

Chapter two

Singing in Human Cultural History

In the first chapter we discussed the worldwide distribution of choral singing styles. We only had occasional references to important historical sources. This chapter is fully dedicated to the historical issues of human group singing, so we will be going back in the history and prehistory of human musical cultures. Of course, unlike the first chapter, which was an overview of currently available facts, this chapter will be mostly based on a hypothetical reconstruction of the history of human singing. As such, it will gradually prepare a steady basis for tackling the origins of the phenomenon of human choral singing.

The circle of issues we are going to discuss brings us to the necessity of the wide use of comparative methodology. Many of my colleagues are aware that comparative studies are often viewed in contemporary ethnomusicology with great suspicion and sometimes even animosity, so I think before going into the main part of this chapter we need to discuss, at least briefly, the history of comparative studies in ethnomusicology.

Comparative vs. Regional Studies

After the Second World War the centre of ethnomusicology shifted from Germany to the USA. This was not only a geographical, but also an important paradigmatic shift in ethnomusicology. To put it very simply, wide comparative studies, drawing conclusions from comparing musical cultures of the different parts of the world, were replaced by deep regional studies focused on one culture or tradition. Methodology of regional studies is based on the traditions of cultural anthropology, and the main aim of this method is to go into the depths of a studied culture. Ethnomusicologists who follow this paradigm try to look at every aspect of a studied culture. In order to get a deeper 'vertical' knowledge of the whole system of social interaction and musical life, they conduct multiple fieldworks in the same region, learn the local language, live among the members of the society for years and learn to play local instruments. Such a high standard of dedication to get into the complex system of social and cultural life of any country, region or even a village under study, of course, gives unique insight into the studied culture, but at the same time it severely limits the number of cultures any scholar can study during his or her lifetime. As a result, most of the scholars who follow this paradigm consider themselves as experts of very few (usually only one) culture or a region.

On the other hand, comparative study, used by pre-war German and European scholars, had diametrically different aims and methods. Comparative methodology

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing programm Logos.

was geographically spread and did not go deep, or '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 a deep knowledge of these cultures. In their studies, comparativist scholars had to rely on available materials from cultures they had never have visited. Of course, no comparativist scholar would consider doing prolonged fieldworks, or committing themselves to such a lifetime task as learning native languages of the compared cultures. Neither Schneider nor Nadel, authors of 'Caucasian/Georgian origins of European professional polyphony hypothesis' have ever visited Georgia or Caucasia. As a result, a comparativist ethnomusicologist would have a geographically wider knowledge of a studied musical phenomenon, but not a deep knowledge of the compared cultures.

After the Second World War the comparative method was discredited and rejected, together with the major part of comparative studies of pre-war Germany. A renowned American ethnomusicologist from the UCLA, Timothy Rice told me about this in Rio de Janeiro in 2001, during the ICTM Conference: 'the baby was thrown out together with the bath water'. Perhaps it is not a mere coincidence that Timothy Rice's most recent and widely discussed article in the journal *Ethnomusicology* (Rice, 2010) calls for a broader look at the problems and the creation of wider theoretical models in ethnomusicology.

Some of my colleagues, who favor the principles of cultural anthropology and follow only the methodology of deep regional studies, sometimes criticize comparativist colleagues for their superficial knowledge of many cultures, calling them 'armchair ethnomusicologists.' On the other hand, a few other of my colleagues, who prefer wider comparativist studies, criticize proponents of deep regional studies for their narrow research interests and the lack of interest in recognizing more universal patterns. There is not much sense in discussing which of the abovementioned methods is 'better'. I hope that readers and most of my colleagues would agree that the method of any particular study should be relevant to the research goal of the study. If we want a better understanding of the social and musical life of a North Indian village, a gamelan-centered community musical life in Bali, or an urban society in Northeast Brazil, we need to spend months and years 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 the region on short fieldtrips. On the other hand, if we want to understand the history of the development and distribution of, say, string instruments, drone polyphony, or lullabies, we cannot accomplish this goal by having long periods of fieldwork in one village or one country, learning the language and studying one tradition in amazing depths of detail. Instead, we will need to conduct a wide comparative study, using all the available resources that sophisticated contemporary libraries and the internet can provide, and generally try to get as much possible additional information from any other available sources, including commercially available CDs and archived materials.

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing program Logos.

If we still try to compare the regional and comparative methods, we have to acknowledge that deep regional study is the 'backbone' of ethnomusicology, because regional studies can certainly exist without comparative studies, whereas comparative studies directly depend on the amount and quality of regional studies.

Before the Second World War there was obviously an insufficient number of regional accounts for comparative studies to rely on. Therefore, global theories about the general rules of the development of human musical cultures, or about the cultural 'borrowings' by one culture from another, were based on a mixture of inferior facts and incomplete second- and third-hand information.

Today, with a growing number of high-quality, in-depth studies from many regions of the world, I believe we are ready for the return of comparative ethnomusicology (see the box: 'Alternative History of Comparative Studies in Ethnomusicology')¹.

This book itself is an example of a comparative study. Although the author of this book is Georgian and his primary expertise is Georgian (and Caucasian) traditional polyphony, as soon as he started researching the origins of polyphony, it became obvious that for these goals deep knowledge of Georgian polyphony was not enough, and that he needed to widely study the phenomenon of polyphony, its patterns of distribution, and possible connections between the different polyphonic traditions of the world.

Now, before we start analyzing the available facts from a comparative perspective, we need to discuss the methodology of comparative studies. Let us look at the next section of this book which addresses this problem.

¹ Alternative History of Comparative Studies in Ethnomusicology

The history of ethnomusicology is usually portrayed as a paradigmatic shift from wide comparative studies to deep regional studies. In terms of Western European scholarship this is certainly true, but this might not be a universal trend. For example, according to the history of the studies of my native Georgian traditional music, the study of regional traditions has been paramount for Georgian scholarship from the 1860s until the 1980s. Paradoxically, during the last few decades, long after the establishment of the so-called new non-comparative paradigm in Western ethnomusicology, Georgian scholars expressed more interest in comparative studies. The same can be said about the history of the study of traditional music in Russia, where research of regional traditions also dominated until the 1960s. The same is also true for Ukraine, Armenia, Azerbaijan, Lithuania, Portugal, Greece, Bulgaria, and in many other countries around the world. As a matter of fact if you count summarily, the comparative works coming mostly from representatives of the great Berlin school of comparative musicology during the first half of the 20th century, were a minority compared with the many hundreds of regional studies conducted by native scholars in the same period. If we try to summarize the gigantic output in ethnomusicological research throughout the world, we will find that in most national scholarships of the world, the share of comparative studies has actually increased after Second World War.

How can we to compare polyphonic traditions?

Let me start with an example from the musical life of my native Georgia. There was quite a historical 'cultural shock' in Tbilisi, the capital of Georgia, in the second half of the 1980s, when the Soviet Union's Central TV program 'The Rainbow' 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 switch on their TV and 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 St. Petersburg, at the very same time when the same TV program was still on, one of the leading experts of folk musical instruments, ethnomusicologist Igor Macievsky called his colleague, Izaly Zemtsovsky: 'Izaly Iosifovich, listen and tell me who is 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. 'Surely these are Georgians, but I am not sure which region of Georgia they are from' came the puzzled reply Igor was expecting. In a way, Zemtsovsky's reply was a very good guess, because if you have never heard Corsican polyphonic singing and if you know Georgian singing very well, then Corsican polyphonic singing does sound extremely 'Georgian'.

