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Cognitive Biases in Processing Information Structure Among Native and L2 English Speakers

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Abstract

The present paper is based on the theory of Functional Sentence Perspective (FSP). It investigates how native English speakers and non-native Czech and Slovak learners process information structure and communicative dynamism. It explores the difference between rigid English Subject-Verb-Object word order and Czech FSP's principle of end-focus. To understand how readers deal with this structural tension, this study analyzes survey responses to an English excerpt from Harry Potter and the Goblet of Fire [13, p.1]. The data reveal that both groups struggle to identify the most important communicative unit (the Rheme Proper) when it violates standard grammatical expectations, for example, when it does not stand at the end of the sentence. Instead, readers fall into "traps" driven by verb weight, pragmatic familiarity with settings, or heavy front-loaded subjects. However, their proficiency with complex clauses suggests that misinterpretation stems from semantic distractors rather than syntactic density.

Keywords: *Functional Sentence Perspective, Information Structure, Communicative Dynamism, Cognitive Bias, L2 Reading Comprehension*

List of Abbreviations

- FSP: Functional Sentence Perspective
- CD: Communicative Dynamism
- L2: Second Language
- SVO / SVOA: Subject-Verb-Object / Subject-Verb-Object-Adverbial
- ThPr: Theme Proper
- DTh: Diatheme
- TrPr: Transition Proper
- Tr: Transition
- Rh: Rheme
- RhPr: Rheme Proper
- Set: Setting
- Pr: Presentation of Phenomenon
- Ph: Phenomenon Presented
- B: Bearer of Quality
- AofQ: Ascription of Quality
- Q: Quality
- Sp: Specification
- FSp: Further Specification

1 Introduction

According to the FSP theory, the information structure of the sentence is organized in specific ways, and its order is not always identical in Czech and English. While Czech has a flexible word order that naturally places the most important new information – the Rheme Proper (RhPr) – in the final position, English primarily follows a fixed Subject-Verb-Object order, even though communication is also driven by the principle of end-focus, where the most dynamic, context-independent information tends to appear at the end of a clause. This creates structural tension concerning how readers process information when English grammar requires new information to be placed at the beginning of a sentence, or when familiar, context-dependent elements appear at the end. Although frameworks by Firbas [7, p. 11], Halliday [8, p. 37], and Chafe [3, p. 72], as well as later expansions on distributional subfields and the Presentation Scale by Svoboda [14], Chamonikolasová [4], and Adam [1], address information structure, there is still a lack of empirical data on how readers deal with these tensions in practice. In particular, it remains unclear whether readers naturally follow the FSP scale of communicative dynamism (CD), or if they are distracted by surface-level grammar and semantics. The present paper addresses this empirical gap by

investigating how native English speakers and non-native L2 learners perceive communicative dynamism and identify the RhPr in a narrative text. This study has three main objectives:
(1) to identify the specific cognitive and semantic "traps", such as the semantic weight of verbs, front-loaded settings, heavy subjects, or secondary rhemes, that cause readers to misidentify the RhPr when English SVO order clashes with FSP factors;
(2) to examine whether comprehension difficulties are caused by syntactic complexity in subordinate clauses [14] or by semantic distractors and pre-existing pragmatic knowledge [3];
(3) to compare the processing tendencies of L1 English speakers and L2 Czech and Slovak learners in order to formulate practical implications for English language teaching [12].

2 Theory

2.1 Functional Sentence Perspective

The theory of Functional Sentence Perspective is based on the tradition of the Prague School of Linguistics and was formalized by Jan Firbas [7]. This approach looks at how information is organized within an utterance corresponding to a clause or sentence in order to achieve a particular communicative function. Central to FSP is the concept of communicative dynamism (CD), which determines the extent to which a linguistic element contributes to the development of the communication. A clause/sentence can be divided into thematic elements (the context-dependent part of the message, with the lowest degree of CD), transitional elements (generally the verb, acting as a link), and rhematic elements (the context-independent part of the message, carrying the highest degree of CD). Among these, the Rheme Proper (RhPr) stands as the greatest communicative peak, carrying a higher degree of CD than the remaining elements, including the standard Rheme (Rh). The distribution of CD is determined by an interaction of three factors: context (whether information is retrievable from the immediately relevant context or cannot be fully retrieved), semantics (dynamic semantic relations between sentence elements), and linear modification (the tendency to place the most dynamic information at the end of a clause) [7, p. 10]. Understanding this framework is important for analyzing how readers identify the most dynamic element – the RhPr, especially when grammatical rules or other factors interfere with the expected flow of information.

