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"Yes, Master": An Analysis of Language Control in Iron Man through Jarvis, Friday, and Veronica from the Lens of Orwellian Linguistics

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Abstract. In the Marvel Cinematic Universe (MCU), one of the superheroes most closely associated with technology is Iron Man. He built and operated advanced digital life assistants that embody technological sophistication. He controls these AI systems primarily through voice recognition, where language serves as the medium of command and control. Through verbal instructions, he exercised linguistic authority to operate his AI assistants, most notably Jarvis, Friday, and Veronica. This research explores the principle of language control in human-to-AI interaction, as portrayed in the MCU. It specifically investigates the categories of language control, such as deletions, substitutions, and reordering, based on Orwellian Linguistics as formulated by Hodge and Fowler (1979). Drawing parallels between Orwellian Linguistics and human-to-AI interaction, this research adopted a descriptive qualitative design, employing Spradley's (2016) analytical framework. The findings revealed that deletions, substitutions, and reordering were applied by the speaker (Iron Man) as mechanism of control over the AI assistants. This suggests that the dynamics of language and control are not limited to human-to-AI interactions but may also extend to human-to-human communication in a persuasive or authoritative contexts. Further research could expand this investigation through comparative analyses of human-AI interaction across various film productions.

Keywords: *Orwellian Linguistics, Language Control, Iron Man, Artificial Intelligence*

INTRODUCTION

In the superhero film industry, the Marvel Cinematic Universe (MCU) exemplifies what Nachbar and Lause (1992) described as "*superheroes born of laboratory accidents*". It implies that technology plays a significant role in the creation of superheroes, giving them distinctive characteristics expressed through their suits or armors. One of the superheroes most closely associated with technology in the MCU is Iron Man. The technologies surrounding Iron Man were depicted as digital life assistants, which he used interchangeably. Iron Man, whose real name was Anthony Edward Stark, or more famously Tony Stark, has appeared since the first phase of the MCU as a genius billionaire and technological innovator. His skill allowed him to become the CEO of Stark Industries after the death of his father. Stark Industries, originally founded by his father, Howard Stark, was initially a weapons manufacturing company. Furthermore, Tony's intelligence continued to develop through his deep engagement with the digital world. Before declaring himself as Iron Man, Tony Stark had already created several digital programs. These technologies assisted him in various tasks, such as data calculation, scanning, and rendering. To operate them, Tony Stark used voice recognition as a command interface. As explained by Perrachione et al. (2011) voice recognition is the ability to identify people by their voice. To control his digital assistants, Tony Stark carefully chose appropriate words when giving commands. This illustrates how language functions as a tool of control.

The use of language control in Tony Stark's interaction with his AI systems shows variation between his speech and that of his programmed assistants. For example, in *Iron Man*, Tony asked Jarvis:

Tony : "Jarvis, you up?"
Jarvis : "For you, Sir? Always."

The utterance of "Jarvis, you up?" indicates both familiarity and emotional closeness between Tony and Jarvis, reinforced by Jarvis's loyal reply "For you, Sir? Always." Another instance in the same film shows a similar exchange:

Tony : "Jarvis, you there?"
Jarvis : "At your service, Sir."

This interaction indicates a strong bond between Tony and his AI technology. It illustrates how the technology faithfully served its creator whenever needed.

From the perspective of language and control as proposed by Hodge and Fowler (1979), these two interactions can be categorized as examples of deletion, since Tony omitted the modal verb 'are'. This omission suggests that Tony is issuing a command or inquiry without explicitly framing it as a request for help. That is why, instead of producing a completely grammatically correct utterance, Stark removed some parts of his sentence. In accordance with Orwellian Linguistic, this constitutes deletion because the modal element was deliberately removed while retaining the core meaning of the utterance. Another example

could be found in *Avenger: Age of Ultron,* involving another AI created by Tony, Friday, who performed a similar communicative function:

Friday: "Good evening, Boss."

This exchange occurred when Tony installed Friday into his suit's operating system. Before doing so, the film showed him deliberating over which AI system to select. The scene depicts Tony examining Friday's chip while setting aside the others labeled Tadashi and Jocasta. As the replacement for Jarvis, Tony ultimately chose Friday over Jocasta, who had been introduced earlier and later became the final AI used by Iron Man. This deliberation represents a process of substitution, as Tony chose Friday by gazing longer at her chip than at others, implying an intention to replace one AI with another. Moreover, since Friday is a system that needs a sense of human language, the occurrence of language control is applied significantly as seen in the response of Friday after being inputted inside the system. The difference address of Tony from "Sir" by Jarvis to "boss" by Friday could be classified as substitution. It also implies that Tony has control over them in the sense of language Tony has programmed inside the program.

