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Part 2.
Comparative perspectives

Introduction: dialogue between regional and comparative studies.

After the world centre of ethnomusicology shifted from Germany to the USA in the 1950s, there was a paradigm shift in ethnomusicology. To put it very simply, **comparative studies** were replaced by deep **regional** studies. Regional study (favored by the post-WW2 USA school of ethnomusicology) is a study going into the depths of a culture. We could call this method "vertical study" as well. Ethnomusicologists, who follow this paradigm, try to look at every aspect of a culture. Multiple fieldworks in the same region for long years, learning the local language, living among the members of the society for a lengthy period are some of the methods of getting deep "vertical" knowledge of the whole system of social interaction and music. Such a high standard of requirements to get into the complex system of social and cultural life of any country, region or even village under study, of course, severely limits the quantity of cultures a scholar can study during his lifetime. As a result, most of the scholars, following this paradigm, are experts in very few (often only one) culture or region.

On the other hand, comparative study (widely used by pre-war German and European scholars) was more geographically spread and did not go deep "vertically" into every culture under comparison. We could call this method "horizontal study". Scholars would study and compare several cultures, sometimes from totally different regions of the world and without much knowledge of these cultures. In their studies comparativist scholars would also often rely on already existing materials from cultures they may never have visited (let alone doing long fieldworks or committing themselves to such a task as learning the native languages).

After the paradigm shift in the 1950s, the comparative method was discredited and mostly rejected together with the major part of comparative studies of pre-war Germany. As Tim Rice told me on July 9th, 2001 in Rio de Janeiro, during the ICTM Conference: "the baby was thrown out together with the bath water". The ICTM (International Council for Traditional Music) is the world's biggest and arguably the

most important professional body of experts in traditional music. Symptomatically, one of the important indications of the possible "Comparative comeback" in 21st century ethnomusicology was the Rio de Janeiro ICTM Conference itself, where the first theme was actually dedicated to the state and perspectives of Comparative research in contemporary ethnomusicology. As ethnomusicology learned few lessons from the previous experience (hopefully), the factual basis widened, methodology advanced, and the means of communication became much more sophisticated, and the time for the "new comparative wave" feels right.

Of course, to say that the pre-WW2 German school of comparative ethnomusicology was always based on a "horizontal study" and that the post-WW2 American school of ethnomusicology was alternatively always based on "vertical study" would be a gross oversimplification, although if we use the word "mostly", instead of "always", the generalization will be closer to the reality. We should not forget, however, that there were some very important regional studies (particularly by native ethnomusicologists from East European countries studying their own musical traditions), published before WW2, and there were at least a few wide comparative studies after WW2 as well (for example, Alan Lomax's widely publicized "Folk Song Style and Culture" was possibly the widest ever comparative endeavor in ethnomusicology).

There is not much sense in discussing which of the abovementioned methods is "better". I hope that most of my colleagues would agree that the **method** of any particular study should be naturally connected to the **research goals** of the study. If we want to get a systemic understanding of the social and musical life of a Bolivian mountain village, or a gamelan-centred community musical life on Bali, or an urban society in Northeast Brazil, we need to spend months and years in getting into the details of their social, economic and cultural life, understand their language and feel the flow of their everyday life. We simply cannot fulfill such a task only by going to the library and reading published accounts about this culture, region or country, or even visiting this region on short fieldtrips. On the other hand, if we want to understand the history of development and distribution of, say, woodwind instruments, or any particular scale, or drone polyphony, or personal songs, or lullabies, or many other shared elements of human musical cultures (and it is not easy to name the element that is not shared by at least few cultures), we cannot accomplish this goal by having long fieldworks in one village or one country, learning the language and studying one tradition in amazing depths of details. We will need to conduct a wide comparative study, using all the available resources that sophisticated contemporary libraries provide, and besides try to get as much as possible additional information from a variety of different sources.

Of course, if we still try to compare the regional ("vertical") and comparative ("horizontal") methods, we need to acknowledge that deep regional study is the "backbone" of ethnomusicology, because regional studies can certainly exist without comparative studies, whereas comparative studies totally depend on the number and quality of regional studies. In the case of active comparative studies of the first decades of the development of our discipline (before WW2), there was a quite insufficient basis of regional studies of the world regions for comparative studies. So

the global theories about the general rules of development of human musical cultures, or about the cultural "borrowings" from one culture by another were often based on a mixture of inferior facts and second- and third-hand incomplete information.

Wider regional studies, or studies of a single phenomenon of traditional music make two most promising directions for new comparative research. As usual, these types of pure "wider regional" or "single phenomenon" studies rarely exist in real life. In practice most existing comparative studies combine the elements of both regional and single phenomenon studies. For example, the study of gender relationships in the musical cultures of Mediterranean peoples is aimed at the particular regional entity (Mediterranean region), although it concentrates only on one aspect of musical culture (gender) (see, for example, Magrini, 2003). In the same way, say, a study of traditional polyphony among the Caucasian peoples is regionally specific, and at the same time it concentrates on one aspect of musical language only. Although both of these methods of comparative studies (wide regional studies and cross-cultural studies of a particular phenomenon of traditional music) require major cross-cultural comparative research, they are methodologically quite different.

For example, if we study Georgian traditional music as a part of a ***wide regional*** study of ***Transcaucasian*** musical cultures, we will be dealing with three independent cultures (Georgia, Armenia, Azerbaijan) with major differences between the whole set of important parameters: the languages they speak (Armenians speak Indo-European, Azerbaijanis Turkic, and Georgians the Caucasian family of languages), religions (Azerbaijanis are Moslems, Armenians and Georgians are Christians, although they belong to different denominations of the Christian Church), and musical culture (Georgian singing traditions are overwhelmingly polyphonic, while Armenian and Azerbaijani singing traditions, having a whole set of differences between them, are both monophonic). At the same time, all three cultures, having lived together as neighbors during the millennia (in the case of Armenians and Georgians) or at least a few centuries (Armenians and Georgians with Azerbaijanis), they currently have a whole set of shared cultural elements. For example, there are quite a few shared song melodies, certain types of musical instruments, and similar layers of urban music. Now, if we look at the prospects of regional ethnomusicological study of the ***entire Caucasian region***, then the North Caucasian peoples, languages and religions come into the picture as well. So we will be dealing with the peoples speaking the Indo-European family of languages (Armenians and Ossetians), the Turkic family of languages (Azerbaijanis, Balkarians and Karachaevis), and the Caucasian family of languages (Georgians, Abkhazians, Adighis, Chechens, Ingushes, and Dagestanians). Regarding religion, we will have here a Christian group of peoples, comprising Armenians, Georgians and Ossetians, and the Moslem group of peoples, comprising Azerbaijanis, most of the Abkhazians, Adighis, Balkarians, Karachaevis, Chechens, Ingushes, and Dagestanians. The situation is more complicated as part of the Georgians and Ossetians are Moslems, and part of the Abkhazians are Christian. In terms of musical culture this region can be divided into the group of peoples with a tradition of polyphonic singing (Georgians and all North Caucasian peoples), and peoples with monophonic singing traditions (Armenians and Azerbaijanis). [This kind of regional division was followed, for

example, by the editors of the Garland Encyclopedia of World Music.] At the same time the North Caucasian peoples (irrespective of differences in religions and languages) share the tradition of specific Nart epic songs – very important for most of the peoples of North Caucasia and virtually absent in Transcaucasia.

On the other hand, a research project dedicated to some ***specific phenomenon*** of Georgian traditional musical culture would lead us to totally different regions and cultures of the world. For example, a search for the parallels and the possible roots of Georgian traditional string instruments could lead us to Middle and Central Asian musical cultures; a search for the parallels of the western Georgian yodel would lead us to some isolated regions of the world, including the Alps, Balkans, some north European countries, Central and South Africa and Papua New Guinea. This is hardly surprising, as on one hand the peoples of the world are tied to each other throughout their ethnic history, migration processes, cultural and economical contacts, and on the other hand, faraway cultures without contacts and common origins may share the principles of convergent evolution. As a matter of fact, the main appeal of the comparative study, particularly for the non-professional reader, is that it is aimed either (1) to uncover the concealed historical and pre-historical processes, like ancient migrations, conquests, assimilations and cultural borrowings, or (2) to bring to light the common mechanisms of the development of human cultures and societies.

It is obvious that the comparative cross-cultural, or "horizontal" study of certain phenomena of traditional music does not (and can not) require from the scholar the deep "vertical" knowledge of all compared cultures, but it does require a wide international knowledge of the musical element under study. In a way, wide cross-cultural study requires a deep "vertical" knowledge of this particular musical phenomenon.

Some elements of traditional musical culture are distributed wider throughout different continents than others. That's why different elements of musical culture pose different challenges for the researchers. For example, a worldwide study of the overtone singing tradition, or the scales with augmented seconds (which are confined to relatively few regions of the world) does not require involving as many cultures of the world, as, say, studies of the drone polyphony or the pentatonic scale.

Brief review of comparative studies and ideas

Being among the biggest themes of musicology and ethnomusicology for more than a century, the origins, distribution and typology of traditional vocal polyphony has been discussed by numerous authors in numerous publications. Before we start discussing the comparative prospects of the study of vocal polyphonic traditions in the second part of this book, I would like to bring to the reader's attention a few ideas on the comparative aspect of the study of traditional polyphony. These ideas come from different scholars from different countries, schools and generations, including the founders of ethnomusicology and the younger generation of ethnomusicologists from different regions of the world.

• Czech Ludwik Kuba was possibly the first scholar who suggested (in 1909) that the unusual dissonant singing style in mountainous villages in the Balkans was the remnant of the ancient tradition (see in Messner, 1980).

• Erich Moritz von Hornbostel, Austrian, arguably the most influential scholar in shaping the development of the German school of comparative musicology, expressed the idea about parallels between African and Medieval polyphony and came up with the suggestion of harmonic (European professional) and melodic (African traditional) types of polyphony (Hornbostel, 1928). He also published one of the first articles on non-European polyphony (Hornbostel, 1909).

• Marius Schneider, a student of Hornbostel and the author of the "History of Polyphony" (1934-35), was the only author who specifically researched the problem of the origins of polyphony in the worldwide detailed study of traditional (and in fact, professional as well) polyphony. During his lifelong work on the origins of the phenomenon of polyphony he argued that polyphony reached Europe late, from South-East Asia via the southern parts of Asia and the Caucasus (Schneider, 1940, 1951, 1961, 1969)

• Joseph Yasser noted the correlation of the scale systems and the type of parallelism in polyphony. He wrote about the connections of parallel fourths and fifths with the anhemitonic scales, and parallel thirds with the diatonic scales (Yasser, 1932). This type of correlation of scale system and type of polyphony was later widely accepted as the explanation of sub-Saharan polyphony (see Gerhard Kubik, 1968).

• Siegfried Nadel studied Georgian traditional polyphony and came up with the idea (before Schneider) that Georgian traditional polyphony possibly contributed to the origins of medieval professional polyphony (Nadel, 1933).

• Curt Sachs deciphered the earliest written example of music, recorded on a Sumerian tablet, and came to the conclusion that the recorded music represents an example of polyphonic music (Sachs, 1937).

• Charles Seeger observed interesting parallels between the shape-note books, African-American spirituals and the early European examples of medieval polyphony (Seeger, 1940).

• Hans Hickman came to the conclusion that the ancient Egyptians had a tradition of vocal drone polyphony (Hickman, 1952, 1970).

• Jaap Kunst is the author of one of the best known and one of the most controversial hypotheses in ethnomusicology about the possible links between Balkan and Indonesian secondal singing, as a result of ethnic and cultural contacts between these two regions (Kunst, 1954);

• Yvette Grimaud together with Gilbert Rouget noted the closeness of the polyphonic traditions of the Central African Pygmies and the South African Bushmen (Grimaud & Rouget, 1957).

• Erich Stockman was the author of one of the first comparative research articles involving Albanian and Georgian polyphonic songs (Stockman, 1957).

• Paul Collaer studied European polyphonic traditions and came to the conclusion that European professional polyphony came to life as a result of the impulses from the ancient vocal polyphony of European peoples (Collaer, 1960);

• Bruno Nettl discussed the available information of polyphony among North American Indians and suggested that the scattered elements of drone polyphony could indicate that (1) these isolated pockets of polyphony were remnants of the earlier wider distribution of polyphonic singing, or (2) that North American Indians were on the verge of developing their own polyphony from an initial monophonic tradition (Nettl, 1961).

• Oscar Elschek conducted a comparative study of European polyphonic traditions. He distinguished six main areas (east Slavs, Carpathian area, Alps, Mediterranean area (the Balkans, Sardinia, Portugal), the Caucasus and Iceland), and came to the conclusion that polyphony is not an European phenomenon (Elschek, 1963)

• Alan Lomax, director and the main force behind the "Cantometric" project, wrote about the particular importance of social cohesiveness and the absence of male domination for the societies that practice polyphonic singing (Lomax, 1968). He considered the West European polyphonic traditions to be an ancient survival that survived in mountains, islands, and generally, "on the fringes of Western Europe" (Lomax, 1971:236).

• Anne Draffkorn Kilmer suggested that the examples of ancient music from Ancient Mesopotamia, recorded on fired clay, represented polyphonic (instrumental) music (Kilmer, 1971, 1974)

• Alica Elschekova conducted a comparative study of vocal polyphonic tradition in the Balkans and the Carpathians (Elschekova, 1981).

• Gerald Florian Messner studied some polyphonic traditions of the Balkans, Indonesia and the Pacific region and published a book dedicated to Bulgarian diaphony, with a wider look at the phenomenon of secondal dissonant singing (Messner, 1980).

• William H. Tallmadge, an expert of Baptist Hymnody in the USA, attempted to explain the origins of folk polyphony ("folk organum") from monophony, using mostly examples of contemporary congregation singing (Tallmadge, 1984).

• Kwabena Nketia studied many local traditions of sub-Saharan Africa and wrote about the importance of the "secondary" materials not gathered by a researcher in a field: "…it is impossible for any single individual to undertake fieldwork that covers the whole of a country or region (let alone the whole of Africa), one cannot but use data from secondary sources, including unpublished materials at radio stations, ministries, and departments of information. The last often maintain an archive of photographs that cover musical events, performers, and musical instruments" (Nketia, 1998:28).

• Rudolf Brandl expressed doubts about the ancient origins of secondal polyphony and suggested that vocal drone could have arisen under the influence of the instrumental drone (Brandl, 1989, 2005)

• Ernst Emsheimer, with his characteristic careful approach to the problems, wrote about European polyphonic traditions, stressing mostly the difference between the isolated traditions from different European regions and suggested that generally there are no connections between vocal and instrumental forms of polyphony (Emsheimer, 1964).

- Edith Gerson-Kiwi (Israel) discussed the possible historical links between the polyphony of the Samaritans and Syrian church organum: "The question is still open whether a connection can be established with the great Caucasian centre of folk polyphonies *via* Syria, where we also have some folkloristic sources for the present practice of Organum singing in the Christian-Syrian churches." (Gerson-Kiwi, 1980:78).
- Cvjetko Rihtman is often credited as being one of the first to note that the polyphonic traditions of the Balkan peoples must be a survival of a very ancient common singing culture (Rihtman, 1958, 1966).
- Nikolai Kaufman independently arrived at a similar conclusion that polyphonic traditions are a survival of the very ancient common singing culture of the Balkan peoples (possibly Illyrian tribes. Kaufman, 1966)
- Gerhard Kubik from Austria has been one of the most active researchers of sub-Saharan African polyphony, and his theory about the link between scale structures and vocal polyphony (Kubik, 1968, 1986, 1988) in sub-Saharan Africa is generally accepted.
- Simha Arom worked extensively with the Pygmies and he is best known for his innovative recording methodology for polyphonic music (Arom, 1991). Arom established the first international research body of traditional vocal polyphony (in Paris).
- Karl Brambats, discussing the polyphonic traditions of the Baltic peoples, put them into a wide Mediterranean and East European context and agreed with a big group of European scholars about the ancient (possibly pre-Indo-European) roots of the phenomenon of drone polyphony in Europe (Brambats, 1983).
- Martin Boiko studied Baltic polyphonic traditions and suggested direct connections between the polyphonic traditions of the Baltic region and the carriers of specific archaeological cultures (Boiko, 1992).
- Nino Tsitsishvili studied parallels between polyphonic traditions and some elements of the ethnography of Georgians and South Slavs (Tsitsishvili, 1991). In another study she suggested the presence of Indo-European elements in the drone polyphonic singing of East Georgian table songs (Tsitsishvili, 1998).
- Bozena Muszkalska studied secondal singing in the Mediterranean region and came to the conclusion that unlike European professional polyphony, where a "maximum purity of intonation" requires a "considerable involvement of the intellect", secondal singing is mostly based on the "intuition and shaped, to a considerable degree, under the impact of emotion" (Muszkalska, 2005:203)

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As is evident from this brief review of published ideas and theories on comparative studies of traditional polyphony, as well as from the review of polyphonic traditions of the world regions from the first part of this book, vocal polyphony is truly an international phenomenon. Different forms of vocal polyphony are present on all the continents and major regions of the world. Besides, with the introduction of the notion of "social polyphony" (which generally means group

singing, not necessarily singing in different parts) it is becoming clear that no human culture is completely devoid of group singing (social polyphony) (Jordania, 2005). We will concentrate on the general human predisposition towards group singing and will discuss the origins of the phenomenon of social polyphony mostly in the third part of this book, together with the problem of the origins of traditional polyphony and other related issues.

The previous part of this book was a regional review of the polyphonic traditions of the world, so I tried to avoid (as much as I could) any comparative endeavors during the review. On the contrary, this chapter is heavily based on the comparative method. So, in this chapter the reader will find discussions of the following topics:

- General methodology of the comparative study of traditions of vocal polyphony;
- Discussion of stable and mobile elements of traditional music and polyphony;
- Traditional polyphony from the perspective of the historical dynamics – the processes of the appearance (or disappearance) of vocal polyphonic traditions;
- Some of the major population migrations in the course of human history and their influence on the distribution of polyphonic traditions;
- Possibility of distinguishing "primary" and "secondary" forms of traditional polyphony,
- Separate cases of the historical studies of some polyphonic traditions, including European drone polyphony, European medieval professional polyphony, East European heterophony, Lithuanian sutartines, Central Asian overtone singing, polyphony of Ainus and Southeast Asian peoples, Nuristan polyphony, Tuareg polyphony, polyphony among American Indians, Polynesian polyphony, discussion of the possibility of vocal polyphony in some extinct civilizations (ancient Middle East and Central America), and elements of archaic vocal polyphony in contemporary pop and rock music.
- The combined cartography of the regions of traditional polyphony and an attempt to distinguish certain "families" of traditional polyphony will be discussed;

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Section 1. Methodological Issues

"They sound so similar", Or how could we compare polyphonic traditions

There was quite an "ethnic-musical shock" in Tbilisi, the capital of Georgia, in the second half of the 1980s, when the USSR Central TV program "Globus" ("The Globe") broadcast a film about the singing traditions of Corsica. Georgians were telephoning each other while the program was still on, urging their friends and relatives to watch the program and to listen to the polyphonic singing that "was not Georgian but sounded exactly like it". A few thousand kilometers away, in the northern part of the USSR, in Sankt Petersburg, at the very same time as the same TV program was still on, ethnomusicologist Igor Macievsky called his colleague, Izaly Zemtsovsky: "Izaly Iosifovich, listen and tell me who are singing now" asked Igor with a pleasant anticipation of a wrong reply from his former teacher and world renowned ethnomusicologist, holding the receiver closer to the TV set. "Sure, these are Georgians, but I am not sure which region of Georgia they are from" came the reply Igor was expecting. In a way, Zemtsovsky's reply was a very good guess, because if you have never heard Corsican polyphonic singing before, and if you know Georgian singing very well, then Corsican polyphonic singing does sound extremely "Georgian". Unfortunately, I myself never saw this particular program about Corsican polyphony. Later I tried to obtain the copy of this program, so after a long search for the phone number of the Central TV officials (which was always problematic in the USSR), I called the program "Globus" of Moscow Central TV Channel and asked them if I could get a copy of that particular program for the Tbilisi State Conservatory archive. I got a sharp reply: "I have already told your colleagues several times that we can not give anyone any copies of any of our programs."

That particular TV program did play at least some positive role in changing the attitudes of some of my colleagues (particularly Georgian colleagues) and friends towards my work. At the time of that historical broadcast, in the second half of the 1980s, I was actively working on a search of vocal polyphonic traditions that were (in my opinion) historically related to Georgian traditional polyphony. In the eyes of some of my friends and colleagues my research had the wrong aim, because Georgian polyphony was considered to be too unique to have close relatives anywhere in the world. "Now that I have listened to that amazing Corsican singing," one of my older musicologist friends told me, "I have started believing you are right – there are some traditions that might be closely related to Georgian polyphonic singing".

A few years later, when "Perestroika" got stronger, the notorious "iron curtain" disappeared and contacts with the western countries became possible for Soviet citizens, I got the recording of that amazing Corsican polyphonic singing tradition. It was very interesting to find out that in fact, Corsican polyphonic singing was on one hand very close to Georgian polyphony, but on the other hand, it was also clear that the Corsican type of polyphonic singing does not exist anywhere in Georgia. Let me

explain this. As the reader may remember from the discussions about Georgian singing traditions, there are generally two – eastern and western Georgian singing styles. The eastern Georgian style is based on richly embellished melodic lines and free rhythm and metre, and western Georgian style is based on non-embellished melodic lines and precise rhythm and metre. These are both ***village*** singing traditions. Besides village traditions, there are two ***urban*** singing styles in Georgia as well – so called "eastern" and "western" styles. The eastern urban style is closely connected to Middle Eastern music with augmented seconds and embellishments, and the western urban style is connected to the European major-minor harmonic system and European-type chords. The Corsican polyphonic style sounded like an interesting combination of eastern Georgian village melodic (embellished) style, mixed with the western Georgian urban (European) harmonic system. Despite the fact that this kind of singing style ("mixture" of the east Georgian village style with the "western" urban style) does not actually exist anywhere in Georgia, the Corsican singing manner, the timbre of their ensemble (male voices only), the open and slightly nasalized sound projection, in combination with the richly embellished melodic lines, was very close to the sound of the East Georgian polyphonic singing tradition. So, strictly speaking, the closeness of Georgian and Corsican polyphonic traditions was based first and foremost on a ***strong audio impression***. At the same time, researching other polyphonic traditions, I came to the conclusion that some other polyphonic traditions (for example, Albanian polyphony from the Balkan region) were ***stylistically*** closer to Georgian polyphony than Corsican polyphony, although they did not sound as similar to the Georgian sound as did Corsican polyphony.

So, here is the question: what should be the basis for comparative research: (1) our audio impressions, or (2) the results of stylistic analyses? Of course, the musical substance is sound, and as the brilliant Russian musicologist B Asafiev declared famously "the criteria by which music is measured is hearing" (Asafiev, 1971:207). Hearing is our first and foremost tool, there is no doubt about that, but we need to remember that our first audio impression can be very strong and very misleading at the same time. As Izaly Zemtsovsky once said to me, the fugue of J.S.Bach, performed on the Kazakh traditional instrument, instantly sounded like a piece of Kazakh traditional music. We must remember that if we want to analyze parallels between different polyphonic traditions, we should rest our research on the appropriate fundament of stylistic analyses of the compared cultures.

I am sure, for most of my colleagues this is something they already know. So, why do I need to repeat here the importance of the stylistic analyses as against the audio impressions? Of course, very few (if any) ethnomusicologists would actually suggest that a comparative study should be based on audio impressions only, but still we should remember that our audio impressions profoundly affect our thinking. That's why we still hear assertions that a certain singing style is "extremely archaic", mostly because it "sounds very archaic". We will discuss some such styles later in this part of the book. Of course, there is nothing wrong in having a strong audio impression about certain singing styles. As a matter of fact, it is very important to have strong audio impressions, but if we want to include our impressions in a scholarly hypothesis, we need to put them through vigorous analyses, using all the available background

information and cross-disciplinary data about the particular carriers of this particular singing style.

The employment of the right method is crucially important for any research. The same is true for the comparative study of polyphonic cultures. The method I am going to employ is very simple. It is based on the specific ***set of stylistic parameters*** of the polyphonic tradition. But before we discuss the all-important set of stylistic parameters for the classification and comparative study of part-singing traditions, we need first of all to discuss whether we can trust music for any kind of diachronic conclusions. So, the next crucial question that we are going to discuss is how deep musical data can go in human history, or simply – how stable is music.

What is more stable: language or music?

To some readers this might sound a silly and "non-scholarly" question. In fact, it is a very serious question, and I remember quite a few discussions of this topic at several ethnomusicological conferences. So, what is more stable: language or music? I guess, for most readers music is one of the unstable elements of human society and culture. According to this opinion, although it might not be exactly clear "how mobile" or "how unstable" is music, we can't go wrong saying that at least language is much more stable than music. "Look at the languages," they would say, "languages come throughout human history and cultures for hundreds and thousands of years. They do not change quickly, they do not follow a fashion, and there are certain rules of very slow changes that languages undergo during the centuries and millennia. And now look at the musical culture and musical styles – they change almost every decade, and different songs travel across the cultures and state borders with an amazing easiness. Of course, language is much more stable than music, no question about this." I guess a big proportion of the linguists will be in this camp.

But this opinion is not the only one on this topic. Now let us listen to another opinion. According to this point of view, music is extremely stable. Again, although it might be difficult to specify exactly how stable music can be, the proponents of this opinion would argue that music is at least much more stable than language. They can name countless examples when people (or part of the people) for different historical (political, economical, migration) reasons lose their language, but still keep alive their musical traditions. "Besides," they would say, "even the most sophisticated linguistic analyses can not go further than four or five thousand years back in human history. Look now at the traditional musical cultures of the world – you can see the musical traditions that come from many more thousand or even tens of thousands of years. Of course, music is much more stable than language, no question about that". At least some ethnomusicologists would agree with this opinion, including myself. For those who would not believe there is something serious behind this bold assertion, I would like to present a couple of brief historical examples of the stability of musical traditions from the cultures I know:

(1) Ossetians live on both sides of the central part of the Caucasian mountain range. They speak the Indo-Iranian language and were considered to be the descendants of the Medieval Indo-Iranian tribe Alans. A study of the physical

features of contemporary Ossetians, Medieval Alans, and the earlier Caucasian population of this region suggested that the Indo-European (Indo-Iranian) Alans in fact did not have much impact on the genetic make-up of the Ossetians (Alexeev, 1974a:197-200). On the other hand there is a clear morphologic continuum between the earlier Caucasian population and contemporary Ossetians. Therefore, the change of language must have occurred without a change of the major part of the indigenous population. Scholars are well aware of such cases when language is lost without the population replacement. The music of the Ossetians, unlike their language, shows a clear relationship with other, indigenous Caucasian populations. This brings us to the conclusion that although the old Ossetian population of the Central Caucasian Mountains lost their language, their musical traditions survived the painful process of their cultural assimilation.

(2) The neighboring Balkarians and Karachaevis represent the same kind of historical story. Both of them speak the Turkic language, are Moslems, and were believed to be the descendants of late medieval Turkic tribes who brought the Turkic language and Moslem religion to the North Caucasus in the 16th-17th centuries. Anthropological surveys of the Balkarian and Karachaevian populations proved that, as in the case of the Ossetians, there has been no serious trace of a genetic relationship between the Balkarians and Karachaevis on one side, and the population of the late medieval Turkic newcomers on the other side. Instead, there is an obvious genetic continuum between the earlier Caucasian population and the Balkarian and Karachaevian populations (Alexeev, 1974a:200-203). This means that the old Caucasian population adopted the new language and religion without being physically replaced by the carriers of this new language and culture. Their music, unlike their language, has not been assimilated in this process. Therefore, the contemporary musical traditions of all North Caucasian peoples, together with their physical morphology, demonstrate the survival of the genetic and cultural unity of the indigenous populations of Caucasia.

(3) Another example of the solid stability of musical traditions could be the Balkan mountainous region. This region is a tapestry of different Indo-European languages, at least two major religions and countless cultural traditions. At the same time, physical anthropologists propose that the populations of the mountainous regions of the Balkans show the obvious signs of (1) morphological unity within the Balkan mountain ranges, and (2) a genetic continuum from the ancient pre-Indo-European population (the so-called “Dinarian” anthropologic type). This ancient “Dinarian” type is the best represented among the populations of southwestern Bulgaria, of northern mountainous Greece, mountain Albania, Macedonia, Serbia, Montenegro, Croatia, Bosnia and Herzegovina. These populations currently have different languages and different religions, which means that new languages and religions spread here without the replacement of the major part of the indigenous population. On the other hand, music also shows clear signs of the ancient unity of all these regions. Drone type of polyphony with specific

frictional (secondal) harmonies is spread throughout virtually the same mountainous regions as the Dinaric physical anthropologic type: southwestern Bulgaria, population of North Greece, mountain (mostly southern) Albania, Macedonia, Serbia, Monte Negro, Croatia, Bosnia and Herzegovina. So, we again witness the change of the languages of the populations in the course of history without major demographic changes. Despite the language change (unquestionably the crucial and the most salient feature of any culture), the ancient unity of the singing traditions on the Dinaric Mountains was preserved throughout the millennia.

Many more examples of the stability of musical language (particularly – the traditions of polyphony) will be discussed in the second and third parts of this book, when we will be analyzing the reasons for the mysterious distribution of the traditions of vocal polyphony on different continents. But I hope that these few examples of the stability of singing traditions are enough at least to put some doubt in the minds of the staunch believers in the non-stable character of music. Yes, despite all these fashion-like kaleidoscope changes of musical styles and popular melodies, there is something extremely stable in musical traditions. This is exactly what we are going to discuss next: what are the stable and mobile elements of traditional musical culture? That's exactly the title of the next section.

What are the stable and mobile elements of musical culture?

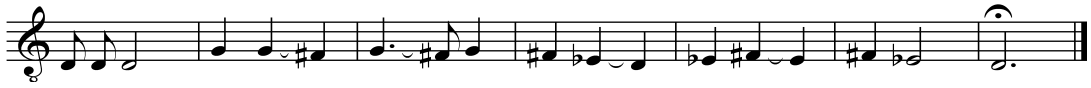
We have just read about a few cases when musical traditions proved to be extremely stable. At the same time we need to always remember that musical tradition, as a complex phenomenon with the whole set of elements, is not a single monolithic unit. Some elements of musical tradition might be more stable than others. As a matter of fact, we should know that although some elements of musical language are unbelievably stable, there are other elements that are extremely unstable. They can easily be lost or obtained, or go traveling across the cultures and territories. For example, song melodies or certain musical instruments can become cross-culturally popular and quickly spread over large territories within a very short period of time. So, melodies can travel, and certainly, musical fashions can change, and still, there are some elements of musical language that are extremely stable. Distinguishing stable and mobile elements is methodologically particularly important, as ***stable elements are the ones we want to rely on for the comparative studies and historical reconstructions***. That's what we are going to do next – try to distinguish stable and mobile elements of musical culture.

To discuss this issue, I would like to present a few not-so-ancient cases of cross-cultural musical contacts, where all the participants and details of these contacts are relatively well known. Let us have a closer look at these cases and see how the cultures "behave" in the process of cross-cultural contacts. These cases might help us to distinguish the mobile and stable elements of traditional musical culture.

(1) "I have lost a little girl" is a typical example of an east Georgian urban song (and by the way, a very popular song in Georgia, so if you happen to be there,

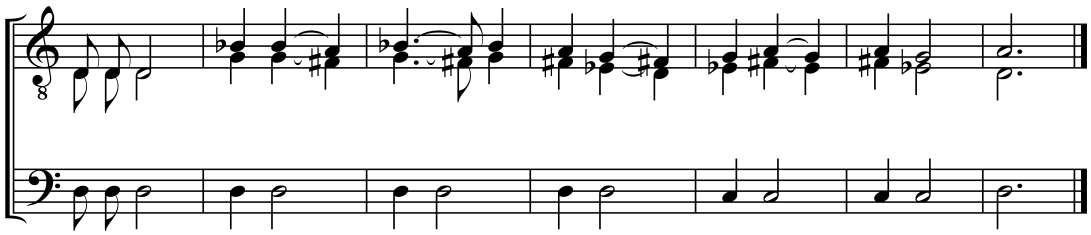
particularly in Tbilisi, at the traditional banquet-like feast, there is a good chance that you'll hear it). The origins of this song are obviously in neighboring Middle Eastern cultures (more specifically – neighboring Armenia and Azerbaijan). This is clearly demonstrated by the specific scale used in this melody, containing an augmented second (totally uncharacteristic for village polyphonic songs in Georgia), and specific melodic embellishments, characteristic of the Middle Eastern singing tradition. Here is this melody:

Fig. 9. Melody of "Patara Gogo", urban song from Tbilisi



Now let us have a look at what has happened to this melody in Georgia. Although the main elements of the melody have remained the same, in Georgia this melody is performed in three-part harmony. Following the principles of Georgian polyphonic tradition, the original monophonic melody is "wrapped" from both sides by two harmonizing parts: (1) another melodic part is singing on top of the main melody (performed by a soloist, mostly following the main melody in parallel thirds, and finishing in a fifth), and (2) the bass part, a slightly moveable drone, performed usually by a group of singers. Now have a look at the same melody in a three-part "Georgian version":

Fig. 10. "Patara Gogo" in three part harmony, as performed in Tbilisi



Let us now analyze what has happened in this case. Nothing particular – this has been happening thousands of times between hundreds of different cultures: the melody from one culture came into another culture and became popular. Every culture has a number of such borrowings. Most importantly for us, during this transition the song has ***undergone certain changes according to the intrinsic rules of the receiving culture***. These "changes" can be quite robust (as in this case, when melody traveled from monophonic to polyphonic culture and "obtained" additional singing parts), or quite subtle (if the cultures are closer to each other – see the next case). So, in this particular case the monophonic melody became polyphonic. It is clear that it's the ***intrinsic rules of Georgian polyphony*** that remained stable. These intrinsic rules are the "grammar" of the musical language, much more stable than the "lexicon" of the language (melodies). In other words we can say that the changeable component for a culture is ***what*** is performed (melodies that can be borrowed from the other cultures), and the stable component is ***how*** it is performed (following the intrinsic rules of the

culture). If we ask questions in this case of the Georgian urban song with the Middle Eastern melody "what are they singing?" and "how are they singing?", the answers will tell us completely different stories about different things. The answer to the first question (***what*** are they singing - a Middle Eastern style melody) is informing us about the migration route of the melody, and possibly about the cultural and economic contacts between Georgia and the Middle East. The answer to the second question (***how*** are they singing - in three parts, with the drone) is informing us about the "main musical grammatical rules" of Georgian music. Every musical culture is able to receive songs and melodies from other cultures, and as soon as the ***intrinsic rules*** of the receiving culture are at work, the newly received melodies will be naturally "absorbed" by the receiving culture. ***It is the tradition of singing in three parts (with the main melody in the middle part and the drone) that is stable in Georgian traditional music.*** This is the way Georgians sing Middle Eastern, Russian, Ukrainian, French, Gypsy, Italian, English and other melodies.

(2) In the next case Georgia is not the "receiver" of the song. Now the song from Georgia traveled a long way to Central Africa. This case is particularly interesting as it involves the interaction of two polyphonic cultures.

