

BASICS OF
ENGLISH INTONATION

(electronic edition)

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ОСНОВИ ТЕОРІЇ ІНТОНАЦІЇ
АНГЛІЙСЬКОЇ МОВИ
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Посібник укладено відповідно до освітньо-професійної програми «Англійська мова і література та друга іноземна мова» першого (бакалаврського) рівня за спеціальністю 035 Філологія, спеціалізацією 035.041 Германські мови та літератури (переклад включно) (перша – англійська) галузі знань 03 Гуманітарні науки; посібник також може використовуватися студентами, які навчаються за спеціальністю 014 Середня освіта (за предметними спеціальностями), спеціалізацією 014.021 Англійська мова та зарубіжна література.

Метою посібника, який є доповненням до курсу лекцій з предмета *Теоретична фонетика*, є формування теоретичної бази знань студентів, розвиток умінь і навичок просодичного оформлення та інтерпретації мовлення, що сприятиме ефективній комунікації. У посібнику стисло висвітлені питання супrasegmentного рівня мовлення: його просодичні характеристики, зокрема, інтонація, її аспекти і функції; інтонаційна (тональна) група, її ознаки, функції, структурні моделі, значення, що передаються. Практична частина посібника містить питання для здійснення самоконтролю отриманих знань, завдання і вправи, спрямовані на закріплення продуктивних і рецептивних умінь і навичок усної мовленнєвої діяльності.

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INTRODUCTION

Audible oral speech is a universal medium for human communication. It involves verbal and non-verbal means of expression. The former ones are segments – vowels and consonants, the “building material” for words, phrases, and utterances.

Verbal means of communication convey the *content* of what we say. *The way that we say it* is determined by prosodic effects – intonation, loudness, tempo, and rhythm (Crystal, 2003 b, p. 248). They are non-verbal means of communication responsible for the expression of meaning and various nuances of meaning, speakers’ attitudes and emotions. These phenomena, known as prosody, are *suprasegmental* features as they extend over *more than one segment*. It is impossible to study connected oral speech without examining prosody.

This study guide reviews the issues of the prosodic (suprasegmental) features, intonation, in particular, and the intonation group as a prosodic unit. The practical section of the study guide contains self-check questions and exercises which are designed to help students of English linguistics develop their phonological awareness, prosodic sensitivity, speaking skills and listening comprehension skills.

A CONCISE REVIEW OF THE PROSODIC FEATURES

Prosody is referred to as the unity of the suprasegmental features – pitch, loudness, tempo, and rhythm (Crystal, 2003 b, pp. 467, 469; Ogden, 2009, p. 23). These features are called suprasegmental because they go beyond segments of speech (sounds) and extend over syllables, rhythmic units, intonation groups, utterances, and longer stretches of discourse. Chunks of speech such as intonation groups, utterances, and speech paragraphs are demarcated by pauses.

The intonation group is the smallest speech unit that is limited by pauses (for simplicity, only this characteristic from among the important properties of the intonation group is mentioned here). Approaches to the identification of the intonation group, as well as its definitions, functions, patterns, and attitudes expressed are discussed further in the text.

Intonation is defined as the “constructive use of pitch in speech” (Crystal, 2003 b, p. 464); it is often called the “melody of speech” (Wells, 2006, p. 1). At the same time, David Crystal (2018, p. 46) underlines that there is more to intonation than the melody of speech; intonation is the major organizational principle of spoken discourse. Intonation conveys meaning in a language through the use of pitch: the voice rises and falls in pitch to express various meanings (Crystal, 2018, p. 41).

Pitch is the “auditory sensation of the height of a sound” (Crystal, 2003 b, p. 467), “the relative highness or lowness of a tone as perceived by the ear” (Britannica, 2023). Usually, three **pitch levels** are distinguished in unemphatic speech: low, mid, and high. Some phoneticians distinguish low, mid, high, and extra-high pitch levels. The pitch level of the intonation group (and the utterance) is established according to its highest-pitched syllable. The more important is the information conveyed by a prosodic unit, the higher is the pitch level. For example, parenthetical items (which provide additional information or

explanations of what has already been said and are therefore not so important) usually have a lower pitch level than intonation groups around them.

In oral speech, pitch is constantly changing from one level to another, which creates the moving tone. Alternatively, the pitch can remain at a constant level; it is the level tone. The basic moving tones are the fall and the rise; there are also complex tones: the fall-rise and the rise-fall.

Tone (Wells, 2006, p. 9; Roach, 2012, p. 121) is the variation in voice pitch – the direction of pitch movement (the fall, the rise or their combinations) in the **nucleus**, that is the stressed syllable in the most important word in a particular intonation group. Obviously, this definition applies to kinetic (moving) tones only. With static tones, the pitch level remains the same. Usually, it is the mid-level tone (O'Connor and Arnold, 1973, p. 10) or the low level tone (Crystal, 2003 b, p. 248).

Not all aspects of speakers' pitch are important to listeners, but only those which are linguistically significant. In other words, listeners pay attention to the aspects of pitch which indicate contrasts:

- pitch level and the direction of pitch movement help to differentiate between general linguistic meanings; for example, **Come ↘over** (an invitation) is contrasted to **Come ↗over** (asking for repetition);

- similarly, pitch level and the direction of pitch movement help to recognize speakers' attitudes; for example, low-pitched **↘What** said with the falling tone is a question and it is usually perceived as serious, sometimes reserved; high-pitched **↗What** said with the rising tone is a question too, but it is mainly associated with surprise, incredulity, sometimes with indignation.

Another important characteristic of intonation is **pitch range**. It is the distance between a top and a bottom levels of the speaker's pitch. It can be graphically shown as

the distance between two parallel lines that represent the highest and the lowest limits of the range. In unemphatic speech, the speaker normally uses the lower part of the pitch range; while emphatic (emotional) speech involves a wider pitch range – higher falls and rises (Roach, 2012, p. 122–123; Cruttenden, 1997, p. 115). Compare the following diagrams:



Unemphatic and emphatic ways of saying **Yes**

Not all words are equally important in an utterance; important words are said to be **accented**. The importance of this or that word mainly depends on the situational context in which an utterance is used. Imagine, for example, a situation in which a speaker praises their pet:

And I must tell you | that Charlie was an exceptionally smart puppy ||

(No punctuation is used in phonetic transcription; one vertical bar | stands for a short pause; two bars ||, for a long one.)

This utterance consists of two intonation groups. It is quite likely that important words in the second intonation group will be **Charlie**, **exceptionally**, **smart** and **puppy**. They will be **accented**; that is the speaker will accent the stressed syllables in these words. What we perceive as stress is a combination of a greater degree of loudness, a greater length of a stressed syllable, modifications in pitch and the quality of speech sounds.

Which word is the most important one depends on the situational context (Crystal, 2018, p. 42). The potentially most important words are underlined in the examples below:

(a) And I must tell you | that Charlie was an exceptionally smart puppy ||

(Charlie was very smart, even as a puppy)

(b) And I must tell you | that Charlie was an exceptionally smart puppy ||

(The speaker had more than one puppy)

(c) And I must tell you | that Charlie was an exceptionally smart puppy ||

(The speaker is very proud of their pet)

(d) And I must tell you | that Charlie was an exceptionally smart puppy ||

(Charlie might not be a purebred dog but he was very smart)

There are different ways of accenting important words (O'Connor and Arnold, 1973, pp. 5–22). Consider the second intonation group in utterance (a); the stressed syllables are typed in bold style:

that **Charlie** was an **exceptionally smart** ↘ **puppy**

The most important word **puppy** is accented by means of stress and tone (↘). If the pitch level in the pre-nuclear part of the intonation group remains the same, other important words (**Charlie**, **exceptionally**, and **smart**) may be accented by means of stress only. If the pre-nuclear part of the intonation group falls or rises in pitch level, each important word is accented by stress and by change in pitch level as each stressed syllable is said a bit lower or a bit higher than the preceding one.

