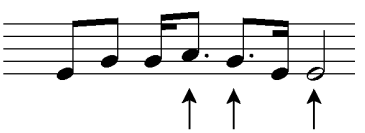
Other techniques must be utilized to locate the tonal center in oral traditions not based on the scales Western theory teaches. One might conclude that the pitch that occurs most frequently in a song is tonal center, but this is not the case if that pitch hasn't rhythmic weight. In the preceding chapter, several determinants for

assessing rhythmic weight were given, and all are types of accent which are illustrated here:

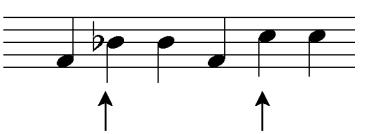
(a) dynamic accent, or force



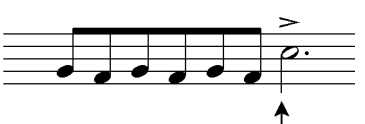
(b) agogic accent, or lengthened notes



(c) tonic accent, or upward leap



Two of the three accents may coincide giving even more rhythmic weight. All three accents coinciding give the strongest weight.



Occasionally two pitches of equal weight may serve as dual tonal centers. That pitch which concludes the song may be designated the tonal center if a decision must be made in favor of one.

11 TONALITY

How is a tonal center determined? There are two rules-of-thumb. Usually the tonal center is that tone which occurs most frequently in strong rhythmic position and with freer distribution syntactically than other tones. Looking at the poles of the most prominent intervals is often a clue to finding the tonal center. Second, the tonal center typically carries the heaviest rhythmic weight and would be expected as the cadential tone. It may be the initial tone as well, or the strongest initial tone, in the case of an anacrusis preceding it. Throughout the song it will likely appear as accented or in long note values. Often these two criteria (frequency of occurrence and strong rhythmic position) will give the same answer, that is, that the tone occurring the most often is also found in the strongest rhythmic positions. When the two agree, a tonal center may be postulated. At a later stage of analysis after formulae have been made for each song, additional confirmation is possible by comparing grammatical formulae.

What are some exceptions? The most frequent pitch may not be the tonal center, heightening the effect of resolution when the tonal center does finally occur. In the case of oral traditions whose pitch inventory is the result of “chains” of intervals instead of scales of pitches, there may be two tonal centers, with two tones qualifying equally in the application of the two criteria for determining a tonal center. The decision in such a case is arbitrary until further data reveals a preference for one over the other; or, if the decision for a single tonal center cannot be made with adequate substantiation, the analyst may choose to retain two emic tonal centers. A corpus of “one-step” melodies would be a case in point, should the cadential note fail to establish a preference.

Dual tonal centers, arising out of one-step melodic structures, may remain nuclear as a music system evolves and expands. A single or dual tonal center may

be referred to as the tonal Nucleus, a term which proves useful in melodic description employing formulae. One example of a dual tonal center is commonly found in a melodic type combining two one-step patterns which function as pairs. These four tones functioning in pairs are easily discernible in a question-answer style such as responsorial or antiphonal singing. One pair of notes is sung by the leader or chorus, while the other pair is heard in the reply of a group or second chorus.

To describe what modulations are common it will be necessary to notice for each song any change in placement of the tonal center. Often its range of shifting remains within the confines of a second or third. In some systems (such as our Western one) the tonal center's range is unlimited in instrumental music but its range in vocal music is more confined, for the obvious reason that a singer's range is narrower than that of some instruments.

Tonal center gives inherent focus to a tonal plan. Its role may be likened to that of a predicate in language that governs the activity of the other units (words). Tonal center likewise governs the action of melody by means of the relationship of each pitch to tonal center, the gravitational point.

If the basic structure of compositions is determined by a "scale," then an attempt should be made to define the unique function of each member of that scale. In many oral traditions it is difficult to define a scale in the strict sense of the word. Sachs defines "scale" as "the various tones of a musical system comprising a whole, yet each tone having a unique function" (Sachs 1961:148-9). Oral traditions in pre-literate societies tend to make melodic expansions outward from a tonal center, e.g. a single step from tonal center becoming a "one-step" structure and so on. Or, there may be reduplication of an interval.

11 TONALITY

“Successive reduplication of an interval” Sachs terms a “chain” rather than a scale. When a scale is difficult to define in a system, and especially when the members of the society do not respond to tones as meaningful units, it is best to express the tonal inventory in terms of emic intervals rather than emic tones. If an analyst prefers to describe a one-step melody as a two-tone scale, he must redefine “scale” for his readers. The better term might be “inventory.” In the event that he is describing melodies whose tonal inventory is two to four tones, he would do well to notice whether or not the series consists of one interval and its reduplication. A scale, then, is not synonymous with the tonal inventory because etic variants of an interval are not scale tones, and furthermore there is danger of including as scale tones those changes of pitch that result from a shift in tonal center. For example, should a song in our Western culture shift from minor to major mode or modulate to another tonal center, it would be inaccurate to indiscriminately add all the tones of the song and call this inventory a scale! What prevents us from doing this is knowledge of the grammar of our music system. We know that certain rules of structuring are in operation. In an ethnic system outside our own, we must first discover what “rules” are in operation before we can accurately say what a scale is in that system, or even that one exists.

In conclusion, the analysis of any music system's tonality includes the bases for identifying a tonal center, any characteristic modulations, and the influence of the tonal center upon melodic tendencies. If the basic structure of compositions is determined by a “scale,” an attempt should be made to define the unique function of each member of that scale.

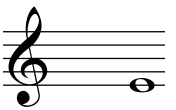
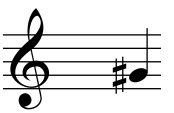
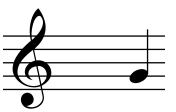
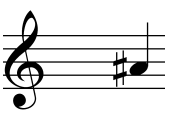
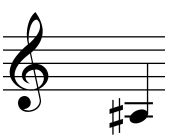
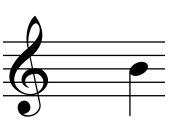
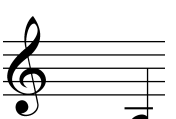
12 PITCH SYNTAX

Grammar in music is defined as a consideration of how emic units within a tonal plan are distributed in relation to each other and in relation to larger units of which they are components.

Having established which intervals are emic, there is no further need to describe a song in terms of an etic concatenation of ascending and descending intervals. In grammatical analysis, we are concerned with the ordering of pitches as they relate to tonal center. The end points of emic intervals determine what pitches are significant in a system, and these pitches are expressed grammatically by means of their acoustic distance from tonal center. For example, M2H signifies a pitch a major second higher than (above) tonal center whereas M2L signifies a pitch located a major second lower than (below) tonal center. The symbols *H* and *L* are used instead of *a* for “above” and *b* for “below” to avoid ambiguity with those symbols for “ascending” or “augmented” and, in the case of *b* to avoid mistaking it for a flat sign. Terms familiar to trained Western musicians - such as 'Major’, 'minor', 'perfect', 'augmented', and ‘diminished’ - are used because their acoustic distance has already been learned, not because there is any correlation between the music system under investigation and the major-minor modes of European music. If a microtone is seen to be emic, it may be expressed by means of a plus or minus added, e.g. /M2+H/ or /m3-L/ which would read: a pitch slightly* higher than a major second above tonal center or a pitch slightly* lower than a minor third below tonal center.

