



Conversation Analysis and Language Analysis on Selected Episodes of *The Big Bang Theory*: Stereotypes of Scientists

Raden Roro Rieta Anggraheni

Hospitality Study Program, Tourism Department, Politeknik Negeri Bali, Badung, Indonesia

Email: rororietaanggraheni@pnb.ac.id

Abstract

*This study aims at analyzing how the language in the popular sitcom *The Big Bang Theory* forms stereotypes towards genius scientists and what power relation is constructed. This study used Critical Discourse Analysis (CDA) as the conceptual framework and combined two types of analysis, language analysis and conversation analysis (CA). Therefore, this study also puts an emphasis on how the analytical framework helps to achieve the objective of CDA. The data are taken from the transcripts of two selected episodes of *The Big Bang Theory*. The result shows that geniuses are represented as awkward and excessively logical persons who find it difficult to maintain a good social interaction and struggle to develop their social skills. This stereotype shows that the group is minor in the society they live among. Through the female characters in the story, it is also found that women are stereotyped as less logical gender. The female scientist characters are the embodiment of the idea that women are supposed to be caring and affectionate in nature, the qualities a mother has. This issue on gender shows that in the post-modern American society, with the concept of liberalism, stereotypes still exist. It indicates that there is no absolute freedom; power domination manifests in various forms out there.*

Keywords: Gender Representation, Stereotype, Conversation Analysis, Language Analysis, CDA.

INTRODUCTION

Comedy series or commonly known as sitcom is one of the most-loved television programs as its nature is to entertain the audience. Needless to say, American TV productions have successfully produced and broadcasted a lot of comedy series watched by the people around the world, such as *Big Bang Theory*, *Friends*, *Modern Family*, *How I Met Your Mother*, and *Two and A Half Men*. Those TV series have internationally been very popular and gained high ratings. Regardless its power of entertaining, however, TV series might give several impacts to the audience. The form of impacts of TV series on the audience that has raised linguistic researchers' attentions is no other but the language that is uttered by the actors and actresses. This refers to the notion that a text or a discourse does not merely include written forms, but it also covers spoken forms and even cultural artefacts which are multisemiotic (Fairclough, 1997). Therefore, TV series has also become an object of discourse analysis. Discourse is believed to transmit and create social and institutionalized values or ideologies, particularly after the work of Foucault (Wales, 2001 as cited in Verdonk, 2002). Furthermore, Fairclough (1995) asserts that ideologies are statements commonly appear as implicit assumptions in texts that help create or reproduce unequal power relations.

The *Big Bang Theory* is a strongly successful television sitcom, airing 12 seasons in total from 2007-2019. The four scientists as the main characters in the sitcom give a depiction of geniuses with distinctive persoane and limited social skills. Quoting Lorre (collider.com), one of the authors of the *Big Bang Theory*, the characters are scientists that "freed us up from a lot of clichés". It is true that the unique and rare characters have brought freshness to the entertainment industry. However, as this program receives both compliments and critiques, it is not without flaws. Through the representations of the characters' identities built by the authors, stereotypes emerge, which is particularly identified through the language choice. This is in line with what Fairclough (2003) suggests "who you are is partly a matter of how you speak, how you write, as

well as a matter of embodiment..." which clearly means that people can build their identity through their language as well as their non-verbal representations. Besides, in a social life, someone's identity construction might also be influenced by the society and its ideology. Fairclough further states that the process of how people identify themselves and are identified by others is the core of 'identities' (2003).

There have been several studies attempting to analyze the *Big Bang Theory* from various perspectives. Many of them put the issues of scientist and gender stereotypes on spotlights. Weitekamp (2015) highlights the success of the sitcom along with the existing debates on gender, genre, and image of scientists and also stresses the importance of viewers' understanding on the context of the comedy. Some studies appreciate the quantity and presence of female scientist characters but criticize the idea that the works of female scientists are devaluated or ridiculed (Filipova, 2016; Naresh and Narayanan, 2021). It is further said that the women are stuck in stereotypical gender roles, which are 'seductresses' or 'mothers'. This is believed to discourage women who seek careers or jobs in science, technology, engineering, or mathematics (STEM) field. Similarly, Yi and Kaur (2019) in their study using Social Role Theory conclude that the male characters fit in the agentic role while female characters fit in the communal role which supports gender stereotypes. In addition to gender representation, Naresh and Narayanan (2021) also highlight the wrongful portrayal of the Indian character.