Interestingly, just a few years before that historical broadcast, I started working on a search of vocal polyphonic traditions that were, in my opinion, historically related to Georgian traditional polyphony. In the eyes of many of my friends and colleagues my research had the wrong goal, because Georgian polyphony was considered to be too unique to have close relatives anywhere in the world. The TV program on Corsican music changed the attitude of many of my colleagues and relatives. 'Now that I have listened to that amazing Corsican singing,' one of my older musicologist friends, Gulbat Toradze, told me, 'I have started believing you are right – there are some traditions that might be closely related to Georgian polyphonic singing'.

Only very recently, in 2008, after meeting in Corsica a brilliant local singer, Philippe Rocchi, I found out that Corsican traditional musicians also had a similar musical 'shock' when they first heard a recording of Georgian traditional polyphony in the beginning of the 1970s.

So, we are coming to the crucial question: what should be the basis for comparative research? (1) our audio impressions, or (2) the results of stylistic analyses? Of course, hearing is our first and foremost tool, but we need to remember that our first audio impression can be very strong yet 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.

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing programm Logos.

The closeness of Georgian and Corsican polyphonic traditions was based first and foremost on a strong audio impression. Audio impressions have a much stronger emotional effect on the listener than a detailed stylistic analysis. Some of my Georgian friends (including professional musicologists) did not believe in the possibility of Georgian polyphony having any 'relatives' among other singing traditions, until they heard Corsican singing. Stylistically, the polyphony of Corsican and East Georgian table song are different as Corsican polyphony is based on a European professional harmonic system whereas Georgian polyphony is not. During my research in the 1980s and the 1990s, I came to the conclusion that some other polyphonic traditions (for example, Albanian polyphony) are stylistically closer to Georgian polyphony than Corsican polyphony, although they do not sound as similar to the Georgian sound as Corsican polyphony does.

The employment of the right method is crucially important for any research venture. 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 a specific set of stylistic parameters of polyphonic traditions. However, before we discuss the set of stylistic parameters for the classification and comparative study of part-singing traditions, we need to discuss in the first place 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 the past of 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 this is a very serious question, and I remember quite a few heated discussions on this topic at several ethnomusicological conferences. So, what is more stable: language or music? I guess, for many readers, music is considered one of the most unstable elements of human society and culture. 'Look at the languages,' they might 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 musical styles – they change almost every decade, and different songs travel across cultures and state borders with amazing ease. Of course, language is much more stable than music, no question about this.' I guess that the majority of linguists will be in this camp.

But this opinion is not the only one on the topic. Now let us listen to another opinion. According to this point of view, music can be 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 much more stable than language. They can name countless examples when people (or a part of a 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. Now look at the traditional musical cultures of the world – you may see musical traditions that go back in history from many more thousands 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. For those who do not believe that there is something serious behind this bold assertion, I would like to present a couple of historical examples of the stability of musical traditions from cultures I know:

(1) Ossetians live on both sides of the central part of the Caucasian mountain range in Russia and Georgia. They speak an 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 revealed that in fact, Indo-Iranian Alans did not have much impact on the genetic make-up of the Ossetians (Alexeev, 1974:197-200). Instead, there is a clear morphological continuum between the earlier Caucasian population and contemporary Ossetians. This means that a change of language occurred without the change of a major part of the indigenous population. Scholars are well aware of cases where language is lost without the population being replaced. The music of the Ossetians, unlike their language, shows a clear relationship with other, indigenous Caucasian populations. This brings us to the conclusion that the old Ossetian population of the Central Caucasian Mountains lost their language, but their

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing programm Logos.

musical traditions (together with their physical features) survived the painful process of their cultural assimilation.

(2) The neighbouring Balkarians and Karachaevis from central Caucasia represent the same kind of historical story. Both of them speak a 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 around the 16th-17th centuries. Anthropological surveys of the Balkarian and Karachaevis 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 Karachaevis populations (Alexeev, 1974:200-203). 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.

(3) Another example of the solid stability of musical traditions could be the mountainous Balkan 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 an obvious morphological unity within the Balkan mountain ranges, and that also there is a genetic continuum leading from the ancient pre-Indo-European population, the so-called 'Dinarian' anthropologic type. The ancient Dinarian type is the best represented among the populations of southwestern Bulgaria, the northern mountainous Greece, the mountains of 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 indigenous population. Apart from physical anthropology, music also shows clear signs of the ancient unity of all these regions. A drone style of polyphony with specific dissonant harmonies is spread throughout virtually the same mountainous regions as the Dinaric physical anthropologic type is: southwestern Bulgaria, the population of North Greece, mountainous (mostly southern) Albania, Macedonia, Serbia, Monte Negro, Croatia, Bosnia and Herzegovina. So we again witness the change of languages in the population in the course of history without major demographic changes. Despite the language change, the ancient unity of the singing traditions on the Dinaric Mountains was preserved throughout the millennia by their polyphonic singing traditions.

I hope that these few examples of the stability of singing traditions are enough to demonstrate that music can be very stable. So, despite all the fashion-like kaleidoscope changes of musical styles and popular melodies, there is something extremely stable in musical traditions too. This is exactly what we are going to discuss next.

What are the Stable and the Mobile Elements of Musical Culture?

We must remember that any musical tradition is a complex phenomenon with a whole set of different elements. While some elements of musical language are unbelievably stable, other elements can be extremely unstable. They can easily be lost or obtained, or go traveling across 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 music that are extremely stable. Distinguishing stable and mobile elements is methodologically crucial, as stable elements are the ones we want to rely on for comparative studies and historical reconstructions.

To discuss this issue, I would like to present three not-so-ancient cases of cross-cultural musical contact, 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 elements from the stable elements of a traditional musical culture.

(1) 'I have lost a little girl' is a typical example of an east Georgian urban song. The origins of this song lie in the neighboring Armenian and Azerbaijani traditions. This is clearly demonstrated by the specific scale used in this melody, containing augmented second and specific melodic embellishments, characteristics of Middle Eastern singing traditions. 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 a three-part harmony. Following the principles of Georgian polyphonic tradition, the original monophonic melody is surrounded from both sides by two harmonizing parts: the higher melodic part on top of the main melody, and the bass part, a drone, performed by a group of singers.

Let us now analyze what has happened in the above mentioned case. Nothing particular – something that happened thousands of times between different cultures: a 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 in accordance to the intrinsic rules of the receiving culture*. In this particular case the monophonic melody became polyphonic. It is clear that the intrinsic rules of Georgian polyphony remained stable. These intrinsic rules are much more stable than melodies. In other words we can say that the changeable component for a culture is *what* is performed (melodies that can be borrowed from any other cultures), and the stable component is *how* it is performed (following the intrinsic rules of the culture). Every musical culture is able to receive songs and melodies from other cultures, and as soon as the basic rules of the receiving culture are intact, 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

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing programm Logos.

the middle part between the higher 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 Georgian song traveled a long way from Georgia to Central Africa. This case is particularly interesting as it involves the interaction of two polyphonic cultures (Georgian and sub-Saharan African).

In a twist of fate, a Georgian doctor was sent by the Soviet government to work in Central Africa in the beginning of the 1980s. Apparently being a good amateur singer of Georgian urban songs and a socially easygoing person, he taught his new African friends a few Georgian urban songs. 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 were a live recording of the singing of three African women, performing the well-known Georgian urban song 'Spring Rain Came'.