In connected English speech, accented words alternate with unaccented ones. Content words that draw attention to new information are typically accented, while

content words which convey given information rather than new, as well as function words are usually unaccented (Allen, 1975, p. 76). Alternation of accented (stressed) and unaccented (unstressed) syllables creates the effect of stress-timed **rhythm** – the regular occurrence of prominent syllables in speech (Cruttenden, 1997, p. 14). In other words, stressed syllables in English speech occur at approximately equal intervals of time, regardless of the number of unstressed syllables between stressed ones (Roach, 2012, p. 107). Consider the following example:

That was exactly what they expected.

/ðæt wɒz ɪg'zæktli wɒt ðeɪ ɪk'spektɪd/

There are two rhythmic units in this intonation group. The **rhythmic unit** is a stretch of speech containing a stressed syllable and unstressed syllables before or after it. The division of the intonation group into rhythmic units may not coincide with the division into words because the rhythmic unit starts with the stressed syllable, the exception being the initial rhythmic unit, which can start with unstressed syllables.

In the example above, the first rhythmic unit is /ðæt wɒz ɪg'zæktli wɒt ðeɪ ɪk/; the second rhythmic unit is /'spektɪd/. Unstressed syllables before the first stressed one are called proclitics; the proclitics of the first rhythmic unit are /ðæt wɒz ɪg/. The stressed syllable in the rhythmic unit is its nucleus; in the first rhythmic unit, the nucleus is /'zækt/; in the second one it is /'spek/. Unstressed syllables after the nucleus are called enclitics: /li wɒt ðeɪ ɪk/ and /tɪd / in the first and the second rhythmic units respectively.

So, in this example, there are eight syllables in the first rhythmic unit and two syllables in the second one. Yet “we take an equal amount of time from one stressed syllable to the next” (Cruttenden, 1997, p. 20), therefore the rate of speech in the first rhythmic unit, /ðæt wɒz ɪg'zæktli wɒt ðeɪ ɪk/, is faster than that in the second one, /'spektɪd/.

Tempo is the speaking rate (speed), which serves linguistic purposes (Crystal, 2003 b, p. 469). It is usually described as normal, fast, and slow. Tempo is determined by the relative importance of information conveyed by the speaker. Chunks of speech that are said slowly are perceived as providing more important information than others (for example, *We – are – not – supposed – to – do – it*). Fast tempo can indicate a lesser degree of importance (for example, *A. Problem? – B. Nottoworry*); extra fast tempo can imply urgency.

Tempo of speech may also convey the speaker's emotions. Fast tempo is usually associated with strong emotions, both positive and negative ones, such as joy, anger, etc. Slow tempo is believed to express a calm or reserved attitude. Yet it is all rather relative. For example, a deliberately slow tempo may be used when a speaker experiences a strong negative emotion – controlled rage, disgust, etc.

Speech pause is typically regarded as a stop in the process of production of voice, but not all pauses are silent. Pause is one of the prosodic boundary markers, the other markers being pitch change and slowing down speech tempo (Cruttenden, 1997: 30–32; Krivokapić et al., 2020; Männel et al., 2013; Trouvain, Werner, 2021, 2022).

There are different types of pauses. In spontaneous speech, there are regular natural pauses caused by respiration (breath pauses); regular intentional pauses that signal a boundary between meaningful syntactic units (silent pauses); irregular intentional pauses used for stylistic purposes (silent pauses used to create a special/dramatic effect); irregular unintentional pauses (hesitation pauses; they may also occur when a speaker needs some time to plan what to say next, to recall a word or an expression; hesitation pauses are filled with sounds like *hmm*, *er*, which is why they are also called filled, or voiced pauses) (Deese, 1980, pp. 71, 77; Igras-Cybulska et al., 2016).

Short pauses (|) usually occur between two intonation groups; long pauses (||), between two utterances (for instance: *He'll come | wet or fine ||*). Extra long pauses (|||) occur between two speech paragraphs.

FUNCTIONS OF INTONATION AND OTHER SUPRASEGMENTAL FEATURES

According to David Crystal (2003 a, p. 173; 2003 b, p. 249), the functions of intonation and other suprasegmental features are as follows:

Emotional function

► expressing a variety of positive and negative attitudinal meanings – excitement, indifference, friendliness, hostility, and many more.

Grammatical function

► marking grammatical contrast, for example, between statements and questions (for example: ↘Nonsense versus ↗Nonsense);

identifying clauses and sentences

(for instance: 'Woman without her ↗man | is ↘nothing ||
versus ↘Woman || With↗out her | 'man is ↘nothing ||).

Informational function

► drawing attention to new information in an utterance (as in: I 'want a blue ↘hat versus I 'want a ↘blue hat).

Textual function

► giving speech paragraphs a distinct melodic shape; the pitch level goes up at the beginning of the paragraph, then gradually descends to a relatively low level at the end of the paragraph.

Psychological function

► helping to organize language into units, thus making them easier to perceive.

Indexical function

► being a marker of personal identity, helping to identify people as representatives of different social groups and occupations; for instance, teachers, shop assistants, actors, and others.

Peter Roach (2012, pp. 146–159) discusses the following functions of intonation:

Attitudinal function

- expressing emotions and attitudes; for example:
- the falling tone is associated with finality and definiteness (**Never ↘mind**);
 - the rising tone, with encouragement (**Go ↗on**);
 - the fall-rise, with uncertainty, doubt (**↘Will you help**);
 - the rise-fall, with surprise, being impressed (**They're mag↗nificent**).

Grammatical function

► - indicating boundaries between phrases, clauses, sentences; for instance, it explains the difference between “restrictive” and “non-restrictive” relative clauses:

The 'students who a↘ttended the 'lecture | were 'pictured with the pre↘senter ||

(some students attended the lecture; a “restrictive” relative clause);

The↘students | who a↘ttended the lecture | were 'pictured with the pre↘senter ||

(all students attended the lecture; a “non-restrictive” relative clause);

- expressing difference between questions and statements (in some dialects of English), for example: **You ↘coming** (confirming the information) versus **You ↗coming** (asking a question).

► An overlap between **attitudinal** and **grammatical** functions in tag questions, as in:

She's ↘here | ↘isn't she || (being comparatively certain)

versus **She's ↘here | ↗isn't she ||** (being not so certain, asking for information).

Accentual function

► focusing attention on a particular word by marking it with the tonic stress (= the nucleus of the intonation group), as in the following examples:

This dog is his best \friend

(The man and his dog understand and like each other) versus

This \dog is his best friend

(The man likes his dog more than he likes other people).

Discourse function

► indicating “new” information, as opposed to what is already “given”; it means placing the tonic stress on a particular syllable in a word to which the speaker wants to draw the listener’s attention, that is to the item of information which is new to the listener; for instance:

Put the cat \out

(It’s been sitting in front of the door for hours) versus

Put the \cat out

(The cat, not the kittens);

► signaling a lower degree of importance of a particular tone-unit (= intonation group), or intonational subordination; such tone-units

(a) are said within a lower part of the pitch range,

(b) are said faster,

(c) have narrower pitch range,

(d) have reduced loudness.

The underlined tone-units below are less important than the rest of the utterance:

↗You know | she is a \great ,actress ||

↘ Sooner or later | I↗hope | they’ll \recognize it ||

INTONATION GROUP AS A UNIT OF MEANING

Chunking speech flow

The spoken material is divided into chunks – prosodic units such as intonation groups, utterances, speech paragraphs. Each intonation group has a particular intonation pattern, called “tune” (O’Connor and Arnold, 1973, p. 7; Wells, 2006, p. 6) or pitch contour (Cruttenden, 1997, p. 48).

