ZÁPADOČESKÁ UNIVERZITA V PLZNI

FAKULTA PEDAGOGICKÁ
KATEDRA ANGLICKÉHO JAZYKA

ANGLICKÁ INTONACE A JEJÍ FUNKCE V POROVNÁNÍ S ČESKOU INTONACÍ
BAKALÁŘSKÁ PRÁCE

Jakub Šochman
Anglický jazyk se zaměřením na vzdělávání

Vedoucí práce: PhDr. Naděžda Stašková, Ph.D.

Plzeň, 2015

THE UNIVERSITY OF WEST BOHEMIA

FACULTY OF EDUCATION
DEPARTMENT OF ENGLISH

ENGLISH INTONATION AND ITS FUNCTION IN COMPARISON TO CZECH INTONATION
UNDERGRADUATE THESIS

Jakub Šochman

English language with focus on education

Supervisor: PhDr. Naděžda Stašková, Ph.D.

PILSEN, 2015

Prohlašuji, že jsem bakalářskou práci vypracoval samostatně s použitím uvedené literatury a zdrojů informací.

Plzeň, 15.4. 2015

....
vlastnoruční podpis

ORIGINÁL ZADÁNÍ

ABSTRACT

The undergraduate thesis from the area of phonetics and phonology is interested in qualities and functions of English intonation compared to Czech intonation. The thesis is composed of theoretical and practical part. Theoretical part describes elemental concepts from the area of intonation (e.g. the tone unit, tonic stress), furthermore its functions and main qualities. The whole topic comes under the field of phonetics and phonology and therefore it is important to explain this terminology at the beginning of the thesis.

Practical part includes the comparison of English and Czech intonation based on recordings of Czech students studying English language. Recordings contains a text read in English and using these recordings we will analyze main differences between Czech and English intonation. The purpose of this research is to answer the question, whether Czech language as a native one has an impact on Czech speakers and their intonation in English speech. Parts of the research are preparation and formulation of hypotheses, determining a sample of participants of the research, realization of the research, collection and analysis of data, comparison of collected data with hypotheses.

Keywords: intonation pattern, tonic stress, tone unit, tonic syllable

Content

Abbreviations

F	fall
F-R	fall-rise
H	head
IP	intonation pattern
PH	pre-head
R	rise
R-F	rise-fall
T	tail
TS	tonic stress
TSL	tonic syllable
TU	tone unit

Introduction

The following bachelor's thesis deals with intonation in Czech and English and is divided into two parts - the theoretical part and the practical part. This division is made for one purpose - first we have to explain what we are going to deal with and then we will transform theoretical knowledge in practical use.

The theoretical part is divided into four chapters. In the first chapter English and Czech intonation systems are described and compared. We explain definitions of individual units, list possible degrees of stress and also deal with the structure of the tone unit as one of the important parts of the practical part. The second chapter is interested in intonation patterns, again both in English and in Czech. Possible intonation patterns are described and examples are given to understand the issue better. The third chapter deals with four possible functions of intonation and we will again deal with intonation patterns as a part of one of these functions. The last chapter of the theoretical part will describe the theory of functional sentence perspective, because it also deals with stress, intonation and other prosodic factors.

The practical part consists of two fields of our interest - the tonic stress and intonation patterns. In this part, we analyze recordings of Czech students who are studying English language. These recordings are dialogues, which are analyzed from two points of view - where the Czech students put tonic stress and where they make mistakes the most and which intonation patterns do they use in different types of sentences, whether they use them correctly and if there is an influence of Czech intonation. In this part we also describe how the research was done, which dialogue we chose and why, what do we expect from the research and it is finished by a conclusion, where we will summarize what we found out with a possible solution how to improve using of English stress and intonation by Czech students.

The main reason of choosing this topic is my interest in this issue. English as a language with fixed word order and no flexion is more melodic than Czech and I would like to know if there is a way how this is projected into English of Czech students. I already made some assumptions, which are described in details in practical part, and I want to know if this research confirms them or denies.

Theoretical Part

1 Intonation systems

The following chapter is dealing with comparison of Czech and English intonation systems. We will describe essential concepts and also point out differences between Czech and English systems.

1.1 Intonation system in English

The hierarchy of English intonation system consists of six levels (Roach, 1991, p. 145) as follows:

phoneme → syllable → foot → tone unit →utterance →speech

Phoneme is "the contrastive units of sound which can be used to change meaning" (Collins & Mees, 2003, p. 10). To give an example, in words *men* and *pen* there are two different phonemes /m/ and /p/, which changes the meaning. Both of these words are composed of three phonemes, men - /m/, /e/, /n/ and pen - /p/, /e/ and /n/.

The syllable is defined as "a unit potentially larger than the phoneme but smaller than the word" (Collins & Mees, 2003, p. 14). Even though it is difficult to define the syllable in more details, most of native speakers are intuitively aware of what a syllable is and are able to count the number of syllables in a word.

Foot (also known as a unit of rhythm) is "a part of tone unit which starts with a stressed syllable, includes all the following unstressed syllables and ends where the next stressed syllable and also next foot begins" (Roach, 1991, p. 121). We can give an example of a sentence and divide it into individual foots:

'Go to the / 'supermarket and / 'buy / 'something for / 'dinner.

The tone unit consists of one or more syllables and is defined as "the most readily perceivable, recurrent, maximal functional unit to which linguistic meanings can be attached" (Headlandová Kalischová, 2010, p. 19) . The easiest way to distinguish individual tone units is that all of them are separated by a pause and these boundaries are also marked by a change of pitch. We will deal with a detailed structure of the tone unit later.

If we look at the definitions of a syllable, foot and tone unit, we can see that one word can contain characteristics of all of the above ones. For example a simple answer "*Yes*." is just one syllable, it is the only stressed syllable in a sentence, so it is also a foot and at the same time it functions as an individual tone unit.

Collins and Mees (2003) see an utterance as a term used to refer to any stretch of speech. Roach (1991) says that an utterance is a continuous piece of speech beginning and ending with a clear pause. From these definitions we can deduce that previously mentioned sentence "*Yes.*" can also work as a one-syllable utterance.

Speech from the point of view of linguistics is dealt by two sciences (Collins & Mees, 2003, p. 7) - phonetics (= study of sound in human language) and phonology (= study of the selection and patterns of sounds in a single language). Speech is mostly understood as a form of human communication.

1.1.1 Structure of the tone unit

For its existence the tone unit has to fulfill two criteria - it has to contain at least one syllable and a prosodically[1] prominent stress (Headlandová Kalischová, 2010, p. 20). According to the position of this stress we can distinguish individual parts of the tone unit: pre-head (PH) - head (H) - tonic syllable (TSL) (also used term nucleus) - tail (T)

The only obligatory part is the nucleus; the head, the pre-head and the tail are optional elements. Let's take a look at the following sentence and then we will explain individual elements:

There was a 'heavy 'rain 'yesterday.

First of all we have to mention, that the speaker wants to emphasize the fact that it was raining. It does not matter that the rain was heavy or that it happened yesterday. Therefore the most prominent stress is carried on the syllable *rain*.

The pre-head is "composed of all the unstressed syllables in a tone unit preceding the first stressed syllable" (Roach, 1991, p. 146). In the sentence above we can see that the first stressed syllable is in the word *heavy* and everything preceding is the pre-head - *there was a*.

The head is part of the utterance "from the first stressed syllable to the tonic syllable" (Roach, 1991, p. 146), which means that in our sentence the head is *heavy*.

The tonic syllable "carries the most prominent pitch accent and it is the syllable where the nuclear tone starts" (Headlandová Kalischová, 2010, p. 21). In our case it is the word *rain*, as it is the most important piece of information that a speaker wants to share.

---

[1] prosody = the set of speech variables, including rhythm, speed, pitch, and relative emphasis, that distinguish vocal patterns (American Heritage® Dictionary of the English Language, 2011)

Finally all the syllables following the tonic syllable till the end of the tone unit are called the tail ((Roach, 1991, p. 147). In the sentence above it is *yesterday.* Thanks to all this information we can now identify all the parts of our tone unit as follows:

*There was a heavy **rain** yesterday.*
(PH)   (H)   (TSL)   (T)

In the whole thesis, the tonic syllable is marked as underlined and bold, the beginning of the head is underlined.

1.1.2 Degrees of stress

As we mentioned in the previous chapter, the tone unit has to carry a prosodically prominent stress. Prosodic prominence is interested in three phonetic features - pitch, length and loudness (Cruttenden, 1986). Combining these three elements we can make specific syllables more prominent than the others. Cruttenden lists four degrees of this prominence:

i.   primary stress - stress carried by a tonic syllable, it is the most prominent one with the most prominent change of pitch

ii.   secondary stress - has a lower change of pitch than primary stress, if we look at the structure of the tone unit, head of the tone unit carries this stress (it is not the most prominent one, but we can already see the change of pitch)

iii. tertiary stress - unlike primary and secondary stress, this one is produced by length and/or loudness but we do not see any change of pitch

iv.   unstressed - this is most common at function words (they do not have full lexical meaning) like articles, preposition, conjunctions but also some pronouns or copular verbs

1.2 Intonation system in Czech

In comparison with the English system, the Czech one consists of five levels (Palková, 1997, p. 9):

syllable → stress/rhythm group → utterance unit →utterance →speech

Stress group is described as "a group of syllables bound together with one word stress", their average length is usually two to three syllables (Krčmová, 2007, p. 76). Czech native speakers have a tendency of not using monosyllabic stress groups, for example

when using reflexive verbs - *'Sprchovala se* ('She was taking a shower), it would be pronounced as one word *'Sprchovalase*.

The Czech view of an utterance unit does not give us any specific definition, on the other hand it gives us some of its qualities (Headlandová Kalischová, 2010, p. 11):

     i.   it is composed of one or more stress groups and is superior to them

     ii.   a pause functions as a boundary between units

     iii.   there is a specific tone pattern before the pause, which is realized by sentence stress and a particular melody

     iv.   it is a unit perceived by both the speaker and the listener

An utterance from the point of view of Czech linguists is "the smallest whole of speech, the fundamental unit of communication" (Daneš, 1957, p. 139). From the syntactical point of view we can compare an utterance to a simple or a complex sentence.

If we compare Czech and English systems, we reveal that they are quite similar as the foot can be compared to the rhythm group and the tone unit to the utterance unit. We can see one missing unit in the Czech system - phoneme. Even though Palková did not include this unit into the hierarchy, Czech phoneticians also see the phoneme (foném) as the smallest unit of language carrying a distinctive function (foném - ABZ.cz: slovník cizích slov, 2015).

2 Intonation patterns

2.1. Intonation patterns in English

In the following chapter we will deal with a system of intonation patterns and we will also establish rules and marks that we will use to describe intonation in this thesis. In different books there are many ways to mark different tones and while we describe individual patterns, we will also give specific symbols to each of them.

First of all, to identify a specific intonation pattern in a tone unit, we have to find the tonic syllable or also called nucleus (both, nucleus and tone unit were explained in the previous chapter). The nucleus carries a nuclear tone, which is the most prominent change of pitch in the tone unit. Even though some books describe more of them, in our case we will deal with four different intonation patterns as described in Collins and Mees (2003) - falls, rises, fall-rise and rise-fall.

2.1.1 Falls

Falling intonation is the most common type of nuclear tones, used in roughly 70% of cases. We distinguish two types - high fall and low fall. High fall is more prominent and has more pitch movement (Collins & Mees, 2003, p. 121). High fall will be marked ˋ and low fall will be marked ˎ .

As an example of a tone unit with falling nucleus tone we can use a wh- question (using of specific nuclear tones in different utterances will be explained in Chapter 3.4) :

ˎ *What is your name?* ˎ *Where are you from?*

2.1.2 Rises

Rising intonation is less common than falling intonation, and again it can be divided into high rise and low rise, with the same difference as between high fall and low fall (Collins & Mees, 2003). We will mark high rise ˊ and low rise ˏ .

As an example we can use a yes/no question:

ˊ *Would you like a cup of coffee?*

2.1.3 Fall-rise

Fall-rise and rise-fall patterns are also called complex (on the other hand falls and raises are called simple). Fall-rise is a pattern that moves from high to low and to mid

(Collins & Mees, 2003, p. 123). We will mark fall-rise as $\vee$. We can find this type of intonation in longer utterances, to divide individual tone unit but to keep the speech fluent:

If you need an $\vee$ advice, $\backslash$ you can ask him.

2.1.4 Rise-fall

This pattern moves from low to high and to mid. It is the least common pattern and not used at all in some English varieties, e.g. accents of northern England (Collins & Mees, 2003, p. 123). We will mark this pattern with a symbol $\wedge$. This intonation is typical for certain questions (usually beginning with how or what) like:

How $_\wedge$much?   What $_\wedge$time does it start?

2.2 Intonation patterns in Czech

Even though we can find some similarities between English and Czech patterns, there is a different terminology in Czech system. In Pálková we can find a term melodeme (melodém) which means "functional melodic scheme" (Palková, 1997, p. 307), and it is used in the same meaning as an intonation pattern. These melodemes have three general functions (to see functions of intonation in English, see chapter 3) (Palková, 1997, p. 307):

i. Melodemes tell the difference between complete and incomplete utterance.
ii. In the system of complete utterances melodemes can (as the only mean) differentiate certain types of utterances (e.g. difference between a statement and a question).
iii. They tell the difference between a neutral utterance and an emotionally colored utterance.