Hence, this study seeks to understand what stereotypes are found in two selected episodes of the *Big Bang Theory* and how is the power relation constructed through the perspective of Critical Discourse Analysis as this theory is believed and has widely been used to unveil hidden meanings of a text and figure out domination relation. CDA is always concerned with power relation (Weatherall, 2010). The hidden agenda juxtaposed in certain relation of power, based on the framework of CDA, is transmitted to the society and may affect their attitudes. Gatling et al. (2014) in their research on mid-life crisis comedy films conclude that the film industry can and does influence the attitudes and behaviors of societal ageist through the negative stereotyping on the aging process. Negative stereotyping seems to incessantly have a place in the media. Recently, CDA has been particularly used in studying gender stereotypes and discrimination (Weatherall et al. 2010; Sriwimon and Zilli, 2017; Siregar et al., 2018; Nurwahyuni and Samelia, 2020) in addition to a myriad of studies elucidating the differences of language used by men and women (Putri et al., 2017; Deutschmann and Steinvall, 2020; Dennin, 2021).

The use of Conversation Analysis (CA) in CDA research is not something new although it is also not as frequently used as other CDA analytical frameworks. Weatherall et al. (2010) mentions that identification and description of practices that carry out the kinds of actions that advance social life is a key objective of CA. Furthermore it is said that social interactions are regularly and normatively carried out by adjacency pairs. This, the researcher believes, makes CA an ideal analyzing tool to study media such as films. According to Van Dijk (1999), albeit not completely, CA and CDA share many things in common so that they can complement each other; one of which is that for the purposes of analyzing the social component of discourse, including socially situated exchanges and more extensive societal structures, both CA and CDA are pertinent.

METHODOLOGY

This study employs qualitative approach in which the analysis is elaborated descriptively. As the underlying theory, Fairclough's Critical Discourse Analysis is used, which combines two approaches namely conversation analysis and semiotic (language) analysis to achieve an adequately thorough analysis. The data sources in this study are the transcripts of two twenty-minute-long episodes of the series. Those are episode 15 of season 2 entitled *The Maternal Capacitance* and episode 3 of season 4 entitled *The Zappy Substitution*. The former transcript consists of 2.774 words, while the later transcript consists of 3.140 words. The two episodes were chosen based on consideration that the language used can significantly help answer the research questions. In addition, the data of analysis are the conversations of the characters and the audiovisual of the series which shows the tone and intonation of the speakers.

In the first step of the analysis, several linguistic aspects in the transcripts are analyzed. This includes analysis on grammatical, lexical, and phonological features; those cover Halliday's (2004) systemic linguistics, register, and tone and intonation. This analysis is also supported by the theory of materialization suggested by Jager (2001) in his dispositive analysis and Fairclough (2001) who calls it as material social process (as cited in Wodak and Meyer, 2015). This means analyzing any significant rhetorical means including figurative language, graphic contexts, and vocabulary used in the sitcom to interpret meanings. This is followed by conversation analysis to find out how the characters convey messages to the others and

the responses received. It is also considered necessary in some parts to analyze the visual images in the discourse as visual images and sound effects are parts of texts in the case of television and linguistic analysis is a part of what has recently been called 'social semiotic' analysis (Hodge and Kress, 1988; Kress and van Leeuwen, 1990) (as cited in Fairclough, 1995). The analysis of the text is then followed by the explanation on how the discourse is related to the sociocultural practice. This deals with the possibility of ideology transmission and its practices in the society in regards with power domination.

RESULT AND DISCUSSION

Identity of scientists: The stereotype

The analysis result of the language shows that the identity constructed in the sitcom is closely related to being an intellectual individual amongst ordinary people whose intelligence is considered average. These identity is reflected through several qualities of an intellectual person which are shown from the rhetorical means spoken by the characters in the sitcom as presented in Table 1.

