

Incorporating information structure in the EAP curriculum

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Abstract

When explaining the difference between syntactic choices, native English speakers tend to declare that one form “sounds more natural” and provide no further explanation. Low frequency word combinations are likely to be identified as unnatural. These unnatural or marked expressions, however, may be correct according to pedagogic grammars. Unlike native speakers, learners frequently do not have sufficient exposure to English to acquire the ability to differentiate between unmarked and marked forms. Therefore, an understanding of the underlying syntactic principles of information structure is necessary to help learners more accurately assess markedness. This paper introduces three principles, namely information flow, information focus and end weight. These principles can be incorporated into an academic writing course to explain structures, such as fronting, passive voice, inversion, discontinuous noun phrases, the postponement of direct objects and the position of adverbials. Examples from learner and reference corpora and suggested activities are provided.

Key words: information structure, markedness, end weight, end focus

I. Introduction

Explaining the difference between particular syntactic choices, such as sentence (1), extracted from an in-house learner corpus (LC), and sentence (2) can be problematic.

- (1). The concepts in the examples of computational functions are two. (LC)
- (2). There are two concepts in the examples of computational functions.

Low frequency expressions are likely to be identified as unnatural. These so-called unnatural or marked expressions, however, may be grammatically correct according to pedagogic grammars.

Native English speakers can identify the unmarked and marked forms with little difficulty, but explanations tend to lack substance. The following quotes were extracted from explanations of syntactic choices:

- “It sounds more natural.”
- “It seems better.”
- “That’s how it is always written in books.”
- “It sounds weird.”

Explanations of “naturalness” do not help learners understand why a particular syntactic choice is preferred. Unlike native speakers, learners frequently do not have sufficient exposure to English to acquire the ability to intuitively differentiate between unmarked and marked forms. Markedness can occur at lexical and syntactic levels.

At the lexical level, Pawley and Syder (1983) claim pre-fabricated phrases tend to be used in a limited number of permutations creating ordinary, idiomatic and natural sentences. This concept of restricted rather than open choice of collocates has been defined, described and explained by numerous linguists (e.g. principle of idiom in Sinclair, 1991, p.110; pattern grammar in Hunston and Francis, 1999; collocation in Stefanowitsch & Gries, 2003).

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At the syntactic level, the order of information adheres to the principles of information structure (Lambrecht, 1996), namely information flow (e.g. given and new), information focus (e.g. theme and rheme) and end weight. Therefore, an understanding of these underlying syntactic principles of information structure is necessary to help learners more accurately assess markedness.

II. Information structure

Readers of texts decode the information as they read in real time, dynamically constructing their interpretation of the meaning (see logogenesis of discourse, Eggins, 2004, p.51). Information structure determines “which part of a sentence is more informative in relation to a particular context” (Xiao, 2007, p.3). The intertwined principles of information flow, end focus and end weight help to chunk information into packages that can be delivered with or without emphasis. Information structure can be viewed as a dichotomy of givenness (known vs. new) and aboutness (topic vs. comment) (Xiao, 2007, p.9). These concepts are explained and activities are suggested for classroom usage in the following sections.

III. Information flow

Information flow is the “tendency to place new information towards the end of a clause” (Quirk & Greenbaum, 1993, p.410). This tendency explains why (3) is more likely to be used than (4) as the first sentence of a paper.

- (3). This paper presents a new algorithm (LC).
- (4). A new algorithm is presented in this paper.

A. Thematic development

Simply put, at least for English, the theme (topic) is what the rheme (comment) is about. In general, the theme is known and the rheme is new. In English, the theme is often the grammatical subject. This development or progression from known (or given) to new occurs at clausal, sentential and discoursal levels.

Daneš (cited in Fontaine, 2013, p.166-7) identified three sources of thematic progression namely constant, linear and derived themes as shown in examples (5, 6, 7).

Constant theme – theme is repeated

- (5). My dog is black. It is a pit bull terrier.

Linear theme – rheme becomes the theme

- (6). My dog is a black. Its colour is rather rare.

Derived theme – block of text becomes the theme

- (7). My pet dog (title) My dog is black.

Ruptured theme – theme suddenly appears

- (8). My dog is black. Pet food is expensive.

Fontaine (2013, p.168) notes that ruptured themes (8) may indicate a weak point in a research paper. She also asserts the frequency of ruptured themes in articles written by international authors; and based on results of research studies, advocates the inclusion of thematic progression in academic writing courses.

Activity 1

Highlight the grammatical subjects of the main clauses in a paragraph and then identify whether the theme is constant, linear, derived or ruptured.

B. Passivization

Information flow can explain why passive voice tends to be used to describe processes. The item that is processed is known and so the most appropriate position for the item is early in the clause (e.g. grammatical subject or theme), which means that the verb needs to be in passive voice as the grammatical subject is

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recipient (i.e. patient) rather than the performer or “doer” (i.e. agent) of the action. This is supported by Biber *et al.* (1999) who found that approximately 90% of agent phrases introduced new information.

Activity 2

Read a description of a process. Highlight the new information in yellow and the known information in orange. Discuss your results with a partner.

