

Pragmatic Strategies of Argumentation in Hidden Figures Movie

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Hidden Figures الاستراتيجيات التداولية للحجاج في فيلم

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المستخلص

يُعرَّف مصطلح "الحُجَّة "بأنّه" :مجموعة من الادعاءات التي تدعم بعضها البعض للوصول إلى نتيجة محددة Govier)"، 10 . (وعليه، فإن عملية الحجاج تتضمن عدة مقدمات تهدف إلى تقديم أسباب وآراء لدعم أو حتى رفض وجهات نظر أخرى. أما التداولية فهي معنيّة بالأفعال التواصلية المختلفة، وكيف يمكن للناس أن يُنتجوا ويُعالجوا ويَفهموا فعلاً تواصلياً مثل الحجاج. ومن خلال اهتمامها بالمعنى الحقيقي للغة، يقدّم هذا البحث رؤية تداولية تستكشف الاستراتيجيات الرئيسة للحجاج في سياق محدد.

تركِّز الدراسة على:

- 1. استكشاف الاستراتيجيات التداولية المختلفة للحجاج التي يتبعها أبطال فيلم . Hidden Figures.
 - ٢. تسليط الضوء على أشكال أفعال الكلام المختلفة بوصفها أدوات للحجاج.
 - ٣. تحديد أفعال الكلام الأكثر قوة في بناء الحجة.

ولتحقيق الأهداف أعلاه، تم اعتماد نموذج فان إيميرين وغروتندورست (١٩٨٣) في تحليل الحجاج. ومن أبرز النتائج التي توصّل إليها البحث:

- ان الادعاءات المستخدمة في فيلم Hidden Figuresتعكس مراحل نموذج الحجاج، مما يؤكد أن مثل هذه العملية المعقدة تسير وفق أنماط محددة للوصول إلى الأهداف المرجوة.
- ٢. إن استراتيجية الحجاج مرتبطة ارتباطاً وثيقاً بالمرحلة التي تُمارس فيها (مرحلة الحجاج)، حيث إن بعض الاستراتيجيات تؤدى دورها في مرحلة معينة دون غيرها.
 - ٣. يمكن توظيف أفعال الكلام المختلفة في أكثر من مرحلة من مراحل الحجاج.

الكلمات المفتاحية :الحجاج، Hidden Figures، أفعال الكلام، الحجاج التراجعي، مراحل الحجاج.

Abstract

The term "argument" is defined as "a set of claims that support one another to gain a specific conclusion". (Govier, 2013). Thus, the process of argumentation contains several premises intending to give reasons and opinions to support, or even reject other points. Pragmatic is concerned with different communicative acts and how people can produce, process, and comprehend a communicative act like argumentation. Being concerned with the real meaning of language, the paper offers a pragmatic view that explores the main argument strategies in a given context.

The study focuses on (1) exploring the different pragmatic strategies of argumentation followed by the main characters of the "Hidden Figure" movie, (2) shedding light on different forms of speech Acts as tools of argument, (3) identifying the most powerful speech acts in an argument. To reach the above aims, Van Eemeren and Grootendorst's model of argumentation analysis (1983) is followed, and among the main results concluded were: (1) The claims used in "Hidden Figure" movie are reflections of the model argumentation stages, which verify the truth that such a complex process is following the same patterns to reach the desired aims. (2) the argumentation strategy is highly related to its stage (i.e. the stage of argumentation) as some strategies function only in a specific stage rather than another. (2) different speech acts are workable in more than one stage.

<u>Keywords:</u> Argumentation, Hidden Figures, Speech Acts, regressive argumentation, argument stages

1. Argumentation As a Speech Act

As a verbal- human activity, argumentation is the process of exchanging a series of arguments to reach a specific conclusion. Toulmin (1958) defines argumentation as a "procedural form" that produces a set of valid arguments. These arguments are "claims" used to increase, or decrease, a standpoint. Some relate the term to persuasion, as both terms are within the domain of altering and directing others.

Argumentation theory has been greatly influenced and developed by the speech act theory, different proposals about argumentation theory used the framework of speech acts. Jacobs (1989) points out that argumentation is a process consisting of a set of organized structures aiming at managing disagreement, and a variety of speech acts are used in these structures depending on the purpose of the arguing. Hitchcock (2007, 121) asserts that arguments are abstract structures; where the premise always constitutes an assertive, while the conclusion is any kind of speech act.

Regarding the *Pragma-Dialectical Approach*, argumentation is defined as a kind of illocutionary act that consists of different speech acts. such an act is treated as a "complex" illocutionary act composed of a series of assertive illocutions, in turn, these constellations constitute the complex illocutionary act of argumentation (van Eemeren and Grootendorst, 1984, p. 34). Argumentation is seen as such a complex illocutionary act because it involves at least two forces, asserting and arguing; that is the speech act of argumentation moves from one utterance into another justification utterance till reaching the assertion.

