CHAPTER I

INTRODUCTION

This chapter consists an overview of the weak version of Sapir-Whorf Hypothesis or moderate 'Linguistic Relativity' as the topic chosen by the researcher. Started with the study focus of Sociolinguistics and the theory chosen within this research which is Linguistic Relativity and its close relation with culture just as Sociolinguistics suggest the interrelationship between Linguistics and culture. Its significances as well as outlining structure of the rest further chapters is within the connection with cultural embodiment happens between interaction dynamics of Neuro-sama the AI VTuber and her community. Specified the scope of pop culture on digitally online social media platforms in where she as the object representing the genre as an active content creator, established literature also involved by the researcher in putting language-thought-culture and world view as the main themes. Thus each part is explained within divination of sub-chapters as Background of Research, Statement of Problem, Research Objectives, Research Significances, Definition of Key Terms and Organization of Writing.

1.1 Background of Research

As how Sociolinguistics focuses on linguistics in relation with culture, based on what Stern (1983: 203) stated that the "Whorfian Hypothesis" known also as Sapir-Whorf Hypothesis or in another version of "Linguistic Relativity" term is

1

a broad principle about how language is related to realm of cognition and culture thus its society and personal at the same time in creating certain perspective around them. The main concept of the theory is specifically a pinwheel effect with how it thus affect each other as well as the thought in creating certain "world view" later on.

Technology is a keyword leading the modern era as it is part of the globalization, especially in current context. Wallerstain (in Utomo, Sangwa Cahyo and Rumambo Pandin, 2021: 15) describes the situation of it simply as an unlimited relations across border. Abrams (1999: 15) mentioned that solid example of this shifting on early-technology also happened during fifteenth and sixteenth centuries in history when written-media in the form of manuscript replaced by printed media culture later. With the role of technologies development, globalization makes each part of the world even connected and become closer in one go.

In the world of globally vast online communities then created due to the impacts of digitalize culture, any individual is possible to embrace new forms of expression in interaction virtually. Thus exists the AI. In short for 'Artificial Intelligent', it is created by a programmer using certain computational languages model without a real physical form. A virtual entity, a product of technology resulted from how much languages and culture rapidly growing and shifting bypassing times. Verma (2018: 5) described Artificial Intelligent as all about a smart learning machine and software that is able to think, learn, know things, talk, understand and recognize things around them. Contrary to the statement from Lakoff (1978: 274) in quotation on how uncertain the future of AI growth is, yet he

himself also stated that despite it still develops to a limited range—it is possible to provide both pragmatic and function of linguistic discourse while giving its own meaning aspects (ibid.: 269).

Characterized with interactive language, diverse perspective and cultural application facilitating as well as contributing to the dynamic exchange mutually happens between AI and humans—the AI also learn more about human unpredictable input, while also raising cultural landscape within the media environment of human and human-like relation being.

As AI technologies progressing to advance, it is providing even more assistance in matters involving emotional fulfillment over any kind of media persona it is embodied. While the existence of AI has revolutionized various aspects including entertainment and media consumption, platform like YouTube (YT) is a big part of this in helping even AI-powered content creator to reach lots of people. A human-like program acts as part of YouTuber (the one serving YouTube contents) community is referred to AI Virtual YouTuber or in short the 'AI VTuber'. While the VTubers themselves as stated by Lufkin and Gigguk (as cited in Byron, 2022: 1) commonly known as internet personalities who hide their real identities behind virtual avatars, often inspired by Japanese pop culture like anime [Japanese film and television animation] and manga [Japanese comic book or graphic novel]. They use animated characters or either 2 dimensional (SD) or 3 dimensional (3D) avatars and motion capture technology for their videos and live streams.

Thus an AI VTuber then means a type of YouTuber with the result of complex computational language program embedded in a configured interactive virtual character appearance to be more appealing for the viewers (target audiences) who interacts with them by chatting, reacting, joking, even singing and showcasing its ability just like what regular YouTubers do despite its limited range of movement compared to human YouTubers. Unlike its common commercial idea of a real person hides behind an avatar persona, AI VTuber is slightly untraditional sort of streamer. AI VTuber genre is leading a new trend in streaming-based content creator and VTuber usual culture. A programmed figure's personality supposedly doesn't hold much a mysterious profile to hide compared to the mainstream wave of human VTubers since it's AI-powered with its own intelligence uniqueness that can learn and grow despite pre-programmed to some extend in advance.