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 absorbed into another polyphonic culture. Therefore the difference between the original and the new African versions are more subtle: as in many urban songs, the two top parts of this song are moving in parallel thirds, and as sub-Saharan African traditional polyphony is predominantly based on the parallel movement of parts, the original (Georgian) parallel thirds have been accepted without any change. The bass part was different. In the Georgian version the bass is a moveable drone, following the European harmonic system. Drone polyphony is not a natural part of the singing style 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.

The same relationship between 'what' and 'how' can be observed in this African case too. If we look at *what* the Central African women sing and *how* they sing it, the answers to these two questions will tell us completely different things. The answer to the question 'what are they singing?' is telling us that there must have been some contacts between the African community and faraway Georgia. Answering the question 'how are they singing this song?' informs us about the main principle of African traditional polyphony – all parts singing in parallel motion. In this case, once 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 can be demonstrated on other, non-Georgian examples. The next case comprises an interesting interaction between Arabic and Polynesian musical cultures. In his letter on the 19th of August 1986, one of the leading experts of Polynesian culture and history, Thor Heyerdahl, wrote to me about a very interesting occasion on which monophonic songs from Arabian cultures

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing programm Logos.

were absorbed by the polyphonic Polynesian culture. Unfortunately, the letter did not contain the musical transcripts, but fortunately the description by 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* they are 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 the borrowing of new tunes and songs from one culture to another effectively use the same general strategy that was employed by traditional musical cultures throughout their histories. 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.

To conclude, it is obvious that the answer to the question ‘what are traditional musicians singing?’ can be quite mobile and can change relatively easily under the influences of cultural contacts. Sometimes very sporadic contacts are enough to bring new songs and new melodies into a culture. On the contrary, the answer to the question ‘how are traditional musicians singing?’ detects more stable parameters, indeed the intrinsic principles on which a given musical culture is based. Recalling the comparison between the stability of language and the stability of music, we may say that specific melodies are much more easily moved around and traveled from culture to culture than language, but the internal grammatical rules of a musical culture are far more enduring than language.

A set of stylistic parameters for polyphonic traditions

We have come to the conclusion that different elements of musical culture have very different dynamics over time. Some elements can change very easily and quickly through even sporadic contacts with other cultures, while 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 stable elements will allow us to follow the most chronologically distanced events of history.

During my almost 30-year long comparative research of traditional polyphony I came to a conclusion that the most stable and most important features of polyphonic music are the following two stylistic parameters:

- (1) Type of polyphony,**
- (2) Vertical coordination between the parts.**

Of course, there are more stylistic parameters that can be taken into account during a comparative study of polyphonic cultures, like social organization of the singing group, scale, rhythm and meter, but the mentioned two parameters are crucial and we will be mostly relying on these two parameters in our study. Let us briefly discuss each of these parameters.

- 1) **Type of polyphony.** This parameter is the most important among stylistic parameters not only because it is the main 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. 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, present in many European and Pacific polyphonic traditions, (3) parallel polyphony, particularly widespread in most sub-Saharan African polyphonic traditions, (4) variant heterophony, particularly prevalent among Eastern Slavs.
- (2) **Vertical coordination between the parts.** Polyphonic cultures differ from each other not only according to the type of polyphony, but also according to the intervals they prefer to hear in their singing. In more scholarly words, cultures differ from each other according to the principles of vertical coordination between the parts. There are two basic types of vertical coordination: some cultures prefer hearing dissonant intervals (mostly seconds), and some traditions prefer hearing consonant intervals (mostly thirds).

Now we are methodologically ready to go into the comparative journey, but before this I think it would be interesting for the readers to know what kind of ideas were expressed by different scholars on the comparative study of polyphonic singing traditions.

Survey of Comparative Ideas and Events Related to Polyphony

To be as brief and efficient as possible, I arranged most of the ideas and important events relevant to the comparative study of traditional polyphony known to me in a single chronological list. This list contains information on traditional polyphony from medieval times to modern time. Some of the most important ideas will be also discussed in separate 'boxes.'

- 1280s. Giraldus Cambrensis gave a detailed description of the traditions of polyphonic singing on British Islands and suggested that polyphony in north part of Britain was brought here by Norwegians and Danes (see the box: 'Giraldus Cambrensis on polyphony').²

- 1496. Italian music theorist Franchino Gafori described a very unusual for European professional music style of singing that was practiced in a Milan church, based on secondal dissonances. The same type of dissonant polyphony was mentioned in the earlier sources of the 1020s and 1030s, by Guido d'Arezzo. This style of singing was famously described by outraged medieval musicians as 'the howling of wolves'.

- 1770s. Participants of James Cook expeditions gave description of polyphonic singing among Polynesians. Despite the detailed character of descriptions, this information was met with distrust by European professional musicians (see the box: 'Polynesian polyphony: Shock for European Musicians')³

² Giraldus Cambrensis on Early European Polyphony

Welshman Giraldus Cambrensis, a widely educated thinker, left us possibly the most important early source on the distribution of polyphony in Europe. Let us see what was he writing about the musical life in Wales and England at the end of the faraway 12th century:

'As to their musical euphony, they do not sing uniformly as this is done elsewhere, but diversely with many rhythm and tunes, so that in a crowd of singers, such as is the custom among these people, you will hear as many different songs and differentiations of the voices as you see heads, and hear the organic (polyphonic) melody coming together in one consonance with the smooth sweetness of B-flat. Moreover, in the northern part of Great Britain, that is across the Humber and on the border of Yorkshire, the English people who inhabit those parts employ the same kind of symphonious harmony in singing, but in only two parts: one murmuring below and the other in a like manner softly and pleasantly above. Both nations have acquired this peculiarity not by art but by long usage, which has made it, as it were, natural. Moreover, it prevails in both countries and is now so deeply rooted there that nothing musical is performed simply, but only diversely among the former people and in two parts among the latter. And what is more remarkable, children scarcely beyond infancy, when their wails have barely turned into songs observe the same musical performance...Since the English in general do not employ this method of musical performance but only the northerners, I believe that it was from the Danes and Norwegians, by whom these parts of the island were more frequently invaded and held longer, that they contracted this peculiarity of singing as well as their manner of speaking' (cited from Hibberd, 1955:8).

³ Polynesian Polyphony: Shock for European Musicians

The very first encounters of European travelers with the Pacific Ocean Island communities brought to light their strong predilection towards vocal polyphonic singing. 'They sing in parts, keeping the same time and varying the four notes without ever going beyond them. So many singers and so few notes you always hear the whole together. The difference of Words & Voices makes some

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing programm Logos.

