

**J. D. O’CONNOR AND G. F. ARNOLD’S SYSTEM
OF INTONATION PATTERNS:
THE TEN TONE GROUPS**

1. WORD GROUPS. TUNES. TONE GROUPS

(O’Connor and Arnold, 1973: 2–12, 39–41)

In speech, utterances are divided into smaller units, for which O’Connor and Arnold use a neutral term *word groups*. A word group is grammatically relevant – it may be the subject and the predicate (*The tall woman by his side | is Mrs. Smith ||*), a clause (*If he doesn’t submit the report, | he’ll be fired ||*), an opening phrase (*In short, | she was nominated for the award ||*), a parenthetical word or phrase (*The baguettes, | not the croissants, | were the best sellers of the day ||*). The single bar [|] is used to separate word groups and clauses that have close grammatical connection. The double bar [||] is used to mark the end of utterances. The single bar corresponds to a short pause; the double bar, to a long one. Intonation helps to organize words into word groups, and word groups into utterances. In speech, word groups are presented as separate units. Such units are important for the meaning. Consider the following examples:

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.)

We 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, the speaker can choose whether to divide an utterance into word groups or not; for example, the subject may or may not be separated from the predicate:

This dictionary | is very useful. ||

This dictionary is very useful. ||

An inherent feature of each word group is its tune. O'Connor and Arnold define *tune* as the complete pitch pattern of a word group. The shortest tunes are those of single-syllable word groups; for example, *Yes* in answer to a question. This word, strange as it may seem, is a complete word group: it is grammatically correct; it may express various nuances of meaning and different 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. For example,

Will you come? – \Yes.

When pronounced with a falling tone, *Yes* may sound cold, neutral, or excited and happy depending on the pitch level and the pitch range the speaker chooses. *Yes* may be pronounced with a rising tone; for example, in

So he called me and ... – /Yes ...

a rising tone is used to show that a person wants their interlocutor to continue.

Another important factor in meaning is stress. In both cases, *Yes* is stressed. Thus pitch movement and stress are the characteristic features of tone groups.

A word group may be longer than a one-syllable word; for example,

Marvelous! ||

What for? ||

As far as I know, | he hasn't arrived yet. ||

But each word group has its centre of importance. From a phonetic perspective, the central element of a word group is not the whole word, but the stressed syllable of the most important word marked by a change in pitch (fall, rise, or their combinations). This syllable is called the *nucleus* of a tune. The nucleus may be preceded and/or followed by stressed and unstressed elements. They form the pitch pattern of a tune. Though the only obligatory element of the pattern is the nucleus. The other elements are optional.

According to O'Connor and Arnold, the *Tone Group* is a group of tunes that

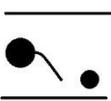
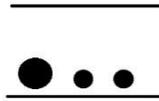
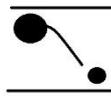
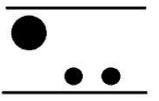
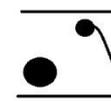
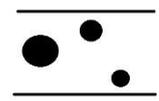
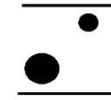
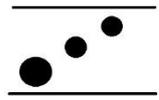
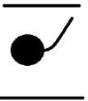
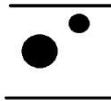
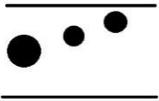
- have one or more pitch features in common,
- convey the same attitude on the part of the speaker (1973: 39).

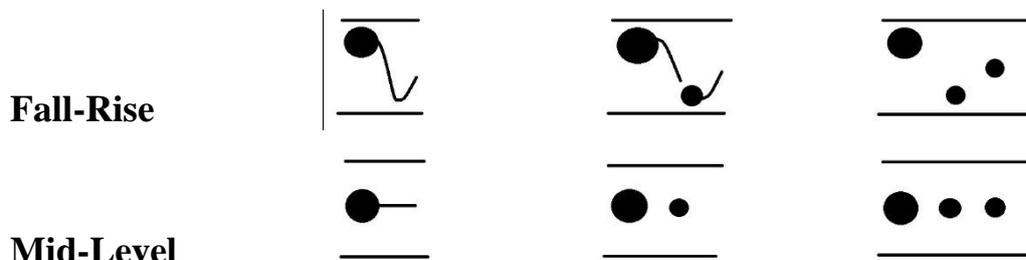
2. THE STRUCTURE OF THE TONE GROUP

(O'Connor and Arnold, 1973: 7–30, 36–41)

The central element of a tone group is the stressed syllable of the last accented word. This syllable is called the *nucleus*. In the three examples below, the nuclear syllable is underlined. The stressed and unstressed syllables following the nucleus are called the *tail*. According to O'Connor and Arnold, the combination of the nucleus and the tail (or just the nucleus if there are no other syllables after it) is the *nuclear tone*. In the diagrams, large dots represent the stressed syllables; small dots, the unstressed ones.

