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# PROSODIC FEATURES OF SPOKEN ACADEMIC DISCOURSE

Globalization creates a lot of language situations which have an influence on the increase of the role of multilingualism. This process didn't miss the society of Kazakhstan, the country that is one of the multinational countries in the world, that develops the programme of trilingual education in the country (Kazakh, Russian and English). It didn't just highlight the role of English in the education system of the country, but also strengthened the status of the national language, the Kazakh language for the purpose of preserving national identity. In order to evaluate the influence of the English language as a lingua franca on the academic native language it is necessary to have a detailed description of Kazakh academic discourse. This issue has led to the identification of the purpose of this research as a contribution to a comprehensive study of Kazakh academic discourse and its prosodic features.

In this study we focus on the identification and description of prosodic features of lectures conducted in Kazakh. Our analysis is based on a 300 thousand word corpus of both six long and four brief Kazakh lectures. The variations in pitch range in interaction types typical for academic discourse were studied with PRAAT programme: types of questions. These features of academic discourse were selected and analyzed with PRAAT. The typical prosodic features of Kazakh lectures were identified.

The most frequently used interaction type in the lectures was (rhetorical) questions, in particular Whquestions. Here the pitch changes its height according to the type and intention of the lecturer.

Key words: academic discourse, lecture, Kazakh, prosody, interaction types.

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#### Ауызша академиялық дискурстың просодиялық ерекшеліктері

Жаһандану көптілділік рөлінің артуына әсер ететін көптеген тілдік жағдайларды тудырады. Бұл үдеріс әлемдегі көпұлтты елдердің бірі болып табылатын, үш тілде (қазақ, орыс және ағылшын тілдерінде) білім беру бағдарламасын қолданып жатқан Қазақстан қоғамын да назардан тыс қалдырмады. Бұл елдегі білім беру жүйесіндегі ағылшын тілінің рөлін көрсетіп қана қоймай, сонымен бірге ұлттық бірегейлікті сақтау мақсатында ұлттық тілдің, қазақ тілінің мәртебесін нығайтты. Ағылшын тілінің лингва-франка ретіндегі академиялық ана тіліне әсерін бағалау үшін қазақ академиялық дискурсының егжей-тегжейлі сипаттамасы болуы керек. Бұл мәселе осы зерттеудің мақсатын қазақ академиялық дискурсын және оның просодиялық ерекшеліктерін жан-жақты зерттеуге қосқан үлесі ретінде анықталады.

Бұл зерттеуде біз қазақ тілінде берілетін дәрістердің просодиялық ерекшеліктерін анықтауға және сипаттауға назар аударамыз. Біздің талдауымыз алты ұзақ және төрт қысқаша қазақ дәрістерінен тұратын 300 мың сөзден тұратын корпусқа негізделген. Академиялық дискурсқа тән өзара әрекеттесудің түріндегі биіктік диапазонындағы вариациялар PRAAT бағдарламасымен зерттелді: сұраулы сөйлем түрлері. Академиялық дискурстың бұл ерекшеліктері PRAAT көмегімен таңдалды және талданды. Қазақ дәрістерінің типтік просодикалық ерекшеліктері анықталды.

Дәрістерде жиі қолданылатын өзара әрекеттесу түрі (риторикалық) сұрақтар, атап айтқанда Wh-сұрақтар болды. Мұнда тон биіктігі оқытушының интенциясына және сұрақ түріне қарай өзгереді.

Түйін сөздер: академиялық дискурс, дәріс, қазақ тілі, просодия, өзара әрекеттесу түрлері.

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# Просодические особенности устного академического дискурса

Глобализация создает множество языковых ситуаций, которые оказывают влияние на повышение роли многоязычия. Этот процесс не обошел стороной и общество Казахстана, страны, которая является одной из самых многонациональных в мире, и которая практикует программу трехъязычного образования в стране (казахский, русский и английский языки). Это не только подчеркнуло роль английского языка в системе образования страны, но и укрепило статус государственного языка, казахского языка с целью сохранения национальной идентичности. Для того чтобы оценить влияние английского языка как лингва франка на академический родной язык, необходимо иметь подробное описание казахского академического дискурса. Этот вопрос привел к определению цели данного исследования как вклада во всестороннее изучение казахского академического дискурса и его просодических особенностей.

В этом исследовании мы сосредоточимся на выявлении и описании просодических особенностей лекций, проводимых на казахском языке. Наш анализ основан на корпусе из 300 тысяч слов, состоящем как из шести длинных, так и из четырех кратких лекций на казахском языке. С помощью программы PRAAT были изучены различия в тональности при типах взаимодействия, характерных для академического дискурса: виды вопросов. Эти особенности академического дискурса были отобраны и проанализированы с помощью PRAAT. Были выявлены типичные просодические особенности казахских лекций.