- 1906. Victor Lederer suggested that North Europe was the birthplace of the phenomenon of polyphony.
- 1909. Erich Moritz von Hornbostel, the most influential scholar in shaping the development of the German school of comparative musicology, published one of the first articles on non-European polyphony. He also expressed the idea about parallels between African and Medieval polyphony and came up with the suggestion of 'harmonic' and 'melodic' types of polyphony.
- 1909. Czech Ludvik Kuba was possibly the first scholar who suggested that the unusual dissonant singing style heard in mountainous villages in the Balkans was the remnant of a very ancient common singing tradition.
- 1924. Curt Sachs, arguably the greatest musicologist of the 20th Century, studied a Sumerian tablet and suggested that it contained a musical notation of a polyphonic piece. This suggestion was severely criticized in 1933 and has been mostly forgotten.
- 1925. Vasil Stoin was one of the first to study Bulgarian traditional polyphony and he came up with the idea of the Bulgarian origin of European polyphony.
- 1926. George Ballanta, arguably the first influential native African musicologist wrote that all African melodies are constructed upon harmonic background and are based on duple metres.
- 1932. Joseph Yasser noted the correlation between scale systems and the type of parallelism in polyphony. He wrote about connection of parallel fourths and fifths with anhemitonic scales, and parallel thirds with diatonic scales. This correlation between a scale system and a type of polyphony was later widely accepted and used to explain sub-Saharan type of polyphony.
- 1933. Siegfried Nadel studied Georgian traditional polyphony and expressed the idea that Georgian traditional polyphony possibly contributed to the emergence of medieval professional polyphony.
- 1934 onwards. Marius Schneider, a student of Hornbostel and the author of the 'History of Polyphony', was the only author who specifically researched the origins of polyphony in his worldwide detailed study of traditional and professional polyphony. Throughout his lifelong work on the origins of the phenomenon of

variety. The singers (that I heard) were all women. One confined herself entirely to the Lower Note which acted as the Drone' – this eloquent and very professional description comes from Cook's second, 1772-1775 voyage. Very clear information on the Oceanic people's part-singing capability came from Cook's third voyage as well: 'Where there is a great number they divide into several parts each of whom sings on a different key which makes a very agreeable music'. Early records even indicated the use of unusual chords (most likely dissonances) as well: 'We now and then remarked some discordant notes, with which, however, the ear of these people seemed very much gratified'.

Such eloquent and precise descriptions from early travelers did not leave space for any scepticism about the wide distribution of polyphonic singing traditions among Polynesians before their first contact with Europeans. Quite amazingly, some European professional musicians still doubted the ability of Polynesians to sing in different parts. It took about 150 years and the discovery of many more vocal polyphonic traditions in different parts of the world, untouched by European civilization, to convince European musicologists that polyphony could have existed before medieval monks 'invented' it.

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing programm Logos.

polyphony he argued that polyphony reached Europe late, from Southeast Asia via the southern parts of Asia and the Caucasus.

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

- 1952. Hans Hickman came to the conclusion that the ancient Egyptians had a tradition of vocal drone polyphony.

- 1954. Jaap Kunst published one of the best known controversial hypotheses in ethnomusicology about the possible links between Balkan and Indonesian polyphony, as a result of ancient contacts between these two regions.

- 1955. Lloyd Hibberd studied the famous passage of Giraldus Cambrensis and concluded that the term 'organ' was used as 'organum', an early term for 'polyphonic singing' (before it was considered as a name of instrument).

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

- 1957. Erich Stockmann published one of the first comparative research articles involving Albanian and Georgian polyphonic songs.

- 1958. Cvjetko Rihtman suggested that the polyphonic traditions of the Balkan peoples could be a survival of a very ancient common singing culture.

- 1960. Paul Collaer studied European polyphonic traditions and came to the conclusion that the appearance of European professional polyphony was a result of the impulses from the ancient vocal polyphonic traditions of European peoples.

- 1961. Albert Lloyd expressed the idea that more advanced and complex polyphonic traditions in isolated mountainous regions of the Balkans (like four-part singing in Albania) might be a survival of more ancient tradition, not a late development.

- 1961. Bruno Nettl summed up the available information about the 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.

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

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

- 1966. Nikolai Kaufman, independently from Rihtman, 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).

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing programm Logos.

- 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 in sub-Saharan Africa is widely accepted.

- 1966. The ICTM (International Council for Traditional Music, earlier known as The International Folk Music Council, IFMC) organized an annual World Conference in Ghana, with two main themes, one of them being 'Multi-part techniques in folk music and dance.'

- 1968. Alan Lomax, the main force behind the "Cantometric" widely publicized project, wrote about the particular importance of social cohesiveness and the absence of male domination in the societies that practice polyphonic singing. He considered the West European polyphonic traditions to be earlier culture survival in the mountains, islands, and generally, 'on the fringes of Western Europe'.

- 1971. Anne Draffkorn Kilmer studied the examples of ancient music from Ancient Mesopotamia, recorded on fired clay, and suggested that it represented polyphonic (instrumental) music. This suggestion was criticized, although it is still widely circulated today.

- 1972. The Committee of Traditional Music of the Union of Soviet Composers (chair – Eduard Alexeev) organized in Georgia the first known to me conference fully dedicated to traditional polyphony. Scholars from most of the former Soviet Republics were participating.

- 1973. International conference 'Drone in European Folk Music' was organized in Saint-Polten, Austria. This was the first known to me 'polyphonic conference' organized in Europe.

- 1980. Edith Gerson-Kiwi discussed the probability of historical links between the polyphony of the Samaritans and Syrian church organum, and possibly Caucasian polyphony as well.

- 1980. Gerald Florian Messner studied 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.

- 1981. Alica Elschekova conducted a comparative study of vocal polyphonic tradition in the Balkans and the Carpathians.

- 1983. Karl Brambats, discussing the polyphonic traditions of the Baltic peoples, placed them into a wide Mediterranean and East European context and agreed with a large group of European scholars about the ancient (possibly pre-Indo-European) roots of the phenomenon of drone polyphony in Europe.

- 1984. William H. Tallmudge, an expert of Baptist Hymnody in the USA, attempted to explain the origins of folk polyphony from monophony, using different examples of contemporary congregation singing.

- 1980s and 1990s. Kwabena Nketia studied many local traditions of sub-Saharan Africa and wrote about the importance of the "secondary" material 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 material at radio stations, ministries, and departments of information. The last often

maintain an archive of photographs that cover musical events, performers, and musical instruments”.

- 1984. The first in a series of biannual international conferences on traditional polyphony was organized in Tbilisi, Georgia. These conferences promoted direct interaction between scholars from different countries, and thus prepared the ground for future comparative studies of world polyphonic traditions.

- 1988. Two articles (one by Izaly Zemtsovsky and another by the author of this book) dedicated to the importance of music in ethnogenetic studies were published in the same issue of the central Soviet ethnographic journal ‘Soviet Ethnography’.

- 1989. A special conference on polyphony among the people’s of Russia was organized in Voronezh. This conference was particularly important as it drew attention to the previously neglected traditions of drone polyphony in Russia.

- 1989, 2005. 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 during the 19th century.

- 1991. Simha Arom worked extensively with the Pygmies and he is best known for his innovative recording methodology for polyphonic music. In 1991 Arom established the first international research body of traditional vocal polyphony (in Paris).

- 1991, 1998. Nino Tsitsishvili studied parallels between polyphonic traditions and elements of the ethnography of Georgians and South Slavs. In another study she suggested the presence of Indo-European elements in the drone-based polyphonic singing of eastern Georgian table songs.

- 1992. 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.

- 1999. Emanuelle Oliver and Susanne Furniss critically reviewed the well-known hypothesis about the possible links between Pygmy and Bushmen polyphony and, unlike most of other researchers, came to the conclusion that the similarity between their polyphonic traditions is superficial.

- 2002. The First International Symposium on Traditional Polyphony was organized in Tbilisi, bringing the initial series of the conferences into major biannual international meetings. At the same time, the International Research Centre for Traditional Polyphony was established at Tbilisi Conservatory, with the help of UNESCO and financial assistance from Japanese government.