2.2 Information Structure: Firbas, Halliday, and Chafe

Although Jan Firbas's [7] FSP shares roots with the theories of Michael Halliday and Wallace Chafe, their approaches to information structure differ. Both Firbas and Halliday view language primarily as a means of communication; however, Halliday's [8, p. 37] Systemic Functional Grammar determines Theme-Rheme based on position. For Halliday, the Theme is the first element of a clause, the "point of departure", making it a location-based concept. By contrast, Firbas defines thematic and rhematic elements in terms of the gradual scale of CD, meaning the Theme can theoretically stand anywhere in the clause depending on context and semantic weight.

While both Chafe [3] and Firbas consider "given" and "new" information, they differ in how they define retrievability. Firbas imposes a strict retrievability span, arguing that information is context-dependent (retrievable) only if it appears in the immediately preceding relevant verbal or situational context [7, p. 22]. Chafe, by contrast, uses a broader psychological framework, defining givenness in terms of activation cost and arguing that information can be active through shared pragmatic knowledge, broader situational context, or long-term memory [3, p. 73].

While Halliday associates information structure directly with syntax and Chafe links it to human cognition, Firbas's approach determines it through linear modification, semantics, and the immediately relevant verbal or situational context.

2.3 Aleš Svoboda and Distributional Fields

While Firbas laid the foundation for the CD scale, Aleš Svoboda [14] further developed the multi-level aspect of FSP. Svoboda introduced the idea of "distributional fields," claiming that FSP does not function merely at a simple linear syntactic level. The main sentence acts as the primary macrofield, in which the elements function as primary communicative units. However, subordinate clauses, infinitive phrases, or complex noun phrases create their own distributional subfields. This subfield can function as a single communicative unit within the main sentence while maintaining its own internal FSP structure with its own Theme, Transition, and Rheme.

2.4 The Presentation Scale and its Typology

While Jan Firbas laid the framework by describing the dynamic semantic scales, Jana Chamonikolasová and Martin Adam later expanded it. Building on Firbas's original definitions, Chamonikolasová [4] modified Firbas's conception by introducing the Extended Presentation Scale containing a Specification, a dynamic semantic function that Firbas had originally attributed only to the Quality Scale and the Combined Scale. Other special types of the Presentation Scale are described in Chamonikolasová and Adam [5].

Following this theoretical expansion, Adam [1, p. 58] systematically examined how the Presentation Scale works within the grammatical rules of the English language. English Subject-Verb-Object word order is naturally resistant to the FSP principle of linear modification, which usually states that the most dynamic element (the RhPr) should occur at the end of a clause. To account for the way English is able to introduce brand-new subjects without breaking its own structural rules, Adam [1, p. 59] proposed a typology of Presentation sentences. He identified specific syntactic types, such as existential *there*-constructions, fronted adverbials with subject-verb inversion, and clauses having a rhematic subject in the preverbal position. Adam also expanded on the criteria for Presentation verbs, noting that a verb does not just need to explicitly express "existence" or "appearance". On the contrary, if there is a strong semantic bond between the subject and the verb (e.g. *ivy spreading* – since the biological nature of ivy is to spread), the verb's action-based quality is emptied, and instead it merely serves to present the subject onto the scene.

3 Methodology

The methodology takes the form of applied research based on survey data. This study analyzes responses from 151 native English speakers and a non-native cohort of 154 first-year English Language and Literature students from the Faculty of Arts at Masaryk University. The non-native cohort consists of two sister language groups – Czech and Slovak speakers with comparable levels of English proficiency. Given the significant (not only structural) similarities between Czech and Slovak, these non-native groups are assessed as one group and are also expected to interpret FSP-related features in English texts similarly. It is important to note that the non-native cohort consisted of first-year students intentionally selected because they had not yet studied FSP theory. Consequently, the respondents were not presented with theoretical terminology, nor were they instructed to identify the 'Rheme' or evaluate 'Communicative Dynamism.' Instead, they evaluated modified excerpts from J.K. Rowling's *Harry Potter and the Goblet of Fire* [13], based on their natural reading comprehension. The survey instructions explicitly stated:

> "After reading each passage, you will be asked to choose the most important language units in individual sentences. Multiple and complex sentences will be divided into simple clauses for easier analysis."