The variations in Tony's utterances also indicate the presence of underlying intention and hidden meaning. These scenes allow for flexible interpretation, depending on each viewer's perception of Tony's relationship with his AI. Thus, it can be summed up that Tony Stark has control over the communicative output of his systems through his command. From the perspective of language and control as examined by Hodge and Fowler (1979), language embodies both bias and authority. Moreover, word manipulation and syntactic restructuring can serve as tools of linguistic control, enabling influence and persuasion. Such mechanisms operate not only in human-to-human communication but also in human-to-technology interaction, as demonstrated by Tony Stark's engagement with his AI systems.

Previous studies have explored several aspects of in *Iron Man*, particularly in the representation of the technology. Some scholars have investigated the potential realization of such fictional technologies in real life. Pedersen and Simcoe (2012), for instance, revealed the *Iron Man* fans believe the technology in the films could become real due to advances in augmented reality. Similarly, Niittyen and Pakkanen (2018) demonstrated how 3D printing technology inspired by Iron Man suits offers innovations that bring real-life engineering closer to cinematic depictions. In the context of speech recognition, Khobragade (2013) identified two classifications, synthesizers (processing text into audio) and recognizers (processing audio into text), in analyzing Jarvis. Thomas and N.S. (2021) argued that ecological awareness and surveillance capabilities make Iron Man a powerful Avenger. Dash et al., (2022) further suggested that Jarvis inspired the development of personal virtual assistants for Windows systems.

Despite these contributions, previous studies have largely overlooked the role of language control in the context of Iron Man's AI systems. In *Iron Man* (2008), Jarvis first appeared as a home security assistant. Later, in *Avengers: Age of Ultron* (2015) where Jarvis was reprogrammed into Vision's body, Tony Stark integrated Friday as his new AI. While language control usually characterizes human

communication, in these films, it extended to interactions between humans and artificial intelligence. Accordingly, this study investigated the categories of language control applied to Jarvis, Friday, and Veronica, based on the framework of Hodge and Fowler (1979).

According to their theory, language control examines how people command others through three different categories: deletions, substitutions, and reordering. The transformations of the three categories have two primary functions: 1) word order suppresses relationships between linguistic elements, and 2) authenticity of utterances diminishes. The overall aim of language control is to influence general consciousness, limiting individuals' ability to think, speak, and write freely. Thus, the interlocutors comply with directives without feeling overt coercion. Building upon this theoretical foundation, the present study explored how such mechanisms manifest in Iron Man's AI interactions.

Language control, as discussed by Hodge and Fowler (1979), revolves around the manipulation of language and utterance to ensure compliance with the speaker's intention. From this perspective, language control can be seen as a manipulative linguistic strategy to conceal one's true intent. It gives a clue about the main function of language control, embedded within the given instruction. Whether expressed through complex and explicit sentences or vague and suppressive ones, such control operates as a means of influence. Hodge and Fowler (1979) illustrate this through the phrase "war is peace".

The 1984 novel by George Orwell has proven how the power of language is used by those in authority to gain obedience from the masses without any resistance, as seen in Newspeak language. As mentioned by Hama (2015), language is often used as an instrument of oppression. Accordingly, this study explored language control in human-AI interaction from the lens of Orwellian Linguistics to reveal the linguistic patterns t may produce effective and controlled instructions from the speaker to the AI.

The occurrence of language control in communication between humans and AI can be examined from the perspective of Orwellian Linguistics, as proposed by Hodge and Fowler (1979). In this study, language control was analyzed through Iron Man's interactions with his AI systems. These AI programs required a human sense of language for effective operation and control. Since Tony Stark was the inventor of these AI programs, his language control did not reflect the pragmatic intent, but rather align with the paradigm of Orwellian Linguistics, in which language control is often used by the government to shape discourse to monopolize the political system. In human-AI interactions, it is assumed that language control appears in the same linguistic phase. Deletion, substitutions, and reordering are used to maintain precision and authority over AI. In other words, the mechanism of using language and control, as examined by Hodge and Fowler (1979) in Orwellian Linguistics and those applied by Tony Stark to his AI assistants (Jarvis, Friday, and Veronica), are methodologically similar. Even when AI's responses exhibit only minor reflection of language control categories in Orwellian Linguistics, they can still be classified as instances of deletion, substitution, and reordering.

In harmony with the characteristics of Orwellian Linguistics, this study aims to bridge the concept of language control observed in Tony Stark's

communication with his AI systems and the patterns typically found in human-to-human interaction. The three categories of language control shown in the film can be used as a communication strategy with the same essential purpose, namely, to produce comprehensive communication, which could have further impact on human-to-AI in real-life interaction.

RESEARCH METHOD

This research used descriptive qualitative design, aimed at deriving clear conclusions from the data analyzed. The data were collected from the *Iron Man* films in both textual and visual forms. The textual data consisted of interactions between Iron Man and his AI assistants, namely Jarvis (J.A.R.V.I.S.– Just A Rather Very Intelligent System), Friday (F.R.I.D.A.Y. – Female Replacement Intelligent Digital Assistant Youth), and Veronica.