Unlike four patterns in English, Pálková deals with only three types of melodemes, melodeme finishing falling, melodeme finishing rising and melodeme unfinishing. First two types can be compared to English simple intonation patterns - fall and rise. Now we will describe these melodemes in more details and we will deal with several special cases of using them.

2.2.1 Melodeme finishing falling

      Like fall intonation pattern, this melodeme is also one of the most common types. It is used in statements, imperatives sentences or question with complementary function (doplňující otázky, similar to wh- questions in English) (Palková, 1997, p. 308). We can see that there is not a big difference between fall intonation pattern and melodeme finishing falling, even though they are not exactly the same. Let's take a look on the following example:

      ﹨*Kdo přišel pozdě?*

      This sentence can be translated as:

      ﹨*Who came late?*

      Even though this question in Czech uses the melodeme finished falling, many Czech native speakers would raise their voice in the first part of the utterance *Kdo při-* and then they would use falling tone for *-šel pozdě.* From English point of view, we would talk about rise-fall intonation pattern, but Pálková categorize this type of an utterance into melodeme finishing falling.

2.2.2 Melodeme finishing rising

      Also here we will not see many differences. This type of melodeme is like rise intonation pattern used in yes/no questions (zjišťovací otázky) (Palková, 1997, p. 30). Unlike in English, this type of melodeme perfectly demonstrates the function of melodemes, specifically the function ii. (see chapter 2.2). We can see a clear difference between a statement and a yes/no question in English, because they have a different word order.

      ﹨*You are ready.*   ／*Are you ready?*

      On the other hand in Czech word order is the same. That is why the right use of melodeme tells us a specific type of utterance.

      ﹨*Jsi připraven.* ／ *Jsi připraven?*

      We can see that melodeme finishing rising and rise intonation pattern have the same use in English in Czech, but in Czech it is more prominent in spoken language, because of its function.

2.2.3 Melodeme unfinishing

As the name suggests, this melodeme is used when an utterance is not finished and the speaker wants to suggest, that there is some additional information (Palková, 1997, p. 313). It is most typical in spoken language, when the speech is interrupted by something or the speaker forgets, what he wants to say or which word to use. It is also used in complex sentences when it is followed by melodeme finishing, which completes the utterance. We will deal with this specific case in the next chapter.

2.2.4 Melodemes in complex sentences

Using of melodemes in complex sentences depends on the length of a sentence. If it is short, we do not use melodeme unfinishing, because we want the speech to sound fluent, and instead of unfinishing we use either melodeme finishing rising or falling. On the other hand, when a sentence is longer, we use one of the finishing melodemes in the end, and for all the preceding parts we use melodeme unfinishing. Even though Pálková does not distinguish falling and rising melodeme unfinishing, the intonation of this melodeme is similar to fall-rise intonation, as we can see in following example:

I když přišel ⌄ pozdě,\ svůj slib splnil.

Even though he was⌄ late, \he fulfilled his promise.

2.2.5 Melodemes in questions with complementary function

Even though we already dealt with this topic in chapter 2.2.1, this is another special case of using melodemes and we should deal with it in more details. As we already know, in this type of questions we use melodeme finishing falling. But there are exceptions when we use melodeme finishing rising, and those are (Palková, 1997, p. 315):

    i.   when we create a repeated question

        Viděli jsme Honzu. ⁄Koho jste viděli?

        We saw John. ⁄Whom did you see?

    ii.   when a question is rhetorical

        Prohráli jsme. ⌐A čí je to vina?

        We have lost. ⌐And whose fault is that? (the speaker does not want an answer, because in that situation everyone knows whose fault it is)

iii.   when we want to emphasize that the attitude of the speaker is ironical or surprised

        Zvítězil Honza. /*Honza?* /*Opravdu?*

        John has won. /*John?* /*Really?*

3 Functions of intonation

In the following chapter we will describe main functions of intonation. We can already think about these functions even without definitions if we first think about human speech without intonation. We would sound like robots and probably the first difference that would come to our minds is the fact that we would not be able to distinguish between statements, questions, exclamative sentences etc. Since we would not be able to analyze a tone unit without intonation (see section 1.1.1), we would not be able to see which syllable is a tonic one and therefore we could not identify the most important piece of information. Changing intonation in specific clauses can also change their meaning. It means that intonation is an important part of human speech. Now we will take a closer look at these functions.

As described in Roach (1991), there are four most often proposed functions of intonation (Roach, 1991, p. 163):

    i.   attitudinal function

    ii.   accentual function

    iii.   grammatical function

    iv.   discourse function

3.1 Attitudinal function

As the name suggests attitudinal function means that thanks to intonation a speaker can express his or her attitude, emotions and feelings. Here we can see how important it is for foreigners who learn English to use intonation properly, because if misused, some clauses may sound ironical even though we did not mean it that way and it could offend a listener. There are three groups of components which help us distinguish attitude in utterances (Roach, 1991, p. 166):

    i.   sequential - components which occurs in a sequence one after another (pre-heads, heads, tonic syllables, tails, pauses, tone boundaries)

    ii.   prosodic - are always present and observable in speech (width of pitch range, key, loudness, speed, voice quality)

    iii.   paralinguistic - components including body language and voice effects

3.2 Accentual function

As Roach explains some writers use term accent instead of stress, so accentual function of intonation is connected with the placement of stress and tonic syllable in a tone unit. In most cases the tonic stress is placed on the last lexical word, but there are cases when we put the tonic stress on some other word - for emphatic purpose, contrastive purpose or when the sentence is ambiguous and we want to make the meaning clear (Roach, 1991, p. 173).

i.   contrastive purpose

I didn't see \ ***you*** *at the party.*

I saw \ ***him*** *there.*

ii.   emphatic purpose

*I was really**ex*cited.* - non-emphatic

*I was **really** excited*. - emphatic

*You shouldn't**do** it*. - non-emphatic

*You **shouldn't** do it.* - emphatic

iii.   ambiguous sentence - the most typical one is the following one:

*I have plans to**leave***. - I am planning to leave.

*I have**plans** to leave*. - I have some plans that I have to leave.

3.3 Grammatical function

This function helps us distinguish certain syntactic relationships - phrase and clause boundaries or for example a question and an emphatic statement (Collins & Mees, 2003, p. 125). One of the most common cases is the difference between a statement and a question:

Peter *is coming to the party. -* statement

Peter *is coming to the party?* - a declarative question (= has the declarative word order, but the question intonation and meaning, here it emphasizes that the speaker is familiar with the answer and it is not a real question, it is more an expression of a surprise or reassurance.)

If we should mention one example of phrase and clause boundaries, we will see that by changing phrase boundaries, we can change the meaning of a sentence (which means that the grammatical function deals with ambiguity like the accentual function does too):

/ *Those who came* / *soon got the money*./ - Everyone who came, got the money, and they got them soon.

/*Those who came soon* / *got the money.* / - Only those, who came soon, got the
money, those who came later, did not get it.

3.4 Discourse function

This function covers several matters. For example, during conversations it tells us when a speaker finished his/her part and wants the other speaker to speak. It also shows their relationship (authority - superior and inferior). Another matter is distinguishing new and old information. Following these aspects, we can divide the position of the nuclear tone into two categories (Collins & Mees, 2003, p. 125):

    i.   falling tones (high fall, low fall, rise-fall) suggest finality or unloading of information

    ii.   rising tones (high rise, low rise, fall-rise) suggest non-finality or that information is sought or anticipated (Collins & Mees, 2003, p. 126)

Now let's take a look on at falling and rising tones in different types of utterances as stated in Collins & Mees:

   i.   statements - typical is the falling tone

         - rising tone implies non finality of a statement

         - fall-rise tone indicates doubt and disagreement

(When are you going to arrive?) On \ *Sunday.* - the speaker is sure, typical statement

(When are you going to arrive?) On ⁄ *Sunday.* - but maybe any other day

   ii.   commands - typical is the falling tone, which indicates more strict and direct order

         - using the rising tone changes a command into more gentle and kinder

\ *Tell me about it.* - I know you do not want to, but you have to

⁄ *Tell me about it.* - it sounds interesting, I want to hear more

  iii.   wh- questions - the most typical is the falling tone, which is more official than the rising tone

         - the rising tone has the same effect as in commands, it makes a question friendlier and kinder

Where are you \ *from?* - officer asking a citizen

Where are you ⁄ *from?* - two people on their first date

  iv.   yes/no questions - the common pattern here is the rise tone

         - falling tone changes a yes/no question into an exclamatory statement

$^{\prime}$*Do I have to do it?* - a real question, I demand an answer

$^{\backslash}$*Do I have to do it?* - I do not need an answer, I want to express that I am annoyed by having to do it

v. tag-questions and tag-responses - in this case both falling and rising intonations are possible, both with a different meaning

- it is important to know that nucleus in tags is always on the verb and not on the pronoun (which is a common mistake made by non-native speakers), there exists no exception when the nucleus would be on the pronoun

- we distinguish two types of question tags - balanced and unbalanced

She works as a teacher, doesn't she? - balanced (the statement is positive, the question tag negative)

She doesn't work as a teacher, does she? - balanced (the statement is negative, the question tag is positive)

I am lazy, am I? - unbalanced (both the statement and the question tag are positive)

You don't like your job, don't you? - unbalanced (both the statement and the question tag are negative)

- unbalanced tags are used for ironic or confrontational effects, but because they are not as common as balanced one, we are going to deal only with intonation patterns in balanced question tags

- we use rising intonation when the question tag is a true question

- we use falling intonation when we are sure about the answer and we want a confirmation

$^{\prime}$*Your sister got married, didn't she?* - a real question

$^{\backslash}$*Your sister didn't got married, did she?* - I know she did not, not a real question

- in tag responses, polarity of a response is always the same as polarity in the previous statement

(He passed the test.) Did he? - statement and tag response are positive

(He didn't pass the test.) Didn't he?- statement and tag response are negative

- we use rising intonation when we want to express surprise or we want to reassure we heard right

- we use falling intonation when we accept the statement, we use high fall to show interest and low fall to express lack of interest

- we use fall-rise intonation when we disagree or when we have doubts

She is forty five. $^{\prime}$*Is she?* - Did I hear you right? She does not look forty five.

She is forty five. $\searngle$ *Is she?* - I do not care how old she is. (high fall)

                                  - You are probably right, she looks forty five. (low fall)

She is forty five. ∨ *Is she?* - Are you sure? I think she is forty six.

4 The theory of functional sentence perspective

In the last chapter of the theoretical part we are going to deal with the theory of functional sentence perspective (FSP). Even though this theory is mainly a matter of semantics, it also deals with several phonological factors. As Headlandová Kalischová writes, this theory was originally introduced by Jan Firbas (Headlandová Kalischová, 2010, p. 31). He works with a sentence as "a basic communicative unit, in which individual elements carry a communicative dynamism (CD) = the relative extent to which a linguistic element contributes towards the further development of communication." (Firbas, 1979) It means that every piece of information in a sentence has a certain informational value - it is old or new information, it is known only in a certain situation or it is a general knowledge etc. Firbas distinguishes four factors, three non prosodic and one prosodic. (Headlandová Kalischová, 2010, p. 31)

4.1 The linear modification factor

The first factor deals with an order in which individual elements are composed into a sentence. It is more or less typical for all Indo-European languages that the most important piece of information is placed at the end of a sentence and the elements are composed gradually from those carrying the least CD to those carrying the most CD. If we consider this factor in Czech and in English, we can see that in Czech this rule is followed more than in English, which is caused by the fact that Czech speakers have a bigger freedom in composing a sentence considering the word order. Thanks to the fact that Czech language is an inflectional language, we are not bound to strictly follow a typical English word order subject - verb - object - adverbial. We can see similarities and differences in the following example:

Let's take a sentence *There is a cat in the street.* We can put the tonic stress on the word *cat* or the word *street.* In the first case, we want to emphasize fact that there is a cat, the street is not an important piece of information. In the second case we want to emphasize that the cat is on the street (and not in the house). In English this difference can

be made only by changing the tonic stress. In Czech we can solve this by changing the word order.

(What do you see?) There is a ＼***cat*** *in the street. - (Co vidíš?) Na ulici je **koč**ka.*

(Where is the cat?) The cat is in the ＼ ***street**. - (Kde je kočka?) (Kočka) je na **u**lici.*

4.2 The contextual factor

The second factor of FSP is interested in context and whether the piece of information is retrievable or irretrievable from specific context. This factor distinguishes four types of context, their order is from "the biggest" context to "the smallest" one (Headlandová Kalischová, 2010, p. 33):

   i.   General context of human knowledge and experience

  ii.   Context of knowledge and experience shared by the interlocutors

 iii.   Entire preceding verbal and situational/experiential context

 iv.   Immediately relevant context (verbal, situational)

The FSP theory is interested only in the last context, as it is the only one where we can decide whether the information is retrievable or irretrievable. If it is retrievable, than it is context-dependent information (given) and is regarded old, on the other hand, if it is irretrievable, it is context-independent information and is considered as a new one.

