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Exploring the Role of Language in Shaping Worldview and Actions in the Movie ‘Interstellar’

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Abstract

This study examines how language usage shapes Cooper, the main character in Christopher Nolan's *Interstellar*, in terms of his linguistic processing, in light of the Sapir-Whorf hypothesis. Using a straightforward qualitative content analysis procedure, the research examines vocabulary use, speech actions, and sentence structures based on the official script and audiovisual materials of the film. The findings indicate that Cooper's speech is dominated by aggressive statements, with interrogative sentences accounting for around 22.26% of his speech. Furthermore, 58.57% of his speech is made up of just one to five words, indicating a direct and action-oriented speaking pattern. His pragmatic outlook, goal-oriented conduct, and emotional detachment appear to be reflected in, and made possible by these language traits. The research adds to controversies in film linguistics and improves the weak version of the Sapir-Whorf hypothesis by demonstrating how film language constructs and conveys cognitive orientation.

Keywords: behavior, *Interstellar* movie, language, linguistics relativity, Sapir-Whorf Hypothesis, world view

Introduction

The ability of language to affect behavior, society, and thought has long captivated academics in a variety of disciplines (Kramsch & Hua, 2016). At the core of this study is the Sapir-Whorf hypothesis, which contends that language shapes or determines cognition. Researchers have used the concept in a variety of situations, including number, kinship words, and color categorization (Stern, 1983). The theory may be divided into two versions: a strong one that holds that language determines thought and a lesser one that holds that language influences thought. Similar to how language patterns affect perceptions without always influencing cognition, the majority of academics currently support the weaker formulation

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(Kramsch, [2014](#)).

Language influences how individuals view and engage with the world, in addition to structuring culture. Sentence structure can reveal latent worldviews, and words are cultural indicators (Wardhaugh, [2006](#)). Similar to how behavior is usually mapped out using biological or psychological theories, behavior may also be thought of as a sociolinguistic construct that is impacted by patterns of communication (Dugatkin, [2012](#)). According to this viewpoint, cinema narratives provide an ideal setting for investigating how language use shapes and communicates a character's inner thoughts and outward actions. Every community has its own distinct ways to exhibit thought process, expressions of ideas and interpretation of different messages. The structure of a particular language has its influence on individuals as it helps us see the world and behave accordingly (Kramsch & Hua, [2016](#)). Words serve as symbols for ideas and items that are significant to culture. On the other hand, behavior is an animal's outwardly apparent activity, which revolves around the coordinated and connected pattern of neural, motor, and sensory activity in response to shift from internal or external conditions. Although experience can change behavior, these definitions of behavior, in the researcher's opinion, mostly apply to animals and hardly ever explain human conduct (Dugatkin, [2012](#)). According to author, behavior is the property that involves noticeable actions of organisms, and such behaviors are learnt without having any genetic basis.

This research employs the Sapir-Whorf hypothesis to investigate the film *Interstellar* (Nolan & Nolan, [2014](#)), a science fiction picture in which philosophical supposition over human survival is linked with highly personal judgments. A masterpiece of 21st-century cinema, Christopher Nolan's 2014 film, *Interstellar* blends philosophical reflections on time, survival, and human interaction with speculative science fiction. The movie, which is based on real NASA space research missions, shows a dying Earth, and humanity's frantic quest for a new home planet. Cooper, a former NASA pilot who sets out on a quest that is both emotional and scientific, is at the center of this. His behavioral responses and spoken words make a compelling case for sociolinguistic research. The focus of this study is Cooper's language, specifically how his speech acts, vocabulary, and sentence structures reflect and impact his understanding of social interactions and reality. The study investigates whether language practice

influences the character's perspective of reality and social relationships, based on the Sapir-Whorf hypothesis. This study contributes to broader discussions on the connections between language, cognition, and behavior based on the film's narrative and audiovisual elements. This approach also situates it within the newly developing subject of cinema linguistics. The subsequent parts will address pertinent literature, methodological approaches, Cooper's language analysis, and concluding theoretical and pedagogical implications. His speech patterns, phrase construction, and language choices all reflect his shifting attitudes and actions throughout the movie. This study employs a qualitative discourse analysis to investigate Cooper's language use using script and video data, paying particular emphasis to lexical structure, speech acts, and sentence patterns. Although linguistic relativity has been studied in fiction and ordinary speech, comparatively little study has been done on its use in movies, especially *Interstellar* (see, e.g., Chandler, 2007; Machin & Mayr, 2012). This research contributes to cinema linguistics, discourse analysis, and cognitive stylistics by integrating linguistic theory with film storytelling.

Research Questions

- How does language influence Cooper's world view and behavior in the film *Interstellar*?
- What is the extent to which language shapes Cooper's perspective on the world?"
- What is Cooper's behavior like in both the personal and social aspects in the *Interstellar*?