For each evaluated item, respondents were prompted:

> "In each sentence or clause, please choose the language unit that you think is the most important and most relevant for the development of the whole story."

From a theoretical perspective, the participants' intuitive selections were then analyzed to determine which syntactic or semantic element they subconsciously perceived as what the FSP framework calls the Rheme Proper. The source text was specifically selected for its clear narrative continuity, cohesion, well-defined sequence of events, and straightforward vocabulary. To address the study's objectives, the 42 evaluated clauses were selected to represent specific FSP structures and potential processing traps. Regarding the first and second objectives, the text includes Presentation Scales with both dynamic and passive verbs (items 6, 7, 20, 27, 40, 42), heavily modified thematic Bearers and Settings (items 13, 19, 20, 36), clauses where context overrides end-focus (items 30, 38, 39), and complex subordinate subfields (items 34, 41), allowing for a direct comparison between L1 and L2 comprehension. Previous work provides a comprehensive breakdown of participant demographics, text modifications, and the complete design of the bilingual questionnaire [9].

The complete English text used in the survey is provided below. The text has been segmented into 42 distinct distributional fields, matching the questions, or items, presented to respondents. The beginning of each evaluated main clause is marked with its corresponding survey item number in bold round brackets. To graphically distinguish hierarchical levels, subordinate structures (subordinate clauses and semiclauses) presented to respondents separately appear in italics.

> **(1)** The villagers of Little Hangleton still called it "the Riddle House," **(2)** *even though it had been many years since* **(3)** *the Riddle family had lived there*. **(4)** It stood on a hill overlooking the village, **(5)** *some of its windows boarded*, **(6)** *tiles missing from its roof, and* **(7)** *ivy spreading unchecked over its face*.

(8) Once it was a fine-looking manor, and easily the largest and grandest building for miles around; **(9)** however, the Riddle House was now damp, derelict, and unoccupied. **(10)** The Little Hangletons all agreed that **(11)** *the old house was "creepy."* **(12)** Half a century ago, something strange and horrible had happened there, **(13)** *something that the older inhabitants of the village still liked to discuss when* **(14)** *topics for gossip were scarce*. **(15)** The story had been picked over so many times, and **(16)** had been embroidered in so many places, that **(17)** *nobody was quite sure* **(18)** *what the truth was anymore*. **(19)** Every version of the tale, however, started in the same place: **(20)** Fifty years before, at daybreak on a fine summer's morning, a maid had entered the drawing room and **(21)** found all three Riddles dead. **(22)** The maid had run screaming down the hill into the village and **(23)** roused as many people as she could. **(24)** "Lying there with their eyes wide open! **(25)** Cold as ice! **(26)** Still in their dinner things!" **(27)** The police were summoned, and **(28)** the whole of Little Hangleton had seethed with shocked curiosity and ill-disguised excitement. **(29)** Nobody wasted their breath pretending **(30)** *to feel very sad about the Riddles, for* **(31)** *they had been most unpopular.* **(32)** Elderly Mr. and Mrs. Riddle had been rich, snobbish, and rude, and **(33)** their grown-up son, Tom, had been, if anything, worse. **(34)** All the villagers cared about was the identity of their murderer — for plainly, **(35)** three apparently healthy people did not all drop dead of natural causes on the same night. **(36)** The Hanged Man, the village pub, did a roaring trade that night; **(37)** the whole village seemed to have turned out **(38)** *to discuss the murders.* **(39)** They were rewarded for leaving their firesides when **(40)** *the Riddles' cook arrived dramatically in their midst and* **(41)** *announced to the suddenly silent pub that* **(42)** *a man called Frank Bryce had just been arrested* [13].

4 Results

4.1 Guide to Table Interpretation

To assist with the interpretation of the empirical data, all tables in this section adhere to a standardized format. The leftmost column provides explanatory labels for each row. Each table consists of five rows that align the text with its theoretical FSP function and the empirical survey results. The first row, Evaluated Text Segment, introduces the specific clauses extracted from the source text, and it identifies the survey item number – the original question number as given in the survey (e.g., Sentence 6). These segments correspond to the exact selectable options presented to respondents in the survey. The second row, Communicative Unit, shows the theoretical FSP analysis mapping the element's hierarchical position on the CD scale. For visual clarity, the actual RhPr is indicated in red within the tables. The third row, Dynamic Semantic Function, describes the element's specific semantic role within the Dynamic Semantic Scale, illustrating how the element's semantic content drives the communication forward. The fourth and fifth rows, Selection Rate (L2 Cohort, the non-native group / L1 Cohort, the native group), show the percentage of participants who voted for that specific text segment as the most important unit for the development of the story. In other words, these metrics indicate how many respondents intuitively perceived that segment as the communicative peak (RhPr). Table titles show the overarching FSP scale used (Presentation Scale / Quality Scale). Where applicable, the title also notes if the segment operates as a subordinate distributional subfield (Sub-clause of Rheme).

