

Intonation of English and Kazakh Languages

Karagoishiyeva Danel, Bektemirova Saule and Iskakova Gulnaz
Al-Farabi Kazakh National University, 71 Al-Farabi Avenue,
050040 Almaty, Republic of Kazakhstan

Abstract: This study examines the intonation of English and Kazakh declarative, exclamatory, interrogative and imperative statements. An overview and comparison is given of the theoretical research on intonation in English and Kazakh. More practically, similarities and differences between these languages are shown. Language is a tool of communication where intonation plays a vital role in expressing the emotions and state of the addresser of a message. Without an intonation it would be hard to distinguish the type of the sentence uttered by a speaker. The peculiarities of the intonation patterns of a definite language are clearly displayed if a comparative study is carried out with the attraction of the intonation of a foreign language. This article examines the intonation of English and Kazakh declarative, exclamatory, interrogative and imperative statements. An overview and comparison are given of the theoretical research on intonation in English and Kazakh. More practically, similarities and differences between these languages are shown. The results of the experiment are taken with the help of the research on the programme PRAAT.

Key words: Intonation, communicative types, the English and Kazakh languages, PRAAT programme, sentence, pitch of voice, prosody

INTRODUCTION

Language is a means of forming and storing ideas as a reflection of reality and exchanging them in the process of human intercourse. Language is social by nature it is inseparably connected to the people who are its creators and users; it grows and develops together with the development of society through communication. When we communicate using sounds we clearly do a good deal more than simply string allophones together to make up words, but in speech words are not used in isolation. Words are used in order to present information, to build a sentence. A sentence, in its turn is the immediate integral unit of speech built up of words according to a definite syntactic pattern and distinguished by a contextually relevant communicative purpose. It can perform this function not only because it consists of words that are made up definite sounds have a definite meaning and follow each other in a definite order according to the rules of the language, but also because it possesses definite phonetic features without which the sentence cannot exist. These features are closely connected to the meaning of the utterance as a whole and carry important information that the words of the utterance do not convey. In the process of speech they are superimposed upon the sounds making up the sentence and are inseparable from it. The well-known

American phonetician Kingdon (1958) claims, "Intonation is the soul of a language while the pronunciation of its sound is its body and the recording of it in writing and printing gives a very imperfect picture of the body and hardly hints at the existence of a soul".

So, we can see that intonation plays an important role in the process of human intercommunication. On the one hand, it points to different communicative types of sentences and on the other, it indicates the attitude and emotions of the speaker. Intonation is an essential component of the discourse structure of speech. We speak in order to communicate and we need to interact with our listeners to do this. We must indicate what type of information we are presenting and how it is structured and at the same time we must keep our listeners attention and their participation in the exchange of information. Communicative interaction would be much more difficult without intonation: some misunderstandings may arise between people in the exchange of e-mail messages or letters where intonation cannot play a role and even in everyday life, especially between foreigners and native speakers.

The well-known foreign phoneticians L.E. Armstrong and I.C. Ward tell of an incident in which a foreigner was misunderstood in England because of his wrong use of intonation. "A German who speaks English very well was not understood by a bus conductor when he asked for a

ticket to Queen's Lane with stress and intonation Queen's Lane instead of Queen's Lane, although his sounds were perfect. This shows the important part that these two elements of speech stress and intonation..." (Armsrong and Ward, 1926).

Object of the study the intonation of English and Kazakh declarative, exclamatory, interrogative and imperative statements.

MATERIALS AND METHODS

The materials for phonetic research of intonation of the English and Kazakh languages were: in total 16 statements given in quasi-spontaneous speech (fragments from fiction and periodicals: 2 narrative statements, 2 interrogative statements, 2 incentive statements and 2 exclamatory statements, each pronounced by 2 speakers.)

For the solution of the formulated tasks of the analysis and processing of a speech signal namely studying the form and function of tonal accents of statements of quasi-spontaneous speech of the English and Kazakh languages the phonetic method was used. Also included was a digital method of processing the speech signal, a perceptual tool which had its own analysis.

RESULTS AND DISCUSSION

The message we convey depends just as much on how we say something as on what we actually say. In order to achieve desired results we must choose the proper pitch of voice and make it higher or lower at will. Phoneticians compare this hesitation in the pitch of voice with the waves of the ocean. Waves rise and fall just as the pitch and volume of the voice go up and down. Vassilyev (1970)'s expresses this concept with the following statement, "The surface of the ocean responds to the forces that act upon it in movements resembling the ups and downs of human voice".

It is clear that when we are expressing emotions we also use different voice qualities, different speaking rates, facial expressions and gestures according to our psychological state and to the grammar of the utterance pronounced. In order to understand what intonation is we can refer to the scientific works of many phoneticians who investigated it and tried to give their own definitions. Up to the present time, intonation has been defined in terms of modifications of tone, pitch or musical notes.

Professor D. Jones states that "Intonation may be defined as the variations which take place in the pitch of the voice in connected speech, that is the variations in the

pitch of the musical note produced by the vibration of the local cards" (Jones, 1992). The well-known Kazakh linguist A. Khasenov defines intonation as follows: "Intonation is a phenomenon which makes a sentence a real sentence which connects the parts of the sentence with each other and which gives the emotional-expressive colour to the grammatical patterns relating to the melody, rhythm, speed, tempo and tamber, sentence and logical stress of the speaking" (Khasenov, 1957).

