

Syntax Analysis Using Tree Diagrams On Adjective Clauses Found In Movie Interstellar

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Abstrak

Proses berbagi informasi, ide, dan perasaan di antara individu difasilitasi melalui bahasa karena bahasa adalah alat komunikasi bagi manusia. Salah satu bahasa tersebut adalah bahasa Inggris. Untuk dapat memahami bahasa Inggris dengan baik, ada beberapa aspek yang harus dimiliki oleh setiap individu. Aspek-aspek tersebut dipelajari dalam ilmu linguistik. Sintaksis merupakan salah satu cabang ilmu linguistik. Dalam analisis sintaksis, analisis dilakukan dari atas ke bawah, dari kalimat ke morfem. Oleh karena itu, diperlukan pemahaman mengenai kalimat, klausa, frasa, dan kelas kata. Klausa kata sifat adalah salah satu dari beberapa klausa dalam percakapan sehari-hari dan dalam banyak tes bahasa Inggris. Ada dua jenis klausa kata sifat: restriktif dan nonrestriktif. Skripsi ini bertujuan untuk menganalisis jenis-jenis klausa kata sifat yang terdapat dalam film Interstellar. Metode yang digunakan adalah deskriptif kualitatif. Terdapat 21 kalimat atau ujaran yang mengandung klausa relatif, sebagian besar bersifat restriktif. Diagram pohon digunakan untuk lebih memahami struktur kalimat, khususnya yang mengandung klausa sifat. Diagram pohon sering digunakan sebagai alat bantu visual untuk menggambarkan struktur kalimat. Aturan struktur frasa diterapkan dalam penggambaran diagram pohon.

Kata Kunci : Sintaksis, Klausa Ajektiva, Diagram Pohon, Interstellar

Abstract

The process of sharing information, ideas, and feelings among individuals is facilitated through language because language is a communication tool for people. One of the languages is English. To have a good comprehension of English, there are some aspects that individuals must possess. Those aspects are studied in linguistics. Syntax is one of the linguistics branches. In syntax analysis, the analysis is conducted from top to bottom, from sentence to morpheme. Thus, having a good comprehension of sentences, clauses, phrases, and word class is required. The adjective clause is one of several clauses that is frequently used both in daily conversation and in many English tests. There are two types of adjective clauses: restrictive and nonrestrictive. This thesis aims to analyze the types of adjective clauses found in Interstellar. The method used is qualitative descriptive. There are 21 sentences or utterances that contain relative clauses, mostly restrictive. Tree diagrams are employed to better understand sentence structure, specifically that contains adjective clauses. The tree diagrams are often used as visual aids to depict sentence structure. The phrase structure rule is applied in the drawing of tree diagrams.

Keywords: syntax, adjective clause, tree diagram, Interstellar

INTRODUCTION

The process of sharing information, ideas, and feelings among individuals is facilitated through language because language is a communication tool for people. One of the languages is English, which has become one of the official languages of several organizations such as The United Nations (UN), the European Union (EU), and ASEAN. In this modern era, English has played crucial roles as a lingua franca in many fields, such as education, social life, and occupation. Unfortunately, English proficiency levels are different between individuals because of many factors.

To have a good comprehension of English, there are some aspects that individuals must possess, for instance, a vast vocabulary. The acquisition of words is crucial; however, it is only one component of the broader knowledge needed for effective communication in English. Besides that factor, there are also some other factors that individuals must have, for instance, the ability to move their tongue, lips, and other speech-related organs with precision and speed that surpasses that of any other consciously controlled muscular activity. All of them are studied in linguistics.

Linguistics has some important branches. One of them is syntax. Syntax, as one part of linguistics, studies not only the structure but also the formation of sentences. If a sentence is arranged correctly, its meaning can be



inferred without analyzing its context. Syntax as an important component of grammar plays a critical role in governing sentence structure.

A sentence is a basic unit consisting of a group of words that show grammatical coherence. It is generally understood that in writing, a sentence always starts with a capital letter and ends with a period, question mark, or exclamation point. Linguists classify sentences into four types based on the clauses they contain: simple sentences, complex sentences, compound sentences, and compound-complex sentences. This classification is based on the presence of dependent or independent clauses within the sentence. A subordinate clause is a dependent clause that cannot stand alone as a complete sentence. Dependent clauses serve various grammatical functions within a sentence. Based on their functions, dependent clauses can be classified into several types, namely noun clauses, adverbial clauses, and adjectival (or relative) clauses. An adjectival or relative clause is a type of subordinate clause that functions to modify a noun or noun phrase within a sentence. This type of clause is introduced by relative pronouns such as "who," "whom," "whose," "which," or "that," or by relative adverbs like "when" and "where." Understanding the structure and position of relative clauses within a sentence is crucial, especially for those who wish to analyze sentence syntax.

Knowledge of relative clauses is also essential in various English language tests such as the TOEFL ITP, TOEFL IBT, and IELTS. In these tests, questions related to adjectival clauses frequently appear. Therefore, a deep understanding of relative clauses is very helpful for those aiming to achieve high scores in these tests. In studying grammar, familiarity with different types of clauses and their functions provides a strong foundation for writing and speaking skills. These clauses not only enrich sentences but also add clarity and detail. As a writer or speaker, the ability to use clauses correctly enhances communication effectiveness and helps convey messages more clearly.