Chunking speech flow makes it possible for speakers to communicate their thoughts and to emphasize important/new information. At the same time, chunking enables listeners to better comprehend a speaker’s meaning. Usually, a chunk is several words that go together; it is separated from another chunk by a pause. Pauses are not placed randomly. In speech chunks, words are united by sense (Chalker, Weiner, 1994, p. 358; Krivokapić, 2007; Männel et al., 2013; Trouvain, Werner, 2021, 2022; Betz et al., 2023). The terms “sense group” and “intonation patterns” are related to each other, and sense groups are actually intonation groups.

Intonation group: definitions and functions

Consider several definitions of the **intonation group**, variously called **tone group**, **tone unit**, **tone-unit**, **sense group**, **intonation phrase**, **phonological phrase** by different authors.

According to Crystal (2003 a, p. 439), the tone group/unit is a “sequence (or ‘contour’) of ‘tones’ in an utterance”.

Guiliano Ferri et al. (1997, p. 136) define the intonation group as a sequence of phonological words; it is uttered without pauses and has a specific prosodic pattern.

John Christopher Wells (2006, p. 6) regards intonation phrases as chunks of the spoken material that have their own intonation pattern (or “tune”). The same description is provided by Richard Nordquist (2019).

Alan Cruttenden (1997, p. 35) delineate the intonation group using the following criteria: the presence of at least one stressed syllable, the presence of a pitch accent, change of pitch level or pitch direction, pauses (and/or unstressed syllables at the beginning of the intonation group), lengthening of the final syllable.

Peter Roach (2012, pp. 129–130) uses the term “tone-unit”. The core element of the tone-unit is a syllable which carries a tone and tonic stress; usually, tone-units are delimited by pauses.

Joseph Desmond O’Connor and Gordon Frederick Arnold (1973, p. 39) consider both the prosodic and attitudinal aspect of the tone group. They define the latter as a grouping of tunes which convey the same attitude on the part of the speaker (1973: 39).

According to Gillian Brown et al. (2015, p. 46), the tone group is an abstract theoretical unit. Many stretches of spontaneous speech cannot be segmented into units that would correlate with tone groups. Therefore, the researchers focus on the phonetically defined unit which they call the pause-defined unit.

There are no rigid patterns for chunking speech. An utterance may be presented not as a single piece of information, but be divided into two or three pieces, depending on speakers’ meanings and intentions to highlight its particular parts (Wells, 2006, pp. 6–7); for instance:

They say the request is absolutely ridiculous ||

They say | the request is absolutely ridiculous ||

They say | the request | is absolutely ridiculous ||

In the intonation transcription no punctuation marks are used because “intonation and stress are vocal equivalents of written punctuation” (Roach, 2012, p. 129); for instance:

Many of us believe | that keeping wild animals and birds in zoos | is wrong. || If | for some reason | an animal or a bird is incapable of surviving in the wild | it should be kept in a sanctuary | where it should be cared for | protected | and allowed to live freely ||

The **functions of the tone group** (= the **intonation group**) are summarized by Michael Alexander Kirkwood Halliday (2013, p. 15): the tone group is an important factor in understanding meaning; it organizes the speech flow as sequential units of information, thus managing the progression of discourse. The tone group helps the listener to get the message: both how it is expressed through items of news and its value as seen by the speaker.

Intonation group boundary markers

According to Roach (2012, p. 155), boundaries between tone-units (= intonation groups) tend to coincide with boundaries between phrases, clauses, sentences; for example:

You can have both an e-book | and a paper version ||

During their international tour | the band gave several charity concerts ||

She's not in the office || She'll be back after lunch ||

Interestingly, the intonation group boundaries can be located with the help of a parser. Ferri et al. (1997, p. 136) provide the description of an algorithm: segmenting the sentence and locating the end of each phonological word; the end of the intonation group occurs before the VG (verb group) phonological word or before the F (a function word or a punctuation mark) phonological word. On the other hand, pauses seldom occur before NP (prepositional noun group) phonological words and PV (prepositional verb group) phonological words. Each intonation group has its own morphology and performs a particular role in the sentence, that is why it receives a different prosodic pattern from the stock of available intonation contours.

Cruttenden (1997, pp. 29–34) points out that intonation groups are clearly noticeable in reading and speaking prepared texts. In spontaneous speech, on the other hand, there are hesitations, repetitions, incomplete sentences, sentences with breaks between grammatically united components, etc.; so, it is more difficult to say whether an intonation group boundary is present or not. The boundary markers between two intonation groups are as follows:

- pause;
- unstressed syllables at the beginning of the intonation group;
- the lengthening of the final (stressed/unstressed) syllables of the intonation group;
- a change in pitch of unaccented syllables: unaccented syllables at the beginning of a new intonation group can be
 - (a) higher than low-pitched unaccented syllables at the end of the preceding intonation group;
 - (b) lower than high-pitched unaccented syllables at the end of the preceding intonation group.

Brown et al. (2015, p. 47) state that in text read aloud, the syntactic and intonation boundaries tend to coincide; that is, the syntactic boundaries are often marked by pauses.

In spontaneous speech, on the other hand, a person may try to work out what they want to say as they are saying it, making pauses in the middle of noun phrases, changing height and pitch direction only to signal that they they are still planning their utterances. The authors conclude that pitch and pause phenomena are phonetic features which help to realize tone groups; yet, if a speaker has difficulties with expressing his/her meaning or with selecting appropriate lexical items, we can hardly speak of perfectly-patterned tone groups.

Word group, tune, and tone group

O'Connor and Arnold (1973, pp. 2–12, 39–41) discuss the correlation between the notions of the word group, the tune, and the tone group (= intonation group).

In speech, utterances are divided into smaller units, for which O'Connor and Arnold use the neutral term **word groups**. Word groups are grammatically relevant and can be represented by different syntactic structures:

- the subject and the predicate; for example:

The tall woman by his side | is Mrs Smith ||

- a clause; for instance:

If he doesn't submit the report | he'll be fired ||

- an opening phrase; such as:

In short | she was not nominated for the award ||

and others.

Due to pauses, word groups are presented and perceived as prosodically separate units, which are nevertheless connected by meaning. Changing the location of speech pauses cause changes in meaning; for example:

My cousin | who is staying with us | is a playwright ||

(My cousin is currently staying with us; he is a playwright);

My cousin who is staying with us | is a playwright ||

(I have several cousins; the one who is currently staying with us is a playwright).

Speakers divide utterances into smaller units being guided by meaning. In any situation, “it is meaning which is the really important factor” (O’Connor and Arnold, 1973: 39). In some cases, a speaker can choose whether to divide an utterance into word groups or not; for instance, the subject may or may not be separated from the predicate:

This cookbook | is very useful ||

This cookbook is very useful ||

An inherent feature of each word group is its **tune**. O’Connor and Arnold (1973, p. 7) define the tune as the complete pitch pattern of the word group. The shortest tunes are those of single-syllable word groups. In the three examples below, **No**’s are the second speaker’s reactions to three different stimuli of the first speaker. In all the three cases **No** constitutes a complete word group (and a complete utterance) because it is grammatically correct and expresses a particular meaning:

A. Was it a lie ||

B. ↘No ||

(the low falling tone means negation)

A. He called a me fool ||

B. ↘No ||

(the high falling tone can suggest incredulity or indignation)

A. I don't trust him ||

B. ↗ No ||

(the low rising tone communicates a question tinged with surprise or disbelief).