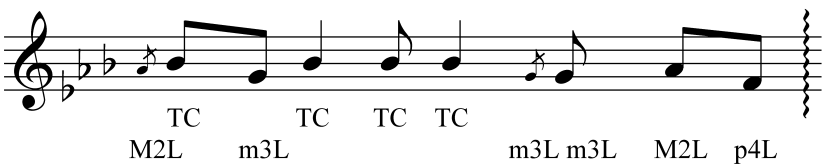
* differing by a microtone.

Table 4: Pitches relative to tonal center

M = major	Given a tonal center of E 
m = minor	M3H is G-sharp 
a = augmented	m3H is G 
d = diminished	a4H is A-sharp 
p = perfect	d5L is A-sharp 
	p5H is B 
	p5L is A 

Once a tonal center is located in a song, the transcription should be converted into a series of intervals measured from the tonal center as in this excerpt from Example 1 of Chapter 5.

Example 20

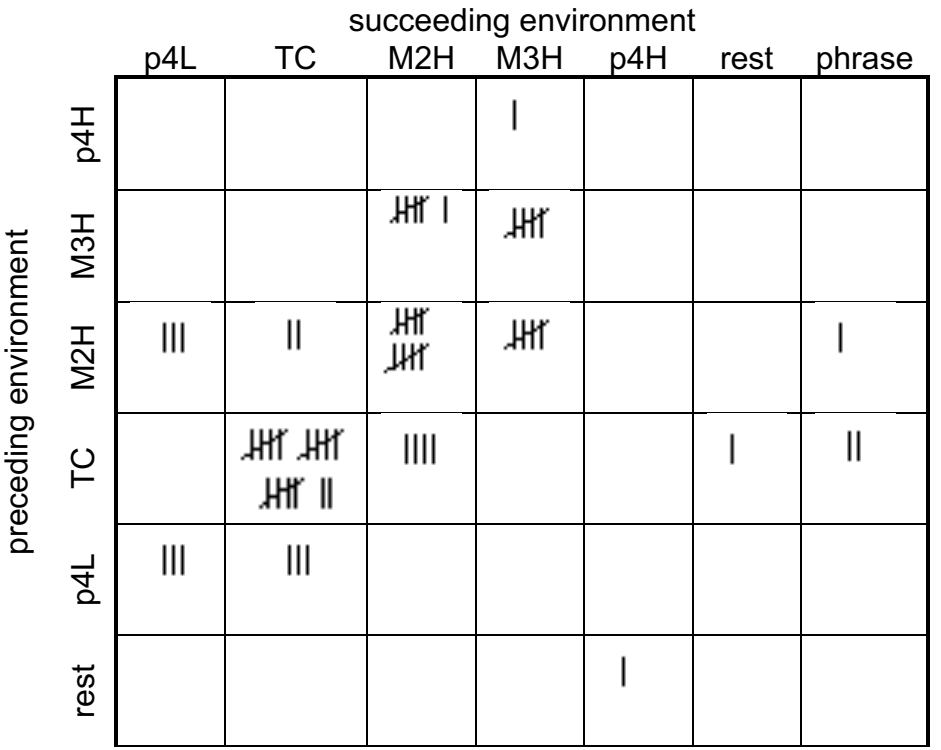


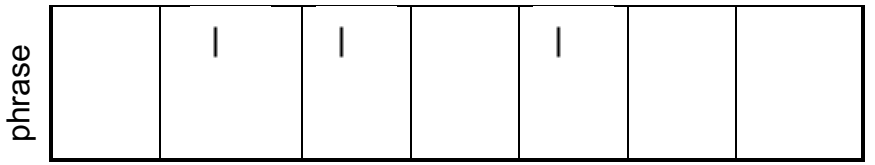
Charts show how pitches are distributed within a song, but their occurrences relative to one another is yet to be described.

Statistics prove useful in discovering the grammar of a music system. If song charts show, for example, that seconds, thirds, and fourths are idiomatic in a particular music system, which of these has freest distribution, and which most commonly occurs? Predominance of certain characteristics helps to distinguish styles within a system. Both predominance and versatility can be seen in a charting of intervals as they relate to tonal center. A chart like that in Table 5 should be made for each song. Note that such charts express not only the number of pitches, but what pitches co-occur, which occur initially and finally, and whether a pitch may be repeated and to what extent. A return to the transcription will be necessary for making new song charts of pitches, all of which may be combined into a composite chart similar to the interval succession chart in Table 2.

Versatility of pitches, that is to say, the variety of their possible environments, can be determined by counting cells occupying each (horizontal) row of the chart. Counting along the rows in Table 5 reveals the pitch a major second above tonal center, M2H, to be the most versatile, appearing in four cells, or four different succeeding environments. Similarly, one may count the occupied cells down each column to determine the number of preceding environments. Combining the two counts will establish the versatility, or degree of freedom, of each pitch in the song. This versatility count will often help to define characteristics of a given style or a particular system when calculated on a grander scale as was demonstrated in Table 2.

Table 5: Pitches relative to tonal center in Duna song 1a





Tabulations:

Versatility

	p4L	TC	M2H	M3H	p4H
number of succeeding environments	2	4	4	2	1
number of preceding environments	2	4	5	3	2
Total:	4	8	9	5	3

Predominance

Predominance of pitches is established by counting the actual number of occurrences in the cells of each row and column. Adding the occurrences of Table 5 shows the predominance of pitches to be:

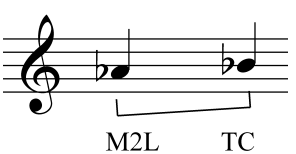
	p4L	TC	M2H	M3H	p4H
number of occurrences by column	6	23	21	11	2

number of occurrences by row	6	24	21	11	1
Total:	12	47	42	22	3

By means of the same chart, the pitch a perfect fourth above tonal center is seen to be the song's starting pitch, the only one preceded by “rest,” or silence. The cadential pitch is tonal center, the only pitch followed by “rest,” or “silence.”

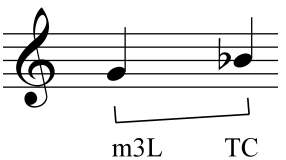
Glancing back to Example 1 on page 30, the Bena-Bena song has a tonal center of B-flat. There are no pitches above tonal center, but below it there are several, and we want to investigate their distribution in relation to one another as well as to the tonal center.