However there isn't still a universal concept of intonation and currently intonation is understood in both a broad and a narrow sense: in a broad (complex, multicomponent) sense, intonation is defined as a combination (crossing/unity) of the heterogeneous prosodic phenomena (intonemes): the main tone, tempo, types of juncture, intensity, rhythmic structure, thus each of the parameters possesses specific units (tonemes, chronemes, accents and under.) with their significance (A.A. Abduazizov, V.A. Artyomov, Sh. Atenov, Z.M. Bazarbayeva, I.A. Baymuratova, V.A. Bogoroditsky, V.A. Vasilyev, D.Jones, V.N. Vsevolodsky-Gerngross, Zh.K. Kaliyev, M.G. Kasparova and Zh.A. Aralbayev, T. Kenshinbayev, J. O'Connor, D. Crystal, B.K. Murzalina, A.N. Nurmakhanova, A.M. Peshkovsky, G.P. Torsuyev, N.U. Turkenbayev, Zh.M. Utesbayeva, A.M. Fazylzhanova, L.K. Tseplitis, etc; in a narrow sense, intonation is only melody including tonemes (S. Amanzholov, L. Armstrong, A. Baytursynov, M. Balakayev, N.A. Baskakov, D. Bolinger, K. Zhubanov, A. Zhunisbek, S.K. Kenesbayev, S.V. Kodzasov, M.I. Matusевич, K. Payk, G.E. Palmer, S. Ode, I. Ward, L.V. Shcherba, etc.)

In the dissertation work of D.A. Karagoysheyeva, the chart, the main picture of terminologization and interpretation of intonation is given: first, intonation is mainly defined as a complex phenomenon with unity of the interconnected elements; secondly, sources are almost unanimous concerning the list of the interconnected elements which form intonation; thirdly, signs and functions of intonation are connected first of all with the speech, instead of language; fourthly, functions of intonation are mainly "attached" to the statement (sentence); fifthly, the main function of intonation is its ability to form the statement (syntactic or communicative function), to distinguish its communicative types and communicative features of its constitutive parts; sixthly, solidarity concerning the ability of intonation to express emotional and expressional shades of sense (which makes the question of the linguistic status of emotional function of intonation indisputable); seventhly, presentation of ranks of intonation functions (from communicative and emotional to the signalling about the ratio of the subject and the purpose of statement) (Karagoysheyeva, 2008).

The allocated community in defining intonation and its functions, certainly is regarded as the high level of knowledge reached by linguistics which is supplemented and specified by researches of intonation of various natural languages. In particular, in turkology there are numerous works devoted to the description of intonation in semantic and communicative aspects with intonational features of all main communicative types of sentences, their types and subtypes (in the Kazakh linguistics works of A. Baytursynov, S. Amanzholov, S.K. Kenesbayev, A. Hasenov, M. Balakayev, K. Zhubanov, M.G. Kasparov, Zh.A. Aralbayev, Zh.K. Kaliyev, N.U. Turkbenbayev, A.N. Nurmakanov, Sh. Atenov, A. Zhunisbek, M.A. Raymbekov, Sh. Bekmagambetov, T.K. Kenshinbayev, S. Negimov, Z.M. Bazarbayeva, Zh. Abuov, B. Sagyndykuly, Zh. Kenshinbayeva, B.K. Murzalina, A. Nukeeva, M.K. Isayev, A.Zh. Amanbayeva, G. Shokyma, S. Akymbek, Zh. Ibraimova).

Statements about direct interdependence of intonation and semantics should be perceived in the general context of works on intonology and revealed dynamics of determination of intonation: "Intonation of the sentence, i.e. correct rhythm of speaking, depends on semantics of the sentence. Thus, semantics of the sentence can be distinguished according to its rhythm of speaking, intonation. Semantics and intonation are closely interconnected with each other" (Khasenov, 1957).

Similar statements affected the general direction of works on Kazakh intonation which were begun in the late 1960's (Darkulova, 2012). Thus intonation received a number of consecutive terminological specifications in Kazakh linguistics: A. Baytursynov considered intonation as a melody of separate sounds in the word or the sentence or 'til auezdigi' (Baytursynuly, 1989); K. Zhubanov suggested to distinguish different types of speech melody according to the mood of the person and called it voice melody or 'sozdin ani/dauys sazy' (Zhubanov, 1966); A. Khasenov called intonation speech/statement melody or aitylu sazy (Khasenov, 1957); R. Syzdyk word melody or soz sazy (Syzdyk, 1995), etc. While in researches of the Kazakh intonation parallelism of its handling as a multicomponent phenomenon with researches of the Russian scientists is accurately traced: structural-functional analysis of intonation and speech ranges, studying of communicative, syntactic, logical and modal functions of intonation of V.A. Artyomov (N. U. Turkbenbayev, A.N. Nurmakanov, Z.M. Bazarbayeva, M. A. Raymbekova, T.K. Kenshinbayev, etc.); studying of voice-frequency configurations connected with registration of illocutive-modal types of statements, so-called system ID (Intonational Designs) by E.A. Bryzgunova.

Intonation of the Kazakh language was studied theoretically and experimentally in line with the main tendencies of the general intonology thus, intonation was defined and successfully described mainly as the multicomponent unity of certain sound means. In the modern Kazakh intonology quite wide experience of the theoretical description of intonation is stored, nevertheless the exact quantity of intonation constructions isn't still established: basing on the unique methodological principles N. Turkbenbayev described 10 types of interrogative sentences, Z.M. Bazarbayeva 8 intones of the Kazakh language; B. M. Murzalina put into linguistic circulation the description of 5 types of intonational constructions and more. Observed distinctions are caused first of all by the fact that different researchers use various methods as the foundation of their descriptions, generating arguments in interpretation of the Kazakh intonation and its units.

The phenomenon of intonation has also other traditions of description. There are phonetic schools in which expanded interpretation of intonation is considered impractical and intonation is defined only as speech melody (occasionally intensity, duration and timbre are included). The Dutch school (Hart *et al.*, 1990), actively using experimental methods with the application of computer programs, belongs to such schools limiting intonation strictly to speech melody (voice-frequency accent). Melody is considered a leading and the most important component of intonation as, in most cases, distinctions in melodic forming of the statement define its perception and interpretation: the speaker allocates the necessary fragments of the statement (word, syntagm) to transfer communicatively important information, for example, by means of certain rising/falling of the height of tone, realising thereby so-called voice-frequency accent.