Hence, Neuro-sama, that's what a name by a male programmer known as Vedal from United Kingdom given to the YT channel as well as serving as the name of the AI VTuber character in mentioned. Neuro-sama as an interactive persona has several generated personalities to carry as an AI VTuber in order to make the persona is more known with distinct uniqueness, more alive and approachable to interact with also to be more relatable with the human audiences between every interaction. Those cognitive personalities and appearance-wise related characteristics are showed in the banner of the YT channel itself which those are sassy, pretty friendly, loves Vedal, wide eyes, very positive and gymbag smell.

Regarding Linguistic Relativity and its usage, the first previous study researched by Buba, Malami and Ibrahim (2022) goes by *Linguistic Relativity And*

Related Phenomenon: Implication For Language Teaching which notably specified the use of original Linguistic Relativity principle in the world of English Teaching to be applied in ESL (English as a Second Language)-based of English language learning in Nigeria where civilians especially students mostly use Nigerian language instead. The second study in term of involving AI-Human Interaction (AHI) within goes by the name of *Assessing Human-AI Interaction Early through Factorial Surveys: A Study on the Guidelines for Human-AI Interaction* by Li, Tianyi et al. (2023) conducted with a large amount of 1,3k participants from crowdsourcing providers. The research focused on examining the "human-AI interaction" with two AI products instead in considering users participated on the surveys gained experiences to find further solution and several testing before investing it in engineering field to tell the differences. This interaction instead illustrated the harmony of AHI by using language as mediator to later on being perceived from human's perspective (mind) and societal values while the AI uses the feedback as its development and cultural reset of what can be accepted and not, as both shares the same role as providers consumers. The third is within this *Virtual YouTuber Kizuna AI: Co-creating human-non-human interaction and celebrity-audience relationships dissertation* work by Zhou (2021). Zhou focuses more to investigate Kizuna AI, the one who popularized the genre of VTuber, and her digital persona introduced in a CG form or also commonly interpreted as a 'Computer-Generated' character. Using celebrity approach, media audience and fan studies for the theoretical framework instead, this research thus focusing more on how the analysis of Kizuna AI as one of the pioneers from the birth of VTuber digital culture

in articulating how she works as a virtual content creator in both in verbal and in visual approach.

Therefore the researcher is interested in the interrelationship between language, thought, culture and world view-building as the principle beyond such Whorfian principle without excluding cultural references happens within. The study is conducted by selecting Neuro-sama as the prominent figure of AI and anti-mainstream type of VTuber on YT and Twitch. Neuro-sama engagement with her community is what opened possibilities that the target thought, culture and world view-shaping is interfered by the native languages they carry. Thus, the researcher provides this thesis goes by the title of, "**Digital Linguistic Relativity in *Neuro-sama* the AI VTuber and her community dynamics**".

1.2   Statement of Problem

Based on previous explanations the problem is what the aspects of language, mind, world view and culture are caused by AI VTuber-Human Interaction (AVHI) that happens thus being analyzed more thoroughly. Also how cultural impact Neuro-sama brings to her community and how it later being perceived as a new or shifted world view to them in relation with social implication within. Therefore, the researcher formulates several research questions from the problems above as:

1. How do the dictions by Neuro-sama the AI VTuber and her community engagement on the respective platforms influence each other's Linguistic Relativity aspects?

2. How does Linguistic Relativity being examined in AI VTuber-Human Interaction (AVHI) of Neuro-sama the AI VTuber and her community through Sociolinguistics's cultural interferences?

1.3 Research Objectives

1. To investigate dictions of Neuro-sama and her community influence each other's aspect of Linguistic Relativity

2. To examine cultural interferences of Sociolinguistics within Neuro-sama and her community exchanges

1.4 Research Significances

1. Theoretically

    This research is able to give a benefit, providing deep understanding and inspiration theoretically for further researchers especially English Literature Department. Also to serve as additional source of Sociolinguistics analysis particularly in using Whorf and Sapir's theory of Linguistic Relativity as moderate version from Sapir-Whorf Hypothesis in digital realm of AI VTuber-Human Interaction.