In English, relative clauses are classified into two categories: defining (restrictive) and non-defining (non-restrictive). A restrictive relative clause provides essential information needed to understand the noun it modifies. Without this clause, the meaning of the sentence would be incomplete or ambiguous. For example, in the sentence "The book that you lent me is fascinating," the relative clause "that you lent me" is necessary to identify which book is being referred to. Conversely, a non-defining relative clause offers additional information that is not essential for identifying the noun it modifies. This clause adds extra details which, if removed, do not change the main meaning of the sentence. For instance, in the sentence "The book, which has a red cover, is fascinating," the clause "which has a red cover" merely provides extra information about the book and is not needed to identify the book being referred to. Non-defining clauses are typically set off by commas in writing. In relative clauses, relative pronouns such as "who," "whom," "whose," "which," and "that," or relative adverbs like "when" and "where" are often used at the beginning of the clause. Understanding the difference between restrictive and non-restrictive relative clauses is important for effective writing and speaking in English. Knowing when and how to use each type of relative clause helps in conveying precise information and enhances clarity in communication.

In the study of syntax, linguists frequently employ tree diagrams, which serve as visual aids to depict sentence structure. These diagrams portray the hierarchical arrangement of elements within sentences, showcasing the grouping of individual words into phrases and the subsequent combination of these phrases to construct larger ones or complete sentences. Rooted in phrase structure rules, which are formal guidelines governing the permissible combinations of words to generate phrases and sentences, tree diagrams provide a clear representation of linguistic structure.

Interstellar is a science fiction movie that tells events between the year 2067 and 2092. In the movie, the Earth is becoming uninhabitable. Humans are running out of food. Cooper, a former NASA pilot, becomes a farmer. After breaking the strange code together with his daughter, Murph, they find research facilities in the middle of nowhere. Inside the facilities, they met Doctor Amelia Brand and his father Professor John Brand. After a long conversation, Cooper agreed to pilot the outer spaceship together with a team from Professor Brand. They travel to Saturn where there is a wormhole to another galaxy. Finally, they arrive at another galaxy with three planets that are very close to a black hole. Albert Einstein's theory of relativity is applied in this movie. Besides many physical theories applied, the movie also provides many linguistic elements in the dialogue, making it a good resource for syntactic analysis. Relative clauses, a syntactic construct of paramount importance, serve as a focal point for this paper.

Based on the phenomena above, the author aims to conduct a text analysis. Firstly, the author will analyze the types of adjectival clauses that appear in the film "Interstellar." Secondly, the author will analyze the syntactic structure of the adjectival clauses found in the film by using tree diagrams. Tree diagrams will help visualize how adjectival clauses are integrated into larger sentences, showing the hierarchical relationships between words and phrases within those sentences.

RESEARCH METHODE

The author employs descriptive qualitative research methodology. Qualitative research is an investigative approach that aims to find solutions to inquiries by gathering evidence. Qualitative research employs a diverse array of approaches, including in-depth qualitative interviews, participant and non-participant observation, field notes focus groups, document analysis, and various other methods for collecting data. The research employed a

content analysis method to identify adjective clauses in the film "Interstellar" directed by Christopher Nolan. The objective of this research is to identify the adjective clauses present in the film "Interstellar" directed by Christopher Nolan. The research title encompasses both syntax and literary work, making it well-suited for qualitative research.

RESULTS AND DISCUSSION

Findings

Having analyzed the data from the movie “Interstellar” dialogue, the writer found 21 sentences containing relative clauses. The table below shows the type of relative clause and type of relative pronoun used.

Table 1. Type of Relative Clause and Type Of Relative Pronoun Used

No	Parameter	Research Finding	Total
1	Restrictive Adjective Clause	Datum: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21	21
2	Nonrestrictive Adjective Clause	None	0
3	Using Relative Pronoun “that”	Datum: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	16
4	Using Relative Pronoun “who”	Datum: 17, 18, 19, 20, 21	5

From the table above, it can be concluded that restrictive adjective clauses are more frequently used than nonrestrictive clauses. This is because the movie's dialog is oral or spoken language. Restrictive adjective clauses are more commonly used in spoken language for several reasons: the natural flow of speech, clarity and conciseness, emphasis on core meaning, informal nature, and the absence of punctuation. The table above also reveals that the relative pronoun “that” is more frequently used than “who”.

Discussions

Datum 1:

"You didn't expect this dirt that was giving you this food." (00:17:04)

- **Main Clause:** “You didn't expect this dirt”
- **Relative Clause:** "that was giving you this food"
- **Function:** Modifies "dirt”
- **Types:** Restrictive

The clause "that was giving you this food" is an adjective clause modifying the noun "dirt." It provides additional information about the dirt by describing what it was doing. This type of adjective clause is a restrictive adjective clause. The tree diagram:

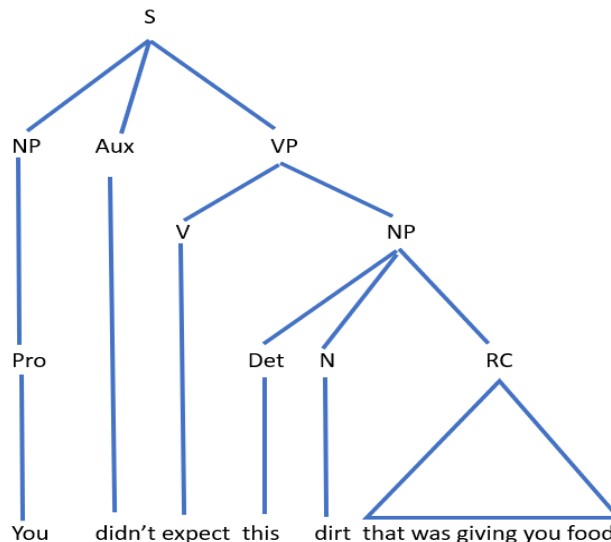


Figure 1. Tree Diagram for Datum 1

Datum 2:

"There's not a planet in our solar system that could sustain life." (00:30:22)

- **Main Clause:** "There's not a planet in our solar system"
- **Relative Clause:** "that could sustain life"
- **Function:** Modifies "planet"
- **Types:** Restrictive

The clause "that could sustain life" is an adjective clause modifying the noun "planet". It provides additional information about the planet by describing what the planet has, a potential for human life. It is a restrictive adjective clause. The tree diagram:

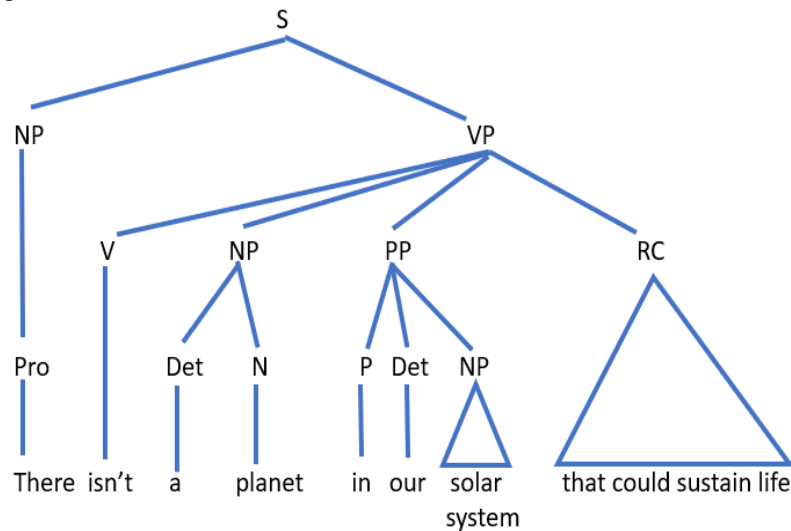


Figure 2. Tree Diagram for Datum 2

Datum 3:

"This is the mission that you were trained for." (00:30:46)

- **Main Clause:** "This is the mission"
- **Relative Clause:** "that you were trained for"
- **Function:** Modifies "mission"
- **Types:** Restrictive

The clause "that you were trained for" is an adjective clause modifying the noun "mission". It provides additional information about which mission is referred to. It is a restrictive adjective clause. The tree diagram:

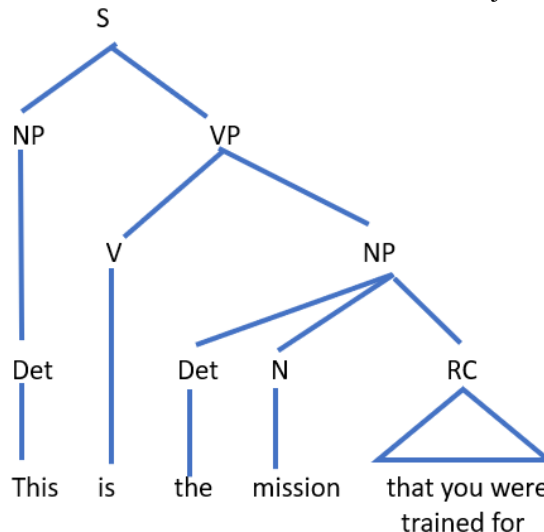


Figure 3. Tree Diagram for Datum 3

Datum 4:

"A black hole that big has a huge gravitational pull." (01:02:48)

- **Main Clause:** "A black hole has a huge gravitational pull"
- **Relative Clause:** "that big"
- **Function:** Modifies "black hole"
- **Types:** Restrictive

The clause "that big" is an adjective clause modifying the noun "black hole". It provides additional information about the size of the black hole. A black hole is a celestial body whose size is enormous. The mass is massive, so nothing can escape its gravitational pull, even light. There are many sizes of black holes according to their mass. So, the relative clause "that big" is a restrictive adjective clause. If this adjective clause is taken out, the sentence would simply read, "A black hole has a huge gravitational pull," which is a much more general statement and loses the focus on the size of the black hole. The tree diagram:

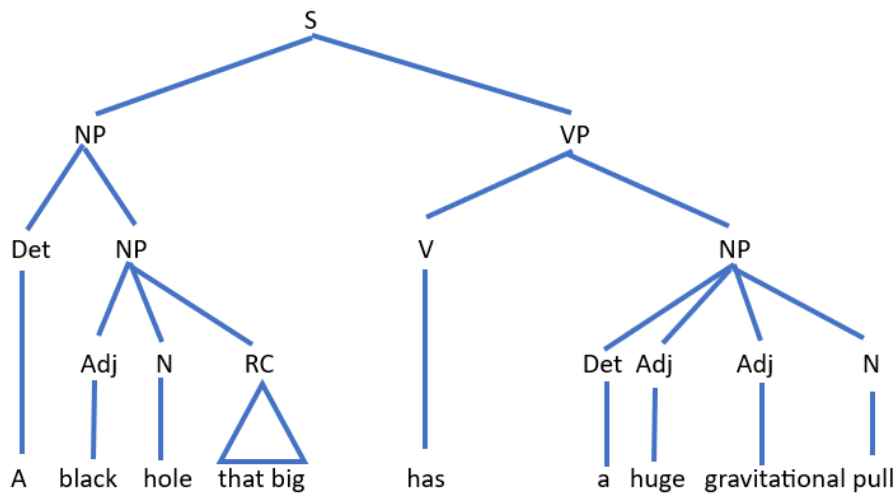


Figure 4. Tree Diagram for Datum 4

Datum 5:

"Our mission Plan A is to find a planet that can habitat the people who are living on Earth now." (01:03:25)

- **Main Clause:** "Our mission plan A is to find a planet"
- **Relative Clause 1:** "that can habitat the people"
- **Relative Clause 2:** "who are living on Earth now"
- **Function:** Modifies "planet" and "the people"
- **Types:** Restrictive

The first adjective clause "that can habitat people" is an adjective clause modifying the noun "planet". It provides additional information about what kind of planet the team is looking for. This planet must support the lives of people. Not another kind of planet. In this case, it is a restrictive adjective clause.

The second adjective clause "who are living on Earth now" is an adjective clause modifying the people, specifying their current location, on Earth, not in other places. Again it is a restrictive adjective clause. The tree diagram:

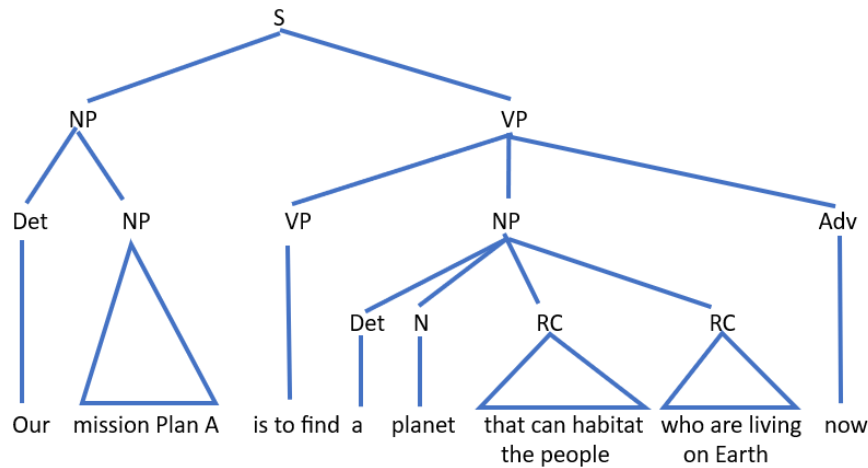


Figure 5. Tree Diagram for Datum 5

Datum 6:

"The only thing that can move across dimensions like time is gravity." (01:15:14)

- **Main Clause:** "The only thing is gravity"
- **Relative Clause:** "that can move across dimensions "
- **Function:** Modifies "thing"
- **Types:** Restrictive

The adjective clause "that can move across dimensions like time" is an adjective clause modifying the noun "thing". It gives specifications about what the thing can do. It is a restrictive adjective clause. The tree diagram:

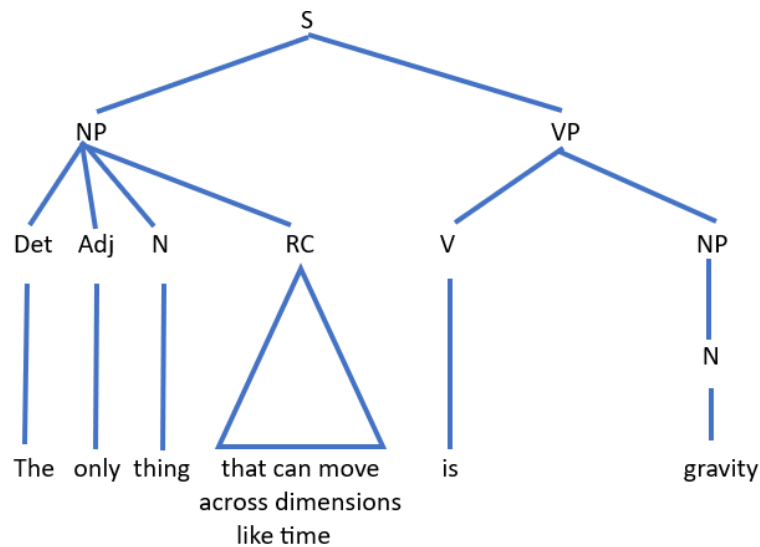


Figure 6. Tree Diagram for Datum 6

Datum 7:

"The beings that led us here can communicate." (01:15:24)