Table 1. Characteristics of Intellectual Persons and Its Rhetorical Means

No	Characteristics	Rhetorical Means
1	showing mental cognition instead of emotion	- choice of verbs - choice of words
2	being self-centered	- first person pronoun - modality
3	avoiding chitchat	- answering efficiently - minimizing hedges
4	speaking formal language	- sentence coherence - formal structure - formal words
5	being exact or specific about anything	- interpreting someone's talk or question literally - being explicit - punctuality
6	being scientific	- relying on scientific theories or finding when they claim something - scientific terminology - analyzing anything even the simple ones
7	being monotonous	- monotonous speech tone and intonation

The first characteristic of an intellect or a genius is having a quality of cognitive ability. This can be seen from the use of mental processes, which are mostly found in *The Zazzy Substitution*. The samples of the process are presented in Table 2.

Table 2. Samples of Mental Process

No	Process	Participants		Circumstance
		Senser	Phenomenon	
1	believe	I (Sheldon)	she (Amy) is experiencing her menses	-
2	doubt	I (Amy)	you'd (Howard) understand	-
3	know	I (Sheldon)	what your (Leonard) point is	-

Believe is a strong word which is, for example, usually used by a researcher when they come to a certain finding or conclusion. It shows how someone can process information using their logical thoughts and deduces it in an assertion even though in the context Sheldon was wrong, for Amy bought feminine hygiene supplies because she wears it all the time for anticipation which strengthens different mindset between an intellectual person and they who are not. It also occurs with the verbs doubt and know which emphasize cognitive ability.

The self-identification of being a remarkable intellect is also seen from the use of relational process seen in Table 3. In example (1) Sheldon's mother gets difficulties to describe Amy, her son's girlfriend who is equally intelligent and 'geeky'. As a result, she identifies Amy as a perfectly unique young woman. In examples (2) and (3), which are relational-attributive processes, the adjective curious as the attribute is the focus. It shows that an intellectual person is always curious about anything, even about simple things that usually happen in daily life. The choice of word might also indicate intellectuality, for instance Beverly, Leonard's mother, chooses to introduce herself as Dr Beverly Hofstadter to Penny. The insertion of *Dr*

emphasizes her level of education. The choice of difficult word is also frequently found in Sheldon's utterances, for example he uses the term *juvenile amalgamation* instead of saying that what Penny does is *immature*; that is when Penny calls him and Amy 'Shamy'.

Table 2. Samples of Relational Process

No	Process	Participants				Circumstance
		Token	Value	Carrier	Attribute	
1	is	she (Amy)	perfectly unique young woman	-	-	-
2	am	-	-	I (Amy)	curious	as to why we're not eating alone (matter)
3	was	-	-	I (Amy)	curious	as a neurobiologist (matter)

The second characteristic is self-centeredness which can be seen from the dominant use of first person pronoun as the centre participant of the clause process. The examples are the sentences uttered by Sheldon.

1) *I'm the social glue that holds this social group together.*

2) *Do I detect a hint of condescension?*

In example (1), besides the use of first person pronoun, the metaphor *social glue* shows over self-confidence which strengthens the self-centeredness. Meanwhile, in example (2), instead of using the phrase *Do I..?*, Sheldon can actually use second person *Do you..?* or non-person *Is it...?* to make it less self-centered. Meanwhile, modality may also be used to indicate self-centeredness. It is found in Amy's sentences as follow.

I must take responsibility. I had to stop for feminine hygiene supplies.

The modulations *must* and *had to* refer to self-obligation. Nobody obliges Amy but herself. It is her responsibility as it has been stated in the sentence. Here, the modality identifies the participant to be the controller of her life, putting the central point on *self*.

The third representation is that an intelligent person will avoid chitchat or table talks. This is manifested in efficient answers or talks with minimal use of hedges which might suggest that the speakers are certain about anything. The example is the following conversation between Sheldon and Amy when they are playing Counterfactuals game.