The first interval below tonal center is a major second:



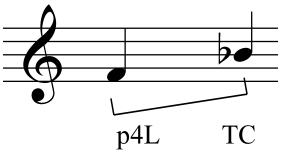
In phrase 1 the pitch a major second below tonal center (A-flat) may precede or follow tonal center. Expanding from tonal center, we begin to build an inventory of pitches and their progressions as shown by arrows. A major second below tonal center co-occurs with tonal center as shown by a double-headed arrow:

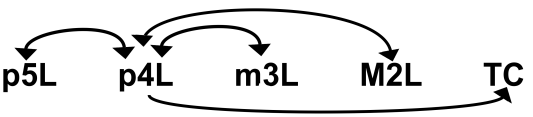
The next interval below tonal center is a minor third:



In phrases 1 and 2, the pitch a minor third below tonal center (G) both precedes and follows (a) the tonal center, (b) the pitch a major second below tonal center (A-flat), and (c) the pitch a perfect fourth below tonal center:

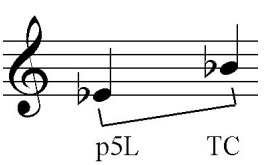
Next, a pitch a perfect fourth occurs below tonal center (F) and in phrase 1 is preceded and followed by m3L (G) or p5L (E-flat) and by M2L (A-flat) in phrase 2. Notice that p4L (F) precedes tonal center in the final phrase but never follows it.

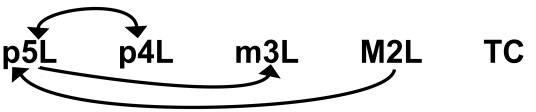




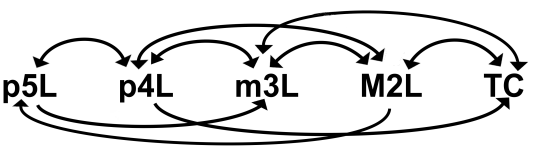
(To facilitate reading, arrows that have only a single direction have been placed below the formula.)

The last pitch below tonal center is at the interval of a perfect fifth (E-flat). In phrases 1, 2, 3 and 8 it is preceded and followed by p4L (F); between phrases 6 and 7 it is preceded by M2L (A-flat) and followed by m3L (G).





In conclusion, pitches and their movement in this Bena-Bena Victory Song are summarized by a formula:



This is read as follows: Between contiguous pitches, movement is unrestricted. Oscillating motion occurs between p4L and M2L, m3L and TC. In addition, p5L may precede m3L, M2L may precede p5L, and p4L may precede TC.

Restrictions: (1) Any pitch may repeat up to four notes in succession.

(2) The song begins and ends on M2L.

It is important to note the possibilities of melodic direction in the system. An essential part of melody is an understanding of the number and kinds of intervals that continue in a common direction. For instance, it was found in an investigation of Duna songs that no more than two intervals proceeded in succession in a common

direction. It is obvious that such restrictions affect the melodic contours found in the entire music system.

Formulae of all the songs in the data may be listed, one under the other, for purposes of combining and consolidating. Significant discoveries from consolidating formulae reveal characteristics related to a composer's style, a song genre, historicity and the like. To illustrate this we will leave the Bena-Bena example and turn to Duna music. Song formulae made from a collection of Duna songs are lined up in Table 6.

Table 6: Duna Song Formulae

Song No.												
1	a	p4						TC	M2		M3	p4
	b	p4						TC	M2		M3	
	c							TC	M2		M3	p4
	d							TC	M2		M3	
	e							TC	M2		M3	
	f							TC	M2		M3	
(i)	1			M3				TC		m3		p4
	2			M3				TC		m3		p4
	3	p4						TC		m3		
	4			M3				TC		m3		
	5	p4	or	M3				TC		m3		
	6	p4	or	M3				TC		m3		
	7			M3				TC		m3		
	8			M3				TC		m3		
	9			M3	or	m3		TC		m3		
	10					m3		TC	M2		M3	
	11					m3		TC	M2		M3	
	12					m3		TC		m3		
	13					m3		TC			M3	
	14					m3		TC	M2		M3	
	15			M3		m3		TC		m3		
(j)						m3		TC	M2		M3	
(m)						m3		TC	M2		M3	
(v)						m3		TC			M3	

Key to symbols:

( ) optional

, occurs with

; choices in the same grammatical slot. Read as “or”.

It is an interesting task for the analyst to investigate commonality in song structures. With a review of Table 6 it will be seen that all songs from 1a through f along with songs 10, 11, 13, 14, (j), (m), and (v), can be combined in a single formula because of a shared Nucleus: TC, (M2H), M3H

Formula X: (p4L; m3L) TC, (M2H), M3H (p4H)

or (p4L; m3L), N, (p4H)

This is read as follows: A Nucleus consisting of tonal center, an obligatory pitch a major third above it, and an optional pitch a major second above it, is optionally preceded by a pitch either a minor third or a perfect fourth below tonal center and is optionally followed by a pitch a fourth above tonal center.

(Song 9 in the data has a unique inventory that should be re-recorded by a Duna singer. The pitches M3L and m3L may fluctuate in certain conditions.)

Songs 1-9, 12 and 15 can also be combined in a single formula because of a shared Nucleus: TC, m3H

Formula Y: p4L; M3L; m3L TC, m3H (p4H)

or p4L; M3L; m3L; N, (p4H)

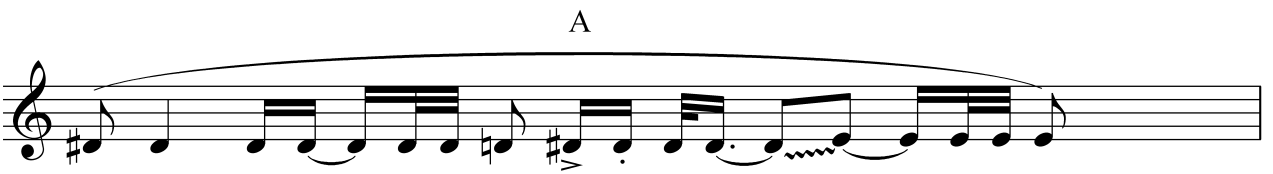
This is read as follows: An obligatory pitch either a fourth below, a major third below or a minor third below tonal center, precedes the Nucleus of tonal center plus an obligatory pitch a minor third above it. The Nucleus may be followed by an optional fourth above tonal center.

Thus we see that there are two principal Nuclei shared among these data. It is unwise to combine subtypes into a composite formula until the songs' function or other reasons for commonality are researched. Should they all have a common usage, such as belonging to a particular ritual, or a composer in common, a geographic area or time period in common, it would seem logical to combine them. As a rule of thumb, if the obligatory Nuclei contrast, it is better not to combine formulae.

In our Western music system auxiliary tones are non-chordal tones that serve to emphasize or ornament chordal tones. The term "auxiliary tones" is used here apart from any harmonic basis. They are tones which are non-pertinent to the system but which elaborate or emphasize basic tones. Auxiliary tones in a melody will be defined using hybrid labels derived from both linguistics and music. The linguistic term refers to the position of an auxiliary tone in relation to the basic melodic structure, while the term taken from European harmony will indicate its direction or progression. Thus, the linguistic affixes known as suprafix, infrafix, and infix will refer respectively to auxiliary tones occurring above the basic structure, below it, or within it (between two basic tones). Auxiliary tones may also be described as passing tones, neighboring tones, changing tones, or escape tones.