Наиболее часто используемым типом взаимодействия на лекциях были (риторические) вопросы, в частности вопрос-ответ на вопрос. Здесь тон меняется в зависимости от типа и намерений лектора.

**Ключевые слова:** академический дискурс, лекция, казахский язык, просодия, типы взаимодействия.

#### Introduction

Since this paper intends to describe characteristics of academic discourse, a definition of this term is in order. Academic discourse has been the object of numerous scientific studies. However, in these studies rather diverging definitions of the term 'Academic Discourse' are employed. Russian studies (Burmakina, 2014; Zubkova, 2009; Kulikova, 2006) consider academic discourse as communication between members of higher educational institutions while European researchers (see: Krul, 2015) address it as a communication in the academic world in general, without distinguishing academic from scientific communication. The term academic discourse is often studied alongside with academic literacy, the definition of which starts from an idea of the typicality of academic discourse (Patterson & Weideman, 2013).

In this paper we adopt the definition given by Kulikova (2006) and Burmakina (2014) namely, that academic discourse is a professionally oriented interaction of members of the academic world in higher educational institutions, since our emphasis is also on academic institutional discourse.

Zubkova (2009) does not consider academic discourse as a type of pedagogical discourse. In

her opinion school pedagogical discourse concerns the schools unlike with academic discourse, even though they have the same common purpose – to convey knowledge. At the same time Karasik (2000) proposes criteria that are used to determine a discourse type, such as participants, chronotope, purpose, values, strategy, material, diversity and genre of precedent texts (manuals, course books, books, methodological rationale, scientific works etc.) according to which he shows the difference between school pedagogical discourse and academic discourse. In Russian, two separate terms are used for discourse in secondary schools and institutions of higher education, respectively.

Burmakina (2014, 11) refers to the definition of the noun academy that is interpreted as "higher scientific or artistic institution" as well as "higher educational institution", so she defines academic discourse as "communication between the members of academic society particularly scientists-researchers, teachers and students, according to the vectors of vertical and horizontal interaction within the framework of appropriate communicative genres", while from the point of Zubkova's (2009, 28) view "professional pedagogical communication at higher educational institutions directed at training specialists of high qualification".

In the Anglo-Saxon scientific world the term academic discourse means any kind of communication in the academic world. However, on closer inspection, not all types of communication realized within educational institutions can be regarded as academic discourse, since the speech of teachers does not always concern academic problems but questions of a more organizational nature, whereas the speech of scientists and researchers at conferences could better be categorized under a distinct label, such as 'scientific discourse'. Therefore it can be argued that the Anglo-Saxon definition is too broad.

Discourse is understood as an act of communication, therefore, it has, by necessity, participants. In academic discourse, then, students and teachers are the typical participants. The communication of students can also be attributed to academic discourse, but only as long as the communication takes place within the classroom domain. Other types of communication between students, for example, of a personal or household character, cannot be considered academic discourse (Zubkova, 2009, 29). This may be justified with the viewpoint of Khutyz (2015) who defined 'academic discourse' as a product of professional interaction in academic sphere. Academic discourse combines the features of scientific discourse, where textbooks and materials verbalize scientific knowledge, and educational discourse interaction between participants with unequal status.

Analyzing the opinions of Polish scientists Krul (2015) concludes that the term 'academic discourse' hasn't found an exact definition yet. Krul proposes that one should differentiate between the types of academic discourse according to the criteria of participants of communicative acts as communication between teachers as scientific academic discourse, teachers and other workers of Higher educational institutions – professional academic discourse, teachers and students – didactic academic discourse. Yet in another study Chubarova and Rezepova (2016) offer the narrowest definition. According to them, the term academic discourse should be defined as: a type of scientific and institutional discourse the purpose of which is to convey information to students.

Here we focus on academic discourse in lectures, since lectures are a distinct but important genre in institutional academic discourse. Within this lecture genre, we identified five interaction types that occurred regularly in the lectures and that exhibit the most prominent characteristic prosodic features: corrections, paraphrasing, repetitions, parenthetical insertions and questions (Antonio& Rahmen Cassim, 2012). In the study under consideration, the fo-

cus is directed to the analysis of questions and their prosodic peculiarities in academic lectures.

#### Materials and methods

The research corpus used in this paper consists of ten university lectures in Kazakh, with a total length of about 300 minutes. Five lectures were recorded at al-Farabi Kazakh National University, two of them were taken from the personal archive of lecturers and other three ones are the archive of Abay Institute at al-Farabi KazNU. The transcription has a total word count of just over 315000 words. Subjects are university professors. The lectures represent a formal register. The lectures are taken from different fields of science: Linguistics (4 lectures), Literature (2 lectures), Law (2 lectures), Biology (2 lectures). Unfortunately there is no Corpus of Academic Spoken Discourse in the Kazakh language as Michigan Corpus of Academic Spoken English (MI-CASE), British Academic Spoken English (BASE) corpus. But we hope that the research material of the work can give a start to the creation of such corpus in the language.