Sheldon : In a world where a piano is a weapon, not a musical instrument, on what does Scott Joplin play The Maple Leaf Rag?
 Amy : Tuned bayonets.
 Sheldon : Defend.
 Amy : Isn't it obvious?
 Sheldon : You're right. My apologies.

The fourth characteristic is speaking formal language which is seen from the choice of formal words or formal structure of utterance and great attention on sentence coherence. Three characters in the sitcom *Sheldon, Amy, and Beverly* tend to use formal language while speaking, compared to the other people especially Penny who speaks informal language. She is used to using informal words such as *righty*, *gonna*, and *Shamy* as a combination of Sheldon and Amy. The example of the sentence coherence is Amy's sentence "*In order to avoid surprises, I wear them all the time*".

The fifth characteristic of intellectual persons is being exact or specific. This can be seen for example when someone is being very literal and explicit as shown by Amy in the following conversation. Amy has interpreted Penny's questions literally, while Penny actually starts a small talk.

Penny : All righty. What's new?
 Amy : Well, just recently, I learned that you refer to us as Shamy, and I don't like that.
 Penny : I got it. But what I was going for was, you know, how's your life?
 Amy : Like everybody else's. Subject to entropy, decay and eventual death. Thank you for asking. Why is she not taking our order?

Being exact can also be marked by exact numbers, for instance when talking about time. The example is when Beverly said to Leonard "*But it's one o'clock, you were going to show me your laboratory at one o'clock*".

The sixth representation of intellectual acuity is being scientific which is marked by the use of scientific terminology, analytical trait, and reliance on scientific theory or scientific data. The examples of the terms are *scientific inquiry*, *menopausal symptom*, *urinate*, *substrates*, *unified theory*, *colonoscopy*, and *external locus*. Analytical trait is formed as a habit of the intellects as well. One example is when Beverly studied the elevator in Leonard's apartment.

Penny	: It's out of order.
Beverly	: Yes, I can read the sign, I'm just pondering the implications.
Penny	: I think it implies that the elevator doesn't work.
Beverly	: Again, I can read the sign. But the sign and the tape are covered with a layer of dust, which indicates that the elevator has been non-functional for a significant amount of time. Which suggests either a remarkable passivity among the, I assume, 24 to 36 residents of this building based on the number of mailboxes and given typical urban population density or a shared delusion of functionality.

The claim that an intellect is portrayed as someone overly relying on scientific data can be seen for instance from Beverly's statement when she is discussing Penny's job as an actress "*Well, there are studies that suggest that many who go into the performing arts suffer from an external locus of identity*". It indicates that an intellect does not make up stories. Instead, he/she tries to provide valid and reliable evidence.

The seventh or last representation of intellectual persons is monotone. Sheldon, Amy, and Beverly rarely vary their speech tone and intonation. This is probably due to their lack of emotional feelings and, therefore, they lack emotional expressions as well. The seven representations of intellectual persons above indicate awkwardness. Their way being too logical and less emotional results in a robotic manner.

The robotic manner of the scientists give impacts on their social interactions which can further be explained through the result of conversation analysis. In the two episodes, the big themes are man and woman relationship, and maternal relationship, where the social interactions among the characters are partaking. From the conversations, it can be seen that awkwardness and reliance on cognitive ability make a hindrance on the interactions with other people. The scientists portrayed in the sitcom lack social skills, meaning that they do not really know how to interact with others normally and, therefore, they should struggle over it. The examples are when the intellectual characters avoid chitchat or small talks, which is commonly used as social means to establish a good social interactions and to reduce social gaps.

Penny	: Uh, I'm Penny. I'm his neighbour.
Leonard's Mother	: Oh, Dr. Beverly Hofstadter.
Penny	: Oh, nice to meet you.
Beverley	: Oh, you're a hand shaker. Interesting.
Penny	: Uh, why don't you come with me. I'll walk you to the apartment.
Beverley	: Oh, all right. Would you like to exchange pleasantries on the way?
Penny	: Yeah, sure, I guess.

