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Determining the difficulties of intonation with *both... and* and *not only...but also*: A computational analysis in teacher education

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Abstract

The stressed content words in sentences with correlative conjunctions carry a special place in the intonation of sentences. Correlative conjunctions are conjunctions that are used in pairs. The term correlative conjunction gets its name from the fact that it signals a paired conjunction that has a reciprocal or complementary relationship in a parallel situation, joining grammatically equal elements (e.g., noun & noun, adjective & adjective, phrase & phrase, clause & clause, etc.). It is interesting to note that the second word of each conjunctive pair in such coordinate conjunctions is a coordinating conjunction, hence they are essentially called coordinate conjunction used in pairs like “both... and, not only... but also, whether...or, either...or, and neither...nor.” There has been no research on the intonation of correlative conjunctions. The aim of this research is to fill in this gap. In this research, the participants will be given 12 sentences that include “both and / and not only... but also” conjunctions as a corpus and will be asked to tape their utterances while they read these sentences out in relaxed and soundproof room. Each participant will hand over the taped material to the researcher. This way, their placement of primary stress as a phoneme in the sentences will be captured by means of Error Hunt Approach Grammar. The utterances of the participants will be further evaluated in terms of Grammar Intonation Approach with respect to Discourse Intonation Approach in relation to teaching and learning sentence intonation in teacher education.

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1. Introduction

Students often find it difficult to use the correlative conjunctions. Despite the apparent grammatical simplicity of the correlative conjunctions, there is uncertainty and disagreement over the suitability of their use in intonation and the correctness of their placement within a sentence. They come in pairs, and we have to use both of them in different places in a sentence to make them give different meanings. They get their name from the fact that they work together (co-) and relate one sentence grammatical element to another. Correlative conjunctions include pairs like “both...and,” “not only...but also,” “either...or,” “neither...nor,” “whether...or,” and so on. Parallelism is a tool that writers use to create balanced sentences. This balance helps readers understand what they are reading because they know what to expect and can clearly see the connections between ideas. Correlative conjunctions can come at the beginning, middle, and towards the end of sentences. Therefore, such a distribution requires grammatical adjustments.

1.1. The Occurrences of Correlative Conjunctions

In the use of correlative conjunctions parallelism is indispensable tools by means of which writers use them to create balanced sentences, which help readers understand what they are reading to see the connections between ideas. That’s why they are called two-part conjunctions because they work together in pairs (Aarts et al., 2014; Azar, 2002:353; Siegaland Connolly, 1999; Barner, 1988).

In this paper, two correlative conjunctions, namely **both... and, not only...but also** will be handled. In English, as frequently used correlative conjunctions, they involve two related elements that should be stated in the same pattern grammatically. The following examples illustrate the parallelism, which is the linking together similar and parallel grammatical parts in a sentence.

Both...and, as a correlative conjunction, has a sense of addition. **Both...and**, as a subordinating conjunction, connects fairly equal in fragments in the sentence. **Both. . .and**, as a correlative conjunction, has a sense of addition by giving an idea that both of the additions are true. People usually balance this structure, so that the same kind of words follows **both...and** (Swan, 1981: 17): Since it adds ideas together, a plural verb is necessary when subjects are joined (Azar, 2002: 353).

The following examples show the general benefit of careful placement of the correlative conjunctions in the structures of sentences:

*Both **Jane and Jack** enjoyed the show. (Subjects: two nouns)*

***Both trees and flowers** grow colorfully during summer. (Two nouns)*

*You should give **both the date and the time**. (Two nouns: two objects)*

*This place **both depressed me and made me want to go home**. (Two verbs, Swan and Walter, 2000:242).*

***Both my cousin and my nieces** are taller than I am. (“Are” is plural)*

***Not only in the morning but also in the afternoon**, I take a nap. (Two phrases)*

***Not only will I watch you grow, but I’ll also raise you twenty**. (Entire clause)*

***Not only do they enjoy summer vacation, but they also enjoy Christmas break**. (Two independent clauses)*

***Not only was he sad but he was also angry**. (Two independent Clauses)*

The basic rule for the use of correlative conjunctions is very simple: use parallel grammatical constructions after each member of the pair. In addition, the conjunctions should be placed as close as possible to the words that are being compared. Here is an example:

*Incorrect: Milton **not only** wrote tragedies **but also** comedies.*

*Correct: Milton wrote **not only** tragedies **but also** comedies.*

1.2. The structure and placement of not only...but also

Not only...but also is a correlative conjunction. It used to present two related pieces of information which are being presented by the writer as surprising or unexpected, with the second one sounding even more surprising than

the first. As a rule, the most important issue to remember about using this construction is that two related pieces of information must be parallel structures, being used before two nouns, two adjectives, two verbs, etc. As a correlative conjunction, it has an additive meaning, which boils down to mean that it is collectively both of these. The parallel structures demonstrated by **not only...but also** can be shown as follows:

Faulty: Clara *not only* wants money *but also* fame.