4.2 The Presentation Scale

The following tables present the empirical results for clauses performing the Presentation Scale. These sentences depict how respondents process a context-independent subject appearing on the communicative scene.

Table 1. Presentation Scale (Sub-clause of Rheme)

Sentence (6)	**tiles**	**missing**	**from its roof,**
Communicative Unit	RhPr	Tr	DTh
Semantic Function	Ph	Pr	Set
Selection Rate: L2 Cohort	8,3%	83,3%	8,3%
Selection Rate: L1 Cohort	4%	88,7%	7,3%

Table 2. Presentation Scale (Sub-clause of Rheme)

Sentence (7)	**ivy**	**spreading**	**unchecked**	**over its face.**
Communicative Unit	RhPr	Tr	Rh	DTh
Semantic Function	Ph	Pr	Sp	Set
Selection Rate: L2 Cohort	38,9%	15,3%	41,7%	4,2%

Selection Rate: L1 Cohort	12,6%	9,9%	72,8%	4,6%

Table 3. Presentation Scale

Sentence (20)	**Fifty years before,**	**at daybreak**	**on a fine summer's morning,**	**a maid**	**had entered**	**the drawing room**
Communicative Unit	DTh	DTh	DTh	RhPr	TrPr/Tr	DTh
Semantic Function	Set	Set	Set	Ph	Pr	Set
Selection Rate: L2 Cohort	50%	0%	5,6%	25%	8,3%	11,1%
Selection Rate: L1 Cohort	63,6%	3,3%	2,6%	11,9%	12,6%	6%

Table 4. Presentation Scale (Sub-clause of Rheme)

Sentence (40)	**the Riddles' cook**	**arrived dramatically**	**in their midst**
Communicative Unit	RhPr	TrPr/Tr	DTh
Semantic Function	Ph	Pr	Set
Selection Rate: L2 Cohort	65,9%	34,1%	0%
Selection Rate: L1 Cohort	41,1%	58,3%	0,7%

Table 5. Presentation Scale (Sub-clause of RhPr)

Sentence (42)	**a man called Frank Bryce**	**had just been arrested.**
Communicative Unit	RhPr	TrPr/Tr
Semantic Function	Ph	Pr
Selection Rate: L2 Cohort	46,3%	53,7%
Selection Rate: L1 Cohort	30,5%	69,5%

A review of sentences 6 (*tiles*), 7 (*ivy*), 20 (*a maid*), 40 (*the Riddles' cook*), and 42 (*a man called Frank Bryce*) shows clear processing patterns. In these cases, the verb expresses existence or appearance on the scene, thereby using a Presentation Scale and pushing the context-independent Subject into the RhPr position. The data suggest that both L2 learners and native speakers struggle significantly with this type of Presentation Scale.

Sentence 20 illustrates Adam's [1] view of scene-setting in Presentation Scales. The author meticulously builds the thematic background by means of a series of spatial-temporal Settings (*Fifty years before, at daybreak, on a fine summer's morning*). This extensive stage-laying causes a cognitive strain, which might be the reason why 50% of the non-native and 63.6% of the native participants incorrectly identified the first Setting as the RhPr, not realizing that its function is merely to present the Phenomenon (*a maid*) onto the scene.

4.3 The Semantic Weight of Verbs

Respondents sometimes mistake the verb for the communicative peak, assuming that the action of a sentence is its most important component. When they fail to recognize the true Specification or Phenomenon, readers commonly resort to Quality or Presentation verbs. However, the reliance on semantic weight can also lead to cognitive processing in accordance with FSP theory.