Before description of the research process we decided to say a few words about the style of lectures chosen for this study. As it was mentioned in the section of theoretical framework there are three styles of lecturing. According to the materials of the research in a form of lectures we defined three styles that were used. The first is read-aloud lectures where lecturers read from the notes (L5, L8), the second is spontaneous or well-prepared lectures without using the notes (L2, L3, L4, L10), and the last one mixed lectures (L1, L6, L7, L9) where a lecturer uses the notes partly. The last lecture style is peculiar mostly for the CIS countries that had a traditional way of conveying a lecture reading and repeating the parts for several times to dictate it for the students to make notes. We realize that defining the style of lectures is very significant for prosodic patterns analysis.

The lectures were coded in the research work as L (that means Lecture) and the number which is given according to the sequence of transcribed lectures (e.g. L1, L2 ...). It should be noted that all lecturers and the audience the lectured were directed to were native speakers of the Kazakh language.

Each lecture was transcribed and segmented into fragments that express the features of academic discourse that are under analysis as corrections and paraphrasing, repetition, parenthetical insertions and questions. The transcription of the lectures is not extremely detailed, as we did not seek studying

all aspects of prosody. Our aims is in the analysis of just a realization of pitch contours with the help of *Praat* programme (Boersma & Weenink, 2016). The transcriptions were necessary for us in finding the samples of features of academic discourse and study the context these units were used in. As there is no device that can be used for appropriate realiza-

tion of transcription of the texts in the Kazakh language we had to transcribe it manually putting each word on paper.

The fragments for the analysis were selected from the audio materials using their transcription. The fragments were the samples of question types (See Table 1.).

**Table 1** – The data on the features of Kazakh lectures

| Features  |                  | Found | Selected | Inaudible |
|-----------|------------------|-------|----------|-----------|
| Questions | Yes/No questions | 97    | 91       | 6         |
|           | Wh-Questions     | 429   | 412      | 17        |
|           | Tag Questions    | 123   | 113      | 10        |

#### Literature review

In this paper, we take lectures as the basic genre of analysis. In the work of Zubkova (2009) "Constitutive features of academic discourse" the types of genres of academic discourse as lecture, seminar, laboratory, practical lessons, colloquium, examination, test, consultation and educational and industrial practice are presented and this justified once again the choice of lecture as a genre of academic discourse. Several studies such as Martin del Pozo (2016) and Tikhomirova (2015) emphasize the centrality of the lecture genre within academic discourse. Considering the significance of study a lecture genre the first researcher considers discourse markers and structure of lecture, while the last one pays more attention to electronic lecture as a newly forming genre of academic discourse. Having reviewed several works devoted to the study of spoken academic discourse as Farr (2003) about the various linguistic devices employed by both parties - teachers and students and how they are engaged in listenership, Chaudron and Richards (1986) on the influence of the categories of discourse markers on comprehension of lectures, Adel (2008) on expert attribution in spoken academic lectures in comparison with academic writing, we made a point of researching lecture and its prosodic features within spoken academic discourse which are poorly researched as a well as the issues considered in the works listed before.

The fact that the number of works devoted to the study of lecture as a genre of academic discourse is increasing, suggests its central position within academic discourse. The lecture is considered the main genre of academic speech: the other genres of academic discourse are derived from the lecture genre. Academic discourse takes place within an institution of higher education, where students get knowledge on a topic from the lecture conveyed and use it in other genres of academic discourse, such as seminar, examinations, independent work etc. Fortanet (2005), in his classification of academic discourse genres, emphasizes the significance of the lecture among other classroom genres of spoken academic discourse.

Fortanet (2005) divides spoken academic discourse into three main groups of genres according to their purpose and assigns the first place among classroom genres to lectures. The authors of the present study, too, consider the lecture as the primary genre of spoken academic discourse, because it is mainly through lectures that the knowledge and directions of lecturers are conveyed to students. This is, at least the case in the practices in Kazakhstani higher educational institutions. The fact that in Kazakhstan attendance to lectures is checked on, as well as the fact that students are evaluated by lecturers, indicates that the role of lecture is more important than other genres.