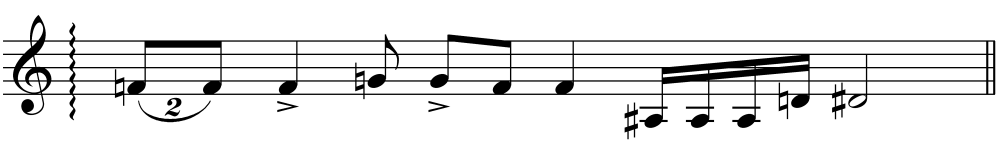
The following phrase is extracted from a two-step melody whose emic pitches are a minor second above and a minor third below tonal center, D-sharp. The D-natural in phrase A is therefore a lower neighboring tone infrafix.

Example 21: Usarufa song 19, “Mushrooms”



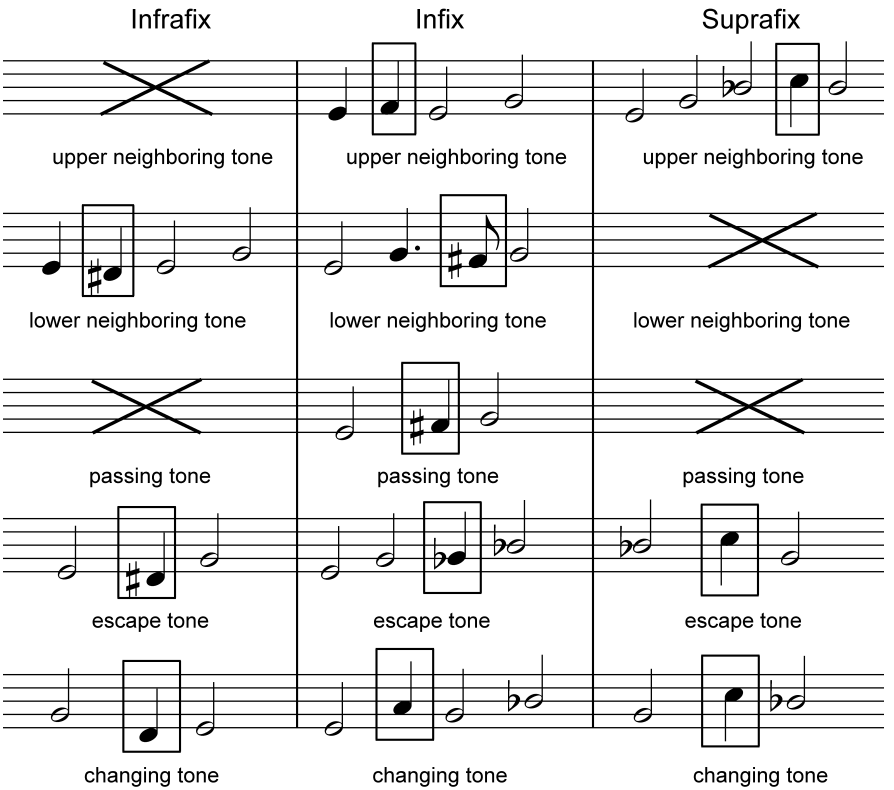
In the next example, D-natural is a passing tone infix within a basic perfect fourth below tonal center.

Example 22: Usarufa song 12, “Pig Butchering”



In the additional illustrations in Example 23, consider G to be the tonal center of a hypothetical two-step song with basic pitches a minor third above and below tonal center. (The white notes in the example are the basic tones.)

Example 23: Affixes



13 MELODIC STRUCTURE

Theories as to the origin of song are numerous. Most of these refer to song originating as mimicry of natural sounds, such as the calls of birds and beasts, sounds made by insects, the wind blowing through reeds or shells, water drops falling, and countless other possibilities. Another proposed origin of melody is that it is an outgrowth of speech, especially speech intended to transcend the ordinary in worship, magic, or the expression of strong feeling. Both origins are probable, and indeed there are musical styles representative of both in the same culture. Within a given culture the musical styles of nature songs and ceremonial songs are often markedly contrastive owing to a different origin as well as purpose, and in a study of the songs of an oral tradition, recognition of style and purpose are essential to comprehending the music system.

Having once decided what the ethnic society recognizes as emic intervals, tonality, and phrases, attention should be centered on the larger unit that they comprise, namely melody. Briefly, melody may be defined as successive pitches ordered within motifs and phrases whose organization produces a complete musical idea. A melody may be described in terms of these smaller internal units and also in terms of external features such as its compass, range, and placement (for example, whether centric, one-step, two-step, plainsong, etc.) or by its movement (for example, whether tumbling, rising, conjunct, disjunct, and the like). In addition, characteristic dynamics and embellishments help to characterize melodic types as well as rhythmic structure (for example, whether in a poetic meter, or whether syllabic, melismatic, isometric, etc.). There are melodic types characterized by contour alone: for example, undulating melodies, cascading melodies (a series of descending phrases each of

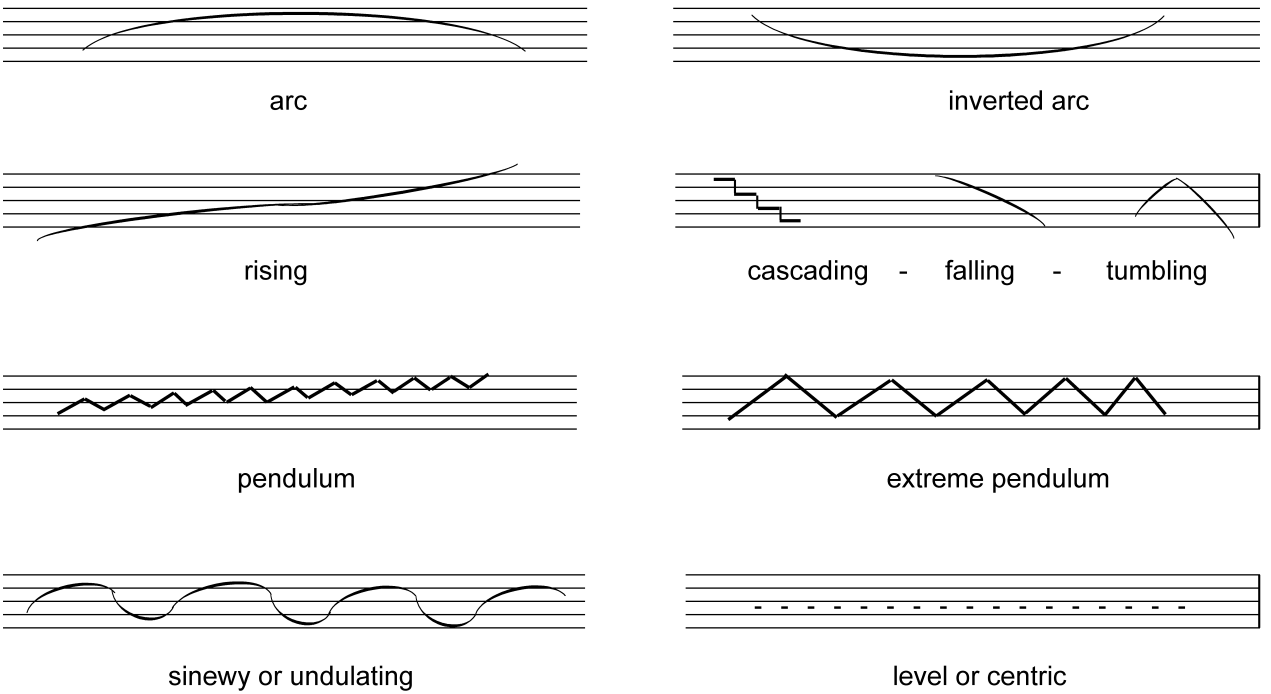
which begins higher than the phrase-final note before it), “tumbling” melodies (whose contour is primarily a descent and whose initial interval is likely to be a wide leap upward), and rising melodies (the opposite of tumbling).