- 2002. An international conference, dedicated to polyphony, was hosted by Taipei National University of the Arts, Department of Musicology. This was the first (and so far the only) such conference held in Asia.

- 2005. A special conference dedicated to the European traditional polyphony ‘European Voices’ was held in Vienna, Austria. A second in these series conference was hosted in 2008.

- 2005. Bozena Muszkalska studied sharp dissonant singing in the Mediterranean region and came to the conclusion that, unlike European professional polyphony where a ‘maximum purity of intonation’ requires a ‘considerable

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing programm Logos.

involvement of the intellect', secondal singing is mostly based on the 'intuition and shaped, to a considerable degree, under the impact of emotion'.

- 2006. Victor Grauer studied the polyphony of Central African Pygmies in the wider context of vocal and instrumental forms of polyphony from around the world and suggested that Pygmy polyphony could be the survival of the earliest type of human choral singing with its roots going back to 100 000 years ago in human prehistory. In 2007 Grauer initiated a comparative study of singing styles and genetic markers in Africa with potentially groundbreaking preliminary results.

- 2009. An ICTM Study group on Traditional Polyphony was established. The first conference of the Study group was held in Sardinia, Italy, in 2010.

- 2010. Daiva Rachiunaite-Viciniene delivered a paper on the comparative study of Lithuanian and Ainu traditional polyphony.

- 2012. A comparative study of traditional polyphony is planned as the central topic of the 6th International Symposium on Traditional Polyphony, to be held in Tbilisi, Georgia.

I am sure that my survey of the comparative ideas and events on study, distribution and origins of polyphony is not complete, but I hope that it can still give the reader the feel of the diversity and richness of the ideas expressed by different scholars and thinkers from medieval times to this day. Now we are ready to go deeper into the search for the beginnings of the phenomenon of traditional polyphony.

The Origins of Polyphony: How Can We Look for Them?

As soon as musicians paid attention to the presence of two very different styles of human singing, monophonic and polyphonic, monophonic singing was considered to be the initial, the most primitive style of human singing. Polyphony was considered to be a later cultural invention, a new and higher level of development of musical culture compared to monophony, at which all human cultures should eventually arrive. This idea seemed so natural for the evolution of human musicality that no one took an effort to give support to this hypothesis. Actually, this was not considered as a hypothesis but as an axiom, something that does not need any additional proof (like an axiom 'A whole is always more than part of the whole').

Progress from the initial monophony to polyphony seemed axiomatic mostly for two reasons: (1) singing in one part is generally easier than singing in several coordinated parts; (2) The history of European professional music, the only style of music that was studied until the 19th century, also was a clear example of development of polyphony from monophony.

Not surprisingly, for a long time it was believed that polyphony was a new progressive development, invented by medieval monks in Europe in the 9th century, and then spread to various cultures through the European Christian missionaries. As I have mentioned, even Charles Darwin stressed in his 1871 classic 'The Descent of Man,' as a well-known fact, that harmony is a later development. The only problem with this very logical and seemingly obvious model is that it does not fit the logic of the existing facts about the distribution of monophony and polyphony in the world. Such inconvenient facts started appearing as early as in the 18th century.

When vocal polyphony was found among the Polynesians in the 18th century, European musicians simply did not believe that Polynesians could have developed polyphony without the help of European missionaries and musicians. So the first sign of the fallacy of the idea of the European professional origins of polyphony was simply ignored. This happened with several other polyphonic traditions as well. In the best case these facts were considered as an 'exception from the rule' (see the box "Exception – Scholar's Only True Friend")⁴. By the 1930s, when a large number of

⁴ The Exception – A Scholar's Only True friend

Scholars formulate plenty of new hypotheses to explain existing facts. In the process of creating a new hypothesis, scholars are often carried away by the long list of facts that fit comfortably into their hypothesis, and therefore neglect the facts which do not fit their hypothesis. These 'misfit' facts are labeled 'exceptions'. Understandably, scholars usually dislike exceptions. Sometimes scholars push exceptions to coerce into their hypothesis, in other times they try to discredit the fact or the source where the fact came from. And if nothing helps, notorious sayings like 'no rule without exceptions,' or even worse, 'exception proves the rule,' are always at hand. But of course, to a non-biased person it is clear that an exception can not prove the rule, and that a rule with 'exceptions' is actually a bad rule. My favorite literary hero, brilliant analytic Sherlock Holmes once said: "I never make exceptions. An exception disproves the rule". I agree with Holmes and consider the saying 'exception proves the rule' as the last resort for a wrong hypothesis. So what is in reality an exception? **Exception is a scholar's best friend, the only true friend that tells the bitter truth.** Do not listen to the calming array of facts that prove your hypotheses, they are like many flattering friends who are ready to lie to you in order to

vocal polyphonic traditions were recorded in the cultures that did not have any historical contacts with European missionaries, the atmosphere for the paradigmatic shift was ready. Marius Schneider and Siegfried Nadel (almost simultaneously), and later Paul Collaer came to a new model of the origins of polyphony. According to their new model, polyphony was not invented by European professional musicians, but by traditional singers, and this happened earlier than 9th century. Schneider believed that the birthplace of vocal polyphony was South-East Asia, and that polyphony reached Europe through the long travel from South-East Asia via India, Persia and Caucasia. Nadel suggested that Georgian polyphony could have influenced the birth of European professional polyphony, and according to Paul Collaer, the emergence of European professional polyphony was a result of the development of local, ancient European polyphonic traditions.

So, the first big shift came in the 1930s. From this time on polyphony was rarely considered as an invention of European professional musicians, although the idea of the 'invention' of polyphony from monophony still survived. Now, in the beginning of the 21st century, it is time to change this axiomatic idea as well.

Let us all agree on one thing: even if the idea of the development of polyphony from monophony seems to the readers the most natural one of all, let us not take it for granted and do not extrapolate the history of European professional polyphony on the rest of the world (see the box 'Milk Drinking Syndrome and the Origins of European Professional Polyphony')⁵. We must still follow the basic

make you a happier person. Listen to your only true friend – exception. And only if this friend is silent, not complaining of any facts that do not fit your idea, you can be truly happy. One exception can outweigh dozens of proving facts. There is no greater proof for your hypothesis than the absence of an exception.

5 **Milk Drinking Syndrome and Origins of European Polyphony**

Many readers of this book might not be aware that different human populations differ drastically from each other according to their ability to absorb milk. It was found, for example, that African Americans have a much higher percentage of people who cannot absorb milk compared to European Americans. Later studies suggested that the number of populations that have problems with milk is quite big, and includes populations of sub-Saharan Africa, Arabs, most of the Jews, most Asian populations, Australian Aborigines and Melanesians. And finally, in the 1970s, 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. 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 initial 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 and to drink milk. Therefore it is the North and Central European adult population's ability to absorb milk, if we may say so, that is 'out of the human norm'. After this fact became known, the embarrassing earlier complaints from many parts of the world about the 'non-quality food provision' for the developing countries were understood, and humanitarian aid programs correspondingly had to adjust their policy of providing huge quantities of milk powder to the starving populations of third world countries, who could not actually drink milk. This methodologically interesting case teaches us a very important lesson – **not to extrapolate European experience to**

premises of scholarly method: we must first accumulate facts, and only after this should we try to find a hypothesis that fits the facts. If the hypothesis is right, ideally, it should not leave any conflicting facts, so called 'exceptions'. If we are lucky to find the correct hypothesis, every piece of the jigsaw puzzle must be comfortably in its place, without us trying hard to push them into the hypothesis.