There is also a possibility that a context-independent information (unknown) is presented as a context-dependent (known). For example in a sentence:

It was a bright cold day in April, and the clocks were striking thirteen. (opening line from George Orwell's 1984) - even though we cannot know which clocks are mentioned, they are presented as already known information

This is called "the in media res effect" (Firbas, 1992, str. 40), and it is typical of introductory sentences of stories to make a reader curios and interested in further reading.

4.3 The semantic factor

As the name suggests semantic factor deals with "the impact of the semantic character of a linguistic element and of the character of its semantic relations on the distribution of CD." (Firbas, 1992, str. 41) Firbas presents two semantic scales:

     i.   Presentation scale (PS)

           Setting (Set) - Presentation of Phenomenon (Pr) - Phenomenon presented (Ph)

    ii.   Quality scale (QS)

        Setting (Set) - Bearer of Quality (B) - Ascription of Quality (AofQ) -

        Quality (Q) - Specification (Sp) - Further Specification (FSp)

The first one deals with the phenomenon presented (Ph), the second one is interested in the quality ascribed to the phenomenon or to its specification. We will now give two examples showing individual elements of these scales:

PS: *The sun is shining outside.*

  (Ph)   (Pr)   (Set)

If we should describe how we analyzed the sentence, noun (*the sun*) is the phenomenon presented as it is a subject doing something - *shining*, which makes the verb the presentation of phenomenon. *Outside* as an adverbial of place specifies where the sun is shining - it is the setting.

QS: *Yesterday my brother found a coin made of silver.*

    (Set)   (B)   (Q) (Sp)   (Fsp)

Again, now we will describe how we analyzed this sentence. *My brother* is like *the sun* in the previous sentence subject, but in QS it is called bearer of quality. Quality is represented by verb - *found*. *A coin* specifies what my brother found, then it is the specification, and *made of silver* specifies specification, so it is called the further specification. *Yesterday* is like *outside* in previous sentence the setting (here it functions as an adverbial of time).

If we take a look at the quality scale, we can see that there is also the ascription of quality. If there is a copula verb in the sentence, then it is the ascription of quality and the quality is expressed by a non-verbal element. (Headlandová Kalischová, 2010, p. 36):

    Her aunt   is   an actress.

   (B)   (AofQ)   (Q)

4.4 The prosodic factor

Prosodic factor is the only one that is presented only in spoken communication. It explains different ways how prosodic elements (e.g. intonation, stress) change the communicative dynamism in an utterance. There are two distributions in which we compare a sentence described by non-prosodic factors and how it changes when we add the prosodic factor:

    i.   perfect correspondence

    ii.   prosodic intensification

Let's take a sentence *She arrived yesterday.* Perfect correspondence means that the communicative dynamism does not change at all by adding the prosodic factor. If we say this sentence without changing the communicative dynamism, the tonic syllable would be on yesterday:

*She 'arrived **'yes**terday.*

Now we have two possibilities how to intensify it:

      i.   Selective non-reevaluating intensification

           - this intensification is "weaker" than the following one and the communicative dynamism changes only slightly, in our sentence we can put more stress on *yesterday*, for example when someone is arguing with us (*She arrived yesterday! Not today!*)

      ii.   Re-evaluating intensification

           - this intensification changes the theme (already know information) and the rheme (new information), for example we can put tonic stress on the word *She* when someone is asking *Who arrived?* and not *When did she arrived?*, therefore *she* is the new information and not *yesterday*

***<u>She</u>** *'arrived 'yesterday.*

By this chapter we finish the theoretical part where we included all the theoretical knowledge we need to understand all the concepts, definitions and ideas in the practical part.

5 Methods

5.1 Target of the research

The following research is focused on studying English intonation and stress of Czech students who are currently studying English. There are two targets - first one is analyzing intonation patterns and if Czech speakers use them correctly in their speech. There are several differences between Czech and English intonation patterns and our target is to find out if Czech intonation has any influence on Czech students speaking English. Our second target will be focused on tonic stress and on the question whether it is placed properly by Czech speakers. We will analyze in which cases the speakers make the most mistakes and try to understand why.

5.2 Participants of the research

As mentioned before our research will be focused on Czech students studying English. All of the recordings used in the following research are recordings of students of The University of West Bohemia and all of these students are currently studying English, either as their main field of interest or just as one of the subjects in their syllabus, the important thing being that they are actively using English and their level is B1-B2. One of the conditions to participate in this research is that a student had to graduate in English at high school. We chose this level of English, because beginners do not deal with intonation as much as we need for our research and on the other hand too advanced speakers would be used to English intonation too much to make any mistakes.

I managed to collect recordings of 28 students and also one native speaker. Native speaker's recording will not be included in the evaluation of data, but we will use it for example when there will be two possible options of position of tonic stress to see where a native speaker would put it. Age or gender were not important for our research, only the speaker's level of English. Just as a matter of interest there are 16 women and 12 men participating in the research, as they are all current students of the university, their age is between 20 and 25 years.

The research and its results are to a certain extent limited, as a limited number of participants have been examined (28). For more objective and more general results the sample of participants should be much larger.

5.3 Materials for the research

The ideal material for studying a person's intonation and stress placement would be to record him or her during casual spontaneous conversation. Of course that would not ensure that the person would focus on phenomena we are interested in and also collected data would be too diverse to bring relevant information, so we have to choose a text that will be read by our speakers and which will be focused on different kind of tonic stress placement and intonation patterns. This text has to be a dialogue, because monologues are not so rich in different intonation patterns and the text should be quite simple, so participants of research would not focus on reading or understanding the text, but they would read it easily without pauses caused by misunderstanding the text (then it would be less natural and results would not be that valid). All of the participants received the text in advance, so that they could prepare for the recording, unfortunately some participants still had some problems reading the text fully fluently, but it did not influence validity of the recording very much to make it useless (originally there were 30 recordings but two of them could not be used because the speaker's level of English was not high enough).

For all these reasons we chose a dialogue from Barbara Bradford's Intonation in Context published in 1992 by Cambridge University Press. There is a dialogue of two friends, which is divided into several parts and used for different exercises throughout the book. For our research we use all of the parts put together and it can be found in Appendix 1. This text is focused on intonation and tonic stress placement, so it is perfect for our research. There are many different ways of placing a tonic stress with utterances where more than one position is possible and also many different intonation patterns in statements, wh- questions, yes/no questions, echo questions, exclamatory statements etc.

5.4 Data preparation and analysis

After collecting all the recordings we have to summarize and then analyze all the data. For this purpose there are two tables in Appendix 2. The first one is dealing with intonation patterns. In the first column there is a number of tone unit (numbers of tone units are available in Appendix 1), in the second column we can see correct intonation pattern used for every unit (F - falling intonation, R - rising intonation, F-R - fall-rise intonation, R-F - rise-fall intonation) and then in every other column is an analysis of individual recordings, where ✓ means that the speaker used the correct intonation pattern and a letter indicates using different than correct intonation pattern (letters are again R and F).

The second table is dealing with correct placement of tonic stress. In the first column there is again a number of tone unit, in the second one there is a word (here by word we mean syllable as you cannot put stress on a different syllable in one word) which carries tonic stress in its tone unit and all the other columns contains analysis of all the recordings where ✓ stands for correct placement of tonic stress and a word means, that a speaker put tonic stress on a different word than he/she should and instead put it on a given word.

In our analysis we will focus on those phenomena that occur in several recordings (if only one speaker uses wrong intonation pattern in a tone unit where everyone else uses it right, of course we will not deal with it). Before we will analyze all the recordings in details, we will prepare our expectations and assumptions and at the end we will make a conclusion.

5.5 Expectations and assumptions

5.5.1 Intonation patterns

As we could see in chapter 2 in theoretical part of this thesis, there are several differences and similarities between Czech and English intonation patterns. I suppose that most of the mistakes will be made in intonation patterns of questions. Even though also Czech language use falling intonation for certain types of questions, I expect Czech speakers to use mostly rising intonation in cases where falling intonation should be used. I think that it will also be caused by a fact, that they will read the text instead and when they will see a question mark, they will use rising intonation. That is why I already mentioned that spontaneous speech would be better as it would erase this issue. Another assumption of mine is that a lot of Czech speakers will not use fall-rise intonation as much as they should and as it is used by native speakers. I think it will be caused by a fact that they are not used to speaking as melodically as native speakers. As I have stated several times, Czech language is less melodic than English thanks to a fact that it is an inflectional language (it has cases and conjugations, English is an analytic language) and the word order is not so strict. My last expectation is that a lot of mistakes will be made in statements and questions where we are listing several items. I suppose that most of the speakers will use only falling intonation in these cases, because it will seem natural to them.

5.5.2 Placement of the tonic stress

I do not think that there will be too many serious mistakes, because in many sentences in our dialogue we can put tonic stress on different elements. Even though there is always one that is correct according to the book, some of the statements and questions are emotionally colored which is difficult to recognize in written text. There are also several cases when we can choose which element we want to emphasize more and in both cases we will be right. My only expectation is that in some cases Czech speakers will have a tendency to put tonic stress to the last element in a tone unit (according to the linear modification factor in chapter 4.1) even though it will not be the correct placement. In cases where more possibilities are right we will focus on the reason why the speakers chose a specific element to put the tonic stress on.

Now that we explained the whole process of the research we are able to understand the analysis we deal with in the following chapter, where the results of the research are described with a detailed commentary.

Analysis and results

6 Intonation patterns

6.1 Intonation patterns in the original text

Before we start analyzing intonation patterns used by Czech speakers, we will analyze the original dialogue to see all the possible intonation patterns occurring in the text. The whole analysis is in Appendix 1, where all intonation patterns are marked. As we can see, there are three types of intonation - falling, rising and fall-rise intonation. The fourth type - rise-fall intonation is not used at all, as it is not as common as the other three.

Most of the texts are statements; there are also several questions and one example of an imperative sentence (even though it does not work as an order or command here and more as a figure of speech). All three kinds of intonation are used for different types of statements. We have typical statements with falling intonation, where we do not expect a lot of mistakes made by Czech speakers as these are the most natural intonation patterns. We can give an example of a statement with falling intonation from the text:

⟍*I had to put my jeans on.*

The second type - fall-rise intonation is the one, where we expect many more mistakes. There are several kinds of statements using fall-rise intonation pattern occurring in the text:

  i. utterances within a complex sentence

⟍*I mean* ⱽ*I managed to answer all the questions* ⱽ *and I think I said the right things,* ⟍*but I don't think I wore the right clothes.*

  ii. emotionally colored utterances

ⱽ*You don't sound very sure.* (doubt)

  iii. means of assertiveness (expressing status of a speaker)

ⱽ *I know it was stupid.*

The last type of intonation in statements used in the text is rising intonation. Even though it is not very common to use this intonation for statements, we can find it in statements where several items are listed. The reason of using this intonation pattern will be explained in chapter 6.4 Statements with rising intonation.

⁄*A job like that,* ⁄ *such a good salary,* ⁄ *with so much responsibility,* ⟍ *you ought to have known better than to wear jeans.*

Another type of sentences used in the text are questions. And again all three types of intonation are used for different kinds of questions. Falling intonation is used for wh-questions, which occur several times in the text, for example:

\\What did you wear \\anyway?

Rising intonation is usually used for yes/no questions, but here it is used for questions that do not demand answers, but are used to express surprise:

/It was where?

There is also a combination of falling and rising intonation in one question - so called alternative question, where we give several alternatives of possible answer.

/Did you forget to go for it, / lose your ticket or \\what?

Fall-rise intonation is used in the text for echo questions expressing doubts or surprise.

∨All right?

The last type of sentence used in the text is an imperative sentence. There is only one which works as a figure of speech and not as a direct command and we use falling intonation.

\\Don't remind me.

6.2 Statements with falling intonation

As we expected in most cases Czech speakers used the right intonation in statements with falling intonation. There is actually only one case in which several speakers made a mistake, and used fall-rise intonation instead of the falling one. It is the case of the tone unit number 7:

\\All right, (I think).

Table 3

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
7	F	28	100%	F-R	6	21%

We could say that we use fall-rise intonation because we want to express doubts (The job interview was all right, but I am not that sure.). On the other hand, doubts are expressed in the following tone unit and this tone unit is an answer to previous question without being emotionally colored. That is the main reason for using falling intonation. As we can see, there is a comma at the end and I suppose that for some speakers it felt more natural to use falling intonation than using falling intonation when there is not a period.

33

But we cannot include this factor as it is caused by the fact that the dialogue was read and therefore this argument is irrelevant for our research.

There are no other statements with falling intonation where participants of the research made a lot of mistakes.

6.3 Statements with fall-rise intonation

Unlike the previous analyzed intonation pattern, in this chapter we will deal with more mistakes. The first one appeared already in the first tone unit - *Hello, Tony.*

Table 1

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
1	F-R	28	100%	F	14	50%

As we know from the information at the beginning of the text, Tony and Lisa met on the street. Lisa is excited and surprised to meet Tony and is curious about his job interview - all of these emotions are projected in using fall-rise intonation. Still half of the speakers used simply falling intonation, probably because they did not realize the conditions under which Tony and Lisa met. Also the native speaker used falling intonation, which suggests that this mistake is not caused by differences between Czech and English intonation.