D. Bolinger was the first to use the term, "pitch accent" having defined it as following: "When accent in a syllable is realized by means of tone height, tone height has two functions. First, it signals about accent in this syllable. Secondly, its direction up, down or its level forms melody. As accent is marked by a difference in the ascending or descending height of tone in relation to the bottom line [heights of tone] and anything in language isn't lost, that special movement of height of tone, without change of accent place, makes melody or intonation in a broader sense, various" (Bolinger, 1986). Ode (2003), considering the definition of pitch accent of D. Bolinger, emphasizes that "special realization of pitch accent doesn't not only distinguish the word from words surrounding it, but also creates speech melody".

C. Ode also highlights that "intonation is a change of height of tone in a flow of speech (statement). Variations

of pitch are movements of tone such as ascending, descending, flat, jump up or down in the range of tone height and such similar changes of tone. The certain movement of tone or configuration of pitch movement, can give to a syllable in the word a perceptual prominence. In that case when the prominence is caused by tone height, this syllable. it is usually a syllable with a verbal accent, receives so-called pitch accent. Thus, the word with pitch accent is allocated or has a big prominence than words surrounding it in the statement. Speaker makes pitch accents in certain words to say to the listener, what words in the statement are important what words carry new information what words contrast with other words, what words express emotions. By the way, not only voice-frequency accents carry out these functions. Other prosodic parameters such as intensity or duration of vowels, rhythmic and variations in speech tempo, can give the word or group of words prominence" (Ode, 2003).

Intonation is a complex phenomenon, the main constituting sign of which has, for a long time, strongly been considered to be the change of height of the main tone or melody. Intonation forms the base of any language and the sense of the speech also begins with intonation. The similar axiom doesn't need confirmation, however in modern linguistics there was a considerable expansion of research approach to intonation from the positions of the theory of ontogenesis and language ability (development of children's speech) and the theory of teaching a second language (development of the secondary language personality). Expansion and deepening of researches were connected also with the natural process of science as a whole and use of experimental and phonetic researches of new methods and analysis techniques. This has led to the successful and prompt development of pilot phonetic studies of various languages of the world having allowed, on the one hand, to include in the field of view of linguists the most exotic for phoneticians languages (Indonesian, Papuan, Paleo-Siberian, see C. Ode, on the other hand, computer technologies gave more ample opportunities for the intonation description with the use of the latest programmes. The perceptual prominence created by tone accent, illustrating a variety of intonational semantics and means of its expression is successfully studied by means of various experimental and phonetic programmes). Generally speaking, functional properties of intonation in different contexts of communication are

- Lending prominence
- distinguishing between sentence types (question, statement)

- Indicating whether the utterance has been completed or not
- Enabling the speaker to organize the utterance and the hearer to perceive which words belong together (prosodic grouping)
- Indicating whether the speaker has finished and the hearer may speak (turn-taking)
- Expressing the relationship between speaker and hearer
- Expressing emotions and emphasis (Ode, 2003)

However while describing intonation of the Kazakh language the computer programmes Praat, Doing phonetics by computer for processing and analysing speech signal weren't used until recently. While analysing intonation (voice-frequency accent) of the Kazakh and English languages the following research steps were completed:

- Records were entered into the computer and sound files were saved (each sound file one statement)
- Every statement was considered separately heard and reviewed
- Each segment of each statement was defined, i.e. in each file the border between syllables was specified and the text of each syllable was added to an image of an intonational contour of each statement
- The corresponding syntagmas of each statement were revealed
- It was established, in what syllable, what word, what syntagma in the statement the voice-frequency accent was made (Ode, 2003)
- The word was measured for voice-frequency accent an interval between low and high levels of movements of tone
- The interval size between the initial and final frequency of tone movement on the logarithmic scale in half tones was determined (ST)
- The form of voice-frequency accent with their phonetic correlates was described
- The communicative function of voice-frequency accent was defined (question, incompleteness, confirmation, etc.)

Since, terms like "intonation" and "prominence" are by no means always used in the same unambiguous sense, these basic terms will have to be defined before discussing problems of describing English and Kazakh intonation. "Intonation is defined as the ensemble of pitch variations in the course of an utterance (Hart *et al.*, 1990) of which the phonetic form can be described from an acoustic, perceptual and physiological point of view Ode

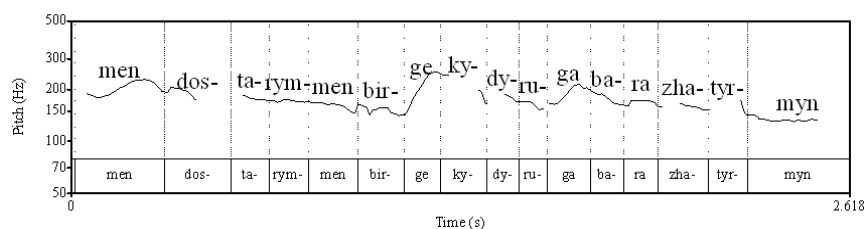


Fig. 1: The statement in realization of female voice of men dostarymnen byrge kydyrugaba zhatyrmyn showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

(2003). Pitch variations are rising, falling and level pitch movements, jumps upward or downward in the pitch range and similar pitch phenomena. A given pitch movement or a configuration of pitch movements, may lend prominence to a syllable, in languages with lexical word stress usually the stressed syllable and the word becomes pitch accented. In an utterance, a word with pitch accent stands out and is more prominent than its surrounding words. For instance, a speaker realizes pitch accents in words that s/he wants to be highlighted in order to communicate to the hearer which words in the utterance are important, contain new information, contrast with other words, express emotions. But note that it is not just pitch accents that can be used to express these functions. In Russian, particularly important in this respect is the interaction between intonation and word order. As regards prosody, prominence can, for example, also be brought about by parameters like intensity, rhythm, vowel length, speech variations or by combinations of these.”