But how can we check if the facts support the idea of the development of polyphony from monophony? Is this realistic? Of course we cannot go back in a time machine to check what our ancestors were doing a few centuries or millennia ago, but I suggest there are still ways to do this with the help of the *recorded history of human cultures*.

Audio recording technology has been around for more than a century. This is not a long time, but it should not be underestimated either. Apart from audio recordings, there are plenty of written sources from very different parts of the world. They go back in our past for centuries and millennia, in some regions of the world reaching depths of four-five thousand years. Also, many readers might not know that the music writing system is almost as old as the first written documents of human culture, and we even have a few written pieces of music that are thousands of years old. I will address the oldest written musical pieces later, in a discussion about the possibility of the presence of polyphony in Ancient Mesopotamia.

Checking available historical and archival records from different cultures can allow us to see the general historical picture and the dynamics of the development of human musical cultures, including polyphony, for several centuries and possibly for millennia (see the box: 'Rise of Andean Mountains and the Origins of Polyphony')⁶.

These records will also help us to see whether it is true that polyphony is gradually replacing monophony, as it was believed by the proponents of the theory of the late cultural 'invention' of polyphony. If this tendency is a fact, we must witness the appearance of a few new polyphonic traditions in regions where there was no polyphony before. That is exactly what I am going to do.

other populations of the world. In my 2006 book I suggested the term 'Milk Drinking Syndrome' for similar cases when European experience is unjustly extrapolated on the rest of the world.

⁶ **Rise of Andean Mountains and the Origins of Polyphony**

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 molluscs 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 series of such earthquakes during many millions of years were responsible for the actual rise of the surface and the creation of the huge range of Andean mountains. Darwin correctly understood the historical dynamics of landscape changes and the rest was a question of multiplying the results of small time span changes (that humans can observe) into a large evolutionary scale that humans cannot observe. Some things are incredibly slow. For example both American Continents are moving westwards about the same speed as nails grow on your fingers. To notice and understand this kind of slow developments, we need to study the **historical dynamics**. The question of historical dynamics is absolutely crucial for the correct understanding of any process that goes for centuries and millennia, including the process of the origins of vocal polyphony.

Is Polyphony Appearing or Disappearing?

Let us have a look at a list of cases when the disappearance of vocal polyphony is historically well documented:

- **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 active traditions of vocal polyphony by the end of the 12th century. According to the available data, in 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 until the beginning of the 20th century.

- **Italy.** In Lombardi, singing in seconds was documented in the 15th century, but has since 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 Andres Yurian at the end of the 19th century, disappeared without much trace.

- **Estonia.** A tradition of drone polyphony was recorded by Tampere in the beginning of the 20th century. No traces of this tradition have survived.

- **Russia.** A unique tradition of duet and trio singing with independent melodies was recorded by Evgeny Gippius in the 1920s, and was never heard again.

- **Sicily.** According to archived 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 policies the tradition of Macedonian singing in dissonant seconds has been disappearing from the 1950s to the 1980s.

- **California.** According to historical sources and archived recordings, interesting forms of vocal counterpoint that were present among South Californian Indians also disappeared.

- **Venezuela.** According to Isabel Aretz, there was a general tendency of the disappearance of three-part singing in the states of Lara, Falcon, and Portuguesa.

- **Taiwan.** According to archived recordings made by Japanese scholars among the Taiwanese native tribes, the small mountain tribe Saisat had a tradition of singing in parallel fourths that later disappeared.

- **Indonesia.** According to Dana Rappoport, part of the traditions of vocal polyphony in Central Sulawesi has disappeared during the last decades.

- **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.

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing program Logos.

- **Africa.** According to Simha Arom, the tradition of vocal and instrumental polyphony has been declining among pygmies from the 1970s, and some songs that were known in four parts survive today only in three- of two-part versions.

- **Georgia.** There are documented cases of the loss (and a major decline) in the traditions of vocal polyphony in southern, eastern and northern Georgia.

These documented cases of the loss of the tradition of vocal polyphony can not reflect a complete list of all disappeared traditions. 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 one case of the disappearance of polyphony in Meskheta). Therefore I expect that ethnomusicologists with an interest in polyphonic traditions could name many other cases of the disappearance and decline of the tradition of vocal polyphony in different parts of the world.

In some cases the reasons for these disappearances and declines are known. For example, in the case of western Sicily it was the natural disaster that disturbed the social life of the traditional society, and in the case of Macedonia it was mostly the government policies 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 1950s-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 while 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 is 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 many countries of Europe (including Georgia) 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 endured in Europe alone.

So, this was the list of cases where the loss of the tradition of polyphony is documented. Let us now have a look at the documented cases where the tradition of vocal polyphony was developed from monophonic singing traditions. If the idea of the late cultural invention of polyphony and gradual replacement of monophonic traditions is correct, we must have even a more impressive list of cultures where the birth of polyphony has been documented.

If readers expect that cases of the emergence of new polyphonic traditions in the previously monophonic cultures are more numerous, I have to disappoint them:

despite my lifelong keen interest in the issues of polyphony in different peoples and regions, I cannot name **even one** well documented case of the internal development of vocal polyphony in folk music in a formerly monophonic culture.

If we remember how important the absence of any 'exceptions' is for a strength of any hypothesis, this fact will become even more important.

'Wait a minute! What about the history of European professional polyphony?' Some readers might ask, 'It is well documented that European professional music started as a monophonic tradition and polyphony was literally invented by medieval monks in the 9th century'. To answer this question, we need first of all to remember, that this is a case of professional, not folk polyphony. Besides, there is a good reason to believe, very much like Schneider, Nadel, and Collaer believed, that European professional polyphony was not 'invented' by Medieval monks, but in fact church authorities just gave up fighting against the local traditions of polyphonic singing, allowing the infiltration of polyphony into professional church music.

So, polyphony is very unlikely to appear naturally in a purely monophonic culture as a result of internal development. Even in cases when monophonic cultures reside next to the polyphonic tradition for centuries and millennia, and have a strong professional musical culture, there are hardly any borrowings from the polyphonic tradition. For example, Georgians and Armenians lived together at least for three thousand years as close neighbors and Christian allies in Caucasia, but Georgian traditional singing is profoundly polyphonic whereas Armenian traditional singing is equally profoundly monophonic.

The cultural policy of the former Soviet Union also provided us with a unique 70-year long mass experiment of creating polyphony involving over 200 million people. Aiming at forming a common socialist musical culture for everyone, Soviet authorities tried to bring choral singing, harmony and polyphony to all the peoples of the Soviet Union. Great amounts of finances were spent and Moscow-trained composers and choir leaders were sent to the monophonic Central Asian republics and Siberian peoples to help them to harmonize their traditional and newly composed monophonic melodies, and to organize big choirs. Despite these efforts, none of the traditionally monophonic peoples of Central Asia or Siberia started singing their traditional songs polyphonically, and as soon as 'perestroika' started, the choirs were disbanded.