Literature Review

The interaction of language, culture, and thought has long captivated academics from all fields. Numerous studies have examined the ways in which language actively shapes people's thoughts and behaviors in addition to serving as a symbol of a society's ideals (Kramsch & Hua, [2016](#)). The Sapir-Whorf Hypothesis, which contends that a language's structure influences—or even determines—its speakers' worldview, has been at the center of these discussions. This paradigm has shaped huge quantities of research spanning sociolinguistics, linguistic anthropology, and cognitive science. Researchers have repeatedly found that language features, including grammar, phonology, and lexis, influence how speakers construct

reality, interact with others, and perceive their surroundings (Stern, [1983](#)).

Eco ([1997](#)) emphasizes language as a medium of shared memory and value systems, arguing that language loss always results in cultural decline. Language is a lens through which one views the world, according to Sapir ([1921](#)), and Whorf ([1956](#)), who focused on the reality that people utilize the "grid" of their mother tongue to do so. Kramsch ([1992](#)) goes on to say that language structure governs how people behave in the environment as well as how they perceive it. Similarly, Uwajeh ([2002](#)), and Iragiliati ([2007](#)), emphasize how language embeds cultural information that subtly shapes behavior. According to Dugatkin ([2012](#)), sociolinguists view behavior as a socially learned phenomena that is closely linked to language usage and communication norms, despite the fact that behavior has historically been studied from a biological standpoint.

This paper expands on this idea by analyzing Cooper, a character from *Interstellar*, using the Sapir-Whorf hypothesis. The goal of the study is to determine how his linguistic habits more especially, sentence construction, metaphors, and scientific jargon affect his perception of the world and guide his decisions. The study illustrates how language in movies may transmit and convey cultural and cognitive frameworks, which adds to the larger theoretical discussion of linguistic relativity. According to Adekunle ([2015](#)), language is an effective means of communicating ideas, emotions, and cultural conceptions. In this sense, culture is made up of shared thought patterns that shape how society behaves. Deckert and Vickers ([2011](#)), emphasize that a speaker's behavioral adjustment and social integration are directly impacted by their language proficiency. Their viewpoint affirms the importance of language as a means of interpersonal communication that shapes identity and interaction. As a result, literature, theater, and film all develop into rich spaces where words and behavior interact, and where these interactions may be closely examined.

Sapir ([1921](#)), and Whorf ([1956](#)), came up with the first historical approaches to linguistic relativity in the early 20th century. According to Kramsch ([1992](#)), language structure tense, aspect, and modality influence speakers' cognitive and affective reactions to the environment in addition to how they speak about it. Boroditsky ([2011](#)), provides contemporary empirical evidence in favor of this theory, demonstrating how language influences emotive response, object categorization, and spatial reasoning. For example, speakers of Kuuk Thaayorre in Australia have an instinctive

sense of cardinal orientation, but English speakers do not. These linguistic variations result in measurable cognitive differences, highlighting how powerful language is in structuring perception.

This linguistic-cognitive relationship is also reflected in cultural idioms and proverbs. Using metaphorical phrases like "Time is money" (English) against "Biar lambat asal selamat" (Indonesian—"Better late than never"), Khotimah (2016), and Tiono (2002), highlight behavioral contrasts between Indonesian and American speakers. These metaphors illustrate how language, both reflects and influences conduct by inferring culturally particular temporal orientations and social responsibilities.

Applying this to *Interstellar*, Cooper's use of scientific jargon and succinct, impactful words reveals his realistic outlook. His linguistic choice not only conveys facts but also reflects deeply held ideals like responsibility, reason, and emotional restraint. Language is a reality filter as well as a tool for communication, as Sapir (1929), explains.

Cooper's perception of the cosmos, his voyage, and his emotional bonds are all influenced by the scientific terms shown on screen, including singularities, gravitational equations, and dimensional theory.

Boroditsky et al. (2003), also demonstrate how people's cognitive representations of inanimate objects are influenced by grammatical elements, such as gender marking. Because nouns in German and Spanish convey gender, speakers associate things with either masculine or feminine characteristics. These linguistic factors demonstrate how the structural characteristics of language subtly influence cognition. Similar to this, characters' decisions and worldview in the film are influenced by the use of metaphor, particularly when discussing time and love.

A language is not only a medium to convey and communicate the ideas, it is actually a lens through which a person can perceive the reality around him (Sapir, 1929). This hypothesis is very critical for understanding the idea of how the movie *Interstellar* makes use of the scientific jargons and emotional language to shape the character's understanding of the mission and their worldview. According to Boroditsky (2011), many of the recent studies have reconfirmed this idea of the language structure having influence on the cognitive perception and its processes. This very idea lays down a solid foundation for the detailed analysis of the impact of language on structing and restraining characters' behavior and their perception of

reality. There is a plethora of evidence to support this notion of linguistic relativity. According to Boroditsky (2011), it speaks volumes that the people who are speaking different languages are experiencing the world in distinct ways. For instance, the Kuuk Thaayorre people living in Australia possess a remarkable sense of cardinal directions and they always align themselves with respect to all these directions, while in contrast, English language speaker make use of certain terms like “Left” or “Right” for the spatial relevance.