From the conversation, it is seen that instead of initiatively start a small talk with Penny, Beverly offers it by saying *Would you like to exchange pleasantries on the way?*. The use of polarity (Yes/No question) will usually indicate social interaction, but in this case the polarity is not commonly asked by people in order to achieve it. If Penny answers *no*, then they will remind silent and social communication is not going to happen. Besides, Beverly's surprise that Penny is a hand shaker and her word *interesting* imply that she is not used to it. Meanwhile, hand shaking is common in people's day-to-day interactions.

Intellectual people in the sitcom are also represented as individuals who have a tendency to talk about something which people might consider inappropriate to discuss, particularly with a stranger. This is seen from Penny and Beverly's conversation as follow.

Penny	: Right, okay. What was he like when he was young?
Beverley	: You'll have to be more specific.
Penny	: Oh, um, okay, like, five or six. Five.
Beverley	: Oh, well, at that age he was well enmeshed in what Freud would call the phallic stage of psychosexual development. An outmoded theory, of course, but the boy did spend most of his waking hours with a tight grasp on his penis.

Other people might choose to talk about different things when they discuss their sons instead of telling people about their psychosexual development like what Beverly does. This kind of conversation will more likely create an awkward moment.

The worse part of this, as mentioned before, is the impact on social relationship. In the analyzed series, the impact is on the relationship either with the opposite sex or with the family members. Leonard's insensitivity, which is probably also driven by his being drunk, to some extent ruins his relationship with Penny. It is seen in the conversation when they are going to be intimate.

Leonard	: You shush, I'm happy, I want to talk about it. You know what my mother would say about this? She would say because you were not loved by your father and I was not loved by my mother, that having sex is our way of making up for the intimacy we didn't get as children.
Penny	: Why would you bring that up right now?
Leonard	: I don't know. Foreplay?
Penny	: So you're saying you're not having sex with me, you're having sex with your mother?
Leonard	: Ummmm, I'm gonna go with "no."
Penny	: That is the sickest thing I've ever heard.
Leonard	: Come on, you're trying to have sex with your father, and I'm okay with that.
<i>Scene</i>	: <i>Penny's front door.</i>
Penny	: Get out!

As Leonard gets drunk and his head is full of maternal issue, Leonard cannot resist discussing it with Penny. Penny's response to Leonard's discussion suggests that his decision to talk about the topic during the intimate moment is unacceptable. Discussing an issue not in the right time will lead to unsuccessful social communication.

In addition, Sheldon's decision to terminate relationship with Amy is seemingly a result of his inability to maintain good communication. It then should leads to Sheldon's 'silent' desperation in the form of cat substitution. Not only with Amy, but Sheldon also has difficulty to have a good interaction with his fellows. He, for instance, always say '*greetings*' when he wants to greet his friends instead of saying '*hello*' or '*hi*'. Luckily his friends have been used to Sheldon's uncommunicative speech and behaviour. This implies that besides self-identity, the success level of social interactions might also be determined by how close the relationship is. However, when meeting strangers, it is self-identity that people construct which determines whether they will dominate or be dominated by others.

Beverly's lack of social skills has given great negative influences on her social relationship with his son, Leonard. Beverly apparently cannot appreciate his son's achievement, of which other women will probably be proud. This is proven from their conversation about Leonard's work.

Leonard	: Fine. Let's go. I think you'll find my work pretty interesting. I'm attempting to replicate the dark matter signal found in sodium iodide crystals by the Italians.
Beverley	: So, no original research?
Leonard	: No.
Beverley	: Well, what's the point of my seeing it? I could just read the paper the Italians wrote.

Appreciating someone, especially the one who is close such as a family, is a key to build a good social interactions which will also help to establish a good social relationship. Satisfying social relation can also be achieved when people are able and willing to appreciate simple actions. Yet, Beverly is not sensitive enough to do this as seen in the following conversation when Leonard makes his mother a cup of tea.

Leonard: Here's your tea, Mother.
Beverley: Oolong?
Leonard: Yes.
Beverley: Loose, not bagged?
Leonard: Yes.

Beverley: Steeped three minutes?
Leonard: Yes.
Beverley: Two-percent milk?
Leonard: Yes.
Beverley: Warmed separately?
Leonard: Yes.
Beverley: One teaspoon sugar?
Leonard: Yes.
Beverley: Raw sugar?
Leonard: Yes.
Beverley: It's cold.
Leonard: I'll start again.