The lecture and its various features have been studied from different perspectives. For example, Chang (2012) examined the interdisciplinary use of questions by professors in English lectures as a genre of academic spoken discourse. Camiciottoli (2008) focuses on questions as a main interactional tool in spoken lectures in comparison with the written text materials. Interrogatives drew the attention of Hyland (2002), who highlights its importance, but he discusses it in the context of academic writing

as a tool bringing the interlocutor into a discourse arena. The present paper, however, targets spoken discourse. Flowerdew and Miller (1996) study the lecture situation in a second language on the sample of lecturing of native speakers of English to ethnic Chinese students in Hongkong, and its cultural aspects. Studies on the analysis of the lecture as an academic discourse genre address various aspects of it: its structure (Crawford Camiciottoli, 2004; Martin del Pozo, 2016), its functions (Deroey & Taverniers, 2011), the effect of discourse markers on structuring the lecture, its comprehensionibility. (Fortuno, 2006; Cabarrão, Moniz, Ferreira, Batista, 2015; Christodoulidou, 2011). I am not aware of studies devoted to the prosodic peculiarities of the lecture in general, but to date, no studies concerning this issue in Kazakh lectures have been carried out.

Nevertheless, based on our observations of the data, we propose that pitch contour is an important tool for a lecturer, by which (s)he can exert influence on the addressee in the academic discourse. Pitch contour is important in regulating and controlling the audience. The variation of pitch of a lecturer is the main tool for effectuating topic comprehension, replying to the reactions of the audience, and for checking if the information is acquired or not (Gumperz, 1982; Chafe, 1988).

In studying academic discourse, and lectures in particular, the main features of spoken discourse distinguishing and highlighting a definite genre from others should be focused on. Antonio and. Rahmen Cassim (2012), in their work devoted to the investigation of coherence relations in academic spoken discourse, propose that interaction types such as paraphrasing, correction, repetition and parenthetical insertion are frequently encountered in/ a universal feature of university lectures. These widely used interaction types come with prosodic features that differentiate them from one another. According to Antonio and Rahmen Cassim, these phenomena contribute to the "coherence of the speech" and as such plays an important role for the lecturer and the audience when it comes to delivering and comprehending a lecture.

Admitting the significance of the study of the above-mentioned phenomena, we also decided to include questions into the list of relevant features. Questions, we would like to argue, play an important role in keeping coherence in spoken academic discourse. As Van Dijk (1980, p. 52) suggests: "A discourse may be briefly defined as an utterance type of natural language which realizes a sequence of sentences which satisfies a number of proper-

ties ... the semantic property of coherence" questions are observed to contribute to coherence of a speech.

The questions will be the main object of analysis in this paper. The technique applied in academic discourse, mostly in spoken academic discourse, with the objective of attracting the attention and raising the interest of listeners (students) for the topic discussed, is questions. Hyland defines the use of interrogatives in academic speech as "the strategy of dialogic involvement par excellence, often functioning to express an imbalance of knowledge between participants but also working to create rapport and intimacy" in one of his studies on written academic discourse (Hyland, 2002, p. 530). In spoken academic discourse, as a "tool used by teachers to activate and facilitate the learning process" (Camiciottoli, 2008, p. 1216) it should have more functions than in writing. If in written discourse the only type of widely used interrogative rhetorical, which is obvious, since the audience cannot reply on the spot. They are then answered by the author himself. By contrast, in spoken academic discourse the use of different types of questions, rhetorical and nonrhetorical ones, is a frequent phenomenon.

## Results and discussion

In the analysis, questions posed by students were not taken into account. At the same time questions consisting of only a single word (e.g. A? (Its equivalent in English may be the question word 'What?'. In Kazakh it is used for asking to repeat in case of mishearing and lack of comprehension), Ia? (Yes? It is used to get an approval for the stated information)) were not considered. So in the materials of the study consisted of lectures in the Kazakh language three groups of questions were observed.

- a. Wh-questions
- b. Yes/No questions
- c. Tag questions

All three types of interrogative sentences are widely used almost in all lectures analyzed. From the data/our analysis it appears that most of the interrogative sentences occurring in the lectures are rhetorical. Only a few of them (80 out of 649 questions) are non-rhetorical and require answers. They are oriented to giving content comprehension or instruction.

Figure 1 below is an example that was taken from the lecture of Literature (L5) about the works, especially the translations, of the Kazakh poet Abai Kunanbayev.

- (1) ... неге аударған?
- ... nege audarğan?
- ... why translatePast

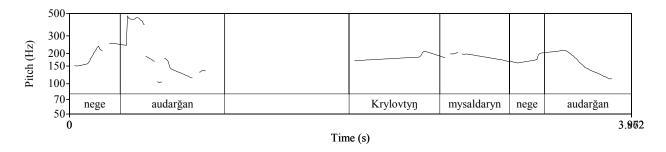
Крыловтың мысалдарын неге аударған?

Krylovtyn mysaldaryn nege audarğan? ...

KrylovGEN fable Pl POSS3ACC why translate-Past?...

'Why did he translate? Why did he translate Krylov's fables?'

Here the speaker asks questions such as 'Why did (he) translate?' (7), 'Why did (he) translate the fables of Krylov?'. The lecturer repeats the Whquestion twice in order to attract the attention of the students to the importance of Abai's choice of Krylov's fables. These interrogatives are followed by the answer given by the lecturer himself. The students were not expected to answer. This tool is frequently employed in lectures.