We see that the linguists of different countries have their own viewpoints about intonation and it proves that the intonation of every language differs from others. In order to learn or investigate the intonation of foreign language we should compare it with our native language. Also we think that all learners of English as a foreign language should have the general idea of the different aspects of intonation. Unfortunately, it would be a bit difficult to learn to speak with proper intonation without being a witness of the real conversation between native English speakers and without comparing English intonation with the intonation used in the native language of the learner.

That is why we decide to analyze the intonation used in the communicative types of sentences on the basis of English and Kazakh languages. The second part of the twentieth century has been marked by special attention to the investigation of intonational variation expressing emotions in speech. Being an indispensable component of oral communication, intonation with other linguistic and extra linguistic means serves to distinguish the

communicative types of utterances, to identify the speaker and to convey his attitude towards the surrounding reality.

Taking into account the fact that monolanguage investigations of the intonation of the different utterances are extremely popular nowadays and that only few contrastive bilanguage researches are carried out we have decided to analyze the intonational patterns of different types of sentences in order to find out similar features and peculiarities.

The material for this investigation is the samples of authentic Kazakh speech and the sentences taken from the research work of some phoneticians. We have decided to observe the situations, free talks where people interact in a way that appears spontaneous. We consider it relevant to study the intonation used in both languages in such a way as this is where human attitudes are revealed most explicitly. The focus of the investigation was made on the estimating intonation from the point of view of direction of tone (pitch voice) whether it is steady, upward or downward.

Four types of sentences are distinguished in English and Kazakh languages, they are declarative, exclamatory, interrogative and imperative.

Intonation of declarative type of sentences: The Kazakh linguist M. Karaev defines declarative sentence as a sentence used for the purpose of expressing thoughts concerning something or somebody (Karayev, 1993). In order to express the thoughts more clearly and more expressive to the listener, the speaker must pay much attention to the rhythm and the melody in pronouncing the declarative sentence (Fig. 1). e.g., Men dostarymnen birge qı'dı'rwgha bara jati'rmi'n.

The speaker realized an ascending tonal accent in the final syllable of the word bir-ga as it was important for him to emphasize that together with friends he goes for a walk. Height of tone remains at the same high level. After that syllable the tone height gradually goes down to the statement end. The size of an interval increase in the syllable ga from 142-251 Hz. The interval size between two glevels in half tones 9ST.

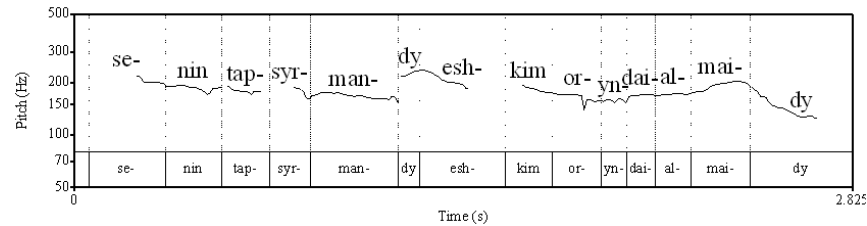


Fig. 2: The statement in realization of female voice of men senin tapsyrmandy eshkim oryndai almaididy showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

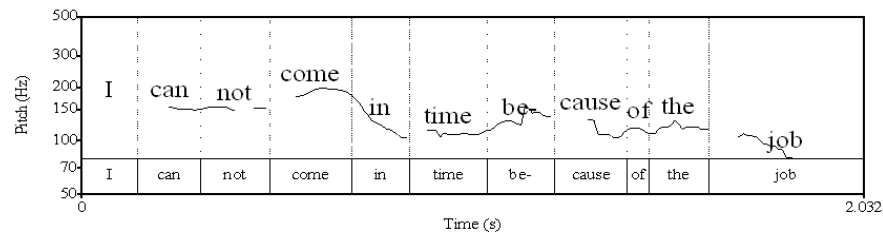


Fig. 3: The statement in realization of male voice of I cannot come in time because of the job showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

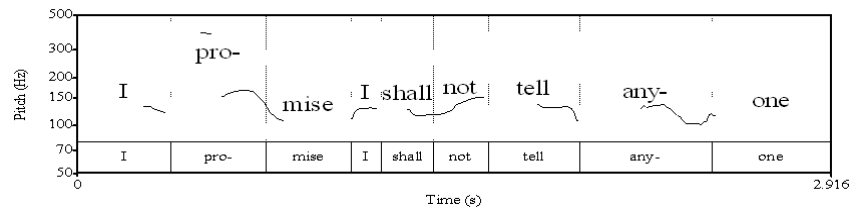


Fig. 4: The statement in realization of male voice of I 'promise I 'shall not tell 'anyone showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

Kazakh speakers while declaring the information, use the falling tone, categoric and matter-of-fact. The negative sentence of Kazakh language sounds as declarative with low voice-pitch. No matter whether speaker is self-confident, categoric, non-categoric, interested or hesitates, he uses falling or high-falling tone in her speech (Fig. 2). e.g., Senng tapsyrmandy eshkim oryndai almadi'.

The speaker made the ascending pitch accent in the final syllable of the word tapsyrmandy. Height of the tone remains at the same high level. After that syllable tone height gradually goes down to the end of the statement. The size of interval increase in a syllable-di is from 160-235 Hz. The size of the interval between two levels in half tones 8ST. In these negative sentences high-falling tone is appropriate to use as it conveys personal concern or involvement and can express vigorous agreement. In English high-falling tone is used to show also these very feelings as in Kazakh (Fig. 3). e.g., I cannot come in time because of the job.

The speaker realized the ascending pitch accent in the last syllable of the word come. Height of tone remains at the same high level. The size of interval increase in the syllable come is from 75-195 Hz. The size of the interval between two levels in half tones 7ST. But the peculiarity of intonation of English declarative sentence is that the speaker can use rising tone in order to make the sentences sound not categoric, assertive and separative, but soothing and reassuring as it is shown in the sentences (Fig. 4). e.g., I promise I shall not tell anyone.