So, after checking the available documented sources on the history of polyphonic singing, we came to a conclusion that ***the disappearance of polyphonic traditions is not the prevailing, but the only tendency***. Therefore, the idea of the late cultural invention of polyphony must be considered outdated and must be fully rejected. There is not a single documented fact that provides any support to this hypothesis. Even the phenomenon of heterophony, often used as a transitional model for the origins of polyphony from monophony, at a closer look reveals that it is in fact a later phenomenon in comparison with the ancient forms of polyphony (see the box 'Heterophony: The Ancestor or the Descendant of Polyphony?')⁷. The closer study of the unique tradition of overtone singing also demonstrates that forms of vocal group

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing program Logos.

polyphony must have been present in Central Asia in the past (see the box: 'Origins of Overtone Singing in Central Asia')⁸.

It is possible to conclude, that the earlier we go into human history and prehistory, more polyphony will be found. Before we start analyzing the evolutionary history of Homo sapiens in search of the origins of vocal polyphony in the third chapter, on the next few pages I shall discuss the possibility of the presence of polyphony in some of the earliest civilizations in human history (see a box 'Polyphony and the Problem of Indo-Europeans')⁹.

Heterophony: The Ancestor or the Descendant of Polyphony?

Because of its ambiguous placing between monophony and polyphony, heterophony was often considered as the natural model for the gradual development from monophony to polyphony. If you generally believe in the late development of polyphony from monophony, it is very easy to imagine gradual transformation of monophony into polyphony: first you would have unison singing, then unison with elements of heterophony, then heterophonic elements increase, and finally we have a full blown polyphony.

In search of the origins of any cultural phenomenon, the study of the distribution and history of this region is the best indication. Let us see what they can tell us about heterophony. The biggest and most important region of heterophony is Eastern Europe, particularly the regions where eastern Slavs (Russians, Ukrainians and Belarus) live. Heterophony is distributed virtually throughout the whole ethnic territory of the eastern Slavs. There is also another singing style in eastern Europe: drone polyphony. Drone polyphony has a very different pattern of distribution: it is found in several isolated regions, often in geographically isolated places (like in the region Polesie, the big and mostly inhospitable marshy regions between Ukraine and Belarus).

The distribution pattern of heterophony on the territory of Eastern Europe obviously points to its late distribution. This is particularly evident in comparison of stratification of heterophony with another singing style of Eastern Europe – drone polyphony. Therefore, we have to conclude, that drone polyphony in East Europe must be chronologically older than the tradition of heterophonic singing. Heterophony is not an ancestor of polyphony. On the contrary, it emerged as a result of the loss of the more ancient tradition drone polyphony, most likely as a consequence of active migrations and ethnic mixtures in the open territories of Eastern Europe.

⁸ Origins of Overtone singing of Central Asia

Different scholars expressed different ideas about the origins of this unique singing style. These ideas range from the prehistoric era to the end of the first millennia AD. To search for the origins of overtone singing, we should first of all to look at the geographic distribution of overtone singing and the historical processes that took place in the area of distribution of this phenomenon.

Overtone singing is spread among several peoples of Central Asia, particularly those who live in (1) western Tuva, (2) western Mongolia, and (3) the Altai-Sayan mountain regions. Regarding historical processes, there is mounting evidence that Central Asia was initially populated by peoples of European origins (they are also mentioned in Chinese historical records). In about 9th century AD the situation changed, as East Asian populations took over in Central Asia. As a result, contemporary peoples of this region bear genetic and cultural traces from both their European and East Asian ancestors. The ancient European substratum is particularly clear in the following regions: (1) in Western Tuva, (2) Western Mongolia, and (3) the Altai-Sayan mountain regions. So, the regions of distribution of overtone singing and the regions where the European substratum is visible are obviously coinciding. From this fact we can derive following conclusions: (1) The Central Asian phenomenon of overtone singing is a result of the mixture of two opposite types of musical cultures: Ancient European drone polyphony, and East Asian monophony; (2) regions where the result of this mixture is better

Did Sumerians and Hurrians have Vocal Polyphony?

Sumerians are widely regarded as one of the most important vestiges of contemporary civilizations. The wheel, the calendar, irrigation, monarchy and writing system are among many Sumerian inventions. The invention of musical notation, usually credited to another Mesopotamian people, Hurrians, was possibly another Sumerian invention, as Hurrians used a writing system and many other cultural inventions borrowed from Sumerians. However, we currently have no accepted Sumerian written example of musical composition.

There are various indications that Sumerians and Hurrians had a tradition of vocal polyphony. Let me briefly discuss them.

Presence of double blown musical instruments. Blown instruments show closeness to vocal traditions, therefore the presence of polyphonic blown instruments can indicate the presence of polyphony in vocal music as well. According to Curt Sachs, double blown instruments first appear in Ancient Mesopotamia (see the box: 'What Can Instrumental Music Tell Us About Vocal Polyphony?')¹⁰,

preserved, are the regions of distribution of overtone singing, and (3) the timeline for the origins of the phenomenon of overtone singing must be the end of the first millennia AD, at around 9th century. It is interesting that the first mentioning of overtone singing, as a 'strange mixture of low roaring sounds together with high whistling sounds', come from Chinese historical sources from the same 9th century.

And at the very end I want to mention that producing overtones is found in many cultures in different parts of the world (in Africa, North America, Europe), although it was only in Central Asia that this singing style became a well established cultural phenomenon.

⁹ Polyphony and the Indo-Europeans

For the understanding of the puzzling distribution of vocal polyphonic traditions on the European continent the question of Indo-European migrations is crucial. Polyphony in Europe is distributed in many geographically isolated and inaccessible areas: mountains, islands, big forest massifs, continent fringes. This kind of geographic distribution is typical for the ancient phenomenon, which is pushed out by newcomers and their culture. Therefore, the only natural explanation on the pattern of distribution of polyphony in Europe must be the one according to which vocal polyphony in Europe is the survival of some ancient cultural unity. Taking into account the history of the European continent, it seems natural to propose that surviving polyphonic traditions in Europe are the remnants of the pre-Indo-European cultural unity. After the appearance of migrating waves of Indo-Europeans, the ancient population of Europe must have been pushed towards more inaccessible places, as this is always the case amidst major migration processes. We know that the contemporary carriers of pre-Indo-European languages in Europe (Basques and the peoples of Caucasia) have strong polyphonic traditions. On the other hand, considering the characteristics of the music of the Ancient Greeks and some other early Indo-European peoples (Armenians, Iranians, Tajiks) we may conclude that early carriers of Indo-European languages belonged to the 'oriental' monophonic musical family, with long melismatic melodies in a free non-metric rhythm. Indo-European migration must have produced occasions for mixture between the ancient polyphonic and new monophonic singing traditions in Europe. In such mixed cultures we find long melismatic melodies in a free metre, based on a drone polyphony. This type of mixed singing tradition is found in many regions of Europe: among Kartli And Kakhetians in eastern Georgia, among Tosks and Chams in southern Albania, among some Macedonians, among Farsheroti Aromanians in Romania, in Pirin in Bulgaria, in Epirus in Greece, in Corsica, and in Albacete in Spain. Drone polyphony in Europe is possibly the best surviving element of the ancient pre-Indo-European cultural unity.

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing program Logos.

Examples of notated music. Amazingly, there are notated examples of music from the ancient Mesopotamia. Curt Sachs' 1924 transcription of the Sumerian hymn was generally refuted, but there is a Hurrian musical composition too, written by cuneiform on clay tablets, and transcribed by Anne Kilmer. Kilmer famously came to the conclusion that the composition is an example of two and three-part polyphony. Most of scholars criticized this suggestion as totally unbelievable, chiefly because it was difficult for them to believe that polyphony could exist in such an ancient musical culture (see also the box 'Can We Really Read Mesopotamian Musical Notation?')¹¹. Some scholars tried to elicit other meanings from the ancient Mesopotamian musical writing to avoid their possible polyphonic interpretation, but the transcript made by

¹⁰ What Can Instrumental Music Tell Us About Vocal Polyphony?