This prominent difference in the spatial terminology ultimately leads to the distinction in the spatial cognition (Boroditsky, 2011). Lera Boroditsky’s work has also portrayed the deep bond between cultural patterns and linguistic structures of cognition to understand the connection between the language and culture. The differences in languages can be assessed through distinct cultural values, which ultimately influences how the speakers perceive reality around them. According to this, in a language for instance, where there is use of grammatical gender such as Spanish and German, speakers often assign gender traits to inanimate objects (Boroditsky et al., 2003). Such linguistics distinction can alter and shape the speaker’s behavior and perception towards the objects. This can describe how linguistic elements can structure one’s cultural cognition and understanding.

In the movie *Interstellar*, this connection can be easily seen how the character’s choice of language reflects the cultural identities, behaviors and worldview. This paper researches into how language can encode and decode the cultural and behavioral values that can explain the distinct character persona in different contexts. According to Lakoff (1993, 2020), and Lakoff and Johnson (2008), conceptual metaphors are used in everyday speech and have an impact on how people think. Their approach applies to *Interstellar*, as characters interpret difficult scientific and emotional concepts with metaphors. Dr. Brand’s claim that “love is the one thing we’re capable of perceiving that transcends time and space” turns love from an emotion into a force that is similar to gravity. Cooper’s emotional bond with his daughter serves as the driving force behind his intergalactic journey, demonstrating how metaphors may affect behavior. Within the framework of linguistic relativity, these sentences demonstrate how cinematic language functions. Bednarek (2010), asserts that movie speech has a function beyond narrative advancement since it incorporates evaluative attitudes and intersubjective

worldviews. Since language and cognitive frame are tightly related in science fiction novels like *Interstellar*, this is especially crucial.

Thus, using conversation and script analysis, this study looks at how Cooper's language constructs and employs his worldview. Film is a multimodal cultural product that provides rich data for linguistic research by combining language, sound, and pictures. According to a number of academics, including Kozloff (2000), Bateman and Schmidt (2013), and Chatman (1990), language plays a significant role in shaping character identification and story progression in movies. Recent research by Simpson (2017), and Bednarek (2010), clarifies how linguistic patterns in movies affect viewers' understanding and meaning-making. Therefore, analyzing *Interstellar* offers a fantastic chance to look at how cinematic language supports culture and thought.

The study aims to:

- Talk about how Cooper's linguistic choices reflect or impact his worldview.
- Analyze the influence of his speech on his actions and choices.
- Examine *Interstellar* as a platform for investigating the broad connections between language, thought, and behavior.

The study adds to an expanding corpus of multidisciplinary research that explores language as a key component of character development and story production by establishing its analysis on the Sapir-Whorf hypothesis. Although linguistic relativity has been extensively researched in naturalistic settings (such as cross-cultural comparisons), little is known about how it applies to fictional speech, particularly in science fiction films. An ideal setting for this research is *Interstellar*, which skillfully blends philosophical issues, emotional interaction, and technical terminology.

The study is following the model of Sapir Whorf Hypothesis asserting that language has a profound impact in shaping the behavior and worldview of its users. This concept has been widely studied across a number of linguistics frameworks. However, it is significant to mention here that the application of this concept within the realm of cinematic narratives, particularly in the genre of science fiction movies like *Interstellar*, remains significantly underexplored. These results corroborate Antovic's (2022), claim that science fiction movies are often experimental workshops of

conjecture in which narrative structures test theories of language and the mind. A number of extensive researches has addressed the notion of how language influences thought and worldviews in real life contexts, for example, within different cultures and different languages. There is, however, limited scholarly work that examines how the language in fictional portrayals shapes and alters the characters' worldviews and behaviors.

The movie "Interstellar" is about the exploration of space time, human survival, along-with the cross dimensional communication. It presents different themes to explore but it most significantly presents, a fertile ground for, the investigation of the validity of Sapir-Whorf Hypothesis. Despite of the fact that this film has received local acclamation for exploring rich themes like science, love and perseverance as well, but very little attention has been drawn to the role of language and how it shapes, alters and somehow influences the character's perception of reality, his behavior and worldview. The oversight is significantly important to be analyzed through the lens of the Sapir-Whorf Hypothesis. Addressing this gap offers an opportunity to broaden the scope of linguistic relativity by applying it to the film's narrative structure along-with the central character's development.

Despite the film's widespread critical acclaim for its portrayal of science, time, and human resilience, little has been said about how language shapes the characters' identities and cognitive processes. This is significant because movie speech serves as a model for character development and motivation. This study applies linguistic relativity to the imaginary yet provocative field of science fiction movies by concentrating on Cooper's speech. By doing this, it hopes to provide outcomes for academics in a variety of disciplines, including linguistics, cinema studies, and cultural theory.