A more serious mistake was made in the tone unit number 8:

(All right,)$^\vee$*I think.*

Table 4

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
8	F-R	28	100%	F	17	61%

Here it is clear that Tony is not sure and he needs to express it in his speech. It also gives Lisa an opportunity to ask what is happening, because this intonation also suggests that there is some additional information Tony wants to share. A similar mistake was made in tone unit number 10:

$^\vee$*You don't sound very sure.*

Table 5

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
10	F-R	28	100%	F	11	39%

This is a similar case as tone unit number 8, but we can see that fewer speakers used the wrong intonation pattern here. From the context we can see that here the state of doubts is expressed more clearly. From previous reactions we can see that Lisa does not believe Tony and that is probably the reason why more speakers realized this and used fall-rise intonation. There are several more cases of these emotionally colored utterances where Czech speakers used the wrong intonation pattern (tone units number 17, 23, 33, 48 - all the tables are listed in Appendix 3).

Several mistakes were made in utterances where fall-rise intonation pattern is used to express status of the speaker. It is an example of tone unit number 45:

$^\vee$*I know it was stupid.*

Table 16

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
45	F-R	28	100%	F	19	68%

In this case 68% speakers used falling intonation. It is not much of a mistake as this intonation pattern is also possible in this type of utterance. The difference is that using fall-rise intonation brings more assertiveness to the speech. In this part of conversation Lisa takes the dominant part and therefore Tony uses fall-rise intonation to express his agreement with Lisa's opinions. But using falling intonation is not counted as a mistake. For illustration the native speaker also preferred falling intonation in this tone unit.

The last case of tone units with fall-rise intonation are those within a complex sentence. It is the case of tone units number 12 and 13, where not a lot of speakers made a mistake, and 24 and 50:

(Of course) $^\vee$*I can't change anything about it, (but I can't help thinking about it.)*

(Oh yes,) $^\vee$*I've got one, (it was at the cleaner's.)*

Table 9

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
24	F-R	28	100%	F	14	50%

Table 19

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
50	F-R	28	100%	F	9	32%

In both cases we use fall-rise intonation, because both utterances are followed by another one with additional information and we also use it for contrastive purpose (*I can't*

change...BUT I can't help thinking about it. I've got one, BUT it was at the cleaner's). Therefore using falling intonation is wrong.

6.4 Statements with rising intonation

In the text there are two sentences where we used falling intonation for statements. Both of them are sentences, where we list several items - typical intonation used in this case is rising intonation for all the tone units except the last one, where we use falling intonation. This applies to tone units number 40, 41 and 42 and 56-61.

⁄*A job like that,* ⁄ *such a good salary,* ⁄ *with so much responsibility,* ＼ *you ought to have* *known better than to wear jeans.*

⁄*Here you are,* ⁄*with a chance of a lifetime* ⁄*to get exactly the job you want,*⁄ *you have all the right qualifications,* ⁄*a lot of experience,* ⁄*no family ties...*

Table 15

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
40	R	28	100%	F	5	18%
41	R	28	100%	F	6	21%
42	R	28	100%	F	6	21%

Table 20

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
56	R	28	100%	F	8	29%
57	R	28	100%	F	4	14%
58	R	28	100%	F	7	25%
59	R	28	100%	F	3	11%
60	R	28	100%	F	3	11%
61	R	28	100%	F	3	11%

Using falling intonation in this case is considered a mistake. We can use fall-rise intonation to make an utterance more assertive, but as we mentioned Lisa is in the dominant position and because of that she uses rising intonation. In Table 19 we can see that after few tone units speakers realized that they are listing items and started to use rising intonation, because the same intonation would be used in the Czech equivalent of this utterance.

6.5 Questions with falling intonation

Surprisingly there were mistakes made in all of the questions with falling intonation. There are four questions of this type - tone units number 6, 28, 46 and 68. Because they are all similar we will take the one with the most mistakes as an example

(tables of the others are available in Appendix 3). The one in which the most speakers used wrong intonation pattern is number 6:

$\searrow$*How did it go?*

Table 2

TU	correct IP	Total number of speakers		misused IP	Number of speakers		misused IP	Number of speakers	
6	F	28	100%	R	12	43%	F-R	3	11%

This mistake is probably caused by the fact that some of the participants are used to putting rising intonation to all the questions when they see a question mark. But in these sentences we never use rising intonation and it is one of the principal rules of English intonation. On the other hand one of the reasons could be an influence of Czech intonation, because this sentence would be pronounced with rising intonation in Czech:

$\nearrow$ *Jak to šlo?*

6.6 Questions with rising intonation

In the whole dialogue there is just one question with rising intonation, even though they are much more common in usual conversations. The example we have here is tone unit number 52:

$\nearrow$ *It was where?*

In this case Lisa is not asking where Tony's suit was, but she is surprised by his previous statement and is expressing surprise. That is also the reason why this intonation is more prominent then if it were a real question. The same intonation pattern would be used in Czech equivalent, and our research confirms it as there were not a single participant who would use any other intonation pattern for this tone unit.

It is not the only question in the research, where all speakers used a correct intonation pattern. It is also number 2 (with one speaker who used different but not completely wrong intonation) and 31:

$\vee$ *Did you go for your interview yesterday?*

$\vee$ *Your jeans?*

The second one is the same example as tone unit number 52. The first one could also use rising intonation (which was used by the participant mentioned), but that would make the question more official and as this is a conversation between two friends, fall-rise intonation is more appropriate. But we should not consider rising intonation as a mistake.

The last thing we need to mention are questions listing items, which are similar to statements listing items and use the same intonation patterns - rising intonation for individual elements and then falling for the last one. There is one example in our dialogue, tone units number 69-71:

/*Did you forget to go for it,* /*lose your ticket* *or what?*

Even though most of the participants use the right intonation pattern for the first two tone units, more than half of them used rising intonation also for the third tone unit in this utterance.

Table 23

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
69	R	28	100%	F	6	21%
70	R	28	100%	F	6	21%
71	F	28	100%	R	17	61%

As we could see in Chapter 6.4 Statements with rising intonation Czech speakers had opposite problem than they are having in this case. In statements they used wrong intonation for listed items except the last one and here most mistakes are made in the last item. It is probably caused by the habit of Czech speakers to use rising intonation in most of the questions (as we could see in previous chapters) and when they listed items with rising intonation they automatically used it also for the last item.

7 Placement of the tonic stress

7.1 Tonic stress in the original text

In the following chapters we interested in placing of tonic stress in utterances. As our research is mainly focused on the intonation patterns, we are not going to analyze placement of tonic stress very deeply.

In the original text there are several different positions of tonic stress, either in final position (following the rule of the linear modification factor as explained in chapter 4.1):

*You <u>don't</u> sound very <u>**sure**</u>.*

or not in the final position (e.g. for emphatic or to show gradation):

*What <u>**did**</u> you wear, (anyway)?* - emphatic purpose

*(Of course) I <u>can't</u> <u>**change**</u> anything,/ but I <u>can't</u> help <u>**thinking**</u> about it.* - gradation

We are going to deal with both of these groups and we will also emphasize those utterances where more than one placement is possible and describe reasons why participants probably chose the specific element to put the stress on.

7.2 Tonic stress in final position

As we described in the theoretical part, elements with the most prominent communicative dynamism are usually put in the final position, even though fixed word order in English does not always allow this positioning. Even though it is more natural for Czech speakers to follow this rule, there were several cases where participants chose a different element to put the stress on. The first example we are going to analyze is tone unit number 10:

*You <u>don't</u> sound very <u>**sure**</u>.*

Table 24

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
10	sure	28	100%	don't	7	25%

A quarter of the participants preferred tonic stress on the word *don't*. Using this placement isn't completely wrong, it only emphasize the negation of the whole utterance. But we need to emphasize that Tony does not sound sure (he could also sound stressed or even scared). Emphasizing *don't* would also make the utterance more strict and disagreeing, while we are trying to keep it in more friendly way.

Another example of misplaced tonic stress are tone units number 12, 13 and 15:

*I <u>mana</u>ged to answer all the **<u>que</u>**stions and / I <u>think</u> I said the right **<u>things</u>**, / (but I don't   think) I wore the right **<u>clothes</u>**.*

Table 25

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
12	questions	28	100%	all	10	36%
13	things	28	100%	right	13	46%
15	clothes	28	100%	right	5	18%

In this case we do not want to put focus on pre-modifiers *all* and *right*. There is a contrast, that even though Tony was fine with questions and things, he did not do well with clothes. To emphasize this contrast, we have to put tonic stress on all the final elements in these tone units. The same issue is found within tone units number 59, 60 and 61 (tables of these tone units are available in Appendix 3).

7.3 Tonic stress not in the final position

Putting tonic stress in different than final position is not always caused only by fixed word order, but there are also several possibilities when we do it on purpose. The first example from the dialogue we are going to deal with is tone unit number 22:

*(Yes, Lisa, I know) there is <u>no</u>thing I can **do** about it.*

Table 27

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
22	do	28	100%	nothing	5	18%

Even though not many speakers made a mistake here, I would like to point this utterance out. There is a possibility of putting tonic stress on the word *nothing* if we like to emphasize that there really isn't any way of doing something. But because in the context of the dialogue this utterance is not that much emotionally colored, we keep the stress on the verb *do*. Most of the speakers put the stress on the right place, but those 18% were also right, and it is possible to use this placement.

Similar example of the tone unit with more than one possible placement is tone unit number 44:

*Don't re**<u>mind</u>** me.*

Again not many participants made a mistake in this tone unit, only few of them put the tonic stress on the first element - *don't*. Important thing we have to consider is that this utterance is not a direct command but a figure of speech. Putting the tonic stress on the first element would make the utterance much more strict and it would change the communicative purpose. As we already discussed the status of Lisa and Tony, the position of the tonic stress also serves for emphasizing submissive position of Tony.

Table 35

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
35	remind	28	100%	don't	4	14%

Another example is using non-final position for showing gradation (tone units number 24 and 25):

*(Of course) I __can't__ **change** anything,/ but I __can't__ help **thinking** about it.*

In the following table we can see that some speakers put tonic stress on can't while some preferred anything in tone unit number 24:

Table 28

TU	correct placement of TS	Number of speakers		misplaced TS	Total number of speakers		misplaced TS	Number of speakers	
24	change	28	100%	can't	5	18%	anything	4	14%
25	thinking	28	100%	can't	3	11%			

In this case we want to put focus on the fact that Tony not only can't change anything, he also can't stop thinking about it. Most of the participants realized this in the second tone unit and already used the right placement even though they made a mistake in the previous one. Placing tonic stress on *can't* would emphasize the inability, which is not the case here. Also placing tonic stress on *anything* is not the right choice here.

Another example we are going to be interested in is tone unit number 28:

*What **did** you wear, (anyway)?*

Table 30

TU	correct placement of TS	Number of speakers		misplaced TS	Total number of speakers		misplaced TS	Number of speakers	
30	did	28	100%	what	3	11%	wear	7	25%

First we are going to eliminate the wrong choice - *wear*. There is no reason of putting tonic stress on the last element, as we are not interested in what kind of action was Tony doing. We are interested in the clothes he was wearing, which brings us to the

possibility of emphasizing *what.* That could be correct, but considering previous utterances, we know that Tony wore the wrong clothes but we do not know which exactly. To illustrate the point we will use the Czech equivalent:

_Co_ *sis tedy oblékl (když ne to správné oblečení)?*

In this case we have to consider the following *anyway,* which helps us realize that we already have some information and we want more details.

The last example we are going to deal with is the one where half of the participants misplaced the tonic stress, tone unit number 48:

*(I know) you've **got** a suit.*

Table 36

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
48	got	28	100%	suit	14	50%

Even though it might seem that *a suit* is the element with the most prominent communicative dynamism, from the context we know, that Tony and Lisa already talked about *a suit* and in this tone unit it is already a known piece of information, so even if it takes the final position, it does not carry the tonic stress. It is caused by fixed word order and we can use the Czech equivalent of this tone unit to illustrate the point:

*(Já vím), že oblek **máš**.*

In Czech it is possible to change the word order and put the verb in the final position and therefore emphasize it not only by the tonic stress but also by its position. The verb is carrying the tonic stress because the important fact is that Tony does own a suit, we are not interested in what he owns.

8 Conclusion

The purpose of the research was to find out whether there is any influence of Czech intonation on Czech speakers and their English speech and using English intonation. We analyzed different types of utterances from the point of view of intonation patterns and from the point of view of tonic stress. To get optimal results, we used utterances with both similar and different intonation patterns in Czech and English. Even though we found several obstacles that may have influence on the results (the speech of speakers was not spontaneous, few speakers had minor problems with fluency of the speech), we can confirm that there is an influence of Czech intonation on the English speech of Czech speakers.

The tone units in which the Czech speakers made the most mistakes were those with different intonation patterns in English and in Czech. There were several cases where more than half of them used Czech intonation pattern even though it was different than the one they should have used. If there was a possibility of two intonation patterns, some of the speakers had tendency to prefer the Czech one, because it sounded more natural to them. This was caused by the fact that English is a more melodic language than Czech and Czech speakers are not used to it while speaking English. If we consider assumptions we did about Czech speakers using wrong intonation patterns, we were right that participants had more problems with questions than statements. Also our expectation that they would make mistakes in statements and questions listing items was right.