The speaker realized the ascending pitch accent in the last syllable of the word promise, the Height of tone remains at the same high level. The size of increase of the interval in the syllable pro is from 122 Hz-379 Hz. The size of the interval between two levels in half tones 20ST. Unfortunately, in Kazakh language rising tone is applied to indicate the interrogative and exclamatory sentences.

If we change the tone or the direction of pitch of voice, declarative sentence may be changed only into exclamatory and interrogative sentences but not into

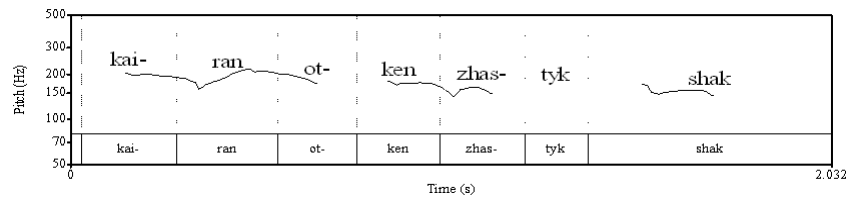


Fig. 5: The statement in realization of female voice of kairan otken zhastyk shak showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

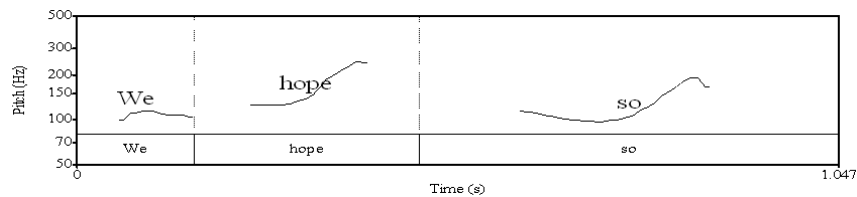


Fig. 6: The statement in realization of male voice of we hope so showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

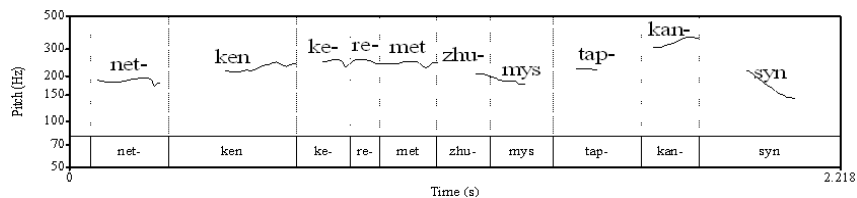


Fig. 7: The statement in realization of female voice of netken keremet zhums tapkansyn showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

imperative one. So, we may draw a conclusion that declarative sentence in Kazakh language is pronounced only with the falling tone when English declarative sentence may have both falling and rising tone according to the condition and feelings of the speaker.

Intonation of exclamatory type of sentences: The exclamatory sentence is used to display such feelings as joy, offense, surprise, pity, disappointment, fear, mockery. The intonation of such kind of sentences in Kazakh is always high pitched. One more sign of the exclamatory sentence is the exclamatory mark put at the end of the grammatical pattern (Ode, 2003) (Fig. 5). e.g., Qayran o'tken jasti'q shaq!.

The speaker realized the ascending pitch accent in the final syllable of the word qay-ran. The Height of tone remains at the same high level. The size of increase of an interval in the syllable-ran is from 160-215 Hz. The size of an interval between two levels in half tones 5ST. In English speech we may hear the sentences carrying the features of emotions which are pronounced with the falling tone and which are used for the purpose to show

the restrained, unsurprised, reserved and uninterested attitude of the speaker (Fig. 6). e.g., we hope so! Time will show!.

The speaker realized the ascending pitch accent in the final syllable of the word hop-e. The Height of tone remains at the same high level. The size of the interval increase in the syllable hop is from 132-245 Hz. The size of an interval between two levels in half tones 11ST. The speaker realized the ascending tonal accent in the final syllable of the word so. The height of tone remains at the same high level. The size of increase of an interval in the syllable so is from 97-192 Hz. The size of an interval between two levels in half tones 11ST. In general and in most cases exclamatory sentences have the rising tone and express only the positive emotions like joy, surprise and interest (Fig. 6). The prosody of interest in English and Kazakh speech is characterized by high pitch level, wide voice range and medium or low intensity. The differences in English and Kazakh intonation are traced in the direction of the terminal tone and the type of the scale: while in English utterances expressing interest are pronounced with the descending stepping scale and

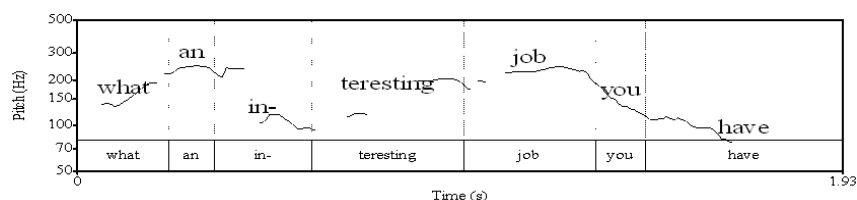


Fig. 8: The statement in realization of male voice of what an interesting job you have showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

downward nucleus, Kazakh utterances are marked by the rising nucleus and either descending or level scale (Fig. 7). e.g., Netken Keremat jimi's tapqansi'ng!.

The speaker realized the ascending pitch accent in the final syllable of the word tap-qan-si'ng. The height of tone remains at the same high level. The size of increase of an interval in the syllable-qan- is from 142-251 Hz. The size of an interval between two levels in half tones 9ST (Fig. 8). e.g., What an interesting job you have!.

The speaker realized the ascending pitch accent in the last syllable of the word what. The height of the tone remains at the same high level. The size of increase of an interval in the syllable what is from 135-192 Hz. The size of an interval between two levels in half tones 6ST. The speaker realized the ascending tonal accent in the final syllable of the word job. The height of tone remains at the same high level. The amount of increase of an interval in the syllable job is from 175-245 Hz. The size of an interval between two levels in half tones 6ST. The prosodic features of surprise in English and Kazakh have few similarities in common intonation of interest. High pitch level utterances expressing surprise in English are pronounced with two types of terminal tones the falling or the rising-falling tone while the Kazakh utterances have the rising tone only. The difference is that the pitch range of the basic emotion of surprise in English is predominantly narrow while in Kazakh it is either narrow or wide.