Besides these moves, argumentation goes through different stages, starting with the *confrontation stage* (where different

opinions are established), the opening stage (the parties state argumentation stage their points). the (devoted argumentation), and finally the *concluding stage* (resolving stage). Different speech acts are utilized at each stage, according to the nature of the stage itself. For example, directive and commissive speech acts are used in the opening stage to define a point or even to challenge one. Whereas, assertive speech acts can function well at the confrontation and concluding stages (Oswald, 2023:148). van Eemeren and Grootendorst (1984: 40) also formulated certain conditions to be fulfilled to consider an act as a speech act of arguing. The four conditions that must be fulfilled are:

- (1) the propositional content condition: the speaker's statements S1 and S2 consist of assertives in which propositions are expressed.
- (2) the essential condition: S. expresses opinions (O) with attempts to reach the listener's (L) satisfaction.

(3) Preparatory conditions:

- S believes that L does not completely accept O.
- S believes that L will accept the justifications

(4) Sincerity conditions:

- O. is acceptable by the S.
- the propositions expressed in the statements is acceptable by the S.
- S. believes that the constellation of statements S1, S2 (,...,Sn) makes an acceptable justification of O. (ibid: 44).

Argumentation as a speech act it involves "doing actions with words" and the whole process is summarized by Al-Hindawi and Naji (2018: 209-210) as an act that goes through the steps of (1) producing words and utterances (locutionary act), (2) understanding the intended meaning of the utterances

(illocutionary act) and (3) the effect on the listeners (perlocutionary act):

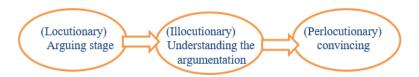


Figure (1) Argumentation Movement

Moving to another approach dealing with argumentation, Bermejo-Luque (2011) presented the "Linguistic Normative Model of Argumentation" where she (ibid) formulated a pragmatic-linguistic approach to argumentation (Haro Marchal, 2023: 484). In this approach, arguing is the communicative activity that aims at showing that the speaker's "target claim" is correct by means of justifications that are characterized by speech acts. Bermejo-Luque (2011) states that to say a speaker is arguing means first our ability to identify certain conditions to count an utterance as an arguing speech act (2011: 71-72). These conditions are summarized in Figure (2) below:

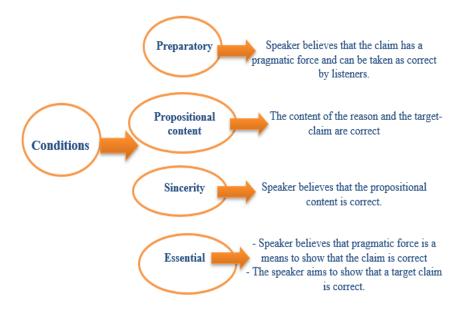


Figure (2) Speech act conditions after Bermejo-Luque (2011)

2. <u>Model of Analysis</u>

2.1. Data Description and Method of Analysis

The data of the present work comes from an online transcript of the "Hidden Figures" movies, the language is American- English 1960s. To reach the aim of the study, selected scenes from the film "Hidden Figures" were analyzed pragmatically by an eclectic model of analysis that is developed in the current study. Context plays a major role in understanding scenes and some pragmatic tools can be context-determined; therefore, the beginning of the analysis is a brief description of the context. Following Van Eemeren and Grootendorst's model of argumentation analysis (1983), the researcher makes use of the three stages of argumentation, namely: the opening, developing,

and concluding stages then exploring the kinds of speech acts utilized in each stage.

3. Pragmatic Analysis and Discussion

Text 1: Context: Mary and Zielinski are walking around the Mercury 7 capsule. He is inspecting and she is writing notes. Zielinski asks questions and Mary gives conclusions and he nods approval.

Mr. Zielinski: "Marry, a person with an engineer's mind should be an engineer. You can't be a computer for the rest of your life. That would be a tragic waste of your ability." Mary: "Mr. Zielinski, I am a Negro woman. I'm not gonna entertain the impossible."	Opening stage
Mr. Zielinski: "Let me ask you. If you were a white male, would you wish to be an engineer?"	Developing stage
Mary: "I wouldn't have to. I'd already be the one."	Concluding stage

At the *opening stage*, the reasonable establishment is revealed by means of *assertive speech act* strategy, the speaker, Mr. Zielinski, uses a *stating speech act* "should be an engineer". To develop the idea further, and refute Mary's claim of "entertain the impossible", a questioning speech act is performed "If you were a white male, would you wish to be an engineer?", which leads directly to the conclusion of "I'd already be the one". Such a conclusion asserts the argument raised by Mr. Zielinski that Mary should be an engineer. It also confirms the argument that it is a race issue; being "a white male" paves the way to

achievement. whereas, the combination of black and women does not.