In a twist of history a Georgian doctor (physician) was sent by Soviet government to work in Central Africa in the beginning of the 1980s. Apparently being a good amateur singer of Georgian urban songs (which is not unusual for Georgians of totally different professions) and a socially easygoing person, he taught his new African friends a few Georgian urban songs. This was not a case of performing an act of "musical therapy", or at least, an intended case. After the Georgian doctor came back to Georgia, Georgian TV made a documentary program about him and later broadcast this program on Georgian TV. A couple of minutes of the program was a live recording of the singing of three African women, performing the well-known Georgian urban song "Zhuzhuna tsvima movida" [lit: "Sparkly Spring Rain Came"]. Here are the choruses of both the original Georgian version and the Central African versions of the same song [Central African version is transcribed from memory]:

Fig. 11. "Zhuzhuna Tsvima", Georgian urban song, chorus only (original Georgian version)

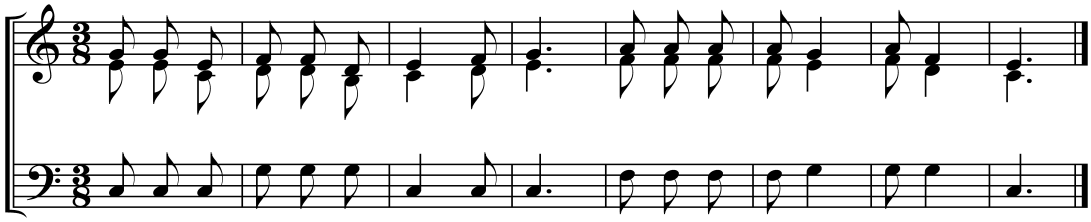
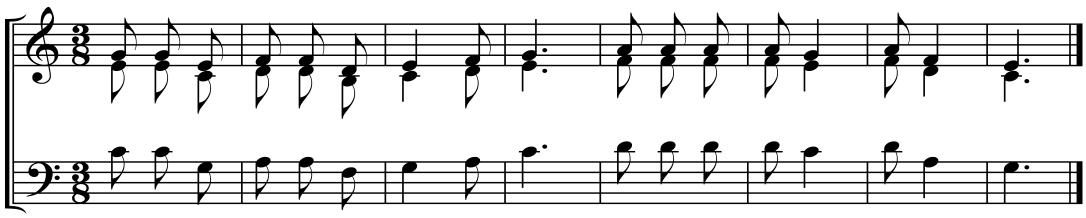


Fig. 12. "Zhuzhuna Tsvima", Georgian urban song, chorus only (Central African version)



Unlike the first case, when we had a monophonic melody absorbed by a polyphonic culture, in this case we have a song from a polyphonic culture (Georgia) absorbed into another polyphonic culture (albeit into a totally different polyphonic culture of sub-Saharan Africa). So the difference between the original and the new African versions (if any) is expected to be subtler. Indeed, the result of the natural "acculturation" of the song is very interesting. Those who can read music please look at the transcriptions of both versions. Two top parts of the original Georgian version of this song are moving in parallel thirds, and as sub-Saharan African traditional polyphony is heavily based on the parallel flow of parts (as you may remember from the first part of this book), the original parallel thirds have been accepted without any change. The bass part was different. In the Georgian version the bass is a functional moveable drone, and it moves quite actively, following the European TSD harmonic system (let us remember this is an urban song). Drone polyphony is not a natural part of the "musical grammar" of sub-Saharan polyphony, so in the African version of this song the original Georgian drone is substituted by a different part, which moves in a **parallel motion together with the two top parts**.

So, again, if we look at ***what*** the Cewntral African women are singing and ***how*** are they singing, the answers to these two questions will tell us completely different things. The answer to the question "***what*** are they singing?" (Georgian urban song) is telling us that there must have been some contacts between the African community and faraway Georgia (in this particular case the contact was very sporadic). The question "***how*** are they singing this song?" is informing us about the main principle of African traditional polyphony – singing in parallel motion of all parts, often in parallel thirds or triads. In this case again, after the song from another culture entered the new environment, it has been ***"absorbed" by the receiving culture according to the intrinsic rules of the receiving culture***. Although I am not aware of many such cases from sub-Saharan Africa, I am pretty sure that most of the songs from different cultures that were absorbed in sub-Saharan African cultures would have undergone somewhat similar changes.

(3) Of course, this kind of borrowing does not necessarily contain Georgian music (as a receiver or as a donor). The next case comprises an interesting interaction of Arab and Polynesian musical cultures. In his letter from the 19th August 1986, one

of the leading experts of Polynesian culture and history, Thor Heyerdahl wrote to me about a very interesting case (in fact, group of cases) when the monophonic songs from Arabian cultures were absorbed by the polyphonic Polynesian culture. Unfortunately, the letter did not contain the musical transcriptions, but fortunately, the description of Heyerdahl is quite eloquent:

"On my visit to Easter Island at the beginning of this year we managed to record on tape a number of choirs performing in three-part harmony, and some of the songs could easily have been mistakes for melodies from the Arabian world, while they were completely different from anything performed elsewhere in Polynesia".

In this case as well, the question ***what*** are Polynesians singing (Arabian style melodies) informs us about the cultural/trade contacts of Polynesians with the faraway Arabian culture, and the question ***how*** are they singing informs us about the intrinsic rules of Polynesian traditional music (singing in three-part harmony). So again, the new melodies and new songs come easily, but they are absorbed and performed according to the ***intrinsic rules*** of the receiving culture.

We have good reason to believe that **contemporary cases of borrowing the new tunes and songs from one to another culture ("absorbing" them through the intrinsic rules of the receiving culture) effectively use the same general strategy that was employed by traditional musical cultures throughout their history.** That's how Ossetians, Balkarians, Karachaevis, and Balkan mountaineers retained their tradition of ancient polyphonic singing through the dynamic periods of Indo-European and Turkic migration waves, often accompanied by the painful processes of language and religion changes.

It is obvious now that the answer to the question ***"what are traditional musicians singing?"*** can be quite mobile and can relatively easily change via cultural contacts. Sometimes very sporadic contacts are enough for bringing new songs and new melodies into a culture. On the contrary, the answer to the question ***"how are the traditional musicians singing?"*** provides much more stable information about the intrinsic principles of their musical culture. Recalling the comparison between the stability of language and music, we may say that "***what***"(specific melodies) is much more unstable than language, but "***how***" ("grammatical rules" of the musical language) is far more stable than language.

Set of stylistic parameters of polyphonic traditions

After we have discussed a few examples of the stability of musical culture, we came to the conclusion that different elements of musical culture behave very differently over time. Some elements can change very easily and quickly through even sporadic contacts with other cultures, but other elements are extraordinarily stable. Of course, both mobile and stable elements convey plenty of information about the culture, but it is the stable elements of the musical language that make the best "comparative tool". Operating with the stable elements will allow us to follow the most chronologically distanced events of ethnic (and possibly even human) history.

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Unfortunately, we cannot distinguish one magic element of music that would give us the clue to the most distanced events of music history (a bit like a mitochondrial DNA that molecular biologists use for the reconstructions of the genetic contacts between early humans). In music these are rather the ***set of elements***, or, I would prefer to say, ***set of stylistic parameters*** of musical language, that we can use for comparative analyses and diachronic reconstructions. As this study is fully dedicated to the study of traditional vocal polyphony, the set of stylistic parameters will be appropriately dealing with the elements of vocal polyphony.

I propose the following five stylistic parameters for the classification and comparative-diachronic study of traditions of vocal polyphony:

1. Type of polyphony
2. Vertical coordination between the parts
3. Social organization of the singing group
4. Scales
5. Rhythm and metre

All five stylistic parameters are easy to distinguish and easy to use in a comparative analysis. This practicality is very important, as a researcher needs to classify a large number of musical examples and transcriptions from different polyphonic cultures. We need also to remember that, unfortunately, the information about different polyphonic styles is not always complete, as not all existing transcriptions provide the fullest possible information. Here is a brief discussion of the strong and weak points of each of the five stylistic parameters:

1. **Type of polyphony.** This parameter is at the top of the list of the set of stylistic parameters not only because it is the main feature element of any polyphonic tradition, but because it also shows a remarkable stability in the course of human history. During the complex ethnic and cultural mixtures and during the migration processes the type of polyphony is more likely to survive (unless there is a considerable change of the indigenous population). The type of polyphony can be a (1) **ostinato** (present in most of the polyphonic traditions, and in some cultures totally dominating, as among Pygmies), (2) **drone** (e.g. as in the Balkans and many other European and some Pacific polyphonic traditions), (3) **parallel polyphony** (particularly widespread in most sub-Saharan African polyphonic traditions), (4) **variant heterophony** (very widely distributed all around the world and particularly important among Eastern Slavs).

2. **Vertical coordination between the parts.** I propose this as the second most important parameter of polyphonic traditions. Polyphonic cultures differ from each other according to the intervals (or chords) they **prefer to hear in their singing**. In other (more

scholarly) words, cultures differ from each other according to the principles of vertical coordination between the parts. We may generally distinguish two main principles of vertical coordination – coordination on **dissonant intervals** (particularly on seconds, as in the Balkan and Caucasian traditions), and coordination on **consonant intervals** (particularly on thirds, fifths, octaves and triads, as in most of sub-Saharan African traditions). There are also cases when the vertical coordination between the parts (intervals and chords) is mostly a result of the free development of melodic variants (dissonant clashes in variant heterophony).

3. **Social organization of the singing group.** Without going into the very interesting and important subtleties of the interrelationships between the parts and singers within a traditional singing group in different cultures (which could be a good topic for a separate big-scale research), in this book this parameter concentrates simply on the ***number of the singers of each part in a polyphonic texture***. Which part/parts are performed by the **individual singer** and which part/parts are performed by a **group of singers**? There are cases when the groups of singers perform all the parts. In other cases the individual performers perform most of the parts, and the big group performs only one part (this occurs in the majority of cases in polyphonic cultures). And finally, there could be cases where individual performers perform all the parts. Although gender differences are another very important part of the social organization of many polyphonic traditions (also a good topic for separate research), the gender aspect will only get a limited attention in our classification.

4. **Scales.** Traditional polyphonic singing uses different types of scales: diatonic, pentatonic, tetratonic, hexatonic, tetrachordal, pentachordal etc. As if this is not enough, each of these scales might contain a few subtypes as well (e.g. pentatonic can be minor, major, or neutral; it can also be without a half tone, or with a half tone, etc.). We will have a special look at the diatonic scale systems based on the use of perfect octaves, perfect fourths, and perfect fifths (creating accordingly the scales systems of the octave diatonic, fourths diatonic, and the fifths diatonic). This parameter (scales) is the most technical, and I'll do my best to give simple explanations in the text to the non-professional readers.

5. **Rhythm and metre.** The rhythmic and metric nature of the music is easier for a non-professional reader to understand than the system of scales. Polyphonic traditions use all the varieties of the existing metres: simple duple and triple metres, array of complex metres, and

> the free metre. The polyphonic nature of music, which requires rhythmically well-coordinated and coherent singing, naturally favors more simple repetitive rhythms (for example, simple duple rhythm dominates sub-Saharan African and western Georgian polyphonic singing traditions). Interesting cases of the polyphonic traditions with a free metre will be analyzed later in the chapter.

All parameters of this five-unit set are **fundamentally important** for the musical language of each polyphonic tradition, although their importance for **comparative research is not equal** (at lest, in this study). The reason for this is the difference in **stability** and the **availability** of the information on different parameters. Some of the parameters seem to be extremely stable (e.g. type of polyphony, or the vertical coordination between the parts), and the information about them is more readily available from the existing transcriptions. Some of the other parameters seem to be more flexible and mobile even within the obviously related polyphonic traditions (e.g. different pentatonic, tetratonic, hexatonic and even diatonic scale systems can all be present in related polyphonic cultures). At other times the information on some parameters is not available from the existing transcriptions (e.g. it is not always indicated in transcriptions and the accompanying notes how many of the singers are singing different parts). Therefore, some parameters are naturally better suited for comparative research than others. As a result, among these five parameters I rely heavily on the first two parameters (type of polyphony and vertical coordination between the parts), as the most stable and readily available parameters for the comparative research of polyphonic traditions.

The third parameter (social organization of the singing group, or shortly – social organization) is the next in line for its importance for comparative studies (at last in this research). Social organization of the singing group seems to be a very stable parameter. For example, for the major part of European polyphonic cultures on one side, and sub-Saharan polyphonic traditions on the other side, the stable models of the social organization of the singing group are used. At the same time, the social organization of the singing group can use different social models within the same culture. For example, in Georgian culture some songs are performed by the large group (the group always sings a bass part in unison, never the melodic parts), while some western Georgian songs are performed by individual performers for each part. Unfortunately, transcribed music does not always contain the information about this important factor, so it is not always clear which part of the polyphonic texture is performed solo, and which part is performed by the group of singers.

Unlike the first three parameters (type of polyphony, vertical coordination, and social organization), which are **specifically connected to polyphonic cultures**, the last two parameters (scale and rhythm) are not specifically connected to polyphonic music. Scales are very important as the universal "building pitch blocks" of every musical culture, both polyphonic and monophonic. As a matter of fact, one of the strongest impulses for the development of ethnomusicology was the introduction of the universal interval-measuring system in cents for measuring different scales from different cultures (1 cent equals 1/100 of a semitone) in 1884 by A. Ellis. Despite their

obvious importance for the musical language, there are at least two inconveniences for using specific scales in comparative research:

(1) Some scales are so widely distributed that it does not make much sense to use them as culture markers. For example, the anhemitonic pentatonic scale is spread through huge territories of all continents (both in monophonic and polyphonic cultures), so, for example, noting that the Chinese and Scottish use the same scale in their traditional music, does not mean that there have been any specific historical connections between them. The same scale is used in many traditions of sub-Saharan Africa and South America. Another group of more specific scales, known as scales of octave, fourth and fifth diatonic, are more culture-specific and more suitable for comparative studies.

(2) Another inconvenience is that closely related cultures (or even within the same culture) sometimes use different scales. For example, among the sub-Saharan African cultures, obviously connected to each other, some traditional cultures are based on tetratonic, some pentatonic, some hexatonic and some diatonic scale systems, and some use more than one scale.

The rhythm and metre are also universally important for both monophonic and polyphonic cultures, as the "building blocks of timing". Like scales, some rhythms are also spread too widely through different continents to be helpful in comparative research of polyphonic studies. For example, simple duple and triple rhythms are actively used in a huge number of musical cultures all over the world. Another, more specific example is the use of rhythmic formulas, and indeed, some of the comparative research even has been done relying on certain rhythmic formulas only (for example, see Zemtsovsky, 1990). As a general tendency, we may say that polyphonic cultures mostly tend to use simple and precise rhythms, although this can by no means be considered a rule (for example, Balkans are the obvious, and not the only exception).

Therefore, as we can see, **most of the comparative research presented in this book is based on specific parameters, connected to the polyphonic texture**.

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So, we have discussed the general methodology of the comparative study of polyphonic traditions, then became witnesses of the amazing stability of musical traditions (and particularly – the stability of polyphonic traditions), then had a look at a few cases of borrowing particular songs and discussed the mobile and stable elements of musical cultures. We have also discussed the importance of different parameters of the polyphonic texture for comparative analyses, and finally, we have established the set of all-important parameters that are going to guide us through the comparative generalizations of polyphonic cultures. So, we are ready to move on.

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Section 2. Practical Issues

Regions, Styles, Peoples, Migrations: Historical Dynamics and Comparative Perspectives

I consider this section the most important for the general idea of this study. Of course, the issues, discussed in the third part of this book (origins of choral singing, intertwined with the origins of human intelligence, language and speech) are much wider and should be naturally considered more important, but this part is the main historical "engine" for the suggested model of the origins of vocal polyphony.

For the sake of a clearer picture of our goals and conclusions in every stage, I organized the different issues connected to the traditional polyphony into separate "case studies". Some case studies are dedicated to the specific and unique polyphonic tradition (like the case study on Ainu polyphony, or overtone singing, or Lithuanian "sutartines"), but some are wider and include discussions of more general methodological issues (like the cases on the importance of Indo-European migrations in establishing the stratification of European polyphonic cultures, or the case study of the historical dynamics of the appearance and/or disappearance of polyphonic traditions, or the case study of the emergence of European professional polyphony).

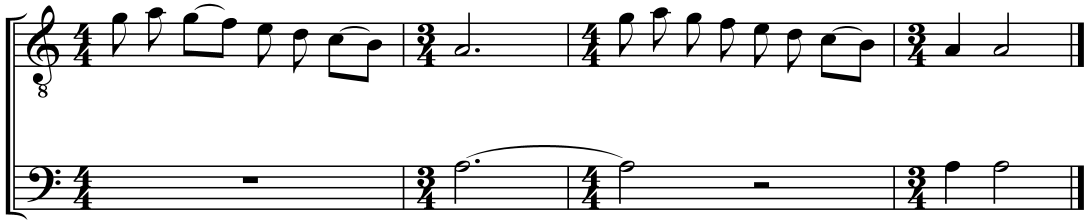
Case Study #1
What has happened to the vocal polyphony in Khevsureti?

Khevsureti is a tiny region in the mountainous eastern Georgia. If the reader goes back and has a look at the ethnographic map of Georgia, it is easy to see how small it is. I am not even sure the readers would remember that I have mentioned Khevsureti in the discussion of Georgian polyphony. The whole of Khevsureti is just about a dozen small villages between the spectacular Caucasian mountains. However, the discussion about Khevsureti had a profound role in the discussions of Georgian ethnomusicologists about the origins of Georgian polyphony. Let me explain why:

Starting from the publications of Araqishvili, and later Chkhikvadze and Aslanishvili, Khevsureti was always considered a case of the most archaic layers of Georgian traditional music and polyphony (Araqishvili, 1905; Chkhikvadze, 1948; Aslanishvili, 1954). The singing style in Khevsureti represents more of a loud (actually, extremely loud!) declamation of poetry, and regarding the music this is always the same falling phrase, starting from the highest point of a melody and going down to the very bottom (usually within a seventh). Polyphony is nominally present in Khevsureti. More precisely, only the meager remnants of the two-part round dance ("perkhisa") were recorded in the 1930s. I was not able to record "Perkhisa" during my two visits to almost all villages of Khevsureti in 1982 and 1986. Only the information about this dieing tradition was recorded. Discussions about the song "Thursday has come" became particularly prominent in Georgian ethnomusicology. In this song the main melody (as I mentioned, always the same falling melody) is joined

at the very end by a few singers as a drone, and the drone is maintained as the next phrase is starting.

Ex. 97. "Khutshabats Gatendebao" (Chkhikvadze, 1960:12)



According to the common belief of Georgian ethnomusicologists, this song is particularly important in the context of the emergence of polyphony in Georgian music. A solo melody, joined casually by the co-singers at the very end of the musical phrase, looks like the most natural way of joining a group with the soloist. Most importantly, when the new phrase starts in this song, the single note drone is still sounding, thus creating the most archaic, or even "primordial" kind of drone polyphony. Most importantly, the singing style itself in Khevsureti sounds incredibly archaic – a very loud, actually a shouting declamation of poetry without any serious commitment to any particular scale (although in some versions of this common falling Khevsurian melody the features of the minor pentatonic scale are evident).

In discussions of Georgian ethnomusicologists Khevsureti was the only alternative to Svaneti, another high mountainous region in western Georgia, as the contestant for the position of the "most archaic dialectal area" of Georgia. Svaneti was always known among ethnographers for its incredibly archaic elements of material and non-material culture (I mentioned them in the first part of this book, in a section about Georgia). The only suspicion for the archaic nature of Svanetian traditional music was caused by the Svanetian polyphony itself – unlike the Khevsurian singing, where there are only meager elements of two-part polyphony, in Svaneti the tradition of three-part singing with sharp dissonant chords, exhilarating round dances and the scales of fifths diatonic thrives. So, if Svanetian polyphony has a well-established three-part structure, Khevsurian polyphony seemed to be at the very "origins" of the polyphonic singing tradition of Georgian tribes.

In the second part of the 1980s a particularly interesting new phase of the discussion about Khevsureti started. Not going into detail of this discussion, I want to mention that the discussion was centered round the possibility of so-called "secondary archaism" in Khevsureti ethnography, religion, and culture. Zurab Kiknadze, head of the Tbilisi University department of Georgian traditional poetry, was the main proponent of the idea of "secondary archaism" in Khevsureti. He argued that some of the most archaic elements of Khevsureti culture were in fact not an ancient survival, but the result of a degradation of the higher forms of culture. This idea caused a major controversy and long published and unpublished debates among Georgian scholars. My research of Khevsureti musical traditions brought me to multifactorial analyses of

this question. I approached Khevsureti musical traditions from different sides and tried to check it by the set of archaic elements of musical culture accepted among Georgian ethnomusicologists. A few of these archaic elements are as follows:

- Syncretic unity of singing and dancing;
- Importance of round-dances;
- Importance of antiphon performances;
- Survival of nonsense syllables, today devoid of meaning;
- Use of the more ancient forms of poetry;

If we check Khevsureti traditional music against these criteria, we will find that:

- There is virtually nothing left in Khevsureti from the ancient syncretic unity of singing and the dance;
- The last remnants of round-dances were witnessed in Khevsureti in the 1930s;
- Although it is present, antiphon does not play an important role in Khevsureti;
- Nonsense syllables of ancient origins (actually, any nonsense-syllables) are virtually completely absent in Khevsureti songs;
- Poetry in Khevsureti is extremely developed, with no signs of the ancient non-rhythmic forms of poetry. Khevsurs are in fact considered to be the best poets among Georgians.

In contrast, Svanetian traditional music shows the archaic character by all these factors: (1) there is a strong syncretic integrity of singing and dancing, (2) round dances are extremely widely distributed, (3) antiphon forms of singing are almost the only form of singing; (4) ancient nonsense-syllables are very widely used (sometimes showing promising parallels with the dead ancient languages of the Mesopotamia) and (5) there is no modern rhythmic poetry in Svaneti. We should also add here that, unlike Svanetians, who still speak their language, Khevsurs speak the Georgian language, although the character of geographic names from Khevsureti suggests that populations of this region spoke North Caucasian languages. Also unlike Svanetians, who still live in their family towers built in the 8^{th}-12^{th} centuries, according to Georgian historical sources, the Khevsurs must have come to the mountainous area of their contemporary residence during 17^{th}-18^{th} centuries. Therefore, if we look at the musical traditions of the Khevsurs from the point of view of the "secondary archaic" it becomes possible to view the simple character of Khevsureti two-part singing not as the actual "beginnings of Georgian polyphony", but as the result of the **loss of more complex forms of polyphony**.

Khevsureti is not the only region in Georgia where we have the case of the gradual disappearance of more advanced forms of traditional polyphony. Meskheti in southern Georgia is another case. Here the last examples of traditional polyphony were recorded in the 1960s by Valerian Magradze from the only two surviving old singers (Magradze, 1986). By 1982, when I conducted a fieldwork in Meskheti, only monophonic versions of polyphonic songs were found. Saingilo is still another region with a Georgian population (in the territory of Azerbaijan) where the tradition of

polyphonic singing is absent, although during my fieldwork in this region in 1987 I managed to record the detailed description of the polyphonic singing tradition that was still around in the 1950s (Jordania, 1988b).

Are these cases of losing the traditions of vocal polyphony unique to Georgia? This is the crucial question we are going to discuss in the next case, dedicated not to any particular tradition of vocal polyphony, but to the general historical dynamics of the appearance/disappearance of vocal polyphony.

Case Study #2
Historical Dynamics:
Appearance or Disappearance?

Just a week after his 26th birthday, while resting in a forest, Charles Darwin experienced a major earthquake that struck Chile on 20th February of 1835. Walking a few days after the earthquake on the beach, Charles noticed that some mollusks that always live on the rocks under the water, were now on the rocks well above the water level. Darwin made a correct conclusion that the recent earthquake was to blame for this, and, on a bigger historic scale, he concluded that the series of such earthquakes during many millennia were responsible for the actual rise of the surface and the creation of the Andean mountains. So, Darwin correctly understood the historical dynamics of the landscape changes and the rest was the question of multiplying the results of small time span changes (that humans can observe) into a large evolutionary scale that humans cannot observe.

The question of **historical dynamics** is absolutely crucial for the correct understanding of any processes that goes for centuries and millennia, including the process of the origins of vocal polyphony.

As ethnomusicologists tacitly agreed more than a century ago, polyphony is a higher form of music, the new stage of musical development that came after humanity exhausted other means of further development within the initial monophonic tradition. According to this paradigm, it is only natural to expect that the geographic area of the distribution of vocal polyphony would be gradually growing.

My own research experience in the field of traditional polyphony suggests that this paradigm of the origin of polyphony needs to be fundamentally revised. In this discussion the question of historical dynamics is absolutely crucial. As we can not go back in time to watch firsthand the process of appearance (or disappearance) of the traditions of vocal polyphony, we can only have a look at the recorded history of humankind and try to find out **which of the processes stand out from our recorded history more prominently: appearance or disappearance of the vocal polyphonic traditions.**

So, let us now have a look at the map of the world vocal polyphonic traditions in search of the facts of the **historical dynamics**.

Here is the list of the cases when the **disappearance** of vocal polyphony is historically well documented (for more detailed information and references reader can have a look at the corresponding sections of the first part of this book where all these cases were described):

- **North Europe.** According to an unambiguous written document from the educated Welshman Giraldus Cambrensis, the big group of North European countries (from Scandinavia to the British Islands) had traditional vocal polyphony by the end of the 12th century. According to the available data, from most of these countries today we have only either late pan-European style polyphony with parallel thirds, or no data on vocal polyphony at all. Only Iceland has retained the earlier form of polyphony (arguably connected to the earlier forms of European professional polyphony).
- **Italy.** In Lombardy, singing in seconds has been documented in the 15th century, but later disappeared.
- **Lithuania.** The unique vocal polyphonic style *sutartines*, based on the almost constant use of secondal dissonances, has disappeared during the last two centuries.
- **Latvia.** A tradition of three-part drone singing, with the drone in the middle of the polyphonic texture and the third part, singing a major second below the drone, recorded by A. Yurian at the end of the 19th century, disappeared without much trace.
- **Estonia.** Tradition of drone polyphony was recorded by Tampere in the beginnoing of the 20th century. No traces of this tradition survived.
- **Russia.** A unique tradition of duet and trio singing with independent melodies was recorded by E. Gippius in the 1920s, and was never heard again.
- **Sicily.** According to the archive recordings, the western part of Sicily was as polyphonic as the rest of this Mediterranean island, but after the 1968 earthquake the tradition seems to be lost.
- **Macedonia.** According to Macedonian ethnomusicologists, as a result of government politics, the tradition of Macedonian singing in dissonant seconds has been disappearing from 1950s to the 1980s.
- **California.** According to the historical sources and archival recordings, interesting forms of vocal counterpoint that were present among South Californian Indians, also disappeared.
- **Venezuela.** According to Isabel Aretz (1967:53), there was a general tendency in the states of Lara, Falcon, and Portuguesa towards the disappearance of three-part singing.
- **Taiwan.** According to the archive recordings, the small mountain tribe Saisat had a tradition of singing in parallel fourths that disappeared within the first few decades of the 20th century.
- **Polynesia**. According to A. Kaeppler, a tradition of six-part polyphony on Tonga, a tradition that the knowledgeable older singers still remember, was eventually lost, and partly replaced by late European three-part singing.
- **Georgia**. Documented cases of losing (and a major decline) of the traditions of vocal polyphony in Meskheti, Saingilo and Khevsureti should be mentioned in this list as well.

These documented cases of losing the tradition of vocal polyphony by no means represent a complete list of all disappeared traditions. I can judge about this even from my own experience of knowing Georgian musical culture. Writing about

the disappearance of the traditions of vocal polyphony is not a very prominent tendency in ethnomusicology. Despite my lifelong interest in all aspects of traditional polyphony, I myself failed to mention the facts of the disappearance of vocal polyphony in Saingilo and the decline of polyphony in Khevsureti in my Garland Encyclopedia article about Georgia (although I did mention the disappearance of polyphony in Meskheti, Jordania, 2000: 827). Therefore I expect that ethnomusicologists with an interest in polyphonic traditions could name many other cases of the disappearance of vocal polyphonic traditions in different parts of the world. And of course, besides the complete disappearance, there are also numerous cases of the decline of the tradition of vocal polyphony.

In some cases the reasons for this disappearance (or decline) are known. For example, in the case of western Sicily it was the natural disaster that disturbed the social life of the traditional society, or in case of Macedonia it was mostly the government policy of a socialist country, waging war against the "out-of-date" cultural practices. There are lucky "escapes" as well. According to Felix Quilici and Wolfgang Laade, the great tradition of polyphonic singing in Corsica was on its way towards dying out in the 1950-1970s, but a later change of state cultural politics and international success made the Corsican tradition of polyphonic singing a much protected and popularized symbol of Corsican culture and identity. Lithuanian sutartines was not so "lucky", and although during the 20th century *sutartines* also became a symbol of Lithuanian national identity, and although you can still hear sutartines sung by University students and amateur ensembles, the village tradition seems to be irreversibly lost.

Of course, speaking of government politics and ideologies, we should not forget the vigorous and millennia-long fight that official churches conducted against the "out-of-date" practices of singing and dancing to the old pagan gods. Historical records from medieval Georgia (as well as many other countries of Europe) about the strict bans against the old traditional singing and dancing practices certify the ferocity of this struggle. We may never know the full extent of the direct and indirect persecutions that the bearers of the "pagan" and "horribly sounded" loud and dissonant polyphony have endured in Europe only.

All right, the reader might say, we briefly discussed the documented cases when the tradition of vocal polyphony was lost. Now, what about the opposite cases, or about the documented cases when the tradition of vocal polyphony was **born** out of the monophonic singing traditions? That's what we are going to talk about in the next "case study".

Case Study #3
Who Can Drink Milk?
Or the Origins of European Professional Polyphony

I remember very well my long visits to my friend, now a decorated and internationally renowned Russian tiger trainer Nikolai Pavlenko at Tbilisi hospital, where he spent the few last months of 1974. I remember very well how surprised I

was to witness how much milk he was drinking every day. I was always a bit uncomfortable with drinking milk, despite encouragement from my parents. I was told it was good for my health, but I always felt a bit heavy in the stomach after drinking even a half-cup of milk. Nikolai, on the contrary, seemed to be happy to drink a few litres of milk every day. I guess this feature is still with me, and when I eat my favorite cereal for breakfast, to the surprise of my Australian friends, I eat it with mineral water instead of milk.

Some readers of this book might not be aware that different human populations differ quite drastically from each other according to their ability to absorb milk. As scholars found out during the second part of the 20th century, there are certain human populations where people cannot drink the usual cow's milk without heavy digestion problems, pain in the stomach and some other uncomfortable complications. For example, it was found that African Americans have a much higher percentage of people who cannot absorb milk than European Americans (particularly North and Central European Americans. Boyless, Rosenzweig, 1966). Later studies suggested, that the number of the populations that have problems with milk (or, more correctly, with lactose, the central ingredient of milk), is quite big, and includes populations of sub-Saharan Africa, Arabs, most of the Jews, most Asian populations, Australian Aborigines and Melanesians (Flatz & Rotthauwe, 1977). And finally the scholars came to the quite amazing conclusion that with some minor exceptions, the only major population on our planet, that can drink milk without complications, is the population of North and Central Europe (and their descendants on different continents).

Symptomatically, scholars, who were conducting these studies, initially considered the ability to absorb milk without problems as a norm of the human condition. If we take into account that most of these scholars were Europeans themselves, and for them drinking milk was a very natural part of their life, it is not difficult to understand this kind of unconscious "European arrogance" towards other populations of the world. From the end of the 1970s it has been acknowledged that although very young children of **every human population** naturally drink milk, it is a norm for most human populations that as children grow, they lose the ability to absorb lactose (to drink milk). So, it is the North and Central European adult population's ability to absorb milk, if we may say so, is "out of the human norm".

How can this case of the human population's ability or inability to drink milk help us to understand the historical dynamics of the distribution of vocal polyphony? No, I am not going to link the distribution of milk absorption by different populations to the distribution of vocal polyphony, but I think this case can teach us a very important historical-psychological lesson – **not to extrapolate European experience to other populations of the world**.

In the previous section we were talking about the multiple documented cases of **losing** the traditions of vocal polyphony. This section is dedicated to the documented cases of the **emergence** of vocal polyphony. According to the dominant point of view in musicology, regarding polyphony as the higher evolutionary (and later) stage of the development of musical culture, there must be many more

documented cases of the emergence of traditional vocal polyphony from monophonic singing.

And here is a disappointment for readers if they expect me to give the long list of cultures where "primordial" monophony gave way to the evolutionarily "more advanced" polyphonic singing traditions: despite my lifelong keen interest in the issues of polyphony of different peoples and regions, I cannot name **even one documented case of the emergence of vocal polyphony in traditional music from a formerly "monophonic" culture**. Of course, I know that such categorical claims are virtually never correct, and I expect there will be at least some suggestions that my claim has no grounds. Of course, I agree that when European missioners came to some remote regions of the world, they did teach Christian polyphonic hymns to many aboriginal peoples, although we must remember that the success of European missioners in teaching European hymns to non-Europeans was often based on solid local traditions of polyphonic singing (as in sub-Saharan Africa or in Polynesia). Besides, let us remember that in cases of European missionaries teaching Christian hymns we are dealing with the **introduction and purposeful teaching** of a new culture, and not the **evolutionary change** of traditional singing style from monophonic to polyphonic. Therefore, I am **not** claiming that you cannot teach choral singing to representatives of monophonic musical traditions (although it does seems to be easier to teach a new polyphonic style to the populations that has the experience of singing any other type of polyphony). What I am claiming is that I do not know a single documented case when the **traditional monophonic singing style "evolved" into a traditional polyphonic singing style.**

Even in cases of century- and millennia-long residence next to the bearers of the polyphonic traditions, accompanied with the millennia-long developments of musical culture, peoples with the monophonic singing stay loyal to their own traditions (as in the case of Armenians, the millennia-long neighbors of Georgians in Caucasia). The cultural policy of the former Soviet Union also provided us with a huge 70-year long mass experiment with over 200 million people in this direction. Aiming at creating a modern socialist musical culture for everyone, Soviet authorities were trying hard to bring choral singing, harmony and polyphony to all people of the former Soviet Union. And still none of the traditionally monophonic peoples started singing their traditional songs polyphonically, and as soon as "perestroika" ensured increased local authority, one of the first things that happened in monophonic Soviet Central Asian republics was that the choirs were disbanded.

The belief that monophony turns into polyphony, and that all the polyphonic cultures were "once upon a time" monophonic is so strong among musicologists that no one actually even tried to raise arguments to support this view. Where does this belief come from? Why should we expect that monophonic traditions would turn into polyphonic ones? Well, there are at least two reasons to believe this must be the case:

(1) To sing in parts for a group of people is generally more difficult than to sing in unison. Therefore, if we look at this commonly accepted fact from the evolutionary point of view, we may conclude that humanity must have come to the idea (and ability) of

polyphonic singing later, after the long period of initial monophonic singing. So, according to this model, polyphony is a kind of evolutionarily natural way of development of human musicality, and therefore, all polyphonic cultures were at some time monophonic, and similarly, at some point all monophonic musical traditions might turn into polyphonic ones.

(2) Most importantly, after all that was said above, we do have a wonderfully detailed documented case of monophonic singing turning into polyphonic singing! This case is so well documented that scholars sometimes claimed to know not only the time but also the name of a person who "invented" polyphony. This "case study" mostly discusses this "newly born" polyphonic tradition.

We can add here that this new emerged polyphonic style that we are talking about is unquestionably the best-known, best documented, best studied and the most influential musical style our planet has ever seen. The only downside of this well documented historical case for our discussion is that this is not a case of emergence of polyphony in **traditional** music. We are talking about the emergence of polyphony in **European professional ("art") music.**

Well, I agree that as this book is dedicated to issues of **traditional** polyphony, we should not be discussing here the origins of European **professional** polyphony (unlike Marius Schneider, who deliberately studied the origins of both – traditional and professional polyphony in his "History of Polyphony"), but we have a few very important reasons to discuss the origins of European polyphony:

(1) European professional polyphonic music was (and arguably still is) the biggest subject of musicological studies.

(2) All our mainstream musical education is based on European professional polyphonic music.

(3) Most of our terminology that we use in studying different styles of music, scales, harmony, still come from the vocabulary of European professional polyphonic music.

(4) Studies of European professional music and European professional polyphony affected the way musicologists (and the general public) view the origins of polyphony as a phenomenon in the most profound way.

(5) And finally, as a result of this profound influence, at least some ethnomusicologists still view the origins of polyphony (repeating – despite the absence of any documented case of traditional

monophonic culture evolving into a polyphonic one!) as a natural evolutionary development of monophonic singing.

Therefore, although European professional polyphony does **not** belong to the realms of traditional music, the importance of the origins of European professional polyphony in the study of the origins of polyphony in traditional music was absolutely crucial. The example of European professional music was so influential that it was widely believed that the way European professional music gained its polyphony (which was developed after a few centuries of development within the monophonic singing style) was the only way for any other people to gain their polyphony. This idea was so keenly believed that no one even tried to seriously prove the correctness of this assumption. Discussing the evolutionist viewpoint on the history of music, Bruno Nettl suggests that although this [evolutionary] "viewpoint cannot be generally accepted, but … has been tacitly agreed upon for the special problem of polyphony. There is, indeed, no culture that has no monophonic music at all, and since each polyphonic composition must consist of (independent) monophonic structures, it can perhaps be assumed that monophony preceded polyphony in each culture" (Nettl, 1961:360-361).