**Figure 1** – Sample of Wh-question realized (L5) in male voice. Horizontally time in seconds is indicated, vertically – frequency of pitch in Hz on a logarithmic scale

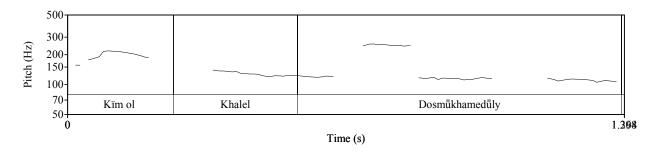
In the Kazakh language the intonation contour of the Wh-questions depends on the position of the question word as the question word is considered as a nuclear of the expression. Rising-falling tone is characteristic for wh-questions in the Kazakh language. We can clearly see it in the following example where the position of the question word changes. According to the change of pitch it is obvious that the speaker highlights the question word 'nege' in the first part – from 139.2 Hz to 263.6Hz. The interval between two levels constitutes 11 ST, while in the second part this question word is less prominent showing the rise of pitch from 164.5 Hz – 173.6 Hz with the interval in 1 ST. This example once more demonstrates that in repetition the first part is more prominent than the following one, whereas in Kazakh the final tone usually falls on the last word of a sentence and the Wh-questions end with falling tone.

As Bazarbayeva (2008, p. 116) states that the question words supposing an answer in rhetorical questions have a position next to the predicate in the sentence and are marked with a logical accent, pronounced in a low tempo.

If we compare the use of Wh-questions of a rhetorical nature with Wh-questions to which an answer is expected, we get the following picture (Figure 2). The lecturer (L8) of Linguistics talks in his lecture about the role in some topical issues of the Kazakh language, such as translating words and the identification of mistakes made in online communication. In the course of the lecture the speaker uses a lot of questions, only a few of them are of non-rhetorical character. One example of a non-rhetorical question is the following:

(2) ... Кім ол Халел Досмұхамедұлы? ... ... Kïm ol Khalel Dosmükhamedüly? ... ... Who he Khalel Docmukhameduly? ... 'Who is he Khalel Docmukhameduly?'

This example is interpreted as "Who is he Khalel Dosmukhameduly?". This question was asked the students as the lecturer was talking about one of his works titled "Kazak-Kyrğyz tilderindegi singarmonism zaŋy" (Vowel harmony law in the Kazakh-Kyrgyz languages) and mentioned his name. He also wanted to check if the students knew who he was. In the Kazakh language the question word who is 'kim', but in this expression the word 'kim' is used with the word 'ol' which means he (she/it) and together give the meaning of who. This is a feature of spoken language, rather than written language.



**Figure 2** – Sample of Wh-question realized (L9) in male voice. Horizontally time in seconds is indicated, vertically – frequency of pitch in Hz on a logarithmic scale

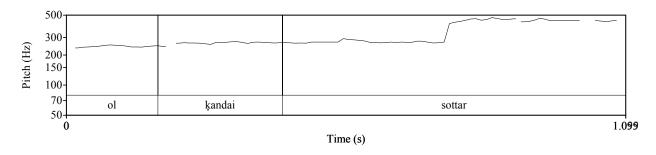
The given example is pronounced with falling pitch and the pitch rises on the question word up from 168.1 Hz to 217.6 Hz comprising the interval in 4 ST then gradually falls down until the rise&fall on the syllable '-dos' which is followed by a low level pitch. The pictures of both cases (Figure 1 and Figure 2) are rather similar, except for the pause made after asking the question. In rhetoric questions the pause is not as long as in non-rhetoric questions. This may be explained by the lecturer's anticipation of students' reaction.

While studying the examples of non-rhetoric Wh-questions one case drew our attention. This was

taken from L6, about a cassation instance in Kazakhstani law system.

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(3) ... Ол қандай соттар? ... ... Ol kandai sottar? ... ... That what courtPL? ... 'What courts are they?'
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Explaining about the new Procedural Code the lecturer mentions that all cases are heard at a first-instance court. Then the question under consideration comes "Ol kandai sottar?" What courts are they?.'



**Figure 3** – Sample of paraphrasing realized (L6) in female voice. Horizontally time in seconds is indicated, vertically – frequency of pitch in Hz on a logarithmic scale

This picture shows that even if this is a Wh-question that has falling pitch at the end of the expression the lecturer used rising pitch on the last word 'sottar' (courts) and kept this pitch on the level between 469.6 Hz – 446.4 Hz which may occur when the speaker wants to continue the utterance or expects someone else to do it. The students answered this question, which shows that they have already mastered/processed this information. In almost all cases after getting an answer of the students to the ques-

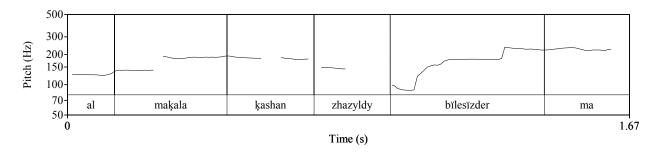
tion the lecturer repeats the answer again or gives the answer himself.