The pendulum contour has a small range with intervals nearly equidistant and alternating in direction; extreme pendulum has larger intervals. A sinewy contour differs from pendulum in that its sinewy or undulating motion does not change with each interval, resulting in a wavy line rather than zigzag.

Other melodic types are named for their tonal inventory. The centric melody centers on one note with optional adjacent tones occurring infrequently and in weak rhythmic position. A one-step melody has an inventory of two notes, both of which are strong rhythmically, and a two-step melody is a one-step melody plus its transposition, or two one-step melodies.

Thus we have various types of melodic classifications. The syntax of units larger than an interval constitutes that part of description known as compositional “form.” We hear melody within a formal framework whether conscious of it or not. Analysis of the formal structure of the melody gives insight as to how the culture conceives the music. The rules necessary for interpreting or composing in that form give insight into the nature of the style to which it belongs and what meaning is associated with the style. For example, once we know the formal structuring of funeral songs in a culture, recognition of the style thereafter signals a certain response for us. Form is a key to internal structural meaning and aesthetic appeal as well; meaning in music is not divorced from the formal structuring of music. More will be said on this subject later.

Example 24: Types of Contours



The simplest method of describing the ordering of phrases within a melody is to assign them letter names as with the analysis of sections in classic Western forms such as sonata-allegro, binary, aria da capo, and the like. An exposition followed by a contrasting section and a return to the original section would be symbolized by capital letters ABA. Superscript numbers designate an alteration of the original, and

superscript letters (lower case) designate the derivation of the phrase variation. To illustrate:

B^1 symbolizes a variation of phrase B

B^a symbolizes a phrase different from phrase A but having some characteristic/s of phrase A

B^a is read as, “phrase B derived from phrase A”.

All melodies have syntactic structuring in addition to their contours and melodic inventories. Some formal types are (Nettl 1956:68-71):

1. iterative, with immediate repetition of a section with slight or no variation; example of syntactic representation = A A A A A

2. reverting, with repetition of material introduced earlier; example of syntactic representation = A B C $\underline{B^1}$ $\underline{A}$

3. progressive, in which there is a progression to new material; example of syntactic representation = A B $\underline{C}$ B $\underline{D}$ A B $\underline{E}$

4. strophic, in which a long section of the entire song is repeated with subtypes; examples of syntactic representation = A A B B (iterative strophic); A A B A (reverting strophic)

5. through-composed, with large-scale repetition absent; example of syntactic representation = A B C D E

13 MELODIC STRUCTURE

Certain principles of design are operative in any art form. Although these may be stated in different ways, five key words will help in the investigation of aesthetic forms:

idea
unity
variety
rhythm
climax

The development of any germ idea should strive for balance between unity and variety. Unifying devices utilized to excess cause a listener to over-anticipate, leading to boredom. The opposite state of excessive contrast, while it may attract the listener's attention, results in loss of continuity and robs him of any musical fulfillment.

Variety includes the modification of material as charted in the chapter on phrases, that is, variety through certain compositional devices. In addition to varying material through kinds of repetition, new or episodic material may be introduced for sharper contrast. There can be a complete rhythmic re-organization as well, giving a contrastive pattern to the tension-relaxation scheme while retaining the previous melodic patterns.

'Form' gives unity and variety to the whole, and within it, the climax may be defined as a musical event uniquely anticipated. Every pattern contained in the whole contributes logically to the anticipation of the next event until a conclusion is reached which satisfies emotionally, intellectually, and aesthetically. This satisfaction is

experienced only by those who understand the particular music system, either subjectively (as by those born into the system) or objectively (as by the analyst).

14 RHYTHM IN MELODY

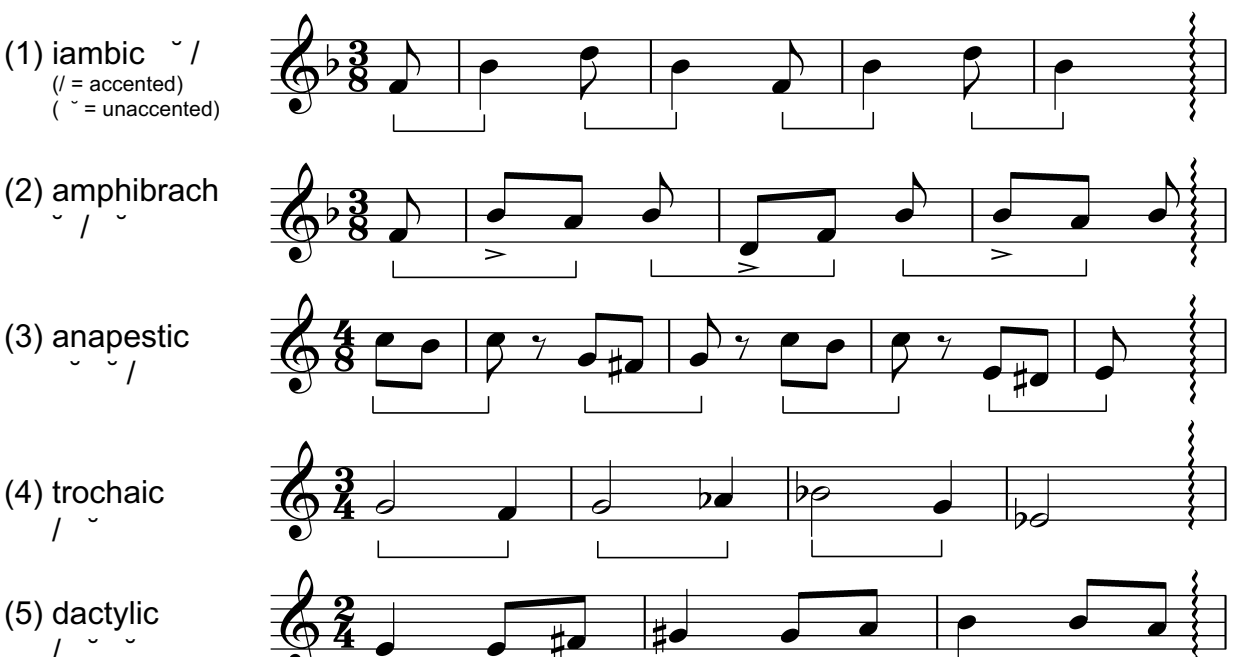
Rhythm is the organization of time units. Every melody has rhythmic as well as tonal organization, and like tonal elements, rhythmic elements build into larger units, each part contributing to an integrated whole. Through the four major syntactic progressions of interval, phrase, form and style, the melodic and rhythmic components carry tension-relaxation meaning, which will be discussed later.