Well, maybe this simple reasoning sounds quite convincing ("singing in one part is simpler, and, therefore, historically must be earlier than singing in many parts"), but the reality of the historical dynamics of the appearance/disappearance of polyphonic traditions, documented in different continents, **does not support this viewpoint.** The examples of the documented disappearances of traditional polyphonic practices are numerous in different parts of the world, but there is hardly even a single case of the documented appearance of polyphony in traditional music from the inner development of monophonic singing.

With the convincing and well-documented example of the late development of European professional polyphony from monophonic singing, for the educated Europeans the late emergence of polyphony from monophony for all human cultures was as natural as the idea of drinking and absorption of milk for all humanity. Of course, in case of milk absorption scholars found out that Europeans were in fact the only major population on the planet who can drink milk without any complications, so the humanitarian aid programs correspondingly had to adjust their policy of providing thousands of tons of milk powder to the starving populations to the third world countries who could not actually absorb lactose (Vogel, Motulsky, 1990:41). In this section of the book I tried to convince the reader that the history of European professional polyphony is in fact a **unique** historical case, and it **should not be used as the model for the origins of the phenomenon of polyphony**. So, the same way as we accepted the fact that not everyone can drink milk without health complications, we need to accept the fact that transformation of European professional monophony into polyphony is a unique occurrence in the history of music.

And of course, in the course of our current knowledge it is clear that even the origins of European professional polyphony cannot be considered as a pure case of

"monophonic music evolving into a polyphonic one". The time when music historians believed that polyphony was invented by the medieval monks and actually were trying to explain the presence of vocal polyphony in traditional music of people from different parts of the world as a result of the influence of European missionaries has long since gone. Siegfried Nadel and particularly Marius Schneider were among the first musicologists who reversed our understanding of the origins of European polyphony and wrote that the historical process of the influence between professional and traditional polyphonies must be reversed: it is not the medieval European professional polyphony that influenced the emergence of polyphony in traditional cultures via missionaries, but, on the contrary, it was traditional polyphony that had a crucial influence on the emergence of medieval European professional polyphony. For Nadel and Schneider this influence came mainly from outside the Central regions of the European continent. Caucasian (mainly Georgian) polyphony was given a crucial role in this model by both Nadel (who only expressed this idea as a possibility. Nadel, 1933) and by Schneider (who first criticized Nadel's idea as "going too far", but soon changed his mind and published a series of special publications on the origins of polyphony from the 1940s until the 1960s. Schneider, 1940, 1951, 1961, 1969). On the contrary, for Paul Collaer the main influence for the emergence of European polyphony came from the local European (particularly Mediterranean) polyphonic traditions (Collaer, 1960). Collaer's idea, that the emergence of European professional polyphony was in fact a penetration of the ancient European traditional polyphony into their professional music, is widely (although not universally) accepted today. I believe the existing evidence also supports Paul Collaer's idea.

Therefore, today even the origins of European professional polyphony do not look to most of my colleagues as "natural evolution" or the "invention" of a new polyphonic style by some talented medieval monks, who dared to go beyond the established tradition of monophonic singing.

If we want to understand the mechanisms of the emergency of professional polyphony in medieval Europe, we need to remember the origins of Christian religion and Christian music in the first place. Christianity came into Europe from the Middle East, together with the accompanying sacred music, performed in Middle Eastern monophonic singing style. For several centuries this new sacred ecclesiastic monophony must have represented a starch contrast to the ancient European traditional polyphony. Supported by the official state and church authority, this new sacred monophonic style tried to suppress the "pagan" tradition of loud and dissonant polyphony. In the end, however, after the first attempts of creation of examples of liturgical polyphony (9^{th}-12^{th} centuries), and later supported by the major changes in ideology and social life during the Renaissance (15^{th} – 16^{th} centuries) and Protestant Revolution (16^{th} century), the ancient tradition of polyphonic singing came back into the European official scene as the victorious and the only officially accepted European style of professional music.

Therefore, we may say that European professional polyphony represents a historical mixture of two main and very different musical styles: the Middle Eastern monophonic singing style and the ancient European polyphonic singing style. The unusual history of the interval fourth in European music theory reflects this historical

marriage of monophonic Middle Eastern and polyphonic European styles. As an unquestionably the purest consonance in Middle Eastern monophonic musical traditions (which is mostly based on the tetrachordal scales with the perfect fourths), fourth was initially considered by European music theorists as consonance as well. However, later period theorists became suspicious about the consonance nature of the fourth and moved it to the category of mild dissonances. This kind of change, when the interval is considered consonance and later it is perceived as a dissonance is unique for the history of the European music. Usually the intervals that were considered to be dissonances are perceived later as consonances (for example, thirds and sixths).

As often happens, the result of this mixture of two different (Middle Eastern monophonic and European polyphonic) styles was a totally new style of music. The most important feature that European professional music owes to Middle Eastern monophonic music seems to be the particular **importance of the melodic element** in European professional music. Unlike the ancient European drone polyphonic style with small range melodies, where hearing sharp dissonances was possibly the leading aesthetic element, European professional polyphony from the very beginning was established as a tradition where the "melody was the soul of the music". On the other hand, the gradual increase of the influence of the ancient European polyphonic tradition from the 9th to the 15th century brought polyphony and harmony into early Christian monodic singing. Or course, the European professional harmonic style was initially very different from the old European traditional harmony. For example, the sharp dissonances (like seconds), long accepted in traditional polyphony, has been granted "freedom of expression" in European professional music only in the 20th century.

The history of European professional music can be in fact viewed as the complex and reciprocal interaction of these two contrasting styles: (1) Middle Eastern monody (characterized by the dominance of the leading melody, which was supported by the rest of the musical texture, as this was the case among Viennese Classical School composers, or more homophonic style music), and (2) old European polyphony (characterized by the primacy of independent and simultaneously sounding parts, as in compositions of J.S.Bach, or polyphonic style music).

Conclusions for the previous two case studies

A study of local polyphonic traditions suggests that the prevailing tendency of the historical dynamics is the **disappearance** of the vocal polyphonic traditions. Actually, this is **not a prevailing, but the only tendency**. Historically documented cases of the disappearance of polyphonic traditions come from Europe, Asia, America, and Oceania. On the contrary, the documented cases of the **appearance** of vocal polyphonic traditions (as the natural evolution of polyphonic singing from monophony) are conspicuously absent. This means that the **universally accepted idea of the natural evolutionary transformation of monophonic singing into polyphonic singing is a fiction, totally unsupported by the evidence.**

Joseph Jordania (2006). From the Book: WHO ASKED THE FIRST QUESTION? The origins of human choral singing, Intelligence, Language and Speech. Logos Publishing.

I believe that the few cases of the disappearance of the vocal polyphonic traditions from different parts of the world that I mentioned in this "case study", are in fact only the "tip of the iceberg" of the multiple cases of the disappearance of polyphonic traditions in different regions of our planet. My colleagues, experts in traditional music from different regions of the world might be aware of few more such cases of disappearance (or decline) of polyphonic tradition that I am not aware of. Hardly any of my colleagues would remember someone writing about the exciting news of the "beginnings of the new vocal polyphonic tradition" (I mean the evolutionary change from monophony to polyphony), whereas scholarly literature is full of suggestions (founded or unfounded) of the "ancient survival" of the existing vocal polyphonic traditions and their gradual disappearance.

I am sure that in ten years we will know about many more such cases of the disappearance of vocal polyphonic traditions in different parts of the world than I have written in this book. And still, I believe that we will never learn about most of the cases of the decline and disappearance of vocal polyphonic traditions during the centuries and millennia of human history and prehistory.

The idea of the disappearance of some polyphonic traditions is not new in ethnomusicology. For example, here are the words of Albert Lloyd from the 1961 issue of the Journal of the International Folk Music Council. Discussing the polyphonic traditions in Albania, Lloyd comments: "Certainly, comparing these [Albanian polyphonic] forms with those of Yugoslavia, Bulgaria and northern Greece, one has the impression that Albania has developed part-singing to a far higher degree. Or should one say: has ***preserved*** it better? For it is possible, even probable, that at one time various polyphonic forms abounded all over the southern Balkans and perhaps far beyond it, that have since dwindled or disappeared. Albanian country communities are more isolated and culturally more conservative than those of Bulgaria, say. In Bulgaria, in Sofia, Pirin and western Rhodope regions, diaphony abounds, but more complex forms are hard to seek. Moreover, even the two-voice singing there is nowadays confined mainly to women and girls, who are notoriously slower than men to change their cultural habits. The notion that the more elaborate forms are ison-based polyphony are now dwindling in the Balkans gains support from Nikolai Kaufman's study of the songs of the Macedonian district of Kostur (Kastoria). Besides one- and two-voice songs, the Kostur tradition also has three-voice songs: but this three-part polyphony is in process of disappearing, the informants are all old, mostly women, and youngsters show little taste for this music though they still perform two-part songs with enthusiasm" (Lloyd, 1961:145). The author of these visionary words did not try to generalize his idea towards the general tendency of the disappearance of vocal polyphony all over the world, but the appearance of such an idea (even in connection with only one region – the Balkans) was symptomatic. Unfortunately, ideas like this sounded like the singing of an exotic bird in the environment of the solid belief of musicologists in the steady evolutionary movement from monophony to polyphony.

As we have seen, the only documented case of the appearance of the polyphony is European **professional** polyphony, discussed in the previous section. It was mostly the legacy of the study of the late emergence of European professional

polyphony that fundamentally influenced the historical thinking of musicologists and ethnomusicologists about the origins of vocal polyphony. And although the idea of the independent and earlier origins of polyphony in traditional music is generally accepted, polyphony is still mostly viewed as the logical result of the development of the initial, or "primordial" monophony. The results of this study strongly suggest that polyphony is not the result of the evolutionary development of initial monophonic singing. On the contrary, the historical dynamics and the available recorded information from different continents suggest that the **tradition of polyphonic singing is gradually disappearing on our planet**.

So where and when should we look for the origins of polyphonic singing? I would suggest readers not jump to conclusions about the origins and age of vocal polyphony. We will reach this subject in the final, third part of this book. In the third part of the book, after discussing the origins of the vocal polyphony, we will discuss the reasons and the mechanisms of the gradual disappearance of the vocal polyphony. But before this we still have a few more important "case studies" to discuss.

Case Study # 4
Drone and Horses:
Ancient European Family of Polyphony
and the Indo-Europeans

For the understanding of the puzzling distribution of vocal polyphonic traditions in the European continent the question of Indo-European migrations is crucial. No other migration process had such a profound impact for the history and populations of Europe, as the appearance and spreading of waves of Indo-Europeans. What I am going to do in this "case" is to generally discuss the appearance and spreading of Indo-European languages throughout Europe from the musical point of view (Jordania, 1992b). I am not going to discuss the problem of Indo-European languages in any detail. I trust that the reader of this book would have some general knowledge of Indo-Europeans and the fact that most of the languages of Europe (particularly of Western Europe) belong to one huge Indo-European family of languages, spreading from North India and Tajikistan to Iceland and Scandinavia.

Of course, we must always remember that the **meaning behind the term "Indo-Europeans" is much more complex than the term "Indo-European languages"**. Language can spread in a new population without any major change of the old population, so for example, if today Norwegians speak one of the Indo-European languages, this does not mean that they are all descendants of the waves of Indo-Europeans that first appeared in Europe four or five millennia ago. Norwegians may well be the physical descendants of the ancient, pre-Indo-European local population, who only changed their language. As a matter of fact, molecular biologists' studies suggest that about 80% of the European population is connected

with the ancient European population which lived here before the appearance of the Indo-Europeans.

Migrations are almost always connected to the mixing of the old and new populations, and as Indo-European progressed through Europe, their ethnic element got more and more mixed up with the local pre-Indo-European ethnic elements. Besides, it is widely known that in some cases the spread of the new languages can happen without any substantial ethnic change of the old population. Therefore some of the contemporary European populations that speak one of the Indo-European languages, might be physical descendants of the local pre-Indo-European population.

Before we discuss the issues connected to the most important migration processes in the history of the European continent, let us briefly review the **characteristic features of the European "polyphonic family"**.

Here I must say that most of the main characteristic features of the polyphonic traditions of Europe are well known among ethnomusicologists (see, for example, Schneider, 1969; or the materials of the conference "Drone in the European folk music", Vienna, 1981). For example, the fact that ***drone*** is one of the key elements of European polyphonic traditions has been noticed by all scholars who have ever discussed European polyphonic traditions. Another crucially important feature is also quite evident – the ***dissonant vertical coordination between the parts***. The term *schwebungsdiaphonie* has been used for this kind of culture for a few decades (for a good discussion of this topic see in Messner, 1980; See also Muszkalska, 2005). Another important feature of European polyphonic traditions is not so widely known – in most cases the melody (melodies) are performed by the individual performers, and the drone is performed by a group of singers. Therefore the ***social organization of the singing group*** is also similar. Scale systems used in European polyphonic traditions range from the anhemitonic pentatonic to diatonic and sometimes even almost chromatic scales with "crawling" seconds in some of the Balkan polyphonic traditions. The possible presence of specific "fifth diatonic" scales has not been investigated in European polyphonic traditions, but this specific scale is present at least in two such faraway cultures from the geographically opposed corners of Europe as Georgia and Iceland. In regards to the rhythmic characteristics we may say that polyphonic songs are mostly based on simple metres, although some traditions (particularly in Balkans) use extremely complex metres and rhythms.

If the reader remembers the review of European polyphonic traditions, they may object to this simple unification of all European polyphonic traditions. These parameters do not always fit every polyphonic tradition of Europe. Neither drone nor the dissonances are universal for all European polyphonic traditions today. For example, most of the polyphony of the East Slavs is not based on drone (it is rather based on different forms of heterophonic singing). Besides, in some traditions of European polyphony (particularly later styles) the main harmonic interval is not the sharp dissonant second, but rather the soft consonant third. And still, the main characteristic of the **older styles** of traditional polyphony seems to fit well with the above-mentioned features (drone polyphony; dissonant intervals between the voices; singing of the melodic lines by individuals and the drone – by the group of singers). This "case study" (which in fact unites two "case studies" – (1) of the ancient

European drone polyphony and (2) the Indo-European element in European polyphonic traditions) is fully dedicated to the discussion of the stratification of European polyphonic traditions in an historical perspective.

Let us first of all have a good look at the distribution of vocal polyphonic traditions throughout Europe. As we may remember from the first part of this book, polyphonic traditions in Europe are scattered through very different regions, ranging from Iceland in the northwest to Mordva in the east and the Mediterranean islands in the south. The crucial question is whether there is a historical-genetic connection between these singing traditions, or whether these different peoples in different regions all started singing polyphonically independently, each on their own, following the common rules of the development of human musical culture. The prevailing opinion between ethnomusicologists on this question is that **there is a deep historical connection between these scattered drone-secondal polyphonic traditions of Europe** (see, for example, Collaer, 1960, or Lomax, 1968). I fully agree with this opinion, and want to discuss the puzzling distribution of polyphonic traditions in Europe in the context of the appearance of Indo-Europeans and Indo-European languages.

For a discussion of these topics let us first of all recall the cartography of the polyphonic regions in Europe.

I remember very well that every time ethnomusicologists start discussing the distribution of polyphonic traditions throughout Europe and try to discuss the possible reasons for the emergence of choral singing, one of the most popular ideas among ethnomusicologists is the crucial importance of the **"mountain factor"**. "Look", someone would say, "most of the European mountain ranges are populated by the carriers of the polyphonic tradition. There is something in this. Somehow mountains help to create polyphony". If you have a look at the cartography again, it is hard to deny that almost all European mountain ranges are in fact populated by the peoples with polyphonic singing traditions: Pyrenees, alps, Balkans, Caucasus (to mention only the few major European mountain regions). But there is another very important peculiarity of the distribution of polyphonic traditions in Europe as well: besides the mountain regions, there are also very important **non-mountain regions** with traditions of vocal polyphony. For example, Polessye, the border region between Russia, Ukraine and Belarus is one such region. Polessye is very rich in forests (you may remember, "Polessye" in east Slavic languages means "the region of forests"), but it is thousands of kilometers away from a nearest mountain range. The same applies to the Baltic region – no mountains around. The same occurs with some of the islands of the Mediterranean Sea and North Europe – no major mountains. If you allow me to use the well-known German saying about one of the most important musical dynasties in the history of European music "Not all musicians are Bachs, but all Bachs are musicians", we could coin a new saying "Not all European polyphonic traditions are in the mountains, but all mountains in Europe are polyphonic".

Most importantly, there is one very important common feature that unites most of the European polyphonic traditions. Mountains, large forests, islands- these are all **geographically isolated** regions. What does this fact tell us?

This fact suggests that mountains do not help to **create** polyphony (the same way as islands and forests do not help to "create" polyphony), but as geographically isolated regions, they help polyphony and other elements of the culture to **survive**. It is widely known that the most archaic features of culture (language, rituals, customs, singing styles, dances) usually best survive in mountainous regions. Islands and huge forests, like mountains, are also geographically isolated, so they also help the ancient features of culture to survive. That's why, for example, all East Slavic scholars agree that the above-mentioned forest-covered Polessye is a unique museum of the most archaic features of the East Slavic language, ethnography and culture.

As I have already mentioned, I am not going to go into a full detailed discussion of the migration processes that shaped the ethnic and linguistic map of Europe. We know that today the majority of peoples in Europe speak Indo-European languages. This is particularly evident in Western Europe, where all the languages but one (Basque) belong to the Indo-European family of languages. This wide distribution of new Indo-European languages means that in the history of Europe at least one very large-scale migration (more correctly – several migration waves during about two millennia) took place. Although it is not very clear from where and exactly when they appeared in Europe (debates continue), carriers of the Indo-European languages entered Europe between the 3rd and the 1st millennia B.C. Of course, this picture was complemented by the arrival of Finno-Ugric peoples, and during the late medieval time the Turkic language also made its way to southeastern Europe.

The process of the arrival of new populations has always been a complex process. Even today, when the migration process is very much controlled by the state authorities, legal and particularly illegal migration often creates different kinds of problems for the state. A few millennia ago this process was easier for the migrating peoples and more painful (and sometimes catastrophic) for the autochthonous peoples. Without discussing the details of this very complex process, let us try to reconstruct the general dynamics of population movement and stratification in Europe. Several stages of this process could be identified:

- Before the migration waves of Indo-Europeans appear, the European continent was populated by the speakers of non-Indo-European languages (sometimes these languages are mentioned as pre-Indo-European languages). Carriers of these pre-Indo-European languages had more or less related cultures; let us not forget that this seemingly monotonous primordial unity of Ancient Europe is generally a fiction, although some common features must have been present.
- The first waves of the new population arrive and occupy the best and the most accessible territories. More waves of the new arrivals – more pressure on the indigenous populations. Some of the later migrants push and assimilate the older migrants as well.
- There are only two options for the autochthonous populations in the wake of major migrations: (1) part of them stay in their old territories, and (2) part of them is pushed to the geographically isolated regions (mountains, forests, swamps, islands, colder northern margins of the Europe). Of course, mountain ranges in Europe have never been "empty", so it would

be a mistake to think that mountains (and other geographically isolated regions) were populated only because of the arrival of the new migrant populations. But there is no doubt that because of the new arrivals the population of the mountains became denser. This was (and still is) the strategy of survival of the indigenous populations against intruders if the relatively inaccessible mountains are a part of their ethnic territory. "If the enemy is prevailing in the plain, I'll go and find a shelter in the mountains" these are the words of a simple Georgian song.

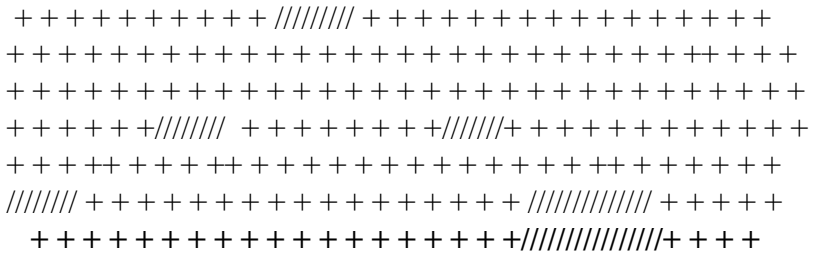
- Part of the older population, who did not move from their native places, is assimilated by the waves of newcomers. The cultural integrity of the other part of the old population that moved to the isolated regions survived better. Of course, we are not talking about the complete survival of all elements of culture. For example, most of the native, pre-Indo-European languages were lost among most of the mountain populations of Europe, with the only exception of the Basque and Caucasian languages which survived until the 21st century (and of course, both in mountains!).
- Let's go back again. Of course, such generalizations are always imprecise, but we may say that two different layers of populations occupy different geographical environments: the newcomers occupy the easy to access and more fertile plain regions of the central and southern part of Europe, and the older populations live in the geographically isolated regions (mountains, islands, forests, and in the northern marginal and colder zone of the continent). For a few centuries (or even millennia) this stratification is kept. Losing contact with other isolated (and related) regions, each surviving isolated island of the older population and culture maintains and develop contacts within the natural borders of their own mountain region, forming closer cultural ties;
- Later, when the time for the creation of the states is right, the "fathers of the state" notice that the most natural places to draw the borders between the states are geographically isolated regions, like mountain ranges, big rivers or the forests. Exactly where the old surviving populations live.
- Caught up in this process of state-making and the creation of state borders, the old surviving populations, living for centuries and millennia in the isolated mountain ranges and forests, and keeping contact within their "own" mountain range, suddenly find themselves belonging to different states, divided by the newly created state borders;
- If we look at the geographically isolated regions in Europe (particularly mountain ranges) we can see that most of the major mountain ranges are used as the borders between the states, and the native mountain populations are often divided between different states. Basques in the Pyrenees are divided between France and Spain. The Alpine population is divided between France, Switzerland, Germany, Austria, Italy and Slovenia. The late unification of Switzerland was a lucky historical exception for the mountaineers. Balkan populations of the Dinaric Alps are divided between Bulgaria, Greece, Serbia and Montenegro, Bosnia,

Croatia, Slovenia, Albania, and Macedonia (Macedonia is itself divided between several state territories). Caucasian mountaineers are today divided between Georgia and Russia. Even the population of the greatest forest region of Europe – Polessye – is also divided mostly between the Ukraine and the Belarus (and partly Russia and Poland as well).

- As a result of the unnatural (from the point of view of the mountaineers) division of their mountainous homeland between different states, very often the peoples, living on the slopes of the same mountain ranges (but from different sides) and thus in different states, are much closer to each other that to some other regions of the country they officially belong to. Northern Italians are closer to southern Germans and western Austrians than to the southern Italians. Northern mountaineer Greeks are closer to mountain Albanians, southwestern Bulgarians and other Balkan mountain populations, than to southern or central Greece. In the same way the population of the Ukrainian part of Polessye is closer to the Belarus part of Polessye than to the southern part of the Ukraine.
- Unlike the infamous "Berlin Wall", dividing one nation (and even one city) into two antagonistic parts, state borders in the mountains were (and still are) much more difficult to guard than in non-mountainous regions. This fact is well known to the mountaineers, living on different slopes of the officially divided mountain ranges. There is hardly a mountain range in the world that does not have some hard-to access mountain pathways that are not guarded by even the most oppressive authoritarian governments. These pathways constantly allow at least limited contact between the officially divided states.
- Another interesting outcome of this process of marginalization of the older autochthonous populations in geographically isolated areas is that the populations of these isolated regions are often considered to be the carriers of the most ancient elements of the ethnography, language and different elements of the national culture. Despite a certain historical irony in this fact, it is certainly true that scholars often discover the whole set of ancient features of material and intangible culture in the mountains and other isolated regions of the ethnic territory.

This hypothetically reconstructed picture of the arrival of waves of Indo-Europeans and the survival of ancient populations on the peripheries and in geographically isolated regions of Europe fits very well the general rule of the geographic distribution of ancient and later elements of culture and population. According to this rule, more ancient phenomena are always distributed in several smaller isolated territories (particularly, in geographically isolated regions, like mountains). Later phenomena, on the contrary, are usually distributed continuously. So if the distribution of two phenomena (A and B) on a map looks something like this:

Fig. 13. Georgaphic stratification of two different cultures. Distribution of the Phenomenon A is indicated with parallel lines (///////), and the Phenomenon B with crosses (+ + +)



the phenomenon "A" that is marked with the parallel lines (//////) and is distributed in few isolated pockets, must belong to the older layers, and the phenomenon "B" that is marked on this map with the small crosses (+ + + +) and is distributed continuously over the whole region, must belong to the later layers in this region.

To summarize all the above-mentioned facts and considerations, we need to conclude, that **the vocal polyphonic traditions of Europe, distributed in geographically isolated regions (mountains, islands, forests, northern peripheries) must be the survival of the singing traditions of the ancient pre-Indo-European populations of the European continent.**

The idea of the survival of the ancient European tradition of polyphony in geographically isolated regions is by no means new in ethnomusicology (see, for example, Collaer, 1960, Kaufman, 1968, Emsheimer, 1964:44; Lomax, 1971:236, Messner, 1980). Besides, the discussion of the ancient pre-Indo-European unity of Old Europe is a perennial theme in many historical disciplines (for a good discussion on this very popular scholarly topic see Gordeziani, 1985, Gamkrelidze & Ivanov, 1984).

One of the most important pieces of support for this ancient unity of the populations of the mountainous regions of southern Europe with the populations of northern Europe comes from physical anthropology. Close morphological links between the populations of Central and East European mountain populations has been noted by many physical anthropologists (for a good review see Alexeev, 1974,1974a; Cavalli-Sforza et al., 1994: 266-268). In the same way the morphological links between Central and Eastern European mountain populations on one side, and the populations of North Europe are also well known (see the review in Alexeev, 1974, 1974a). Discussing the ancient languages of the Europe, Cavalli-Sforza wrote: "In the late Paleolithic, languages spoken in Europe may have been of the type still represented in Basque and Caucasian regions, and it is tempting to speculate that languages of this family were spoken by the first modern humans who arrived in Europe. Most linguists are convinced that languages evolve too fast to allow recognition of relationships of this time depth. Recent preliminary results, however (reviewed in Ruhlen, 1990) suggest that this skepticism is unjustified There is a clear

need for a deep investigation of ancient language relationships so that they can inspire general confidence."

"It is also difficult to exclude the possibility that expansion of proto-Caucasian (proto-Basque) speakers was later than the first expansion of anatomically modern humans to Europe, but there is no reason to postulate other radiations until there is evidence for them. If a proto-Caucasian type of language was used by modern humans spreading to Europe in the period between 40 and 30 kya, its origin need not have been in the Caucasus. It is more likely that the Caucasus is one of the few areas that lends itself, for geographic and ecological reasons, to the survival of relic languages. But, we are clearly asking questions that are very difficult to answer and we do not know whether answers will ever be found. In any case, thorough investigation of the Caucasus populations must be a high priority" (Cavalli-Sforza et al, 1994:300).

Legacy of Singing Indo-Europeans

In our discussion of the interaction of the pre-Indo-European and Indo-European populations and cultures so far we have deliberately omitted one very important aspect that we are going to discuss in this section. This aspect is the complex process of ***mixture***.

There is no migration or conquest without mixture of populations, traditions, and different elements of culture. There is no doubt that the arrival of the new waves of new populations was accompanied by the complex process of mixing of dozens of important elements of musical culture as well. And maybe the most exciting outcome of such mixtures is that the result of such processes can be a totally new phenomenon. Unlike biology, where the horse and the donkey produce a mule (which can not actually breed and produce itself any more!), the result of such mixture in culture can be a new wonderful and thriving cultural phenomenon. The result of one such musical-stylistic mixtures of supposedly pre-Indo-European and later Indo-European musical traditions is the topic of our next section.

East Georgia: Listen what the "Long" Table Songs can tell us

The "Long" table songs of Kartli and Kakheti (central regions of East Georgia) are one of the wonders of traditional polyphony. The magnificent "Chakrulo", the best known among the "long" table songs, was officially pronounced by UNESCO as the "Masterpiece of intangible heritage of Humanity" in 2001. In this sub-section we are going to discuss the origins of the "long" table songs from East Georgia.

If the reader remembers the quite detailed description of the polyphonic traditions of Georgia, they might remember the generally accepted division of the whole of Georgia into two parts – (1) eastern Georgia and (2) western Georgia. Despite the obvious unity of the vocal polyphonic traditions of both Georgian halves, the differences between them are quite clear as well. Let me briefly remind you of the most important elements of the difference between the East and West Georgia:

- East Georgia is considered to be the "kingdom" of the pedal drone (particularly the magnificent "long" table songs, like "Chakrulo" and "Long Kakhetian Mravalzhamier"); West Georgia is mostly known as the "kingdom" of contrapuntal polyphony;
- The drone is always at the bottom of the musical texture in East Georgia, while in West Georgia the drone can be used in the middle of the polyphonic texture as well, or above the main melody (as happens in magnificent four-part working songs);
- In East Georgia the bass is always sung by the group of singers; in the most intricate songs of West Georgia the bass is performed by an individual singer, and is often the most melodically active part;
- The metre is always precise in West Georgian songs, while in at least some East Georgian songs (particularly – the same "long" table songs from Kartli and Kakheti) the polyphony develops without a precise metre, in so-called "rubato" (free metre);
- A major part of the metered polyphonic songs in Georgia is based on the simple duple (2/4, 4/4) and triple metres (¾, 6/8). East Georgia uses all these metres, whereas West Georgia uses predominantly (and in some regions almost exclusively) only duple metres;
- East Georgian polyphonic songs are famous for their richly ornamented melismatic melodies. There are no ornamented melismatic melodies in West Georgian polyphonic songs at all (apart from the region of Racha, which has an obvious influence from the East Georgian singing style);
- Both East and West Georgia are the "kingdoms" of the dissonances, although sharp dissonant chords play a much more prominent role in West Georgian traditional and ecclesiastic music;
- East Georgia makes use of the scales of fourth and fifths diatonic, and in "Long" table songs there is an interesting mixture of these two scale systems, used simultaneously above and under the drone; Western Georgian polyphonic songs are based almost exclusively on scales of the fifths diatonic;
- The specific and very important melodic formula, the so-called "Melody of Iav-Nana" (Aslanishvili, 1954), is present only in East Georgia;
- The yodel is present only in West Georgia;

The differences between East and West Georgia are not exhausted by this list of musical elements. There are other important differences as well in musical instruments, traditional architecture, ethnography, everyday and ritual food, dress, etc. There is no need to continue this list. Many countries of the world comprise regions with the whole set of notable differences, so there is nothing particular in the existence of two regions in Georgia with a set of differences between them. The reader should remember that I am listing here only **the differences** between East and West Georgia. The list of the features common to East and West Georgian vocal polyphony is much more impressive.

Let us now briefly discuss the possible reasons for the existing differences between the eastern and western Georgian polyphonic traditions. Of course, the

possibility of the inner, independent development of all above-mentioned differences within the singing traditions of eastern and western Georgia can not be ruled out, although the possibility of a certain external influence on the singing traditions of one of these regions seems more plausible.

N. Tsitsishvili specially studied the stylistic features of the East Georgian "long" table songs and using the specially designed seven style factor analyses came to the conclusion that there are certain commonalities "…between the singing style of the Kartli-Kakhetian 'long' songs and the singing style of the rural Armenia, Azerbaijan, West and Central Asia. Solo performance and monodic musical structure (factors 1 and 2) inherent in the rural music-cultures of Armenia, Azerbaijan, West and Central Asia are also characteristic of the Kartli-Kakhetian "long" songs. Tetrachordal system in the scales of "long" songs (factor 3) is the system on which songs from the music cultures of Armenia, Azerbaijan, and the peoples of West and Central Asia are based (Kushnarev, 1958:11-12). Ornamentation and recitation in the melodies (factor 4), freely improvised rhythm (factor 5), non-metric time organization (factor 6) and non-repetitive improvised form (factor 7) are characteristic traits of the rural music-cultures of the peoples of Armenia, Azerbaijan, Central and West Asia as well as well as of the Kartli-Kakhetian 'long' songs." (Tsitsishvili, 1998:137).

The most plausible historical explanation of these contacts comes from the archaeological records. According to them, there had been two major waves of migration on the territory of Georgia in the 3rd and 2nd millennia B.C. These migrations brought to Georgia a totally new type of material culture, social organization, burial rites, and a new population with a different physical type. Archaeologists believe these migrations were connected to the appearance of Indo-Europeans on the territory of Georgia (Japaridze, 1976). As time went by the mixture of the old and new populations and cultures became evident. The new Indo-European population must have brought to Georgia the new type of musical culture as well, most possibly close to the musical styles of some other Indo-European peoples of the neighboring regions – like Armenia and Iran. These are musical cultures based on a **monophonic singing style with an emphasis on solo performance, richly ornamented melodic lines, tetrachordal scales, free rhythm and non-metric time organization.**

Most importantly for our topic, these migrations and major cultural and population changes during the 3rd-2nd millennia involved only the territory of East Georgia, while the territory of western Georgia, situated on the other side of the Likhi mountains (the dividing mountain range between the eastern and western Georgia) remained virtually unaffected (Japaridze, 1976; Abdushelishvili, 1964, 1966); Alexeev, 1974a).

Richly ornamented and freely flowing "long" table songs are not the only witness of the ancient external influence of the monophonic musical cultures of West Asia and Central Asia on East Georgian musical culture. The singing traditions of Kartli and Kakheti (two central regions of the East Georgia) also contain a special genre of solo monophonic working songs, known under the generic names "Orovela" [meaning is unknown] and "Urmuli" [lit. bull-carter's song]. These are important groups of songs of purely monophonic music, with richly melismatic melody, free

rhythm, non-metric time organization and "oriental" tetrachordal scales with augmented seconds. In Georgia "Orovela" and "Urmuli" songs are found exclusively in the plain regions of East Georgia (Kartli and Kakheti). There are no signs of Orovela and Urmuli type songs in western Georgia or the mountain regions of eastern Georgia. At the same time, outside Georgia the same type of agricultural working songs (based on tetrachordal scales with the augmented seconds, melismatic melodic line and free metric organization) are found in neighboring Armenia, Azerbaijan, West and Central Asia. Even the generic Georgian term "Orovela" finds parallels with the solo working songs from Armenia ("Horovel"), Azerbaijan ("Holovar") and even with the texts of Central Asian solo working songs (Tsitsishvili, 1998:139).

Therefore, if the "long" table songs show signs of a complex stylistic mixture of polyphonic and monophonic singing traditions, "Orovela" and "Urmuli" songs are more direct and unaffected representatives of the West and Central Asian monophonic singing traditions in East Georgian traditional singing culture.

As you would expect from the polyphonic-crazed Georgians, there is a tendency to turn the solo monophonic "Orovela" (but not "Urmuli") into polyphonic songs. So, although "Orovela" is a genuine monophonic song, traditionally performed in East Georgia solo during different types of agricultural work, when performed in a different social environment (when the performer is not alone), or later, on a stage, the song instantly "acquires" the pedal drone, thus becoming a typical example of East Georgian two-part drone polyphony.

To summarize, we may say that the singing style of the East Georgian "long" table songs is an incredible mixture of two totally different musical styles: (1) the autochthonous Caucasian polyphonic three-part singing style with the drone and dissonant intervals, and (2) the West and Central Asian monophonic singing style with richly ornamented melodic lines, specific scales, free rhythm and non-metric time (see Tsitsishvili, 1998, 2000). As Tsitsishvili puts it "…the [East Georgian] "long" songs represent a total transculturation of style which differs from both parent cultures, though belongs in the polyphonic music-culture of Georgia" (Tsitsishvili, 1998:145-146).

European Mix: Indo-European Contribution to Ancient European Polyphony

The case of the mixing of the autochthonous polyphonic tradition with the monophonic singing style of the Indo-Europeans in East Georgia is by no means a unique occurrence in Europe. Moving through Europe, Indo-Europeans were in constant contact with the autochthonous carriers of the ancient European polyphony, so **the possibility of mixture of these two different types of music (polyphonic and monophonic) must have been extremely high in many regions of Europe**.

Before we start discussing the possible legacy of the Indo-Europeans in Europe we need to make an important point. Many details of the ethnic and cultural identity of Indo-Europeans are still not clear. The same must be said about their musical culture. For our topic it is crucial to remember that **carriers of at least some**

Central and West Asian Indo-European languages (Indians, Iranians, Tajiks, Armenians) musically are close to contemporary West Asian and North African monodic musical culture. Therefore there is a strong possibility that at least some of the early carriers of Indo-European languages in Europe belonged musically to the same extended "oriental" musical family. This was the case, for example, with the Dorian population, the leading ethnic element in Ancient Greece. The similarity of musical traditions of the Ancient Greeks to the West Asian musical cultures has been acknowledged since the works of Curt Sachs (Sachs, 1937a).