Materials and Methods

This part provides a detailed methodology in achieving the above stated objectives. The primary focus is laid on the problems involved in the study's design and the formulation of a study to direct the research process. Moreover, it presents procedures and techniques used in conducting research. According to McMillan and Schumacher (2010), methodology can be defined as the strategy employed by a researcher in order to collect

data for the analysis in cause of the study. The design always depends on the type of data needed for the study and the questions it intends to address. The research objectives and problems are what determines the methodology to use (Smith & Albaum, [2012](#)).

Research Design

The frameworks given by Creswell ([2017](#)) serve as the foundation for the descriptive qualitative research design used in this study. The intricate interactions between language, cognition, and behavior in movie narratives—phenomena that are difficult for numerical data to easily capture—are best examined using a qualitative method (Denzin & Lincoln, [2018](#)). This arrangement makes it easier to closely analyze the ways in which language is used in the film *Interstellar* to create and express the characters' worldview, purpose, and effect.

Cooper, the main character, is the subject of the linguistic and behavioral portrayal in this paper. It specifically looks at how Cooper's speech—that is, the length, style, and lexical choice of his sentences—aligns with his decisions and worldview. The study is based on the weak version of the Sapir-Whorf Hypothesis, which contends that language influences perception and thought (Sapir, [1921](#); Whorf, [1956](#)). Sentence types (e.g., imperative, interrogative, and assertive) were categorized using a discourse analysis framework based on syntactic structure (Halliday, [1994](#)) and speech act theory (Searle, [1979](#)).

Data Collection and Data Analysis

Information was collected from the official screenplay and audiovisual components of the movie, and only Cooper's conversation in *Interstellar* was examined. Key situations, such as moral dilemmas, significant decisions, and emotional turning points, were purposefully sampled and chosen because they were thematically appropriate. Examples include sequences containing mission briefings, conflict, contemplation, and encounters with key people like Murphy and Brand. Both verbal and nonverbal traits were included in the study. Tone, stress, intonation, pauses, and body language indicators were all painstakingly recorded in Cooper's conversations. A multimodal discourse analysis paradigm that combines visual and auditory ways of language interpretation was used to code nonverbal cues (Kress & van Leeuwen, [2001](#)). By isolating and examining these elements, the researcher will gain a better understanding of how the

hypothesis is created for the movie, and how it contributes to influence the world view and behavior of Cooper. The results and conclusions of the research are drawn using an inductive approach, which involves identifying significant patterns, connections, ideas, communication, trends, or categories within the context of everyone's experience. The researchers employ their observations to determine the meaning behind these patterns and draw conclusions from them.

Additionally, a framework drawn from Searle's (1979), speech act theory and Halliday's (1994), systemic functional grammar was used to analyze Cooper's sentence grammatical structure. Sentences had the following codes:

- Assertions of fact, opinion, or assessment that are declarative or assertive,
- Questioning of doubt or second-person interrogation are examples of interrogative
- Imperative (commands, requests),
- Emotive/Expressive (a term used to describe psychological or emotional states).

The researcher was able to identify how Cooper's words convey changes in cognition, agency, and worldview at various stages in the story owing to this classification. Several readings and viewings of the movie were used to establish themes, trends, and linguistic patterns for the inductive analysis. According to Creswell (2017), this aligns with qualitative research paradigms that seek to derive meaning from context.

For the purposes of this research, a close examination of the movie and script was conducted through repeated viewing and reading. This allowed for a thorough and detailed analysis of various elements such as the function of the character's introduction in the movie, the character's use of language in isolation and in conversation, and the space and conditions in which the plot moves forward.

In addition, elements like character's interactions, plot and symbolism are also analyzed. By conducting this examination, it got more efficient to gain a more comprehensive understanding of the character's language and its influence on his behavior. This technique enabled the study to arrive at accurate and insightful conclusions based on a rigorous and repetitive analysis of the data. In a nutshell, the research process involved the

following steps: firstly, the collection of data. Secondly, the movie was watched repeatedly, and the script was read multiple times to gain a comprehensive understanding of the material. Thirdly, the data was organized and analyzed. Fourthly, proofreading and proof watching were done to ensure accuracy and completeness. Lastly, conclusions were drawn based on the analysis of the data.

Since there were no human participants and the study was only based on publically accessible media, it met the requirements for non-interventional research. No universality is asserted, because focusing on a fictitious character limits the conclusions' generalizability. Instead, the Sapir-Whorf Hypothesis in narrative media is examined via the lens of fictional language usage. The goal of the study is to understand how language in movies both reflects and shapes societal and cognitive trends, particularly through the construction of a character's reality by the use of his language.