Despite the components of intonation in Kazakh different introductory words also play an important role in building up the exclamatory sentences and in making the amplitude of intensity in comparison to English ones. e.g., Oyp'i'ri'm-ay! Ku'yewining minezi qanday jaman edi!.

In Kazakh speech there are sentences which play the role of both exclamatory and interrogative sentences and which have either an exclamatory or question mark at the end of the sentence. e.g., Keshirim surap kelgenmenen ne payda!?

The analysis shows that the greetings, farewell, apology and their intonation used in English and Kazakh languages are similar. If we take for instance the formal greetings "Good morning"! which has its equivalent in

Kazakh language "Qayi'rli' tang"! we can see that their intonation is low pitched and is pronounced with falling tone. For expressing friendly mood these very exclamations sound with the rising tone. There are such neutral greetings as "How do you do"? "How are you"? in English may be translated into Kazakh as "Sa'lemets'z be"? and they always end with the falling tone expressing distinct, complete, polite, serious atmosphere.

A bit different in its intonation is farewell "Good bye"! in English and Kazakh languages. Farewells in English are pronounced with rising tone making an accent on the friendly, joyful condition of the speaker. e.g., Good bye! Nave a nice day!.

In Kazakh language all farewells are pronounced with falling tone or on the medium level in spite of the state of the speaker. e.g., Saw boli'ngi'z! Jaqsi; demali'ng'z!.

This peculiarity leads to the conclusion that Kazakh people treat the farewell more serious than English people do. If the speaker is to beg pardon and regrets for the situation happened before the apologies "Sorry"! or "Excuse me"! are pronounced with the falling tone. It is very easy to mix up the apology pronounced with the rising tone which is used with the aim of asking to repeat the sentence once more and the real apology.

In Kazakh language such difference also exists. The Kazakh equivalent of this apology is "Keshiringiz"! We can see that the intonation of the exclamatory sentences may be changed according to the aim of expressing the or to the condition and mood of the speaker. Nevertheless, the exclamatory sentences in Kazakh language are pronounced in most cases with high pitch level and rising or rising falling tone.

Intonation of interrogative type of sentences: In Kazakh language there are four types of interrogative sentences: general, special, alternative and disjunctive questions. The linguists pay much attention to the intonation of the interrogative sentence in Kazakh language (Jones, 1992). e.g., Ayghani'm menlli"yas ko'netin emes. Ko'netIn emes? I'a', ko'netin tu'ri joq...

In these sentences the words "Ko'netin emes?" may have both the interrogative and exclamatory meaning with

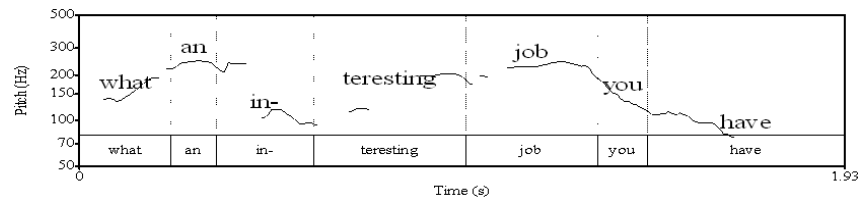


Fig. 9: The statement in realization of female voice of sen nemene tonyp kalganbysyn showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

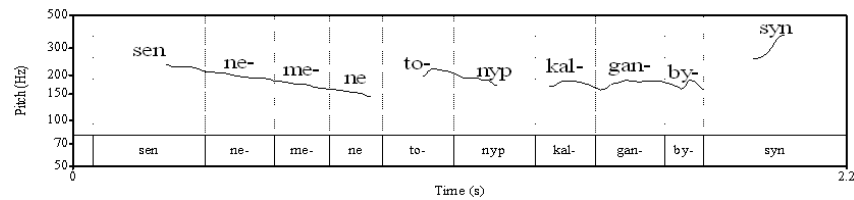


Fig. 10: The statement in realization of female voice of sen dykenge baryp kelesin solai emes pe showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

the help of intonation. If in English the general question begins with the auxiliary verb or modal verb, in Kazakh language the feature that shows that this question is general one is the interrogative particles like *ba*, *ma*, *ma*. e.g., Do you speak English? *Siz aghi'lshi'n tilin bilersiz be?*

The answer to this question should be as in English language "Yes" or "No" "Ia" or "Joq". It is evident that in English the general questions are pronounced with rising tone. This feature of intonation is similar to Kazakh one. The function of such kind of questions is to encourage the continuation of the conversation and reaction of the listener. We know that some English interrogative sentences especially general question are said with the high fall tone or falling-rising tone which make the sentence sound reserved, phlegmatic and insistent. But in Kazakh language we cannot almost meet such falling tone in general question.

Some Kazakh general questions have the interrogative endings or particles between the root and the inflectional endings such as *mi'*, *mi*, *bi'*, *bi*, *si'*, *si* and others (Fig. 9). e.g., *Sen nemene, tongi'p qaldi'ng ba?*

The speaker made the ascending tonal accent in the last syllable of the word *qal-ghan-bi'-si'ng*. The height of the tone remains at the same high level. The amount of increase of an interval in the syllable *si'ng* is from 162-354 Hz. The size of an interval between two levels in half tones 13ST. Some Kazakh declarative sentences may also be turned into general questions with the help of intonation as in English. They are used by the speaker to denote the speaker's readiness to continue the talk or to show his surprise and interest. e.g., *Mening ko'ngil-ku'yim joq. Ko'ngil-ku'yim joq?*

Special questions begin with the interrogative pronouns which are followed by the auxiliary or modal verb. This is a strong rule of the English special questions. But in Kazakh special questions there are also the interrogative pronouns which do not have a definite place. e.g., What is your address? *Sening meken-jayying qanday?*

The most usual intonation contour for the special question of both English and Kazakh languages is low-fall tone. They sound serious and responsible. The special questions pronounced with rising tone mean that the speaker is sympathetically interested. Such kind of cases is met in Kazakh language very seldom. The interrogative pronouns which indicate the special question in Kazakh language are: *qanday* (what), *qayda* (where), *qansha* (how many), *qalay* (how), *ne sebepti* (why) and others.