Correct: Clara wants *not only* money *but also* fame.

Correct: Clara *not only* wants money *but also* wants fame.

(<http://www.towson.edu/ows/conjunctions.htm><http://www.towson.edu/ows/conjunctions.htm>)

By nature, not only...but also introduces a contradictory or additional choice:

Examples:

*She was **not only** sad, but also angry*

*He is **not only** rich **but also** generous.*

*She is **not only** intelligent **but also** beautiful.*

*He speaks **not only** English, **but also** German.*

The intonation of both...and / not only... but also

There is not much written feedback on the intonation of correlative conjunctions. There clear-cut grammatical explanations on and the placement of them within the sentences, but not on their intonation. Each placement of correlative conjunctions brings subtle differences to the structure and stress of the sentence by offering different nuances of meaning. Additionally, when we speak, since we can use our voice or facial expressions to show which words we wish to emphasize, the importance of correct intonation gains importance.

1.3. The intonation of both and

Since in both...and, the word “both” does the first job, it requires a primary stress either upon itself or the neighboring content word (Wells, 2006; Alexander, 1988; Bernstein, 1988). Moreover, this conjunction requires parallelism, and so you need to move the first half of the correlative. In the following examples, / ' / stands for the primary stress phoneme while / , / indicates a secondary stress phoneme:

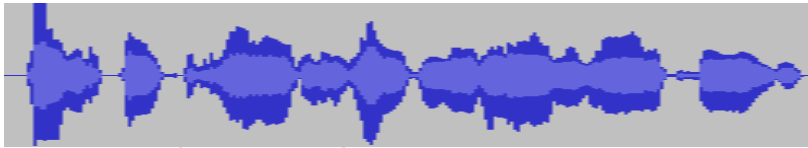
- A. In the following examples, the neighboring contents words carry the primary stress, because two instances are equally possible:

I was both **pleas**ed and **surpr**ised.



/²I was both ³PLÉASed²²and surp³RÍsed¹∨/

I was **both tíred and húngr**y when I arrived home.

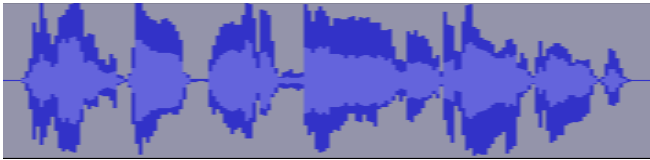


I /²I was **both** ³TÍREd² ²and ³HÚNGRY when I arrived home¹↘/

Ex: Both **JÁNE** and **TÁRzan** have been working towards that goal.

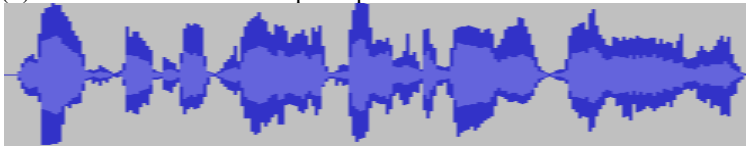
B. The word **both** receives the primary stress next to **and**, which receives a secondary stress, both of whose graphs can be given as follows:

(a) She is **both** beautiful **and** intelligent.



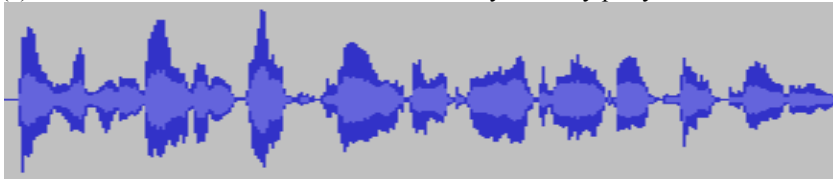
/²She is ³BÓTH beautiful²²³ ²AND intelligent¹↘/

(b) Both the teacher and the principal were furious.



/²³BÓTH the teacher²²³ ²AND the principal were furious¹↘/

(c) I have invited **BOTH** John **AND** Peter to my birthday party.