Table 6. Quality Scale

Sentence (39)	**They**	**were rewarded**	**for leaving their firesides**
Communicative Unit	ThPr	RhPr	DTh
Semantic Function	B	Q	Set
Selection Rate: L2 Cohort	1,2%	76,8%	22%
Selection Rate: L1 Cohort	3,3%	82,1%	14,6%

The data for sentence 39 show an instance of contextual factor overriding linear modification. Because the reader already knows from the immediately relevant context that the villagers left their homes to visit the village pub, the phrase *for leaving their firesides* is contextually retrievable. In FSP theory, this demotes the phrase to a Diatheme. The communicative peak shifts backwards to the passive

verb *were rewarded*, which introduces new information. Most respondents (76.8% of non-natives and 82.1% of natives) correctly identified the verb as the RhPr despite its non-final position.

However, with respect to Presentation Scales, such as sentence 6 (Table 1.) and sentence 42 (Table 5.), the majority of respondents incorrectly selected the dynamic Presentation verbs (*missing* and *had just been arrested*, respectively) rather than the actual new Phenomena (*tiles* and *a man called Frank Bryce*). These choices demonstrate that verbs carry heavy semantic weight for the reader. Respondents relied on broad situational context – knowing, for example, that the house had *tiles* or that there was *a man called Frank Bryce* – which made the idea of a *reward* or an *arrest* seem like the most important piece of information.

4.4 The Setting Trap

The narrative method in the text analyzed involves frequent temporal and spatial shifts, such as going back to *fifty years before* (sentence 20), *that night* (sentence 36), or *the suddenly silent pub* (sentence 41). This heavy world-building pulls respondents to continuously evaluate semantically rich Diathemes. Consequently, spatial, temporal, and contextual settings become the main focus. In sentence 20 (see Section 4.2), even though the true RhPr is the phenomenon *a maid*, 63.6% of the native group and 50% of the non-native group chose the opening phrase *Fifty years before*, which serves only as a temporal setting (DTh) as the most important element.

Because the respondents were likely familiar with the globally recognized *Harry Potter* universe, Wallace Chafe's [3] theory of cognitive processing regarding information flow becomes applicable to their way of processing the material. Chafe explains that these background settings require low cognitive activation costs because of pre-existing pragmatic knowledge. Rather than relying on the context of the clause itself, readers draw on their general knowledge of the franchise. The research observes a paradox: according to FSP theory, familiar information should serve as the thematic foundation and carry the lowest CD. Yet the survey data show that respondents often confuse their psychological recognition of a well-known concept with communicative novelty and, as a result, assign these settings the greatest importance.

Furthermore, when Settings are front-loaded (as shown by the temporal shift in sentence 20), respondents instinctively tend to accept this prominent initial placement, systematically confusing Halliday's [8] structural starting point with Firbas's peak of communicative dynamism.

4.5 The Subject/Bearer Trap

In specific syntactic structures, respondents can get distracted by the Bearer of Quality, mistaking the thematic subject for the most important part of the clause. This happens when the Bearer is placed at the beginning and carries heavy descriptive weight, in which case the respondents focus on it as if it were the most important communicative element.

Table 7. Quality Scale (Sub-clause of Rheme)

Sentence (13)	**something that**	**the older inhabitants of the village**	**still**	**liked to discuss**
Communicative Unit	DTh	DTh	TrPr	TrPr/RhPr
Semantic Function	Set	B	-	Q
Selection Rate: L2 Cohort	2,8%	16,7%	29,2%	51,4%
Selection Rate: L1 Cohort	3,3%	29,8%	19,2%	47,7%

Table 8. Quality Scale

Sentence (19)	**Every version of the tale,**	**however,**	**started**	**in the same place:**
Communicative Unit	DTh	TrPr	TrPr/Tr	RhPr
Semantic Function	B	-	Q	Sp
Selection Rate: L2 Cohort	34,7%	1,4%	1,4%	62,5%
Selection Rate: L1 Cohort	57%	0,7%	11,9%	30,5%

Table 9. Quality Scale

Sentence (36)	**The Hanged Man, the village pub,**	**did**	**a roaring trade**	**that night;**
Communicative Unit	DTh	TrPr/Tr	RhPr	DTh
Semantic Function	B	Q	Sp	Set
Selection Rate: L2 Cohort	35,4%	0%	59,8%	4,9%
Selection Rate: L1 Cohort	39,7%	0%	58,3%	2%

The data reveal a cognitive tendency in which readers confuse semantic descriptive weight with CD. In FSP theory, the Bearer of Quality belongs to the thematic sphere and serves as the foundation. However, when a Bearer is heavily modified (such as the apposition in *The Hanged Man, the village pub* or the quantifier in *Every version of the tale*), it creates competition for the rheme. For example, in sentence 36, 35.4% of non-natives and 39.7% of natives incorrectly chose the diathematic Bearer *The Hanged Man, the village pub*; a similar distraction occurred in sentence 13, where 16.7% and 29.8% chose the Bearer *the older inhabitants of the village*. Furthermore, in sentence 19, while the non-native group mostly identified the final Specification as the most important part of the clause (62.5%), a 57% majority of the native English speakers, with respect to FSP theory, divergently identified the thematic Bearer, *Every version of the tale,* as the most important part of the clause.