Let us have another look at the existing polyphonic traditions of the European peoples **in search of the possible traces of this ancient mixture of polyphonic and monophonic singing styles**. So, we are looking at the vocal polyphonic traditions with the following specifications:

(1) Drone polyphony (most likely the pedal drone),
(2) Melodic lines are richly ornamented with melismas,
(3) The rhythm is free (or relatively free), and
(4) The time organization is mostly non-metric.

Those who read the first part of this book very carefully may remember that polyphonic traditions with such characteristics are not rare in Europe. Here are some of them:

- South Albanian polyphony of the Tosks and Chameri (but not the Labs);
- Part of the polyphony of the Macedonians (although the other part does not show these features);
- Polyphony of Farsheroti Aromanians in Romania;
- In Bulgaria – vocal polyphony in Pirin;
- Northern Greece (Epirus) polyphony;
- Southeastern Serbian polyphonic style;
- Northern regions of Belarus Palessie (and again – the southern part does not show these features);
- Corsican polyphonic singing;
- North Sardinian polyphonic singing;
- East Spain polyphonic singing in Albacete;
- Eastern and Southern Portugal polyphony (but not the northeastern polyphonic style).

More about Mixed Styles: Age Matters

Any migration can and usually does lead to the mixture of different ethnic elements and cultures, and there is hardly a culture (or nation) on our planet that does not represent a mixture of different ethnic and cultural elements. The only difference is that earlier influences from a different type of culture are much more difficult to trace than later influences, because the longer period of time of the interaction

between different musical styles assists the process of natural "absorption" of two initially different cultures into one common mixed style. Later influences are often more obvious, less "absorbed" and much easier to detect. For example, in Georgia the later influences (from the 7th century onwards) of Arabic and Turkic musical cultures are very obvious, because often the complete melodies, musical instruments, performance genres and terminology univocally point to the external influences. At the same time an earlier influence of Indo-European culture in Georgia (3rd-2nd millennia B.C.) is much more difficult to detect, as this earlier influence has been long since absorbed, and today it is represented by a much more subtle mixture of elements from polyphonic and monophonic singing traditions (like the ornamented melodic lines and rhythmically freely flowing singing of polyphonic "long" table songs of East Georgia). Late external influences are usually readily identified and acknowledged by national scholars (and sometimes rejected from the sanctuary of the national culture), but this is often not the case with the historically earlier external influences.

In some European regions the influence of more than one source is the most likely case. For example, the "oriental" elements in some regions of the Balkans could be connected not only to the later and more obvious influence of Turkish culture, but to the possible earlier influence of Indo-European culture as well. The early arrival of Indo-Europeans with the "oriental" type of monophonic singing in the Balkans has been documented in the case of Ancient Greece. In the same way, prominent "oriental" features of the music in some regions of Spain and Portugal could be the result of not only the later and more obvious influence of Arabian culture, but to the earlier influence of Indo-European cultures as well.

Using Georgian music as a model of such "earlier" and "later" influences, I agree that the obvious external influence in the musical traditions of the Balkans and the Pyrenees ("oriental" musical forms and genres, melodies, musical instruments and instrumental ensembles) came from the influence of Arabic (in case of the Pyrenees) and Turkic (in case of the Balkans) musical cultures, but I would suggest that the more subtle and already mixed singing styles (for example, in Albacete in Spain, or Chameri in Albania), where richly ornamented and freely flowing melodies are mixed with the drone polyphony, are possibly the result of a much earlier influence, supposedly coming from early Indo-European migrations. These mixed styles of polyphonic and monophonic elements (which are often unacknowledged as mixed styles in the first place) I attribute to the legacy of Indo-Europeans.

Another factor that we should take into account is that Indo-Europeans came to the different part of the Europe after a certain ethnic and cultural mixture during their long migration, so when they reached their "destination", they could have been the carriers of quite different and already mixed singing styles. Besides, some of the Indo-Europeans might be carriers of different polyphonic singing traditions as well. In this case the identification of the new cultural element would be much more difficult. Therefore, not all the waves of Indo-Europeans might be the carriers of the monophonic vocal traditions with richly ornamented melodies and free rhythm and metre. In this context it is important to note, for example, that there are hardly any traces of the "oriental" mixture with drone polyphony in many northern regions of

Europe. (Although we need to acknowledge that very few traditions of polyphonic singing from North Europe have survived until the 20th century).

After a brief discussion of the importance of distinguishing earlier and later influences in European music, let us now go back to the list of mixed cultures of ancient Europe. This list can be longer, but I think my argument is already clear: moving through Europe, the Indo-Europeans were in constant contact with the autochthonous population of Old Europe, with the supposedly polyphonic traditions of drone polyphony. During the centuries and millennia after the arrival of Indo-Europeans these two cultures and their representatives interacted, mixed, and gave birth to the new combined traditions of polyphonic singing. The typological closeness of these "mixed" polyphonic traditions is quite clear. The main reason for this closeness must be the fact that in all these cases there was a **similar mixture of two different types of cultures**:

(1) Drone dissonant-based polyphony of the old European populations, and
(2) Richly ornamented, free rhythm and non-metric time based monophony of the populations brought by at least some migration waves of Indo-Europeans.

I suggest that this initial closeness of two main ingredients of the "Great European Stylistic Mixture" created the similarity of the drone polyphonic traditions of East Georgians, Chameri Albanians, Corsicans or the Albacete residents from eastern Spain (to name a few), and not the westward migrations of Georgians to southern Albania or eastern Spain, or the eastward migrations of Spaniards or Albanians to Caucasia.

More mixture: The Influence of European Professional Polyphony

Stratification of European polyphonic traditions is further complicated by the apparently late influence of European professional polyphony. European professional polyphony (itself a result of the mixture of Middle Eastern monody and ancient European polyphony) first appeared at the end of the first millennia, then gained confidence and went from strength to strength from the 15th century on. By the 19th-20th centuries European professional polyphony became the most influential musical style of our planet, influencing indigenous musical traditions throughout Africa, Asia, Oceania, Australia, and America.

Before we discuss the influence of European professional polyphony on European traditional polyphonic cultures, let us name a few well-known and most important features that entered European traditions of polyphonic singing from European professional polyphony:

(1) Prevalence of parallel thirds and sixths between the parts,
(2) Prevalence of triadic chords, and
(3) Tonic-dominant-subdominant functional system with typical base movements by fourth and fifths.

Here is the list of a few traditional polyphonic styles of Europe that show signs of the late influence of European professional polyphony:

- Singing "na bas", very widely distributed in virtually all the **Balkan** polyphonic cultures, is mostly based on two-part singing, prevalence of the parallel thirds between these two parts, the peculiar cadence formula in the base (jump of the base fourth down, often considered as a jump from Tonic to Dominant), and finishing musical sentences on the "empty fifths";
- Another very important region of the distribution of the mixture of ancient European and late European professional polyphony is the biggest mountain range of Central Europe – the **Alps**. Choral singing of the Alps mountaineers in Austria, Switzerland, Northern Italy, and Southern Germany is the backbone of their traditional music. Harmonies here are usually fuller (three and four-part) than in the Balkan mostly two-part singing tradition of "na bas". The influence of European professional polyphony in this region is so strong, that apart from the yodeling, it is not easy to detect any feature that does not come from the influence of omnipotent European professional polyphony.
- In **Georgia** this tradition is well represented by the so-called "western branch" of Georgian urban music, particularly in a cappella three- (and four-) part table songs with parallel thirds and sixths, changeable drone (changes according to the TSD system), and triadic chords. This style is known and popular in most of the cities of Georgia, particularly in the biggest city of western Georgia – Kutaisi and the capital Tbilisi.
- The reader might remember that the polyphonic style, heavily affected by European professional polyphony, is widely present in the **Ukraine**.
- The influence of the European professional style is also evident in the polyphonic traditions of the Mediterranean islands: **Corsica**, **Sardinia** and **Sicily**. This influence is mostly evident in the triadic structure of the chords, and the TSD harmonic system.

Many more European polyphonic traditions are affected by late professional polyphony than the ones listed above. We could expect that in **most European cities** there will be some late style group singing connected to European professional polyphony. In general, the influence of the European professional polyphony is much wider than the influence of the West Asian monophonic style.

Conclusions

Not going into the details of many other influences that shaped the musical profile of the European continent, we may say that contemporary European polyphonic traditions represent a mixture of at least these three big and very different musical styles:

1. Ancient European drone polyphony with secondal dissonances. This style is autochthonous to Europe;

2. West Asian monophonic singing with richly ornamented melodies and free meter and rhythm. This style arguably came first to Europe together with some carriers of the Indo-European languages, as well as later with other carriers of the West Asian singing traditions (carriers of Arabic and Turkic languages);

3. European professional polyphony with parallel thirds and triadic chords and TSD harmonies. This singing style was developed in medieval professional polyphony (and historically is a mixture of ancient European polyphonic and Middle Eastern monophonic cultures);

We could call these three styles "three main stylistic elements" that mostly shaped the profile of the polyphonic traditions of different European regions. As a conclusion of our discussion of the historical processes involving the polyphonic traditions of Europe, we can now briefly summarize this multifaceted "case study" and present a generic picture of the complex interactions of these three main stylistic elements in different European polyphonic cultures. I suggest that in some of the cases we have a result of the interaction of **two styles**, and in other cases we even have a mixture of **all three above-mentioned styles**. And still in other cases we have the relatively **complete survival** of the ancient drone polyphony without any major external influences. Let me mention a few polyphonic traditions of the Europe to illustrate my ideas:

- **No external influences. Ancient European drone polyphony without major external influences** could be represented by the polyphonic traditions of western Georgia (particularly in Svaneti), Laberi in Albania, Shops in Bulgaria, the central Polessye region in the Ukraine and Belarus, or drone polyphony in Latvia (both two- and the currently disappeared three-part traditions). Here the ancient European drone polyphony with the secondal dissonances does not show any major traces of the influence of West Asian melismatic monophony or European professional polyphony.

- **Mixture of two styles (A). Ancient European drone polyphony with the influence of West Asian melismatic monophony** could be represented by the polyphonic singing traditions of East Georgians (particularly "long" table songs), Chameri from Albania, Albacete drone polyphony from East Spain, melismatic eastern and southeastern Portugal polyphony, Farsheroti Macedonians polyphony from Romania, or southeastern Serbian polyphony. Here the ancient drone polyphony is mixed with ornamented melodies and free rubato flow.

- **Mixture of two styles (B). Ancient European drone polyphony with the influence of European professional polyphony** could be represented by the singing traditions of west Georgian urban style a cappella songs (particularly from Imereti), a new Balkan popular singing style "na bas" (group of songs and traditions without melismatic elements in the melody), most of the polyphonic traditions of the Alps, or drone polyphony from eastern Lithuania ("collective *sutartines*") with triadic chords.

- **Mixture of three styles. Ancient drone polyphony with the double external influence from West Asian melismatic melody and from late European classical polyphony.** These are historically the most interesting polyphonic styles, where the mixture of all three major styles is evident. I think few European traditions could represent this category: Corsican polyphony with drone, freely flowing melismatic melody, triadic chords and TSD harmonies is a clear example of the mixture of all three major European styles; Sicilian polyphony and North Sardinian polyphony also show obvious elements of the mixture of these three styles. Some of the Balkan "na bas" singing style with ornamented melodies and parallel thirds could also be included in this category.

Case Study #5
Heterophony

Heterophony is strategically positioned between polyphony and monophony. To have a heterophonic singing all you need is to have a group of singers, singing in unison where some members of the group do not strictly follow the unison. Even rare deviations are enough to see the elements of heterophony. Ethnomusicologists often use heterophonic polyphony as a flexible model to illustrate the process of the **emergence** of polyphony from monophony. If you believe in the evolutionary development of polyphony from monophony, you can have a look at the musical tradition of any national musical culture with developed heterophonic traditions and classify heterophonic examples according to the gradual increase of the heterophonic elements. So you will soon have a clear evolutionary picture of the evolution of polyphony from monophony: at the bottom of the scale you can put the unison examples (as the most archaic, "monophonic layer"); then comes the unison singing with only occasionally emerging heterophonic elements; next would be examples where heterophonic "deviations" from the unisons are quite numerous, and finally you may have examples where heterophony is the leading element of the texture, and where the unison only is used at the crucial moments of melodic development (this would be the latest, already the "polyphonic layer").

The only problem with this very simple and ostensibly logical evolutionary transformation from monophonic to polyphonic singing is that existing facts do not support this scenario. So, there is nothing wrong with this kind of classification of unison-heterophonic traditions per se, but if we want to consider this gradation as the *historic model of the evolution of polyphony from monophony*, we immediately run into major contradictions with the existing facts. Even if we forget about the general tendency of the disappearance (and not the appearance) of polyphonic traditions around the world, discussed earlier in this part, the evolution of monophony into polyphony through heterophony still faces contradictions.

Let us first of all note the difference between the heterophonic elements in polyphonic cultures and heterophonic polyphony per se.

Heterophonic elements can be potentially present in every polyphonic culture and style, where at least one of the parts is performed by more than one person. For

example, in Georgian polyphonic songs different bass singers may occasionally sing different notes. These notes are never haphazard, and they are as a rule a third or a fifth apart (according to the principle of "third and fifths substitution", mentioned during the discussion of Georgian polyphonic tradition in the first part).

Heterophonic polyphony is a type of texture where all (or almost all) the singers perform the main melody of the song heterophonically. In this "case study" we will be concentrating on heterophonic polyphony, not the heterophonic elements in other types of polyphony.

Let us now have look at the patterns of stratification of heterophony in one of the most important regions of the distribution of heterophonic polyphony in the world, and definitely the largest region of the distribution of heterophonic polyphony in Europe – Eastern Europe. This is the ethnic territory of the eastern Slavs, who are particularly well known for their rich traditions of heterophonic polyphony.

Heterophony among Eastern Slavs has a few different versions, but the uniting feature between them is the above-mentioned tradition of singing the main melody as a "thick" heterophonic melody. The singers call this heterophonic melody a "bass" part (see the section about Russian polyphonic traditions on this subject). In eastern Slavic tradition heterophonic singing of the main melody is often accompanied by a functionally different part (usually a high part), mostly performed by a single performer.

If we want to understand the history of the phenomenon, first of all we need to have a careful look at the geographic distribution of this phenomenon in a wider context. Let us ask two important questions: (1) is this phenomenon distributed throughout a single uninterrupted territory or throughout several isolated smaller territories? And (2) is this phenomenon distributed throughout geographically isolated regions (like mountains, major forests, islands, continental fringes) or throughout easy to access territories? The answers to these questions are usually very easy to discover, and are very informative at the same time. Here are the simple answers to these two questions:

(1) Heterophony is distributed virtually throughout the whole ethnic territory of the Russian populations, as well as the Ukrainian and Belarus populations. Only in a couple of smaller regions do we see the existence of a different type of polyphony – drone polyphony. This simple and well known fact among Russian ethnomusicologists points to the earlier chronological period of distribution of drone polyphony and the later distribution of the heterophonic singing style.

(2) The area of the distribution of heterophony is the hundreds of thousand kilometers of open area of Eastern Europe, north from the Black and Caspian Seas. No major geographically isolating ecological systems exist on this territory. Except one. The only geographically isolating region on this huge territory is Polessye, the biggest forest region of the Europe, the border region between

> all three Slavic peoples (particularly – between the Ukraine and Belarus). And again – Polessye is almost the only region where another (drone) type of polyphony is distributed.

Therefore, the distribution pattern of heterophony on the territory of Eastern Europe point to its late distribution. This is particularly evident in comparison of the distribution pattern of heterophony with another polyphonic type of the Eastern Europe – drone polyphony. Drone polyphony of Polessye and some other (also isolated!) smaller regions (like the Bryansk and Belgorod districts in Russia) must be chronologically much older than the tradition of heterophonic singing.

The idea of the possible later origin of heterophony, as the result of losing the ancient "more polyphonic" tradition, has been expressed (as one of the historical possibilities) by Russian and Ukrainian scholars. For example, Sokolova declared "Heterophony is not the primordial type of polyphony, but a specific version of the texture of the 'podgolosochnaia polifonia' type" (Sokolova, 1989:44). Efremov concluded his recent paper, delivered at the Tbilisi 2004 International Symposium on traditional polyphony, with the idea that the dissonant small range drone polyphony and dissonant small range heterophony is the archaic form of Ukrainian polyphony, and the heterophony with parallel thirds and large range (up to sixth) melodies is a historically later form of group singing (Efremov, 2005).

If we have another look at the geographic map of Eurasia, we can see the possible reasons for the disappearance of the older forms of polyphony in most of the territory of Eastern Europe: this territory is totally unprotected by any serious geographic barriers, so the new migrating waves (coming from the east, by the way) were able to go through without any major natural obstacles. This was the region where the migration waves from Central and East Asia (the most monophonic regions of Eurasia) were coming into Europe.

So, if the relatively equal mixture of the carriers of ancient drone polyphony and the carriers of vocal monophony created in Mediterranean Europe the qualitatively new melismatic and free-flowing drone polyphonic style, the much bigger proportion of the new (monophonic) migration waves in Eastern Europe created heterophonic polyphony, the phenomenon that is positioned between the polyphonic and monophonic types of singing. Another very important distinction: unlike Central and Western Europe, East Europe had a major influx of new populations and cultures from Central and East Asia, carriers also of monophonic (although very different from some "oriental" early Indo-European, or West Asian style) singing traditions. So, without going into a detailed discussion, we may say that unlike Central and Western Europe, Eastern Europe had one more very important stylistic element that shaped the musical profile of this region – the Central and East Asian musical style, based on anhemitonic pentatonic scales and monophonic singing.

One of the biggest questions of Euro-Asiatic musical stratification is the problem of the Turkic peoples. The Turkic-speaking world unites peoples of such vastly different origins as Turks, Balkarians and Karachaevis, Kazakhs and Yakuts. The historical process of the creation of Turkic linguistic unity might be one of the

key elements for our understanding of the musical diversity of Eurasia (see Zemtsovsky, 2003).

Stratification of the polyphonic forms of Eastern Europe shows some other signs of losing the ancient tradition of drone polyphony that must have been distributed in Eastern Europe much wider than it is today:

(1) Drone polyphony (although not the small range dissonant type, but with the elements of heterophony in the top parts) is still present in Mordva;

(2) Remnants of drone polyphony are also present in some heterophonic singing traditions, where the main melodic line is performed heterophonically by a group, and the functionally different part is sung in a higher range, as a slightly movable drone. In some traditions this high drone is performed by a single singer, although high drone can be also performed by a group of singers as well (see the discussion of Slavic polyphonic traditions in the first part of this book);

(3) In some Eastern European traditions drone and heterophonic singing are more intertwined. Here both parts (drone and the melody) are performed by groups of singers and there is no strict division between the functions of these parts. In this singing tradition singers can easily cross over from the main melody to the drone and vice versa even during the same stanza (see again the discussion of Slavic polyphonic traditions in the first part of this book);

In my opinion, this diversity of the unorthodox and sometimes fragmentary use of the drone together with the heterophonic types of singing points to the actively negotiating processes of the interaction of ancient drone polyphony with monophonic singing traditions. Unlike the Mediterranean region of Europe, where we can clearly see the influence of the "oriental" type of the singing style with richly ornamented and rhythmically free melodies, in Eastern Europe the main source of the monophonic influence seems to be the Central and East Asian pentatonic monophonic style.

Conclusions. According to the stratification of the heterophony and the drone polyphony in the territory of Eastern Europe, heterophony must be a later phenomenon, apparently the result of the loss of the more ancient tradition drone polyphony, as a consequence of active migrations and ethnic mixtures in Eastern Europe. This conclusion about the secondary nature of heterophony is supported by the general historical tendency of the loss of the tradition of polyphonic singing, discussed above.

Joseph Jordania (2006). From the Book: WHO ASKED THE FIRST QUESTION? The origins of human choral singing, Intelligence, Language and Speech. Logos Publishing.

Case Study # 6
Lithuanian Sutartines

As discussed in the first part of this book, Lithuanian *sutartines* represents a unique singing style. Most of the ethnomusicologists that have discussed the origins of *Sutartines* consider it a very archaic singing style. In this "Case Study" we are going to look at this unique singing style from the historical and comparative perspectives.

D. Rachiunaite-Vychiniene gives a comprehension survey of the available publications on Sutartines (Rachiunaite-Vychiniene, 2002:16-38). It is clear that the unique tradition of secondal *sutartines* has been at the very heart of Lithuanian musicology and ethnomusicology for the most part of the development of Lithuanian ethnomusicology.

The first information about a specific style of music (that has been identified by musicologists as *sutartines*) comes from the 1578 publication of Alexander Guagnini. This publication describes the tradition of "strange and dissonant" music played on "long wooden horns" (trumpets) in 16th century Samogitia (the southern part of Lithuania). The publication of the "Chronicle" of Polish Maciej Stryjkowski in 1582 contains extremely interesting information about Lithuanians singing with the specific syllables associated with the *sutartines* singing style, and gives fragments of the texts of two historical *sutartines*. The first actual mention of the term *sutartines* comes much later, from the early 19th century. In a 1828 publication Simonas Stanevichius comments about one of the songs: "This song is one of the *sutartines*, which has recently gone out of fashion, and has lost its purpose among Somigitians. Remnants of the song are more commonly heard in Lithuania [upland Lithuania]" (cited from Rachiunaite, 2002:20-21). The first actual transcription of *sutartines* comes from 1833. The example and the accompanying notes mention the multipart performance style (actually a canon – round), but the example does not represent the famous secondal *sutartines* with dissonant intervals and polytonal clashes between the parts.

Publications of Adolfas Sabaliauskas and Aukusti Roberto Niemi in 1911 and 1916 contained 150 melodies of *sutartines*, both vocal and instrumental. According to Sabaliauskas, "hymns" (*sutartines*) are "never sung in unison, but always contain two melodies, one alongside the other, coming together in counterpoint". Interestingly, Lithuanian musicologists and intellectuals did not understand at the time the advanced musical language of *sutartines*, considered it "incomprehensible, and probably completely impossible", even describing it as "a crocodile, singing in parallel seconds" (Rachiunaite, 2002:31).

Jadviga Chiurlionyte's anthology of Lithuanian folk sings (Chiurlionyte, 1938) contained 22 *sutartines* (out of 350 songs from all Lithuania). Chiurlionyte pointed at the unique character of *sutartines* among other Lithuanian songs (I guess she was pointing primarily at the unique character of secondal *sutartines*) and wrote that the chronological relationship between the *sutartines*, and the other Lithuanian singing styles was unclear. Her 1967 German article about *sutartines* (Chiurlionyte, 1967) brought international interest to the *sutartines* phenomenon.

Joseph Jordania (2006). From the Book: WHO ASKED THE FIRST QUESTION? The origins of human choral singing, Intelligence, Language and Speech. Logos Publishing.

In his book on Lithuanian folk music, German scholar Edwin Geist expressed the idea that *sutartines* was the ancient type of atonal music, practiced much earlier than the European professional atonal music of the 20th century (Geist, 1940:74. Cited from Rachiunaite, 2002:34). The comparison to the 20th century advanced music language is appropriate, although the point of comparison is not completely justified – *sutartines* is the early style of ***not atonal***, but ***polytonal*** music, as the two tonal centres and shifts between them are clearly identifiable in the examples of secondal *sutartines*.

The biggest contribution to the study of *sutartines* comes from Zenonas Slaviunas. In his comprehensive 3-volume book (Slaviunas, 1958-1959) all the available information and examples of *sutartines* are gathered, and are accompanied by a deep analysis of many aspects (historical and theoretical) of the study of the phenomenon of *sutartines*.

A number of European scholars also expressed their opinions about the unique singing style of *sutartines*:

- Walter Wiora included two examples of *sutartines* in his "European Folk Music" and considered *sutartines* an ancient polyphonic style. Wiora grouped *sutartines* with the polyphonic traditions of North and South Europe – the Icelandic tradition of parallel fifths, and Portuguese polyphony of three-part parallel singing (Wiora, 1952:7).
- One of the greatest scholars of the 20th century, Curt Sachs, seems to miss the point, suggesting that in *sutartines* singers do not pay any attention to the clashing secondal dissonances, concentrating instead on the regular repetition of the theme (Sachs, 1965:181; see Rachiunaite, 2002:36). On the contrary, all the currently available information on the *sutartines* point to the fact that singers enjoy the clashing dissonances and try to achieve them. This phenomenon of enjoying the dissonant seconds is now well documented from a great number of traditional polyphonic cultures.
- K. Stumpf wrote in 1926 "in the music of primitive peoples, there is often the desire to achieve a sharper sound through the help of a 'clinging' of adjacent tones from which, for example, parallel seconds are formed" (Stumpf, 1926:42. Cited from Rachiunaite, 2002:54)
- Ernst Emsheimer wrote about the originality of the *sutartines* style (Emsheimer, 1964) restraining himself from any further comments about the age of *sutartines*. Werner Dankert pointed out, "not all polyphony is based on consonance" (Danckert, 1966:66).
- Nikolai Kaufman points out that, despite the obvious differences, *sutartines* show the closeness with the Bulgarian ("Shop" region near Sofia) singing style, where the enjoyment with the sharp secondal dissonances plays the leading role (Kaufman, 1966).
- Florian Messner (1980) pointed to the similarities between different singing styles throughout the world that use the secondal dissonances, and *sutartines.*
- Alica Elschekova suggested that the *sutartines* style has no parallels, at least in the Carpathian and Balkan regions (Elschekova, 1981:240).

- Karl Brambats expressed the same idea of the unique character of the *sutartines* style. According to him, *sutartines* is "difficult to fit into some genetic and historical context" (Brambats, 1983:26).
- Martin Boiko did a fundamental study of the *sutartines* phenomenon and after a study of the other Baltic singing styles he (1) found structural similarities of *sutartines* with the refrain songs from Latvia and Estonia, as well as (2) found the elements of *sutartines* in Latvian traditional music (Boiko, 1992, 1992a)

Discussing the age and the archaic origins of *sutartines*, Rachiunaite uses the information based on the set of three different elements: (1) archaic elements in the texts of *sutartines*, (2) very old choreography, and (3) musical features. Based on an analysis of these elements in detail, Rachiunaite agrees with most of the researchers of *sutartines* and concludes that the roots of *sutartines* "lie as deep as the prehistoric era" (Rachiunaite, 2002:58).

I agree that an analysis of the song texts, choreography and musical features can give us lots of information, but I would still suggest that if we want to find out the age of *sutartines* (or of any other phenomenon of culture) we need to consider first and foremost the context of its **geographical distribution**, then the **ethnic history of the region**, and finally the **existing parallels with other polyphonic traditions**.

1. Geographic distribution. Typical elements of the archaic geographic distribution are:

- The phenomenon exists in several geographically isolated islands, surrounded by the later styles.
- The extremely ancient phenomenon of traditional culture is most likely to survive in extremely isolated and hard to reach geographical regions, as in high mountains, or on islands, or in deep forests, where active migrations and new economic and cultural developments can not reach easily;

2. Ethnic history of the region. You would certainly expect that the region where the extremely archaic elements of culture can survive, will:

- Display the great continuity of the population and languages; and will
- Display the whole set of other archaic features as well.

3. The set of defining musical features. Musical language of the extremely archaic phenomenon would:

- Display a great integrity of the archaic musical features;
- Display deep parallels with other existing archaic traditions from different isolated parts of the world.

If we study the geography, ethnic history of the region, and musical features of *sutartines* polyphony against these criteria, we will have the following picture:

- *Sutartines* does not exist in several isolated regions. It is basically one region only, unique for the rest of the Europe and in fact the whole world;
- The region where *sutartines* is distributed does not have any kind of isolating geographical environmental factors (high mountains, forests, island);
- The ethnic history of this region does not show any particular continuity of the population or the language. The ethnic, linguistic and cultural continuity of this

region was interrupted at least once, when the Baltic peoples came here at the end of the 3rd millennia B.C. as a part of the migration waves of Indo-Europeans;

- The region where the unique secondal polytonal *sutartines* was located is not prominent with any other archaic survivals of other elements of culture and ethnography. Even within Lithuania the region of distribution of secondal *sutartines* is not considered to be the most archaic. East Lithuania, where examples of drone *sutartines* (but not the unique secondal *sutartines*) come from, is considered generally to be the region of the most archaic survivals within Lithuania.
- The main elements of *sutartines*, the famous secondal clashes and the polytonal relationship between parts show very different pictures. Secondal dissonances in *sutartines* show obvious parallels with the big group of other archaic polyphonic traditions from the most archaic high mountain regions, but no other polyphonic style from the rest of the world shows parallels with another crucial and unique element of *sutartines* – the polytonal relationship between the parts. According to the words of Rachiunaite "most scholars stress that *sutartines* are unique, having no direct parallel in the folklore of any other country" (Rachiunaite, 2002:38).

Therefore, despite the whole set of archaic elements, found through an analysis of the texts of *sutartines*, choreography and the musical features, very uncharacteristic for the archaic survivals geographic location, devoid of any isolating factors, ethnic history of the region and population, undistinguished from other Indo-European migrants, and the unique musical sophistication of one of the *sutartines* most important elements (polytonal relationship between parts, absolutely uncharacteristic for archaic singing traditions) suggest that ***sutartines* can be a relatively late phenomenon**.

But let us not forget, that *sutartines* is not only secondal and is not always polytonal. Rachiunaite discusses 36 different types and sub-types of sutartines. My conclusion about the relatively late origins of the *sutartines* does not concern all types of *sutartines*, but rather the **secondal polytonal *sutartines***.

I would like to suggest that another, currently extinct type of *sutartines* was the archaic prototype of the unique secondal polytonal *sutartines*. In search of this archaic prototype let us have a good look at two different polyphonic styles from Lithuania: (1) **secondal polytonal *sutartines*** and (2) **drone polyphony** of eastern Lithuania. They are both known as *sutartines*, although stylistically they are quite different. (1) Secondal polytonal *sutartines* does not use drone, is based on the canonic repetition of two polytonal sections of the melody and is full of sharp secondal dissonances. (2) Drone polyphony (known as "collective *sutartines*), on the contrary, is based on the drone bass but in vertical coordination it is heavily based on the triadic harmonies, revealing the strong late influence of European professional polyphony.

I suggest that there was a common predecessor of both of these styles, a predecessor that "gave birth" to both secondal polytonal *sutartines* and late style of drone polyphony in Lithuania. This common predecessor was the **ancient European polyphony based on the wide use of drone and secondal dissonances**. I propose that this common predecessor of both secondal polytonal *sutartines* and the drone

("collective") *sutartines* with triadic chords underwent local developments and changes in different region of the Aukstaitia.

In Eastern Lithuania, the region with the most archaic set of elements in the whole of Lithuania, the main element of the archaic drone polyphony – the drone – survived, but another important feature of the archaic polyphony – the dissonant vertical coordination of the parts - was heavily influenced by European professional triadic harmony. This process is very well documented in many regions of Europe, where the tradition of the drone survived, but dissonant vertical coordination was substituted by European style triadic harmonies. I have discussed such mixed styles in the "Case Study #4", dedicated to historical aspects of European traditional polyphony, under a name "Mixture of two styles (B): Ancient European drone polyphony with the influence of European professional polyphony".

In another region of Lithuania the ancient drone polyphony with secondal dissonances underwent different modification: the drone was lost, but the art of creating constant secondal clashes reached unprecedented heights with the introduction of a new vocal style – polytonal canonic singing. We may also say that drone was "sacrificed" for the sake of creating more secondal dissonances. This was the birth of secondal polytonal *sutartines*.

Therefore, if the survival of the ancient drone and the loss of the dissonant vertical coordination between the parts in eastern Lithuania created an obviously late style of European-influenced polyphony, in another region of Aukstaitia the survival of dissonant clashes and loss of the drone created a new style of secondal polytonal *sutartines*, absolutely unique among traditional polyphonic cultures of our planet, and preceding the revolutionary "discovery" of polytonality in European professional music by Ives, Bartok and Prokofiev in the 20th century.

Therefore, I support the idea of the close relationships of *sutartines* with the Balkan polyphonic traditions, and other European traditions based on the drone and secondal dissonances (Messner, 1980). At the same time, in most of the Balkan traditions the drone is a central element of polyphony, which is not the case in secondal polytonal *sutartines*. I fully support the idea of Rachiunaite, that "according to polyphonic elements, the *sutartines* [secondal polytonal type of *sutartines*] would be closer to the polyphony of Bosnia and Herzegovina by virtue of the crisscrossing of voices, syllabism, and the dominant second accords" (Rachiunaite, 2002:72). Elschekova wrote about these specific parallels as well (Elschekova, 1981:240). Both in Lithuanian secondal polytonal *sutartines* and Bosnia-Herzegovina polyphony we have the total domination of secondal dissonances and the absence of the drone, although in Bosnia-Herzegovina the domination of secondal dissonances is achieved mostly by parallel "crawling" singing in seconds, whereas in Lithuanian secondal polytonal *sutartines* this is achieved by simultaneous singing of triadic melodies in two different keys. According to Slaviunas, the closest links *sutartines* displays with Polesie region (known for long drones and secondal dissonances. Slaviunas, 1972:10). Another very interesting parallel to *sutartines* (that was mostly excluded from the discussions about *sutartines* style) is the three-part drone polyphony with secondal dissonances, recorded as a dying tradition in neighboring Latvia at the end of the 19th

century by A. Yurian. We will discuss these parallels later in another context, in a case dedicated to Nuristan polyphony.

It is very interesting that the main principle of *sutartines* polyphony (melodic development by the consonant thirds and fifths, and harmonic coordination between the parts by dissonant seconds) coincides with the principles of improvisation in the western Georgian traditional polyphony, where the each melodic part develops by consonant thirds and fifths, and the vertical coordination between the parts is based on dissonant intervals (seconds, fourths). There are two important difference between Lithuanian *sutartines* and west Georgian polyphony though (apart from the fact that these principles are realized in *sutartines* is two-part canonic polyphony, and in western Georgia this principle is realized in three- and four-part contrapuntal polyphony): (1) in *sutartines* improvisations are very much restricted, whereas in western Georgian contrapuntal polyphony these principles are used first and foremost for improvisation, and (2) in *sutartines* we have a case of true polytonal polyphony of two parts, whereas in Georgian music all three or four parts are united within one tonality.

To conclude this "case study" I would like to briefly discuss the possible reason for the appearance of the unique secondal polytonal *sutartines*. I think the idea of the influence of the instrumental (particularly aerophones) tradition of playing in several layers of the secondal dissonances can be very fruitful. To support this idea we could recall that the very first information about the *sutartines*-like music was mentioning instrumental music, and besides, melodies of secondal *sutartines* are so close to the instrumental sutartines that there are certain deep connections between them. The idea of the influence of instrumental *sutartines* on the vocal *sutartines* was expressed in different times by Slaviunas (1959:20), Rachiunaite (2004:222) and the expert of Lithuanian traditional instruments S. Paliulis (Paliulis, 1984:88).

Conclusions. The unique polyphonic tradition of Lithuanian secondal *sutartines* is based on the combination of two crucial elements: (1) the abundance of secondal dissonances, and (2) the conscious use of polytonality in two different vocal parts. Out of these two elements the first (secondal dissonances) is documented in many geographically isolated (mostly in high mountainous) regions of Europe and other parts of the world, which point to the obvious antiquity of this element. On the contrary, the conscious use of polytonality does not show characteristics of archaic polyphony, is not represented in different isolated regions of Europe or the world, and must be considered a late development (possibly under the influence of well documented and rich instrumental polyphony in Lithuania with many layers of secondal dissonances). I propose that the prototype of secondal polytonal *sutartines* was the ancient European drone polyphony with secondal dissonances. According to my suggestion, this ancient tradition of European drone polyphony underwent developments in Lithuania in two different directions: in eastern Lithuania, under the influence of European professional music the dissonances were substituted by triadic harmonies, although the use of drone survived. In the other case, on the contrary, the drone was lost but the art of singing in dissonant seconds was brought to the highest possible point by developing a unique polytonal singing style, where two parts sing simultaneously precisely coordinated two triadic melodies in two different keys.

And as I have already mentioned, we will be back again to the *sutartines* singing style when we discuss other isolated polyphonic traditions.

Case Study #7
Overtone Singing of Central Asia

The Central Asian tradition of overtone singing is a unique singing style that poses another puzzle for ethnomusicologists. Overtone singing is distributed among several Central Asian peoples - primarily in Tuva, Mongolia, Altai and Khakassia. This phenomenon is mostly known by the Mongolian term *khoomei* or *hoomii* (throat, or pharynx). During the 1930s and 1940s *hoomii* was elevated in Mongolia to a "national" art form (Pegg, 2002: 1009). Here are a few questions that I will attempt to answer in this "case study":

(1) In the first place, it is not clear whether this is monophony or polyphony. As I have mentioned earlier, from the musical point of view it is polyphony, as we have two obviously functionally different parts (drone and melody), but from the social point of view, this is not polyphony, as the main element of polyphonic singing – group musical socializing, is absent.