Seven Types of the Nuclear Tone

	<u>Form</u>	<u>Forty</u>	<u>Formula</u>
Low Fall			
High Fall			
Rise-Fall			
Low Rise			
High Rise			



The Pre-Nuclear Pattern. The syllables before the nucleus form the pre-nuclear part of a tune. It comprises two elements, the pre-head and the head. Both of them are optional; it means that a tone group may have one of these patterns:

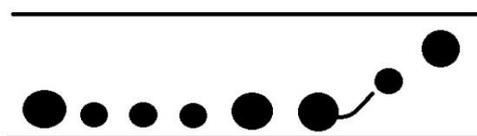
- the nuclear tone
- the head + the nuclear tone
- the pre-head + the nuclear tone
- the pre-head + the head + the nuclear tone

The Head. O'Connor and Arnold state that the *head* begins with the stressed syllable of the first accented word and ends with the syllable preceding the nucleus.

Four types of the head are typical of unemphatic speech:

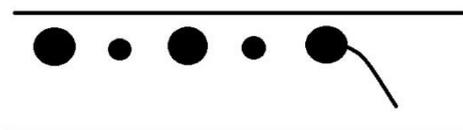
the Low Head

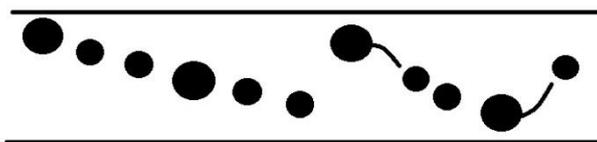
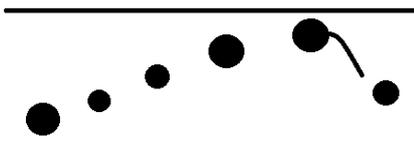
Couldn't you just say yes or no?



the High Head

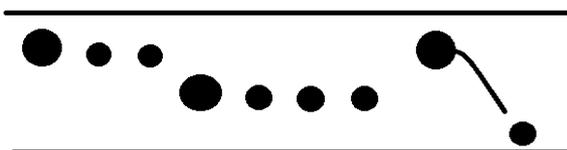
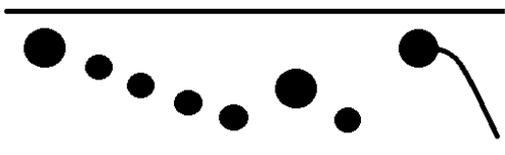
Thank you very much.



the Falling Head*No one has ever accused me of lying.***the Rising Head***What did you do that for?*

Changing the shape of the head, we can make a word group sound more emphatic, i.e. more lively and emotional.

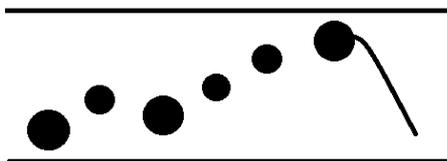
The two types of the emphatic falling head are as follows:

the Stepping Head*Nobody's coming to his party!***the Sliding Head***Nobody was surprised at all.*

The rising head also can be made more emphatic:

the Climbing Head

What on earth did he say?

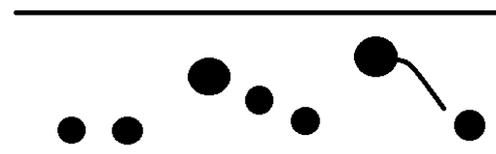


The Pre-head. O'Connor and Arnold define the *pre-head* as all the syllables before the stressed syllable of the first accented word in a tune. The syllables in the pre-head may be both unstressed and stressed.

In unemphatic speech, the pre-head typically has one or two syllables pronounced on a low pitch:

the Low Pre-head

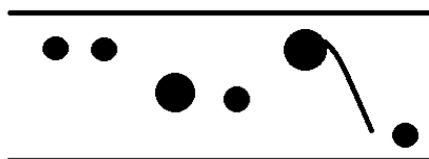
I could hardly believe it.



There is also an emphatic modification of the pre-head:

the High Pre-head

But he wouldn't tell me.



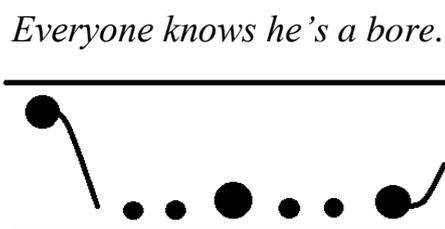
3. SIMPLE AND COMPOUND TUNES

(O'Connor and Arnold, 1973: 28–30)

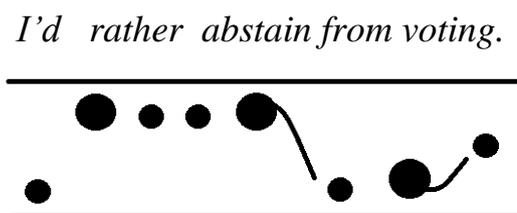
A tune containing one nuclear tone is regarded as *simple* (as in all the examples above). A tune which contains two nuclear tones is called *compound*; basically, it is the High Fall followed by the Low Rise:



The syllables between the High Fall and the Low Rise are pronounced on a low pitch.