All music is based on a series of quasi-equal units in a time continuum. These periodic units are called pulses. In any particular composition, not all pulses are necessarily actuated, but because of their regularity, all of the pulses are anticipated and felt by the listener. A pulse may be actuated as a surge of sound, or as a transition between two sounds or between silence and sound. When a regularly recurring accent is superimposed on the series of pulses, the rhythmic organization is metric. Meter is the measurement of the number of pulses between these regularly recurring accents. (Pulses in a metric context are called “beats” [Cooper et al. 1960:3].) Meter and pulse give unity to the time continuum by establishing a regular temporal pattern.

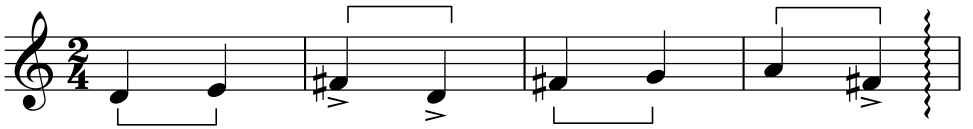
The rhythmic phrase is coincident with the tonal phrase since rhythm is an integral part of melody. Any melodic phrase can be articulated rhythmically by various means. The performer may subtly increase the tempo and decrease it again toward the end of the phrases, thus providing a light pause between phrases without interfering with the overall pulse or metric organization. (At the same time, he may bring, for example, dynamic articulation into play by an increase and subsequent decrease in loudness. Changes in tempo and dynamic articulation, however, need

not be synchronized.) It is characteristic of Western performance for the peak or climax to be emphasized. A performer is said to be “phrasing” when he observes the borders and peaks of phrases. Exaggerated phrasing is the mark of a novice, and can be at once ludicrous and grotesque. Oral traditions often do not articulate a phrase by emphasizing the peak but by emphasizing the borders, bringing the phrase into relief by long terminal notes or by long rests between phrases.

Example 25: Kinds of Rhythmic Feet



(6) spondee / /
and
(7) pyrrhic ˘ ˘



A rhythmic phrase, like a tonal phrase, may be defined as having one primary accent. This corresponds to a measure or a “foot” in poetry. However, the analyst must guard against expecting to find meter in oral traditions. If song texts in oral traditions are not metrical poetry, their phrases must not be forced into measures when the music is transcribed.

In musical meter, the primary accent is the beginning of a measure. This primary accent is written immediately following the bar line. A primary accent that begins a rhythmic foot is called a "thesis" (see Example 25, numbers 4-7); an unaccented beat that begins a foot is called an "anacrusis" (see Example 25, numbers 1-3). All other rhythm groups are multiples or combinations of these. Spondee and pyrrhic are perhaps more characteristic of pulse than of meter.

Regular meter is called isometric, and irregular or mixed meters are heterometric.

Every melodic phrase is, at the same time, a rhythm phrase. Thus, in a melodic line a rhythm phrase is the melodic rhythm of the phrase. It includes duration of the pitches and rhythmic structure of the motifs.

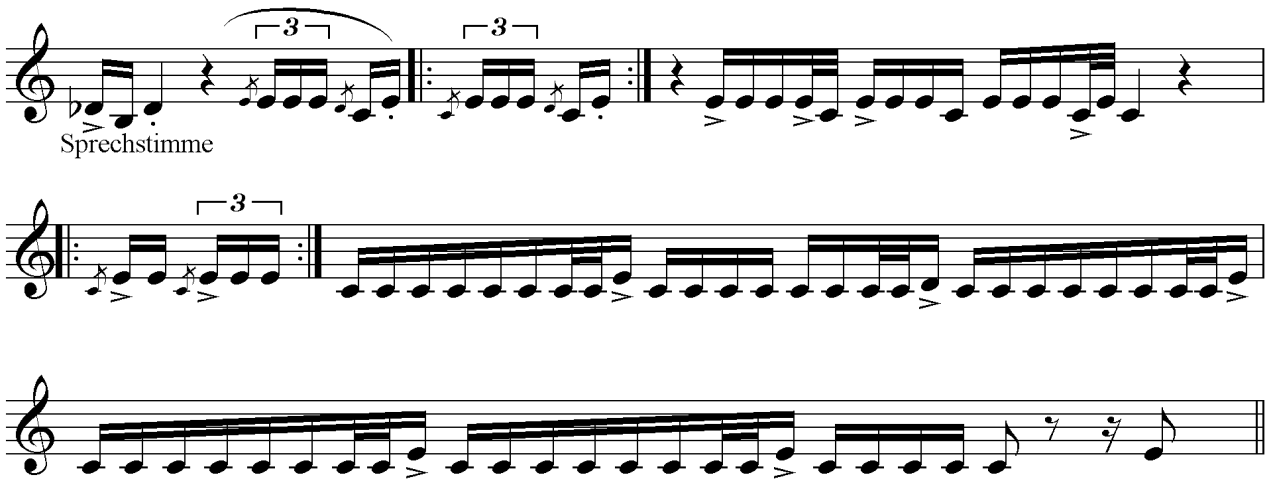
14 RHYTHM IN MELODY

Characteristic rhythm patterns are often a factor more unifying than the pitches of a melody. This is the more apparent in a song where melodic rhythm is dictated by words. It is musical grammar superimposed upon verbal grammar that makes song transcend speech. This musical grammar has a “life” of its own. It is the nature of song to enhance the words, and one means is by declamatory reinforcement. Every feature of melodic and rhythmic structure can and should be considered: pulse, accent, phrasing and motifs, plus any other musical features that are the counterparts of intonation in speech. (Strangely, the pitches of individual syllables in a tone language rarely match the melodic pitches in song.)

Song lifts speech out of the realm of ordinary expression. It is conceivable that phonological features of speech broadened into a resonant chant when feelings were intense and developed at a later stage into stylized melody.

When words are paramount, as in a liturgical setting, melody is kept simple. To even partially synchronize musical intervals with those spoken is to approach a recitative style not far removed from ordinary speech. Recitative styles have a purpose if the composer wants to deliver a message to the audience, to narrate or to inform. It is frequently used in oratorio, opera, and the like to make the plot explicit. Juxtaposed to music that is not in a spoken-style, it interrupts the illusion, halts the imagination, and causes a shift of focus not unlike a TV commercial in the midst of a play. *Sprechstimme* is a dramatic style of recitation in which the tonal contours of speech are employed in exaggeration. The term means literally "spoken-style” and is found in oral tradition as well as in the twentieth century works of European composers. A Duna war leader excites men to battle with the recitation in Example 26 (Chenoweth 1969:229):

Example 26



Simplicity of melody is of great consequence whenever the words are considered to be of supreme importance, as in liturgical and ceremonial music. Here the intervals tend to be small, the melodic compass narrow, and the rhythm no more elaborate than the words themselves; no excess in any of the music constituents is allowed to detract from the words, particularly rhythm.