It goes without saying that the answers to the special questions are usually pronounced with the falling tone. The structure of an alternative question is similar to the general questions in English but the question of choice consists of two sense-groups: the first of which is pronounced with the rising tone and the second with the falling tone. e.g., Will you go to the theater or to the cinema?

In Kazakh language the alternative question has also such kind of intonation and the second sense-group is divided from the first one with the help of the word (or) (Fig. 10). e.g., *Siz teatrgha barasi'z ba, a'lde ki'nogha barasi'z ba?*

Sometimes, especially the speaker omits the word "alde" and pronounces both sense-groups with rising tone and divides them from each other with the pause.

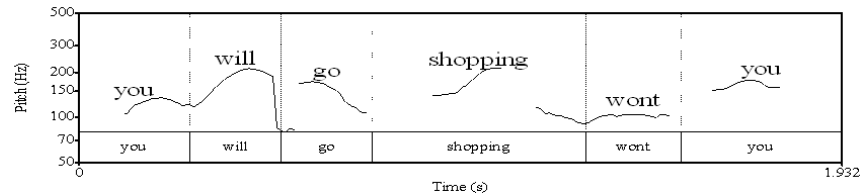


Fig. 11: The statement in realization of male voice of you will do shopping, won't you showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

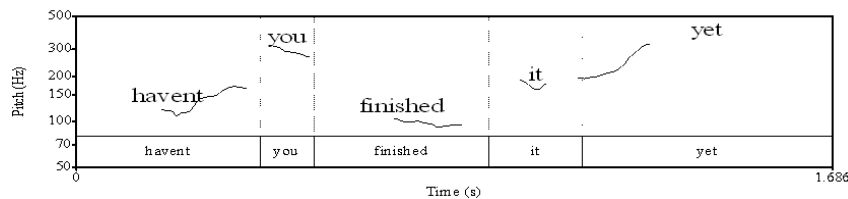


Fig. 12: The statement in realization of male voice of haven't you finished it yet showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

This feature may be unique to Kazakh intonation. The announcer made the ascending tonal accent in the final syllable of the word of a-mas. The height of the tone remains at the same high level. The amount of increase of an interval in the syllable mes is from 249-388 Hz. The size of an interval between two levels in half tones 8ST. A disjunctive question consists of a statement and mini-question in both languages. It also has two sense-groups as the alternative question but in comparison to the alternative one, the first part of the disjunctive question is pronounced with falling tone and the next one with the rising tone. Such kind of question is used to provoke the listener's reaction (Fig. 11). e.g., You will go shopping, won't you?

Siz teatrga barasi'z ba, a'lde ki"nogha barasi'z ba? The speaker realized the ascending tonal accent in the final syllable of the word will. The height of tone remains at the same high level. The size of increase of an interval in the syllable will is from 118-210 Hz. The size of an interval between two levels in half tones 10ST. The speaker realized the ascending tonal accent in the final syllable of the word you. The height of the tone remains at the same high level. The amount of increase of an interval in the syllable you is from 103-177 Hz. The size of an interval between two levels in half tones 9ST.

When the speaker of English language builds up the mini-question according to the first part, the speaker of Kazakh language uses the definite word combination playing the role of mini-question like ("is not it?", "Do you agree?") and others (Fig. 12). e.g., Haven't you finished it yet?

The speaker realized the ascending tonal accent in the final syllable of the word you. The height of the tone remains at the same high level. The amount of increase of an interval in the syllable you is from 166-298 Hz. The size of an interval between two levels in half tones 10ST. The speaker realized the ascending tonal accent in the last syllable of the word yet. The height of tone remains at the same high level. The amount of the interval increase in the syllable yet is from 194-315 Hz. The size of an interval between two levels in half tones 8ST. The intonation of the disjunctive question in Kazakh and English languages has common features.

Intonation of imperative type of sentences: The kazakh phonetician M. Karaev defines the imperative sentence in the following way: "The imperative sentence is a kind of sentence used to express the demand, the will or the order of the speaker" (Fig. 13). e.g., Tezirek u'yge qayt!.

The speaker realized the ascending pitch accent in the final syllable of the word u'y-ge. The height of tone remains at the same high level. The size of increase of an interval in the syllable ga is from 157-220 Hz. The size of an interval between 2 levels in half tones 6ST. Such sentences sound serious, firm, reserved and often patronizing. Imperative sentences in the Kazakh language are pronounced with the falling tone but in the meaning of order or demand, such sentences have rising tone like the imperative sentences in the English language (Fig. 14). e.g., Ko'rsetpe ko'z jasi'ngdi'!.

