

The effect of four factors on parallelism in English sentence

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Abstract— This article is an attempt to shed the light on the importance of using parallelism in English sentences. The parallel sentences are easily read and comprehend the contrary of the non-parallel sentences which create confusion and ambiguity. However parallelism facilitates the production and comprehension of the recipients. This positive effect of parallelism is affected and restricted by four factors which can reduce its influence. This work tries to memorize these main factors and show the difference in the interpretations and comprehension of the sentences when they are parallel and non parallel.

Keywords— parallelism in English sentence, conjunctions, comprehension.

I. INTRODUCTION

Humans are prone to scrutinize, analyze and comprehend the mechanism of the linguistic structure of the sentence in order to facilitate their messages when they are interacting. Parallelism provides simplicity and facilitation to both the cooperators and the coordination process. Parallelism means the repetition and the commitment of the same structure when we combine sentences by conjunctions which are of variant kinds. The coordinated conjunctions such as *and*, *but*, *or*, *nor*, *than* and *yet*; the second kind is subordinate conjunctions such as *while*; the third type is correlative conjunctions such as *either...or*, *neither...nor*, *but...also*, *not only* and *if...then* and finally the relative clauses which use *that*, *which*, *who* to combine sentences. The agreement between the two conjuncts is very necessary to ease and increase the comprehension (Altmann, Henstra&Granham 1993) and production (Bock 1986 and many subsequent studies). It makes our speech run smoothly and our writing become clearer and more powerful.

In fact, parallelism has impact on the different aspects of language such as phonology (Carlson, 2001; Frazier et al. 1984), syntax, semantics (Kutas, 1993) and animacy (Carlson, 2001; Frazier et al. 1984). This influence is called *parallelism effect*. Here a question raises: what are the factors which affect the parallelism effect? In what follows, an attempt is given to summarize the most important factors which play remarkable roles in the parallelism effect.

1.1. Parallelism and the gapping

Many researchers like Frazier et al. (1984) find it is easy to grasp the ideas and thoughts when they are shown in a similar structure in both conjoined sentences, for example:

1.a. the black man hits the child and the white man hits the old.

1.b. the black man hits the child and the old is hit by the white man.

The recipient finds facilitation when he reads (1.a) rather than (1.b) because the second conjunct is of the same grammatical structure as the first sentence, so it glides smoothly from the first sentence to the second without interruption. But (1.b) there is a pause which cuts the smooth current of the constituent order of comprehension in the second sentence.

Frazier et al.(2000) have many opinions concerning this phenomenon. They thought this facilitation can be interpreted according to many possibilities; one of them is that both nouns in both conjoined sentences are preceded by determiner; the other opinion is the approximate length of the syllable in the two conjuncts which can be named as the effect of parallelism in phonology.

Is the repetition of the verb necessary ?

Aria et al. (2007), Branigan et al (2005), Pickering & Ferreira (2008) state the repetition is very emergent one to pursue the parallelism effect. While Traxler (2008) and

Knoeferle & Crocker (2009) affirm that the repetition of the prime verb doesn't affect strongly the parallelism facilitation.

The omitted material from the second conjunct contains the verb or may be the object (Johnson 1997, Kuno 1976, Sag 1980). The tendency of the parallelism effect to the non-gapping elements in the conjoined sentences is more than to the gapping one and when the second conjunct sometimes lacks the verb (missing), we assume that it holds the same priming verb. Then the sentence is an ambiguous one.

Now consider the following sentences:

1. Jane took the children to the school and Janet to the mall.
2. My mum gave me a bread and others cookie.

In (1) the second sentence contains of mere noun and pp. Janet is whether the subject and the post verbal for the verbless second sentence or the object for the priming sentence. The same interpretation is with (2).

The interpretations for the sentence:

- 1- Jane took the children to the school and Janet took the children to the mall.
- 2- Jane took the children to the school and she took Janet to the mall.

Frazier, Clifton & Munn (2000) state that:

Parallelism did not facilitate processing when the structure of a subject and object were manipulated, implying that parallelism effect are largely limited to the conjuncts of a coordinate structure and not due simply to the repetition of a phrase with a particular shape.

These ambiguities affect the parallelism effect and restrict its influence. This will lead us to the second factor: Does the parallelism effect depend on the surface or internal structure of the sentence?

1.2. Parallelism and the linguistic features

Psychologically the listener finds easy to grasp the parallel structure than the non-parallel structure. Frazier et al. (1984) find facilitation in reading the second parallel structure rather than thenon-parallel structure. According to Chomsky (1957) the two conjuncts should be structurally compatible. It means they must be of like syntactic categories. In spite of the

different syntactic category of the conjoined sentences, they are still grammatical acceptable.