The next type of interrogative sentence is yes/no questions. Yes/No questions are used in the lectures because the presence of a live audience allows lecturers to interact with students. Not all of them always require verbal answer from the students, in most cases just silence or gaze or non-verbal expressions of the students suffices as a reaction for a lecturer.

- (4) ... ал мақала қашан жазылды, білесіздер ме? ...
- ... al maķala ķashan zhazyldy bïlesïzder ma? ... ... and article when write Past Pass know POL PTC
- '... and when the article was written, do you know?...'

This example was taken from the lecture of Linguistics (L9) devoted to the problems of the modern Kazakh language. It may be interpreted as 'Do you know when the article was written?'. In

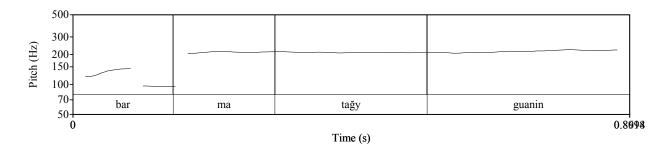
the Kazakh language Yes/No questions are formed with the help of interrogative particles —ma, -me, -pa, -pe, -ba, -be at the end or after the main verb or the suffixes as —my-, -mi-, -by-, -bi-, -py-, -pi-which are added to the main verb (barğanbysyŋ — have you gone). The examples of yes/no questions formulated with the help of suffixes haven't been encountered in the corpus. In the example given above the particle comes at the end of the question and is pronounced with rising tone. The pitch rises from the main verb (80 Hz to 226.1 Hz). It can be observed in the Figure 10.



**Figure 4** – Sample of Yes/No question realized (L9) in male voice. Horizontally time in seconds is indicated, vertically – frequency of pitch in Hz on a logarithmic scale

Example (5) below is taken from L4 on Biotechnology, where the lecturer explains about the method of DNA sequencing developed by Allan Maxam and Walter Gilbert. In English it may be formulated as "Is there any more guanine?"

(5) ... бар ма тағы гуанин? ... bar ma tağy guanin? ... ... be3 PTC else guanine? ... is there else guanine? ...



**Figure 5** – Sample of Yes/No question realized (L4) in male voice. Horizontally time in seconds is indicated, vertically – frequency of pitch in Hz on a logarithmic scale

Whereas in the previous example (Figure 5) the pitch rises from the main verb coming before the interrogative particle *ma* from 78.23 Hz to 240 Hz, in the following Yes/No question, extracted from the

lecture of Biotechnology (L4) the change of pitch is from the verb bar (to be – is) from 115.6 Hz to 215.6 Hz and it preserves this level until the end of the expression. The size of the interval between the

levels in the first case is 19 ST while in the second one it is 10 ST. It shows that in using Yes/No questions lecturers mostly raise their pitch of voice very high. This can also be inferred from the considerable interval between the levels.

The following yes/no question was encountered frequently in the data, and serves exclusively to assess whether students have understood the topic or not. This question is 'Tüsïnïktï me?', 'Tüsïndïnïzder me?' (Is it clear? or Have you understood?) or in the form of an alternative question 'Tüsïnïktï me, zhok pa?' (Is it clear or not? or Have you understood or not?).

In the process of analyzing the lectures delivered in the Kazakh language we came across cases where the majority of lecturers used a sentence structure in which the first part is given in the narrative form, but ends with the words 'ija' or 'da' ('da' is the Russian equivalent of the word 'ija') ('yes?' 'right?') raising the pitch of voice. These words are used in cases where a speaker wants to witness the positive reaction of students towards the given information, or, in other words, to be ap-

proved, and to check if the students have understood the material. These can be classified as tag questions.

(6) Демек бұл әсемпаз деген сөздің ар жағындағы

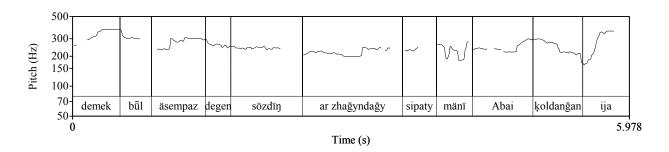
Demek bül äsempaz degen sözdin ar zhağyndağy Consequently this asempaz such wordGEN deep

сипаты, мәні Абай қолданған, иә? sipaty, mäni Abai koldanğan, ija?...

featurePOSS3, meaning POSS3 Abai usePAST, yes...?