4.6 Contrastive Focus and the Presentation Scale

While contextual retrievability typically causes an element to be pulled down into the thematic sphere, a contrastive focus can override this principle. The data concerning sentence 18 illustrate how strongly readers respond to semantic contrast.

Table 10. Presentation Scale (Sub-clause of Rheme)

Sentence (18)	**what**	**the truth**	**was**
Communicative Unit	DTh	RhPr	TrPr/Tr
Semantic Function	Set	Ph	Pr
Selection Rate: L2 Cohort	2,8%	87,5%	9,7%
Selection Rate: L1 Cohort	4,6%	90,7%	4,6%

A vast majority of both cohorts, in relation to FSP theory, convergently identified the element *the truth* as the most important part of the clause. Even though *the truth* could initially seem contextually given, Firbas [7, p. 109] claims that contrastive focus overrides retrievability. Without context, *the truth* could be the known topic (Theme/Bearer). Since it is placed in direct semantic contrast with the preceding references to an *embroidered* and *picked over* story, *the truth* becomes context-independent. Because a subject carrying the highest degree of CD cannot function as a thematic Bearer of Quality, the clause is treated as a Presentation Scale. The copula *was* functions as Presentation, presenting the contrasting Phenomenon of *the truth* onto the communicative scene. The approximately 90% success rate indicates that respondents are keenly aware of contrastive semantics and easily disregard standard grammatical expectations when there is explicit juxtaposition.

4.7 Linear Modification vs. The Contextual Factor

A tension in FSP theory occurs when the structural principle of end-focus directly clashes with the contextual factor of retrievability. The following sentences demonstrate how readers rely on linear, end-of-sentence placement at the expense of context.

Table 11. Quality Scale (Sub-clause of Rheme)

Sentence (30)	**to feel**	**very sad**	**about the Riddles,**
Communicative Unit	Tr	RhPr	DTh
Semantic Function	Q	Sp	Set
Selection Rate: L2 Cohort	15,9%	57,3%	26,8%
Selection Rate: L1 Cohort	23,2%	53%	23,8%

Table 12. Quality Scale (Sub-clause of Rheme)

Sentence (38)	**to discuss**	**the murders.**
Communicative Unit	RhPr	DTh
Semantic Function	Q	Set
Selection Rate: L2 Cohort	42,7%	57,3%
Selection Rate: L1 Cohort	41,7%	58,3%

According to Firbas [7], contextual retrievability demotes an element to the thematic status. In sentence 30, the phrase *about the Riddles* is fully retrievable from context and is downgraded to a Setting (DTh). Yet, over a quarter of both groups (26.8% and 23.8%) incorrectly identified it as the communicative peak. A more pronounced example is sentence 38, where *the murders* is similarly retrievable from the immediately preceding context. The RhPr is moved backwards onto the verb *to discuss*. However, most respondents (57.3% of non-natives, 58.3% of natives) were influenced by linear modification, incorrectly assuming that because the noun phrase was placed at the end of the sentence, it must be the Rheme. These results imply that some readers process information linearly, assuming end-focus means the highest CD and thus giving up on the principle of contextual demotion.

4.8 The Secondary Rheme Trap

When a sentence contains multiple pieces of new information, respondents frequently select a standard Rh, rather than locating the actual RhPr.

Table 13. Quality Scale

Sentence (22)	**The maid**	**had run**	**screaming**	**down the hill**	**into the village**
Communicative Unit	DTh	TrPr/Tr	Rh	DTh	RhPr
Semantic Function	B	Q	Sp	Set	FSp
Selection Rate: L2 Cohort	15,9%	6,1%	46,3%	3,7%	28%
Selection Rate: L1 Cohort	7,9%	11,3%	63,6%	0,7%	16,6%

For instance, in sentence 22, the true RhPr is the further specification *into the village*. However, 63.6% of the native respondents chose the non-finite verb *screaming*, which functions only as a standard Rheme providing a secondary specification. A similar divergence appears in sentence 7 (see Section 4.2), where 72.8% of the native group chose the standard Rh *unchecked* instead of the RhPr *ivy*. Because standard specifications carry high CD and are context-independent, respondents easily recognize them as new information and stop evaluating the rest of the sentence, failing to locate the communicative peak.