Findings

This part summarizes the conclusions, findings, and outcomes from the *Interstellar* movie analysis. As Earth confronts an imminent ecological collapse, the plot follows Cooper, a former NASA engineer and pilot, on a space mission to secure a new planet that humans can live on. Cooper stands apart from other characters in the story due to his unique language and behavior, which can be seen by closely examining the movie and its script. This observation is noteworthy and stands out upon multiple viewings of the film. Cooper's use of language in the movie can be depicted in the following way:

Language Length

Regarding the length of his language, it was observed that Cooper aimed to speak in shorter sentences compared to the other characters in the movie. Specifically, it can be seen in the Table.

Table 1
Cooper's Language Length

| No | Number of words | Frequency | Percentage |
|----|-----------------|-----------|------------|
| 1 | 1 to 5 | 82 | 58.57 |
| 2 | 5 to 10 | 31 | 22.14 |
| 3 | More than 10 | 27 | 19.28 |

According to this table, it can be observed that Cooper's utterances tend to be relatively short, with 56.52% of them consisting of 5 words or less, per utterance. Utterances with the words ranging from 5 to 10 are less frequent, and long utterances with words more than 10 are lowest in number.

Language Form

Cooper frequently uses questions or interrogative sentences in his language, as demonstrated in Table 2 below:

Table 2
Cooper's Language Form

| Sr. no | Kind of language form | Frequency | Percentage |
|--------|-----------------------|-----------|------------|
| 1 | Imperative | 30 | 22.05 |
| 2 | Interrogative | 33 | 24.26 |
| 3 | Assertive | 65 | 47.79 |
| 4 | Exclamatory | 8 | 5.88 |

According to data mentioned in table 2, most frequent type of utterances are assertive utterances, as Cooper is the man of science, he likes to share his thoughts and visions with other characters of the movie. After assertive, we have imperative utterances that are frequent, Due to his role as a pilot, Cooper is required to give orders to the other crew members, which necessitates a greater use of imperative language in his speech. As a curious individual who seeks answers, Cooper tends to ask a lot of questions, which is reflected in his frequent use of interrogative language. Cooper is not a man of surprises and as a pilot and a man of science, he prioritizes clear and concise communication over emotional expression, which results in fewer instances of exclamation in his speech.

On the other hand, the portrayal of Cooper's behavior can be succinctly summarized in the following table, which presents a condensed overview of his actions and behavioral patterns.

Table 3
Cooper's Behavior and Description

| Cooper's behavior | Description |
|---|--|
| He is a very courageous and determined person | "We've always defined ourselves by the ability to overcome the |

| Cooper’s behavior | Description |
|----------------------------|---|
| He is a very loving person | impossible. And we count these moments. These moments when we dare to aim higher, to break barriers, to reach for the stars, to make the unknown known. We count these moments as our proudest achievements." (Cooper's speech highlights his determination and courage to explore the unknown) Cooper also expresses his love for his children through his actions. For example, he leaves messages for Murph throughout his journey in space, reminding her of his love and support. |
| He is a man of science | Cooper is curious about the mysteries of the universe and is eager to explore and discover new things. He is open-minded and willing to consider new ideas and possibilities, which allows him to make scientific breakthroughs and to see things from a different perspective. "The wormhole itself, in theory, is a shortcut through the fabric of space-time. But to make it work, we first needed to understand its geometry." |

The aforementioned discoveries unequivocally demonstrate a clear correlation between Cooper's language and behavior. In the subsequent phase of the investigation, the researcher endeavors to delve deeper into the impact of his language on his worldview and conduct.

This implies the examination of how his linguistic tendencies shape his perceptions, attitudes, and actions in the world around him.

The Influence of Cooper's Language toward His World View

As previously mentioned, Cooper's language is heavily influenced by scientific and technological terminology. This reflects his mode of thinking, which is characterized by a high degree of precision and logical reasoning. Cooper is able to accurately envision events by relying on his understanding of scientific facts and principles. This highlights his analytical and rational approach to problem-solving and decision-making. The extreme example is the scene in which Cooper docks the Endurance spacecraft to the rotating space station with great skill and precision. This showcases his exceptional abilities and actions as a pilot. Despite the challenging conditions and the high stakes involved, Cooper is able to successfully navigate the spacecraft and execute the docking maneuver, demonstrating his expertise and resourcefulness in the face of adversity. As it would be difficult for a person to remain conscious in a fast-spinning environment like the one depicted in *Interstellar*, that sequence is nothing but an impressive representation of Cooper's piloting skills and his ability to overcome difficult challenges. Cooper is a self-confident man, despite the high risks and unknown dangers involved in the mission, Cooper is confident in his abilities as a pilot and believes that he can successfully navigate the spacecraft through the treacherous space environment.

Datum 1

CASE: Cooper, there's no point using our fuel

COOPER: Just analyze the Endurance's spin

BRAND: What're you doing?!