Leonard's effort to satisfy his mother's request is unappreciated due to a 'mistake' he has made. Another example is when Beverly wants to return home, she has an awkward parting with Leonard.

Leonard	: All right, Mother. Um, have a nice flight.
Beverley	: That's not really in my control, is it? Oh, uh, yes (<i>gives him a very uncomfortable hug.</i>)

Here, the visual image which shows Beverly's uncomfortable hug and together with her answer shows how she is very awkward and makes the situation awkward as well. Beverly's unwillingness to pay attention to Leonard is also shown when he tells Penny how he built a hugging machine when he was child so that it could pat his back, and even his father used to borrow it. On the other hand, the ideal figure of a mother for Leonard is quite the opposite of his mother. The claim is supported by Leonard's description about an ideal mother that he sees lie on Sheldon's mother.

Leonard : *Sheldon, you don't give your mother enough credit. She's warm, she's loving, she doesn't glue electrodes to your head to measure your brain waves while potty training.*

From the conversation analysis, how awkwardness and reliance on cognitive ability give negative impacts on the establishment of social interactions is clearly portrayed in the sitcom. The conversations also indicate power struggles of the characters in the social groups. The intellectual characters try to dominate by showing their excellence through the language they utter which brings awkwardness and irrelevance into their social communication. However, they are suppressed by the social construction; the ones who develop social skills are more powerful as they can handle any social interactions without hindrance.

The scientists with superb intelligence is stereotyped as 'geeks' or eccentrics who struggle with their social life. Naresh and Narayanan (2021) in their article write that anyone with intellectual mindset in most cases in the sitcom is considered a 'nerd'. There are opposing views on whether the image of scientists in the Big Bang Theory is a negative depiction of the historically bullied groups. However, the ultimate goal of a comedy is to make laughs and amuse the audience, and the humors in the Big Bang Theory are centralized on the stereotyped image of the scientists. This is in line with Weitekamp (2015) who writes that comedic portrayals of scientists in movies and television sometimes simply play the existing stereotypes to make the viewers laugh. It is further mentioned in the article that audience need to understand the 'complex social convention and generic rules' underlying the sitcom in order to appreciate the humorous aspect. That is, the sitcom can be more well-accepted by people whose experiences and context are relatable to the story, for example scientists and engineers. Otherwise, the sitcom may affect the society attitudes towards intellectual scientist group with the believed stereotype that they cannot balance their intellectual mind and their social skills.

Gender Stereotypes

Gender representation is one of the issues contributing to the embodiment of stereotypes in the stories. The first aspect to notice is the proportion of the male and female characters as well as the proportion of male and female intellectual figures. In the two episodes, there are six scientists and two 'ordinary' people including Penny and Mrs. Cooper (Sheldon's mother). In *The Maternal Capacitance*, there are 4 male characters and two female characters, while in *The Zazzy Substitution* there are 4 male characters and three female characters. Relevantly, the proportion of scientists includes four males and two females. This might suggest that there are more male geniuses rather than the female ones which might lead to the stereotype that man is smarter than woman in the way that man is more logical and less emotional than woman. The presence of female scientists in the series may compensate the possible stereotype if both female scientists

are not depicted as horrible women. One is identified as judgmental, sanctimonious, and obnoxious girlfriend, while the other is portrayed as an analytical but cold, awkward, and uncaring mother who are unable to express her affection towards her own son. This can be seen, for instance, in the conversation between Leonard and his mother, Beverly.

Leonard	: So, Mother, what's new?
Beverley	: You'll have to be more specific.
Leonard	: All right. Uh, what's new with you?
Beverley	: Oh, well, I've been having some fascinating menopausal symptoms recently.
Leonard	: Maybe something less personal.
Beverley	: Oh. Your Uncle Floyd died.
Leonard	: Oh, my God. What happened?
Beverley	: His heart stopped beating. I have to urinate.