The speaker realized the ascending tonal accent in the final syllable of the word ko'rset-pe. The height of the tone remains at the same high level. The amount of

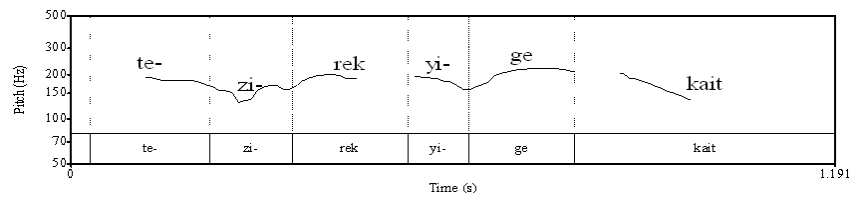


Fig. 13: The statement in realization of female voice of tezirek yige kait showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

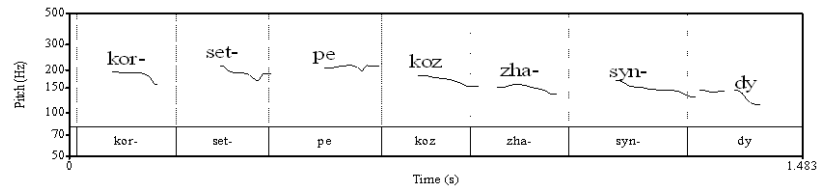


Fig. 14: The statement in realization of female voice of korsetpe koz zhasyndy showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

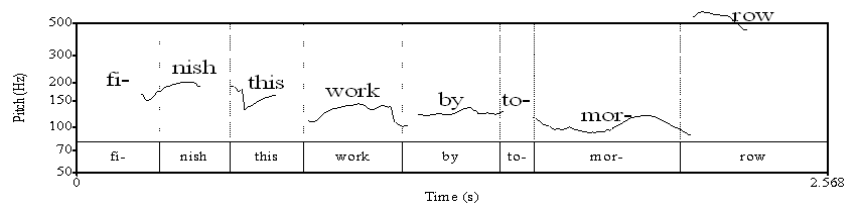


Fig. 15: The statement in realization of male voice of finish this work by tomorrow showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

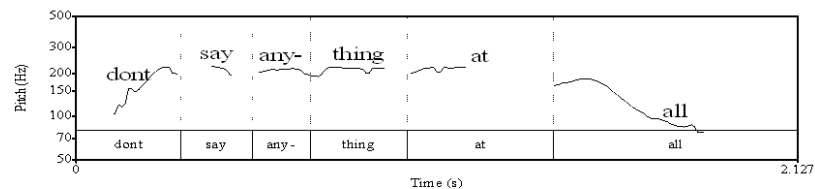


Fig. 16: The statement in realization of male voice of don't say anything at all showing in the text of borders of syllables (vertical lines) and measuring frequency of the main tone in hertz on a logarithmic scale

increase of an interval in the syllable pa is from 167-215 Hz. The size of an interval between two levels in half tones 5ST (Fig. 15). e.g., Finish this work by tomorrow! .

The announcer realized the ascending voice-frequency accent in the final syllable of the word to-morrow. The height of tone remains at the same high level. The amount of increase of an interval in the syllable mor is from 94-119 Hz. The size of an interval between two levels in half tones 2ST. Summing up the results of the comparative analysis of intonation of the communicative types of sentences on the basis of English and Kazakh languages we have come to the point that there are a lot of similar features in intonation used in both languages

though the specific variations of intonation characteristic of a language prevail (Fig. 16). e.g., Don't say anything at all!.

The speaker made an ascending tonal accent in the final syllable of the word don't. The height of the tone remains at the same high level. The amount of increase of an interval in the syllable don't is from 121-220 Hz. The size of an interval between two levels in half tones 10ST.

CONCLUSION

We may say that intonation commonly expresses the attitudes and emotions of the speaker and the latter uses it to influence the attitudes and the behavior of the

listener. Without intonation a statement can often be understood, but the message is tasteless and colorless. Besides that, the incorrect use of intonation can lead to embarrassing ambiguities. On the basis of measurements of voice-frequency accents by means of tone height and the sizes of an interval between the lowest and highest points of the variations of pitch on a logarithmic scale in a relative ST size (half tone), the ranges of communicative types of statements of the Kazakh language are established: narrative, interrogative, imperative and exclamatory statements: 5-8ST (the minimum size), 8-9ST (the average size), 9-13ST (the maximum size); ranges of communicative types of statements in English: narrative, interrogative, imperative and exclamatory statements: 2-7ST (the minimum size), 7-11ST (the average size), 11-20ST (the maximum size) and the forms of pitch accent (the ascending, rising-falling and descending accent) are also described. Thus, the maximum interval between the lowest and highest points of the pitch variation on a logarithmic scale in English is observed 20ST.

ACKNOWLEDGEMENTS

Researchers thank Cecilia Ode for help in the analysis of intonation of the Kazakh language and for valuable remarks and advice when explaining how to use the phonetic Praat program.

REFERENCES

- Armsrong, L.E. and I.C. Ward, 1926. Handbook of English Intonation. Heffer Publisher, Cambridge, England, Pages: 124.
- Baytursynuly, A., 1989. Shygarmalar. Zhazushy, Almaty, Kazakhstan.
- Bolinger, D., 1986. Intonation and its Parts: Melody in Spoken English. Stanford University Press, Stanford, California, ISBN:0-8047-1241-7, Pages: 420.
- Darkulova, K.N., 2012. The main directions of researches on prosody and intonation of the Kazakh language: KAZGU Bulletin. Philology Series, University of Oklahoma, Norman, Oklahoma.
- Hart, J. R. Collier and A. Cohen, 1990. A Perceptual Study of Intonation: An Experimental-Phonetic Approach to Speech Melody. Cambridge University Press, Cambridge, England.
- Jones, D., 1992. An Outline of English Phonetics. Kalyani Publishers, New Delhi, India.
- Karagoysheyeva, D.A., 2008. Experimental and Phonetic Analysis of Intonation of the Kazakh Language. Copy Land, Almaty, Kazakhstan.
- Khasenov, A., 1957. Zhai Soilemder Sintaksisin Okytudyn Keibir Maseleleri. Kaz Meme Publisher, Almaty, Kazakhstan.
- Kingdon, R., 1958. The Groundwork of English Intonation. Longmans, London, England, Pages: 272.
- Ode, C., 2003. Description and transcription of russian intonation (ToRI). Stud. Slavic Gen. Ling., 30: 279-288.
- Syzdyk, R.S.S., 1995. Additional Manual. Sanat Publisher, Almaty, Kazakhstan.
- Zhubanov, K., 1966. Tilly Said Zhonindegi Zerteuler. Gylym Publisher, Almaty, Kazakhstan.