- **Main Clause:** "The beings can communicate"
- **Relative Clause:** "that led us here"
- **Function:** Modifies "The beings"
- **Types:** Restrictive

The adjective clause "that led us here" is an adjective clause modifying the noun "beings". It provides information about which beings are referred to. It is a restrictive adjective clause. The tree diagram:

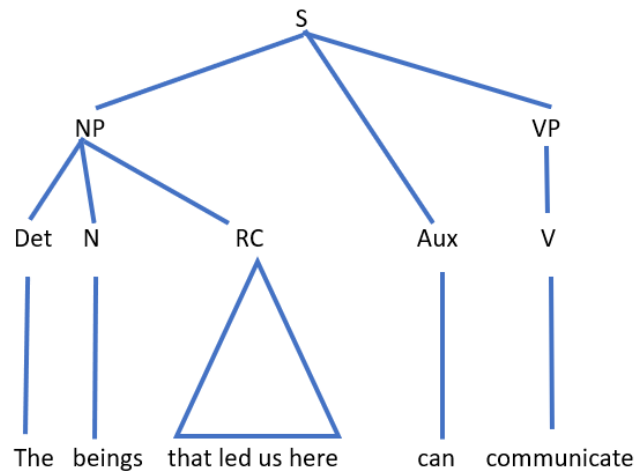


Figure 7. Tree Diagram for Datum 7

Datum 8:

"The past might be a canyon that they can climb into." (01:15:46)

- **Main Clause:** "The past might be a canyon"
- **Relative Clause:** "that they can climb into"
- **Function:** Modifies "a canyon"
- **Types:** Restrictive

The adjective clause "that they can climb into" is an adjective clause modifying the noun "canyon". It describes what can be done with the canyon. This restrictive clause is crucial for conveying the metaphorical meaning of the sentence. It suggests that the past is not just any canyon, but specifically one that can be entered or explored. Removing the clause would significantly alter the meaning and lose the implication of the past being something that can be revisited or examined. The tree diagram:

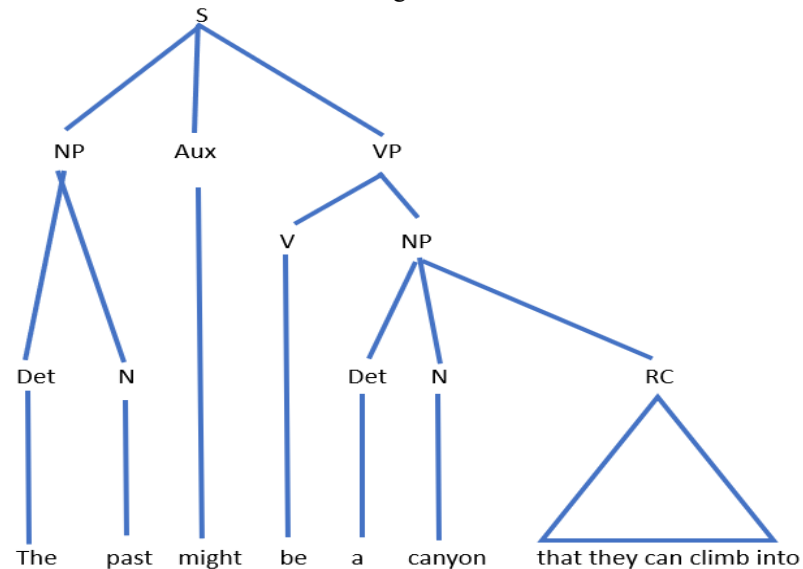


Figure 8. Tree Diagram for Datum 8

Datum 9:

"Every rivet that they strike could have been a bullet." (01:23:55)

- **Main Clause:** "Every rivet could have been a bullet"
- **Relative Clause:** "that they strike"
- **Function:** Modifies "a bullet"
- **Types:** Restrictive

The adjective clause "that they strike" is an adjective clause modifying the noun "rivet". It specifies which rivet is being referred to. It is a restrictive adjective clause. The tree diagram:

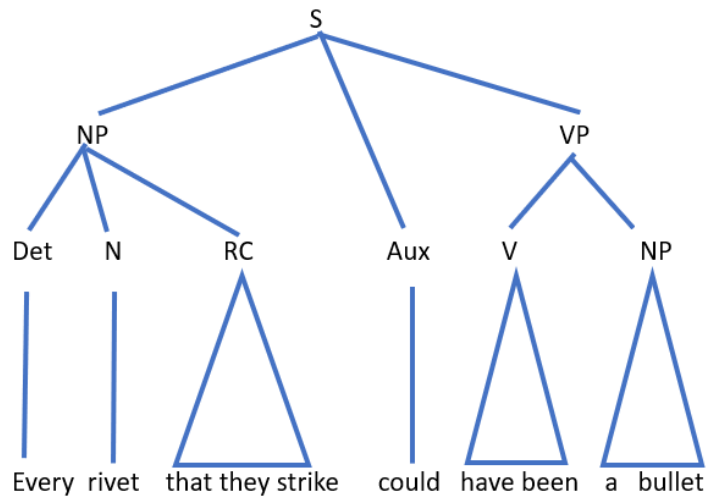


Figure 9. Tree Diagram for Datum 9

Datum 10:

"It's some artifact of a higher dimension that we can't consciously perceive."(01:28:10)