Beverly's unsatisfying answer to Leonard shows her indifference, while it turns out later that Uncle Floyd is Leonard's closest family. This is supported by Leonard's use of metaphor related to his mother "*My head is her summer house*" which implies that his mother gets the power and authority to control him and it brings him suffer. Beverly's insensitivity is also seen from the use of "*his heart*" as an actor or subject of the sentence *his heart stopped beating*, rather than telling Leonard what made Uncle Floyd die. The choice to emphasize *heart* as an actor indicates that Beverly does not have or does not want to show enough emotional feeling and so she belittles her brother's death.

Meanwhile, the other note around gender representation is reflected through Howard's comment when Sheldon terminates his relationship with Amy.

Howard: *Women, huh? Can't live with them, can't successfully refute their hypotheses.*
Howard's statement suggests that if a man cannot rule a woman, he cannot live with her. Thus, women are seen as difficult and complicated individual and, therefore, it is not easy to understand them.

After all, it is not only female scientist who is portrayed as a horrible woman character. Penny and Mrs. Cooper are also depicted as individuals who do not meet the standard of their closest people. Instead of impressed by his mother, Sheldon adores the qualities Leonard's mother has.

Sheldon : *Your mother is brilliant, analytical, insightful, and I'm betting she never hit you with a Bible because you wouldn't eat your Brussels sprouts.*

Sheldon's sentence above implies that his mother is a religious person, with which he is not comfortable, and pays much attention to him in a way which he does not like. On the other hand, Penny being not adorable is found in the scene where Howard, Leonard, and Raj gather in Penny's apartment.

Penny	: Kinda, sorta had to?
Leonard	: I didn't agree with him.
Penny	: Well, you defended me, right?
Leonard	: I tried, but (<i>Penny starts rubbing her foot with a pumice stone</i>) he made a fairly well-reasoned argument.

The analysis here is more on the visual image where Penny rubs her foot and Leonard does not seem comfortable with that. He frown his eyebrows which might imply that Penny's attitude is unacceptable or roughly obnoxious, but he chooses not to tell her directly.

The claim about terrifying women is strengthened by the two characters, Howard and Raj. Howard lives with his mother and Raj is mute when there is a woman around, unless he gets drunk. This is proven by Beverly's statements.

Beverley : *You know, both selective mutism and an inability to separate from one's mother can stem from a pathological fear of women. It might explain why the two of you have created an ersatz homosexual marriage to satisfy your need for intimacy.*

The phrase *fear of women* in the statements represents the idea that women are scary.

Through the analysis, it can be inferred that women are represented as complicated persons who sometimes appear to be horrible and terrifying, particularly when they become too logical. This departs from the stereotype in the society that women are supposed to be warm, caring, and loving individuals or many people may choose to say 'motherly'. As a result, when they are excessively intelligent they will in fact

lose their ‘logic’. Moreover, based on the maternal issue in the series, women are and are going to be mothers who should take care of their children with affection.

Gender stereotyping is also built through the character named Penny, the solely main character who is not a scientist. She is portrayed as a ‘beautiful blonde’ throughout the seasons who becomes the object of jokes related to lacking intellectual acuity. Penny is a character that are given compliments for her body and physical appearance. It is also worth mentioning that the ‘beautiful’ Penny has the most excellent social skills. This may strengthen the idea that to be confident and well-accepted by the society, women need to fulfil certain standard of beauty, which is now an issue frequently brought up in social media.

CONCLUSION

Based on the analyses, the sitcom’s key to gain humorous elements are by exaggerating the self-identity of intellectual social groups which includes gender stereotyping. The stereotype sees geniuses as outstanding individuals who have remarkable brain and knowledge, but awkward in social life. They lack capability to well-interact with ordinary people, or even with the other scientists, because of their complicated language and excessive logical thoughts. This stereotype might transfer values which are believed by the audience and possibly develop in the society who do not understand the complicated social convention and generic rules of the group.

Besides, this social group of scientists is also dominated by men, implying that women may not fit in the scientific world. The presents of female intellects in the sitcom, although can be a good idea, in fact strengthens the premise that genius women will oppose their ideal identity which are caring, loving, affectionate, and well-mannered. It is ironic that in the 21st century where liberalism is getting sturdier, Americans still preserves traditional values. This might suggest that there is no absolute freedom of human race, and there are always dominated and dominating parties.