As far as the tonic stress is concerned, we found out that there is a tendency to prefer the tonic stress on the last element of the tone unit even though it should be placed elsewhere (as we expected). If there were more possible options of putting the tonic stress, also in this case the Czech speakers preferred putting the tonic stress on the last lexical item. The influence of Czech language is visible here, because Czech speakers are used to prefer this position in Czech speech by modifying the word order. That is not always possible in English and therefore it is necessary to change the position of the tonic stress.

In the end it is important to say that the number of mistakes was not that high to say that the influence is too strong, so it would make a speech not understandable for a native speaker, and I personally expected a bigger influence. As a recommendation for improving someone's intonation and a placement of tonic stress, I think that knowing the theory is not enough, it is necessary to communicate in English a lot and get used to its melody. Then we can eliminate or diminish the influence of Czech intonation.

References

American Heritage® Dictionary of the English Language. (2011). Houghton Mifflin
Harcourt Publishing Company.

Bradford, B. (1992). *Intonation in Context.* Cambridge: Cambridge University Press.

Brazil, D. (1994). *Pronunciation for Advanced Learners of English Student's book.*
Cambridge: Cambridge University Press.

Collins, B., & Mees, I. M. (2003). *Practical Phonetics and Phonology.* Oxford: Routledge.

Cruttenden, A. (1986). *Intonation.* Cambridge: Cambridge University Press.

Daneš, F. (1957). *Intonace a věta ve spisovné češtině.* Praha: Nakladatelství
Československé akademie věd.

Firbas, J. (1979). *Brno Studies in English.* Brno.

Firbas, J. (1992). *Functional sentence perspectivein written and spoken communication.*
Cambridge: Cambridge University Press.

foném - ABZ.cz: slovník cizích slov. (2015, Leden 18). Retrieved from ABZ online
výkladový slovník cizích slov: http://slovnik-cizich-
slov.abz.cz/web.php/slovo/fonem

Headlandová Kalischová, I. (2010). *Intonation in Discourse.* Brno: Masaryk University.

Krčmová, M. (2007). *Úvod do fonetiky a fonologie pro bohemisty.* Ostrava: Ostravská
Univerzita, Filozofická fakulta.

Palková, Z. (1997). *Fonetika a fonologie češtiny.* Praha: Karolinum, Univerzita Karlova.

Roach, P. (1991). *English Phonetics and Phonology.* Cambridge: Cambridge University
Press.

Summary in Czech

Bakalářská práce z oblasti fonetiky a fonologie se zabývá vlastnostmi a funkcemi intonace v anglickém jazyce v porovnání s českou intonací. Práce se skládá z teoretické a praktické části. Teoretická část popisuje základní pojmy z oblasti intonace (např. tónická jednotka, tónický stress), dále její funkce a hlavní vlastnosti. Celé téma spadá do oblasti fonetiky a fonologie, a proto je důležité na začátku práce tyto termíny objasnit.

Praktická část obsahuje porovnání anglické a české intonace na základě audio nahrávek českých studentů anglického jazyka. Nahráván je čtený text v anglickém jazyce a pomocí těchto nahrávek jsou analyzovány hlavní rozdíly v české a anglické intonaci. Cílem výzkumu je zodpovědět otázku, zda se čeština jako rodný jazyk a její intonace promítají do mluveného anglického projevu českých studentů. Součástí výzkumu je i zachycení chyb českých mluvčích v anglické intonaci. Dále jsou jeho součástmi příprava a formulace hypotéz, určení vzorku účastníků výzkumu, provedení pilotního výzkumu, sběr a analýza dat, porovnání sebraných dat s hypotézami.

Appendix 1

The original text and its analysis

Two friends - Tony and Lisa meet in the street. Lisa asks Tony about his job interview.

Lisa: Hello, Tony. Did you go for your interview yesterday?

Tony: Hi, Lisa. Yes, I did.

L: How did it go?

T: All right, I think.

L: All right? You don't sound very sure.

T: I mean I managed to answer all the questions and I think I said the right things, but I don't think I wore the right clothes.

L: Well, there's no point worrying about it. What's done is done.

T: Yes, Lisa, I know there's nothing I can do about it. Of course I can't change anything, but I can't help thinking about it.

L: I'm sure you needn't worry. What did you wear anyway?

T: I had to put my jeans on.

L: Your jeans? Oh, I see.

T: But I wore a tie.

L: Never mind, you said the right things, anyway...but Tony, surely you realised everybody would be wearing suits. A job like that, such a good salary, with so much responsibility, you ought to have known better than to wear jeans.

T: Don't remind me. I know it was stupid.

L: Well, what was the problem? I know you've got a suit.

T: Oh yes, I've got one, it was at the cleaner's.

L: It was where?

T: At the cleaner's. It still is.

L: You're hopeless. Here you are, with a chance of a lifetime to get exactly the job you want, you have all the right qualifications, a lot of experience, no family ties, and when the day of your interview arrives, you're in the interview room and your suit is at the cleaner's.

T: I know, I know.

L: Well, what happened? Did you forget to go for it, lose your ticket or what?

T: No, but I asked Samantha to pick it up for me and they gave her the wrong one. By the time I got back to the shop it was closed.

(Bradford, 1992)

Analysis of the text

1. ˅ Hel**lo**, Tony.

2. ˅ <u>Did</u> you go for your **in**terview yesterday?

3. \ **Hi**, Lisa.

4. \ **Yes**,

5. \ I **did**.

6. \ <u>How</u> did it **go**?

7. \ All **right**,

8. ˅ I **think**.

9. ˅a<u>ll</u> **right**?

10. ˅ You don't <u>sound</u> very **sure**.

11. \ I **mean**

12. ˅ I <u>ma</u>naged to answer all the **que**stions

13. ˅ and I <u>think</u> I said the right **things**,

14. \ but I **don't** think

15. \ I wore the right **clothes**.

16. \ **Well**,

17. ˅ there's <u>no</u> point **worry**ing about it.

18. ˅ What's **done**

19. \ is **done**.

20. \ **Yes**, Lisa,

21. \ I **know**

22. ˅ there's <u>no</u>thing I can **do** about it.

23. \ Of **course**

24. ˅ I <u>can't</u> **change** anything,

25. \ but I <u>can't</u> help **thinking** about it.

26. \ I'm **sure**

27. ∨ you needn't **worry**.

28. ＼ What **did** you wear

29. ＼ **anyway**?

30. ＼ I <u>had</u> to put my **jeans** on.

31. ∨ Your **jeans**?

32. ＼ <u>Oh</u>, I **see**.

33. ＼ But I wore a **tie**.

34. ∨ <u>Never</u> **mind**,

35. ∨ you **said** the right things,

36. ＼ **anyway**

37. ＼ ...but **To**ny,

38. ／ surely you **rea**lised

39. ／ everybody would be wearing **suits**.

40. ／ A job like **that**,

41. ／ <u>such</u> a good **sa**lary,

42. ／ with **so** much responsibility,

43. ＼ you <u>ought</u> to have known **better** than to wear jeans.

44. ＼ Don't re**mind** me.

45. ∨ I <u>know</u> it was **stu**pid.

46. ＼ Well, <u>what</u> was the **pro**blem?

47. ＼ I **know**

48. ∨ you've **got** a suit.

49. ＼ Oh **yes**,

50. ∨ I've **got** one,

51. ＼ it was at the **cleaner's**.

52. ／ It was **where**?

53. ＼ At the **cleaner's**.

54. ＼ It still **is**.

55. ＼ You're **hope**less.

56. ／ Here you **are**,

57. ／ with a <u>chance</u> of a **life**time

58. ⟋ to get ex<u>act</u>ly the job you **<u>want</u>**,

59. ⟋ you have <u>all</u> the right qualifi**<u>ca</u>**tions,

60. ⟋ a <u>lot</u> of ex**<u>pe</u>**rience,

61. ⟋ <u>no</u> family **<u>ties</u>**,

62. ⌄ and when the <u>day</u> of your interview a**<u>rrives</u>**,

63. ⌄ <u>you're</u> in the **<u>in</u>**terview room

64. ⟍ and your <u>suit</u> is at the **<u>cleaner's</u>**.

65. ⟍ I **<u>know</u>**,

66. ⟍ I **<u>know</u>**.

67. ⟍ **<u>Well</u>**,

68. ⟍ what **<u>ha</u>**ppened?

69. ⟋ Did you for<u>get</u> to **<u>go</u>** for it,

70. ⟋ lose your **<u>ticket</u>**

71. ⟍ or **<u>what</u>**?

72. \ **<u>No</u>**,

73. ⌄ but I <u>asked</u> Sa**<u>man</u>**tha

74. ⟍ to pick it **<u>up</u>** for me

75. ⟍ and they <u>gave</u> her the **<u>wrong</u>** one.

76. ⌄ By the time I got <u>back</u> to the **<u>shop</u>**

77. ⟍ it was **<u>closed</u>**.

Appendix 2

1. The analysis of intonation patterns

TU	IP	Record 1	Record 2	Record 3	Record 4	Record 5	Record 6	Record 7
1	F-R	✓	✓	F	✓	F	✓	F
2	F-R	✓	✓	R	✓	✓	✓	✓
3	F	✓	✓	✓	✓	✓	✓	✓
4	F	✓	✓	✓	✓	✓	✓	✓
5	F	✓	✓	✓	✓	F-R	✓	✓
6	F	✓	R	✓	R	✓	F-R	F-R
7	F	✓	✓	✓	✓	F-R	✓	✓
8	F-R	F	F	F	F	F	F	✓
9	F-R	✓	✓	✓	✓	✓	✓	✓
10	F-R	F	✓	✓	F	✓	F	✓
11	F	✓	✓	✓	✓	✓	✓	✓
12	F-R	F	✓	✓	✓	F	✓	F
13	F-R	F	✓	✓	✓	F	✓	F
14	F	✓	✓	✓	✓	✓	✓	✓
15	F	✓	✓	✓	✓	✓	✓	✓
16	F	✓	✓	F-R	✓	✓	✓	✓
17	F-R	F	F	F	F	F	F	F
18	F-R	F	✓	✓	F	✓	✓	✓
19	F	✓	✓	✓	✓	✓	✓	✓
20	F	✓	✓	✓	✓	✓	✓	✓
21	F	✓	✓	✓	✓	✓	✓	✓
22	F-R	✓	✓	✓	✓	F	F	F
23	F	✓	✓	✓	✓	✓	✓	✓
24	F-R	✓	✓	✓	F	✓	F	✓
25	F	✓	✓	✓	✓	✓	✓	✓
26	F	✓	✓	✓	✓	✓	✓	✓
27	F-R	✓	✓	F	✓	F	F	F
28	F	✓	✓	✓	F-R	F-R	F-R	✓
29	F	R	✓	✓	✓	✓	✓	F-R
30	F	✓	✓	✓	✓	✓	✓	✓
31	F-R	✓	✓	✓	✓	✓	✓	✓
32	F	✓	✓	✓	✓	✓	✓	✓
33	F-R	✓	F	F	✓	✓	✓	✓
34	F-R	✓	✓	✓	✓	✓	✓	✓
35	F-R	✓	✓	✓	✓	✓	✓	✓
36	F	F-R	✓	✓	✓	✓	✓	✓
37	F	F-R	✓	F-R	F-R	✓	✓	✓
38	R	✓	✓	✓	✓	F	F	F
39	R	✓	✓	✓	✓	F	F	F
40	R	✓	✓	F-R	✓	✓	✓	✓
41	R	✓	✓	F-R	✓	✓	✓	✓

TU	IP	Record 1	Record 2	Record 3	Record 4	Record 5	Record 6	Record 7
42	R	✓	✓	F-R	✓	✓	✓	✓
43	F	✓	✓	✓	✓	✓	✓	✓
44	F	✓	✓	✓	✓	✓	✓	✓
45	F-R	F	F	F	F	F	✓	F
46	F	✓	✓	✓	F-R	✓	F-R	F-R
47	F	R	R	✓	✓	F-R	✓	✓
48	F-R	✓	✓	F	✓	F	F	✓
49	F	✓	✓	✓	✓	✓	✓	✓
50	F-R	✓	✓	F	✓	✓	✓	✓
51	F	✓	✓	✓	✓	✓	✓	✓
52	R	✓	✓	✓	✓	✓	✓	✓
53	F	✓	✓	✓	✓	✓	✓	✓
54	F	✓	✓	✓	✓	✓	✓	✓
55	F	F-R	✓	✓	✓	✓	✓	✓
56	R	✓	✓	F	✓	F	✓	F-R
57	R	✓	✓	✓	✓	F	✓	F-R
58	R	✓	✓	✓	✓	F	✓	F-R
59	R	✓	✓	✓	✓	F	✓	F-R
60	R	✓	✓	✓	✓	F	✓	F-R
61	R	✓	✓	✓	✓	F	✓	F-R
62	F-R	✓	✓	✓	✓	F	✓	✓
63	F-R	✓	R	✓	✓	F	F	✓
64	F	F-R	✓	✓	✓	✓	✓	✓
65	F	✓	✓	✓	✓	✓	✓	✓
66	F	✓	✓	✓	✓	✓	✓	✓
67	F	✓	✓	✓	✓	✓	✓	✓
68	F	R	R	✓	F-R	✓	R	R
69	R	✓	✓	✓	✓	✓	F	✓
70	R	✓	✓	✓	✓	✓	F	✓
71	F	R	R	R	R	R	✓	✓
72	F	✓	✓	✓	✓	✓	✓	✓
73	F-R	✓	F-R	F	✓	✓	✓	✓
74	F	✓	✓	F-R	✓	F-R	✓	✓
75	F	✓	✓	✓	✓	✓	✓	✓
76	F-R	✓	✓	✓	✓	✓	✓	✓
77	F	✓	✓	✓	✓	✓	✓	✓