(2) We need also to ask why the "usual" forms of vocal polyphony are absent in Central Asian cultures, where the two-part overtone singing tradition is so developed and widespread?

(3) Another important question would be whether different forms of overtone singing from different regions of the world are connected to each other, or whether they represent the result of convergent evolution.

(4) And finally – the question about the beginnings: where and when do we propose to find the origins of overtone singing? Without going into details of the technique of producing the audible overtones (there are a few good publications on this subject, (see reviews in Tongeren, 2002; Levin, 2006) we need to ask whether this is (a) a relatively recent phenomenon, or (b) this is a survival of a very ancient sound-producing method.

As the most of the prime territory of distribution of overtone singing (Tuva, Khakassia, Altai) is within the territory of the Russian Federation, and the second most important region – Mongolia - was also under the political and cultural influence of Russia (more precisely – the Soviet Union) during the major part of the 20th century, it is not surprising that the majority of early scholarly works on overtone singing were published in Russian. Here is a brief account of the important publications and a few relevant ideas on the subject:

- The Russian linguist N. Baskakov described in the 1940s solo two-part overtone singing in epic singing traditions among Altai mountaineers. He mentioned

the existence of three different styles, known as *kuulep kaila, kargirlap kaila,* and *sygyrtip kaila* (*kai* is a generic name for overtone singing in Altai) (Baskakov, 1948).

- The Soviet archaeologist and ethnographer S. Vainshtein proposed in 1980 that the origin of the Central Asian overtone singing tradition was connected to the Turkic ethnic groups from the mountainous and steep regions of Sayan-Altai mountain grade, where the ancestors of the contemporary Tuva people lived. Vainstain roughly dated the origins of overtone singing by the 1st millennia.

- The Mongol linguist and musicologist, Jamtsyn Badraa, published in 1981 an article "Xoomei" and "Urtin Duu – Specific Phenomenon of Mongol traditional Classic Music" (published in Russian). The article is mostly devoted to the clarification of the terms *khoomei*, *hoomii, xoomei* and the unification of overtone singing with a melodic whistle through the teeth (*isgerex*) and playing instruments (*tsur* and *xulsun-xuur*) in a related musical-stylistic system.

- Khamza Ikhtisamov, an ethnomusicologist from Central Asia, in his 1984 article "Notes on Two-Part Throat Singing of Turkic and Mongol Peoples" concentrated primarily on the archaic features of the sound-producing method in different styles of overtone singing. Based on the study of two Russian scholars, B. Chernov and V. Maslov, Ikhtisamov concluded that the acoustic – physiological characteristics of the performer's throat during the overtone singing must have been characteristic for human societies before the development of speech and singing abilities (Ikhtisamov, 1984:180). Ikhtisamov dated the origins of overtone singing deep in the prehistoric times of 30-40 thousand years ago (ibid 180-181). Ikhtisamov discussed the use of the term *sygyt* (lit. "whistling" in Tuvan), the name of one of the most popular styles of overtone singing, in an epigraph dedicated to the Turkic chief Kiul-Tigin (died in 732). This term meant in ancient Turkic "to lament", or "dirge", or "to make yourself lament". It is not clear whether the term was used in the 8th century to denote overtone singing during ritual mourning, but as we know, the repertoire of overtone singing does not have connections with burial rites. Connection to burial rites is considered to be one of the most stable in human societies and cultures.

- Carole Pegg's 2001 book "Mongolian Music, Dance, and Oral Narrative" gives a comprehensive analysis of the overtone singing tradition in Mongolia. According to Carole Pegg, overtone singing in Mongolia has several social functions: it is used to lull babies to sleep, to call yaks and, among the Baits, during part of a wedding celebration – "seeing of the bride." The Tsaatans, a group of people from Northwest Mongolia, use it during hunting. This singing style is physically very demanding. "The best *hoomii* performers are often champion wrestlers at the peak of their strength; and even professionals have injured the larynx, burst blood vessels in the eyes, and lost consciousness, particularly when performing *hamryn* and *turlegt hoomii*" (Pegg, 2002:1009-1010)

- Ted Levin was a member of the New York-based Harmonic Choir, when heard the Tuvan recording and found one of his lifelong scholarly attractions. In 1987 he became the first American to do fieldwork in Tuva, and then helped Tuvan performers to start touring (from 1993 on) in the USA and other parts of the Western World. Levin stressed the use of certain overtones and the conscious missing of seventh and eleventh harmonics, which are not part of the pentatonic scale. "The

resulting harmonic scale expresses the strongly pentatonic character of many Tuvan melodies, demonstrating that for performers of *khoomei*, the harmonic series is not simply a naturalistic sonic resource but is musically shaped and stylized in ways that reflect ingrained cultural preferences". Levin, 2002b:982). His recent book "Where Rivers And Mountains Sing", written together wit Valentina Suzukei (2006) gives a comprehensive picture of the Tuvan overtone singing tradition.

- Mark van Tongeren, a Dutch scholar and performer, published a book in 2002 "Overtone Singing: Physics and Metaphysics of Harmonic in East and West", providing a look at this phenomenon both as a performer and a scholar.
- In her 2002 book "Tuvan Throat-Singing" (in Russian) Tuvan ethnomusicologist Zoya Kyrgyz surveyed all existing ethnographic and historic materials connected to overtone singing in Tuva. The biggest existing variety of the types of overtone singing in Tuva, according to the scholar, proves the Tuvan origin of this phenomenon.
- Mongolian musician Tserendavaa holds another opinion, suggesting that it is a Chandman, a region in western Mongolia that gave birth to overtone singing tradition (Levin, 2006:69).

To understand the origins of the overtone-singing phenomenon, and to critically check the possibility of this singing style being extremely ancient, it is very fruitful to have a careful look at the region of distribution of overtone singing and to take into account the historical context of the groups of peoples practicing overtone singing. Geography and the ethnic history of this region brings the following facts to our attention:

(1) According to the data of archaeology and physical anthropology, the region of Central Asia underwent a major population change. The growing body of information suggests that almost till the end of the first millennia c. e. this region was mostly populated by peoples with different, mostly European (Caucasian) physical characteristics, and supposedly, culture. Besides growing archaeological and physical anthropological evidence, these older layer of the peoples from this region had been mentioned in Chinese historical records as well.

(2) Starting from the 9th century, major ethnic and population changes took place in Central Asia. New waves of peoples (mostly from contemporary China) replaced the previous populations in many parts of Central Asia. This process of a westwards movement of the East Asian population resulted later in a series of major conquest wars of the great Mongol Empire, reaching well into Central Europe in the 13th and 14th centuries.

(3) Physical anthropological studies of Central Asia by Russian anthropologists suggested that the old European substratum is still

clearly evident among the peoples of certain regions of Central Asia. More specifically, this substratum is best preserved among the populations of: (a) western Tuva, (b) Western Mongolia, and (c) the peoples of the Altai-Sayan mountain ranges.

(4) Overtone singing is distributed among several peoples of Central Asia, and the strongest traditions were found among the following peoples: (a) Western Tuva, (b) Western Mongolians, and (c) the Altai-Sayan mountain region peoples.

(5) We have already discussed in a special "Case Study" the musical influence of the early Indo-Europeans in several European polyphonic cultures, where the mixture of two different (polyphonic and monophonic) singing styles created a totally new polyphonic singing style with the element of both "parent" styles: with the drone, wide melismatic melodies and free rhythmic flow. I propose that in the case of overtone singing we again have the result of another extremely interesting **mixture of different (polyphonic and monophonic) singing traditions: the singing style of the earlier population of central Asia (supposedly carriers of drone polyphony) was mixed with the singing style of new populations (supposedly carriers of monophonic singing traditions).**

(6) The results of this mixture reflected the intensity of the new population influx in Central Asia. Characteristics of contemporary population suggest that the contribution of the new arrivals was much bigger than the contribution of the older population. The same must be said about the singing traditions of this region. They reflect the much bigger contribution of the Asian (monophonic) element in music traditions. That's why there are no other "usual" types of vocal polyphony in this region, and that's why one of the cornerstones of vocal polyphony – social interaction by means of vocal activity – is absent in the tradition of overtone singing.

(7) At the same time, the most persistent element of the previous (supposedly ancient European vocal polyphonic style – the drone – has survived the ethnic and cultural assimilation and is still present in the singing traditions of contemporary Central Asia. We will discuss later in this part one of the universal historical steps of the process of the loss of vocal polyphonic traditions: replacement of another singer (as polyphony is meant to be performed by more than one singer) by new technical means: "if no one is going to sing together with me, I'll sing polyphony on my own". This resulted, for example, in the creation of polyphonic (double, triple and even

quadruple) blown instruments (we'll discuss this issue a bit later, in a "case study" about Ancient Mesopotamian and Ancient Mesoamerican civilizations). In the case of Central Asia a brilliant artistic solution was found: without the help of musical instrument, the possibilities of polyphony were found within the human voice-production system.

(8) As harmonics are a universal quality of any musical sound, it is possible that the technique of producing overtones was found (first accidentally) by several individuals independently from each other. Not all such discoveries lead to the establishment of a new singing style and the creation of a wide ethnic repertoire in this new style. For example, we may remember from the first part of this book that a form of overtone singing (*umngqokolo*) is known among Xhosa women and girls (Dargie, 1991). According to the scholar, "The style may have developed from a practice of small boys: they impale a beetle on a thorn, put it in their mouths, and isolate various overtones produced by the insect's buzzing" (ibid 40-41). American country singer Arthur Miles also independently created an overtone singing style in the 1920s.

(9) Agreeing with the chronology of the origins of the overtone singing phenomenon in Central Asia, suggested by the Russian ethnographer, S. Vainshtein, I suggest that the origins of Central Asian overtone singing must be connected to the processes of great population change and ethnic mixture, that took place in Central Asia from the 9th to the 10th centuries. The mixture of two different populations (supposedly bearers of polyphonic and monophonic traditions) on the territory of Central Asia must have given the original push for the creation of the phenomenon of overtone singing.

(10) Accidentally, the Chinese written sources also mention (from the same 9th century!) that peoples of Central Asia (when going into battle) were producing a strange voice – a mixture of low roaring sounds together with high whistling sounds (Kyrgys, 2002).

Therefore, although I do not agree that Central Asian overtone singing style is an extremely ancient, pre-articulation phenomenon, I believe its origins are at least as old as the origins of European professional polyphony (also the 9th century). I suggest that the rich and dramatic ethnic history of the Central Asian region, where two different populations (supposedly carriers of monophonic and polyphonic singing traditions) had a large-scale ethnic and cultural mixture, triggered the creation of this unique singing style.

Joseph Jordania (2006). From the Book: WHO ASKED THE FIRST QUESTION? The origins of human choral singing, Intelligence, Language and Speech. Logos Publishing.

Case Study #8
The Nuristan Polyphony

The uniquely isolated tradition of vocal polyphony in the Hindukush Mountains requires a separate look. Without repeating what was said in the first part of this book about Nuristan polyphony, let us go straight to the main point.

We do not have many historical records about the Nuristan and their polyphony. Most of the existing records describe the inhospitable Nuristan terrain and the failure of Arab and Mongol conquerors who tried to subdue and convert the recalcitrant "pagan" mountaineers. The heavily wooded steep mountains of the interior Nuristan with fast mountain rivers (with the villages strategically positioned on the other side of the river) are mostly inaccessible even today for all but those on foot.

The legacy of the visit of Alexander the Great, who came to Nuristan in the 4th century B.C. is still a popular theme of discussions and legends. According to historical tradition, the meeting between the people of Nuristan and Alexander the Great was a friendly one. The unusual physical features of the Nuristan men and women (with a large number of people with blue eyes and red and blond hair) had been sometimes discussed in the context of the prolonged visit of Macedonians to the Nuristan.

Another great conqueror, Tamerlane, came to Nuristan many centuries later with different, more aggressive aims. By the end of the campaign, after most of his horses were dashed to death against the rocks, Tamerlane turned back and sent his prayers of thanks to god for his safe return from the Kafiristan.

The population of Nuristan maintained their way of life and religion up to 1896, when they were conquered by Afghani Amir Abdur Rahman Khan, who forcibly turned them into Moslems. The deep changes that followed this transition, according to available information, did not alter their tradition of vocal polyphony.

I am not going to repeat the characteristics of Nuristan polyphony in detail, but to remind the readers, we may say that Nuristan polyphony is mostly a three-part tradition, with a drone in the middle of the texture and two melodic parts around the drone. The range is very small and sharp seconds are almost the only harmonic interval the listeners hear.

Florian Messner seems to be the first who put Nuristan polyphony in the context of European drone polyphonic singing with dissonant seconds, known from the Balkans, Caucasia, the Baltic region and even Melanesia (Messner, 1980, in German. English translation is in press. See also Brandl, 1975). I would like to discuss in a bit more detail the existing parallels between Nuristan polyphony and the Lithuanian *sutartines* style.

Here are two different lists. The first list presents the list of features that demonstrate the differences between Nuristan polyphony and the *sutartines*. The second list discusses the features that are common between these two polyphonic styles.

So, these are the points that **differ between** Nuristan polyphony and Lithuanian secondal *sutartine*s:

- Nuristan polyphony is primarily drone type polyphony, while there is no drone in the Lithuanian secondal polytonal *sutartines*. Drone polyphony is present in Lithuania (as "collective *sutartines"*), but in a different style, heavily influenced by the late European professional music;
- Canon is the dominating type of polyphony in *sutartines* while in Nuristan there are hardly any traces of it;
- Polytonality is a "trademark" of the unique secondal sutartines. Secondal clashes in Nuristan polyphony and the two melodic centres are organized within one tonality, without real polytonal content;
- The leading rhythm in Nuristan in 6/8, while in *sutartines* it is 4/4;
- Change of key (or harmony) happens in *sutartines* after three bars, so the six-bar structure is equally divided into two sections. In Nuristan the change occurs within the three-bar structure;
- *Sutartines* were traditionally performed by women only, while Nuristan polyphony is performed both by women and men (separately and even together);
- In *sutartines* the number of performers is strictly limited by the tradition, allowing only two, three, or four performers to sing any example of *sutartines*. In Nuristan the number of performers is not limited, so bigger and not so strictly organized groups can participate in singing;
- Lithuanian *sutartines* is a two-part polyphony, while Nuristan polyphony is mostly three-part;
- Lithuanian *sutartines* it an example of a cappella singing, while in Nuristan musical instruments (most prominently the archaic harp *wadzh* and percussion) often accompanies polyphonic singing;
- There are several well-defined styles of *sutartines* in Lithuania (including the canonic, heterophonic, drone types) while there is generally only one style of traditional polyphony in Nuristan;
- Some Lithuanian *sutartines* sub-types display the obvious influence of the European professional style, while there are hardly any traces of the influence of European professional music on Nuristan polyphony;
- And finally, sharing the fate of many other polyphonic traditions, Lithuanian *sutartines* was completely lost as a folk tradition, while Nuristan polyphony is still actively functioning in a society.

As promised, here is the second list, discussing **common elements** between the *sutartines* and Nuristan polyphony:

- Both traditions are based on the wide use of ostinato polyphony;
- Both traditions make wide use of specific Lydian scale with the augmented fourth.
- In both traditions seconds are almost the only harmonic interval heard at any time;
- Melodies have a small range – mostly third or fourth (or augmented fourth);

- Rhythmic recitation on the same note is an important part of the melodic development of both *sutartines* and Nuristan polyphony;
- Melodic development of the leading parts often is based on the abundance of small jumps on the thirds;
- Crossing of the parts is used very widely, and the jumps on thirds around the other part are extremely popular in both traditions;
- In both traditions each melodic part usually has two centres for the melodic development;
- The shift of the melodic centre always happens on a distance of major seconds (down or up);
- The usual song structure is based on the repetition of three-bar musical phrases, forming six-bar musical sentences;
- Songs have two relatively equal leading melodic parts (although in Nuristan the third voice – drone - is also present);
- Songs usually start with one of the voices, and the other voice comes in after three bars;
- Both of them are often connected to dances;
- In both traditions secondal dissonances are present in both vocal and instrumental music;

The number of shared features is too big and too specific to consider them the result of convergent and totally independent development of these two geographically distant polyphonic traditions.

Although the Baltic region and the Hindukush Mountains are by no means neighbors, linguistic and physical features of Lithuania and Nuristan still allow us the possibility of some kind of relationship between these traditions: (1) both are members of the Indo-European linguistic unity, and (2) both show some similarity in the physical anthropological features. The brilliant Russian scholar Nikolai Vavilov tried to explain the unique features of Nuristan physical appearance (great number of blue eyes and blond and red hair among Nuristan women and men) by their unique and prolonged isolation in the mountains. It is well known that in very isolated populations the small pool of genes leads sometimes to the appearance of unique features. The other possibility is that both Lithuanian and Nuristan populations could be connected to the related populations. I am not talking about the specific migration of the groups of people from Lithuania to Nuristan or vice versa. I am rather talking about the possibility of the belonging of both singing traditions to ancient European polyphonic traditions. The historical connections of Lithuanian *sutartines* to the other remnants of the ancient European polyphonic unity (which survived in the mountains of the Balkans, Caucasia, Alps, of the forests of Polessye) are highly probable (about this see above the “Case Study”, dedicated to *sutartines*), but Nuristan is a bit more difficult to approach. Nuristan is about twice as far from Caucasia (the easternmost point of the acknowledged survival of the ancient European polyphonic family), as the Balkans, and this puts a shadow of doubt on the possible historical connections between the Nuristan and the European polyphonic family of cultures. Otherwise, if

the Nuristan people and polyphony were found somewhere among Balkan Mountains, they would blend very well there.

Before we go into a discussion of the possibility of Nuristan polyphony belonging to the ancient European family of polyphony, let us have a look once more at the lists of the shared (and dividing) features of Nuristan polyphony and Lithuanian *sutartines*:

The impressive list of the shared features is clear by itself, but the list of the differences between the *sutartines* and Nuristan polyphony, viewed from the **historical** perspective, can provide more useful information. So, here is the major part of the points of differences between Nuristan polyphony and secondal polytonal *sutartines*, together with brief comments from the historical perspective (see comments in square brackets):

(1) Nuristan polyphony is primarily drone type polyphony, while there is no drone in the Lithuanian secondal polytonal *sutartines*. Drone polyphony is present in Lithuania (called "collective *sutartines"*), but without secondal dissonances, and heavily influenced by late European professional music. [Drone is definitely the most characteristic feature of European traditional polyphony, so according to this feature Nuristan polyphony shows closer ties to the ancient European tradition of polyphony than secondal *sutartines*].

(2) Canon is the dominating type of polyphony in *sutartines* while in Nuristan there are hardly any traces of it. [Although hailed as one of the most archaic types of traditional polyphony, canon is hardly found in any of the European polyphonic traditions. Therefore this feature also speaks about the closer ties of Nuristan polyphony to the ancient European tradition of polyphony than *sutartines.*].

(3) Polytonality is a "trademark" of the unique secondal sutartines. Secondal clashes in Nuristan polyphony and the two melodic centres are organized within one tonality. [As I have already mentioned earlier, the brilliant use of polytonality by the Lithuanians at least few centuries before Ives, Bartok or Stravinsky, is absolutely unique and does not fit either the features of ancient European polyphony, or the characteristic features of the polyphonic traditions - archaic or even contemporary - from any other parts of the world.]

(4) *Sutartines* were traditionally performed by women only, while Nuristan polyphony is performed both by women and men (separately and even together). [This feature is not so easy to classify, as in many European traditions women are the main singers of the polyphonic styles, although the examples of such important and archaic polyphonic traditions, as Georgians from Caucasia and Laberi from the Balkans, suggest that singing by both women and men must be the most archaic characteristic of ancient European polyphony.]

(5) In *sutartines* the number of performers is strictly limited by the tradition, allowing only two, three, or four performers. In Nuristan the number of performers is not limited, so bigger and not so strictly organized groups can participate in singing. [Very strict organization of the singing group by numbers is more of a later trait, not characteristic for ancient European polyphonic traditions, and polyphonic traditions are usually oriented towards the inclusiveness of the whole community.]

(6) Lithuanian *sutartines* is a two-part polyphony, while Nuristan polyphony is mostly three-part. [This is a very interesting feature, and I am going to discuss this issue separately very soon.].

(7) Lithuanian *sutartines* is an example of a cappella singing, while in Nuristan musical instruments (most prominently the archaic harp *wadzh* and the percussion) often accompanies polyphonic singing. [According to this feature I believe that *sutartines* shows closer connections to the ancient European polyphonic traditions, which are mostly a cappella.]

(8) There are several well-defined styles of *sutartines* in Lithuania (including the canonic, heterophonic, and drone types) while there is generally only one style of traditional polyphony in Nuristan. [Heterophony, as I tried to show, is more a result of the disappearance of the polyphonic tradition. Heterophony is a characteristic mostly of the Eastern European Slavic traditions, but not for many other archaic traditions of polyphony of Europe. The canon is in a same way very rare or absent among most European polyphonic traditions. Therefore, the "loyalty" of Nuristan polyphony to the simple drone polyphony with secondal clashes suggests closer ties of the Nuristan tradition to the ancient European tradition of polyphony than *sutartines*].

(9) Some Lithuanian *sutartines* sub-types display an obvious influence of the European professional style, while there are hardly any traces of the influence of European professional music on Nuristan polyphony. [Taking into account the cultural-geographic environment, of course, it was much more natural for the *sutartines* to be affected by European professional polyphony than for the Nuristan, who was so far away from Europe. At the same time, Nuristan was fiercely fighting for many centuries against their conversion to Islam, and it is fascinating that Nuristan traditional three-part polyphony hardly displays any serious signs of the influence from the West Asian melismatic singing style, suggesting that the level of the isolation and preservation of the ancient polyphonic tradition in Nuristan was very high. The recordings show that Nuristanians also sing songs that belong to the monodic world of West Asia, but this singing style does not show signs of integration with the traditional Nuristan three-part drone polyphony, and must be the result of the changes that were introduced since "Kafiristan" became "Nuristan" in 1896].

(10) And finally, sharing the fate of many other polyphonic traditions, Lithuanian *sutartines* was completely lost as a folk tradition, while Nuristan polyphony is still actively functioning in a society. [We may again explain this by the difference of the cultural-geographic environments between East Europe and the almost Central Asian Hindukush mountains, although we need to remember, that despite the fact of the disappearance of the secondal polytonal *sutartines*, the tradition of drone polyphony (although heavily influenced by European professional music) is still very much alive in the same Lithuania. There must be something very vital in the drone type of polyphony itself.]

To summarize, we may say that even compared to the Lithuanian *sutartines*, Nuristan traditional polyphony shows an array of features characteristic to the ancient European tradition of vocal polyphony.

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Let us now discuss the geographic factor of the possible connections of Nuristan polyphony with the ancient European family of vocal polyphony.

Is it possible to find the carriers of the ancient drone polyphony so far east from Europe as Nuristan? In a previous "Case Study", dedicated to overtone singing, we discussed the possibility of the presence of the carriers of the ancient European drone polyphony in Central Asia. Archaeological, physical anthropological, musical and Chinese written sources all point to the reality of this possibility. The most important regions for the distribution of overtone singing (like Tuva and West Mongolia) are about twice as far from the same Caucasia as Nuristan. Therefore, in the context of all this, it is not at all improbable to suggest that **Nuristan polyphony is a member of the ancient European drone polyphonic family**, and even more, taking into account their extreme geographic isolation, **Nuristan vocal polyphony could be one of the best isolated and best preserved member of the ancient European polyphonic family**.

For a further discussion of this topic let us have a look at the already discussed historical stratification of European polyphonic, monophonic and mixed singing styles in a "Case Study", dedicated to drone polyphony and the migrations of Indo-Europeans. In the "conclusions" I outlined four different groups of the European polyphonic traditions, most of them showing signs of external influences. These groups were:

(1) No external influences. Ancient European drone polyphony without major external influences;

(2) Mixture of two styles (A). Ancient European drone polyphony with the influence of West Asian melismatic monophony;

(3) Mixture of two styles (B). Ancient European drone polyphony with the influence of European professional polyphony;

(4) Mixture of three styles: ancient drone polyphony with the double external influence from West Asian melismatic melody and from late European classical polyphony;

Amazingly, Nuristan vocal polyphony best fits the first category, the group of cultures of ancient European drone polyphony without major external influences.

Now to another aspect of the comparative study of Nuristan polyphony. Three-part Nuristan polyphony with the drone in the middle of the polyphonic texture and the abundance of secondal dissonances shows particularly close parallels to the two European polyphonic traditions (both of them are "members" of the group of ancient European drone polyphonic traditions that does not show any major external influences). These two traditions are (1) Laberi polyphony from Albania, and (2) three-part Latvian drone polyphony, recorded by Yurian at the end of the 19th century.

In all these three polyphonic traditions (Nuristan, Laberi Albanian and Latvian three-part polyphonic singing) the drone is in the middle of the polyphonic texture, surrounded from both sides by the melodic parts, actively clashing with the drone in secondal dissonances. This closeness is so obvious that the Laberi polyphonic style, for example, is typologically closer to Latvian three-part polyphony and Nuristan polyphony, than to the neighbouring Chameri polyphony, or to the other Balkan singing styles. In the same way Latvian three-part polyphony shows much closer

typological parallels to Laberi and Nuristan polyphony, than to any other styles of polyphony, recorded in the Baltic region (Lithuanian secondal, heterophonic or drone *sutartines*, or Setu polyphony).

Two explanations are possible:

(1) Three-part drone singing with the drone in the middle of the texture, and with the secondal dissonances from both sides of the drone was part of the ancient European drone polyphony. This tradition was lost in many regions and survived only in the high mountains of Hindukush and the Balkans, or,

(2) Ancient European drone polyphony was based on two-part drone singing with clashing secondal dissonances. Three-part singing was later developed (independently from each other) from two-part singing by Laberi Albanians, Latvians and Nuristanians.

Explaining this closeness of the polyphonic traditions between Laberi Albanian, Latvian three-part polyphony and Nuristan polyphony might have a fundamental importance for characterizing ancient European drone polyphony.

Although the existing information is not enough at this moment to make an informed choice between these two possibilities, the idea of "survival" seems to me more plausible in the light of the existing facts and historical tendencies. Three facts on which I rest my judgment are:

(1) Documented facts of losing traditions of vocal polyphony from different regions and continents suggest that there is a historical tendency towards a general decline of polyphonic traditions around the world;

(2) The "fate" of Latvian three-part polyphony also points in this direction. Latvian three-part singing was documented by Yurian at the very end of its existence, at the end of the 19th century (ironically, almost the same year as Kafiristan lost its independence to Afghanistan). Today only two-part drone singing is left in Latvia. Following this historical tendency it is not too far fetched to think that if there was a traveling ethnomusicologist, wandering around the European mountains at the end of the 18th century, a few more polyphonic traditions with clashing seconds would have been documented.

(3) The geographic regions where the Laberi Albanians and the Nuristanians reside are suitably isolated for the long survival of ancient features by the mountain ranges of the Balkans and the Hindukush. Geographically more vulnerable Latvia (devoid of the "shield" of high mountains) lost possibly one of the most archaic

traditions of European polyphony by the beginning of the 20th century.

Besides the three above-mentioned polyphonic styles that are amazingly close to each other (Laberi Albanian, Latvian lost three-part singing tradition and Nuristan polyphony), some other traditions also show a certain similarity to the above-mentioned three-part drone polyphony. In these traditions the drone is in the middle of the texture, surrounded by two other parts, and full of clashing dissonances. Few traditions demonstrate typological resemblance to this tradition:

- The West Georgian working songs "Naduri", one of the most developed and complex group of songs from Georgia, consist of three-part main part, and the four-part prolonged final section. More simple three-part sections of the song consist of the drone in the middle of the polyphonic texture, and two melodic parts, often creating dissonant intervals with the drone. Four-part sections of "Naduri" songs, with two basses are also interesting. The lowest part of the four-part polyphonic texture, is the second bass, and is believed by Georgian ethnomusicologists to be a later addition to the three-part texture. If we have a look at the three high parts only (omitting the possibility of a late addition, the low bass), we can see the three-part texture, with the drone in the middle, surrounded with two other parts, sung by soloists, clashing with the drone. The soloist singing lower than the drone is almost constantly a major second lower under the drone.
- In some Bulgarian traditional songs from the "Shopluka" region (the region around the capital city Sofia) two-part singing is "enriched" by the appearance of three-part chords. The peculiar three-part singing tradition, independently discovered by Florian Messner and Tim Rice in the end of the 1970s, has elements of this singing style. Here the bass actually consists of two different parts, both singing the drone, and only at the cadences do they divide in a second. One of them is singing "straight" (continuing the drone), and another one is "curving" down, creating a clashing second under the drone. In some other songs from the same Shop region three-part songs are constructed as almost constantly sounding seconds in the two lowest voices (peculiar double drone in seconds!).
- The tradition of embellishing the bass part with the repeating grace note from the second below (for example, known in Northern Greece, in Epirus) also might be considered in the context of the ancient polyphony consisted of the drone, surrounded by two other parts.
- Slight elements of this kind of three-part singing style can be also seen in some Polessye drone songs. In two-part songs, just before going into the cadencial unison, bass (drone) singers divide into two parts, creating a three-part clashing chord.

Another interesting topic is the historical development of this ancient three-part style. This tradition disappeared before our eyes in Latvia; in Lithuanian *sutartines* the drone most likely disappeared, giving freedom to the two melodic parts; in the Shop region of Bulgaria and in Epir the remnants of three-part dissonant singing survived only in the cadences; among the Albanian Laberi these songs were mostly turned into four-part songs; the same also happened in West Georgian working

songs, where a more simple three-part section is now followed by a monumental four-part section. In this dynamic historical picture of changes, gains and losses, the tradition of Nuristan three-part drone singing might be the best preserved polyphonic tradition of ancient Europe, still surviving far from Europe, in the unique isolation of the Hindukush mountains.

Case Study #9
Ainu Polyphony

I became interested in Ainus in 1986, when in physical anthropological literature I read about the unique physical features of the Ainus, oldest inhabitants of the North Japan. I had no idea about Ainu music, but at the time I was fascinated by the coincidence of the geographic distribution of physical anthropological types and traditions of vocal polyphony, so I decided that if the coincidence of distribution of different populations and polyphonic types was a reality, then Ainus must have had vocal polyphony. According to my knowledge of that time, no people had a vocal polyphony in that region, eastern from the overtone singing regions of Central Asia, and this was making my search for the vocal polyphony in the one of the most monophonic region of the world even more tantalizing and exiting.

In the second half of the 1980s, in the Soviet Union, with "Perestroika" just beginning, still without open contacts to the western world, with KGB still opening all the letters going in other countries or coming from other counties, without the possibility of telephone contacts to any other countries, and of course, without email and internet, any search for the information was depressingly slow. I remember very well, that in the **fastest cases** (providing that the correspondence was successful at all!) I was receiving the response mail from the other end after three months. A very important letter from editor of "The Garland Encyclopedia of World Music", for example, sent in May of 1989, I received in April of the following year.

I searched the libraries of my native Georgia and then Moscow, asked all my colleagues – ethnomusicologists about Ainu music, but could not get the definite answer. During that time I met in Georgia a Japanese amateur musicologists, who was interested in Georgian secular and sacred music, and although she told me that she happened go to Ainu village and even recorded their singing during a show performance, she could not tell me whether their singing was polyphonic or monophonic. She only told me they did sing in big groups. That was not good enough, as singing in a big group still might be in unison, like in many monophonic cultures of East Asia. I talked several times about Ainus to Valeri Alexeev, outstanding Russian physical anthropologist, who knew the Ainu problem very well from the physical anthropological point. He draw me a map of the possible migrations of the European populations eastwards from the Europe. He was expecting the news about Ainu music from me as well. But the response was very slow in coming. I lost faith that I could find the information about Ainu music within Soviet Union, wrote a letter to my good friend Minoru Morita to Japan and was set for at least the three months "waiting period" when I had a sudden luck.

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On 10th December 1986 I was talking to my colleague from Siberia, Yuri Sheikin (currently the head of Faculty of Traditional Musical Culture at the Arctic State Institute of Culture and Arts in Yakutsk, Republic of Sakha). "Yuri", I asked him while we were waiting for the suburban train near Moscow, "do you know anything about Ainus and their music?" I still precisely remember his words and the intonation he pronounced these words: "Oh, do you know what a polyphony they have!!" After he pronounced these words he had to take care of my safety as the train was approaching and in my state of mind it was not safe to stay close to the train tracks on a Russian snowy winter day. He not only told me this exciting news, but few seconds later he also informed me that he had a book of Tanimoto Kazuyuki about Ainu traditional music with transcriptions and the accompanying recordings (Kazuyuki, 1965). I called Valeri Alexeev the same day, and three days later, on December 13th we spent eight hours in his Moscow apartment discussing this exciting news.

In the first part of this book I mentioned Ainu polyphony as the most isolated tradition of polyphony on our planet. Living on the very fringe of the Eurasian supercontinent, on Kuril Islands and on Hokkaido, Ainus are about 3-4 thousand kilometers away from the nearest regions with vocal polyphonic traditions (Taiwan in the southwest and Tuva and Mongolia in the west).

The idea, that Ainu people developed their polyphony in total isolation theoretically possible, but highly improbable. To start with, I hope the reader remembers that there is hardly a single documented case of the evolution of polyphony from monophony. Therefore I look very skeptically at the possibility of someone "developing" polyphony from monophonic singing traditions unless the case is well documented. And of course, there is also the uniquely isolated position of Ainu language, culture, and particularly physical type, mentioned earlier. These unique features of Ainu culture and physical type suggest that Ainus made a long trip to arrive to the Kuril Islands and North Japan. From the very first meetings with the Ainus it was clear that they were of the different ethnic origins from the prevalent population of the East Asia. Without going into detail, we could mention, for example, generally very scarce development of the facial hair in East Asian populations. Ainus, on the contrary, have the highest level of the development of the facial hair in the world. Their hair form is also different. This feature, together with few other unique features, point towards possible southern and western connections: Australian Aboriginal and European populations are known for their thick facial hair. So these two directions are the possible source of Ainu ethnic origins. Westwards (European) connections were more prominent in the earlier scholarly works, and southwards connections became more prominent in the later period (see the review in: Cavalli-Sforza et al., 1994:231-232). Contemporary scholars often disregard the physical differences of Ainus and unite them with other East Asian populations (ibid, 232).

If we take into account the unique polyphony of Ainu people, Australian connections must be ruled out, as Australian Aboriginal singing traditions are one of the most monophonic in the world. The same is with the East Asian populations, carriers of the most monophonic singing culture among human populations. Talking about the southwards connections, from the musical point of view it would be more plausible to connect Ainu polyphony to the polyphony of the indigenous Southeast

Asian populations. This population constitutes the big part of national minorities of South China and Vietnam, as well part of populations of other Southeast Asian countries. Their vocal music is quite prominently polyphonic, and vocal polyphony of the Taiwanese aboriginal peoples (by the way geographically the closest polyphonic tradition to the Ainus), are a good example of their vocal polyphonic traditions. Although musically this connection makes a perfect sense, physical features of Ainus do not seem to support these (Taiwanese and South East Asian) connections.

The only connection, that does not contradict the fact of the presence of polyphony in Ainu singing traditions, as well as their physical features, is the connections to European traditional polyphony and population. In the previous "Case Studies" we have already seen that there is a strong possibility (supported not only by musical, but the combination of archaeological, physical anthropological, and written sources) that the carriers of old European vocal polyphony came as far east as Central Asia and West Mongolia. Valeri Alexeev was sure that archaeological and physical anthropological data suggest that European populations came very far in their earlier migrations, reaching the easternmost fringes of Eurasia, and maybe even going further via the Bering Strait to the American continent (See about this later).

Musically speaking, Ainu polyphony is not so obviously European, as Nuristan polyphony. Out of two most important elements – (1) drone and (2) dissonant harmonies Ainu polyphony does not use the drone (well, almost – see the examples of Ainu polyphony from the first part of this book), although dissonant harmonies (the same secondal dissonances) are actively present in their vocal polyphony. Drone type of polyphony, dominating European polyphonic traditions from the most isolated mountain regions, is rather substituted by the wide use of canon among Ainus.