The emerge of opposing views whether the characters are a negative portrayal of scientists shows that the sitcom as a media discourse affects the society attitudes. Television consumers and the consumers of other similar media, therefore, should be aware of what makes them laugh.

REFERENCES

Dennin, K. (2021). The changing language of women on the Big Bang theory. *SN Social Sciences*, 1(11). <https://doi.org/10.1007/s43545-021-00273-9>

Deutschmann, M., & Steinvall, A. (2020). Combatting linguistic stereotyping and prejudice by evoking stereotypes. *Open Linguistics*, 6(1), 651-671. <https://doi.org/10.1515/olpi-2020-0036>

Fairclough, N. (1995). *Media Discourse*. London: Edward Arnold.

Fairclough, N. (1997). *Critical Discourse Analysis: The Critical Study of Language*. London: Longman.

Fairclough, N. (2001). *Language and Power*. 2nd Edition. London: Longman.

Fairclough, N. (2003). *Analyzing Discourse: Textual Analysis for Social Research*. London: Routledge.

Fairclough, N. (2001). Critical Discourse Analysis as A Method in Social Scientific Research. In Wodak and Meyer (Eds.), *Methods of Critical Discourse Analysis* (pp. 122-123). London: SAGE Publications Ltd.

Filipova, P. (2017). Women (and) scientists: modern sexism in The Big Bang Theory. *Océáinde*, (9), 2.

Gatling, M., Mills, J., & Lindsay, D. (2014). Representations of middle age in comedy film: A critical discourse analysis. *The Qualitative Report*, 19(23), 1-15.

Halliday, M.A.K. 2004. *An Introduction to Functional Grammar*. Third Edition. London: Hodder Education.

Jäger, S. (2001). Discourse and knowledge: Theoretical and methodological aspects of a critical discourse and dispositive analysis. *Methods of Critical Discourse Analysis*, 32-62. <https://doi.org/10.4135/9780857028020.n3>

Naresh, S., & Narayanan, V. (2021). Popularity Or Political Correctness-A Closer Look At The Big Bang Theory. *NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal/ NVEO*, 9616-9631.

Nurwahyuni, K., & Samelia, M. (2021). Stereotypes and discrimination in the "Green book" Movie: A critical discourse analysis. *International Journal of Systemic Functional Linguistics*, 3(1), 44-50. <https://doi.org/10.55637/ijjsfl.3.1.3000.44-50>

Putri, D. E., Putri, K. H., & Putri, E. Y. (2017). Language and gender: A conversation analysis in the difference of language related to gender. *Proceedings of ISELT FBS Universitas Negeri Padang*, 5, 21-26.

Siregar, A. L., Gurning, B., & Santoso, D. (2019). Stereotyped language about women on internet memes of meme comic Indonesia (A multimodal critical discourse analysis). *LINGUISTIK TERAPAN*, 15(2). <https://doi.org/10.24114/lt.v15i2.12350>

Sriwimon, L., & Zilli, P. J. (2017). Applying critical discourse analysis as a conceptual framework for investigating gender stereotypes in political media discourse. *Kasetsart Journal of Social Sciences*, 38(2), 136-142. <https://doi.org/10.1016/j.kjss.2016.04.004>

Van Dijk, T. A. (1999). Critical discourse analysis and conversation analysis. *Discourse & Society*, 10(4), 459-460. <https://doi.org/10.1177/0957926599010004001>

Weatherall, A., Stubbe, M., Sunderland, J. A. N. E., & Baxter, J. (2010). *Conversation analysis and critical discourse analysis in language and gender research: Approaches in dialogue*. na.

Weitekamp, M. A. (2015). 'We're physicists': Gender, genre and the image of scientists in the Big Bang theory. *The Journal of Popular Television*, 3(1), 75-92.

Yi, K. Y., & Kaur, M. (2019). Gender Discourse in American TV Series The Big Bang Theory. *International Journal of English Literature and Social Sciences*, 4(2), 513-524. <https://doi.org/10.22161/ijels.4.2.48>