TU	IP	Record 8	Record 9	Record 12	Record 13	Record 14	Record 15
1	F-R	✓	F	F	F	F	F
2	F-R	✓	✓	✓	✓	✓	✓
3	F	✓	✓	✓	✓	✓	✓
4	F	✓	✓	✓	✓	✓	✓
5	F	✓	✓	✓	✓	✓	✓
6	F	✓	✓	✓	F-R	R	R
7	F	✓	✓	F-R	✓	F-R	✓
8	F-R	✓	F	✓	✓	F	F
9	F-R	✓	✓	✓	✓	✓	✓
10	F-R	✓	F	✓	✓	✓	✓
11	F	✓	✓	✓	✓	✓	✓
12	F-R	✓	F	✓	✓	✓	✓
13	F-R	✓	F	✓	✓	✓	✓
14	F	✓	✓	✓	✓	✓	✓
15	F	✓	✓	✓	✓	✓	✓
16	F	✓	✓	✓	✓	✓	✓
17	F-R	F	F	✓	F	✓	✓
18	F-R	✓	✓	✓	F	✓	✓
19	F	F-R	✓	✓	R	✓	✓
20	F	✓	✓	✓	✓	✓	✓
21	F	✓	✓	✓	✓	✓	✓
22	F-R	✓	F	✓	F	✓	F
23	F	✓	✓	✓	✓	✓	✓
24	F-R	✓	✓	✓	F	F	✓
25	F	✓	✓	✓	✓	✓	✓
26	F	✓	✓	✓	✓	✓	✓
27	F-R	✓	F	F	F	F	F
28	F	✓	✓	R	F-R	R	R
29	F	✓	R	✓	R	R	✓
30	F	✓	✓	✓	✓	✓	✓
31	F-R	✓	✓	✓	✓	✓	✓
32	F	✓	✓	✓	✓	✓	✓
33	F-R	✓	F	✓	✓	✓	✓
34	F-R	✓	F	✓	✓	✓	✓
35	F-R	✓	F	✓	✓	✓	✓
36	F	✓	✓	F-R	F-R	✓	✓
37	F	✓	✓	✓	F-R	✓	✓
38	R	F	✓	✓	✓	F	F
39	R	F-R	✓	✓	✓	F	F
40	R	✓	✓	✓	✓	✓	✓
41	R	✓	✓	✓	✓	✓	✓
42	R	✓	✓	✓	✓	✓	✓
43	F	✓	✓	✓	✓	✓	✓
44	F	✓	✓	✓	✓	✓	✓

TU	IP	Record 8	Record 9	Record 12	Record 13	Record 14	Record 15
45	F-R	✓	F	F	F	✓	F
46	F	✓	R	F-R	R	F-R	✓
47	F	✓	✓	✓	✓	✓	✓
48	F-R	✓	F	✓	✓	✓	✓
49	F	✓	✓	✓	✓	✓	✓
50	F-R	✓	F	✓	✓	✓	F
51	F	✓	✓	✓	✓	✓	✓
52	R	✓	✓	✓	✓	✓	✓
53	F	✓	✓	✓	✓	✓	✓
54	F	✓	✓	✓	✓	✓	✓
55	F	✓	✓	✓	✓	✓	✓
56	R	F	✓	✓	F	✓	F
57	R	✓	✓	✓	✓	✓	✓
58	R	✓	✓	✓	✓	✓	✓
59	R	✓	✓	✓	✓	✓	✓
60	R	✓	✓	✓	✓	✓	✓
61	R	✓	✓	✓	✓	✓	✓
62	F-R	R	R	✓	✓	✓	✓
63	F-R	✓	R	✓	✓	✓	✓
64	F	✓	✓	✓	✓	✓	✓
65	F	✓	✓	✓	✓	✓	✓
66	F	✓	✓	✓	✓	✓	✓
67	F	✓	✓	✓	✓	✓	✓
68	F	✓	R	R	✓	R	✓
69	R	✓	✓	F	✓	✓	✓
70	R	✓	✓	F	✓	✓	✓
71	F	R	✓	R	R	R	✓
72	F	✓	✓	✓	✓	✓	✓
73	F-R	✓	✓	✓	✓	✓	✓
74	F	✓	✓	F-R	✓	✓	F-R
75	F	✓	✓	✓	✓	✓	✓
76	F-R	✓	✓	F	✓	✓	✓
77	F	✓	✓	✓	✓	✓	✓

TU	IP	Record 16	Record 17	Record 18	Record 19	Record 20	Record 21
1	F-R	F	F	F	✓	✓	✓
2	F-R	✓	✓	✓	✓	✓	✓
3	F	✓	✓	✓	✓	✓	✓
4	F	✓	✓	✓	✓	✓	✓
5	F	✓	✓	✓	✓	✓	✓
6	F	✓	✓	✓	R	✓	R
7	F	✓	✓	✓	F-R	✓	✓
8	F-R	F	✓	✓	✓	F	F
9	F-R	✓	✓	✓	✓	✓	✓
10	F-R	F	✓	✓	✓	F	✓
11	F	✓	✓	✓	✓	✓	✓
12	F-R	F	✓	✓	✓	F	✓
13	F-R	✓	✓	✓	✓	F	✓
14	F	✓	✓	✓	✓	✓	✓
15	F	✓	✓	✓	✓	✓	✓
16	F	✓	✓	✓	✓	✓	✓
17	F-R	F	✓	✓	F	F	F
18	F-R	F	✓	F	✓	F	✓
19	F	✓	✓	✓	✓	✓	R
20	F	✓	✓	✓	✓	✓	✓
21	F	✓	✓	✓	✓	✓	✓
22	F-R	F	F	F	✓	F	F
23	F	✓	✓	✓	✓	✓	✓
24	F-R	F	F	F	✓	F	F
25	F	✓	✓	✓	✓	✓	✓
26	F	✓	✓	✓	✓	✓	✓
27	F-R	F	✓	F	F	F	F
28	F	F-R	✓	✓	R	F-R	F-R
29	F	✓	✓	R	✓	R	R
30	F	✓	✓	✓	✓	✓	✓
31	F-R	✓	✓	✓	✓	✓	✓
32	F	✓	✓	✓	✓	✓	✓
33	F-R	✓	F	✓	✓	✓	✓
34	F-R	F	✓	✓	✓	✓	F
35	F-R	F	F	✓	✓	✓	F
36	F	✓	✓	✓	✓	✓	✓
37	F	✓	✓	✓	✓	✓	✓
38	R	F	✓	F	✓	F	F
39	R	F	✓	F	F	F	F
40	R	✓	✓	✓	✓	✓	✓
41	R	✓	✓	✓	✓	✓	✓
42	R	✓	✓	✓	✓	✓	✓
43	F	✓	✓	✓	✓	✓	✓
44	F	F	✓	✓	✓	✓	✓

TU	IP	Record 16	Record 17	Record 18	Record 19	Record 20	Record 21
45	F-R	✓	F	F	✓	✓	✓
46	F	✓	✓	✓	F-R	✓	R
47	F	✓	✓	✓	✓	✓	✓
48	F-R	F	F	✓	✓	✓	F
49	F	✓	✓	✓	✓	✓	✓
50	F-R	F	F	✓	✓	F	✓
51	F	✓	✓	✓	✓	✓	✓
52	R	✓	✓	✓	✓	✓	✓
53	F	✓	✓	✓	✓	✓	✓
54	F	✓	✓	✓	✓	✓	✓
55	F	✓	✓	✓	✓	✓	✓
56	R	✓	✓	✓	✓	✓	✓
57	R	✓	✓	✓	✓	✓	✓
58	R	✓	✓	✓	✓	✓	F
59	R	✓	✓	✓	✓	✓	✓
60	R	✓	✓	✓	✓	✓	✓
61	R	✓	✓	✓	✓	✓	✓
62	F-R	✓	✓	✓	✓	✓	F
63	F-R	✓	✓	F	✓	✓	F
64	F	✓	✓	✓	✓	✓	✓
65	F	✓	✓	✓	✓	✓	✓
66	F	✓	✓	✓	✓	✓	✓
67	F	✓	✓	✓	✓	✓	✓
68	F	✓	✓	✓	R	✓	✓
69	R	✓	✓	✓	✓	✓	F
70	R	✓	✓	✓	✓	✓	F
71	F	R	R	✓	✓	✓	R
72	F	✓	✓	✓	✓	✓	✓
73	F-R	✓	✓	✓	✓	✓	✓
74	F	✓	✓	✓	✓	✓	✓
75	F	✓	✓	✓	✓	✓	✓
76	F-R	✓	✓	✓	✓	✓	✓
77	F	✓	✓	✓	✓	✓	✓

X

TU	IP	Record 22	Record 23	Record 24	Record 25	Record 26	Record 27	Record 28
1	F-R	✓	✓	✓	✓	F	F	F
2	F-R	✓	✓	✓	✓	✓	✓	✓
3	F	✓	✓	✓	✓	✓	✓	✓
4	F	✓	✓	✓	✓	✓	✓	✓
5	F	✓	✓	✓	✓	✓	✓	✓
6	F	R	R	R	✓	R	R	R
7	F	F-R	✓	✓	✓	✓	✓	✓
8	F-R	F	F	✓	✓	F	✓	✓
9	F-R	✓	✓	✓	✓	✓	✓	✓
10	F-R	F	✓	✓	✓	F	✓	F
11	F	✓	✓	✓	✓	✓	✓	✓
12	F-R	F	✓	✓	✓	✓	✓	✓
13	F-R	F	✓	✓	✓	✓	✓	✓
14	F	R	✓	R	✓	✓	✓	✓
15	F	✓	✓	✓	✓	✓	✓	✓
16	F	✓	✓	✓	✓	✓	✓	✓
17	F-R	F	F	F	✓	F	F	F
18	F-R	✓	✓	✓	✓	✓	F	✓
19	F	✓	✓	✓	✓	✓	✓	✓
20	F	✓	✓	✓	✓	✓	✓	✓
21	F	✓	✓	✓	✓	✓	✓	✓
22	F-R	F	F	F	F	F	F	F
23	F	✓	✓	✓	✓	✓	✓	✓
24	F-R	✓	F	✓	✓	F	✓	F
25	F	✓	✓	✓	✓	✓	✓	✓
26	F	✓	✓	✓	✓	✓	✓	✓
27	F-R	✓	✓	✓	✓	F	F	F
28	F	✓	✓	✓	✓	F-R	F-R	✓
29	F	✓	✓	✓	✓	✓	✓	✓
30	F	✓	✓	✓	✓	✓	✓	✓
31	F-R	✓	✓	✓	✓	✓	✓	✓
32	F	✓	✓	✓	✓	✓	✓	✓
33	F-R	F	F	✓	F	F	F	✓
34	F-R	✓	✓	✓	✓	✓	✓	✓
35	F-R	✓	✓	✓	✓	F	F	✓
36	F	✓	✓	✓	✓	✓	✓	✓
37	F	✓	✓	✓	✓	R	✓	F
38	R	✓	F	✓	F	✓	✓	F
39	R	✓	F	✓	F	F	✓	F
40	R	✓	F	✓	✓	F	F	F
41	R	F	F	✓	✓	F	F	F
42	R	F	F	✓	✓	F	F	F

TU	IP	Record 22	Record 23	Record 24	Record 25	Record 26	Record 27	Record 28
43	F	✓	✓	✓	✓	✓	✓	✓
44	F	✓	✓	✓	✓	✓	✓	✓
45	F-R	F	F	✓	✓	F	F	F
46	F	R	✓	✓	✓	R	✓	✓
47	F	✓	✓	✓	✓	✓	✓	✓
48	F-R	F	F	✓	✓	F	F	F
49	F	✓	✓	✓	✓	✓	✓	✓
50	F-R	✓	✓	✓	F	✓	✓	F
51	F	✓	✓	✓	✓	✓	✓	✓
52	R	✓	✓	✓	✓	✓	✓	✓
53	F	✓	✓	✓	✓	✓	✓	✓
54	F	✓	✓	✓	✓	✓	✓	✓
55	F	✓	✓	✓	✓	✓	✓	F
56	R	✓	F	✓	✓	✓	✓	F
57	R	✓	F	✓	✓	✓	✓	F
58	R	F	F	✓	F	F	✓	✓
59	R	✓	F	✓	✓	✓	✓	✓
60	R	✓	F	✓	✓	✓	✓	✓
61	R	✓	F	✓	✓	✓	✓	✓
62	F-R	F	F	✓	✓	F	✓	✓
63	F-R	F	F	✓	F	✓	✓	✓
64	F	✓	✓	✓	✓	✓	✓	✓
65	F	✓	✓	✓	✓	✓	✓	✓
66	F	✓	✓	✓	✓	✓	✓	✓
67	F	✓	✓	✓	✓	✓	✓	✓
68	F	R	R	✓	✓	✓	✓	✓
69	R	✓	✓	F	✓	✓	✓	F
70	R	✓	✓	F	✓	✓	✓	F
71	F	R	✓	R	✓	R	✓	R
72	F	✓	✓	✓	✓	✓	✓	✓
73	F-R	✓	✓	F	✓	✓	✓	✓
74	F	✓	✓	✓	✓	F-R	✓	✓
75	F	✓	✓	✓	✓	✓	✓	✓
76	F-R	F-R	✓	✓	✓	✓	✓	✓
77	F	✓	✓	✓	✓	✓	✓	✓