To summarize, melody does not exist apart from rhythm but incorporates it, and basic rhythmic organization may be by pulse or meter. It is suspected that some characteristics of rhythm may be universal: for instance, the variation of tempo and the predominance of duple rhythms in meter developed by pre-literate societies. However, motival development and accompanimental rhythms vary considerably

from one culture to another. Triple rhythms are sophisticated and rarely found in oral traditions that have not had contact with the metrical music of other cultures. Pulse rhythms are generally found in vocal styles while the metrical is characteristic of dance styles. A true song style which purposes to enhance the words of the text will not allow an accompanimental rhythm to overcome the melodic rhythm resulting from the text.

* * * * *

14 RHYTHM IN MELODY

The grammar of any melodic analysis should include:

(1) A summary of emic pitch syntax, including statistics that demonstrate their prevalence and versatility of pitches.

(2) A description of the tonality of each song and the syntactic relationship between the tonal center and all other pitches. It is suggested that phrase boundaries be identified first; afterward the tonal center/s should be defined and a formula made for each song.

(3) A description of melodic structure, with attention to compositional devices, phrase structuring, rhythmic characteristics, and song form.

(4) A discussion of structural styles within the system. Songs with the same formula potential often help to determine styles within the system.

It is not presumed that these procedures will exhaust the possibilities of description for any one melodic system; however, they are essential to any generative description.

PART IV

SEMANTICS OF MUSIC

15 SEMANTICS

Response to music varies greatly from one person to the next. Some responses depend upon familiarity with the culture and its music system. Other responses hinge upon the degree to which an individual receives musical stimuli. But response to music is not the same as music's import. Whether we respond to a musical work negatively or affirmatively, or whether we respond at all, does not determine music's significance. But as members of a culture and subculture, we tend to bestow a kind of meaning upon music that is not inherent in the music. We will call these areas of musical meaning “semantics.”

Musical semantics will be discussed from four viewpoints:
(1) biological, (2) declamatory, (3) designative, and (4) structural.

Biological Meaning

Music's biological meaning is responded to through identification with various bodily rhythms and responses. Although rhythm is the dominant factor in music's biological meaning, other factors such as dynamics and tonal contours also influence physical response to and conception of music. Haste, dexterity, and drive - these are the unsettled attitudes that a fast tempo can project; they are intensified with an increase in volume. Slower tempi, on the other hand, tend to reflect the more settled attitudes of melancholy, meditation, weariness, and the like; the dynamic level, this time decreased, emphasizes calm.

15 SEMANTICS

An average tempo approximates a walking tempo (*andante* in Western music). Perhaps it is basic - conscious of it or not - to associate tempo with gaits. The sounds of gaits are probably the first measured pulse heard by the human ear. While there are other physiological pulses that are automatic, they are not always audible. Footsteps are; and any deviation from a normal walking gait obtains a response.

Mere imitational sound is not music, but music may be composed which utilizes such imitations. Sounds may be “musical,” but to become “music,” sounds must be incorporated into the invention of a balanced design that is repeatable in form. Music employing imitations from nature is called referential music. Even in sophisticated, written traditions, such sounds in nature have inspired composers, but reference to the source is made so subtly within the formal structuring that the imitations are not in themselves evident except as impressions. Program music designed for children's narratives, background music for animated cartoons, and the like may be deliberately imitative. It is worth noting that melodic contours may approximate human cries, exclamations, wailing, sobbing, and so forth without directly imitating their reality. They are only suggested by the rise and fall of pitches, by the shape of phrases, by melisma, or by abrupt interruption of established patterns. Any deviation from patterns established as the norm signals the listener to respond differently. In the case of song, the text may more precisely interpret what the response should be. In investigating the vocal and instrumental musical characteristics of any people, it may prove valuable to seek out the linguistic features which signal various attitudes and feelings, although little has been written about transferring intonation and style from speech to music. Cultures have much in common paralinguistically and intonationally; all know angry shouts, arguments, joyful exclamations, surprise, and shock. These can be projected without actually

depicting or imitating their reality. An increase in volume may signal strong emotion, and so may the deviation from an established rhythmic pattern.

Rhythm has a physiological basis. We are rhythmic creatures, and our sustaining bodily functions consist of many rhythmic pulses - the heartbeat, blinking, breathing, and so on. Our normal gaits are duple; in fact, man has no natural rhythm that is triple. A gait in triple rhythm thus signals something apart from the normal, such as skipping or dancing, and is usually associated with gaiety. However, triple rhythm can take on a serious nature in a slow tempo. A skipping gait decreased in tempo to where balance is unreliable suggests another mood entirely, not gaiety but a heaviness, weariness, a crippled gait with loss of well being, perhaps with pain. It is fashionable in some circles to regard as naive the “step-motifs” Schweitzer attributes to Bach's thinking, and yet they seem to answer some questions pertaining to the import of rhythmic motifs in the history of music.

Voice quality and manner of performance also are related to biological response. In Papua New Guinea, a vocal vibrato is in some areas employed only in wailing songs, where the voice tends to quiver emotionally in response to death and grief.

Any reader desirous of statistics on biological response to music will want to peruse case histories of music therapy or the controlled experiments in children's behavioral response to music. Of all the categories of meaning in music, biological meaning comes closest to being a universal.

Declamatory Meaning

Declamatory meaning is dependent upon a text. It may be considered in some sense biological - even as speech is - but it merits some discussion on its own due to its importance in composing music to words.

Speech intonation reflects a speaker's emotion, and musical declamation enhances or emphasizes the words of song by the reinforcement of the intonational features and rhythm of the words. Declamatory meaning is rightly the meaning of the text to which it is bound.

As a category of meaning, then, declamation is limited to the vocal, and seeks to reinforce a specific text while adhering to word accent (agogic, tonic, or dynamic), phrase boundaries, and some semblance of intonational contour. However syllabic pitch is more often than not abandoned, otherwise song would be reduced to nothing more than resonant speech. And since biological meaning is not lexical, but encompasses a range of meanings to which there is physical response identifiable with certain physical stimuli, a song has both declamatory and biological meaning. Even for those who do not understand music's structure, a biological and declamatory response is probable.

Designative Meaning

Designative or associative meaning refers to the connotation of music in relation to certain events. Ethnic cultures keep these styles separate without conscious effort. Tradition dictates. The relation between the style and what it designates are as inseparable in meaning as form and content, that is, until the event

itself ceases to be significant. No Usarufa, for instance, would conceive of combining the musical style of fight songs with garden magic rites. It would be a cultural incongruity. Once a culture for any reason resorts to incongruity between style and the style's original purpose, designative meaning is partially destroyed. By the same token, jumbling styles with texts that by tradition or physiological response are inappropriate to a given meaning creates the dilemma of trying to receive two contradictory stimuli. A decision must be made to respond in favor of one or the other. In the case of music where musical style and text are at cross-purposes, the listener receives only one as a stimulus for response. If he chooses to respond to the text and/or designative meaning which it implies, and looks upon the musical style as a mere background adding a hint of color to the occasion, he has become a passive listener, and his capacity for understanding music has been forfeited.

Tone color has some designative meaning, such as the timbre of a military band, but it is doubtful whether the quantitative reinforcement of a feature contributes to meaning. The question here is whether meaning is more affected by three singers in unison than by only a solo voice rendering the same song.