4.9 Distributional Subfields

To determine whether structural density obstructs FSP analysis, the survey tested clauses containing complex subordinate structures (subordinate clauses and semiclauses).

Table 14. Quality Scale

Sentence (34)	**All the villagers cared about**	**was**	**the identity of their murderer**
Communicative Unit	DTh	TrPr/Tr	RhPr
Semantic Function	B	AofQ	Q
Selection Rate: L2 Cohort	13,4%	0%	86,6%
Selection Rate: L1 Cohort	14,6%	0%	85,4%

Table 15. Quality Scale (Sub-clause of Rheme)

Sentence (41)	**announced**	**to the suddenly silent pub**	**that a man called Frank Bryce had just been arrested.**
Communicative Unit	TrPr/Tr	DTh	RhPr
Semantic Function	Q	Set	Sp

Selection Rate: L2 Cohort	8,5%	1,2%	90,2%
Selection Rate: L1 Cohort	7,3%	7,3%	85,4%

Following Aleš Svoboda's [14] concept of distributional subfields, when a constituent is realized by a subordinate clause, it creates a lower-rank subfield. Interestingly, the empirical data show that respondents are able to interpret these complex syntactic hierarchies. Whether the sub-clause is placed at the beginning of the sentence as a heavy thematic Bearer (as in sentence 34) or functions as a rhematic Specification at the end of the clause (as in sentence 41), the rate of reader success remains high. In both cases, over 85% of both groups correctly identified the macro-level RhPr. This suggests that even when a sentence is structurally complex, readers can still figure out its main message. Complicated grammar isn't the primary cause of misunderstanding. Rather, readers get distracted by the semantics of words themselves (like action verbs or specific details), which pull their attention away from the main idea.

4.10 Rhematic Subject in Preverbal Position

In Martin Adam's [1] typology of Presentation Sentences, a rhematic subject in preverbal position violates the FSP principle of end-focus but maintains English grammatical syntax.

Table 16. Presentation Scale

Sentence (27)	**The police**	**were**	**summoned**
Communicative Unit	RhPr	TrPr	Tr
Semantic Function	Ph	-	Pr
Selection Rate: L2 Cohort	86,6%	0%	13,4%
Selection Rate: L1 Cohort	86,1%	0,7%	13,2%

Both Clause 27 and 40 (Table 4.) feature a rhematic subject in the preverbal position. The English SVO word order places the new Phenomenon (*The police* and *the Riddles' cook*) to the front of the sentence. However, the evidence shows that this front-loaded position confuses readers only when paired with a semantically heavy Presentation verb. In the case of sentence 40, 58.3% of the native cohort failed to identify the subject as the rhematic peak and instead selected the active, dynamic verb phrase: *arrived dramatically*. The combination of the verb's semantic weight and the end-focus violation proved too cognitively taxing.

In contrast, many respondents successfully identified the RhPr in sentence 27. Despite the fact that *The police* occupied the same preverbal position, 86.6% of non-natives and 86.1% of natives correctly identified it as the RhPr. The reason for this high success rate is the passive, semantically weak Presentation verb *were summoned*. This indicates that readers can identify a front-loaded rhematic subject and override linear modification, provided that the Presentation verb remains semantically unobtrusive.

5 Discussion

The empirical data analyzed in this study show that there is a difference between the theoretical structure of Functional Sentence Perspective and the way readers actually understand texts. While the respondents were able to deal with specific syntactic hierarchies, the frequent discrepancy between what participants perceived as the most important unit and the actual theoretical Rheme Proper suggests that readers do not always process information in a purely structural or linear manner. On the contrary, pragmatic context, semantic weight, and cognitive biases frequently shape how syntactic reality is perceived. Consequently, the findings of this study offer implications for the fields of cognitive linguistics, translation studies, second language acquisition, and language teaching.