Instrumental music has one obvious advantage over vocal music: unlike vocal music, which does not fossilize, musical instruments are found among the earliest archaeological remains and they can tell us plenty of useful information about bygone musical activities. In the case of wind instruments the information from archaeological cultures may even contain more specific details, like type of scales, the presence of polyphony, and even the type of polyphony. Most importantly for us, music played on blown instruments is often very close to the vocal music from the same culture. So, if the vocal traditions are polyphonic, double blown instruments in the same culture most likely will be also polyphonic, based on the same type of polyphony. Important note: we must always be careful and check the construction of a double blown instrument, because the construction can be both monophonic or polyphonic. The construction is polyphonic when the tubes are of non-identical length, or have a different number of holes, and it is monophonic when tubes are identical, both in length and the number of finger holes. There are even double flutes where one tube is straight, and the other one is a bit curved with the same number of finger holes, clearly an indication that the musical instrument was most likely playing secondal dissonances (such instruments are found in ancient Mesoamerica).

String instruments do not show such links with singing, most likely because singing and playing string instruments involve completely different mechanisms, whereas singing and playing blown instruments are both based on the same physiological mechanism of breathing. Therefore, the presence of double blown instruments with non-identical tubes is a serious indication that the culture was familiar with vocal polyphony.

¹¹ Can we Really Read Mesopotamian Musical Notation?

My Georgian colleague asked me a very logical question: 'How can we assume we can read musical writing from a musical culture totally unknown to us and which was already dead thousands of years ago, if we cannot even read the musical writings that our direct ancestors, the Georgians, used only 800 years ago?' The answer to this tricky question is actually quite simple: there are two basic systems of writing: (1) approximate, and (2) precise. If you write down a melody with a few curved lines, indicating only the direction of the melodic development, this will be an approximate writing system. That's how the neumatic writing system was used in medieval Byzantine and Georgia. But if you give different pitches specific names (say, use alphabet letters, 'A', 'B', 'C' etc for specific notes), and then write down a melody with these letters, this will be a much more precise writing system. Sumerians, inventors of the first writing system (cuneiform system), possibly must be credited with the invention of the first musical writing system as well (based on the same writing system). The ancient Mesopotamian music writing system existed for several thousand years, and a few written compositions from Ancient Greece were written using the same alphabetical system. This system was in use for a much longer time than our contemporary writing system. During the early Middle Ages the Mesopotamian system was mostly forgotten, and musicians at Christian churches started using a new, neumatic, non-precise writing system. So, the musical writing system started its existence as a precise

Anne Kilmer is still considered the most convincing. The views on the global historical dynamics of disappearances of polyphonic cultures proposed by the author of this book, and the rejection of the idea of the late development of polyphony, provides strong extra support to the suggestion that ancient Mesopotamians had polyphony.

Vocal nature of Sumerian polyphony. Even Kilmer and Sachs did not suggest that Sumerians could have had polyphony in vocal music. They interpreted written musical examples as the examples of instrumental music, more precisely, the harp playing two- and three-part chords (accompanying singing). This raises several doubts: (1) when musicians are transcribing singing with instrumental accompaniment, it is very unnatural to transcribe much less important instrumental accompaniment and not to transcribe the all-important vocal part. Even in the 20th century, when ethnomusicologists transcribed traditional singing with string instrumental accompaniment (for instance, examples of the Kazakh epic tradition), they were usually transcribing only the vocal part, completely neglecting the two-part accompaniment. Therefore it is very unlikely that Sumerians would transcribe an instrumental-only part. Most likely, both vocal and instrumental parts were polyphonic. (2) verbal text, written next to the musical transcription, does not leave any doubts that the composition was vocal. (3) We know that Sumerian temples had choral singers, named 'Nar-Nar'. (4) There are also a few non-logical octaves and double octaves in Sumerian three-part music. Double octaves mean that there were three of the same notes (like A, A, A). Three identical notes together would be understood more logically if it were an example of vocal polyphony. In this case there would have been three vocal parts singing in unison. So, if you have three identical notes written for a harp, you have to play them in different octaves, but in vocal music this means that three parts are coming together into the unison (very usual for vocal music). (5) There are several regions in ancient Mesopotamia which most likely had historical and cultural contacts with the Ancient Mesopotamian civilizations (like the Island Bahrain, Caucasia, and the Balkans), and all these regions have ancient traditions of vocal polyphony. This also indicates that ancient Mesopotamia most likely also had vocal polyphony. (6) Mesopotamians invented and used the precise system of notation, which is known as a necessary tool for the performance and recording of polyphonic music.

All these arguments, together with the general historical tendency of disappearance of the traditions of vocal polyphony, give us strong grounds to propose that at least some peoples of Ancient Mesopotamia (Sumerians and Hurrians among them) had traditions of vocal polyphony.

system, and in the 8th-9th centuries it turned into a non-precise system, and then returned to the precise system again. This paradoxical shift will make sense if we take into account a well-known fact: that a precise system is necessary if the music is polyphonic. Sumerian music most likely was polyphonic. Ancient Greeks, owners of monophonic musical traditions, used the precise system that was invented in polyphonic Mesopotamia. Georgians, on the other hand, owners of rich polyphonic traditions, used the writing system that was invented in monophonic tradition of the early Christian chanting. That's why Hurrian and Ancient Greek musical compositions are easier to read today than the Early Christian or Georgian transcriptions. As we still use letters for the musical notes (A, B, C, D, E, F, G), we can say that we still use a musical writing system invented in ancient Mesopotamia about four thousand years ago.

Joseph Jordania (2011). "Singing in Human Cultural History" Chapter 2 In: *Why do People Sing? Music in Human Evolution*. The publishing programm Logos.

Here I should add that the most celebrated expert of Ancient Egyptian musical culture, Hans Hickmann, also suggested (in 1952) that Ancient Egyptians were familiar with vocal polyphony. Apart from the ancient Middle East, the presence of vocal polyphony was also proposed in another ancient civilization, in Mesoamerica. Mesoamerica is particularly rich in the double, triple and even quadruple blown instruments, some with two different drones, with some of them even arranged so that a player would be playing mostly secondal dissonances.

Conclusion

We are coming to the end of the second chapter. The most important conclusions of this chapter are that (1) vocal polyphony is an extremely stable element of human culture that can survive drastic cultural and linguistic changes and can indicate the ancient connections of the population, and at the same time, (2) vocal polyphony is gradually disappearing from our planet. Vocal polyphonic traditions are currently dispersed in the most isolated geographical areas – mountains, islands, large forest areas and continent fringes. Such a pattern of distribution in combination with the historical tendency of the gradual disappearance of polyphonic traditions strongly suggest that polyphony is an extremely ancient phenomenon, and therefore we must fully reject the existing model of the origins of polyphony as a late cultural invention.

Thus, if we want to find the origins of polyphony, we should stop seeking for the first creative individuals, or the first creative people who developed polyphony out of monophony. Instead, we need to go deeper into human prehistory. Only after researching human singing behaviour in the broad context of human evolutionary history can we clarify the origins of human choral polyphony and answer the question of why do humans sing. These problems will be discussed in the next, third chapter.