Text 2: Context: At the court, Mary made a petition to be allowed to attend courses at Hampton High School. The judge, while flipping through the case notes, states that Hampton High School is for the white-people and that "Virginia is still a segregated state ... Our law is the law.". after asking for permission, Mary approaches the bench.

MARY: "Your Honor, you of all people should	
understand the importance of being first."	Opening stage
THE JUDGE: "How's that, Mrs. Jackson?"	
MARY: " You were the first in your family to serve	
in the Armed Forces. US Navy. The first to attend	
University. George Mason. And you are the first State	
Judge to be re-commissioned by three consecutive	
Governors."	
THE JUDGE: "You've done some research."	
MARY: "The point is, your Honor No Negro	Developing
woman in the State of Virginia has ever attended an	stage
all-white school. It's unheard of. And before Alan	
Shepard sat on top of a rocket, no American had ever	
touched space. And I, sir, plan on being an engineer at	
NASA. But I can't do that without taking those classes	
at that all-white high school. And I can't change the	
color of my skin.	
So I have no choice but to be the first. Which I can't	Concluding
do without you. Your Honor, of all the cases you'll	stage
hear today, which one will matter in a hundred years?	
Which one will make you the "first?"	
THE JUDGE: " Only the night classes."	

The above example presents a regressive argumentation; where the speaker (Mary) starts with the conclusion "you of all people should understand the importance of being first", then she states the reasons and facts. Using a stating speech at the opening stages arouses the judge's attention. Mary shows how much she knows about the judge to the degree of making him say that she had "done some research"—basic merit for anyone who wants to attend Hampton High School- Mary's arguments are developed by speech acts of reasoning and facts, "No Negro woman...has ever attended an all-white school... Alan Shepard sat on top of a rocket... no American had ever touched space" and determination "I, sir, plan on being an engineer at NASA..."

At the conclusion stage, Mary uses a commissive speech act; where she commits to "...I have no choice but to be the first." She opens up possibilities and gives the judge the option of being part of these possibilities "Which I can't do without you. Your Honor... Which one will make you the "first?"; building such strong arguments made her reach the conclusion stage by winning the argument.

Text 3: Context: Dorothy and her kids were dismissed from the library. They are on the bus. She talks to them about what happened and then she pulls a book from her bag.

DOROTHY: "You act right, you are right. That's for	
certain. Understand?"	
THE BOYS: "Yes, Momma."	Opening
She smiles at her little men. Settles in. Thenpulls the	stage
Fortran Computer book out of her purse.	
LEONARD: "You took that book, Momma?"	
DOROTHY: "Son, I pay taxes. And taxes pay for	Developing
everything in that library	stage
You can't steal what you already paid for."	Concluding
	stage

A combination of effective and appropriate arguments can be seen in the above extract. Effectiveness is manifested by following Grice's principle of cooperation by being logical, informative, and clear "Understand?". Dorothy tells the truth, supports her argument with the required information, and explains things clearly. Before taking the book out of the bag, Dorothy at the opening stage uses a speech act of asserting "You act right, you are right. That's for certain." as if she paves the way to answer the debatable question "You took that book, Momma?". To reach the target claim (it is not a steal), she gives reasoning act "I pay taxes" and the conclusion "You can't steal what you already paid for."

Text 4: Context: Al Harrison is in the office asking about Katherine. She enters the office and she is completely wet because of the rain.

AL HARRISON: "Where the hell do you go every	
day?"	
KATHERINE: "The bathroom, sir."	Opening stage
AL HARRISON: "The bathroom! The damn	
bathroom! For 40 minutes a day!? What do you do in	
there!? We are T-minus zero here. I put a lot of faith in	
you."	
KATHERINE: "There's no bathroom for me here."	
AL HARRISON: "There's no bathroom? What do you	
mean there's no bathroom for you here?"	Developing
	stage
KATHERINE: "There's no bathroom here. There are	
no COLORED bathrooms in this building or ANY	
building outside the West Campus. Which is half a mile	
away! Did you know that? I have to walk to Timbuktu	Concluding
just to relieve myself! And I can't take one of the handy	stage
bikes. Picture that, with my uniform: skirt below the	
knees and my heels. And don't get me started about the	
"simple pearl necklace" I can't afford. Lord knows you	
don't pay "the coloreds enough for that. And I work	
like a dog day and night, living on coffee from a coffee	
pot half of you don't want me to touch! So excuse me	
if I have to go to the restroom a few times a day!"	