- **Main Clause:** "It's some artifact of a higher dimension"
- **Relative Clause:** "that we can't consciously perceive"
- **Function:** Modifies "a higher dimension"
- **Types:** Restrictive
-

The adjective clause "that we can't consciously perceive" is an adjective clause modifying the noun "dimension". It describes what cannot be done with the dimension. It is a restrictive adjective clause. The tree diagram:

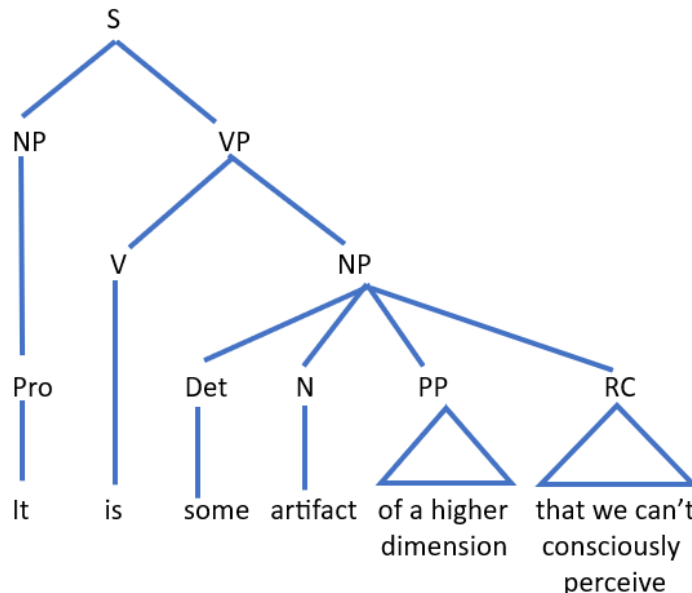


Figure 11. Tree Diagram for Datum 11

Datum 11:

"There are some things that aren't meant to be known." (01:42:58)

- **Main Clause:** "There are some things"
- **Relative Clause:** "that aren't meant to be known"
- **Function:** Modifies "some things"
- **Types:** Restrictive

The adjective clause "that aren't meant to be known" is an adjective clause modifying the noun "some things", specifying which things are meant not to be known. It is a restrictive adjective clause. The tree diagram:

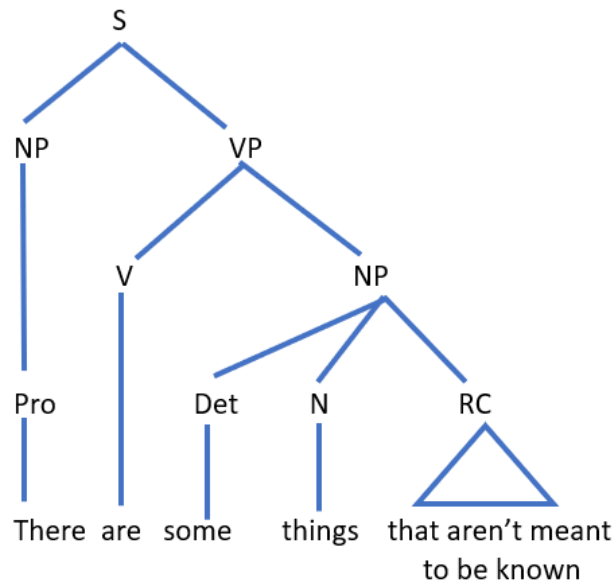


Figure 11. Tree Diagram for Datum 11

Datum 12:

"You are a father with a survival instinct that extends to your kids."(01:50:38)

- **Main Clause:** "You are a father with a survival instinct"
- **Relative Clause:** "that extends to your kids"
- **Function:** Modifies "a survival instinct"
- **Types:** Restrictive

The adjective clause "that extends to your kids" is an adjective clause modifying the noun "instinct." It provides additional information about the instinct by describing its extent. It is a restrictive adjective clause. The tree diagram:

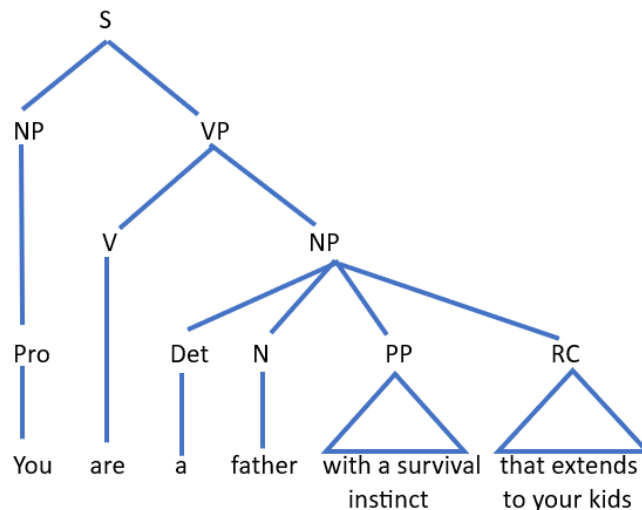


Figure 12. Tree Diagram for Datum 12

Datum 13:

"People could build a civilization that has evolved past the four dimensions we know."(02:34:04)