IV. Information focus

The default focus is end-focus which is automatically realized by placing new or newer information towards the end. In this case, the theme is given and the rheme is new. However, at times, the writer may wish to focus the reader on another aspect and harness clause initial focus. This can be achieved by moving a clause element to an earlier than expected position. The default order of clause elements is:

Subject	Verb	Object	Complement	Adverbial
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Figure 1: Clause elements

That means that the object, complement or adverbial may be emphasized by fronting.

A. Fronting

In (10) the time adverb *recently* is fronted and therefore emphasized. Adverbials are probably the easiest clause element to emphasize in this manner. Time adverbs, in particular, commonly receive such emphasis.

- (9). There have been several attacks recently.
- (10). Recently, there have been several attacks.
- (LC)

Fronting is used for cohesion, focus and often forms a contrast or refers to given information (Xiao, 2007, p.37). Marked themes are those that are “unusual enough to draw attention to themselves (Thompson, 2000 p.121). One way to mark a theme is to front or “move into initial position an item which is otherwise unusual there” (Quirk *et al.*, 1985, p.1377).

Activity 3

Discuss the difference between each of these pairs of sentences with your partner.

a. The SERS questionnaire was established in 1993.

They established the SERS questionnaire in 1993.

b. There are two main conclusions in this paper.

In this paper, there are two main conclusions.

(Sentences in all activities are extracted or adapted from the Corpus of British Academic Written English.)

B. Inversion

When negative adverbials (e.g. never, seldom, scarcely and few) are fronted, i.e. placed before the subject, subject-operator inversion is frequently used for rhetorical effect as shown in (11, 12).

- (11). Only rarely do foreign bodies penetrate the wall of the aerodigestive tract. (Corpus of Contemporary American English, COCA)
- (12). No sooner has our understanding grown, than our imagination is again thrown into disarray... (COCA)

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Activity 4

Rewrite the following sentences emphatically, starting the sentence with the underlined word(s).

- a. The methods of paying money in and out of banks was just as important as the record keeping necessary to keep track of the ever increasing flows of cash this encompassed.
- b. Assassination had never gone hand in hand with philosophy in Roman history until the death of Julius Caesar.
- c. The outrage was so strong that those found giving to beggars were fined.
- d. He was not only a great patriotic leader, but also his industrialisation and rearmament policies were seen as successful.

V. End weight

In addition to end-focus, there is “tendency to reserve the final position for more complex parts of a clause or sentence” (Yule, 2002, p.199). This end weight principle results in long "heavy" elements being placed at the end of the sentence. The principles of information flow and end weight usually agree, but should conflict arise information flow overrides end weight (Xiao, 2007, p.16).

The “heaviness” of elements may result from their length, number or grammatical complexity. Sentences comprising one very long clause and one short clause are most likely to follow the principle of end weight as in (13), while (14) comprises a long theme and short rheme, breaking the end weight principle and creating a marked sentence.

(13). We have no other option if the government continues to prevent relief supplies from being transported to the large numbers of people seeking humanitarian aid. (Yule, 2002, p.137)

(14). The number of articles which were collected is 22,000. (LC)

A. Postponement

To ease the burden on working memory (Baddeley, 2012) and make text easier to read, lengthy phrases, such as direct objects and adverbials, may be delayed.

Activity 5

Identify the word or phrase that breaks the end weight principle.

- a. Therefore how meronymic relation is structured is only found by looking at each relation with prototypical features carefully.
- b. Close contact with epithelium cell surfaces will give a supply of nutrients acquired from the damaged epithelium cells to it.

At times only the tail end of a noun phrase is delayed, resulting in discontinuous noun phrases with verb phrase separating the head and the tail as shown in (15).

(15). A simulation was performed to assess the impact of inshore growth overfishing on the brown shrimp yield. (COCA)

Activity 6

Reorder these marked sentences.

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- a. Recently new evidence that suggests that there was a king before Narmer who had fought battles in the hope of uniting the tribes has been discovered.
- b. The time to pardon and forget has come.
- c. In this type of structure a decision as to how best to group the purchasing activities so as to be most effective has to be taken .

B. Extraposition

Pronouns, such as *it*, can be used as cataphoric referents and mark the place of “heavy” noun phrases that are postponed. For example, the grammatical subject in (15) is replaced with *it* and the moved to the rheme in (16).

(15). A revolution in the building types, therefore, is necessary to achieve. (LC)

(16). It is necessary to achieve a revolution in the building types.

Adjectives that often follow the anticipatory or empty subject *it* and a that-clause rather than a “heavy” subject include:

amazing, apparent, appropriate, certain, clear, crucial, difficult, doubtful, essential, evident, extraordinary, important, inevitable, interesting, likely, natural, obvious, odd, plain, possible, probable, surprising, and unlikely.

Activity 7

Rewrite these using either it or there as the first word of the sentence.

- a. Three reasons for this exist.
- b. Understanding the situation and circumstances is essential.

VI. Conclusion

Information structure can be incorporated into the EAP curriculum through awareness raising activities (e.g. identification and naming), explanatory activities (e.g. selecting and explaining differences), and productive activities (e.g. reordering, completing and rewriting). Understanding the three key principles can help learners identify which sentences are syntactically marked and which are not.

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