5.1 Cognitive Linguistics and Preference for Transition

The most common processing error observed across both cohorts was the tendency to promote semantically heavy Transitions to the communicative peak. From the perspective of cognitive psychology, this corresponds to Event Segmentation Theory [16], which states that human mental processing is naturally inclined to process continuous narratives by paying attention to specific, dynamic

actions. Furthermore, according to Langacker [10, p. 103] in the field of cognitive grammar, people have a natural cognitive bias in favour of "energetic interactions." When a reader encounters a semantically rich verb (*arrived dramatically*, *missing*, *were rewarded*), their cognition treats it as a main narrative event. The data indicate that when the structural peak of CD is based on a static phenomenon or specification, but a highly dynamic verb occurs elsewhere in the clause, cognitive event processing often overrides linguistic structure. Readers tend to prioritize the semantic action over the syntactic information, which causes them to intuitively select the verb as the most important unit, diverging entirely from what FSP theory designates as the Rheme Proper.

5.2 Translation Studies and the Presentation Scale

The findings regarding Martin Adam's typology of the Presentation Scale [1] concerning rhematic subjects in the preverbal position are interesting for translation studies. This distinction matters when translating from languages with flexible word order (like Czech or Slovak, which rely heavily on the linearity principle) into structurally rigid languages like English. To bridge this gap and let the message flow naturally, translators usually need to change the grammatical voice, a method Baker [2, p. 182] highlights in her framework for textual equivalence. The contrasting success rates between sentences 40 and 27 (see Section 4.10) give support to this approach: while the dynamic verb in sentence 40 distracted the majority of native speakers from the preverbal subject, the passive, semantically weak verb in sentence 27 allowed over 86% of both cohorts to correctly identify the subject as the RhPr. Therefore, if a translator needs to preserve a Presentation Scale in English, applying semantically weak or passive verbs is a suitable strategy.

5.3 Second Language Paradox

An unexpected trend in the data is that native English speakers occasionally showed a higher sensitivity to semantic distractors than the L2 learners. For example, within sentence 19, a majority of native speakers subjectively selected the Theme (*Every version of the tale*) as the most important unit, compared to a much smaller percentage of the non-native speakers. This dynamic can be explained using MacWhinney's [11] Competition Model of language acquisition, which states that speakers rely on specific linguistic cues determined by their L1. Because Czech and Slovak rely largely on pragmatic FSP cues rather than fixed syntax, non-native learners likely showed subconscious sensitivity to CD. In contrast, native English speakers could be so accustomed to syntactic word order that they instinctively assign high importance to heavy or long elements, causing them to mistake long thematic subjects for the core of the message.

5.4 Sociolinguistics and Pragmatics

Applying Wallace Chafe's [3, p. 74] concept of activation cost to a globally recognized narrative like *Harry Potter* highlights an important sociolinguistic aspect of reading comprehension. Since respondents were likely familiar with the text's background (e.g., *the village, the firesides, the Riddle house*), the cognitive activation cost associated with these settings was low. This familiarity might have caused readers to promote background thematic information to rhematic status. It therefore follows that the more widely a text is known among the public, the less dependence readers have on grammatical structure and the more they rely on pragmatic assumptions.

5.5 Reading Comprehension

These findings also challenge classic methods of English language teaching. Standard pedagogy frequently relies on "notional grammar" [6, p. 13] or "traditional grammar" [15, p. 2], where educators help students to identify various parts of a sentence based on meaning rather than syntactic function, such as defining a verb as an "action word" and the grammatical subject as the "doer of the action". As this study demonstrates, this approach can cause advanced learners to pay too much attention to verbs or subjects, thereby harming advanced reading comprehension. As McCarthy [12, p. 34] argues, language educators need to go beyond teaching grammar at the sentence level and incorporate discourse analysis into their teaching.

In order to develop syntactic awareness and advanced reading comprehension, educators should adopt an approach informed by FSP. In classroom practice, teachers do not need to burden students with FSP terminology; instead, they can design simple consciousness-raising exercises where

students bracket off front-loaded settings and heavy subjects, or cross out repeated clause-final words to see how the main focus shifts backwards onto the verb. Furthermore, comparing active and passive Presentation sentences (such as clauses 40 and 27) can train learners to recognize when a preverbal subject actually carries the key new information. Students should be encouraged to ask themselves, "What is the new piece of information?" to look beyond grammatical rules and focus on how information actually flows through a text. Practicing this skill not only prevents readers from getting distracted by vivid verbs or familiar settings during reading comprehension, but also helps L2 students structure their own (academic) writing more cohesively. Understanding these biases isn't just important for linguistic theory; it also provides a practical framework for improving translation and helping students achieve advanced fluency.

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