There were several steps in collecting the data. The first step was identifying and understanding the dialogue between Iron Man and his AI assistants. The next step was examining the types of language control applied to each AI. The final step involved classifying and drawing conclusions regarding the categories of language control applied to each AI.

In the data reduction process, each relevant dialogue was analyzed according to the framework of Orwellian Linguistics introduced by Hodge and Fowler (1979). Only the scenes containing one or more of the three categories, namely deletion, substitution, or reordering, were included as valid data sources. Consequently, all selected films align with the scope of this study, focusing on the linguistic mechanisms of control in human-AI interaction. The following table presents the data sources used in this analysis.

Table 1. Data Sources.

No.	Marvel Cinematic Universe		
	Films	**Release Years**	**Reasons**
1.	*Iron Man*	2008	Jarvis first appeared in Stark's suit as the security of Stark's house. The installation of Jarvis into Stark's armor shows a close relationship between Jarvis and his master.
2.	*Iron Man 2*	2010	Jarvis not only understood Iron Man's commands literally but also non-literally, showing an improvement in the language control applied by Tony Stark.

3.	*The Avengers*	2012	The control and authority of Tony made Jarvis ignore potential risks.
4.	*Iron Man 3*	2013	The furtherance of Jarvis to detect any potential danger around Iron Man as a form of protection despite being commanded unconsciously.
5.	*Avengers: Age of Ultron*	2015	The first time Veronica was brought up as an option in a worst-case scenario.
6.	*Captain America: Civil War*	2016	Iron Man relied more on Friday as his digital well-being detector than his other AI assistants.
7.	*Avengers: Infinity War*	2018	Friday had the privilege to control the nano tech.
8.	*Avengers: Endgame*	2019	The interaction between Iron Man and Friday tended to prioritize urgency and agility in assisting Iron Man's last war.

This study employed domain, taxonomy, componential analysis, and cultural theme techniques proposed by Spradley (2016) to unveil the structural system of the study. Domain departs the objects of the study in a surface component analysis. In other words, it would unveil the larger unit of knowledge of objects. Taxonomy deals with the specific aspects of each surface component in domain analysis. While the componential phase uncovers another specific part of taxonomic analysis, which shares the same part but has different functions. Moreover, cultural themes help to uncover the meaning and significance of the study in regard to the object. In the domain analysis, the researchers examined the interactions between Iron Man and his AI systems in the selected movies.

Table 2. Componential Table.

	Language and Control		
	Deletion	**Substitution**	**Reordering**
Iron Man - Jarvis			
Iron Man - Friday			
Iron Man - Veronica			

After examining the domain phase, the researchers conducted the taxonomic phase to identify which AI was repeatedly used by Iron Man in conversational or non-conversational AI. Then, these selected AIs used by Iron Man were grouped according to their specific Iron Man-AI pair interaction in the componential phase. Through this process, each interaction between Iron Man and his AI was analyzed to reveal how language control was exercised and what significance it carried within their communication. Thus, the cultural theme emerging from this study may reflect the limitations of human-AI interaction, particularly in how language control shaped the given tasks and corresponding responses.

RESULTS AND DISCUSSION

Overall, the results revealed three categories of language and control, observed in the interactions of Iron Man-Jarvis, Iron Man-Friday, and Iron Man-Veronica, with a total of 110 occurrences. From the eight selected movies, one representative sample was drawn from *Avengers: Age of Ultron*, which contained 28 instances of language control: 10 deletions, 7 substitutions, and 11 reorderings.

Overall, the cumulative results revealed 41 instances of deletions, 39 of substitution, and 30 of reordering. Among these, deletion was the most frequent form of language control, occurring 26 times in Iron Man-Jarvis interactions, 14 times with Friday, and once with Veronica. Substitutions appeared 25 times in Iron Man-Jarvis and 14 times in Iron Man-Friday 14 interactions. Finally, reordering occurred 23 times with Jarvis, 6 times with Friday, and once with Veronica. These findings are summarized in the following table.

Table 3. Occurrences of Each Language Control Category within the Interactions between Iron Man and His AI Assistants.