'Consequently it was Abay who used the word 'asempas' in its deepest quality, its deepest meaning, yes?...'

Example (6) can be interpreted as "Consequently, the deepest feature, meaning of this word 'äsempaz' was used by Abai, wasn't it?". Here the speaker talked about the linguistic features of Abai's works, particularly the initial meaning of the words 'önerpaz and äsempaz'.



**Figure 6** – Sample of tag question realized (L2) in female voice. Horizontally time in seconds is indicated, vertically – frequency of pitch in Hz on a logarithmic scale

As we see in the Figure 6 the first narrative part of the expression was pronounced with falling pitch at the end, but the change is noticed in the second part where the pitch of voice was raised from 86.31 Hz up to 359.1 Hz. The size of the interval between the levels is 24ST. All questions of this formation were considered as tag questions. Except for them there are some tag questions used with the words 'solai emes pe?' and 'solai ma?'.

Other types of questions that were encountered in the data where 'alternative questions' and questions that were formed with intonation alone. However, their number was so low that they were not taken into consideration: they appeared not

to be widely used tools in spoken academic discourse.

# Conclusion

In this article we studied lectures as a fundamental type of academic discourse. In the course of observation questions were identified. These phenomena occurred frequently in the lectures and were therefore relevant to be analyzed. It was argued that they can be considered prominent features of spoken academic discourse. We have focused on the prosodic features of those interaction types, as they occurred in the speech of lecturers delivering a lecture.

The corpus, which was compiled for this study, consisted of ten lectures of diverse disciplines, such as Linguistics, Literature, Biology and Law, and which were of various length (6 lectures – 60 min, 4 lectures – 20-25 min), and were delivered in Kazakh, by native speakers of Kazakh. The audience the lectures were oriented to were native Kazakh speaking undergraduate students.

The most widely used tool by lecturers is interrogative sentences. Three types of questions were distinguished Wh-, Yes/No and tag questions. Questions are used to check the comprehension of students and draw their attention on the topic discussed. These can be either rhetorical or non-rhetorical. The lecturers in the corpus usually prefer to use question words at the end of a Wh-question, by which they highlight the part the students should memorize, acquire or even clarify. The pitch of voice rises on the question word and falls at the end of the question. Sometimes lecturers may keep the pitch level even at the final part, in which case it is a sign to the students that the lecturer wants to continue speaking.

The majority of Wh-questions are rhetorical, in the sense that the lecturer doesn't expect an answer but gives it himself. The Yes/No questions are characterized by rising pitch. The largest number of Yes/No questions belongs to the questions such as 'Did you understand?' or 'Is it clear?'.

Tag questions often consist of either *ia* 'yes' or *da* 'yes' used after the narrative sentences and have the rising pitch which is characteristic of tag questions. Therefore, these questions were also considered as tag question in this paper. The biggest size of the interval between the levels (24 ST) was traced in pronouncing the tag question. The smallest interval between the levels was peculiar to the Wh-questions (1ST). In general the medium size of the interval between the levels varies between 10-11 ST. The individual style and peculiarities of the lecturers shouldn't be ignored.

The results of this study may contribute to the development and extension of the scope of prosodic research within the Kazakh language, since the study of phonetic and phonological features of Kazakh is still in its infancy. The results of this study, as well as the corpus that was compiled on behalf of it, may be of use in Kazakh speech synthesis.

In this study we observed that tempo and pause in the academic lectures are diagnostic tools by which spontaneous speech may be distinguished from read passages. It would be interesting to establish to what extent these features are typical for lectures. A contrastive analysis could be conducted on the materials of the Kazakh and English lectures. Moreover, other academic genres could be studied and provide comparative material. This may be pursued in future studies.

# References

Adel, A. (2008). "What uh the folks who did this survey found": expert attribution in spoken academic lectures. Nordic Journal of English Studies, Vol. 7 (3), P. 83-102.

Bazarbayeva, Z. (2008). Kazahskaja intonacija [Kazakh intonation]. Almaty. Daik-Press (In Russian)

Boersma, P., Weenink, D. (2016). Praat: doing phonetics by computer. Version 6.0.20.

Burmakina, N. (2014). Diskursivno-integrativnye i kul'turno-konvencional'nye harakteristiki akademicheskoj kommunikacii [Discursive-integrative and cultural-conventional characteristics of academic communication]. Thesis for a candidate degree in philological sciences. Krasnoyarsk, 216. (In Russian)

Cabarrão, V., Moniz, H., Ferreira, J., Batista, F. (2015). Prosodic classification of discourse markers. Proceedings of the 18th International Congress of Phonetic Sciences (ICPhS 2015), the University of Glasgow, Glasgow, UK, P. 1-5

Chafe, W. (1988). Linking intonation units in spoken English. In J. Haiman, S. A. Thompson (Eds.), Clause Combining in Grammar and Discourse (P. 1-28). John Benjamins Publishing Company, http://dx.doi.org/10.1075/tsl.18.03cha