Designative meaning is found in styles associated with various cultural activities, and the number and types differ with each culture. Religious music is designative in nearly all cultures in order to distinguish it from the mundane. Music that connotes a fiesta bears designative features different from the religious style, for example. It would not suffice to perform a victory dance in the soft dynamics of a lullaby, unless the purpose is to contradict the joyful celebration of victory, as when preoccupied with those killed in the fighting. Non-literate cultures in the author's experience tend to be straightforward, rarely expressing in music mixed emotions.

Designative meaning, then, is acquired through tradition. “Anything acquires meaning if it is connected with or indicates or refers to something beyond itself so that its full nature points to an end revealed in that connection” (Meyer 1956:35). For some, meaning in music is no more than connotative meaning along with the physiological response, which is involuntary.

The multitudinous and ineffable variables within a musical composition free it for artistic interpretation. By his performance an artist tells the audience what he understands of the music's import. And while music's import is never fixed (Langer 1953:31), in homogeneous cultures the stylistic aspect of music may in fact have a fixed connotation.

Structural Meaning

Music's profundity lies in the musical structuring of an idea. While all people respond in some degree to biological, declamatory, and associative meaning in music, true understanding of what the composer hopes to convey is possible only in terms of structural understanding.

Structure and meaning cannot be divorced. Langer speaks of the structure-meaning composite as “significant form” (1942:174-208). Meyer states that the internal structuring of music has “absolute” meaning operating within a closed system (1956:22-42). One of the most difficult endeavors in ethnomusicology is to discover this structural meaning in an oral tradition.

The tension-relaxation principle in music is the key to internal structure's meaning. Langer names the same principle “tension-resolution” (1953:137), while

Meyer terms it “tendency-resolution” or “stimuli-consequent” (1956:22-42). The former term in each case refers to the development of the form by manipulating all its components in such a way that they anticipate a fulfillment. In other words, patterns are established on all levels of composition by a tension-relaxation grouping of intervals, rhythmic motifs and phrases, and any larger units. The composer manipulates, develops, or distorts the tension to any degree he feels necessary to the fulfillment of the expectation. The highest degree of expectation in a composition, brought about by the greatest build-up of tension, is the music's climax.

For music to be an aesthetically fulfilling whole, its tensions must resolve. This does not exclude postponing resolution to achieve suspense or any other special effect, but simply emphasizes the fact that it is this tension-relaxation principle that gives direction to a musical composition. Whatever the overall plan of a composition, it is crucial to maintain balance and so avoid excess in either tension or resolution.

Any investigation of music discloses some manifestation of the tension-relaxation principle. It is in evidence in any progression of dissonance to consonance, in displacement of rhythmic accent; there is evidence of it even in the simple melodic framework of some oral traditions, even if it is no more than a deviation from and return to a given tonal center. Potential applications of the principle are as infinite as music itself, but one common use of it for heightened effect prior to a climax is to fragment the established patterns and rebuild them at the resolution point. Contemporary Western composers frequently resort to a fragmentation of a theme and its development, withholding the complete statement of the theme for a climax that has more impact for not having been heard in any previous passage.

Larger formal units of musical composition are: idea - development - climax

For special effect, the order may be reversed or mixed. Two climaxes in one work are not equal in import, even if similarly anticipated; the second is an anti-climax once the pattern of preparation has been established.

Established patterns then bring about a norm to which the listener is sensitive, and in varying degrees he detects any changes or deviation from that norm. The greater his sensitivity to the structuring, the more he will respond to any deviation, so that his capacity to register tension development will determine the extent of climactic impact.

Meyer suggests three responses to an interruption in the patterning expected by listeners (1956:29):

(1) They postpone their expectations.

(2) They are frustrated or irritated.

(3) They register it as satire or humor.

Meyer differentiates between embodied meaning and designative meaning. The first is a product of expectation and refers to something like itself. Designative meaning, on the other hand, refers to something unlike itself and is outside the system. Langer holds that embodied meaning is music's significant form, “unhampered by any fixed, literal meaning”. She maintains that music is truer to feelings than speech because of this ambivalence of content. She prefers the term “import” to “meaning” in reference to music since music has no fixed vocabulary but is a psychological language of feelings taking its inspiration and model from without,

but does not stand symbolically for its model (1953:31). At the same time, music has an emotive life of its own, determined by its formal plan or “commanding form” (1953:123).

In summary, music's office is the creation of emotive “life” by means of musical articulation. What is articulated is a quality rather than fixed meaning. This quality is a semblance of life in abstract terms apart from the familiar, discursive terms of the “real world.” Musical meaning does not exist outside of a formal, repeatable plan, and yet music's import is more than just intellectual. Musical meaning at its fullest requires response through all four channels of meaning discussed in this chapter. Biological and designative meanings belong to all members of a culture by heritage. Declamatory and structural meanings are, for the most part, consciously acquired. The great music of any culture is that which satisfies emotionally, intellectually, and aesthetically.

GLOSSARY

anacrusis	an unstressed beat beginning a phrase, an “up-beat”; opposite of *thesis*
antiphonal	alternation of two choruses
augmentation	lengthening of time values, opposite of diminution
conjunct motion	stepwise melodic motion
contraction	variation by subtracting from the original material
diminution	decreasing the length of time values, opposite of augmentation
disjunct motion	melodic progression by intervals of a third or larger
displacement (octave)	variation device by sounding one or more thematic tones an octave higher or lower than their placement in the original statement
expansion	variation by adding to the original material
gamelan	Indonesian orchestra composed primarily of metallophones
generative	the capacity for producing most of the acceptable structures of the system
glottal	obstructing the voice by contracting the glottis, symbolized ʔ
heterometric	having two or more different meters
heterophony	see *texture*
homophonic	see *texture*
incantation	the verbal text sung or spoken in a magic rite
inversion (melodic)	substituting higher for lower tones and vice versa
inversion (real)	the interval remains the same but the direction is opposite (e.g., M3a → M3d)
inversion (tonal)	the transfer of tones into a higher or lower octave, changing both the interval and the direction (e.g., p5a → p4d)
isometric	having the same meter throughout
isorhythmic	audibly pulsating, non-metrical rhythm

melisma, melismatic	an extended melodic passage sung to one syllable
metallophones	metal idiophones whose pitch/es is fixed
monophonic	see *texture*
microtones	intervals smaller than a semitone
ostinato	a clearly defined melodic phrase repeated continuously in the same voice part, usually the bass
portamento	the voice gliding gradually from one tone to the next
responsorial	a vocal style in which leader and chorus alternate
retrograde	reverse motion
sequence (melodic)	the repetition of a short figure in one and the same voice part/s at different pitches, usually at a second above or below
Sprechstimme	speech song
substitution	a compositional device in which a musical element substitutes for another of like kind, as in melodic variation
syntax	serialization, concatenation, continuous line
texture	the horizontal and vertical relationships of musical materials, comparable to the weave of a fabric. There are four basic textures: a. monophonic, a single melodic line b. polyphonic, composed of two or more voices each having individual melodic significance c. homophonic, a single melodic line with harmonic support d. heterophonic, the parts have the same melody but with different melodic and rhythmic variations
thesis	a stressed beat beginning a phrase, the “down-beat”; opposite of *anacrusis*
vibrato	rapid undulation of a pitch

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