	Language and Control		
	Deletions	**Substitutions**	**Reordering**
Iron Man - Jarvis	26	25	23
Iron Man - Friday	14	14	6
Iron Man - Veronica	1	-	1

In alignment with the domain analysis, Iron Man repeatedly used AI as his assistants, both in domestic settings and in battle. Thus, the domain was elucidated in this component to classify each AI according to its occurrence and function. It is important to note that Tony Stark has other developed several other technologies which cannot be classified as AI. In the taxonomic phase, Iron Man's interactions with different types of AI were classified into two categories. The first category is conversational AI, represented by Jarvis and Friday. The conversational AI, in the context of Iron Man technologies, refers to each artificial

intelligent agent capable of understanding and producing verbal communication, which suggests that this interaction is similar to natural human conversation. The analysis revealed that Jarvis and Friday are the primary examples of conversational AI applied by Iron Man. The second is non-conversational AI, represented by Veronica. Non-conversational AI, in the context of Iron Man technologies, refers to an artificial system designed to respond automatically through actions rather than verbal exchanges. Due to its particular ability, Veronica had produced proto utterance which shared similar meaning with onomatopoeia. According to Ye (2023), onomatopoeia are words that phonetically imitate or suggest their meaning. From this perspective, the sound "beep" produced inside the system can be interpreted as proto utterance. In particular context, such as during an attempt to control Hulk rampage, onomatopoeia significantly signified the action of Veronica as non-conversational AI. This is clear evidence that Tony has developed his AI systems, particularly Veronica, not only to serve his personal needs but also to assist his team, especially in controlling the Hulk who could only understand minimal and basic commands. At last, componential analysis revealed that Iron Man-Jarvis, Iron Man-Friday, and Iron Man-Veronica interactions which were different from one another, but all of these AI systems shared the same function as Iron Man's assistants. Jarvis served himself as his personal assistant and home guardian on his first appearance in *Iron Man*. Friday also served as his female artificial intelligence assistant, particularly to replace Jarvis in *Avenger: Age of Ultron*. Meanwhile, Veronica only appeared as the hulkbuster controlled by Tony. These three AI technologies, namely, fulfill the tasks assigned by Tony. Chronologically, Tony activated Friday due to the disappearance of Jarvis, while on the same event, Tony also deployed Veronica to subdue the Hulk's rampage. Therefore, while each AI performed different operational roles, their shared objective remained consistent, namely, to execute tasks efficiently and fulfill Iron Man's commands.

Furthermore, each type of the data most frequently occurred in the interactions between Iron Man and Jarvis. This indicates that language control tends to emerge when AI receives both literal and non-literal commands. The frequent use and control strategies underlie the assumption that each AI is shaped by different degrees of human control. In alignment with the cultural theme, the researchers assumed that Jarvis, as the first AI integrated into Iron Man's suit and introduced in the earliest film, held a higher degree of control authorization compared to Friday and Veronica. This finding aligns with the previously discussed cultural theme, which suggests that the interaction between Iron Man and Jarvis is the most recurrent form of human-AI communication involving language control. Two primary reasons support this assumption. Jarvis is the earliest AI system introduced in *Iron Man* (2008). Second, Jarvis remained in use from 2008 until his transformation into Vision's body, meaning that Jarvis had assisted Tony Stark for approximately 7 years. This duration implies a consistent and prolonged application of command and control.

In contrast, Friday demonstrated less language control since she only appeared as a replacement for Jarvis after his transformation into Vision. She assisted Stark for less than five years due to the impact of Thanos' blip, resulting in limited interaction time. In contrast, the implementation of language and

control on Veronica is the least of all, as she was just a satellite-based anticipatory system designed solely to deal with Hulk's rampage in the worst-case scenario.

Moreover, this study was divided into three sub-discussions. As proposed in the theory of language and control by Hodge and Fowler (1979) that the main analytical categories include deletions, substitutions, and reordering. Words or parts of words that are deleted, substituted, or reordered can reveal hidden intentions or implicit meanings by the speaker. These linguistic operations may also reflect confusion or deliberate attempts to mislead the interlocutor. Specifically, deletions occur when parts of the speech such as articles, conjunctions, modality, tenses, or prepositions are omitted. Substitutions involve replacing one word with another that may only be meaningful to the speaker, while reordering changes the placement of words to alter meaning or emphasis. Altogether, these categories illustrate how language control can manifest within interaction.

As in the used theory by Hodge and Fowler (1979) that prioritizes human-to-human interaction, the controlling paradigm could be extended to human-to-AI communication through deletions. In the context of human-to-AI interaction, the mechanism of using deletion as a control language is to omit certain information, ideas, or words to shape mind and ideology. Meanwhile, the interaction involves both AI and its users in this matter are Tony Stark. In addition, deletions could be seen in how users shape the input based on the AI capabilities and how AI responds to its order, whether there is omission of certain things or not while communicating.

Regarding the interaction, applying deletions could lead to misleading outputs by the AI because of the obscure order, which might create biased ideas. As the study by Tuinman and Gray (1972) examined that deleting random or shortening sentences could lead to impossible messages created. The way AI responds to each filtered order by deleting certain intentions and words also reflects the way users input their dynamic power to control them. By limiting the ability to only obey the order of its users, it also indicates that controlling power occurs. Although in the interaction lack of human intent, controlling language via deletions arises from its programmed prioritization, necessity, and action as reflected through his AI. In the context of deleting certain word, the exact message could still be understood by the AIs.