Chang, Y. (2012). The use of questions by professors in lectures given in English: influences of disciplinary cultures. English for Specific Purposes, Vol. 31 (2), P. 103-116 https://doi.org/10.1016/j.esp.2011.08.002

Chaudron, C., Richards, J. (1986). The effect of discourse markers on the comprehension of lectures. Applied Linguistics, Oxford: Oxford University Press, Vol. 7 (2), P. 113-127. http://dx.doi.org/10.1093/applin/7.2.113

Christodoulidou M. (2011). Lexical markers within the university lecture. Novitas-ROYAL (Research on Youth and Language), Vol. 5 (1), P. 143-160

Chubarova, Y., Rezepova, N. (2016). Discourse elements in English academic discourse. Journal of language and education, Vol. 2, 1, P. 56-64. Retrieved from http://old-ojs.hse.ru/index.php/jle/article/view/22877

Crawford Camiciottoli, B. (2004). Interactive discourse structuring in L2 guest lectures: some insights from a comparative corpus-based study. Journal of English for Academic Purposes, Vol. 3 (1), P. 39-54. http://dx.doi.org/10.1016/S1475-1585(03)00044-4 Deroey, K., Taverniers, M. (2011). A corpus-based study of lecture functions. Moderna Sprak, Vol. 105 (2), P. 1-22

Farr, F. (2003). Engaged listenership in spoken academic discourse: the case of student–tutor meetings. Journal of English for Academic Purposes, Vol. 2 (1), P. 67-85. http://dx.doi.org/10.1016/S1475-1585(02)00035-8

Flowerdew, J., Miller, L. (1996). Lectures in a second language: Notes towards a cultural grammar. English for Specific Purposes, Vol. 15 (2), P. 121-140. http://dx.doi.org/10.1016/0889-4906(96)00001-4

Fortanet Gomez, I. (2005). Honoris Causa speeches: an approach to structure. Discourse studies: SAGE Publications. London: Thousand Oaks, CA and New Delhi. Vol. 7(1), P.31-51. http://dx.doi.org/10.1177/1461445605048766

Fortuno, B.B. (2006). Discourse markers within university lecture genre: a contrastive study between Spanish and North-American lectures. PhD thesis. Castellon. Jaume I University.

Gumperz, J.J. (1982). Discourse strategies. Cambridge: Cambridge University Press http://dx.doi.org/10.1017/CBO9780511611834

Hyland, K. (2002). What do they mean? Questions in academic writing. Text and Talk, Vol. 22 (4), P. 529-557. http://dx.doi.org/10.1515/text.2002.021

Karasik, V. (2000). O tipah diskursa [About types of discourse]. Collection of scientific papers: Linguistic identity: institutional and personal discourse. Volgograd. P. 5-20. (In Russian)

Khutyz, I. (2015). Akademicheskij diskurs: Kul'turno-specificheskaja sistema konstruirovanija i transljacii znanij [Academic discourse: cultural-specific system of construction and translation of knowledge]. Moscow. Flinta.(In Russian)

Krul, M. (2015). Academic discourse in Polish scientific world image (review of special literature). Materials of International Roundtable: Academic discourse and discourse approach in foreign language teaching [Electronic resource]. Minsk. BSU.

Kulikova, L. (2006). Kommunikativnyj stil' v mezhkul'turnoj paradigme [Communicative style in intercultural paradigm]. Monograph. Krasnoyarsk. KSPU. (In Russian)

Michigan Corpus of Academic English (MICASE) www.quod.lib.umich.edu/m/micase/

Patterson, R., Weideman, A. (2013). The typicality of academic discourse and its relevance for constructs of academic literacy. Journal for Language Teaching, Vol. 47 (1), P. 107-123. http://dx.doi.org/10.4314/jlt.v47i1.5

Thompson, S.E. (2003). Text-structuring metadiscourse, intonation and the signalling of organisation in academic lectures. Journal of English for Academic Purposes, Vol. 2 (1), P. 5-20. http://dx.doi.org/10.1016/S1475-1585(02)00036-X

Tikhomirova, E. (2015). Electronic lecture as a forming genre of academic discourse. Materials of International Roundtable: Academic discourse and discourse approach in foreign language teaching [Electronic resource]. Minsk: BSU, P. 41-42

Van Dijk, T.A. (1980). The semantics and pragmatics of functional coherence in discourse. In: A. Ferrara (ed.) Speech acts theory: Ten years later. (P. 49–65). Special issue of Versus (Milano).

Zubkova, Y. (2009). Konstitutivnye priznaki akademicheskogo diskursa [Constitutive features of academic discourse]. Proceedings of VSPU, Vol. 5, P. 28-32.(In Russian)

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