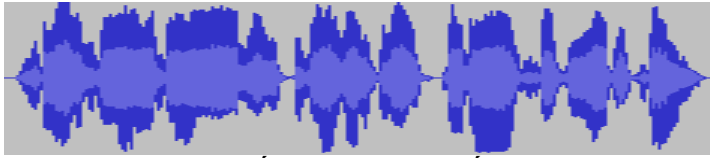
/²I have invited ³BÓTH John²²³ ²AND Peter to my birthday party¹↘/

Notice how each pair makes the following statements more emphatic by repeating words that indicate the following (https://www.tamui.edu/uc/writingcenter/documents/correlativeconj_5-22-12_JM.pdf)

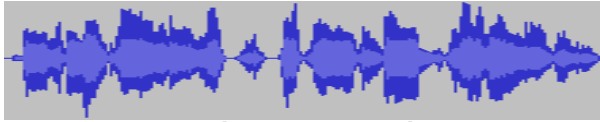
In the graphs given (a), (b), and (c), the wavelengths of the word **BOTH** have highest velocity, which illustrates that it has received the highest stress in the sentences.

1.4. The intonation patterns of not only...but also

A. The content words right after **not...only.... but also** receive the primary stress:
She is not only **intelligent** but also **beautiful**.



/²She is not only in³TÉlligent²²but also ²BÉAUtiful¹↘/



/²He's not only ³RÍCH²²but also ²GÉnerous¹↘/

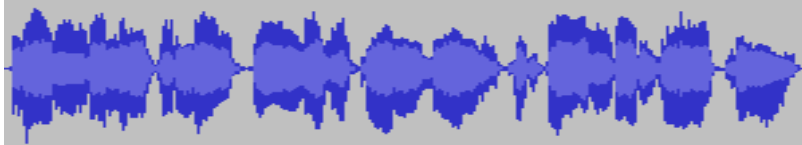
Other examples:

She was not only MÉAN, but also RÚDE.

Today, it was not only WÁRM but also HÚmid.

B. In sentences, either one of the components of **not only...but also** receives the primary stress:

My son eats **nót** only string beans but **á**lso broccoli



/²My son eats ³NÓT only string beans²²but ³ÁLso broccoli¹↘/

The candidates campaigned **NÓT** only in Ankara but **Á**Lso in İstanbul.

C. **Not only... but also** does not take a primary stress, but two content words in two parts of the sentence separated by **not only... but also** can take the primary stress:

He **is** not only an excellent teacher but also a keen **r**ésearcher.



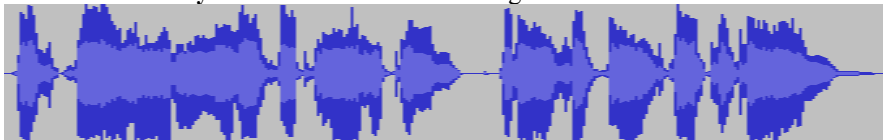
/²He³ÍS not only an excellent teacher²²but also a keen ³RÉésearcher¹↘/

This question is not only about **WRÍ**Ting but also about **RÉA**Ding.

She not only sings with **É**ASE, but also plays **aMÁ**zing music.

D. One of the components of **not only... but also** and a content word coming after **only... but also** in the sentence can take the primary stress: this is called the **composite pattern**.

This car not **ónly** is economical but also feels good to **d**rive.



/²This car not ³ÓNly is economical²²but also feels good to ³DRÍVE¹↘/

I come not only to bury **CÁ**esar, but **Á**Lso to praise him.

The types of intonation utterances of the above-mentioned conjunctions are not encountered in books and text books. In this research, in addition to Grammar Intonation Approach, Discourse Intonation Approach of Brazil (1985, 1994), is applied.

1.5. Punctuation of correlative conjunctions

In the perception production of juncture phonemes are highly functional. It must be noted that both parts of the correlative conjunction must be used in the sentence to properly convey the intended meaning, and at this point punctuation comes to help the speakers and writers. They appear in pairs, and both parts receive the same attention (Fowler, 2009).

The existence of a comma is a kind of silent mental alarm that signals the existence of a pause.

1. An independent clause introduced by **not only** requires inversion, and there must be a comma at the end of the independent clause, which requires a pause, indicated by a sustained juncture phoneme.

Not only is he acting suspiciously, but he also refuses to cooperate with the police.

*(Note that **also** belongs within the second clause)*

Not only does he like your idea, but he also wants to lend you the money you need to market it.

(<http://ericquire.com/grammar/cnctors3.htm>)

2. In the punctuation of correlative conjunctions the same rules that apply to coordinating conjunctions take place: if the conjunction doesn't join two independent clauses, no comma is needed.