Deletions

Deletion often occurs in spoken and written language, especially in communicative contexts. According to Chilton (1984), deletion may obscure the reference of certain words such as 'of', in', and 'for', leading to potential interpretation by the listener. This aligns with the study by Gonzalez (1992) which examined the use of extreme manipulation language with a simplistic vision for political purposes. He found that all words containing unfavorable connotations and potentially leading to criticism of the regime were deleted. In a broader perspective, the language used to control ideology functions to obscure the reality.

This paradigm can be extended to human-AI communication by omitting certain information, ideas, or words that can influence mind and ideology. In the interaction between Tony Stark and his AIs, deletions occurred when the input was simplified or shortened to match the AIs' capabilities and how they responded to commands. This can lead to ambiguous or biased outputs, as examined by Tuinman and Gray (1972), who argued that deleting random or shortening sentences could lead to distorted meanings. The way AIs respond to each filtered order also reflects the way users exercise their dynamic power to control them. Although the AIs in this study lacked human intent, control through deletions arises from programmed prioritization, necessity, and actions, as reflected through his AI. In the context of deleting certain words, the exact message could still be understood by the AI.

To demonstrate, in *Avengers: Endgame,* Stark instructed Friday to create a quantum realm simulation:

> Tony : "I got a mile inspiration. I want to check it out. So, look around one last sim before we pack in from tonight. This time in a Mobius strip inverted, please."
> Friday : "Processing."
> Tony : "Gimme the eigenvalue of that particle factor in spectral decom. It would take a second."
> Friday : "Just a moment."

The straightforward answer "Processing" indicates Friday's compliance to her creator's instruction. In this case, the word 'sim' is an abbreviation of 'simulation'. By deleting the suffixion, Stark clearly showed control over Friday's linguistic processing. This was presumably due to Stark's intention to make Friday understand a simple order rather than a complex order. The way Friday responded to Stark by directly processing his request also demonstrated that his language control was effective. Friday's response in a soft tone also indicates that she fulfilled the request gladly. This scene is strengthened by Stark's next order, "Gimme the eigenvalue of that particle factor in spectral decom. It would take a second". Stark used the same deletion on the word 'decom', the shortened word for 'decomposition'. In this situation, Stark might expect his AIs to be able to examine the exact and correct input order which aligned with its output. Despite her ability to calculate the eigenvalue, Friday also examined an ambiguous order because she answered, "Just a moment". Thus, it can be assumed that there were two reasons. First, the order was hard to understand. Second, Friday needed more time to process the output that Stark expected. In addition, a study by Khalfaoui & Tucker (2019) underscored that deletion would likely count as an even improvement rather than all at once. It is proven by Stark by uttering attrition step by step in two different commands. These two commands with the same pattern (e.g., deleting the affixes, -ion), create an assumption that the roots are arguably collected as an evenly reduced process. Though Stark did not delete the complete words, the shortened form can be understood by Friday easily. As stated by Kokkota (1988), rational deletion increases the ability for examining

language ability beyond sentence-level structure. Consequently, it was not only Stark who gave the order steadily, Friday also understood the order well.

A similar case of linguistic deletion also happened in *Iron Man 2*. Tony Stark fought military robots controlled by his enemy, Ivan Vanko. This presented an extraordinary difficulty for Iron Man because he had to fight against dozens of them, including his friend, James Rhodes, in a War Machine suit under Vanko's control as well.

Tony : "How, Jarvis?"
Jarvis : "Remote reboot unsuccessful."

Stark asked Jarvis without elaborating on the context of the question. However, Jarvis had been programmed to sense and monitor the situation around him, which made him produce an immediate answer even with no context in the given command. Ye & Zhou (2009) stated that, "During communication, speakers and listeners have to organize thoughts and actions in accordance with internal goals. The speaker may use executive functions to select the right word over competing alternatives and inhibit the tendency of producing an inappropriate word". In other words, when people communicate, they use mental skills to choose the most appropriate words and refrain from saying something out-of-context. This illustrated the deletion technique, because without details from Tony, Jarvis could assume what Stark meant, which was to reboot all the robot armors controlled by Vanko.

Deletion was found in the interaction between Iron Man and Veronica. Unlike the other AI assistants, Veronica was programmed to respond to the Hulk rampage if Iron Man had to deal with the Hulk. Although designed as a mobile service module, Veronica was still part of AI because it was stocked with an automatically assembled part of Iron Man's suit. This Hulkbuster was once called by Tony Stark in *Avengers: Age of Ultron* film when Hulk was hypnotized by Wanda Maximoff to go to the city streets on a rampage. In a chaotic situation, Tony activated Veronica with succinct commands:

Tony : "I'm calling Veronica."
Tony : "Veronica, give me a hand."