Nevertheless, the parallelism sometimes is in the internal structure and it depends on the context not on the surface structure only. Knoeferle (2014) affirms that the facilitation of parallelism comes either from the constituent order of the sentence or from the modulation of the linguistic context.

Munn (1992, 1993, 1999) states that the parallelism can be between the sentences which have the same semantic features. Gazdar, Klein, Pullum & Sag 1985; Pollard & Sag, Gazdar, Wasow & Weister 1985 emphasize the unification of the two conjuncts which means they share the same characteristic features and categories. For instance:

- 1- Jane wants to travel tomorrow or on Sunday.
- 2- Jane runs quickly but with quite care.
- 3- Jane runs quickly and to the garage.

In the first two sentences the adverbs (tomorrow), (on Sunday), (quickly) and (quite care) each parallel sentences has the same semantic feature of the adverb while the third sentence (quickly) and (to the garage) are different in their semantic categories; the first one is adverb of manner while the second is of goal. The unlike semantic feature of (3) affects the parallelism facilitation and reduces its effect.

1.3. Parallelism and Prosody

Prosody deals with the suprasegments such as rhythm, intonation, tone, stress (wikipedia). It plays a significant role in the parallelism effect and on the auditory processing of the sentence Carlson (2001) for it gives the sense of the intended message the speaker wants to convey. Lehiste, 1973; Price, Ostendorf, Shattuck-Hufnagel & Fong, 1991 state that prosody's contribution to parallelism is to make the sentence as unambiguous one.

The study of the relation between the prosody and the influence of parallelism isn't recent study but it belongs to many decades ago (Culter, Dahan, & van Donselaar 1997. Carlson (2001) assumed that the absence of prosody leads the ambiguity to the sentence. The interpretations as we mentioned before for the sentence which has gapping elements, the prosody is necessary (kjelgaard, 1995; Speer, kjelgaard, & Dobroth, 1996) to solve the ambiguous problem. But the prosody's effect isn't beneficial in the sentence's analysis. The effect of prosody on parallelism is called prosodic parallelism which can be used as a bridge between the gapping and non-gapping analysis of the sentences Carlson (2001). For the gapping sentence, the using of

prosodies is the crucial point which can distinguish the intended meaning.

One of the prosody's elements is pitch accents. Pitch accent is useful as many researchers find (Birch & Clifton, 1995; Schafer, Carlson, Clifton, & Frazier, 2000; Schafer, Carter, Clifton, & Frazier, 1996) when it marks the deferential point between the first and the second conjuncts. For instance:

- John shocked the teachers with his fluency and Jack with his appearance.

In this sentence whether we consider it a gapping or non-gapping sentence, the two words (*fluency and appearance*) are different, thus the location of the pitch accent on the specific element is very important to determine the contrastive points between the two conjuncts. However, the similarity of using the same pitch accent over the same syntactic element in both conjoined sentences will increase the effect of parallelism in spite of their contradictions.

1.4. The number of the elements between the verb and its particle.

The facilitation of the parallelism becomes more influential when the number of elements between the verb and its preposition is less and vice versa. Dubey et al. (2005) said "particle verbs are of particular interest for the investigation of parallelism, because they allow for a syntactic alternation which has only a minimal effect on meaning". Consider the following example:

- 1- Jane felt sick and she took off the cigarette.
- 2- Jane felt sick and she took the cigarette off.

In the sentences (1) and (2), Dubey et al. (2014) assumed that we have in our consideration two factors; the obvious syntactic constituent concerning parallelism in (1) and the phonological factors in (2) concerning of the variant syllables which separate between the verb and its preposition. The constituent stream of the sentence psycholinguistically becomes difficult and this difficulty can be explained according to other linguistic features. The facilitation in (1) is clearer than in (2) because the number of separated elements in (1) is less than in (2). Both sentences have identical meaning but different structure. However the meaning of sentence (1) is little affected by the syntactic exchange and this affects the parallelism effect as a result.

II. CONCLUSION

Parallelism plays a remarkable role in the sentences' comprehension, production and interpretation. It gives the sentence a kind of clarity, easy and smoothness which the non-parallel sentences lack. In the previous papers, we conclude that there are factors that affect the influence of the parallelism and reduce its effect. One of these factors is the gapping or missing element in the second sentence which leads to ambiguity and finally misleads the addressee. The second factor is the number between the verb and its particle. Whenever the number of the elements increases, the parallelism effect reduces. The third factor is: if we depend on the surface structure of the sentence or on the internal structure or context. In fact, if we restrict ourselves with the surface structure of the sentence, many realities will be vanished and marginalized. For this sake, if we go further inside the deep structure of the sentence, we will find similarity either in category or kind. As a result, this fact will help parallelism to pursue to achieve its purpose. The ultimate factor as a researcher's point of view is the prosody and its invisible impact on the recipients' sense of the intended meaning of what is said.

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