2. The analysis of a placement of the tonic stress

TU	TS	Record 1	Record 2	Record 3	Record 4	Record 5	Record 6
1	hello	✓	✓	✓	✓	✓	✓
2	interview	✓	✓	✓	✓	✓	✓
3	hi	✓	✓	✓	✓	✓	✓
4	yes	✓	✓	✓	✓	✓	✓
5	did	✓	✓	✓	✓	✓	✓
6	go	✓	✓	✓	✓	✓	✓
7	right	✓	✓	✓	✓	✓	✓
8	think	✓	✓	✓	✓	✓	✓
9	right	✓	✓	✓	✓	✓	✓
10	sure	don't	✓	✓	don't	✓	✓
11	mean	✓	✓	✓	✓	✓	✓
12	questions	✓	✓	✓	all	all	✓
13	things	think	✓	✓	right	✓	✓
14	don't	✓	✓	I	✓	✓	✓
15	clothes	wore	✓	✓	✓	✓	✓
16	well	✓	✓	✓	✓	✓	✓
17	worrying	no	no	no	✓	no	no
18	done	✓	✓	✓	✓	✓	✓
19	done	✓	✓	✓	✓	✓	✓
20	Yes	✓	✓	✓	✓	✓	✓
21	know	✓	✓	✓	✓	✓	✓
22	do	✓	nothing	✓	✓	✓	✓
23	course	✓	✓	✓	✓	✓	✓
24	change	can't	✓	✓	✓	can't	✓
25	thinking	can't	✓	✓	✓	can't	✓
26	sure	✓	✓	✓	✓	✓	✓
27	worry	✓	✓	✓	needn't	✓	needn't
28	did	✓	✓	✓	what	✓	✓
29	anyway	✓	✓	✓	✓	✓	✓
30	jeans	had	✓	✓	✓	✓	✓
31	jeans	✓	✓	✓	✓	✓	✓
32	see	✓	✓	✓	✓	✓	✓
33	tie	wore	wore	✓	✓	✓	✓
34	mind	✓	✓	✓	✓	✓	✓
35	said	right	right	✓	✓	right	✓
36	anyway	✓	✓	✓	✓	✓	✓
37	Tony	✓	✓	✓	✓	✓	✓
38	realised	surely	✓	✓	✓	✓	✓
39	suits	✓	everybody	✓	✓	✓	✓
40	that	✓	job	job	✓	✓	✓
41	salary	✓	good	such	good	✓	✓

TU	TS	Record 1	Record 2	Record 3	Record 4	Record 5	Record 6
42	so	✓	responsibility	responsibility	✓	✓	✓
43	better	ought	✓	✓	✓	✓	✓
44	remind	don't	don't	✓	✓	✓	don't
45	stupid	✓	✓	✓	✓	✓	✓
46	problem	✓	✓	what	✓	✓	✓
47	know	✓	✓	✓	✓	✓	✓
48	got	✓	suit	✓	suit	✓	✓
49	yes	✓	✓	✓	✓	✓	✓
50	got	✓	✓	✓	✓	✓	✓
51	cleaner's	✓	✓	✓	✓	✓	✓
52	where	✓	✓	✓	✓	✓	✓
53	cleaner's	✓	✓	✓	✓	✓	✓
54	is	✓	✓	still	✓	still	✓
55	hopeless	✓	✓	✓	✓	✓	✓
56	are	✓	✓	here	✓	✓	✓
57	lifetime	✓	✓	chance	✓	✓	✓
58	want	exactly	exactly	exactly	exactly	✓	✓
59	qualifications	all	all	all	all	all	✓
60	experience	✓	✓	✓	✓	✓	✓
61	ties	no	no	family	✓	family	✓
62	arrives	✓	✓	✓	✓	✓	✓
63	interview	you're	✓	✓	✓	✓	✓
64	cleaner's	✓	✓	✓	✓	✓	✓
65	know	✓	✓	✓	✓	✓	✓
66	know	✓	✓	✓	✓	✓	✓
67	well	✓	✓	✓	✓	✓	✓
68	happened	✓	✓	what	✓	✓	✓
69	go	✓	✓	✓	✓	✓	✓
70	ticket	✓	✓	✓	✓	✓	✓
71	what	✓	✓	✓	✓	✓	✓
72	no	✓	✓	✓	✓	✓	✓
73	Samantha	✓	✓	✓	✓	✓	✓
74	up	✓	✓	✓	✓	me	✓
75	wrong	✓	✓	✓	✓	✓	✓
76	shop	✓	✓	✓	✓	✓	✓
77	closed	✓	✓	✓	✓	✓	✓

TU	TS	Record 7	Record 8	Record 9	Record 10	Record 11
1	hello	✓	✓	✓	✓	✓
2	interview	✓	✓	✓	✓	✓
3	hi	✓	✓	✓	✓	✓
4	yes	✓	✓	✓	✓	✓
5	did	✓	✓	✓	✓	✓
6	go	✓	✓	✓	✓	how
7	right	✓	✓	✓	✓	✓
8	think	✓	✓	✓	✓	✓
9	right	✓	✓	✓	✓	✓
10	sure	✓	✓	✓	don't	don't
11	mean	✓	✓	✓	✓	✓
12	questions	✓	✓	all	✓	✓
13	things	✓	✓	✓	right	✓
14	don't	✓	✓	✓	✓	✓
15	clothes	right	✓	right	✓	✓
16	well	✓	✓	✓	✓	✓
17	worrying	✓	✓	✓	✓	✓
18	done	✓	✓	✓	✓	✓
19	done	✓	✓	✓	✓	✓
20	Yes	✓	✓	✓	✓	✓
21	know	✓	✓	✓	✓	✓
22	do	✓	✓	nothing	✓	nothing
23	course	✓	✓	✓	✓	✓
24	change	✓	✓	✓	✓	✓
25	thinking	✓	✓	✓	✓	✓
26	sure	✓	✓	✓	✓	✓
27	worry	✓	✓	✓	✓	✓
28	did	✓	wear	✓	wear	wear
29	anyway	✓	✓	✓	✓	✓
30	jeans	✓	✓	had	✓	✓
31	jeans	✓	✓	✓	✓	✓
32	see	✓	✓	✓	✓	✓
33	tie	✓	✓	wore	✓	✓
34	mind	✓	✓	✓	✓	✓
35	said	✓	right	✓	✓	right
36	anyway	✓	✓	✓	✓	✓
37	Tony	✓	✓	✓	✓	✓
38	realised	✓	✓	✓	✓	✓
39	suits	✓	✓	everybody	✓	✓
40	that	✓	✓	✓	✓	✓
41	salary	✓	✓	✓	✓	good
42	so	responsibility	responsibility	ought	✓	responsibility
43	better	✓	✓	✓	✓	✓
44	remind	✓	✓	✓	don't	✓

TU	TS	Record 7	Record 8	Record 9	Record 10	Record 11
45	stupid	✓	✓	✓	✓	✓
46	problem	✓	✓	✓	✓	what
47	know	✓	✓	✓	✓	✓
48	got	✓	suit	✓	✓	✓
49	yes	✓	✓	✓	✓	✓
50	got	✓	✓	✓	✓	✓
51	cleaner's	✓	✓	✓	✓	✓
52	where	✓	✓	✓	✓	✓
53	cleaner's	✓	✓	✓	✓	✓
54	is	✓	✓	✓	✓	still
55	hopeless	✓	✓	✓	✓	✓
56	are	✓	✓	✓	✓	✓
57	lifetime	✓	✓	chance	✓	✓
58	want	exactly	✓	exactly	exactly	exactly
59	qualifications	✓	✓	✓	✓	✓
60	experience	✓	✓	✓	✓	✓
61	ties	no	family	✓	✓	family
62	arrives	✓	✓	day	day	✓
63	interview	✓	✓	✓	✓	✓
64	cleaner's	✓	✓	✓	✓	✓
65	know	✓	✓	✓	✓	✓
66	know	✓	✓	✓	✓	✓
67	well	✓	✓	✓	✓	✓
68	happened	✓	✓	✓	✓	✓
69	go	✓	✓	it	✓	✓
70	ticket	✓	✓	✓	✓	✓
71	what	✓	✓	✓	✓	✓
72	no	✓	✓	✓	✓	✓
73	Samantha	✓	✓	asked	✓	✓
74	up	✓	me	me	✓	✓
75	wrong	✓	✓	✓	✓	✓
76	shop	✓	✓	✓	✓	✓
77	closed	✓	✓	✓	✓	✓

TU	TS	Record 12	Record 13	Record 14	Record 15	Record 16
1	hello	✓	✓	✓	✓	✓
2	interview	✓	✓	✓	✓	✓
3	hi	✓	✓	✓	✓	✓
4	yes	✓	✓	✓	✓	✓
5	did	✓	✓	✓	✓	✓
6	go	✓	✓	✓	✓	✓
7	right	✓	✓	✓	✓	✓
8	think	✓	✓	✓	✓	✓
9	right	✓	✓	✓	✓	✓
10	sure	✓	✓	✓	✓	✓
11	mean	✓	✓	✓	✓	✓
12	questions	✓	all	all	all	✓
13	things	right	right	right	right	right
14	don't	✓	✓	✓	✓	✓
15	clothes	✓	✓	✓	✓	right
16	well	✓	✓	✓	✓	✓
17	worrying	✓	no	✓	✓	✓
18	done	✓	✓	✓	✓	✓
19	done	✓	✓	✓	✓	✓
20	Yes	✓	✓	✓	✓	✓
21	know	✓	✓	✓	✓	✓
22	do	✓	✓	✓	nothing	✓
23	course	✓	✓	✓	✓	✓
24	change	✓	anything	anything	✓	✓
25	thinking	✓	✓	✓	✓	✓
26	sure	✓	✓	✓	✓	✓
27	worry	✓	needn't	✓	✓	✓
28	did	what	✓	✓	wear	✓
29	anyway	✓	✓	✓	✓	✓
30	jeans	✓	✓	✓	✓	✓
31	jeans	✓	✓	✓	✓	✓
32	see	✓	✓	✓	✓	✓
33	tie	wore	✓	✓	✓	✓
34	mind	✓	✓	✓	✓	✓
35	said	✓	✓	right	✓	right
36	anyway	✓	✓	✓	✓	✓
37	Tony	✓	✓	✓	✓	✓
38	realised	✓	✓	✓	✓	✓
39	suits	✓	✓	✓	✓	✓
40	that	✓	✓	✓	✓	✓
41	salary	✓	✓	✓	good	✓
42	so	responsibility	✓	responsibility	✓	✓
43	better	✓	✓	✓	✓	✓
44	remind	✓	✓	✓	✓	✓

TU	TS	Record 12	Record 13	Record 14	Record 15	Record 16
45	stupid	✓	✓	✓	✓	✓
46	problem	✓	✓	✓	✓	✓
47	know	✓	✓	✓	✓	✓
48	got	suit	suit	suit	suit	suit
49	yes	✓	✓	✓	✓	✓
50	got	✓	✓	✓	✓	one
51	cleaner's	✓	✓	✓	✓	✓
52	where	✓	✓	✓	✓	✓
53	cleaner's	✓	✓	✓	✓	✓
54	is	✓	✓	still	✓	still
55	hopeless	✓	✓	✓	✓	✓
56	are	✓	here	✓	✓	✓
57	lifetime	✓	✓	✓	✓	✓
58	want	exactly	✓	✓	✓	exactly
59	qualifications	✓	✓	✓	✓	✓
60	experience	✓	✓	✓	✓	✓
61	ties	✓	family	✓	✓	✓
62	arrives	✓	✓	✓	✓	✓
63	interview	✓	✓	✓	✓	✓
64	cleaner's	✓	✓	✓	✓	✓
65	know	✓	✓	✓	✓	✓
66	know	✓	✓	✓	✓	✓
67	well	✓	✓	✓	✓	✓
68	happened	✓	✓	✓	✓	✓
69	go	✓	✓	✓	✓	✓
70	ticket	✓	✓	✓	✓	✓
71	what	✓	✓	✓	✓	✓
72	no	✓	✓	✓	✓	✓
73	Samantha	✓	✓	✓	✓	✓
74	up	✓	✓	✓	pick	✓
75	wrong	✓	✓	✓	✓	gave
76	shop	✓	✓	✓	✓	✓
77	closed	✓	✓	✓	✓	✓