By saying "I'm calling Veronica", Tony showed his controlling power to help conquer Hulk. With Veronica hovering close by to provide Stark with support while battling with the Hulk himself, it reflects Stark's deletion strategy by choosing Veronica over the others. The main assumption why this happened was because the Hulkbuster was designed specifically for stopping the Hulk stop from creating chaotic situations. Like the other AIs that required language control to operate their programs, this hulkbuster program also required the same stage. Iron Man as their creator needed to insert a sense of language to activate them. When the program ran with the shortened form of instructions, it reflects deletion, as proposed in the Orwellian Linguistics.

As the battle with Hulk got worse, which left-suit of Iron Man's hand was broken, Stark then asked again, "Veronica, give me a hand", and Veronica

responded immediately by helping him. This indicates that communication occurs as Stark wanted. Even though Veronica was not designed to be able to communicate, this reflects Tony's power of how he would like to operate his creation. Therefore, deletions as the examination appeared.

Substitutions

Substitution, at its core, works to replace a word that sounds negative with another word that is more positive, aiming at changing the actual meaning of the original word and ease the effect of harsh or unpleasant realities. In other words, this strategy is used to control the interlocutors to obey orders thoroughly without requiring anyone to rebel by limiting their thoughts through changing or manipulating words. Substitution fundamentally shares a similar paradigm to euphemization. As stated by Abdu & Khafaga (2019), euphemization removes negative connotations that may be attributed to the expression, not only used to save the interlocutors' face, but also to manipulate them into complete obedience.

Substitution involves speakers altering certain words or even tones as a technique to highlight focus and get the desired effect. By substituting particular words, speakers can either soften or intensify the impact of the words as to emphasizing the actual focus, also giving multiple orders that are often aligned with persuasive intentions. As mentioned previously, substitutions have a similar pattern to euphemisms, where both certainly have similar functions as well. In this case, Olúránkinse (2010) claimed that the first of these functions is to remove direct terms, this attempts to mask the bluntness of a certain topic, hence, as to soften the meaning of the words uttered. The second is to replace a term with its opposite to avoid unpleasant meanings; and the third is to shift negative situations for control and domination. In its application to technology, especially to AI programs, speakers used to apply substitutions to give clear orders by adapting to the current situation so that AI systems can process the orders efficiently and provide appropriate results.

To clarify, in the first *Iron Man* film, during the test flight of Stark's new suit, everything went under control until the scene where Stark wanted to do further tests on how high the iron suit can reach. Due to the experimental stage, the suit was not completely made of materials tested for higher altitudes so that the suit ended up freezing once it reached the atmospheric ice layer. This accident caused the power system to fail and caused Stark to fall from a height. Stark then exclaimed:

Tony : "We iced up, Jarvis! Deploy flaps! Jarvis!"
Tony : "Come on, we got to break the ice!"

The sudden commands showed the danger Stark was facing as well as reflecting his emotional state. He frantically simplified his order to substitute the focus on Jarvis, given the urgency of the situation he was dealing with and the urge to get a response or action as quickly as possible. Jarvis, as stated by Krings et al. (2023) is an AI that can understand the point of Stark's intention depending on the current context even without detailed prompts. The researchers continued that this was possible because Jarvis was programmed through natural language, where even complex commands can be conveyed easily with simpler language.

Meanwhile, his emotional state affected changes in Stark's tone of voice, which tended to show fear and panic. Hagenaars & Minnen (2005) argued that "a vocalization is the result of actions of a great number of muscles in the chest, throat and head, so any alterations in muscle tonus will affect vocal characteristics. In fear, for example, increased muscle tension could lead to a high-pitched voice". In this case, Stark's panic during the failed test flight caused his voice to become higher-pitched and more urgent. It perfectly illustrates how fear increases tension. This physiological response affects vocal characteristics, leading to changes in pitch, tone, and speech rate. Furthermore, the following order by Stark somehow reinforced the idea of substitution techniques as well. The words chosen and the intonation used tended to be clear and direct, which was also intended to focus on the action he wanted to obtain.

The substitution strategy was also found in *Iron Man 2* where Jarvis assisted Tony in finding a new element to replace palladium in the arc reactor, which served as the power source for his Iron Man suit, yet it is also known to be poisoning his life. During the process, Stark and Jarvis interacted intensely by applying all the characteristics of language control. However, Stark's way of substituting his language influenced how Jarvis responded. He said:

Tony : "How many buildings are there?"
Jarvis : "Am I to include the Belgian waffle stand?"
Tony : "It was rhetorical. Just show me."

On the first question, Tony's intention was meant to be rhetorical since it reflects his surprise at the hologram on display. Thus, he wa not actually asking for a count while Jarvis caught the question literally and even added a bit of humor by asking whether he should include such a trivial food stand. However, the unexpected response from Jarvis led Stark to clarify and ended up substituting his language. Due to his dissatisfaction, the next command tended to be more straightforward in order to get the response he desired. This aligned with the concept formed by Hodge and Fowler (1979) that language determines thought. This implies that Stark was correct in the first place to shift his command which is more acceptable for Jarvis to provide any response.