- **Main Clause:** "People could build a civilization"
- **Relative Clause:** "that has evolved past the four dimensions we know"
- **Function:** Modifies "a civilization"
- **Types:** Restrictive

The clause "that has evolved past the four dimensions we know" is an adjective clause modifying the noun "civilization." It provides additional information about a civilization by describing its evolution. It is a restrictive adjective clause. The tree diagram:

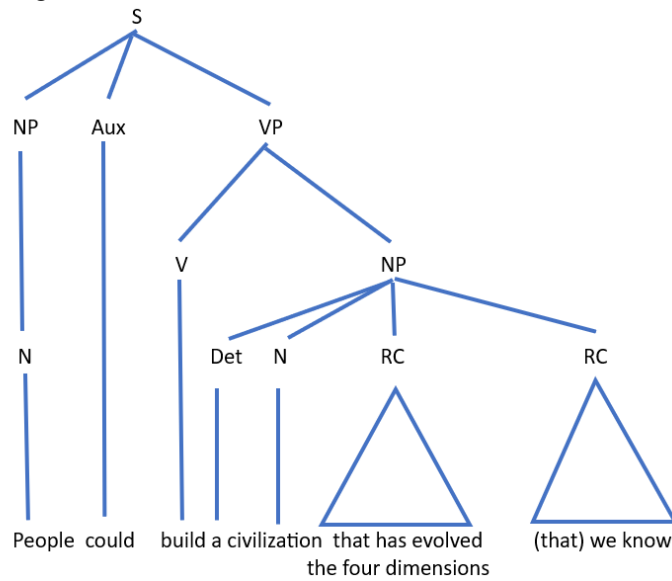


Figure 13. Tree Diagram for Datum 13

Datum 14:

"Just think about the resources, including the time that would be spent trying to get back here."(01:04:09)

- **Main Clause:** "Just think about the resource, including the time"
- **Relative Clause:** "that would be spent trying to get back here"
- **Function:** Modifies "the time"
- **Types:** Restrictive

The clause "that would be spent trying to get back here" is an adjective clause modifying the noun "the time." It provides additional information about the time by describing its use. It is a restrictive adjective clause. The tree diagram:

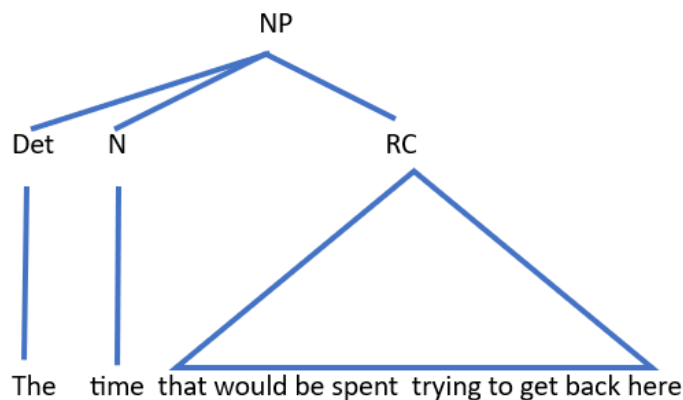


Figure 14. Tree Diagram for Datum 14

Datum 15:

"Love is the one thing that transcends dimensions of time and space."(01:28:23)

- **Main Clause:** "Love is the one thing"
- **Relative Clause:** "that transcends dimensions of time and space"
- **Function:** Modifies "the one thing"
- **Types:** Restrictive

The clause "that transcends dimensions of time and space" is an adjective clause modifying the noun "thing." It specifies what kind of thing love is by describing its unique property. It provides additional information about the instinct by describing its extent. It is a restrictive adjective clause. The tree diagram:

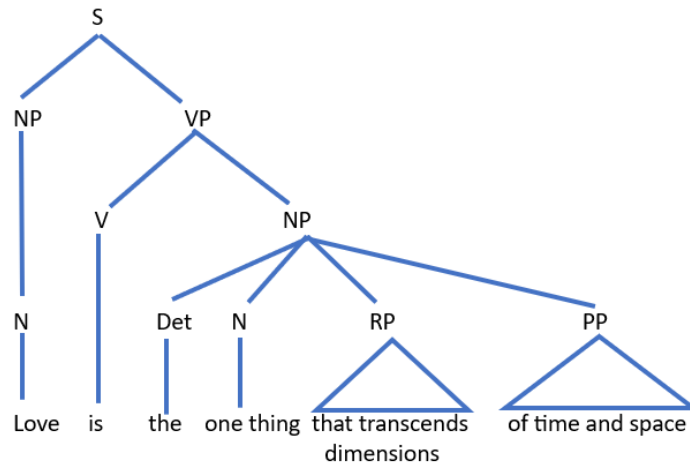


Figure 15. Tree Diagram for Datum 15

Datum 16:

"He is equipped to transmit every form of energy that can pulse."(01:47:03)

- **Main Clause:** "He is equipped to transmit every form of energy"
- **Relative Clause:** "that can pulse"
- **Function:** Modifies "every form of energy"
- **Types:** Restrictive

The clause "that can pulse" is an adjective clause modifying the noun "energy." It provides additional information about the type of energy by describing its capability. It is a restrictive adjective clause. The tree diagram:

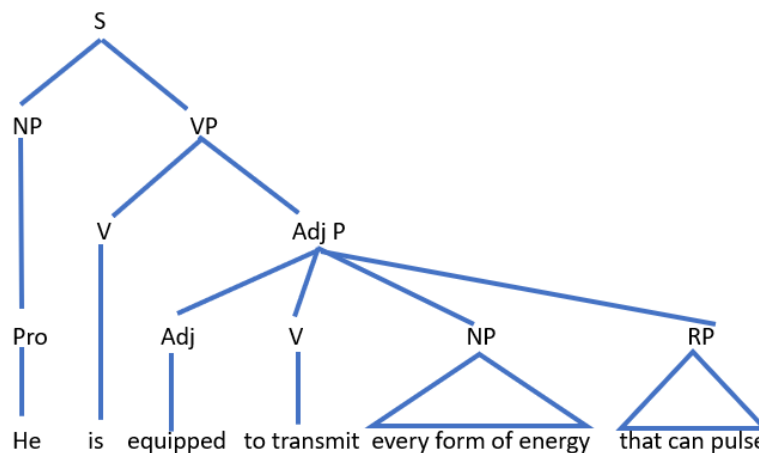


Figure 16. Tree Diagram for Datum 16

CONCLUSION

In this study, the writer identified and analyzed 21 adjective clauses selected in sentences from the movie "Interstellar." Among them, 16 adjective clauses use the relative pronoun "that" while the rest use the pronoun "who". Among those 21 adjective clauses, all of them are adjective clauses are restrictive. Restrictive adjective clauses are more commonly used in spoken language while nonrestrictive adjective clauses are more commonly used in writing.

The tree diagram is a useful tool for visualizing the components of a sentence. This is governed by the Phrase Structure Rules. By following a systematic approach that includes identifying the main clause, identifying the adjective clause, determining the function and the types of the adjective clause, and constructing a syntax tree diagram, the writer demonstrated how to break down sentences into their grammatical components. The analysis reveals how adjective clauses provide essential descriptive details about nouns, enhancing the clarity and depth of the sentences. This study highlights the importance of understanding syntactic structures to appreciate the

intricacies of language used in film dialogues. In this study, the writer used top-to-bottom analysis in making tree diagrams although it is also possible to analyse from bottom to top. Either way is only a matter of preferences.

REFERENCES

- Aarts, B. (2024). *English Syntax and Argumentation*. Bloomsbury Publishing. <https://books.google.co.id/books?id=8DzqEAAAQBAJ>
- Abdullah. (2023). *English Syntax*. Badan Penerbit UNM.
- Ali, S. W., Bay, I. W., & Mufatiroh, I. (2023). *SYNTACTIC TREE DIAGRAM : STUDENTS ' PROBLEMS AND THE*. 5(1), 68–76.
- Asdar, Hustiana, & Ahyadi. (2023). Part of Speech Classification by EFL Students': A Review about their Familiarity. *ELS Journal on Interdisciplinary Studies in Humanities*, 6, 2023. <https://doi.org/10.34050/elsjish.v6i4.32383>
- Asri, R. (2020). Membaca Film Sebagai Sebuah Teks. *Jurnal Al Azhar Indonesia Seri Ilmu Sosial*, 1(2), 74–86.
- Azar, B. S., & Hagen, S. A. (2017). *Understanding and Using English Grammar* (5th ed.). Pearson Education.
- Burton-Roberts, N. (2016). *Analysing Sentences: An Introduction to English Syntax*. Taylor & Francis. <https://books.google.co.id/books?id=OH6PCwAAQBAJ>
- Carnie, A. (2021). *Syntax: A Generative Introduction*. Wiley. <https://books.google.co.id/books?id=FPnHzQEACAAJ>
- Chrystal, D., & Yu, A. C. (2023). *A Dictionary of Linguistics and Phonetics* (7th ed.). Wiley-Blackwell.
- Daminah, Pantow, J. B. S., Riyanti, R. D., & Suratinah. (2023). *Structure III*. Universitas Terbuka.
- Harsa, L. N. (2022). *English Morpho-Syntax* (Second). Universitas Terbuka.
- Hornby, A. (2022). *Oxford Advanced Learner's Dictionary* (10th ed.). Oxford University Press.
- Ismahani, S., Anisah, K., Nuraisyah, P., Havid, D. M., & Studi, P. (2024). *Syntactic Analysis of Tree Diagrams in the Lyrics of the Song "You are My Sunshine."* 8(1).
- Kristianingsih, D. A., Ma'mun, A. H., & Ahmad, Z. (2023). A Syntactic Analysis of the Sentence Structure in Motivational Quotes using Tree Diagram for English Learning. *Edunesia: Jurnal Ilmiah Pendidikan*, 4(3), 1447–1458. <https://doi.org/10.51276/edu.v4i3.602>
- Miller, J. (2016). *Introduction to English Syntax*. Edinburgh University Press. <https://books.google.co.id/books?id=rjVYDwAAQBAJ>
- Muchtar, N. (2017). Nine Parts of Speech in Teaching English to Electrical Engineering Students. *Education & Language International Conference*, 540–548.
- Müller, S. (2016). *Grammatical theory: From transformational grammar to constraint-based approaches*. Language Science Press. https://doi.org/10.26530/OAPEN_611693