*They will give her **not only** a trophy **but also** a Grant.*

*He was **both** happy **and** proud when his son went off to the military service.*

2. Method

Research questions:

1. What is the correct rate of the perception of **both... and** as a correlative conjunction?
2. What is the correct rate of the perception of **not only... but also** as a correlative conjunction?
3. Which pattern of **both... and** do they generally perceive?
4. Which pattern of **not only ... but also ..** do they generally perceive?
5. What is the overall success of **both...and** and **not only ... but also**

2.1. Participants

Participants are 48 students of English Language Education Department in the Faculty of Education at Hacettepe University. They are 9 males and 38 Females, whose ages range from 18 to 19. They have studied on the grammar of correlative conjunctions. They had studied on the rules of the conjunctions **both..and** and **not only...but also** in terms of Grammar Intonation Approach.

2.2. Instruments

This is a research which is based on listening comprehension on the intonation of two correlative conjunctions. The multiple choice test includes 20 sentences, 10 sentences on **both... and** and 10 sentences on **not only...but also** conjunctions. 20 sample sentences are downloaded from Longman English Dictionary (2008) via Audacity 1. 2.6. Program in Audio Tract, Mono, 44100Hertz 23-bit float. The questions are administrated to the participants, who listened to the questions with 5 alternatives by means of shadow reading: the participants followed the sentences by their eyes when they heard them from the voices of native speakers. The questions are given from the computer three times within 5 minute intervals. They are asked to choose the correct alternative. Data Collection Analysis for each answer of the participants can be stated as follows:

3. Results and discussion

3.1. What is the correct rate of the perception of “both ... and ...” as a correlative conjunction?

| Descriptive Statistics- RQ1 | | | | | |
|-----------------------------|----|---------|---------|--------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| “Both...and...” | 47 | 4,00 | 9,00 | 7,4255 | 1,33098 |
| Valid N (listwise) | 47 | | | | |

To check the rate of overall success of the students, an analysis on descriptive statistics is conducted. All of the questions are included into the analysis within the scope of the first research question. Accordingly, the mean score of the participants for these aforementioned questions is 7, 4255 out of 10 which means that participants’ scores range at the ratio of 74, 26%. Henceforth, the participants’ overall success of the test used for this study is at the ratio of 74, 26%; general failure is 25, 74%.

3.2. What is the correct rate of the perception of “not only ... but also ...” as a correlative conjunction?

| Descriptive Statistics- RQ2 | | | | | |
|-----------------------------|----|---------|---------|--------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| “Not only...but also...” | 47 | 5,00 | 10,00 | 8,1489 | 1,44431 |
| Valid N (listwise) | 47 | | | | |

To check the rate of silent letter success of the students, an analysis on descriptive statistics is conducted. The questions composed of silent letter items are included into the analysis within the scope of the second research question. Accordingly, the mean score of the participants for these aforementioned questions is 8, 1489 out of 10 which means that participants’ scores range at the ratio of 81, 49%. Henceforth, the participants’ silent letter success of the related test items used for this study is at the ratio of 81, 49%.

3.3. Which pattern of “both ... and ...” do they generally perceive?

| Paired Samples Statistics- RQ3 | | | |
|--------------------------------|------|---|----------------|
| | Mean | N | Std. Deviation |
| Pattern A | | | |
| Pattern B | | | |

| Paired Samples Test- RQ3 | | | | | | |
|--------------------------|-------------|--------------------|-----------------|-------|----------|-----------------|
| | Correlation | Paired Differences | | t | Df | Sig. (2-tailed) |
| | | Mean Difference | Std. Error Mean | | | |
| | | | | | Lower | Upper |
| Patterns A-B | -,481 | 25,000 | 4,49843 | | 15,94513 | 34,05487 |
| | | | | 5,557 | 46 | ,000 |

In order to see which pattern of “both ... and ...” students generally perceive more accurately, Paired Samples T-Test is conducted. Accordingly, the mean value of students’ overall success rate in Pattern A (X_A=79, 26) is higher

than the mean value of students’ overall success rate in Pattern B ($X_B=54, 26$) with the values of $t(46)= 5,557$, $p < .05$ (two-tailed) as given in the table above. Henceforth, there is significance between the two patterns as students are better in Pattern A while perceiving “both ... and ...” as a correlative conjunction.