So, tunes can express different **meanings**. Consider two more examples that illustrate how tunes are responsible for the change of meaning:

He's your ↘brother | ↗isn't he ||

(the rising tone in the second word group ↗isn't he indicates that the utterance is a question)

He's your ↘brother | ↘isn't he ||

(the falling tone in ↘isn't he changes the meaning of the whole utterance; now it is a statement and in a particular context it can be interpreted like this: I'm surprised that he doesn't want to help you – after all, he's your brother!)

Another important factor in meaning is **stress**. The importance of stress becomes clear if we consider word groups that are longer than a one-syllable word (such as **No** in the examples above); needless to say, they are the overwhelming majority. For instance:

The dish was just **marvellous!**

What **for?**

He hasn't **arrived** yet.

Each polysyllabic word group has its centre of importance. From a phonetic perspective, the central element of the word group is not the whole word, but the stressed syllable of the most important word which is marked by a change in pitch (the fall, the rise, the fall-rise, the rise-fall). This syllable is called the **nucleus of the tune**. Compare, for example:

Peter was ↘**lucky** ||

↘**Peter** was lucky ||

The nucleus may be preceded and followed by stressed and unstressed syllables. They form the pitch pattern of the tune. The only obligatory element of the pattern is the nucleus; the other elements are optional.

Tunes have their own meanings and express various **attitudes** – the speaker has just to change the direction of pitch movement (to let the voice fall, rise, or to maintain a level pitch between high and low) and to make the pitch range wider or narrower. The following examples present dialogues, where **Yes** is the reaction of the second participant:

A. Will you come ||

B. ↘Yes ||

If it is the low falling tone and the pitch range is narrow, **Yes** sounds cold or neutral. When said with the high falling tone and wide pitch range, the answer can be perceived as excited and happy.

Yes can be pronounced with a rising tone; for example:

A. So he called me and ||

B. ↗ Yes ||

Here the low rising tone indicates that a person is interested or puzzled and wants their interlocutor to continue. The high rising tone can suggest tentative or casual attitude

According to O'Connor and Arnold (1973, p. 39), the **tone group** (= intonation group) is a group of tones which

- ▶ have one or more pitch features in common and
- ▶ convey the same attitude on the part of the speaker.

THE STRUCTURE OF THE INTONATION GROUP

This part of the study guide is based on the seminal works on English intonation by J. D. O'Connor and G. F. Arnold (1973), A. Cruttenden (1997), J. C. Wells (2006), P. Roach (2012), D. Crystal (2003 b).

Nucleus and nuclear tone

It has been stated above that a one-syllable word can constitute a word group and an intonation group if such a word has a particular tune and expresses a certain attitude on the part of the speaker. Consider, for example, the answer to the question in the following dialogue:

A. How many sandwiches did you buy ||

B. ↘**Three** ||

Three is a one-syllable word; it is stressed and carries a falling tone (the Low Fall may sound serious; the High Fall, lively). It is more often, however, that intonation groups comprise more than one syllable and more than one word, as in:

A. How old is your Auntie Marge ||

B. ↘**Seventy** ||

A. What is your cousin Ben ||

B. He's a com↘**puter** engineer ||

In He's a com↘**puter** engineer, the word that is most important for the speaker is

com↘**puter**; its stressed syllable carries the tone – it is the syllable with a distinct pitch movement. This syllable is the **nucleus** of the intonation group. It does not matter whether the speaker uses a falling or a rising tone; what matters is that the nucleus is the syllable on which the tone movement begins (Wells, 2006, p. 7). Compare two examples:

Isn't she ↘**lovely** ||

Isn't she ↗**lovely** ||

The nucleus is the same because in both cases **love-** is a stressed syllable and it is the place where the pitch movement begins. In both cases the word **lovely** is brought into focus: the quality of loveliness is important for the speaker. Yet the use of different tones – falling and rising – changes the meaning. A falling tone (either the Low Fall or the High Fall) indicates a statement: **Isn't she ↘lovely**. Both the Low Rise and the High Rise indicate that **Isn't she ↗lovely** is a question.

The syllables that follow the nucleus are called the **tail**. The combination of the nucleus and the tail (or the nucleus alone if there are no other syllables after it) is the nuclear tone. According to Cruttenden (1997, p. 50), the **nuclear tone** begins on the nucleus and covers the stretch of the intonation group up to its end. It is largely the nuclear tone that conveys the meaning of the intonation group. In the examples above ↘**Seventy**; He's a com↘**puter engineer**; **Isn't she ↗lovely**, the nuclear tones are ↘**Seventy**; ↘**-puter engineer**; ↗**lovely** respectively.

In Crystal's (2003 b, p. 248) classification, there are nine basic types of the nuclear tone ("nine ways of saying **Yes**"):

low fall – the voice falls from a medium to a low pitch

full fall – the voice falls from a high to a low pitch

mid fall – the voice falls from a high to a medium pitch

low rise – the voice rises from a low to a medium pitch

full rise – the voice rises from a low to a high pitch


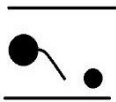
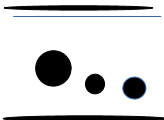

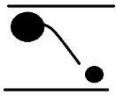
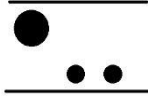

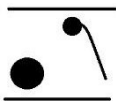
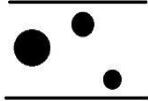

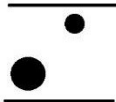
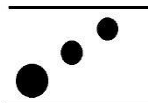
high rise – the voice rises from a medium to a high pitch

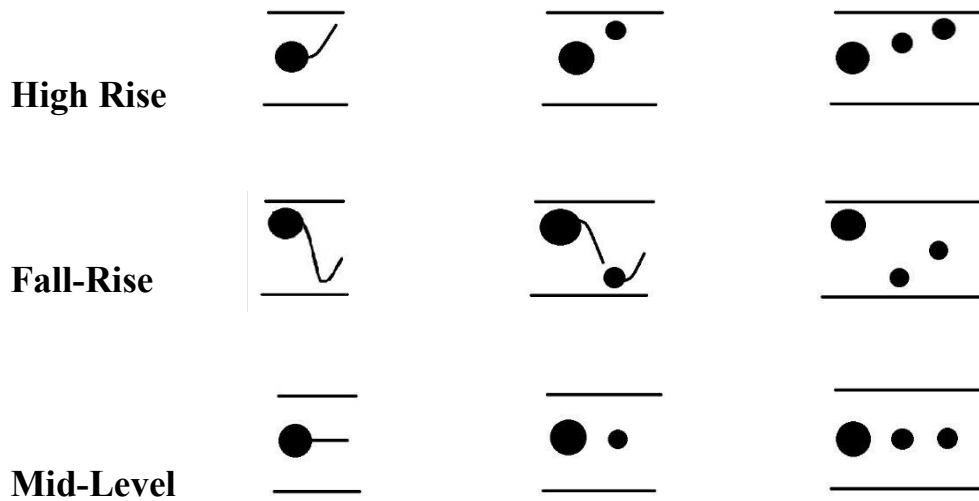
level – the voice maintains a level pitch between low and medium

fall-rise – the voice first falls from a high to a low pitch, then rises to a medium pitch

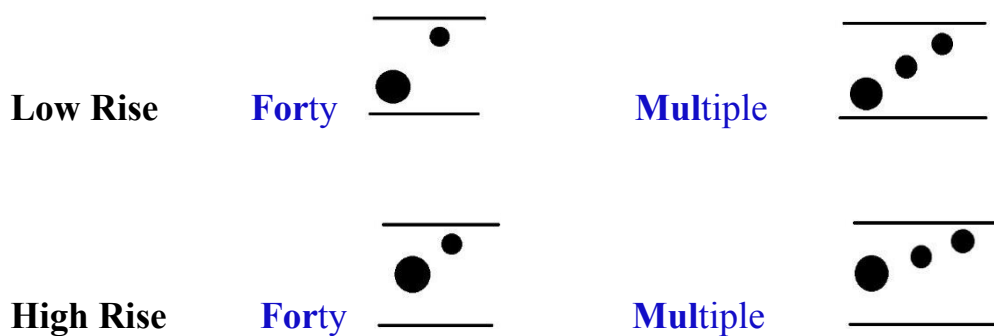
rise-fall – the voice first rises from a medium to a higher pitch, then falls to a low pitch