Another example in *Captain America: Civil War* which showed fighting between Iron Man and Captain America because of a misunderstanding where Captain America hid the truth behind Tony's parents' death in the hand of Bucky which back then was hypnotized by Hydra. Under this circumstance, Iron Man asked Friday to quickly analyze Captain America's fighting patterns by saying:

Tony : "Analyze his fight patterns."
Friday : "Scanning."

When giving this order to Friday, Tony used a flat intonation to emphasize it because he apparently was disappointed in one of his fellow Avenger, Captain America. The study by Grandjean et al. (2006) revealed that prosody distributes the same paradigm into any suprasegmental changes in the situation while spoken language uttered. One of the aspects cited as one of the suprasegmental

changes is intonation where it might reflect a specific emotion, as examined by Banziger & Scherer (2005). Under this situation, it affected the order itself to Friday by using flat intonation to indicate an urgent command. Friday's response indicates that she examined the order thoroughly because she quickly understood his boss's instruction. This also reflects Stark's ability to control Friday under certain circumstances. Therefore, this instance can be categorized as substitution because Tony intensified his order by substituting the usual tone to flat tone when giving order to Friday.

Reordering

Reordering attempts to shift attention related to place, time, or person. This aims to eliminate one's responsibility and to highlight the first mentioned words whether it is in active, passive, or nominalization forms. Significantly, the three categories listed have the same functions and goals, mainly to manipulate words or sentences in order to control the masses for obedience and dominance authority. These categories, as implied by Youvan (2024), are used to govern not only the actions, but the very thoughts of its subjects, demonstrating the terrifying potential of language as a tool for oppression and control.

The context of reordering is often associated with the substitutions process due to both similarities that involve changes to certain elements. If substitutions are replacing one term with another by adjusting the tone, simplifying complexity, and shifting focus, then reordering works by rearranging the terms of instruction of order without altering the word itself. Pflug & Rinderle-Ma (2015) argued that reordering is a strategy used to enhance resource management and improve process efficiency, which has effects on maintaining due times, optimizing temporal performance, and adapting to control flow patterns. In a simpler way, various purposes of engaging in this strategy are to set priorities, thus, to emphasize the focus that the speaker wants to concentrate on, reflect the urgency of a particular condition, and align actions with the context. Reordering also can be understood as multiple orders, where the first order usually contains the main focus that the speaker wants to highlight, while the second order is the next action that the speaker wants to orient after the first order is completed.

For instance, reordering can be seen in Iron Man-Friday interactions in *Avengers: Age of Ultron* when Friday gave information about the current condition of Sokovia:

> Friday : "The vibranium cores got a magnetic feed. That's what keeping the rock together."
> Tony : "If it drops?"
> Friday : "Right now, the impact can thousand. Once it gets high enough, global extinction."

The utterance of Friday in the dialogue led Stark to think about the following possibility. In this case, Friday prioritized saying the background information instead of the following impact. This allowed Tony to favorably listen to what effect might be realized. Across the theoretical paradigm, reordering deals along

with syntactic word order in the communication. The latter study by Hahn et al., (2020) offered evidence that language structure is respectively designed by communicative and cognitive pressures. As seen in this datum, after the background or the cause of the problem had been uttered, the impact of the situation was also uttered. This also shaped the interlocutor's perspective, which later subtly framed the exact message of the sentences. By delaying the exact intention until later, it could encourage the interlocutor to continue listening and paying attention to it. This has been proven by Tony who responded, "If it drops?" which indicates that he paid attention to what Friday was concerned for. By considering which message to be conveyed first could reduce the negativity of thoughts, such as in this situation. It allowed the audience to be ready with the following impacts and effects in a certain condition, which could be as a dangerous situation or as negative results. As in Friday's next calculation, she said, "Right now, the impact can thousand. Once it gets high enough, global extinction." From the scratch of this scene, Friday had been warning Tony that a complicated situation would occur as the effect. Furthermore, under these circumstances, it can be said that from Tony's perspective, his AI would somehow warn his creator about certain dangers without saying it right away to maintain his psychological effects to remain well. Moreover, the accordance of rational communication as explored by Piantadosi et al., (2011) had shown that the content conveyed in the information is considerably much better than the regular occurrence of the word. As a result, the study also suggested that effective communication is structured from the lexical system as an optimization of natural language use. Thus, it reflects Tony's authority to control his AI through its input system. Prioritizing a certain word or sentence through reordering such in this situation to be emphasized also reflects strategic sequencing of the speaker for effective communication.