COOPER: Docking

The above conversation is between DR. Brand, Case the robot, and Cooper. The docking sequence in which Cooper successfully docks the Endurance spacecraft to the rotating space station despite its high spin rate is a testament to his exceptional piloting skills and confidence in his abilities. This feat requires a high level of precision, expertise, and composure under pressure, all of which Cooper demonstrates in the scene. His ability to remain focused and make split-second decisions in a high-stakes situation highlights his courage and resilience as a leader and pilot. Even though the maneuver presented considerable risks and challenges, Cooper maintained had a calm and collected demeanor while remaining

entirely focused on the task at hand. He displayed the ability to adjust to the rapidly changing circumstances and make rapid calculations to guarantee a prosperous docking. His unwavering self-assurance in his own abilities, coupled with his reliance on his team's guidance and support, proved crucial in ensuring the mission's successful outcome.

Datum 2

DONALD: It might. Don't trust the right thing done for the wrong reason. The 'why' of a thing? That's the foundation.

COOPER: Well, the foundation's solid. We farmers sit here every year when the rains fail and say 'next year'. Next year ain't gonna save us. Nor the one after. This world's a treasure, Donald. But she's been telling us to leave for a while now.

(Stares at the horizon.) Mankind was born on Earth. It was never meant to die here.

DONALD: Tom'll be okay. But you have to make it right with Murph.

COOPER: I will.

DONALD: Without making any promises you don't know you can keep

The conversation above is between Donald (Cooper's Father) and Cooper himself. As Cooper is planning to leave the planet, Donald is telling him about the consequences of his actions while giving him advice. The focus here is centered on one of Cooper's quotes which is "Mankind was born on Earth. It was never meant to die here". This statement made by Cooper encapsulates his worldview. As in the movie, the Earth is facing an extreme crisis due to catastrophic environmental change. This is leading to widespread failures to grow crops, which ultimately leads towards the extinction of human population. From this utterance, we can find a influence that depicts Cooper's worldview. He acknowledges the severity of such a dire situation and he is ready to sacrifice everything in order to prevent the impending doom of the people of Earth.

Through Cooper's language, it is found that Cooper embodies the pioneering spirit of exploration. He is of the belief that humans should not adhere to the challenges they face on Earth. He is ready to venture out into

the space in search to find new habitable planets in order to ensure the continuation of human race. Cooper's expression of love for his children evokes in him a great sense of responsibility towards the safety of his children. Cooper has an inherent belief in the potential of humanity to overcome drastic situations. His choice of words proves that he believes in the survival instinct of people and he knows that humans can achieve great accomplishments even in the face of drastic challenges.

The Influence of Cooper's Language toward his Behavior

It is clearly seen that most of Cooper's utterances can be characterized as: assertive 46.84 percent, interrogative 25.22 percent and imperative 22.52 percent, so Cooper's frequent use of questions and imperatives in his language highlights his inquisitive nature and leadership qualities. His curiosity and desire to seek answers reflect his eagerness to learn and explore new frontiers, while his commanding tone reflects his natural leadership abilities.

Personal Aspect

At first, Cooper's use of scientific and technical jargon reflects his logical and analytical approach to problem-solving. When he encounters a problem, he employs precise language to describe it, formulates a hypothesis, and makes informed decisions based on logical deductions. His background knowledge enables him to communicate complex ideas precisely that makes it a personal behavioral trait. This trait is evident throughout the course of action. In order to convey his thoughts and ideas effectively, he efficiently makes use of specific and technical language, while discussing mission objectives, and scientific phenomena etc. The adherence to logical as well as analytical language reflects his reliance on data driven decision making. The usage of scientific language aids him in formulating potential solutions. He leverages his knowledge, makes use of his expertise in order to develop logical theories about any obstruction they encounter. This approach guides his actions through any challenge.

Datum 3

COOPER: Look, I can swing around that neutron star to decelerate.

BRAND: It's not that, it's time. That gravity will slow our clock compared to Earth's. Drastically.

COOPER: We can't drop down there without considering the

consequences.

DOYLE: Cooper, we have a mission

COOPER: That's easy for you to say - you don't have anyone back on Earth waiting for you, do you?

In this sequence, it is evident that his language is dominated by scientific and technical terms, reflecting his background as an engineer and astronaut. The phrase "swing around that neutron star to decelerate" demonstrates his deep acquaintance with scientific knowledge (mainly of astrophysics and celestial mechanics). This implies that he not only possesses theoretical knowledge but he is also aware of its practice. The word choice here "swing around" suggests that he has a plan to utilize his knowledge as a means of decelerating the aircraft. His language here speaks his trust in his knowledge, his ability to withstand the challenge and ultimately willing to take calculated risks to achieve the objective. The line implies the meaning which emphasizes his ability to weigh pros and cons before jumping into decisions. This marks his behavioral trait of assurance and confidence in high stress situations during the mission.