It might look amazing, that with this feature (wide use of canon instead of drone), Ainu vocal polyphony shows interesting parallels with Lithuanian *sutartines*. In fact, Lithuanian *sutartines* is structurally closer to Ainu polyphony, than to any other European polyphonic tradition. Of course, there are plenty of differences between them as well. For example, (1) there is no use of polytonality among Ainus, (2) the number of performers are not so strictly limited among Ainus, as among *sutartines* performers, and (3) secondal dissonances are not so prevalent in Ainu singing. Despite these differences, the typological similarity between the Ainu polyphony and *sutartines* is much more striking, than the differences, because the two most important structural elements of both polyphonic traditions - (1) wide use of **canonic** singing and (2) **secondal** dissonances are the same.

Two possible explanations that could explain these similarities are:

(1) Use of canon and secondal dissonances in such a geographically isolated regions, as Lithuania and North Japan suggests, that in these two cultures we have a unique case of **survival** of the earlier European tradition of polyphony, which must have been distributed much wider in the past, and:

(2) North Japanese Ainus and Northeast European Lithuanians arrived to the similar results of using the canonic singing and secondal dissonances **independently** from each other.

Out of these two possibilities the model of "independent development" seems to me more plausible than the model of the "survival of archaic features". I rest my judgment of following premises:

- The importance of drone type of polyphony for the ancient European polyphonic traditions seems to be beyond doubts, as drone is overwhelmingly represented in geographically isolated regions of the Europe and beyond (in the most isolated mountain ranges, forests, islands).
- It is very likely that the drone was also the part of Lithuanian and Ainu polyphonic traditions. Both in Lithuania and among Ainus drone was subsequently lost and the canon was introduced.
- Unlike European **professional** polyphony where canon and imitation are of the crucial importance, there are hardly any **traditional** vocal polyphonic cultures (apart from Lithuanian *sutartines* and Ainu polyphony) that are based on the wide use of canonic singing. There is something specific in the principle of "delayed" repetition of the same melody (the main principle of canonic singing) that is much closer to professional polyphonic composition than to the folk polyphonic composition.

Therefore, Ainu traditional music confirms the unique position of Ainus in the context of East Asian ethnic and cultural picture. Their tradition of polyphonic singing, arguably the most isolated on our plant, point towards their westwards (European) or southwards (Taiwan and other southeast Asian) connections. Together with their physical anthropological features, their tradition of vocal polyphony point more towards the European connections of Ainu people. Discussing Ainus physical features and their hairiness, Cavalli-Sforza sites Alexeev's 1979 work on Siberian peoples. Alexeev noted that there are some isolated Mongoloid groups that who show hairiness, although Alexeev (like Cavalli-Sforza himself) believed that North Asia was initially populated by Caucasoid groups, and considered hairiness as the possible substratum of the Caucasoid populations. To summarize Ainu problem, Cavalli-Sforza concludes: "It seems reasonable to discard the myth of a Caucasoid origin of the Ainu" (Cavalli-Sforza et al., 1994:232). In the light of the presence of vocal polyphony, absolutely unique in East Asian region, I would not rush to discard the possibility of European (Caucasoid) connections of Ainu. Of course, for the comprehensive discussion of the historical and ethnic origins of Ainu people all the elements of their biology and culture must be taken into consideration. I hope that the unique (for the whole East Asian region) tradition of Ainu vocal polyphony will be seriously taken into consideration in this discussion.

Case Study #10
Southeast Asian Polyphony

November 14th 1986 was the last day of the international conference on traditional polyphony in Georgia. The conference was working in the foyer of the big hall of the "House of Creative Recreation of Composers" built by Soviet government in the picturesque mountain resort Borjomi. Oscar Elschek was leading the last

session. I delivered my paper on the origins of vocal polyphony, where I extensively talked about the correlation between the geographic distribution of the physical features of different populations and the vocal polyphony. I was very happy how the paper with such a controversial content was received. After the session was formally closed, an ethnomusicologist from Nalchik (capital city of Kabardino-Balkaria in North Caucasia), Tamara Blaeva approached me. "Joseph Mindievich, you mentioned in your paper that there is no polyphony in East Asia, including Vietnam, right?" "That's right. I have no data about polyphony from that region" I answered. "My husband is Vietnamese. He is a musician, composer, and I know from him that there is a tradition of vocal polyphony in Vietnam. He has recorded examples, and I can send you them if you are interested."

What can you say? I always disliked the most unscholarly (in my opinion) saying "the exception proves the rule", but the situation looked for exactly this kind of the "last resort for the bad theory". At that moment I had no idea about the presence of vocal polyphony in Vietnam. [By the way, this information is not easy to find out even today. For example, special Garland encyclopedia article on Vietnamese minorities does not mention the tradition of vocal polyphony.] The only thing I could recall in that very moment on November 14th, 1984 about Vietnam, was the article I read in the central Russian anthropological journal "Soviet Ethnography" on the odontology (population research of the teeth) of the population of Vietnam. I remembered that one of the main conclusions of the article was that the population of the mountainous central and northern parts of Vietnam was very different and must have had different origin from the main ethnic group – the Viets. "Tell me, please", I asked Tamara Blaeva, who was waiting for my reply, "is this polyphony in Vietnam is distributed among the populations of the Central and North Vietnam mountains?" She looked at me with a great surprise "How do you know that? That's exactly where it is!" Next year, on May 27th I met Tamara's husband, Vietnamese composer, Nguen Van Nam in Nalchik, North Caucasia, who gave me very interesting and useful information about the vocal polyphony among Vietnamese mountain populations, and sent materials for the 1988 polyphonic conference in Georgia, Borjomi.

I am not going to discuss here in detail the complex and not fully understood ethnic and cultural history of the southeastern Asia. Generally speaking, contemporary population of this region consists of two major elements: (1) earlier layer of indigenous peoples, occupying most of the southeastern Asia, including southern China (particularly rich archaeological cultures of their culture had been unearthed from Taiwan and Vietnam) and (2) the east Asian populations, who came later from more central and northern regions of contemporary China, assimilated and pushed the indigenous populations towards more mountainous and forest-covered regions of Southeast Asia (Cavalli-Sforza, 1994:206-207).

Stratification of vocal polyphonic traditions and the populations of Southeast Asia strongly suggest that the tradition of vocal polyphony must have been a cultural trait of the earlier, indigenous population of this region. This ancient tradition survived together with its bearers mostly in the forest-covered tropical mountains of Southeast Asia. Another question that could be raised in connection of the polyphony of Southeast Asia are the possible links (via Assamese and Southern Indian tribal

communities) (1) to the sub-Saharan polyphony on the West, or/and (2) to the polyphony of the some Indonesian minorities and further, to the polyphony of Melanesian and even Polynesian peoples. Hopefully future studies in the field of traditional polyphony will illuminate these questions.

Case Study #11
From Atlas Mountains to Bahrain

Readers may remember the unusual three-fold division of the African continent, suggested in the first part of this book. This was based mostly on the fact of the presence of the unique for the African continent tradition of vocal drone polyphony among Tuaregs. Tuaregs live between the Sub-Saharan Africa and North Africa, in inhospitable Atlas Mountain ranges and Sahara Desert. The two neighbouring regions from south and north from Tuaregs residence are musically totally different. Sub-Saharan Africa is the largest and the most active polyphonic region of the world. North Africa, on the contrary, is one of the most monophonic regions of the world.

With their tradition of vocal polyphony Tuareg music is generally closer to sub-Saharan African music, which is also polyphonic. At the same time, the difference between the sub-Saharan African polyphony and the Tuareg polyphony is based on the element of crucial importance. Tuareg polyphony is based on drone polyphony, whereas in sub-Saharan Africa drone is hardly ever used. Therefore, Tuareg traditional polyphony cannot belong to sub-Saharan African family of vocal polyphony.

Two possible historical models might explain this isolated position of Tuareg polyphony in Africa.

(1) Tuareg polyphony is a totally separate and isolated tradition of vocal polyphony, with no traceable links to any other big polyphonic family; or,

(2) Tuareg vocal polyphony is a part of a bigger polyphonic family, separated from the other members of same “family” for some geographic or historical reasons.

Considering this issue in the wider Eurasian-African context, the second model seems to be much closer to the historical reality. Although Tuaregs live in Africa, where their polyphony is almost a one-of phenomenon, their polyphony finds plenty of parallels among European polyphonic traditions. The readers may remember geographically isolated archaic traditions of vocal drone polyphony on the islands and the mountainous regions of the northern beaches of the Mediterranean Sea. The idea of Tuareg-Berber contacts with the ancient European world is not alien to linguists as well (Allieres, 1979, See also Cavalli-Sforza et al, 1994:264). According to Cavalli-Sforza, “Caucasoids arrived in western part of North Africa from the Iberian

peninsula at an early time, perhaps 20 kya [20 000 years ago] or more" (Cavalli-Sforza, 1994:193). The well-known hypotheses about the possible genetic relationship of Basque and Caucasian languages further complements the links of Tuareg polyphony with the ancient European polyphonic traditions (see Gordeziani, 1985; Gamkrelidze & Ivanov, 1990; Cavalli-Sforza et al., 1994:222).

So, according to our model, Tuareg vocal polyphony historically was a part of a big polyphonic family that was occupying most of the territory around the Mediterranean Sea. We could call this family the "Mediterranean family of vocal polyphony" but the similar traditions are found in distant from the Mediterranean Sea regions as well. For example, polyphony of the big forest region between the Ukraine and Belarus, Polessye, or the polyphony of Baltic countries, or even the polyphony of Nuristan in Hindukush Mountains show the obvious signs of belonging to the same polyphonic family. Another possible name of this "super-family" of vocal polyphonic traditions could be "European family of vocal polyphonic traditions", but even this name would not include the regions like Nuristan and Atlas mountains in North Africa. The wider geographic names like "West Eurasian", or even "West Eurasian-North-African vocal polyphonic family" would be more precise for the existing reality of stratification of drone polyphony across the Eurasia and North Africa. Let us not to concentrate too much on terms. Whatever name we use, it is important to know that this term denotes the polyphonic family that includes polyphonic traditions from the different parts of Europe, North Africa and parts of Asia.

Another interesting issue connected to the Tuareg polyphony is the presence of the obvious elements of the monophony in their singing traditions. We have already discussed the European polyphonic traditions that show the traces of the deep structural influence of Middle-Eastern type monophony. Such cultures (like the East Georgian table songs, singing of Albanian Laberi, the province Albacete from the eastern Spain, or the polyphonic singing from Corsica, Sardinia and Sicily) combine drone polyphony with the richly ornamented melodic lines and free flowing. The same can be said about Tuareg polyphony, which also bears the obvious signs of the interaction with the monophonic singing traditions (although Tuareg polyphony is usually rhythmically strictly organized).

Of course, to explain this presence of the monodic singing influences on Tuareg music, we do not need to look very far for the source of influence. Appearance of Arabs and the Moslem religion in North Africa in the 7th century is well documented even to the extent of the precision of the year – 688. But I do have some mild reservations about explaining the monophonic elements in Tuareg music by the influence of Arabian musical traditions from the 7th century. I'll explain why.

As I tried to argue earlier, in the cases of the influences of monophonic music on polyphonic music the age of the influence makes a big difference. For example, in the case of the influence of Arabian music on East Georgian singing, starting also from the 7th century, the layers of the two different musical styles are still clearly identifiable. The genuine mixture between the monophonic and polyphonic styles and creation of the new singing style (like among East Georgians, Chameri Albanians, Albacete Spaniards, or Corsicans), I believe requires longer period of the interaction of the monophonic and polyphonic singing styles. I tried to argue that the creation of

this mixed style was connected to the influence of the Indo-European migrations that, according to archaeological and physical anthropological evidence, took place in Eastern Georgia around the 2nd millennia BCE.

We cannot use the migration of Indo-Europeans for the explanation of Tuareg mixed style of drone melismatic polyphony. According to our knowledge, Indo-European languages never reached the African continent. At the same time, the presence of Semitic peoples in the North Africa is well documented well before the appearance of Arabs in the 7th century. Therefore, I suppose that the genuine mixture of monophonic and polyphonic styles, present in Tuareg traditional polyphony, could be the result of the influence of the Semitic (supposedly monophonic) traditions on indigenous (supposedly polyphonic) singing traditions.

The presence of the remnants of the drone polyphonic singing traditions among Tuareg s in currently monophonic North Africa is not a unique occurrence for the North African – Middle Eastern region. Another very important tradition of vocal polyphony is the songs of **pearl divers from the Bahrain**, the biggest island of the Persian Gulf. If the readers remember from the first part, the tradition of pearl collecting around the Bahrain was a thriving enterprise for the local populations at the beginning of the 20th century. At around 1930 few important factors altered this situation: (1) economic depression following the Wall Street crisis in 1929 slowed down the business, (2) finding of the oil on Bahrain started a new and more lucrative business (1932), and (3) mass manufacturing of cultured pearls by Japan created a severe competition on the world market. These changes eventually stopped the pearl diving business. According to Rovsing-Olsen, traditional singing of pearl divers, continuing as the indispensable part of the regional business **at least** for the last 4000 years, ended in 1956-1957. Even earlier, more than 5000 years ago, Bahrain (known as "Delmon" or "Dilmun"), at that time closely connected to the civilization of Sumerians, was the most important point of the trade between Mesopotamia and Indus Valley civilizations. The ancient songs of pearl divers survived during the second half of the 20th century by the *dars*, or "music houses", where the former pearl diving boat crewmembers meet to sing their traditional songs with the cups of tea and coffee. In 1978 there were 14 such "music houses" on Bahrain (Rovsing-Olsen, 2002a:89).

There is a certain typological link between the vocal polyphony of Tuaregs and Bahrain pearl divers. Most importantly they display (1) drone type of polyphony, where one (or two) soloists sing against the group of singers who sing the drone, and (2) both of them display the obvious sings of the influence from the Middle Eastern monophonic music.

Following the historical tendency of the disappearance of vocal polyphonic traditions in many cultures all over the world, I do not look seriously at the possibility of the independent and late "invention", or evolution of vocal polyphony from the local monophonic traditions on the Bahrain. Most likely the local drone is the survival of the ancient practice of this region. In one of the later "case studies" we are going to discuss the possibility of the presence of vocal polyphony among Sumerians. The

available information about Sumerian music contains the earliest in human history notated piece of arguably polyphonic (two and three-part) music.

There are other possible survivals of the ancient drone polyphony from the Middle Eastern region. Summarizing the available information on vocal drone in the Middle East, Rovsing-Olsen mentions "Egyptian work songs and dance songs", Sufi ceremonies from different countries, Bedouin double chorus song called *ahalla*, "Mawled singing in Dubai", and United Arab Emirates where the drone sometimes is above the leading melody (Rovsing-Olsen, 2002:93).

Therefore, following the musical characteristics of the polyphonic singing of Bahrain, we should unite the vocal polyphony of pearl divers with the extended "West Eurasian-North African polyphonic family".

Case Study #12
"I'll Follow the Sun": Round-the-World travel ticket or the vocal polyphony of Native Americans

I always loved the idea of travel to faraway countries, and the globe is one of my most favorite objects from my childhood. This was quite a fruitless passion for a person, born and raised in the Communist Soviet Union. My former compatriots would still remember that any travel outside of the Soviet Union was almost a miracle. That's why until the Communist regime started to crumble from the second half of the 1980s, I traveled outside of the Soviet Union only once – it was a two-week visit in Socialist at the time Hungary in August 1977. It was still a miracle and my friends were not tired for long months asking me to tell them about the life "outside of the wired fence", as we sometimes called the Soviet Union. Later, after we moved to Australia in 1995, we started to travel, and the first really big travel was the round-the-world tour on the last year of the 20th century. Our round-the world ticket was covering the mouthwatering rout from Melbourne to Los-Angeles, Chicago, London, Paris, Istanbul, Tbilisi (capital of Georgia) and back to Melbourne. I do not know if any of the readers thought about this, but viewing the forthcoming exciting route around the world on a small globe on my desk, I remember having a thought about the direction of our round-the-world travel. "Everyone moves around the world going either to the western direction, or to the eastern direction". Of course, from the point of view of the shape of the globe the ideas of "up" or "down" are purely arbitrary. I often imagine, when I am talking on the phone to my relatives and friends in Georgia, or Europe, how they are strangely "upside down" for me (or I am "upside down" for them). So, theoretically it does not make any difference whether we move around the world eastwards/westwards or southwards/northwards. For example, if you start your travel from Australia, you could as well go northwards and visit Indonesia, China, Japan, Russian Far East, then fly over the North Pole, go through Canada, USA, Mexico, Peru, Brazil, and then from Argentina (or Chile) you could fly over the Antarctica to Australia again. Do you think this route is less interesting? And if you want to make your travel more exciting and challenging, you could even try to spend few days on Antarctica as well.

Well, maybe this unusual direction of the round the world travel does not differ from any other "usual" itineraries, when you are watching the globe on your desk. Maybe some airline companies will some day even offer this kind of unusual round-the world travel routs "across the North and South Poles" tours for a change, but the difference that the direction of the real round-the-world travel can make is enormous. Particularly, if the airplanes and large comfortable ocean liners have not been invented yet. I am talking about our ancestors, amazing travelers, who on foot colonized the vast regions of the world long before the ocean liners and later plains came to the existence.

The big difference is that in real life it is much easer to travel long distances eastwards or westwards, than southwards or northwards. The reason is very simple. If we move to north, it will be getting colder every few hundred kilometers, and if we move to south, it will be becoming increasingly hotter. In southern hemisphere the directions for "hotter" and "colder" temperatures are naturally reversed. On the other hand, if you travel westwards (or eastwards), you may travel within changing, but still in relatively comfortable for your health temperatures and ecology for tens of thousand kilometers. The position of the Sun and the degree its rays fall on the surface of the earth is crucial for this. Direct sunlight in the tropical region, moderate degree of sunrays falling on the earth in more moderate regions, and very high degree of sunrays falling on the earth closer to the poles are chiefly responsible for the drastic differences between the temperatures on our planet.

Sunlight is not the only facilitator (or the challenge) for the large-scale migrations. Another obvious factor is the geography of continents. Continents have not been designed for the easy travel on foot, and are interspersed with seas, big rivers, mountain ranges and other natural challenges for travelers. Therefore, although our distant ancestors did not have to apply for the tourist or student visa to travel and settle on new territories, they were constrained in their travels by these two important factors: (1) the availability of the more or less comfortable ecological zones to travel and to settle in new territories (subject to the availability of Sunrays), and (2) natural geography of continents.

Roughly speaking, we could divide our planet into three huge ecological zones: (1) cold, (2) hot, and (3) moderate. Hot (or Equatorial) zone is a single belt, going around the world roughly along the equator. Both "cold" and "moderate" zones are each of them two, one in each of the hemispheres. "Cold" zones are at the North and South Poles, and the "moderate" zones are sandwiched between the "hot" equatorial and "cold" pole zones.

Why do I need to talk about these obvious things? When we are talking about the large-scale migrations, we need to take into account these very simple geographical and ecological factors. Combination of the two factors (position of the Sun and natural geography of continents and big regions) determines the direction of the major, or strategic migrations in human history. Based on a special study of the variation of gene frequencies and their principal components associated with latitude and longitude (Piazza et al. 1981), Cavalli-Sforza concludes: "Longitude showed a major effect, not surprisingly, given that most of human genetic variation is placed on

an east-west axis that reflects the most important population movements" (Cavalli-Sforza et al., 1994:142)

These factors explain, for example, why the traces of sub-Saharan African populations (living mostly in tropical environment) are not found in Central or North Europe, or in Central or North Asia. The only available point to reach the New World (Bering Strait) was also a beyond the comfort climatic zone of sub-Saharan African populations.

Because of the same climatic constrains Europeans did not go into deep into the tropical Africa until the 19th century. And even in the 19th century this was not easy – read about the travel of David Livingston or Henry M. Stanley.

Because of the same climatic constrains East Asian populations did not go deep into the tropical forests of the Southeast Asia and did not reach Australia until relatively recent times.

So, large-scale travel towards north or south seems to be extremely difficult to conduct. On the other hand, travel possibilities towards the east and west were widely opened for every population willing to travel to new territories. This is main reason that many great travelers in human history and prehistory were "following the Sun", or, alternatively, were going towards the "place where Sun rises". There is a great ecological wisdom in these symbolic destinations. Follow the sun and you will stay warm.

Different human populations were formed in different regions of the world and different ecological conditions. Some were formed in the tropical "belt", and others in the moderate or even cold conditions.

Sub-Saharan African populations were formed in tropical belt. Naturally constrained from the westwards migrations from Africa, the eastwards route was not very easy either, although still was not impossible. In a contemporary world the populations, possibly related to sub-Saharan African populations, are found on the eastwards direction from Africa - in several pockets of the southern and northeastern tropical regions of India, up to Melanesia.

European populations were formed in the relatively moderate and cold climatic conditions. Eastward large-scale migration was the natural direction for them as well. And their traces are found all way through the whole Eurasia, and according to some archaeological and physical anthropological data, they also reached American continent.

For the **East Asian** populations both ways – east (to America) and west (to the West Asia and Europe) were open, and as we know, they used both ways for their natural territorial expansion. Their prehistoric "eastern campaign" brought East Asians to both North and South America, and their "western campaign" during the much later, middle centuries brought them up to the territory of Central Germany.

Discussing environmental adaptations of early humans, Coon wrote: "Simply by observing the geographical distribution of living peoples, we can see that no single subspecies is limited to a single climate. Caucasoids live all the way from Norway to India. The aborigines of Tasmania, who were spiral-haired Australoids, went about nearly naked in a climate as cold as England's. Mongoloids may be found from the Arctic to the wet tropics, and both the Australian aborigines and the South African

Bushmen, whose ranges are more limited, live through broiling heat and freezing weather at different seasons, with a minimum of cultural assistance" (Coon, 1963:59). Despite the correctness of Coon's argument, the dividing force of the "tropical belt" still stands.

Because of the abovementioned climatic constrains on "north-south" travel there had been hardly any major prehistoric conflicts between the sub-Saharan African populations with the European or East Asian populations; or between the East Asian and Australian Aboriginal populations. On the other hand, European and East Asian populations were residing in the same "climatic zone" of the Eurasia (Europeans in the west, East Asians in the east), and this fact resulted in their mutual coexistence in Eurasia with the common mixture of the whole range of human neighbouring relationships.

After this long discussion about the human long-range migrations (that could be called as "Meridian Migration Model", or MMM) I think we are ready to talk about the polyphonic elements, found among Native Americans.

Bruno Nettl's more than 40 years old article is still the arguably the best publication on this topic (Nettl, 1961). I am not going do repeat the description of the elements of vocal polyphony among North American Indians. To briefly summarize, we can recall, that bigger and smaller elements of vocal polyphony were found in traditional singing practice of American Indians in many regions of North America, most notably among the Northwest coastal tribes and Salish Indians of British Columbia, and Eastern USA Indian tribes. The most widespread type of polyphony is drone (for the detailed discussion of the available information see the section about North American Indian polyphony in the first part of this book).

Discussing the available information on the vocal polyphony among North American Indians from the historical perspective, Nettl suggests two possible interpretations:

"The question is, then, whether there was a *bona fide* development of polyphony in North America. A basic rhetorical problem is the distinction between a culture capable of inventing polyphony, and one capable, because of its prior musical development, of absorbing polyphony brought from elsewhere" (Nettl, 1961:360) Then Nettl discusses the evolutionary approach towards the origins of polyphony and assumes that "monophony [perhaps] preceded polyphony in each culture. If this is the case, were the Indians about to evolve a polyphonic style? Why are the references so sparse and the recordings at a minimum? And did the development of Indian polyphony in North America come as a result of influence from the outside, or was it indigenous?"

"One possibility, of course, is that the Indians formerly had an elaborate polyphonic style, which had died out before there was intensive contact with the whites, and which still exists in isolated remnants. Such a case of retrogression, of moving from polyphonic to strictly monophonic music, would be unprecedented in music as we know it. On the other hand, the widely separated instances of one particular type, the drone, tends to strengthen this argument, since these isolated instances could be interpreted as survivals of a widespread practice. If the surviving

types were more complex or specialized ones than, say, the simple drone, the possibility of an early polyphonic culture in North America would have to be taken very seriously. Under the circumstances – and assuming that a simple phenomenon, such as drone, stands a chance of being invented of discovered several times independently – the opposite must be considered a greater possibility; that is, that the Indians were beginning to discover polyphony, but that it had not been generally accepted except, perhaps, by a few tribes" (ibid, 361).

Reading this historical discussion about the scattered traditions of vocal polyphony among North American Indians, written more that 40 years ago, is very interesting. Nettl suggested the possibility of the gradual disappearance of the tradition of vocal polyphony among American Indians and its survival in many isolated regions, although he himself considers this kind of "retrogression" "unprecedented in music history". Earlier in this part of the book I discussed quite a few documented cases of the gradual disappearance of vocal polyphony in different regions of the world. Therefore, the possibility of the "retrogression from polyphony to monophony" is by no means an "unprecedented in music history". On the contrary, the idea of the development of vocal polyphony from monophony, discussed by Nettl, as more plausible model to explain the presence of elements of vocal polyphony among North American Indians, would be really unprecedented in the realms of traditional music. Therefore, with our current knowledge of the historical dynamics of vocal polyphony, suggestion of Bruno Nettl about the gradual disappearance of vocal polyphony among North American Indians and survival of this tradition in isolated regions of North America sound very realistic.

If we try to explain the presence of vocal polyphony in different parts of North (and South) America, we are coming to the very much-debated problem of human migrations to the American continent.

During our discussion of the MMM (Meridian Migration Model) we mentioned the well-known fact that more moderate and colder parts of Eurasia were populated by the two major populations – Europeans (in the west, mostly around Europe) and East Asians (in the east, mostly around Central and North China). Regarding the first settlers of America, during the early 20th century it was mostly believed that Native population of American continent was descendants of East Asian groups that crossed the Bering Strait more than 10 thousand years ago. Later this model was reexamined, and the presence of European element was noted. The absence of some important East Asian physical features (like epicanthus) among many American Indians peoples, and the presence of other atypical for East Asian population features (big noses, for example) is widely known. Russian physical anthropologist Valeri Alexeev delivered a paper in Yellowknife, Canada, in 1987, on the settlement of American continent by the early waves of European populations who came there via the Bering Strait. According to Cavalli-Sforza, European population and culture was first to settle North Asia from about 35 000 BP (Cavalli-Sforza, 1994:197) and this is the possible time for the appearance of the first waves of humans in North America from North Asia (Cavalli-Sforza, 1994:303-308).

Scholars generally agree that there had been at least three migration waves to America. The presence of European component has been suggested only for the first

wave (around 35-15 thousand years ago). Second wave brought Na-Dene peoples to America (peoples like Dene, Apaches, Navajos, about 15-10 thousand years ago), and the third wave is connected to the appearance of the Inuit and Aleut populations (about 10 thousand years ago or later. See Cavalli-Sforza et al., 1996:307-308). Classification of the languages of the American Indians by into three groups (Greenberg, 1987) also suggests three big waves.

Bering Strait is not the only route that scholars suggested for the appearance of Europeans to North America. New rout via the ice-covered Atlantic Ocean directly from Europe was also proposed. There are also suggestions about the earlier (around 37 000 years old) migration via the Bering Strait, during the previous ice age, and still another hypothesis suggested arrival of the earliest human groups to America from the Pacific. Generally more agreed model among archaeologists and anthropologists is that first Americans arrived from Siberia about 35-15 thousand years ago and then spread to Central and South America (Cavalli-Sforza et al., 1994:308).

Now let us have a look at the singing traditions of American Indians in the light of different settlement models existing today. Much debated settlement of American continent is far from being finally settled. According to Cavalli-Sforza, "America, in particular South America, is genetically the most variable part of the world" (Cavalli-Sforza et al., 1994:337).

What can we say in this regard according to the polyphonic data? East Asian populations are carriers arguably the most monophonic singing traditions among human populations, therefore plenty of elements of vocal polyphony that American ethnomusicologists recorded in different isolated pockets of North America strongly contradict the model of exclusively East Asian origins of American Indians. On the other hand, the possible presence of European populations among the early settlers of America receives support from singing traditions of Native Americans. This support is more specific, than the simple presence of the vocal polyphony per se. The type of polyphony (drone) also point to the European direction. The readers may remember from the review of the Native American traditions of vocal polyphony that drone had been recorded both under the main melody, and above the main melody. This feature is also characteristic to polyphonic traditions of European populations.

Regarding the route that European drone polyphony could appear in North America, we cannot rule out either ways (eastern – via Bering Strait, and western – via ice-covered Atlantic Ocean), although the route via Bering Strait looks much more preferable. This is because, as we discussed during the previous "Case Studies", there are signs of presence of European drone polyphony among contemporary populations of Central Asia (Tuva, Western Mongolia and adjacent territories) and East Asia (Ainus). Therefore, the long-range migrations of European populations deep in Asia might be reflected in the musical traditions of Central and East Asian peoples.

Therefore, summarizing this case study, we can say that vocal traditions of American Indians support the suggestions about the European elements in their settlement history, and the most likely rout for this gigantic transcontinental migration must have been via Bering Strait. This does not rule out other routs, and in the light of the amazing tenacious traveling abilities of our ancestors we should not be very

surprised if the strong evidence is found to confirm that human populations did reach America via more than one route.

Case Study # 13
Vocal Polyphony in Ancient Civilizations: Mesopotamia and Mesoamerica

One of the main problems of the research of the early forms of vocal music is that singing does not fossilize. It is a different story with musical instruments. You can discover different musical instruments in the archaeological remains, and studying them you can receive plenty of useful information about the music that was played on these instruments. In case of the blown instruments you can sometimes even have the "first hand" information about the scale system of the music that was played hundreds and thousand of years ago. In regards of singing the most you can learn from the archaeological artifacts, are the paintings (or statuettes) of the people singing, sometimes in conjunction with playing instruments or dancing. Those interested in vocal polyphony (like myself) are always fascinated by the ancient drawings depicting group of people singing together. And here come the unanswerable questions: were they singing in unison, or in harmony? And if they were singing in harmony, what kind of harmony or polyphony was that?

Are these questions really unanswerable? This "case study" discusses the method that could help us to read the archaeological records in search of the vocal polyphonic traditions of the ancient world.

The method is very simple and straightforward, and is based on the **parallels between vocal and instrumental music**.

Readers might remember that this book was originally perceived, researched and written as a book wholly dedicated to the problems of **vocal** polyphony. Detailed interaction between vocal and instrumental polyphony is a huge new sphere, which I was carefully avoiding for two main reasons.

(1) The scope of the book is already and understandably wide, and bringing the new information about musical instruments from hundreds of cultures from different parts of the world would make this book almost unreadable.

(2) Although I have been actively researching the sphere of traditional polyphony for more that thirty years, my main interest always has been directed towards the vocal polyphony. Therefore, I must say that despite the ironic fact that after I had been invited as a guest scholar-ethnomusicologist in a popular Australian TV series to discuss musical instruments from different cultures, and some of my friends consider me an expert of musical instruments, my actual expertise in the sphere is quite limited.

So why then I am going to go against my own principles and discuss here the interaction between vocal and instrumental polyphony? There is only one reason for this. Because I believe **instrumental polyphony can provide us with very useful**

information about the history of vocal polyphony, information that we would unlikely to receive from any other source.

On one hand it seems natural, that the vocal and instrumental music of any given culture must be interconnected in many robust and subtle ways – musical, psychological, social, historical, political. What we play on musical instruments must be closely connected to what we sing. On the other hand the links between the vocal and instrumental polyphony is far from simple. Recognizing the complex nature of the interaction between the vocal and instrumental polyphony, and the further need in this promising sphere, I want to discuss here only the possible links between the **vocal polyphony** and the **blown polyphonic instruments.**

Looking at the different polyphonic types in my native Georgia, I noticed that the bagpipes from the different regions of Georgia were playing the same type of polyphony that was characteristic for the vocal music of these regions. In Racha bagpipe was mostly playing the simple drone and ostinato figures, whereas in contrapuntal Achara bagpipe played more active polyphony. And on double *Stviri* in Kartli they play simple drone and ostinato polyphony. Look at other cultures proved that this was not a unique occurrence to Georgia, and that in many regions vocal polyphony and blown instrumental polyphony are very close to each other. After Georgian ethnomusicologist Ketevan Nikoladze started researching the parallels between the polyphonic blown instruments and vocal polyphony, these links became more obvious (Nikoladze, 1986, 2003).

At least some of my colleagues would say that there is hardly anything extraordinary in this fact. Yes, you can certainly see that on polyphonic double blown instruments people often play the type of music they sing. The facts of the close connections between the double blown musical instruments and the tradition of vocal polyphony were noted by scholars from different countries (see, for example, Kvitka, 1973 for Russia, Kachulev, 1965 for Bulgaria; Tinurist, 1980 for Estonia; Rachienaite-Vychiniene, 2002 for Lithuiania, Nikoladze, 1986, 1986a, 2003 for Georgia. See also Emsheimer, 1964:43-44).

Interestingly, the idea of the close relationship between the polyphony of blown musical instruments (double and triple blown instruments) finds support in the regions where this correlation between the vocal polyphony and double blown instruments is ostensibly not working. For example, double blown instruments are known among Central Asian peoples (Uzbeks, Tajiks, Turkmens), although their vocal traditions are mostly monophonic. To answer this question, we must take into account not only the fact of the presence of double blown instrument per se (presence of two reeds), but **the construction of the instrument and the type** of music, played on these instruments. Central Asian double blown instruments play in unison, and unlike of many double instruments from Mediterranean region, both reeds are understandably of the same length, with the identical number of the holes on each reed.

Therefore, in discussing double blown instruments, the type of the instrument must be taken into the account: are both reeds of the same length? Are all the holes identical? The answer on these simple questions can provide us with same basic knowledge about the type of music played on these instruments. Therefore,

distinguishing **structurally monophonic double blown instrument** (with identical length reeds and identical number and system of holes) and **structurally polyphonic double blown instrument** (with non-identical reeds and different system and number of holes) from each other is methodologically extremely important.

Of course, it is theoretically possible (although less likely), that traditional player could play polyphonic music on the structurally monophonic double blown instrument. The reversed case, when the performer plays monophony on the structurally polyphonic double blown instrument (say, with a melodic pipe and a drone pipe), consciously trying to play in unison, is much more difficult, although we will see later that the skepticism of scholars sometimes have very little or no boundaries, particularly when it comes to accepting the presence of polyphony in ancient musical cultures.

Sometimes both (polyphonic and monophonic) types of double blown instruments are present in the different regions of the same country. For example, Ancient Greece knew both polyphonic and monophonic types of double blown instrument *avlos*: (1) the one that was considered to be the purely Hellenic instrument had the same length reeds with the identical holes on them (structurally monophonic instrument), and (2) another one was considered non-Hellenic, "barbaric" instrument, it had the reeds of the different length, with non-identical set of holes on them (structurally polyphonic instrument) (See: Oxford Classical Dictionary, 1979:710). This fact of the presence of two different types of the *avlos* correlates with the fact of the mainstream monophonic singing culture of the Ancient Greeks, and the presence of the traditions of vocal polyphony in mostly mountainous regions of the Balkan Peninsula (including Epir and Rhodes in Greece, where the polyphonic tradition was alive in the 20th century).

An important detail in correlation of the traditions of vocal polyphony and the double blown instruments is that, double blown instruments seem to become particularly important for the culture when the tradition of vocal polyphony is **declining**. In Georgia, for example, double blown instruments are found mostly in regions where the vocal tradition is not as strong as in other regions. The absence of double blown instruments in very active polyphonic traditions could be connected to the total domination of vocal choral practice in musical and social life. For example, musical activity of Pygmies was traditionally almost exclusively vocal and choral. Seems that blown polyphonic instruments are becoming more important when social and choral ties in community are getting weaker. The psychology behind this phenomenon is something like this: "If there is no one else to support my singing with the other part, I'll do this for myself".

The readers might interpret this connection between the blown instruments and vocal music as the indication of the general link between the vocal and instrumental forms of traditional music. Interestingly though, another big group of musical instruments, sting instruments, does not show this kind of close connections to the vocal traditions. Plenty of cultures with the monophonic singing traditions have very developed polyphony of string instruments. For example, many of the Central Asian cultures with the monophonic singing traditions have the polyphony of string instruments (but not the polyphony of double blown instruments).

This specific closeness of blown instruments with the vocal traditions is most likely to have the physiological-psychological basis and be connected to the **process of the breathing**, paramount for the physiology of both singing and playing blown instruments (Jordania, 1989:224-227, 1985; Nikoladze, 1986). Because of the breathing the musical phrasing on vocal and blown instrumental music is also very similar.