In another situation, reordering strategy can be observed in *Iron Man 3* during the final battle against Adrich Killian and his men. The unusual strength possessed by the villain required Stark to involve all of his armor, or as known as the Iron Legion, to the battlefield. In this scene, the Iron Legion was operated by Jarvis through control and command from Tony Stark. Furthermore, the dialogue showed Tony Stark reordered his command by giving multiple orders, indicating that the orders were urgent according to the situation.

> Tony : "Jarvis, target signs of extreme heat. Disable with extreme prejudice."
> Jarvis : "Yes, sir."

The reorder steps can be reasoned from how Stark rearranged his orders to be more straightforward and contain urgency but still provide clarity. The first order was what Stark primarily wanted Jarvis to prioritize. As studied by Stone (1969) "The so-called Law of Primacy in Persuasion, as formulated by Lund, holds that the side of an issue presented first will have greater effectiveness than the side presented subsequently". Thus, it is clear that the information people hear first about a topic is more convincing than what they hear later. It is also proved that Stark's order was truly concrete. Stark then immediately gave the next order

without any pause, reflecting the further urgency of the situation at hand. In other words, Stark intended to show Jarvis the priority of the action he wanted to make. The strategy was the right decision considering the context of the situation. Tony Stark as the master was once again able to control Jarvis in various conditions, which ended up proving the effectiveness of the strategy and getting Jarvis to respond steadily.

For further example, the *Iron Man* (2008) shows a scene when Tony was about to develop a new project that he officially named Mark II. It was a modernized and more aerodynamic armor than his first suit, Mark I, which was made in a cave with Ho Yinsen during the hostage incident in Afghanistan. In the project-development scene, the dialog between Tony and Jarvis occurred.

> Tony : "I'd like to open a new project file, index as Mark Two."
> Jarvis : "Shall I store this on the stark industries central database?"
> Tony : "Actually, I don't know who to trust right now. Till further notice, why don't we just keep everything on my private server?"
> Jarvis : "Working on a secret project, are we sir?"
> Tony : "I don't want this winding up in the wrong hands. Maybe in mine, it can actually do some good."

In this scene, information was obtained that the first instruction from Tony Stark was to ask Jarvis to start creating a new file that would store all the important data for the initial design of the Mark II. Jarvis, as Tony's reliable assistant responded by confirming whether he would prefer the files to be stored in Stark Industries' central database. Due to the current realization that his own company has been exporting weapons to unethical organizations, Tony gave Jarvis an advanced order to store the files on his personal server. This included a reordering strategy that Tony used to clarify his orders so that Jarvis could do his job perfectly, in accordance with what Stark desired. Furthermore, the conversation came to an end with Jarvis' feedback to confirm once again whether the project they were working on was private and confidential. This phenomenon certainly supports the argument by Li et al., (2024) that a program, especially an AI, cannot be overconfident in anticipation of truth accuracy errors and to prevent reliance on bad information. Thus, AIs will always need language to get further approval and reassurance from humans.

CONCLUSION

Language is a significant asset for building communication, while control is a person's ability to regulate one's thoughts and actions. Based on the results of the investigation, deletions, substitutions, and reordering as described by Hodge and Fowler (1979) can be applied in human-to-AI communication. Language control can be seen in the uttered order of the speaker for the interlocutor. This could also be influenced by factors such as condition, intonation, and tone. The main goal of employing language as a control is to build authority and maintain power. Regarding its application to AI, the function of language control is essentially to provide clarity and directness by aligning the context, whether to simplify or

intensify the words spoken. Language control in 1984 implies the negative function while Iron Man tended to perform language control as a tool to effectively show intimacy.

People's minds tend to be easy to manipulate, and language is a great tool to bridge the gap. This makes language control the most common application in human-to-human interactions. The clear function and purpose to manipulate and demand domination and authority, making its terminology play a consequential role, especially in political issues. In government, for example, there are always communities with the aim of leading and influencing each individual's opinion regarding one thing and opposing the existing ideology. Given these conditions, the propaganda in circulation most definitely cannot be separated from the application of language control, each will have efforts to change, replace, or even erase the truth of the existing facts. Finally, the strategies and techniques provided in this research can be used as references for other further studies.

In this study, AI's creators aimed to make AI become their partner to complete certain tasks. The AI could also become their subordinate for completing tasks only by AI itself. Furthermore, the implication arises regarding this aim would likely need a controller around how the creator creates controlling dynamics to operate the AI. In this situation, practically, language and control over AI would occur as the exact conducted input. By examining the result of this study much farther, it could be guidance to be able to create precise order to grasp effective outcomes. For further real-life applications, this study can keep developing to reveal various persuasive methods through language and control, where the speakers play a crucial role in directing the conversations with the interlocutors to achieve the desired results. In addition, the findings of this study can also be a reference for a further study on AI-related film studies in comparative studies involving the interaction of human-to-AI in one production with another.

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