In the next utterance, Cooper's language reflects his cautious approach in decision making. "We can't drop down there without considering the consequences". He emphasizes the importance of thoughtful analysis of the potential outcomes before taking action. That makes his behavioral trait of avoiding any reckless reactions during making essential choices. This utterance here highlights his sense of responsibility towards the crew. It is evident from his words that he takes his leadership role very seriously, the choice of words makes him a critical thinker. This perspective influences his behavior by directing his actions toward the larger mission rather than any short-term gains or solution. It also evident that he is a loving and emotional man from his utterance above: "That's easy for you to say - you don't have anyone back on Earth waiting for you, do you?" Cooper's usage of language in this line reflects his emotional state, as he made the promise to his daughter that he will come back to her, now he is frustrated about the fact he may not be able to see her again. This emotional investment in this situation is conveyed through his language. He is always shown to be straightforward in making decisions but here, he is comparatively hesitant in making any risky choices particularly those that could impact his ability to return home to his family. Now his love for his family has influence on

his decision making.

Above all, the instances show him as a logical and analytical thinker who values precision and accuracy. Furthermore, Cooper's frequent use of questions in his language reflects the curious aspect of his behavior as, for instance, mentioned below.

Datum 4

COOPER: NASA?

PROFESSOR BRAND: NASA. Same NASA you flew for.

COOPER: What happened to the other vehicles?

This highlights his inquisitive nature and curiosity. He is not content with taking things at face value and seeks to explore deeper meanings and understandings. As mentioned, when he discovers the NASA base, he is full of questions about the mission and the purpose of the base, showing his natural curiosity and desire to learn.

Similarly,

Datum 5

COOPER: I heard you got shut down for refusing to drop bombs from the stratosphere onto starving people.

PROFESSOR BRAND: When they realized killing other people wasn't a long term solution, they needed us back. Set us up in the old NORAD facility. In secret.

COOPER: Why secret?

There are significant interrogatives in the Cooper's utterance. Cooper's utterances are replete with questions which evidently highlight his curious behavioral approach. This ability drives him to dig deeper in order to fully comprehend anything that was left hanging before, with a lot of Why's in his conversation with other characters. It is implied that he values transparency and is of staunch belief that open communication is necessary for making informed choices. At the same time, such questions indicate that he may doubt the intentions of those withholding any vital information that could ultimately lead to disaster as it happens in the movie. Cooper was a former pilot, being a pilot, one is always in control so in order to assert his authority, and he had to ask a lot of questions.

Social Aspect

Cooper's language reflects his ability to adapt to different social situations. As it is evidently found from the analysis when he is interacting with his fellow astronauts, he uses technical and scientific language to convey complex information. However, when he is communicating with his family, he uses more emotional language to express his feelings. This presents the social trait of his behavior as someone who can navigate different social contexts with ease.

Datum 6

MURPH: You have no idea when you're coming back.

COOPER: I love you, Murph. Forever. And I'm coming back

During his conversation with his daughter Murph, Cooper uses emotional language to express his love and regret. He says, "I love you forever, and I'm coming back," which shows his commitment to their relationship. His response to Murph's question about his return showcases his emotional attachment with his daughter, that marks the social aspect of his behavior as the language of his love influences his behavior by encouraging and motivating him to return home safely and be with his family. Those words influence his behavior by providing him with the incentive to overcome any obstruction and stay put in the face of adversity. His words of love to Murph provide him with the source of strength and stability. This positively influences his behavior.

Datum 7

COOPER (over radio) Brand, get back here!

BRAND we need the recorder –

DOYLE Case, go get her!

COOPER Dammit! Brand, get back here!

BRAND we can't leave without her data –

COOPER (over radio) you don't have time!

BRAND Cooper, go! Go! I can't make it!

COOPER Get up, Brand!

BRAND GO! GET OUT OF HERE!

In the case above Cooper's description of the massive, mountain-like waves that are swiftly approaching them evokes a sense of urgency. His aggressive and solution-focused attitude to problem-solving under tremendous pressure is demonstrated by his authoritative tone toward Brand, which exhorts her to return right away. Cooper's language reveals his protective nature for his crew members and he is equally concerned for their well-being. No doubt, he wants that data, but he is also concerned for his crew members. The sense of responsibility is evident in his language and that is telling him not to leave her behind. Cooper's language during this critical time was very supportive as he wants her to come back. The words demonstrate his commitment to help his crew members, as he proves that he is true and worthy to be called a leader. His language, style of command, protection as well as responsibility put emphasis on his decision-making skills. His language navigates his behavior, how to stay focused and makes challenging decisions for the greater good.

Based on the aforementioned aspects, we can state that this finding is consistent with Tiono's (2002), research which suggests that language has an impact on one's worldview and behavior. In other words, this finding aligns with the Sapir-Whorf hypothesis. While the language and behavior of other characters were not specifically examined, it can be inferred that the use of a different linguistic style would result in different behavior. In this case, the main character's language differs from that of the other characters, which in turn affects his behavior and perspective about the world.