According to O'Connor and Arnold (1973, pp. 7–17), there are seven types of the nuclear tone. In the diagrams, large dots represent the stressed syllables; small dots, the unstressed ones. The single-syllable, two-syllable, and three-syllable word groups are used to illustrate the system of the tunes:

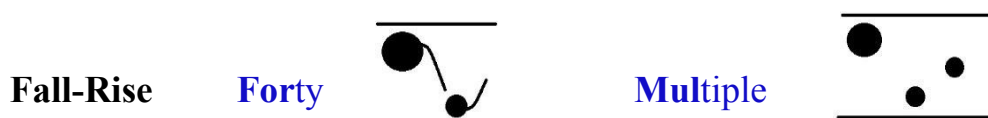
	Yes	Forty	Multiple
Low Fall			
High Fall			
Rise-Fall			
Low Rise			



In the rising tunes of two- and three-syllable words there is no upward glide in the tail but a jump in pitch from the stressed syllable to the unstressed one, for instance:

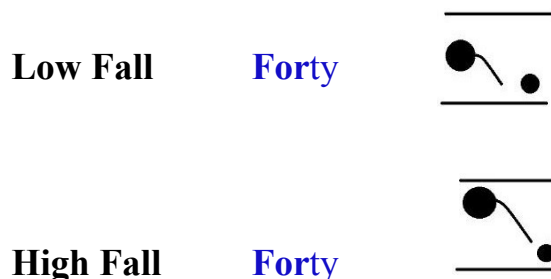


The **Fall-Rise** is not completed within the nucleus but involves two or three syllables of the tail, for example:



With the falling tunes, it is more complicated:

(a) the fall is mainly completed within the stressed syllable if it contains a long vowel, a diphthong or a short vowel + a voiced consonant, as in:



(b) the fall is not completed within the stressed syllable if it contains a short vowel and a voiceless consonant, as in:



(c) the Rise-Fall may follow either (a) or (b) pattern.

O'Connor and Arnold (1973, p. 13) state that all word groups, irrespective of the number of accented (important) or unaccented words in the tail, follow one of the seven nuclear-tone patterns discussed above.

Cruttenden (1997, p. 50–54) also distinguishes between the **high-fall** and the **low-fall**, and between the **high-rise** and the **low-rise**. The falling tones have “serious” overtones, the rising tones are “lighter”. The high-rise ends at a very high pitch, and this is how it differs from the low-rise. A tone that starts very low and has the high-pitched ending is sometimes called the **full rise** (compare Crystal’s taxonomy); though in Cruttenden’s opinion, it is closer semantically to the high-rise.

A second change in pitch direction following the nucleus produces the **fall-rise** and the **rise-fall**; these are complex tones. For instance:

fall-rise

He does it un↘willingly

(the fall occurs on the stressed syllable **-will-**; the rise, on the unstressed syllable **-ly**);

I ↘didn't ask them to ↗come

(the fall-rise is “split” between two words; the fall occurs on the stressed syllable **did-**; the rise, on the stressed syllable **come**);

rise-fall

It's a main di↗stinction

(the rise occurs on the stressed syllable **-stinc-**; the fall, on the unstressed syllable **-tion**).

According to Cruttenden, the fall-rise is sometimes realized as the **rise-fall-rise**; but he does not consider it a separate nuclear tone because it is not associated with a distinctive meaning.

Cruttenden calls the high fall, the low fall, the high rise, the low rise, the fall-rise, and the rise-fall the “moving” tones. There is also the **level** tone, the mid-level tone being the most common one.

Now let us return to O'Connor and Arnold's (1973, pp. 5–7, 13–17) notions of the tone group and the tune. Obviously, the word containing the **nucleus** of the tune is **accented**, as shown in the examples below:

(a) She has re'markable ar'tistic ↘skills

(She is a remarkable artist);

(b) She has re'markable ar'tistic ,skills

(She has artistic, not business or any other skills);

(c) She has re'markable ar,tistic ,skills

(The speaker is impressed by her skills);

(d) \She has re,markable artistic ,skills

(She, not the actress who plays the role of a friend, has remarkable skills).

Usually, there are no accented words in the tail of the tune. **Nucleus is the last pitch accent**; it is the stressed syllable in the last accented word, as in: (a) She has remarkable artistic \skills. However, if the speaker places the nucleus early in an utterance, there can be stressed syllables in the tail, as in: (d) \She has re,markable artistic ,skills. The syllables -mar- and skills are likely to be stressed for rhythmical purposes, but the words remarkable and skills are not accented.

Accented words can occur in the **pre-nuclear** part of the intonation group:

- in (a) the words re'markable and ar'tistic can be accented;
- in (b) there can be one accented word in the pre-nuclear part of the word group: re'markable.

Pre-nuclear part

The syllables before the nucleus form the pre-nuclear part of the tune. The pre-nuclear part comprises two elements, the **pre-head** and the **head**. Both of them are optional; it means that the structural patterns of the intonation group are as follows:

(Pre-Head +) (Head +) Nuclear tone

According to Cruttenden (1997, p. 54), pre-nuclear pitch accents generally serve to modify the meaning conveyed by the nuclear tone.

The **head** is the part of the tune which begins with the stressed syllable of the first accented word and extends to the last syllable before the nucleus (O'Connor and Arnold, 1973, p. 17; Roach, 2012, p. 138; Wells, 2006, p. 8). Compare three examples:

In [She has re'markable ar'tistic \skills](#) the head is 'markable ar'tistic

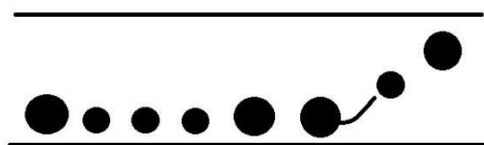
In [She has re'markable ar\tistic ,skills](#) the head is 'markable ar-

Note that there is no head in [\She has re,markable artistic ,skills](#)

According to O'Connor and Arnold (1993, pp. 18–22), there are four types of head in unemphatic speech: the low head, the high head, the falling head, and the rising head.

The **low head** occurs before the Low Rise nuclear tone, as in:

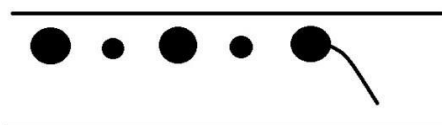
[Couldn't you just say yes or no?](#)



The syllables in the head are said on the low pitch. The accented words (the syllables [Could](#) in [Couldn't](#) and [say](#) in the head) are stressed, but there is no change in their pitch level.

Similarly, the pitch level in the **high head** does not change; but the high head is said on a rather high pitch. For instance:

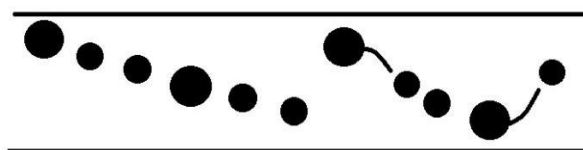
[Thank you very much.](#)



Stress (the syllables [Thank](#) and [ve-](#) in the head) indicates the accent.

In O'Connor and Arnold's taxonomy, the **falling head** occurs before the falling-rising nuclear tone. The first syllable in this type of head is high-pitched, and all the following syllables gradually go down (If the head has only one syllable, it is said on the high level.) The diagram below is an example of a polysyllabic falling head:

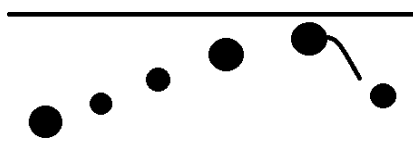
No one has ever accused me of lying.