I was thrilled to discover, that very deep connection between singing and blown instruments had been noted by Ancient Egyptians. The same hieroglyph (showing the bird – another very symbolic sign) was used by Egyptian writers to depict both (1) singing, and (2) playing the flute (Gruber, 1941:172).

General closeness of blown instrumental polyphony and vocal forms of polyphony has potentially revolutionary implications for the study of the history of vocal polyphony. As the musical instruments are among the best-preserved artifacts in the archaeological records (particularly when they are made of the materials like bone, or fired clay), they can provide quite accurate information about the monophonic or polyphonic types of music, including the type of polyphony and scales. If the closeness between the polyphonic singing and polyphonic blown instruments is taken into account by ethnomusicologists (and particularly by music archaeologists), the information provided by ancient musical instruments could considerably widen our scope of the knowledge about the singing practices of the past epochs.

Two examples of the ancient civilizations that might have known vocal polyphony will be discussed below.

Polyphony in Ancient Mesopotamia.

According to Kurt Sachs, double oboe appears in very early written Sumerian documents (Sachs, 1937:100). This instrument from the Ancient Mesopotamia was generally of drone type (“Both reeds were sounding together, one of them playing the melody and the other holding the same note”, Sachs, 1937b:85). Does this mean that Sumerians were acquainted with the tradition of polyphony? There are few other sources of information (besides of their use of double blown instruments) that could shed a light on this matter.

Maybe the most importantly, or at least most famously, there are written examples of music from the Ancient Mesopotamia. Ancient Sumerians, most likely the inventors of the writing system, wheel, the system of the time units from 60 seconds to twelve months, intensive agriculture, legal civil and administrative systems and schools, are credited with the invention of the music writing system as well. The same Curt Sachs, one of the best experts of the music of Ancient civilizations, wrote in the 1930s:

”Relatively recently an important discovery was made. This discovery enriches our meager knowledge on the ancient Babylonian music. This discovery is particularly important, as it is the only example of Babylonian musical culture that is available to us. In the Berlin Museum of the Front Asia there is a tablet with writings from the Sumerian epoch. Writings represent a poem in Sumerian language about the creation of humans. Next to it there is a translation of this text into Assyrian language.

Scholars investigated the writings in Sumerian on the margins of the tablet. These writings represent the usual Sumerian syllables, but they are arranged the way that they do not make any sense. The author of this article managed to decipher this writing, which turned to be a system of music transcription. There are 57 syllables, and 18 of them (like our own do, re, mi, fa, sol, la, ti) denote the single notes. All the other syllables denote the chordal combination of two and even three sounds. Later research suggested that this excerpt represents the recording of the harp part, which is accompanying the voice, singing the melody. Semitone melodic moves are thoroughly avoided. Only the five tones within the octave are used. The rest three or even four tones are used only when modulating in other mode. From the full scale

C D E F F# G A B C

the musician from the Babylon uses only the following scale sequences:

C D E G A C
C D F G A C
D E G A B
D E F# A B

"In these melodic sequences the semitone is always absent. It is not used neither in diatonic nor even the chromatic phrases. The harp is following the melody in unison, simultaneously accompanying the melody with the two and three-part chords, consisting of fourths, fifths, octaves, seconds, and double octaves. The music makes an impression of great inner unity and reminds of the Chinese music (the same way, as the system of the seasons of the year)".

"The importance of this discovery is in the fact that this is not only the first and the only example of Babylonian music, but the only example of musical culture of pre-Hellenic epoch. Besides, this is the first example of multiphonic instrumental music, and it gives us at least some idea of what and how was performed on the multistring harp" (Sachs, 1937:103-104). Therefore, great German scholar suggested that Sumerians instrumental music was polyphonic.

After the 1930s, when Kurt Sachs wrote these words, the archaeological research brought few more "first-hand" musical material to our knowledge. Few dozens of tablets with apparently musical notations were found from the Ancient Mesopotamia, particularly during the 1960-1970s. Few different readings of these notated examples were suggested (see the discussion in West, 1994). The most widely known is the interpretation made by Anne Draffkorn Kilmer, scholar who played important role in interpreting and publishing the Ancient Mesopotamian texts related to music theory. Kilmer interpreted the interval names as indication of two-part music (the upper part as a vocal line and the lower line as an accompaniment). Therefore, Kilmer also point towards the presence of instrumental polyphony among the peoples of Ancient Mesopotamia (in this case in Hurrians from Ugarit, the ancient royal residence in contemporary northern Syria) (Kilmer, 1971, 1974).

Kilmer's transcriptions caused major controversy mostly because scholars could not believe developed two-part music could exist in Ancient Mesopotamian epoch. As West puts it, "One's immediate reaction is skepticism at the notion of this kind of harmony existing in any ancient music" (West, 1994:173). Other scholars also

expressed the same kind of skepticism (Wulstan, 1974; Duchesne-Giullemin, 1975, 1980:11-18). As a support for her suggestion of the possible presence of polyphony in Mesopotamian music, Kilmer mentioned the study conducted by Hans Hickmann.

Hans Hickmann earlier proposed that two-part music with drone was known in Ancient Egypt, and even made the transcription (Hickmann, 1952, 1970:138-140). Scholars were (and some still are) cautious about this revolutionary interpretation (for example, see Manniche, 1991:30-32).

Therefore, we have at least three interpretations of the Ancient Mesopotamian (and Ancient Egyptian) music, made by Kurt Sachs, Hans Hickmann, and Anne Draffkorn Kilmer, where scholars propose that the Ancient Mesopotamians (and Egyptians) knew and performed polyphonic instrumental music, and the crucial argument against this idea, to put it simply, is that scholars do not believe that it was possible that these ancient peoples could already develop polyphony few thousand years ago.

As we can see, the main problem is again the deeply rooted belief of musicologists that polyphony evolved later as the natural development of primordial monophonic music. Of course, if we are ready to critically reconsider this blind belief in the light of the documented history of human musical cultures (discussed earlier in this book), we will be able to see that polyphony is in fact gradually **disappearing** (instead of **appearing**) throughout the human history. And if we do accept this historical tendency of the gradual disappearance of the polyphonic traditions, we will be able to see this whole controversy about the polyphony in Ancient Mesopotamian music in a new light. Our model of the gradual disappearance of polyphonic traditions, and therefore, wider earlier distribution of polyphonic traditions, strongly supports the suggestions of Kurt Sachs, Hans Hickmann and Anne Kilmer.

But this is not the whole story. According to our current knowledge and the suggested model of the gradual disappearance of the traditions o f vocal polyphony, it would be natural to propose that Ancient Mesopotamians had **not only instrumental, but vocal forms of polyphony** as well (Jordania, 1989a). Let us now have a look what we have to support this bold claim, besides the general model of gradual disappearance of the traditions of vocal polyphony in different parts of the world.

- First of all let us have a look at the surviving traditions of vocal polyphony from this region. Polyphonic singing has been a part of the ancient tradition of the pearl divers from the Bahrain. This uninterrupted tradition of pearl diving has been documented **at least** for the last 4 thousand years, and Bahrain, or the ancient Dilmun (Delmon) has been the vital part of the Ancient Mesopotamia from the earliest (Sumerian) period. Although the theoretical possibility that Bahrain pearl divers "developed" their polyphony from monophony may still exist, the conspicuous absence of such evolutionary transactions in traditional singing cultures does not allow much chance for this possibility.
- Strong vocal polyphonic tradition among the oldest layers of the populations of the Balkan and Caucasus, living in the most isolated mountain regions also support this view.

• Drone polyphony, documented among Tuaregs, arguably the best survival of the indigenous North African population and culture, also supports the suggestion made by Hickmann about the presence of drone polyphony in the Ancient Egypt, and generally strengthens our argument about the presence of vocal polyphony in Ancient Mesopotamia.

• The fact that choir singing in the Sumerian temples was an everyday practice, is also known to scholars. Choirs were known under the name "Nar" (or "Nar-Nar").

• Even the transcription of Kurt Sachs, made as an example of instrumental music, makes more sense if considered as the example of vocal music. I mean the intervallic content of the musical piece. According to Sachs, the intervals used in the music he transcribed were "fourths, fifths, octaves, seconds, and double octaves" (Sachs, 1937:103). Octaves, and particularly double octaves seems a bit out of logical sequence in this line, because the other intervals mentioned are much smaller – seconds, fourths, fifths. (Russian music historian Rozenshild even skips double octaves when citing the Sachs intervals. See Rozenshild, 1969:15). On the other hand, if we consider this music to be vocal, instead of the "octaves" and "double octaves" we will be having merging two (or three) vocal parts in unison, which is a common practice for many polyphonic traditions.

• Even from recent (20th century) experience of transcribing different musical traditions ethnomusicologists know that in vocal-instrumental genres it is the **vocal part** that is the first and foremost to be transcribed. In Kazakh epic tradition, for example, performed by a singer with the vigorous accompaniment of the two-sting *dutar*, it was only the vocal line that what was usually transcribed, without the instrumental accompaniment (Kunanbay, pers. comm.). It seems to me very odd to imagine that in the same combination of singing with the instrumental accompaniment, Sumerians would transcribe only the accompaniment, leaving the all-important vocal part without notation at all.

• The evolution of musical paleography is also interesting in the light of our discussion. The first music writing system in human history was invented by Sumerians (the one we are discussing) and it represented the **precise** system of writing (I mean precise in pitch). This system was using letters and syllables of Sumerian language for the each sound, like we use the alphabet letters today A, B, C, D, E, F, G, to indicate the pitch. This Ancient Mesopotamian system was around for at least couple of thousand years, and even the survived examples of Ancient Greek music were written down with the letters. This makes Sumerian music writing system the longest running music transcription system in human history. Historically the next system of notation – neumatic system of the Medieval Europe (Byzantine, about 8th century) was based on the **approximate** indication of the movements of the melodic line. This system was serving mostly monophonic singing traditions of early Christian church singing. The third system of notation (which is still in use today) started few centuries later. The third system was again the **precise** system of writing, and it is widely accepted, that the invention and wide distribution of the third (contemporary) system of precise writing was needed to write down the new **polyphonic** music texture. The seemingly strange twist that musical writing system did during its four

thousand years of existence (it started as precise pitch system with the Sumerians, became approximate in medieval monophonic Europe, and then came back to the precise system again in polyphonic European professional music) I suggest must be connected to the polyphonic nature of the Ancient Mesopotamian and contemporary European music and monophonic character of early Christian music.

- As the transcription of the Sachs and Kilmer represents more of an example of parallel polyphony (not so much the drone polyphony), this brings one more possible question and one more possible player in the picture. Dwellers of the highest mountain ranges of the Europe, Svanetians from the western Georgia, living in the impenetrable mountains of the Caucasian Mountain Range, with the signs of unbroken cultural continuity for few thousand years, show startling structural closeness to this (Mesopotamian) type of polyphony, with the excessive use of the harmonic intervals of seconds, fourths and fifths, and with a relatively limited use of the drone polyphony. They employ mostly parallel and ostinato type polyphony in three-part vocal texture. It might be interesting for the readers to know that the closeness of certain elements of Svanetian and Sumerian culture has been noted for about a century ago. Sachs wrote about the survival of the Sumerian type of harp in Georgia (more precisely in Svaneti, where it is still in use. Sachs, 1937:98). One of the hypothesis link the isolated Sumerian language to Georgian, and particularly the most archaic Svanetian language (see the review in Gordeziani, 1985). There are also promising linguistic parallels with Sumerian language and mythology in Svanetian songs and names for the places as well. I do not want to go into details into this topic, obviously the theme for another multidisciplinary study.

To conclude this section, we can say that the (1) examples of **notated music** from the ancient Sumerians and Hurrians (most likely of the polyphonic music, as suggested by Sachs and Kilmer), (2) existing tradition of **choir singing** in Sumerian temples, (3) the presence of non-logical octaves and double octaves in Sumerian three-part music, better explained by the **vocal character** of this polyphony, (3) **survival of ancient vocal polyphony** in isolated mountain regions of Caucasia and Balkans, as well as ancient polyphony of Bahrain pearl-divers (all of them having deep connection with the Ancient Mesopotamian civilizations) , (4) much **less probability of Sumerians to record only instrumental part** without recording the all-important vocal part, (5) invention of the precise system on notation, better tool for **recording of polyphonic music**, and (6) even the possibility of more direct links between Sumerians and Svanetians, dwellers of western Georgian mountainous region, famous for their unbroken cultural heritage and ancient **three-part polyphony with seconds, fourths and fifths**; together with the presence of the **double blown musical instruments** in Ancient Mesopotamia, strongly connected to the cultures with vocal polyphonic traditions, and finally, all this arguments coupled with the **general historical tendency of the disappearance of the traditions of vocal polyphony** give me grounds to propose that at least some peoples of the Ancient Mesopotamia (Sumerians and Hurrians among them) had a tradition of vocal polyphony, and that at least some of the first recorded examples of human musical culture from the 3rd–2nd millennia BC represent the examples of vocal polyphony.

Joseph Jordania (2006). From the Book: WHO ASKED THE FIRST QUESTION? The origins of human choral singing, Intelligence, Language and Speech. Logos Publishing.

Ancient Mesoamerica

Represents quite a different story. Unlike the Ancient Mesopotamia, we do not have (at least so far) any examples of recorded music from this region, and the written sources are not so deep and rich. On the other hand, Ancient Mesoamerica is arguably the **richest region of double blown musical instruments, true heaven for music archaeologists**. Therefore our discussion will concentrate more around the mentioned earlier connections between the vocal polyphony and the double blown musical instruments.

Multiple duct flutes and the problem of polyphony became one of the popular topics of the scholarly discussions and publications, particularly in the 1960s. Part of the scholars suggested that Ancient Mesoamerican civilizations knew polyphony, but there is some skepticism as well. Let us listen to Dale Olsen from the Florida State University:

"Music iconography can reveal information about musical context, but it cannot tell us many details about techniques of playing. It can suggest the big picture but not the little picture, the focus of musical detail. For example, the player of the single-headed drum pictured in figure 11 is probably playing with a mallet, but we can not tell how he hits the drumhead (in the middle? On the rim of the skin? With his fingers? Also with his palm?) Similarly, the player of the three-tubed flute in figure 12 is obviously playing with his fingers, but we cannot tell which part of the fingers (tips or middle joints). Nor can we tell which holes he covers with which fingers (this would be important information to know for the purposes of determining whether or not ancient Mexican played multipart music on their multi-tubed flutes" (Olsen, 1998a:15).

Some scholars on this subject are more certain that the Ancient Mesoamerican peoples knew instrumental polyphony:

- Charles Boiles (1965:218), based mostly on the archaeological evidence from the Totonacapan region in Veracruz, where he found triple flutes made of clay, suggested that a particular notion of harmony could be explored based on this type of instruments.
- Samuel Marti (1968:210) came to the same conclusion, on the basis of the discovery of quadruple vertical flutes from Teotihuacan.
- Daniel Sheehy (1998:601) wrote: "Extensive historical evidence supports the claims that during many periods and in numerous areas of what is now Mexico, music was complex and important. Tubular duct flutes with multiple tubes that were apparently played simultaneously, unearthed on the east and west coasts and perhaps going back more than two thousand years, point to the existence of polyphony".
- Jose Raul Hellmer (1960) noticed that quadruple vertical flutes produce not only chords but two or more melodic lines.
- Robert Stevenson (1968:84), the author of the most comprehensive study of the ancient instruments of the Ancient Mesoamerica, also agreed that pre-Columbian cultures had harmony; however, he insisted that notion of multipart texture has to be understood within the concept of parallelism.

Arturo Chamorro and Dale Olsen still have some reservations about the equivocal acceptance of the idea of polyphony in Ancient Mesoamerican cultures: "Archaeological discoveries of he twentieth century have revealed the former use of ceramic tubular duct flutes with holes (many with multiple tubes), globular flutes (some with multiple chambers) with and without holes, and other ductless aerophones. There is evidence pro and con for the existence of polyphony or multipart texture in ancient Mexico" (Chamorro, 1998:555). According to Olsen, "Ancient multiple duct flutes have been discovered in other parts of Mexico and as far south as Guatemala. Their existence suggests that multipart musical textures were used in Mexican and Central American antiquity, though a theory of polyphony is debatable, since no ancient flutist survive to prove or disprove it, and multitubed duct flutes are no longer used in this area" (Olsen, 1998:8).

If the readers remember the central thesis of this book, regarding the origins of polyphony, that polyphony did not evolve late in the human history as the natural evolution of the monophonic singing, and that polyphony seems to be an extremely archaic feature of human cultural history, it is easy to understand that despite of all the possible shortcomings, I do support the idea of the presence of instrumental polyphony in Ancient Mesoamerican civilizations.

But this is not the end of story. Should I propose that Ancient Mesoamerican cultures knew not only the instrumental, but vocal polyphony? I simply have to, because the sheer number and the spectacular variety of multitubed flutes in Mesoamerica, unrivalled in the world, does not leave much doubts for me that the people who played these instruments were familiar with vocal forms of polyphony as well.

I am by no means the first (or alone) in proposing the presence of vocal polyphony in ancient Mesoamerica. Samuel Marti summed up the historical sources and the eyewitness accounts to propose that Ancient Mesoamericans knew not only the instrumental, but vocal polyphony as well as early as in the 1950s (Marti, 1968 [1955]).

Let us first of all have a closer look at the survived instruments. Multitubed instruments may provide the most useful information about the possible tradition of vocal polyphony in Ancient Mesoamerica, as the type of vocal polyphony and polyphony of blown instruments show strong connections across the cultures. Most importantly, this includes the information (1) about the type of polyphony and (2) the harmonic intervals used in vertical coordination.

Type of polyphony.

- The information about the type of polyphony is quite precise. Big part of the double, triple and quadruple instruments contain at least one drone tube. There are instruments with two drone tubes as well (Boiles, 1965; Marti, 1968). This suggests that the tradition of drone polyphony must have been very familiar to Ancient Mesopotamians.
- Suggestion of vocal polyphony in Ancient Mesoamerica finds support from the elements of vocal polyphony surviving and recorded in 19th and 20th centuries

among many isolated regions of North and South America (see the section about polyphony among Native Americans in the first part of this book);

- Most of polyphonic elements recorded among Native Americans, particularly from the Northwest and East Coast of North America, as well as Q'eros from the Andean mountains (arguably the best cultural survival of the region), are based on the use of drone polyphony, showing remarkable similarity with the type of polyphony of the multitubed instruments from the Ancient Mesoamerican cultures;

Harmonic intervals.

- It is much more difficult to speak about the harmonic intervals of the Mesoamerican polyphony, because the choice of the actual notes and their combinations that player may prefer totally depends on the cultural preferences of the player. So, the same musical instrument in the hands of different players might produce totally different styles of music. In the beginning of the 1980s I was quite shocked to see that Khevsurs from the high mountains of the eastern Georgia were playing Russian *balalaika*, although the music they played on this instrument was as different from Russian instrumental and vocal–instrumental music as generally are Khevsurian and Russian musical styles. According to their own words, Khevsurs were using *balalaika* as a louder substitute for their traditional *panduri*.
- There is one particular type of instrument though that might give us better chance to understand the intervallic vocabulary of the Ancient Mesoamericans. This is a specific double flute made from clay. Both tubes are ostensibly the same length, and both have the same number identical holes. Although this description point to the monophonic type of double instrument, this double flute has a very interesting (in fact, unique) distinction from monophonic instruments. These two tubes do not have the identical shapes. Out of two tubes one is straight, and the shape of another one has a small curve, "twist". So although the absolute length of both tubes is the same (from the mouthpiece to the end of the tube), the length of the vibrating air column is bigger in the "twisted" tube (Marti, 1971:72). Therefore, if we try to play on this instrument, covering simultaneously the same holes on both tubes, we will get the constant sounding dissonant interval (roughly the major seconds).

Of course, the suggestion that Ancient Mesoamericans were playing in parallel seconds is very hypothetical, as there are plenty of different ways of playing this kind of double flute "with a twist", not only by covering the same holes of both tubes simultaneously. And still, the idea of playing in parallel seconds must be taken into consideration seriously. Let me say few words to support this supposition:

- Double blown instruments with the similar length tubes and identical holes (I am talking about the unison double instruments from other regions) are mostly played in unison, with player covering the same holes simultaneously. With the identical holes on both tubes on Mesoamerican double instruments it seems natural that player would cover (at least sometimes) same holes on both tubes, creating parallel seconds. Otherwise, if the instrument was constantly played with the hands of both fingers constantly using different (non-secondal) sound combinations, then what was the purpose of making of a double instrument with such an inventive shape?

• In a "Case Study" of American native musical cultures, following the suggestions of archaeologists, physical anthropologists and molecular biologists, I proposed that the surviving elements of vocal polyphony among American Indians might be connected to the carriers of European singing traditions, as European were supposedly among the first human groups who reached the American continent. **Drone** type of polyphony and **secondal** dissonances are basic characteristic features of European type vocal polyphony. Drone character of polyphony is quite obvious from the Mesoamerican multitubed flutes and surviving elements of vocal polyphony of Native Americans from different regions of America. Double flute "with a twist" gives an indication that dissonant seconds could as well be part of the polyphony of the Ancient Mesoamerican peoples.

Of course, none of these considerations and facts gives the definitive support to the preposition that Ancient Mesoamericans were familiar to the vocal forms of polyphony with the drone and secondal dissonances. At the same time it seems to me that together they give quite a substantial combined support to this idea. And of course, if we remember the central idea of this book, that **vocal polyphony is not a late phenomenon that evolved from the initial monophony**, and that the traditions of vocal polyphony show the overall historical tendency of **decline and disappearance** in all major regions of the world (including North and South Americas), the presence of vocal and instrumental forms of polyphony among Ancient Mesoamerican cultures seems very natural.

There is another possibility to view the tradition of vocal and instrumental polyphony in Ancient Mesoamerica in a historical perspective. Readers might remember, that the blown polyphonic instruments are often becoming particularly important in cultures when the tradition of vocal polyphony is waning. The sheer number of the multitubed polyphonic blown instruments in Mesoamerican culture might be indicating that the tradition of vocal polyphony was in a state of decline and disappearance during the creation of the hundreds and thousands of multitubed flutes.

Small Appendix to this "Case Study".

South America seems to be the only region on our planet where the populations of the colder climate (European and East Asians) managed to go beyond the hot and unfriendly "tropical belt" and to settle in southern hemisphere in prehistoric times. Before that Europeans and East Asians did not succeeded (at least in large numbers) going beyond the "tropical belt" and settling in sub-Saharan Africa, tropical island Southeast Asia, or Australia.

Why South America? I propose there is a good geographical reason for this. Unlike the tropical Africa and tropical Asia, South America has a unique geographic-ecological "passage" between the northern to southern hemispheres, allowing the dwellers of the colder climate to go through the tropical hot and wet rainforests. I am talking about **South American mountain range (Andes) that goes through the "tropical belt", and therefore provides a passage for the populations used to the moderate and colder climate and environment.** I do not need to argue that mountain ranges always create the certain microclimate (cooler and less humid) and

harbor most of the resort settlements in tropical countries, particularly for non-indigenous residents. Therefore, when Europeans and East Asians reached Central and then South America, the Andes provided for them the only existing on earth passage to travel further to the southern part of the globe. This must be reason that South America is the only region where the descendants of European and East Asian populations settled in southern hemisphere in prehistoric times. Andean region could also facilitate the ecological adjustment of Native Americans (originally from colder regions) to the tropical rainforests of Amazonian basin.

The importance of the "Andean Passage" must have been crucial not only in case of well-documented arrival of Siberian populations via Bering Strait, but even for the dubious possibility of the late European arrivals via Atlantic Ocean. In both cases the new arrivals entered American continents from the Northern hemisphere, and therefore the Andes must have provided the passage, connecting North and Central America with the southern parts of the South America.

Case Study #14
Polynesian Polyphony

Settlement of Polynesian Islands is one of the biggest puzzles of large-scale human pre-historic migrations. The fact itself that humans populated such vastly distanced isolated islands, as, for example, the Rapa Nui (Eastern Island), is quite amazing. Unlike scholars, studying most of other human pre-historic migration routs, scholars of the history of Polynesia sometimes had to prove that people could reach Pacific Islands without the late European sophisticated marine technique. Dr Thor Heyerdahl sailed a balsa raft from South America to the Polynesian islands. Dr David Lewis sailed traditional Haitian catamaran from Tahiti to New Zealand without the sophisticated contemporary instruments. Ben Finney made several trips on a Hawaiian double canoe. Of course, no scholar would doubt the idea that, say, East Asians (or even Europeans) could actually walk the long distances to the America via Siberia and Bering Strait, but Polynesia is different. Polynesian islands are dispersed in the biggest ocean of our planet, surrounded by thousands of kilometers of open ocean waters.

Polynesian case does test our trust into the traveling abilities and spirit of our ancestors. It seems to me natural, that as time goes by, and as the studies of "historical genetics" of human DNA (particularly mitochondrial DNA) matures, more and more facts of human large-scale migrations will come to our knowledge, and our trust and respect for our traveling ancestors will increase. But at the moment we need to rely on the existing facts.

In the juxtaposition of linguistic, historic, ethnographic, physical anthropological, archaeological, genetic and other data, each providing sometimes contradicting information, quite outstanding polyphonic traditions of Polynesians had been mostly neglected. The main reason for this neglect is (again!) the deep belief of music scholars in the late origins of polyphony. "What valid historical information could Polynesian polyphonic traditions provide, if, most likely, Polynesians developed their own polyphony quite late, say, in 15th or 16th centuries, before the first contacts

with European sailors, long after settling on Polynesian Islands?" – that is the questions that believers of the late origins of polyphony would be asking. We may remember, that some European musicologists could not even face the facts and accept reality that Polynesians "already" had polyphony when Europeans arrived there (Kaeppler et al., 1998:15).

I am very sorry, if the readers are already tired me repeating the same idea again and again, but I can't help myself, so I need to repeat once again, that the idea of the late origins of the vocal polyphony from monophony is a myth, unsupported by the existing facts. Multiple examples of the disappearance of vocal polyphonic traditions from different parts of the world on one hand, and the conspicuous absence of the facts of the "natural evolution" of vocal polyphony from monophony on the other hand suggests that polyphony is gradually disappearing in human cultures. Therefore, I believe that **the fact of the presence of vocal polyphonic traditions in any of the regions of the world, in any of the cultures must be treated as the possible very valuable source of the ancient history of this region/culture.** This is particularly important in the cases when the tradition of vocal polyphony holds an important place in the traditional social life and culture. This undoubtedly is the case in Polynesia.

Readers might remember that Polynesia is one of the three world's richest regions of the world in regards of traditions of vocal polyphony. Unlike two other richest polyphonic regions – sub-Saharan Africa and Europe, which had been populated by the carriers of indigenous vocal polyphonic traditions (sub-Saharan Africans and Europeans) for many millennia, Polynesia has been populated relatively recently and obviously by the newcomers. The question is **where from**. The possible source of the outstanding vocal polyphonic traditions of Polynesia is the main topic of this "Case Study".

Strategically surrounded by mostly monophonic Americas, East Asia and Australia, Polynesian polyphony is one of the most interesting and most isolated polyphonic regions of the world.

First of all, closer look at the regions around the Pacific Ocean reveals that Polynesia is not actually surrounded by carriers of the monophonic traditions only. Elements of polyphony had been found among American Indians in both North and South America (including old Mesoamerican civilizations), in Japan among Ainus, among indigenous populations of Southeast Asia (minorities living mostly in mountain regions of Taiwan, Vietnam, South China, and other countries of this region), in Micronesia, and most importantly, the strongest vocal polyphonic traditions in this region (after the Polynesians) are found among Melanesians.

Therefore it will be closer to the historical reality if we try to find the links that Polynesian polyphony shows with other polyphonic regions of the Pacific region.

From the whole Pacific region Polynesian tradition of vocal polyphony has the closest parallels with the vocal polyphony of Melanesians and Indigenous peoples of the Southeast Asia. The only controversy that follows this "western" connections of Polynesian vocal polyphony, is that the tradition of vocal polyphony is the weakest in the western regions of Pacific, and it is increasing from the western regions to the eastern regions of the Pacific Ocean. Only minor elements of polyphony are found in

Micronesia, in Melanesia polyphony is more pronounced, and the most of the Polynesia is profoundly polyphonic. This controversy is quite important and puzzling, as you would expect the reversed picture of stratification of the traditions of vocal polyphony - the strongest in the west (closest to the region where this tradition might originally come from). Besides, the idea of the intense migrations from Melanesia to Polynesia and subsequent "transportation" of the traditions of vocal polyphony from Melanesia to Polynesia looks also unlikely due to the obvious differences in physical type between the Polynesian and Melanesian peoples.

If we look wider in the search of typological connections of Polynesian polyphony, it must be stated that the closest typological links exist with the European polyphonic traditions. Marius Schneider was possibly the first who mentioned an unusual closeness of European and Polynesian vocal polyphony in his "History of Polyphony". According to Alan Lomax, "Coding from many of the most distant reaches of Oceania indicate that certain features common to the Old European style [Old European style for Lomax are polyphonic singing traditions of mountain regions of the Europe] were almost surely present before contact with European explorers in the eighteenth century. The song traditions of Oceania and Old Europe share distinctive cluster of traits – textual complexity plus precise enunciation plus cohesiveness plus polyphony – major features of Middle European folk hymnody… (Lomax, 1968:90).

The biggest counterargument for any possible connections between the Europe and Polynesia is the huge distance between these two regions. Europe and South Pacific are on the opposite sides of the globe. And it is not only the distance that makes this connection unrealistic, but also the fact they are in different hemispheres. I tried to argue earlier, that crossing the hot and wet tropical "ecological belt" for the dwellers of moderate and cold regions of the world must have been extremely difficult, and this was the reason that both European and East Asian populations traveled extensively along the axis east-west, or "following the Sun", without crossing the tropical line. If this was not this huge distance between the Europe and Polynesia, and if Polynesia was situated, say, somewhere in the Atlantic Ocean, "only" couple of thousand kilometers from the Europe, there would most certainly be widely acknowledged historical connection between the vocal polyphony of the Europe and Polynesia. But Polynesia is exactly opposite of the globe from Europe, behind many thousand kilometers and the unfriendly "tropical belt" for the dwellers of the moderate and cold climatic regions.

Amazingly, there is a theoretical possibility that might be worth discussing, at least from the musical point of view.

As we have seen in a "Case Study" discussing the possibility of vocal polyphony in cultures of ancient Mesopotamian and Mesoamerican civilizations, there is a possibility that traditions of vocal polyphony existed wider in North and South America (including old Mesoamerica). Discussing these traditions, we came to the conclusion that the main characteristic features of American polyphony were typologically very close to European polyphonic traditions (the same drone, or even the double drone, and maybe the secondal dissonances).

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The presence of European features of Polynesian polyphony might be explained by the at least partial migration of the groups of people from the South and Central America to the Polynesia. This rout was popularized by the controversy, following the claims of Thor Heyerdahl about the initial migration of the groups of people from South America to Polynesia. The long controversy resulted in acknowledging by most of the scholars that that there has been at least sporadic contacts between the Polynesians and South American Indians. For example, bringing and cultivating South American sweet potato (with the same name) in Polynesia would be impossible without such "personal" contacts. If we take into account the amazingly strong polyphonic traditions of Polynesians (and I tried to convince readers that the traditions of vocal polyphony must be taken into consideration very seriously), then the contacts between the supposedly European polyphonic elements of South America and Polynesia must have been more than "sporadic". (Survey of different ways of colonizing Pacific see Bellwood, 1989.)

Very strong polyphonic traditions of Polynesians provide circumstantial support to the idea of the possible relatively late migration of the groups of the people from Europe to the Central America via Atlantic Ocean as well. This possibility, generally dismissed as totally unrealistic, receives at least some confirmation from the historically quite well documented migration of Indonesians to the Madagascar across the whole Indian Ocean. The distance between the Indonesia and Madagascar is the same as between the Europe and Central America, and the direction is the same as well – from east to west, in both cases supported by the dominant ocean currents. (By the way, most of the ocean currents also "follow the Sun" from east to West.)

This ancient migration of European groups to Central America, whatever slim it might seem today, is supported by the possibility of the further southern migration and crossing the difficult "tropical belt" by dwellers of the colder non-tropical regions in the Andes we have already discussed.

Whatever fantastic and unrealistic it may seem, it is my duty to note, that musical data do support the "round-the-half-world" travel of Europeans from Mediterranean Sea to Central America, and then, via the Andes Mountain passage, to Polynesia. Crucial points of this support are as follows:

(1) The presence of the European type drone polyphony with the characteristic secondal dissonances in Ancient Central America (in instrumental, and possibly in vocal music as well);

(2) The presence of drone polyphony among the Q'eros, unique high mountain survival of pre-Inca culture and population;

(3) The presence of more polyphonic traditions among few other peoples of the Andes region; and

(4) The presence of the European type drone vocal polyphonic traditions in Polynesia.

I fully realize that at the moment these facts of the presence of the European type drone polyphony in Mesoamerican civilizations, in high mountain regions of the Andes and Polynesia are not sufficient to support the romantic hypothesis raised by Thor Heyerdahl about the possible pre-Contact links between the ancient Europe and the Mesoamerica, with the subsequent continuation of the travel via Andes to the Polynesian Islands. But if at any point in the future any additional support for this bold and currently unrealistic transcontinental travel thorough two oceans and the "tropical belt" comes to the knowledge of scholars, then the tradition of European type drone polyphony, found in Mesoamerica, in Andes (including Q'eros) and Polynesia must be seriously taken into account.

Case Study #15
The Beatles: Ancient Sounds in Hit Parades

Paul McCartney and George Martin had a few interesting discussions about the orchestration of The Beatles "Yesterday" (the first song where the very unusual string quartet was used on a rock-band recording). "Mozart would not have used that minor seventh", said George Martin to Paul, and that gave Paul even more incentive to put this seventh into the arrangement. Of course, John Lennon loved this "bluesy" minor seventh. On another occasion Martin did not like the idea when Paul said he wanted one of the violins to keep the high "A" during the last appearance of the immortal melody of "Yesterday". "You can't double the third!" George Martin told to Paul. "You wanna bet?" said Paul (Coleman, 1995:46). I think many would agree, that this long hovering "A" gives the last appearance of the melody some special beauty and even poignancy.

George Martin, as usual, was absolutely correct from the point of view of the sacred rules of professional harmony – many music students would remember that according to the classical harmony, doubling of the third was considered a big mistake. In the 18th and 19th century European composers were openly criticized for the lack of professionalism for making such blunders (like doubling the third, or having parallel fifths).

Paul McCartney was correct from the point of view of the highest authority of the musical art – our ears. George Martin finally agreed with him, because despite his strong classical musical education, going against the established rules was an important part of his own creative nature.

Every epoch has its own aesthetic rules, its musical language, connected to the whole set of specific technical elements. For the most of the human history most of the people were raised in a musical environment of a single culture, therefore they were familiar with one "musical language" only. It was almost impossible for them to comprehend the music based on the different set of rules. For example, according to James Porter, "Beethoven and Haydn … clearly puzzled by the modality of the [Scottish] tunes and effects derived from bagpipe technique (such as double tonic or a freely pentatonic structure), could not understand why some tunes did not end on her "tonic" or home key" (Porter, 2000:367). Even these composers, deservedly ranked

among the greatest in human history, "failed to understand the modality of the tunes. Even when they found them attractive, they cast them in continental harmonies" (Porter, 2000: 372-373).

If we look at the history of European music it is not difficult to see that professional and traditional musical languages often existed side by side, sometimes misunderstanding each other. Traditional music was often perceived by the professional composers as simple and even "primitive", at the best deserving a new life by harmonizing traditional tunes with new professional harmonies. Despite this arrogance of professional musicians, traditional musical language was sometimes well ahead of the development of musical language of professional music. Lithuanian traditional singing style *sutartines* used polytonality much earlier than Ives, Bartok or Stravinsky. Georgian composers Dimitri Araqishvili and Zachary Paliashvili recorded but never used complex traditional polyphonic songs from Guria, western Georgia, because Gurian songs harmonic language was too dissonant and too complex for them. For the same reason one of the greatest pioneers of the contemporary professional music Stravinsky openly admired western Georgian polyphony.

In this "Case Study" we will concentrate on the musical language of arguably the most creative band of the history of popular music, the Beatles. I will try to trace the origins of the several elements of the Beatles musical language, revolutionary for the European popular music and Rock-n-Roll. I'll try to argue that some of the most revolutionary elements of the Beatles musical language have interesting parallels with the traditional polyphonic cultures of the archaic polyphonic Europe. Some of these topics, concerning the closeness of the Beatles legacy with traditional musical cultures (particularly of British peoples) are known from more than 400 books, published about the Beatles, but some will be discussed for the first time. I organized this "Case Study" into separate sections.