TU	TS	Record 17	Record 18	Record 19	Record 20	Record 21	Record 22
1	hello	✓	✓	✓	✓	✓	✓
2	interview	✓	✓	✓	✓	✓	✓
3	hi	✓	✓	✓	✓	✓	✓
4	yes	✓	✓	✓	✓	✓	✓
5	did	✓	✓	✓	✓	✓	✓
6	go	✓	✓	✓	✓	✓	✓
7	right	✓	✓	✓	✓	✓	✓
8	think	✓	✓	✓	✓	✓	✓
9	right	✓	✓	✓	✓	✓	✓
10	sure	✓	don't	✓	don't	✓	✓
11	mean	✓	✓	✓	✓	✓	✓
12	questions	all	✓	✓	✓	✓	✓
13	things	✓	right	right	✓	✓	✓
14	don't	✓	✓	✓	✓	think	✓
15	clothes	✓	✓	✓	✓	✓	✓
16	well	✓	✓	✓	✓	✓	✓
17	worrying	✓	✓	✓	no	point	✓
18	done	✓	✓	✓	✓	✓	✓
19	done	✓	✓	✓	✓	✓	✓
20	Yes	✓	✓	✓	✓	✓	✓
21	know	✓	✓	✓	✓	✓	✓
22	do	✓	✓	✓	✓	✓	nothing
23	course	✓	✓	✓	✓	✓	✓
24	change	can't	✓	✓	can't	✓	anything
25	thinking	✓	✓	✓	can't	✓	✓
26	sure	✓	✓	✓	✓	✓	✓
27	worry	✓	✓	needn't	✓	needn't	✓
28	did	wear	✓	✓	✓	✓	✓
29	anyway	✓	✓	✓	✓	✓	✓
30	jeans	✓	✓	✓	✓	✓	✓
31	jeans	✓	✓	✓	✓	✓	✓
32	see	✓	✓	✓	✓	✓	✓
33	tie	✓	✓	✓	✓	✓	✓
34	mind	✓	✓	✓	✓	✓	✓
35	said	right	✓	right	✓	right	right
36	anyway	✓	✓	✓	✓	✓	✓
37	Tony	✓	✓	✓	✓	✓	✓
38	realised	✓	✓	✓	✓	✓	✓
39	suits	✓	✓	✓	✓	✓	✓
40	that	✓	✓	✓	✓	✓	✓
41	salary	✓	good	✓	good	✓	✓
42	so	✓	✓	✓	✓	responsibility	responsibility
43	better	✓	ought	✓	✓	jeans	jeans

TU	TS	Record 17	Record 18	Record 19	Record 20	Record 21	Record 22
44	remind	✓	✓	✓	✓	✓	✓
45	stupid	✓	✓	✓	✓	✓	✓
46	problem	✓	✓	✓	✓	✓	✓
47	know	✓	✓	✓	✓	✓	✓
48	got	suit	✓	suit	✓	suit	✓
49	yes	✓	✓	✓	✓	✓	✓
50	got	✓	✓	✓	✓	one	✓
51	cleaner's	✓	✓	✓	✓	✓	✓
52	where	✓	✓	✓	✓	✓	✓
53	cleaner's	✓	✓	✓	✓	✓	✓
54	is	✓	still	✓	✓	still	still
55	hopeless	✓	✓	✓	✓	✓	✓
56	are	✓	✓	✓	✓	✓	✓
57	lifetime	✓	✓	✓	✓	✓	✓
58	want	exactly	✓	✓	exactly	job	✓
59	qualifications	all	all	✓	all	right	✓
60	experience	✓	lot	✓	lot	✓	✓
61	ties	no	family	family	✓	✓	✓
62	arrives	✓	✓	day	✓	✓	✓
63	interview	✓	✓	✓	✓	✓	✓
64	cleaner's	✓	✓	✓	✓	✓	✓
65	know	✓	✓	✓	✓	✓	✓
66	know	✓	✓	✓	✓	✓	✓
67	well	✓	✓	✓	✓	✓	✓
68	happened	✓	✓	✓	✓	✓	✓
69	go	✓	✓	✓	✓	✓	✓
70	ticket	✓	✓	✓	✓	✓	✓
71	what	✓	✓	✓	✓	✓	✓
72	no	✓	✓	✓	✓	✓	✓
73	Samantha	✓	✓	✓	✓	✓	✓
74	up	✓	✓	✓	✓	me	pick
75	wrong	✓	✓	✓	✓	✓	✓
76	shop	✓	✓	back	✓	✓	back
77	closed	✓	✓	✓	✓	✓	✓

TU	TS	Record 23	Record 24	Record 25	Record 26	Record 27	Record 28
1	hello	✓	✓	✓	✓	✓	✓
2	interview	✓	✓	✓	✓	✓	✓
3	hi	✓	✓	✓	✓	✓	✓
4	yes	✓	✓	✓	✓	✓	✓
5	did	✓	✓	✓	✓	✓	✓
6	go	✓	✓	✓	✓	✓	✓
7	right	✓	✓	✓	✓	✓	✓
8	think	✓	✓	✓	✓	✓	✓
9	right	✓	✓	✓	✓	✓	✓
10	sure	don't	✓	✓	✓	✓	✓
11	mean	✓	✓	✓	✓	✓	✓
12	questions	✓	all	✓	all	✓	all
13	things	right	right	✓	right	right	✓
14	don't	✓	✓	✓	✓	✓	✓
15	clothes	✓	right	✓	✓	✓	✓
16	well	✓	✓	✓	✓	✓	✓
17	worrying	✓	✓	✓	about	✓	✓
18	done	✓	✓	✓	✓	✓	✓
19	done	✓	✓	✓	✓	✓	✓
20	Yes	✓	✓	✓	✓	✓	✓
21	know	✓	✓	✓	✓	✓	✓
22	do	✓	✓	✓	about	✓	✓
23	course	✓	✓	✓	✓	✓	✓
24	change	✓	✓	anything	✓	can't	✓
25	thinking	✓	✓	✓	✓	✓	✓
26	sure	✓	✓	✓	✓	✓	✓
27	worry	✓	✓	✓	✓	✓	✓
28	did	✓	✓	wear	what	✓	wear
29	anyway	✓	✓	✓	✓	✓	✓
30	jeans	✓	✓	✓	✓	✓	✓
31	jeans	✓	✓	✓	✓	✓	✓
32	see	✓	✓	✓	✓	✓	✓
33	tie	✓	but	✓	✓	✓	✓
34	mind	✓	✓	✓	✓	✓	✓
35	said	✓	✓	✓	right	right	right
36	anyway	✓	✓	✓	✓	✓	✓
37	Tony	✓	✓	✓	✓	✓	✓
38	realised	✓	✓	✓	✓	✓	surely
39	suits	✓	✓	✓	✓	✓	✓
40	that	✓	✓	✓	✓	✓	✓
41	salary	good	✓	✓	good	✓	good
42	so	responsibility	✓	✓	✓	responsibility	✓
43	better	✓	ought	✓	✓	✓	jeans

TU	TS	Record 23	Record 24	Record 25	Record 26	Record 27	Record 28
44	remind	✓	✓	✓	✓	✓	✓
45	stupid	✓	✓	✓	✓	✓	✓
46	problem	✓	✓	✓	✓	✓	✓
47	know	✓	✓	✓	✓	✓	✓
48	got	✓	suit	suit	✓	✓	suit
49	yes	✓	✓	✓	✓	✓	✓
50	got	✓	✓	✓	✓	✓	✓
51	cleaner's	✓	✓	✓	✓	✓	✓
52	where	✓	✓	✓	✓	✓	✓
53	cleaner's	✓	✓	✓	✓	✓	✓
54	is	still	✓	✓	✓	✓	✓
55	hopeless	✓	✓	✓	✓	✓	✓
56	are	✓	✓	✓	✓	✓	✓
57	lifetime	✓	✓	✓	✓	✓	✓
58	want	✓	exactly	✓	job	✓	✓
59	qualifications	✓	all	all	all	✓	✓
60	experience	lot	✓	✓	✓	✓	lot
61	ties	no	✓	✓	✓	family	✓
62	arrives	✓	✓	✓	✓	✓	✓
63	interview	✓	room	✓	✓	✓	✓
64	cleaner's	✓	✓	✓	✓	✓	✓
65	know	✓	✓	✓	✓	✓	✓
66	know	✓	✓	✓	✓	✓	✓
67	well	✓	✓	✓	✓	✓	✓
68	happened	✓	✓	✓	✓	✓	✓
69	go	✓	✓	✓	it	✓	✓
70	ticket	✓	✓	✓	✓	✓	✓
71	what	✓	✓	✓	✓	✓	✓
72	no	✓	✓	✓	✓	✓	✓
73	Samantha	✓	✓	✓	✓	✓	✓
74	up	✓	pick	✓	✓	✓	✓
75	wrong	✓	✓	✓	✓	✓	✓
76	shop	✓	✓	✓	✓	✓	✓
77	closed	✓	✓	✓	✓	✓	✓

Appendix 3

1. Tables of misused intonation patterns

Table 1

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
1	F-R	28	100%	F	14	50%

Table 2

T U	correct IP	Total number of speakers		misused IP	Number of speakers		misused IP	Number of speakers	
6	F	28	100%	R	12	43%	F-R	3	11%

Table 3

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
7	F	28	100%	F-R	6	21%

Table 4

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
8	F-R	28	100%	F	17	61%

Table 5

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
9	F-R	28	100%	R	0	0%

Table 6

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
10	F-R	28	100%	F	11	39%

Table 7

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
17	F-R	28	100%	F	21	75%

Table 8

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
22	F-R	28	100%	F	20	71%

Table 9

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
24	F-R	28	100%	F	14	50%

Table 10

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
27	F-R	28	100%	F	19	68%

Table 11

TU	correct IP	Total number of speakers		misused IP	Number of speakers		misused IP	Number of speakers	
28	F	28	100%	F-R	9	32%	R	4	14%
29	F	28	100%	R	7	25%			

Table 12

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
33	F-R	28	100%	F	10	36%

Table 13

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
35	F-R	28	100%	F	7	25%

Table 14

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
38	R	28	100%	F	14	50%

Table 15

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
40	R	28	100%	F	5	18%
41	R	28	100%	F	6	21%
42	R	28	100%	F	6	21%

Table 16

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
45	F-R	28	100%	F	19	68%

Table 17

TU	correct IP	Total number of speakers		misused IP	Number of speakers		misused IP	Number of speakers	
46	F	28	100%	R	6	21%	F-R	7	25%

Table 18

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
48	F-R	28	100%	F	13	46%

Table 19

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
50	F-R	28	100%	F	9	32%

Table 20

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
56	R	28	100%	F	8	29%
57	R	28	100%	F	4	14%
58	R	28	100%	F	7	25%
59	R	28	100%	F	3	11%
60	R	28	100%	F	3	11%
61	R	28	100%	F	3	11%

Table 21

TU	correct IP	Total number of speakers		misused IP	Number of speakers		misused IP	Number of speakers	
62	F-R	28	100%	F	6	21%	R	2	7%
63	F-R	28	100%	F	8	29%	R	2	7%

Table 22

TU	correct IP	Total number of speakers		misused IP	Number of speakers		misused IP	Number of speakers	
68	F	28	100%	R	10	36%	F-R	2	7%

Table 23

TU	correct IP	Total number of speakers		misused IP	Number of speakers	
69	R	28	100%	F	6	21%
70	R	28	100%	F	6	21%
71	F	28	100%	R	17	61%

2. Tables of wrong placement of the tonic stress

Table 24

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
10	sure	28	100%	don't	7	25%

Table 25

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
12	questions	28	100%	all	10	36%
13	things	28	100%	right	13	46%
15	clothes	28	100%	right	5	18%

Table 26

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
17	worrying	28	100%	no	7	25%

Table 27

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
22	do	28	100%	nothing	5	18%

Table 28

TU	correct placement of TS	Number of speakers		misplaced TS	Total number of speakers		misplaced TS	Number of speakers	
24	change	28	100%	can't	5	18%	anything	4	14%
25	thinking	28	100%	can't	3	11%			

Table 29

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
27	worry	28	100%	needn't	5	18%

Table 30

TU	correct placement of TS	Number of speakers		misplaced TS	Total number of speakers		misplaced TS	Number of speakers	
30	did	28	100%	what	3	11%	wear	7	25%

Table 31

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
33	tie	28	100%	wore	4	14%

Table 32

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
35	said	28	100%	right	14	50%

Table 33

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
39	suits	28	100%	everybody	2	7%

Table 34

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
42	salary	28	100%	good	9	32%
43	so	28	100%	responsibility	11	39%

Table 35

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
35	remind	28	100%	don't	4	14%

Table 36

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
48	got	28	100%	suit	14	50%

Table 37

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
54	is	28	100%	still	9	32%

Table 38

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
58	want	28	100%	exactly	13	46%
59	qualification	28	100%	all	11	39%
60	experience	28	100%	lot	4	14%
61	ties	28	100%	family	8	29%

Table 39

TU	correct placement of TS	Total number of speakers		misplaced TS	Number of speakers	
74	up	28	100%	me	4	14%