The above extract is an example of a quarrel, the *opening stage* makes use of some figures of speech like metaphor and the rhetorical question "Where the hell do you go every day?", as well as amplification "The bathroom! The damn bathroom! For 40 minutes a day!?". AL Harrison raises the standpoint that 40 minutes a day is too much for a bathroom!

Moving into the *second stage*, Katherine raises the argument further in the *developing stage* by *stating speech act* " *There's no bathroom for me here*" which leads spontaneously to the *question speech act* " *What do you mean there's no bathroom for you here?*".

Using argumentative speech acts can be connected to the stage itself. Some speech acts can be utilized in some stages but not at all. The stating speech act was activated at the concluding stage "There's no bathroom here". To win the argument of being excused for spending 40 minutes a day, Katherine uses the reasoning speech act "There are no COLORED bathrooms in this building or ANY building outside the West Campus", questioning speech act "Did you know that?". Expressive speech acts are used by Katherine to imply the emotional state of "I can't take one of the handy bikes... with my uniform: skirt below the knees and my heels".

In addition, she raises racism issues in the workplace context; the first issue is with being "colored" and the speech act of stating a fact that there is no "COLORED bathrooms". The second point is the payment; the salary is not enough "Lord knows you don't pay "the coloreds enough for that". to win the quarrel, commissive speech acts are used by Katherine merged with the metaphor "I work like a dog day and night, living on coffee from a coffee pot half of you don't want me to touch" and she

concludes her argument by a concluding speech act of "So excuse me if I have to go to the restroom a few times a day!"

Text 5: Context: Katherine is being introduced to a man called Jim Johnson and they are walking and talking.

JIM JOHNSON: Aeronautics. Pretty heady stuff. They	
let women handle that kind of Well. That's not what	Opening stage
I mean.	
KATHERINE: What do you mean?	
JIM JOHNSON: I was just surprised something	
sotaxing-	Developing
Katherine stops him.	stage
KATHERINE: Mr. Johnson, it may be best if you quit	
talking right now.	
JIM JOHNSON: I'm not meaning any disrespect-	
KATHERINE: I'll have you know, I was the first	
Negro female student at West Virginia University	
Graduate School. On any given day I analyze the	
manometer levels for air displacement, friction and	Concluding
velocity and compute over 10,000 calculations by	stage
cosine, square root and lately Analytic Geometry. By	
hand. There are 20 bright, highly capable Negro	
women in the West Computing Group. And we're	
proud to be doing our part for the country. over at	
NASA, Mr. Johnson. But it's not because we wear	
skirtsit's because we wear glasses.	

In the above extract, Katherine and Jim are talking for the first time, and he knows that she works for NASA. The *opening stage* starts with *assertive speech act "Pretty heady stuff"* which leads to another exclamative speech act: "They let women handle that kind of-"; with saying that an argument is launched, though he tries to amend it " *Well. That's not what I mean"*. the *developing stage* is accelerated by a *direct interrogative speech act "What do you mean?"* and the argument is raised further "...taxing... I'm not meaning any disrespect-"

Therefore, Katherine uses a directive speech act of stop talking "it may be best if you quit talking right now". to reach a standpoint, Katherine uses the assertive speech act "I'll have you know" and she starts counting facts and using reporting speech act "I was the first Negro female student at West Virginia University", expressive speech act of praising "There are 20 bright, highly capable Negro women... we're proud to be doing our part for the country", and concluding speech act "...not because we wear skirts...it's because we wear glasses.".

4. <u>Conclusion</u>

Strategies of argumentation can be diverse in nature and they are also highly context-dependent. Specific institutional contexts may require specific argumentative strategies. From an illocutionary point of view, the analysis shows that the speech act of arguing, used by the main characters in "Hidden Figure" movie, is a complex speech act consisting of adducing a reason (or reasons and facts) and concluding a target-claim, or conclusion. Thus, within the context of NASA scientists and workers, most speech acts used are assertive speech acts: including *stating*, *reporting*, *mentioning*, *and predicting*.

Speaking about stages of argumentation, the strategies can be highly connected to some stages; the strategies can be used in a consistent rhythm through all stages or can be used in some stages only. Therefore, these argumentative strategies can be more like "opening strategies", "developing strategies" and "concluding strategies". In addition, the same speech act can function in more than one stage: stating speech act was highly activated at two different stages (opening/developing).

Argumentation also can move in different directions. For instance, *regressive argumentation* is seen in the data of analysis where the arguer starts with conclusions and uses *stating speech act* then states the reasons for that conclusion in a way of developing the reasons behind that conclusion.

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