The High Fall may be preceded by the High Head.



4. STRESS AND ACCENT

(O'Connor and Arnold, 1973: 31–36)

Words are accented if in a given situation they are important to the speaker. Accented words are always stressed. Besides, the most important words are marked by a change in pitch (fall, rise, or their combinations) or a sustention of pitch (maintaining

a level pitch between high and low). The movement/sustention of pitch combined with stress are also perceived as accent. For example,

'Where did you \meet him? ||

I ¹beg your ↘pardon? ||

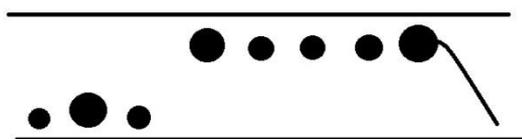
On the other hand, some words in an utterance may be stressed not because they are important to the speaker, but for rhythmical purposes. The peculiarity of the rhythm in English speech is that stressed syllables occur at approximately equal periods of time. So some words are stressed just to maintain the rhythmical pattern of an utterance. They are *stressed but unaccented*.

The accented syllables are

- the nuclear syllables,
- the stressed syllables in the head,
- the stressed syllables between the High Fall and the Low Rise in a compound tune.

Stressed but unaccented syllables appear in the pre-head and the tail. For example,

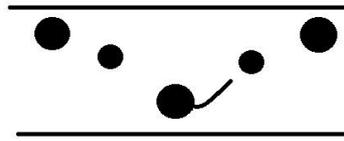
I told him Mother would object.



Here *told* is a stressed syllable in the pre-head. Typically, the head starts with the change of the level. In the example above, the head starts with the first syllable in the word *Mother*.

Consider another example:

Come and help me, please.



Here the tail consists of two syllables, *me* and *please*. The first one is unstressed; the second one is stressed but unaccented.

5. THE TEN TONE GROUPS

(O'Connor and Arnold, 1973: 41–45, 106–251, 287)

As it has been stated above, the tone group comprises tunes that have one (the nuclear tone) or more (the pre-head, the head, the nuclear tone) pitch features in common and convey the same attitude on the part of the speaker.

O'Connor and Arnold give their tone groups metaphorical names so that a learner can imagine the direction of pitch movement in a particular pattern.

1. The Low Drop

Low Fall

may be preceded by

Low Pre-head / High Pre-head

and/or

High Head / Stepping Head

Attitude

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

2. The High Drop

High Fall / High Fall(s) + High Fall

may be preceded by

Low Pre-head / High Pre-head

and/or

High Head / Stepping Head

Attitude

light, lively, interested, mildly surprised; sometimes sceptical

3. The Take-off

Low Rise

may be preceded by

Low Pre-head / High Pre-head

and/or

Low Head

Attitude

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

4. The Low Bounce

High Head + Low Rise

may be preceded by

Low Pre-head;

alternatively

High Pre-head + Low Rise;

alternatively

High Pre-head + High Head / Stepping Head + Low Rise

Attitude

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

5. The Switchback**Fall-Rise**

may be preceded by

Low Pre-head / High Pre-head

and/or

Falling Head / Sliding Head;

alternatively

High Fall(s) + Fall-Rise

may be preceded by

Low Pre-head / High Pre-head*Attitude*

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

6. The Long Jump**Rising Head + High Fall / Climbing Head + High Fall**

may be preceded by

Low Pre-head / High Pre-head*Attitude*

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

7. The High Bounce

High Rise

may be preceded by

Low Pre-head / High Pre-head

and/or

High Head / Stepping Head

Attitude

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

8. The Jackknife

Rise-Fall

may be preceded by

Low Pre-head / High Pre-head

and/or

High Head / Stepping Head

Attitude

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

9. The High Dive

High Fall + (Low Accents +) Low Rise

may be preceded by

Low Pre-head / High Pre-head

and/or

High Head / Stepping Head

Attitude

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

10. The Terrace**Mid-Level**

may be preceded by

Low Pre-head / High Pre-head

and/or

High Head / Stepping Head*Attitude*

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

Reference

1. O'Connor, J. D., Arnold, G.F. 1973. Intonation of colloquial English. 2nd edn. London: Longman Group Ltd. 293 p.