The beginning of the falling-rising nuclear tone is higher than the last syllable of the falling head (a- in the word accused).

The **rising head** is used with the High Fall. The first syllable of the rising head is low-pitched (if the head has only one syllable, it is said on the low level.). In a polysyllabic rising head, the syllables that follow the first stressed syllable gradually go higher, as in:

What did you do that for?

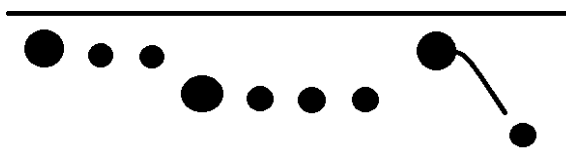


The last syllable of the rising head (do) is lower than the first syllable of the nuclear tone.

According to O'Connor and Arnold (1993, pp. 37–38), the pattern of the head can be modified to make the tone group sound more lively, emotional; in other words, more **emphatic**. The emphatic forms of the head are as follows: the stepping head, the sliding head, and the climbing head.

With the **stepping head**, the stressed syllable of each accented word is said a “step” lower than the previous one; for instance:

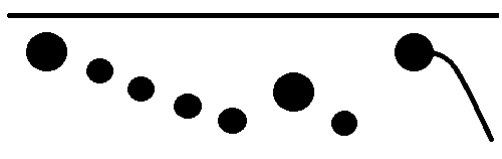
Nobody's coming to his party.



Unstressed syllables in the stepping head are said on the same level as the preceding stressed one. In the example above, the unstressed syllables -body's are level with the preceding stressed syllable No-; the unstressed syllables -ming to his are level with the preceding co-, which is stressed.

The **sliding head** is a series of falls from each stressed syllable. There is a slight jump-up between the last unstressed syllable and the next stressed one in the sliding head, as in:

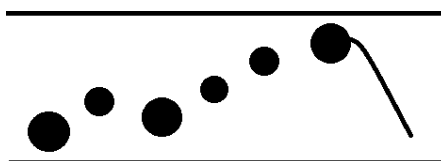
Nobody was surprised at all.



No- is stressed, and the following unstressed syllables -body was sur- “slide down” from it. The second stressed syllable -prised comes up, but not as high as the first stressed syllable No-; the unstressed at “slides down” again.

The **climbing head** is also emphatic. There is a series of rises from each stressed syllable, and a slight jump-down between the last unstressed syllable and the next stressed syllable in the climbing head; for example:

What on earth did he say?



The unstressed on “climbs” higher than the preceding stressed syllable What. The next stressed syllable earth is said on a lower pitch than on; but the unstressed syllables after earth continue to “climb up”; each one is said higher than the preceding syllable.

Besides, each stressed syllable in the head can carry the **high fall** tone before the final High Fall or Fall-Rise. O’Connor and Arnold (1993, p. 38), and Cruttenden (1997, p. 54) indicate that it makes the head sound emphatic, for instance:

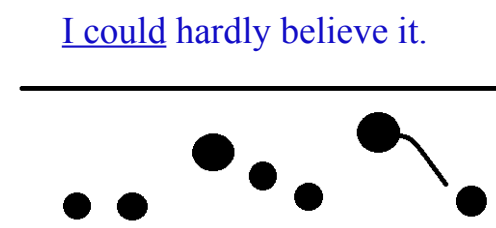
He is a \most in \tolerable \person

She didn’t \see through his de\ception

The **pre-head** is all the syllables preceding the stressed syllable of the first accented word (O’Connor and Arnold 1973, p. 22). The pre-head does not contain any accented words (Wells, 2006, p. 8) because the stressed syllable of the first accented word is regarded as either the beginning of the head or the nucleus.

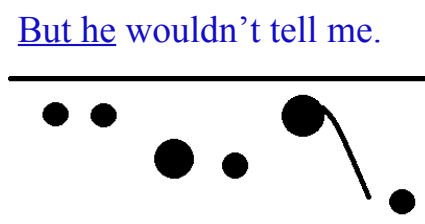
There are two types of pre-head: the low pre-head and the high pre-head.

In the **low pre-head** (O'Connor and Arnold, 1973, pp. 22–24), all the syllables are said on a level low pitch, as in:



Sometimes, the pre-head before the high head may have stressed syllables, though the words that contain stressed syllables in the pre-head are not accented.

In the **high pre-head** (O'Connor and Arnold, 1973, pp. 25–28), all the syllables are rather pitch-pitched and are said on the same level. An important thing about the high pre-head is that it gives considerable **emphasis** to the tone group (= intonation group). The high pre-head is not as common as the low pre-head; and usually it is not long (two or three syllables). For example:



There may be stressed, yet unaccented, syllables in the high pre-head; these syllables are usually suppressed.

Wells (2006, p. 8) indicates that the boundaries of the pre-head, the head, the nucleus, and the tail coincide with syllable boundaries but not necessarily with word boundaries. Compare the following examples:

In Oc\tober

(In Oc- is the pre-head; -to- is the nucleus; -ber is the tail)

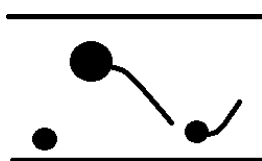
'Nobody was sur\prised

('Nobody was sur- is the head; -prised is the nucleus)

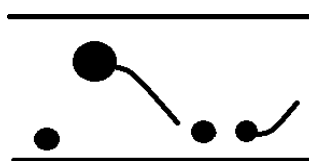
Simple and compound tunes

O'Connor and Arnold (1973, pp. 28–30) make distinction between the **simple tune** that has only one nuclear tone (as in: *Isn't she \lovely* or *Isn't she /lovely*) and the **compound tune** – basically the High Fall followed by the Low Rise, which are always on different words:

He can't come.



I don't agree.



Thus, it can be inferred that in the compound tune there are two nuclear tones. The syllables between the High Fall and the Low Rise are said on a low pitch, as in:

Everyone knows he's a bore.



The High Fall may be preceded by the High Head; for instance:

I'd rather abstain from voting.



Roach (2012, pp. 130, 141) also differentiates between the **simple tone-unit** (= tune) that has only one tonic syllable (= the nucleus) and the **compound tone-unit** that contain two tonic syllables. The compound tone-unit is almost always a fall + a rise; for example:

I've ↘seen ↗him

Cruttenden (1997, p. 50) calls the rise-fall, the fall-rise, and the rise-fall-rise **complex tones**.

TEN TONE GROUPS BY O'CONNOR AND ARNOLD: PATTERNS AND ATTITUDES

According to O'Connor and Arnold (1973, pp. 39, 98–274), the tone group is a grouping of tones that

- (a) have one pitch feature (the nuclear tone) or more than one pitch features (the pre-head, the head, the nuclear tone) in common;
- (b) convey the same attitude on the part of the speaker.

O'Connor and Arnold's taxonomy comprises ten tone groups. Each tone group is described, including diagrams of the intonation patterns and attitudes conveyed; each one is extensively exemplified.