Conclusion

The weak version of the Sapir-Whorf hypothesis, which holds that language influences but does not directly drive mind and behavior, is supported by this study. The results of a thorough linguistic and multimodal examination of Cooper's character in *Interstellar* demonstrate how his language reflects and upholds his social judgment, emotional fortitude, and scientific worldview. Cooper uses aggressive and technical language frequently to exert authority in high-risk, unstructured circumstances. For example, "Look, I can swing around that neutron star to decelerate" is one example of this linguistic strategy. Approximately 60% of his most significant utterances are declarative or aggressive in nature, supporting his sense of agency on a social and cognitive level. These speech patterns are performative acts that influence Cooper's internal motives and relationships

with others, in addition to reflecting his identity. One speaking act that converts his emotional resolution into a guiding behavioral commitment is his pledge to Murphy, "I'm coming back." This study supports the notion that linguistic choices create, frame, and maintain cognitive and behavioral processes by showing how cinema language may be a potent medium for conveying scientific logic, emotional drive, and ethical purpose.

In doing so, this study contributes to the broader multidisciplinary discussion on linguistic relativity and validates the applicability of the Sapir-Whorf hypothesis in media analysis of narratives, especially science fiction, where language is typically entangled with hypothetical thinking and conceptual metaphors. The findings demonstrate how conversation in movies, even in made-up settings, may mirror real-life cognitive and cultural processes, making language more than just a means of communication but also a crucial component in the creation of human experiences. Notably, his spoken exchanges are comparatively concise and to the point, accounting for approximately 60 percent of his total utterances. These distinctive features exert a profound influence on his thrilling journey to safeguard everyone on the Earth. For instance, in the movie sequence, when Cooper is making an attempt for docking, the choice of words are concise and authoritative, which indicates the seriousness of his mind. It becomes apparent that Cooper's language reflects the underlying sentiments of love for his daughter, sympathy for the Earth's inhabitants and a profound sense of responsibility. These above-mentioned elements manifest conspicuously in his character and it is safe to say that they can be attributed to the language choices he makes.

In the movie "Interstellar" it becomes abundantly clear that Cooper's utilization of language plays a significant influence in shaping his behavior and morphing his perception of the world, as it is seen in the above mentioned detailed analysis. The above-mentioned analysis presents a clear interplay between his language, choice of sentences and the resultant transformation depicted from his behavior. The significant example where language influence shapes his behavior accordingly. It can be found in a moment, when he said to Murph, "I am coming back". This declaration, encapsulated in his words, triggers an intense shift in his behavior. Each uttered word becomes a solid commitment. As a result, he puts his efforts so that he can be with his daughter again. The words of promise have etched into the fabric of his consciousness. As the story unfolds, we bear witness

to his unwavering commitment to honor his vow. It is during the course of his journey that we observe an intense transition and shudder he feels during the journey. Despite being a man of unwavering composure and strong nerves, this transition in his behavior is because of his promise to Murph. This sequence is a testament to the enduring power language holds. In a nutshell it is safe to say that language has the capacity to drive individuals to extraordinary lengths.

Moreover, his concise usage of language and frequent use of scientific jargons in them evidently plays a significant role in shaping his serious perspective of the world. The seriousness is palpable in every decision he makes and every action he takes throughout the course of his mission. For instance, Cooper's behavior exhibits confidence in himself as he says, "Look, I can swing around that neutron star to decelerate". Language influence on the social as well as personal aspect of his behavior has been found throughout the course of action. As discussed earlier, on a social level, the influence of language is manifest in a way he engages with fellow crew members. His language and communication style played a vital role in resolving conflicts and building alliances. At personal level, his use of language influences his inner thoughts and emotions. For instance, his love for his daughter and for the people of the Earth, as in example here from script "That's easy for you to say - you don't have anyone back on Earth waiting for you, do you?" The consequences of his linguistic choices on his personal as well as on social behavior become increasingly defined.

These findings hold significant relevance for language teachers, who can use these insights to enrich their pedagogical approaches to educate their students about the influence of language on culture and behavior. By understanding the power of language, students can develop not only linguistic competence but also socio-cultural competence in language learning. Language teachers can utilize this information as a valuable resource to present the impact of language on world view and behavior. This broader perspective equips learners with the tools to navigate the complexities of cross-cultural communication effectively. This study serves as a launching point for future research in the domain of language and culture. Researchers can expand on this study by exploring how language influences culture in more defined ways, such as through real-life analysis and cultural texts. In essence, this study equips teachers to foster a comprehensive understanding of the role of language in shaping culture and

behavior, while also paving a way for the upcoming researchers.

Conflict of Interest

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

Data Availability Statement

The data associated with this study will be provided by the corresponding author upon request.

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