• **Unity of the music creator and the performer.** Strict division of all the functions across the society was one of the cornerstones of the professional music in Europe. This division included whole range of professions, ranging from the composer, performer or performers, and conductor, to the music copier and music critics. Even listeners were supposed to follow the strict rules of the game (for example, how to behave, or when to remain silent and when to clap). This tradition was so strong in European music, that even R'n'Roll mostly followed the trend. For example, "King of R'n'Roll" Elvis had not written any of the songs he performed. On the other hand, in a traditional society a performer is a creator (or at least co-creator) of the music he (or she) performs. By establishing the trend of writing their own songs, the Beatles brought back this ancient tradition of unity of the creator and the performer.

It became a standard after the Beatles for the rock bands to write their own songs. They were certainly not the first rock musicians to do this, of course, but their phenomenal success gave a strong message to the existing or the new bands to write their own material, and therefore, to be not only the performers, but creators of their own songs (it was difficult for me to believe that even such a "self-contained" rock

band as Rolling Stones were not writing their own songs before they had a positive example from the Beatles).

• **Writing music together.** Maybe one of the biggest differences between the **professional** and **traditional polyphonic** cultures is the process of creating music. Composing music professionally is a very much individual enterprise. On the contrary, composing music in a traditional polyphonic society is a group activity. Readers might remember the examples of creating new compositions in western Georgia, Polynesia or among Bushmen from the first part of this book. Sitting together for hours and putting different part together to come up with a shared polyphonic composition is usual for the traditional singers.

Acknowledging the crucial difference between these two models of music composing, I would like to propose the existence of two music-composing models: (1) **individual** (we could call it "mono-brain") and (2) **group** (or "multi-brain"). I am not talking about the well-known but not very clear idea of the "collective" authorship of traditional songs, when several generations of creative singers may contribute to the development of a song (implying that song had an individual author, who's name is lost). I am talking about the polyphonic cultures, where the very **process of initial creation of the song is also a group activity**. These two different music-composing models fundamentally affect both composing process and the final product.

Professional composition is entirely constructed by an individual, and the composing process is very much "authoritarian". That could be the reason why professional polyphonic compositions contain so much imitation, strict parallelisms, and are generally more vertically organized. On the other hand, in traditional society, when two or more creative talents are trying to put their individual creative power to the work for the shared composition, the process has more "democratic" features. That's why the traditional compositions are usually less based on imitation, have more contrastive (non-parallel) movements between the parts, and are more melodically (rather than harmonically) organized.

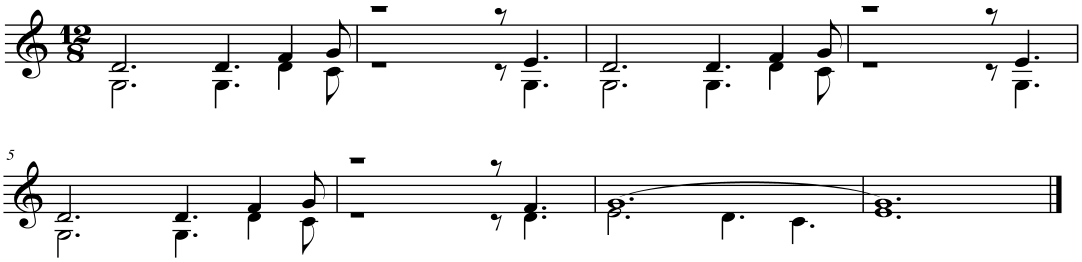
The Beatles was a wonderful example of group creative activity. There was no clear leader, or even the main singer of the group. This was a novelty that gave some initial headache to George Martin: "When I first met them, there was no obvious leader. They all spoke in turn, and I went home wondering which one of them was going to be the star. My thinking was so coloured by the success of people like Tommy Steele and Cliff Richard that I couldn't imagine a group being successful as a group. I felt that one of them was bound to come out as having a better voice than the others. Whoever that was would be the one, and the rest would become like Cliff Richard's backing group, the Shadows. I was quite wrong". (Martin, 1979:124). Fortunately for all of us, Martin liked going against the established rules and trends and accepted the idea of a group.

Most importantly for our topic, writing music for John Lennon and Paul McCartney, particularly in the first period of their partnership, was very much a shared creative act. Paul describes their process of writing song the following way: "We would sit down with nothing and two guitars, which was like working with a mirror. I could see what was he doing, and he could see me. We got ideas from each

other. In fact, it was better than in mirror because if he plunking away in D, I could see where his fingers might go and then I could suggest something. So that was like writing from the ground up. 'She loves you", "from me to you", "This Boy" were all written that way, as were most of the earlier songs" (Smith, 1989:201). Their (Lennon an McCartney) composing model was obviously a "group model" of music writing, widely employed in traditional polyphonic cultures, and very different from the "individual" model employed by professional composers.

This early period of intense use of the "group model of composition" resulted in some very interesting and non-traditional voice leading of the Beatles. Their song from the first single, "Love me do", is a good example of this kind of unusual harmonizing:

Fig. 14. Love me do, vocal harmonies



Combination of the fifths, thirds and sixth, with the melodies moving sometimes in parallel motion and sometimes against each other, would hardly be written if this all was a brainchild of the single composer.

During the later period of the existence of the Beatles, this immediate co-writing practice was mostly replaced by the more individual efforts, although both Paul and John would still share the ideas about the new songs, and particularly, if they were "stuck", they knew where to go. Writing music as a creative communication apparently was particularly important for Paul McCartney. During his post-Beatles years McCartney wrote songs together with different musicians (Danny Lane, Eric Stewart, Elvis Costello, Stevie Wonder and Michael Jackson. See Coleman, 1995:127-128).

As many from my generation, I have been the Beatles fan from my early teen years, when their music went through the unfriendly Communist "iron curtain" as if it did not even exist. My personal interest in music, playing the guitar and studying English language started when I tried to work out their outrageous chordal progressions and play their songs. Watching them from the distance, I came to the conclusion, that one of the factors that contributed to the break-up of The Beatles as a group, was the inner creative conflict of Paul McCartney, the de facto leader of The Beatles during their final years. On one hand, Paul always relished and very much enjoyed the "group model" of songwriting with very open creative communication (that's why he tried so many songwriting partners after John Lennon), but on the other hand, his perfectionist attitude towards the final product was taking over at some stage and did not allow too much creative freedom to his songwriting partners. George Harrison was particularly suffering from Paul's perfectionist and sometimes single-

minded working style. In a well-known argument recorded in the film "Let it Be" George is getting frustrated as Paul wants him to play what Paul wants to be recorded. In another case, when recording Paul's classic "Hey Jude", Paul did not like George's idea of guitar answering Paul's opening phrases. In a recent (2006, May) TV interview with Parkinson Paul McCartney was talking about playing almost all the instruments on his last album, as a means to have more creative control on the final production: "I was actually all geared up to play with my band, but he [producer, Nigel] said…on a second week he said: "I'd like to try something different. I want you to play lot of instruments". So he got me drumming a bit… Which I *love* to do. And I think the trick for me… I thought of it afterwards…possible what have happened is that… I write a song, I bring it to the studio, and then, the drummer, kind of takes over and he writes the drum part, whereas if I play it, I'm still sort of composing, I'm still writing the guitar, the base, the drum…"

• **Performance style.** Arguably the most loved Russian rock-musician, Andrey Makarevich, the front men of the most popular Russian rock band "Time Machine" said about the Beatles, that listening to their music for the first time for him was like taking the cotton buds out of your ear for the first time in your life. I agree with him and I think many, who's lives were enriched by the Beatles music would also agree, that there is something very important in this simple and maybe awkward comparison.

If we try to characterize the Beatles performance style (first of all, their singing style), this would be a performance with no reservations, very open, full of emotions, including exciting panting and shouting.

"Up until then there had been nothing to involve young people to quite the same extent. The rock-and-roll gyrations of Tommy Steele and Cliff Richard were clinical, anaemic, even anaesthetic, compared with the total commitment of the Beatles, which somehow got down to the very roots of what the kids wanted," wrote Georgia Martin about the British rock scene in the beginning of the 1960s (Martin, 1979:125).

European classical tradition of music performance has always been based on the professional control of the vocal apparatus. Singing with the excited shouts was as unimaginable for the classical European tradition, as singing in "bel canto" style for the rock-musician. In this regards the performance style of rock music was again very close to the performance style of the traditional music, particularly traditional polyphonic music.

The electrifying phenomenon of the Beatles music mostly consisted of two elements: (1) the performance style, based on honestly and openly expressing their emotions (coming from R'n'Roll), and (2) sophisticated harmonic and melodic language that will be discussed very soon. Despite the very limited harmonic vocabulary (only three-chords!), R'n'Roll swept the world with its honesty of emotional expression. The Beatles magnified this emotional intensity, coming from the R'n'Roll performance style, with hundreds of new inventive harmonic combinations and melodies.

• **The performance as a social experience.** The readers may remember the crucial difference in models of relationship between the performers and listeners in different styles and genres of music from the introduction of this book. European classical music represents maybe the most rigidly divided model of the social interaction between the performers and the listeners. Listeners are not supposed even to clap between the parts of the symphony, leave alone the encouragement of the performers **during** the performance. On the other end of the relationship models between the performers and the listeners is the traditional polyphonic society. Here the society is not even divided on the performers and the listeners, as all the society is expected to be involved in performance. Therefore, there are no listeners at all.

One of the crucial elements of contemporary rock and pop-music is the unparalleled (in classical music or even jazz) close connections between the performers and the listeners. Emotions that are pouring from the stage elicit strong emotions from the audience. And although the reaction of the audience might be deafening and distracting for the performers, this loud response is a vital and generally very positive part of the live rock performances. Participation in the electrifying atmosphere is crucial for the rock-concert goers. Here are the Beatles' drummer's words from the interview with British media on 12th December 1972:

Q.: "Was the Wembley show in any way a nostalgic experience for you?"

Ringo: "Very much so. They were screaming and shouting and I love that."

Q.: "So you enjoy the scream then?"

Ringo: "Oh yeah. If they had been quiet when I played I would have died. I wouldn't have known what to do" (Badman, 1999:86).

So if you ever go to a rock concert, do not complain "it was too noisy". People go to rock concerts not only to listen to the music, but to participate as well. To participate the same way, as the guests participate in singing at a Georgian wedding, or the members of the community participate in an African village celebration (clapping, singing, stomping, dancing). We could compare attending the classical concert and the rock concert to a reading the brilliantly written essay about the Carnival in Rio, and being in a Rio in the midst of a crowd during the carnival. If you do not like too much noise, you'd better stay home and read the book.

• **Harmony of The Beatles songs.** Arguably the biggest contribution that the Beatles made to the development of the contemporary popular music was the new exiting harmonic language. In the early 1960s classical 12 bar blues and R'n'Roll were still mostly based on the basic harmonic progressions of European classical music: the use of Tonic, Dominant, and Subdominant harmonies (in a C-major key the C-major chord is a Tonic, G-major chord is dominant, and F major chord is Subdominant). Basically speaking, the only difference harmonically was that R'n'Roll used Subdominant after the Dominant (this harmonic change was strictly forbidden in classical tradition).

The Beatles were often praised for their innovative harmonies, although the praise of professional musicologists shows they were mostly still looking at the Beatles legacy through the window of the European classical harmony. For example, arguably the best-known praise, that came from the professional musicologist was for

their use of "Aeolian cadence". This is one of the simplest cadences in classical harmony, and to praise the Beatles for the use of this cadence sounds like praising Ian Thorp that he can swim, or Michael Schumacher that he can drive a car. The harmonic genius of the Beatles is in the fact, that most of their harmonic progressions cannot be classified within the very restrictive system of classical functional harmony.

For the development of harmonic language of popular music The Beatles did what the romantic composers did for the development of harmonic language of the classical music – brought all the unrestricted richness of chordal changes and new colorful modulations. Before the "harmonic revolution" of the Romantic composers (like Schubert, Chopin, Tchaikovsky or later Rachmaninoff) harmonic language of the "classical" music was unbelievably strict and limited. For example, if the key was C-major, composer could not use F-major chord after G-major, or E-minor after the D-minor, or F-major after the D-minor, and forget about using chords like B-minor, or E-flat major, or even B-flat major at all – these kind of harmonies were totally out of limits of classical harmony. I remember that preparing students for the oral test for the Classical style chordal progressions was relatively easy, as each chord in Classical harmonic language had only two or three options where it could "legitimately" go. For example, in C-major key, G major chord could go only to C major or A-minor (by the way, G-major followed by A-minor is the mysterious "Aeolian cadence"), E minor could be followed only (!) by F-major; F major had the biggest number of options – it could go to C-major, D-minor, D-major, or G-major. Of course, preparing students for the aural test of the "Beatles style harmony" would have been much more difficult, as chords can go to any other chords without formal restrictions.

Despite the assertions of George Martin that Paul and John were first and foremost tunesmiths (see: "the ability to write good tunes often comes when someone is not fettered by the rules and regulations of harmony and counterpoint. A tune is a one-fingered thing, something that you can whistle in the street; it doesn't depend on great harmonies", Martin, 1979:139-140), they first and foremost revolutionized the harmonic language of popular music.

European classical music traditions was based on the unchallenged primacy of the melody (melody was considered the "soul of music"), so creating the melody (or "theme") was usually the first and most important stage of constructing a new composition. In traditional polyphonic cultures, on the contrary, musical composition was primarily concerned with the richness of the harmonic language.

Both Paul McCartney and John Lennon emphasized the crucial role of harmonic development in their songwriting. They spoke directly that they were often starting the new musical ideas with the chord progressions. Here are Paul's words, indicating that **harmony usually was the initial element** that would **suggest him the melodic idea** of a new song:

"I nock a couple of chords off, and it suggests a melody to me. If I haven't heard the melody before, I'll keep it" (Gambaccini, 1976:79).

John Lennon's words from his very early (1964) interview give even a better insight of the **importance and primacy of harmonic element** in his songwriting:

"If I found a new chord (I used to) write a song around it. I thought that if there were a million chords I'd never run out. Sometimes the chords got to be an

obsession and we started to put unnecessary ones in. We then decided to keep the songs simple and it's the best way. It might have sounded okay for us but the extra chord wouldn't make other people like them any better. That's the way we've kept it all along" (Turner, 1994:54).

Interestingly, aware of their own revolutionary harmonies, at the beginning Lennon and McCartney were a bit concerned not to make their songs musical language too complicated. Their second number 1 hit – "From me to you" (which they wrote during a bus ride on a tour) contained some new harmonic colors, including the wonderful change of the key, going through the minor dominant chord. After writing the song, they were concerned, that "the music was a bit on the complicated side and it "wouldn't catch on with the fan's". [Let us not forget, that at this moment The Beatles had only one number 1 hit, and the longevity of their success was by no means guaranteed!] Fortunately, Paul's father calmed them down (Turner, 1994:30). Paul's father was absolutely right – their fans followed them in all their harmonic endeavors with fascination (unless they discarded harmony completely as in "Revolution #9").

Steve Turner also emphasizes the importance of harmony in the Beatles' songwriting, particularly during the early years: "In the early days, the Beatles had concentrated mainly on mastering the musical side of the songs – chord construction, arrangement, and delivery. Dylan was the first recording artist to affect them primarily as lyricist" (Turner, 1994:60)

Lennon's well-known fascination with the deep meaningful lyrics combined with his love of the colorful harmonies created an interesting mixture. Predilection towards deeper lyrics among songwriters often leads to the excessive recitation and more monotonous and simple harmonic language. This is usually the case with the artists who put the meaning of the lyrics above all other elements of the song. Great example is Bob Dylan, arguably the most influential lyricist of popular music. Unlike such artists, Lennon also had great love of colorful harmonies, so this mixture gave birth to some of his very interesting songs, where the recitation is coupled with the inventive harmonic progressions (song like "Julia", "Help", or "Lucy in the sky with diamonds").

It was not a coincidence that Lennon was so deeply impressed by the Beethoven's brilliant use the Neapolitan harmony from the opening of the 14th ("Moonlight") sonata, that he wrote his choral masterpiece "Because" under the deep impression of Beethoven's music (Turner, 1994:194).

Particular importance of the harmonic element in Lennon/McCartney puzzled musical critics, because sometimes it was not even clear which of the singing parts was the "main melody". Tim Riley wrote about "If I fell": "…the melody itself seems written as harmonized – both lines are so lyrical it's hard to say just which one is the "melody". The intertwining harmonies are so strong that they seem to carry the entire song along behind them" (Riley, 1988:102). Here we can recall the puzzling absence of the "main melody" from Georgian (and not only) polyphonic songs. I believe that musicologist's search for the "main melody" does not make much sense in such compositions, because it is not the melody, but the combination of the different parts, the resulting harmony is the "soul of music". The same is the case, for example, for

the song "Julia". The melody of "Julia" is mostly a long monotonous recitation on one note, but the combination of this simplest melody with the cascade of colorful harmonies represent the "soul" of this sublime music.

Ambiguity of tonal centre is another feature that connects the Beatles harmonic thinking with at least some traditional polyphonic cultures. Tonal centre (or the "tonic") is very easy to define in classical music (or even in "classic" R'n'Roll), as compositions usually start and finish with the tonic harmony. Tonic here is the only fully stable harmony. In traditional polyphonic cultures, on the contrary, it is difficult even to speak about the presence of "tonic". Genius of Beethoven was needed to do what Mozart or Haydn never did – **to begin a musical composition with other that tonic harmony**. In the very beginning of his 17th sonata, Beethoven starts with the dominant chord: A-major 5/6 chord in D major key. In the next, 18th sonata, Beethoven starts with the subdominant instead of the tonic in A-flat key (D-flat major chord with the added sixths, of, more formally, B flat minor 5/6 chord). The Beatles classic "And I love her" is a great example of starting the song with non-tonic (subdominant II) chord and generally using tonally ambiguous harmonies. "All my loving", "Hello, Goodbye" and "Paperback writer" start with subdominant chords (II and IV), "I wanna hold your hand", "Oh, Darling", "I feel fine" and "Revolution" start with dominant chord (V), and "She loves you" starts with Submediant (VI). Another of the Beatles classics, "Michelle", starts with the tonic chord, but the unusual sound in the base overturns the stability of the tonic harmony.

Ending of the songs on non-tonic chords is something that even Beethoven did not attempt to do. Classical pieces (at least music of Viennese School composers – Haydn, Mozart, Beethoven) always finish with the tonic harmony. It seems to me that classic R'n'Roll also always comes to the tonic at the end. For the traditional songs, where the idea of the tonic is often alien, finishing on unusual places is perfectly acceptable. For example, for a popular Spanish (Flamenco) harmonic progression (A-minor, G-major, F-major, E-major), finishing on the "dominant" (E-major) chord is normal. To name the few songs that finish on different than tonic harmony, we could recall the Beatles songs, "From me to you" (finishes on Submediant), "And your bird can sing" and "Help" (finishes on Subdominant). "For no one" (finishes with the Dominant chord), "And I love her" (finishes with major Submediant).

One of the interesting features of the Beatles harmonic language was the wide use of the **Secondal connection of chords**. I am talking about the chord progression like I, II, III, IV (C-major, D-minor, E-minor and F-major). You cannot find even a single instance of using of this harmonic progression in any of the compositions of Mozart, Haydn or Beethoven. This kind of chord progression was not the part of the R'n'Roll either. In traditional polyphonic music, on the contrary, secondal connections between the harmonies are the most usual (in Georgia and Balkan traditions, for example). Beatles used a lot I, II, III, IV harmonies, for example, in "Here there and everywhere", or IV, III, II, I in "Long, long, long". I, II, III chords were used very early in a song "ask me why" on their first LP, and in "If I fell". Secondal progression VI-flat, VII-flat, I appears in songs like "With a little help from my friends" (in a coda) and "Ps I love you". Interestingly, in a later rendition of this

latter, very much underrated early song ("PS I love you") Paul McCartney slightly changed the original chordal progression, and instead of D, Em, D, A, Bm, A, B-flat, C, D, he put D, Em/D, D, A/C-sharp, Bm, A, B-flat, C, D. So in a new version of this song the base moves exclusively by seconds during the whole verse.

By the way, this song has one of the most amazing chord sequences in the opening of the song. On a very simple melody hardly anyone other than the Beatles would have used any other than G and D major chords. The Beatles put between the G and D triads brilliant C-sharp seventh chord.

Structure of the Dominant chord. Appearance of the D7 (Dominant seventh chord) was crucial for the formation of the classical system of harmony. This chord (G7 chord in a key of C-major) is named "Dominant" because it is dominating the whole tonal system in classical harmony. This chord, with the specific diminished fifths between the third and the sevenths of the cord, was the main element that distinguished classical functional harmony from the medieval modal harmony or traditional harmonies of different polyphonic traditions. Traditional music (unaffected by European professional music) does not use this chord. Although The Beatles still widely used the "classical" D7 chord, they started using the other chord as well, sometimes known among jazz and pop musicians as "Suzi" (play on a piano F-major chord with right hand and G in base with left hand and you'll get "Suzi"). This new type of dominant chord does not contain the crucial for Classical harmony diminished fifth (b-f in a chord G, B, D, F). Instead it uses G, F, A, C, G. For example, in a song "Hello, Goodbye" the "classical" cadencial chord progression (K6/4, V7, I) is replaced with K6/4, V7, V"suzi", I (listen to the words "you said goodbye, I said "hello". V"suzi" sounds on words "I said…"):

● **Dissonances.** The wide and innovative use of the Dissonances is another important element that brings the Beatles musical language closer to ancient European traditional polyphonic cultures. My colleagues would remember that dissonant chords and harmonies were considered in professional classical music "auxiliary" to the consonant harmonies. There were rules to be observed when using the dissonances – one had to know how to prepare and resolve dissonances. Of course, in the 20th century music dissonances were fully "emancipated", but classical harmony rules of using the dissonances were very restrictive. Chopin's brilliant harmonic language was often considered "too dissonant" by his peers. In the R'n'Roll of the 1950s and the 1960s dissonances were created mostly by the use of the blues notes against the major triadic and seventh chords (T, S, D chords). Chords based on other than third intervals were very seldom.

The musical language of the ancient European traditional polyphonic cultures, still surviving in mountainous isolated areas, is based on the wide use of harsh dissonances. In these traditions (like in the mountain ranges of Caucasia and Balkans) dissonances do not need any "preparation" or the "resolution". That's why secondal Sutartines and west Georgian dissonant harmonies were much ahead of the development of European harmonic language in the 18th and 19th centuries. European

professional music only reached the same level of acceptance of dissonances roughly during the musical impressionism (Claude Debussy) and later.

The Beatles love to the dissonant chords and intervals is acknowledged, but still underrated. I will not describe here their use of parallel fourths and fifths, often mentioned in the published works, but want to briefly discuss one particularly interesting case of the use of the sharp dissonance. Stunning vocal harmony is heard in a song "Drive My Car". At the end of the verse, on the words "you can do something in between", John and Paul are reciting together during two bars on "F" (John) and "G" (Paul), a second apart from each other. Most importantly, this is happening on the harmonic background of A7 chord. The resulting chord (A-F-G) is one of the harshest harmonies you can hear in popular music. Accidentally, this chord is very close to the chord that starts medieval west Georgian church-song "Centuries and Epochs" (here too this chord is used for reciting):

Fig. 15. Harmonies from The Beatles song "Drive my Car" (recitation before the chorus)

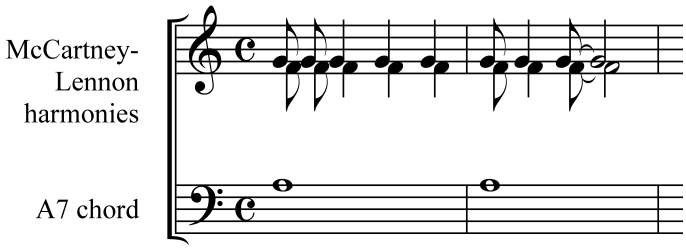
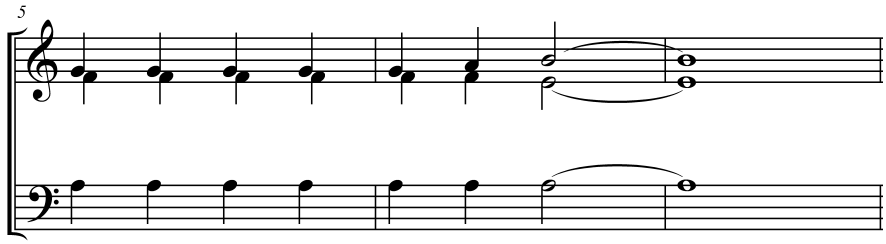


Fig. 16. Medieval West Georgian church song "Zhamta da tselta" (opening recitation)



The love of dissonant harmonies was, I believe, one of the main driving forces of the long lasted interest of George Harrison in Bulgarian traditional singing, famous for the secondal dissonant clashes, during the 1980s.

• **Drone.** The use of the drone is quite usual for the classical harmony, although it is very unusual for the dynamic R'n'Roll. Drone is also extremely widely used in traditional polyphonic cultures (particularly in Europe, but not in Africa).

Unlike the professional classical music, where drone is mostly used in the base, in traditional polyphonic cultures drone is often used in the middle and the top of the polyphonic texture as well. If we look at the use of a drone in the Beatles songs, we will see that the drone is mostly used on the top of the texture, and sometimes in the middle.

Vocal drone on the top of the harmonic texture is used in "You won't see me", where the simple but brilliant vocal harmonies are almost "stealing the song", and in a dynamic "Sergeant Peppers lonely heart's club band" (Reprise), where out of two leading parts the top one is actually reciting the text on the tonic (F) of the F-major key, and after the modulation, on G (in G major key).

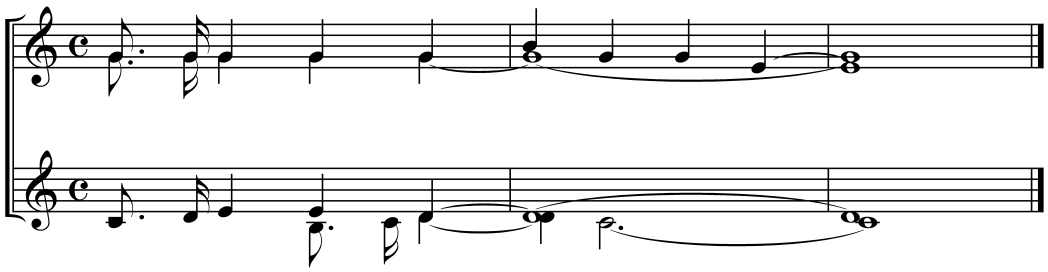
Instrumental drone on the top is held for almost the whole song in compositions like "You've got to hide your love away" (where the high drone is held on a tonic) and "Getting better" (drone is on 5th step). Drone also appears for the most important, dramatic last appearance of the melody in several songs. Among such songs are: "Eleanor Rigby" and "Yesterday" (violin holding the high drone in both songs, on tonic in "Eleanor Rigby" and on very unusual third in "Yesterday"), and Back in the USSR (high pitch guitar playing a drone on tonic). The use of the drone in the middle of the harmonic texture, where it is held against colorful harmonic changes and even modulations, is outstanding in "Blackbird". The use of the drone in a lowest point of the texture (the most widespread in classical music) is very rare among the Beatles, although John Lennon's "Tomorrow never knows" is completely based on a long base drone. And of course, George Harrison's "Indian" songs with the use of Indian instruments are mostly based on the use of the drone in the lowest range.

• **Vocal harmonizing.** Guitar sound and generally instrumental texture was crucial for pop and particularly rock music followers. Paul McCartney himself relished himself first and foremost as a base player, then as a singer, and then as a songwriter. Elvis Presley could himself play a guitar and this was in the eyes of the young Beatles a major achievement. Despite this high rank of guitar playing, The Beatles were primarily a brilliant vocal band. Harmonizing was a crucial part of the Beatles sound. Many of the harmonic innovations that I was talking about, were realized in vocal harmonizing. Harmonizing was particularly active during the first period of the Beatles existence, when the songwriting between John and Paul was mostly based of the "group model". During the later period they did not have question-and-answer hocketing style songs with active and dynamic vocal interaction (like "It won't be long", or "Tell me why") and harmonizing generally declined.

Paul McCartney was mostly responsible for the richness of vocal harmonizing style of the Beatles. His vocal harmonizing in many of the Lennon's songs was crucial to the final sound of the song. It is difficult to imagine songs like "If I fell" and "Because" without Paul's high harmonies. In these songs his harmony successfully competes with the original leading melody. During the second period of their partnership it was mostly Paul harmonizing in John and George's songs (I am talking not about the wordless harmonizing [like "doo", "ah" or "la-la-la"], freely used by the Beatles, but about the active contrapuntal intertwining of the melody and harmonizing parts, both using the verbal text).

Brilliant vocal harmonies from the introduction of the song "Paperback writer" epitomize most of the elements I was discussing about the Beatles music language: starting the song with non-tonic harmony, pure a cappella sound, expressing the idea not with a melody, but with a combination of melodies, richness of the four-part harmony, wide us of several drones and clashing dissonant seconds:

Fig. 17. Opening a'cappella harmonies of "Paperback Writer"



Conclusions

Profound changes occurred in many important elements of popular music, particularly from the second half of the 20th Century, no questions about that. Contemporary means of technology, sound-recording, media, communications, globalization, legal system, issues of performance rights and booming marketing system created a phenomenon that is difficult to compare to any other musical (or cultural) phenomenon in the history of the humankind. At the same time, as I tried to demonstrate on the example of the Beatles, few very important elements of the ancient traditional polyphony came back in the rock-musician's songwriting practices, performance style, and even their harmonic and melodic style. According to these elements the legacy of the Beatles is closer to the traditional polyphonic cultures than to early classic R'n'Roll. Some of these elements are:

- **Group creative** process and the **unity of composers and performers**;
- Music is **composed and recorded orally**, mostly by individuals **without classical music education**;
- **No formal rules of harmony or counterpoint** – ear is the only legitimate point of reference;
- Unparalleled (in classical music or even jazz) **close connections between the performers and the listeners**;
- Unrestricted **richness of chordal changes** and new colorful modulations;
- Partial **diminishing of the role of the pure vocal melody**, and particular **importance of the harmonic element** (sometimes puzzling professional musicologists, unable to decide which of the harmonizing melodies is the "main melody");

- **Ambiguity of tonal centre**; beginning and finishing musical composition with other than tonic harmonies;
- Wide use of the **secondal connection** between the chords;
- **Changes** to the all-important (for classical musical system) **dominant** chord;
- The wide and innovative use of the **dissonances**;
- Wide use of vocal and instrumental **drones**, particularly on the top and in the middle of the musical texture.

Many of the elements that were successfully used by the Beatles, were later used by other rock and pop-bands. In some cases certain elements were particularly widely used by bands. For example, both "U2" and "Cold Play" started using drones in a high range in a big part of their songs.

Conclusions of the second part

Second part of the book is coming to an end. This part was fully dedicated to the comparative perspectives of the research of traditional polyphony. Without going into detail, let us have few most important conclusions to sum up the second part of the book:

- Documented cases of the disappearance of polyphonic traditions in different regions of the world, and the absence of the cases of the evolution of polyphony from monophony in traditional music suggests that the general historical dynamics is the gradual disappearance of vocal polyphonic traditions. Therefore, **the idea of the late evolution of polyphony from monophony, dominating the musicological and ethnomusicological literature for more than a century, is totally unsupported by existing facts and must be discarded.**
- Some characteristic features of vocal polyphony show extraordinary stability. The type of polyphony, vertical coordination of parts, and the social organization of singing group are the most stable elements of polyphonic traditions, allowing scholars to conduct wide comparative research.
- European polyphonic traditions, based on the use of drone and dissonant vertical coordination between the parts is an extremely ancient phenomenon. Despite the language change in most of the European countries, following the migration waves of Indo-Europeans, Finno-Ugric peoples, Arabs and Turks, the ancient tradition of the European vocal polyphony survived in the geographically isolated regions: high mountain ranges, forests, islands, continental fringes.
- Part of European polyphonic traditions bears the traces of complex external influences from the West Asian monophonic singing traditions and the late influence of European professional polyphony. The other part shows relatively complete survival the ancient tradition of vocal polyphony.
- Heterophony, as a separate type of polyphony (where the big group of singers sing the main melody in unison-heterophonic style), is not an evolutionary

"transition point" from monophony to polyphony. Geographic distribution of heterophony in East Europe (the largest region of heterophonic polyphony) suggests that heterophony originated as a result of the mixture of ancient European polyphonic and East and Central Asian monophonic singing styles.

- The origins of overtone singing must be connected to the complex ethnic and historic processes that took place on the territory of Central Asia from around the end of the first millennia A.D.
- Some elements of the Lithuanian traditional polyphonic style *sutartines* show parallels with the ancient European drone-dissonant polyphony and must be extremely old. On the other hand, the use of polytonality and canonic forms must be a relatively late phenomenon. I propose that three-part singing with the drone in the middle and secondal clashes between the parts (tradition that is known from the neighboring Latvia, Balkans, Caucasia, and Nuristan) must be the ancestor of both secondal polytonal sutartines and the drone ("collective") *sutartines* singing styles, still surviving in region Aukstaitia.
- Nuristan polyphony from the Northeastern Afghanistan impenetrable Hindukush Mountains is one of the best survivals of the ancient European tradition of three-part vocal polyphony with the drone in the middle, small range melodic parts around the drone and clashing secondal dissonances.
- Southeast Asian polyphony is a singing style of the aboriginal populations of Southeast Asia, southern China and Taiwan, pushed to the mountainous and forest regions by the migration waves of the East Asian populations from Central regions of China during the last centuries.
- Tuareg drone polyphony is a unique phenomenon within the African context, surrounded by the sub-Saharan African parallel polyphony from south and monophony of Arab population from the north. On the other hand, in a broader Mediterranean and Euro-African context Tuareg polyphony shows obvious links with the ancient European drone polyphony. I suggest uniting Tuareg polyphony in the "European polyphonic family".
- Ainu Polyphony, the most isolated vocal polyphonic tradition on our planet could be connected with the migration of (1) the population from southeastern Asia and Taiwan, or (2) the Europe. The presence of European population in Central Asia and even North America (according to the physical anthropological, archaeological and molecular biological evidence) strengthens the idea of possible European connections of Ainu polyphony.
- Elements of vocal polyphony of American Indians, scattered among different tribes of North, Central and South America, strengthen the suggestion of the growing group of scholars about the participation of European populations in the early settlement of the American continent.
- Strong traditions of Polynesian vocal polyphony should not be neglected in the long running discussion on the settlement of Polynesian Islands. Links of the Polynesian polyphony point towards three regions: (1) polyphony of Southeast Asian autochthonous population, (2) polyphony of Melanesian populations, and (3) European polyphony via American continent. Typologically Polynesian polyphony is closest to the European traditional polyphony.

- Wide geographic distribution of ancient European vocal polyphony must be connected to the dominating direction of large-scale migrations – going eastwards or westwards. The same way East Asian populations were also spread very widely, although mostly north of the Equator. South America and Polynesia seems to be the only regions where the European and East Asian populations settled South Hemisphere in prehistoric times (possibly via the Andean Mountain "passage").
- The historical model of the gradual disappearance of the tradition of vocal polyphony in different regions of the world suggests, that general skepticism towards the presence of polyphony in ancient Mesopotamia and Mesoamerica is unfounded. I suggest that Sumerians, Hurrians, and cultures of Mesoamerica must have been familiar with vocal polyphony as well.
- Internal links between singing and playing blown instruments (based most likely on a shared system of sound-producing - *breathing*) can revolutionize our understanding of the distribution of vocal polyphony in ancient period.
- Polyphony of pearl-divers could be an extremely ancient phenomenon, connected to the singing traditions of Ancient Mesopotamia.
- Well-documented late origin of European professional polyphony is unique in the history of human musical culture and should not be extrapolated on other (traditional) polyphonic traditions. Origin of European professional polyphony was itself a result of the mixture of the west Asian (early Christian) monophonic singing practice and ancient European polyphonic traditions.
- Professional and traditional polyphonic cultures use very different models of music writing, transmission, and performance. Creative genius of the members of the Beatles brought back to contemporary popular music many systemic elements of traditional polyphonic cultures. According to some important features of creative process and elements of musical language, the Beatles were closer to traditional polyphonic cultures than to the "classic" R'n'Roll.