In this study guide, I provide but a sketch summary of O'Connor and Arnold's system and reproduce some of the numerous attitudes discussed in their work:

1. The Low Drop

(Low Pre-Head +) (High Head +) Low Fall (+ Tail)

Some attitudes

detached, cool, flat, reserved, unsympathetic, categoric, hostile, serious

2. The High Drop

(Low Pre-Head +) (High Head +) High Fall (+ Tail)

Some attitudes

light, lively, interested, mildly surprised; sometimes sceptical

3. The Take-Off

(Low Pre-Head +) (Low Head +) Low Rise (+ Tail)

Some attitudes

encouraging further conversation, reserving judgment, wondering, mildly puzzled;
expressing criticism or disapproval

4. The Low Bounce

(Low Pre-Head +) High Head + Low Rise (+ Tail)

High Pre-Head + Low Rise (+ Tail)

Some attitudes

soothing, reassuring; sympathetically/genuinely interested, encouraging; puzzled;
disapproving

5. The Switchback

Fall-Rise + Tail

(Low Pre-Head +) Fall-Rise (+ Tail)

(Low Pre-Head +) Falling Head + Fall-Rise (+ Tail)

Some attitudes

grudgingly admitting, concerned, reserved; greatly astonished, interested, surprised;
scornful, reproachful, hurt

6. The Long Jump

(Low Pre-Head +) Rising Head + High Fall (+ Tail)

Some attitudes

protesting, (unpleasantly) surprised, with a note of critical surprise

7. The High Bounce

(Low Pre-Head +) (High Head +) High Rise (+ Tail)

Some attitudes

questioning, calling for repetition of the information already given, tentative, echoing the listener's question before giving an answer, casual

8. The Jackknife

(Low Pre-Head +) (High Head +) Rise-Fall (+ Tail)

Some attitudes

impressed, complacent, self-satisfied, challenging, censorious, disclaiming responsibility antagonistic

9. The High Dive

(Low Pre-Head +) High Fall + (Low Accents +) Low Rise (+ Tail)

Some attitudes

appealing to the listener to continue; expressing gladness, regret, surprise, despair; pleading, persuading; encouraging, protesting

10. The Terrace

(Low Pre-Head +) (High head +) Mid-Level (+ Tail)

Some attitudes

(in non-final word groups) expressing non-finality; (in final word groups) calling out to someone

SELF-CHECK QUESTIONS AND TASKS

Prosodic features

1. How is prosody different from intonation?
2. Why are pitch, loudness, tempo, and rhythm called suprasegmental features?
3. What is the relationship between the intonation group (= tone group) and the utterance?
4. Discuss Crystal's (2003 b, p. 464) definition of intonation as the "constructive use of pitch in speech".
5. What in your opinion does Crystal (2018, p. 41) mean saying that "intonation is the major organizational principle of spoken discourse"?
6. Discuss the distinction between the terms "pitch" and "pitch level".
7. Discuss the statement: The pitch level of the tone group (or the utterance) is established according to its highest-pitched syllable.
8. Why is a prosodic unit that conveys important information higher in pitch level than other prosodic units?
9. Discuss the moving and level tones.
10. How does tone indicate the nucleus of the intonation group?
11. What is tone? kinetic tone? static tone?
12. Comment on the statement: Listeners pay attention to the aspects of pitch which indicate contrasts.
13. What is pitch range? How is it different from pitch level?
14. Why are some words in an utterance accented?
15. How can a word be accented?
16. Discuss English rhythm.
17. What is "prosodic boundary marker"?
18. Discuss the types of pauses.

Functions of intonation and other suprasegmental features

1. In what respects is Crystal's approach to the functions of intonation different from that by Roach? What are similarities in the two approaches?
2. How do suprasegmental features express speakers' attitudes and emotions?
3. Give your own examples to illustrate the grammatical function of intonation.
4. Discuss the informational/discourse function of the suprasegmental features.
5. What is the difference between accentual and discourse functions of the suprasegmental features within Roach's approach?
6. Reread Crystal's (2003 a, p. 173; 2003 b, p. 249) explanation of the textual function of intonation. Why do you think the pitch level goes up at the beginning of the paragraph, then gradually descends to a relatively low level at the end of the paragraph?
7. Reread Crystal's (2003 a, p. 173; 2003 b, p. 249) explanation of the psychological function of the suprasegmental features. How can prosody organize language into units?
8. Think of your own examples of how the suprasegmental features can perform indexical function.

Chunking speech flow

1. According to Wells (2006, p. 6), each intonation group has a particular intonation pattern, called "tune". Do utterances have tunes?
2. Comment on the statement: Chunking speech flow makes it possible for speakers to communicate their thoughts and to emphasize important/new information.
3. Why are intonation groups sometimes called sense groups?

Intonation group: definitions and functions

1. Choose the definition(s) of the intonation group (tone group, tone unit, tone-unit, intonation phrase) that in your opinion explains this phenomenon most clearly. Comment on it.
2. Which of the definitions do you find difficult to comprehend? Why?

3. Why aren't there any rigid patterns for chunking speech?
4. What is the meaning of Roach's (2012, p. 129) statement: "intonation and stress are vocal equivalents of written punctuation"?
5. What functions of the tone group are specified by Halliday (2013, p. 15)?

Intonation group boundary markers

1. What are the roles of prosody and grammar in chunking speech?
2. What makes it difficult to spot intonation group boundaries in spontaneous speech? Compare arguments provided by Cruttenden (1997, pp. 29–34) and Brown et al. (2015, p. 47).
3. What are intonation group boundary markers other than pauses?

Word group, tune, and tone group

1. What is the relationship between the utterance and the word group?
2. Is there a pattern for dividing utterances into word groups?
3. What is the main principle for dividing utterances into word groups?
4. Comment on O'Connor and Arnold's (1973, p. 7) definition of the tune as the complete pitch pattern of the word group.
5. How do tunes render meanings?
6. What is the nucleus of the tune?
7. How do tunes express attitudes?
8. Comment on O'Connor and Arnold's (1973, p. 39) definition of the tone group.

The structure of the intonation group

1. What are the prosodic features of the nucleus?
2. What is the nuclear tone?
3. Compare Crystal's (2003 b, p. 248) and O'Connor and Arnold's (1973, pp. 7–17) classifications of the nuclear tone types.

4. Describe the direction of pitch movement in each type of the nuclear tone in O'Connor and Arnold's (1973, pp. 7–17) system: in the Low Fall, the High Fall, the Rise-Fall, the Low Rise, the High Rise, the Fall-Rise, the Mid-Level.
5. Comment on Cruttenden's (1997, p. 51) statement about the falling tones having “serious” overtones, the rising tones being “lighter”.
6. What are complex tones?
7. What is accent? What is the last pitch accent?
8. Discuss the structural patterns of the intonation group.
9. Give the definition of the head.
10. According to O'Connor and Arnold (1993, pp. 18–22), there are four types of head in unemphatic speech. Discuss each type.
11. How, according to O'Connor and Arnold (1993, pp. 37–38), can the head be modified to make it sound more emotional?
12. What is the pre-head?
13. Discuss the two types of pre-head.
14. Discuss the difference between the simple and the compound tunes.

Ten tone groups by O'Connor and Arnold: patterns and attitudes

1. Explain the meaning of the associative names of the ten tone groups (O'Connor and Arnold, 1973, pp. 106–288).
2. Discuss the differences in the structure and attitudes between
 - the Low Drop and the High Drop,
 - the Take-Off and the Low Bounce,
 - the Low Bounce and the High Bounce,
 - the Switchback and the Long Jump,
 - the Switchback and the Jackknife,
 - the Switchback and the High Dive,
 - the Terrace and any other tone group of your choice.

EXERCISES

INTONATION AND INTONATION GROUP

1. Listen to *A Design Presentation* on the British Council's free website:

<https://learnenglish.britishcouncil.org/skills/listening/b2-listening/design-presentation>

Provide examples from *A Design Presentation* to explain how

- ▶ pitch level, tone, pitch range, placement of the nucleus in a particular intonation group,
- ▶ stress/accent, rhythm, tempo,
- ▶ pauses

spotlight the following functions of intonation and other suprasegmental features:

emotional/attitudinal function;

grammatical function;

informational/accental/discourse functions;

textual function;

psychological function;

indexical function.