3.4. Which pattern of “not only ... but also ...” do they generally perceive?

| ANOVA Statistics- RQ4 | | | | |
|-----------------------|---------|----|----------------|-----------------|
| | Mean | N | Std. Deviation | Std. Error Mean |
| Pattern A | 87,2340 | 47 | 26,51514 | 3,86763 |
| Pattern B | 80,8511 | 47 | 39,77271 | 5,80145 |
| Pattern C | 93,1915 | 47 | 12,70166 | 1,85273 |
| Pattern D | 47,8723 | 47 | 40,32133 | 5,88147 |

In order to see which pattern of “not only ... but also ...” students generally perceive more accurately, ANOVA is conducted. Accordingly, the mean value of students’ overall success rate in Pattern C ($X_C=93, 19$) is the highest one while the mean value of students’ overall success rate in Pattern D ($X_D=47, 87$) is the lowest one as given in the table above. Henceforth, students are able to perceive better in Pattern C of “not only ... but also ...” as a correlative conjunction.

3.5. What is the overall success of “both ... and ...” and “not only ... but also ...”?

| Descriptive Statistics- RQ5 | | | | | |
|-----------------------------|----|---------|---------|---------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| Overall success | 47 | 12,00 | 19,00 | 15,5747 | ,26119 |
| Valid N (listwise) | 47 | | | | |

To check the rate of overall success of the students, an analysis on descriptive statistics is conducted. All of the questions are included into the analysis within the scope of the fifth research question. Accordingly, the mean score of the participants for these aforementioned questions is 15, 5747 out of 20 which means that participants’ scores range at the ratio of 77, 87%. Henceforth, the participants’ overall success of the test used for this study is at the ratio of 77, 87%; general failure is 22, 13%.

4. Conclusion

In academic writing and speaking, conjunctions help create better sentences. Correlative conjunctions work in pairs to join phrases or words that carry equal importance within a sentence (Webster Dictionary, 1988; Swan, 1981; Swan and Walter, 2000). Grammatically speaking, when using correlative conjunctions, you must ensure that verbs agree with the following elements of the sentence, only then the sentences can make sense. Using them incorrectly result in choppy and incoherent writing, makes the learners sound non-native in speech. If these conjunctions are used properly, they may breathe creative life of intonation into your speech by means of natural sounding speech. Their intonation can, however, cause problems if not used properly.

It must be noted that the correlative conjunctions *both . . . and . . .* are best served by parallelism, which requires a careful positioning of the conjoined elements within a balanced level. In other words, what follows *both* and what follows *and* should have the same grammatical form.

References

- Aarts, B. Chalker, S. and Weiner, D. (2014). *Oxford dictionary of English grammar*. Oxford Oxford University Press.
- Alexander, L. G. (1988). *Longman English grammar*. London: Longman.
- Azar, S. B. (2002). *Understanding and using English grammar* (3rd Ed.). New York: Pearson Education.
- Barner, B. A. (1988). *A dictionary of modern American usage*. Oxford: Oxford University Press.
- Bernstein, T. M. (1988). *The careful writer*. New York: Free Press-Simon & Schuster.
- Brazil, D. (1985). *The Communicative value of intonation in English*. Birmingham: University of Birmingham, English Language Research.
- Brazil, D. (1994). *Pronunciation for advanced learners*. Cambridge: Cambridge University Press.
- Cambridge Dictionary of American English (2000). Cambridge: Cambridge University Press.
- Fowler, H. W. (2009). *A dictionary of modern English*. Oxford: Oxford University Press.
- Longman English Dictionary* (2008). Longman: Pearson.
- Merriam-Webster's Dictionary of English Usage* (1994). Merriam-Webster, Inc
- Siegal, A. M. and Connolly, W. G. (1999). *The New York Times manual of style and usage*. New York: Three Rivers Press.
- Swan, M. (1981). *Practical English Usage*. Oxford: Oxford University Press.
- Swan, M. and Walter, C. (2000). *How English works: a grammar book with answers*. Oxford: Oxford University Press..
- https://www.google.com.tr/?gfe_rd=cr&ei=15y.
- (http://www.pearsonlongman.com/ae/azar/grammar_ex/message_board/archive/articles/00095.htm).
- <http://www.oxforddictionaries.com/definition/english/whether>
- <http://dictionary.cambridge.org/grammar/british-grammar/whether>
- <http://www.towson.edu/ows/conjunctions.htm>.
- <http://ericsquire.com/grammar/cnctors3.htm>.
- https://www.tamtu.edu/uc/writingcenter/documents/correlativeconj_5-22-12_JM.pdf