2. Listen to *A Business Interview* on the British Council's free website:

<https://learnenglish.britishcouncil.org/skills/listening/b2-listening/business-interview>

Discuss the questions in 2.A – 2.F.

2.A Listen again to what the guest speaker, Anna, says about challenges teenagers and their parents have when it comes to homework these days: from “Well, teenagers and their parents ...” to “subject to support”; 28–54 seconds into the recording.

1. On what syllables does the speaker raise her pitch level?
2. On what syllables is the pitch level lowered?

3. How does the change in pitch level help the speaker to convey her meaning?
4. Would you call it emphatic or unemphatic speech?

2.B Divide this part of the interview into intonation groups.

1. Which intonation groups have the the highest pitch level?
2. Why do you think these particular intonation groups are said on the highest pitch level?
3. Which intonation groups are said on a low pitch level? Why is that?

2.C Listen again to the last utterance in this speech paragraph, from “What I mean is ...” to “subject to support”; 47–54 seconds into the recording.

1. How many intonation groups does this utterance comprise?
2. What is the nucleus in each intonation group?
3. What is the tone in each nucleus: the falling, the rising, the falling-rising, the static tone?
4. What meaning and attitude(s) do each tone express?

2.D Listen to what the speaker suggests concerning student-tutor interaction: from “The next issue is ...” (1 minute, 17 seconds into the recording) to “in the same town or city” (1 minute, 43 seconds into the recording).

1. How does the speaker divides the speech paragraph into intonation groups?
2. Which of the intonation groups have the widest/narrowest pitch range?
3. How does a wide pitch rage make a particular intonation group sound?

2.E Listen to the utterance that begins with “I really wanted ...” (2 minutes, 15 seconds into the recording) and up to “he was having difficulty with” (2 minute, 25 seconds into the recording).

1. The utterance comprises three intonation groups. What syllables in each intonation group are stressed?
2. Are the words containing these syllables accented or are the syllables stressed for rhythmical purposes?
3. How many unstressed syllables between the stressed ones are there in the third intonation group, which begins with “or I didn’t actually know anything ...”?
4. Do you think the speed of pronouncing these unstressed syllables depends on their number?

2.F Listen to the whole interview again.

1. What intonation groups are said slower/faster than others? Explain the change in tempo.
2. Give examples of adjacent intonation groups that are divided by short, long, and extra long pauses. Explain the effect of pauses.
3. Does the guest speaker, Anna, make intentional pauses for stylistic purposes (for creating a special/dramatic effect)?
4. Do you hear any hesitation pauses throughout the interview?

3. Read the sentence silently and do the tasks:

It was a seminal piece of writing.

1. Now say it in as many different ways as you can, using different tunes suggested by O’Connor and Arnold (1973).
2. Draw diagrams for each tune: the pitch range is presented as the distance between two horizontal lines, big and small dots represent stressed and unstressed syllables respectively, curves indicate the direction of pitch movement.
3. Discuss attitudes conveyed by each tune.

4. Work in pairs. One student makes a recording of the following paragraph; the other marks the pauses the first student has made.

The *Harry Potter* series by J. K. Rowling is one of the best examples of modern classic in the genre of fantasy. Given its wide popularity, it can be compared to another modern fantasy classics – *The Hobbit* and *The Lord of the Rings* by J. R. R. Tolkien. Yet, unlike Tolkien’s archetypal fantasy, the *Harry Potter* discourse features the presence of two worlds, magical and realistic ones, and a distinct third literary world that is created through mingling the spaces of the former two.

4.A Discuss chunking the oral text into utterances and intonation groups:

1. What determines the placement and duration of pauses?
2. With what syntactical items – units comprising several words, sentences, clauses – do the intonation groups coincide?

4.B Work in pairs. One of the students makes a recording of the following utterance. Both students listen to the recording and mark the pauses, accented and lengthened syllables, changes in pitch. Then both students discuss the questions.

Yet, unlike Tolkien’s archetypal fantasy, the *Harry Potter* discourse features the presence of two worlds, magical and realistic ones, and a distinct third literary world that is created through mingling the spaces of the former two.

1. According to Cruttenden (1997, pp. 29–34), there are several types of intonation group boundary markers: pause; unstressed syllables at the beginning of the intonation group; the lengthening of the final syllables in the intonation group; a change in pitch of unaccented syllables at the beginning of a new intonation

group. Between what intonation groups in the speech paragraph above are these boundary markers most noticeable?

2. How does chunking this utterance into several intonation groups help the speaker to organize the speech flow?

3. Does chunking help listeners to get the speaker's message?

5. Work in pairs. Listen to Elif Shafak talking on the danger of numbness and indifference: <https://www.facebook.com/reel/774904410959853>

5.A Discuss the question:

Does the speaker make pauses, change the pitch level or the pitch direction to signal she is still planning her utterances?

5.B Make a transcript of the speech; choose three intonation groups and discuss their intonation patterns:

1. Does each of them have the pre-head and/or the head?

2. Do the nuclear tones comprise both the nucleus and the tail?

3. What is the pitch direction in the nuclear tones?

4. What meanings and attitudes do the tunes of the chosen intonation groups express?

6. Listen to the short story *The Filipino and the Drunkard* by William Saroyan: <https://thisfilipinoamericanlife.com/2017/05/30/bonus-episode-the-filipino-and-the-drunkard/>

Analyze the following utterance (2 minutes, 28 seconds into the recording):

When the big door opened, the young Filipino moved swiftly among the people, fleeing from the drunkard, reaching the boat before anyone else.

1. How many intonation groups does it have?
2. Do the syntactic boundaries of the sentence coincide with the boundaries of the intonation groups?
3. Establish the nucleus in each intonation group.
4. What type of the nuclear tone does each intonation group have: the Low Fall, the High Fall, the Low Rise, the High Rise, the Fall-Rise?
5. Is there the tail after the nucleus in each of the intonation groups analyzed?
6. Is there the pre-head and the head in these intonation groups?
7. What words are accented in each intonation group?
8. Are they accented by stress and tone or just by stress?
9. Draw diagrams of the tunes for each of the intonation groups analyzed: the pitch range is presented as the distance between two horizontal lines, big and small dots represent stressed and unstressed syllables respectively, curves indicate the direction of pitch movement.

7. Listen to Sir Ken Robinson's speech Do Schools Kill Creativity ? on TED Ideas Change Everything:

https://www.ted.com/talks/sir_ken_robinson_do_schools_kill_creativity

7.A Make a transcript of the part of the presenter's speech beginning from "What these things have in common is ..." (5 minutes, 17 seconds into the recording) to "... we get educated out of it" (6 minutes, 12 seconds into the recording).

7.B Listen to the extract again. Discuss the speaker's intonation:

1. Provide examples from the extract to illustrate the emotional, informational, textual, indexical functions of intonation.
2. What words does the speaker accentuate? Why?
3. Does the speaker's intonation correlate with the grammar of his sentences?
4. Give examples of how the speaker's intonation makes it easier for the listener to comprehend his message.
5. How many ideas does the speaker present in this particular extract?
6. How does the speaker use intonation to signal transition from one speech paragraph to another?

7.C In your audio transcript, choose a speech paragraph that in your opinion best conveys the speaker's message. Discuss the paragraph:

1. Listen to how the presenter chunks his speech into utterances and intonation groups. Mark boundaries between them in your transcript.
2. Choose three tone groups that in your opinion have the most vivid intonation contour (tune).
3. Draw diagrams for each of the tunes.
4. Analyze the structure of the chosen intonation groups: the types of pre-head and head (if any), and the nuclear tones.
5. How do the tunes help convey the speaker's meaning?
6. What attitudes on the part of the speaker do the tunes express?

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