2. Practically

This research is able to be a textual tool to implement Sociolinguistics study in real life world especially to give more insight on how Linguistic Relativity by Whorf and Sapir leading to more engaging and effective communication. Besides, the practical advantage of this research is to provide guide development in building a more harmonious and supportive online environment of AI VTuber-Human Interaction thus to promote cross-cultural communication in digital platforms at once.

1.5   Definition of Key Terms

1. Linguistic Relativity

As a hyphothesis, it originally means how one's language structure affects how their behavior comprehends the reality and honor it (Whorf, 1956: 23).

2. Sapir-Whorf Hypothesis

Another term invented by linguists in revising original Linguistic Relativity specifically discussing language, thought and culture (Jakobson, 2009: 4).

3. Sapir-Whorf Hypothesis (Weak Version): Linguistic Relativity

The weaker or "moderate" version of the hypothesis in which an individual's language only partially shaping the cognitive pattern, Jakobson (2009: 25).

4.   Language

Is a solid sense of words and phrases used by any individual to convey what's in the mind, Whitney (in Chomsky, 1964).

5.   Thought

Thought or mind links things together in solving problems and is formed through language, Vygotsky (2006: 218).

6.   Culture

Is a "left over", a valuable remain, to a person after they forget the particular things they intentionally tried to learn from formal education, Powys (1930).

7.   World view

Reflection of peoples' different interpretation in seeing the world amidst difference languages, Silalahi (2011: 82).

8.   Artificial Intelligent

"...the science and engineering of making intelligent machines", McCarty in Manning (as how cited by Li and Pang 2024: 2).

9.   Social Media

A variety of interactive internet applications that enable users, either collaboratively or individually, to create, curate, and share content generated by its user. Platforms within it including Facebook, YouTube, Instagram, etc. (Davis, 2016: 1).

10.   Virtual YouTuber

In short is VTuber, indicates a virtual entity embodied within a certain avatar character by using technology of Motion Capture and [Computer Graphic/Computer Generated] CG, Kim and Yoo (2021: 3).

1.6   Organization of Writing

This research presents five amount of chapters as follows:

Chapter I: Introduction

This chapter consists an overview of the weak version of Sapir-Whorf Hypothesis or moderate 'Linguistic Relativity' as the topic chosen by the researcher. Started with the study focus of Sociolinguistics and the theory chosen within this research which is Linguistic Relativity and its close relation with culture just as Sociolinguistics suggest the interrelationship between Linguistics and culture. Its significances as well as outlining structure of the rest further chapters is within the connection with cultural embodiment happens between interaction dynamics of Neuro-sama the AI VTuber and her community. Specified the scope of pop culture on digitally online social media platforms in where she as the object representing the genre as an active content creator, established literature also involved by the researcher in putting language-thought-culture and world view as the main themes. Thus each part is explained within divination of sub-chapters as Background of Research, Statement of Problem, Research Objectives, Research Significances, Definition of Key Terms and Organization of Writing.

Chapter II: Theoretical Framework

This chapter consists theoretical groundworks of this research by integrating existing knowledges as well as identifying gaps of areas for further investigation. Involves reviews of literature related to the topic chosen by the researcher. Thus divided into major sub-chapters as Sociolinguistics, Linguistic Relativity, Sapir-Whorf Hypothesis, Communication Patterns, AI VTuber-Human Interaction (AVHI), Online Video Streaming Platforms: YouTube and Twitch thus Neuro-sama.

Chapter III: Research Method

This chapter consists the methods and procedures used to conduct the research including data collection and sample of analysis in general. Providing detailed explanations and serves as a map for replicating this research and contributes to the transparency and unity of the whole research process. Thus divided into sub-chapters as Research Design, Source of Data, Sample of Data, Technique of Analyzing Data and Technique of Collecting Data.

Chapter IV: Findings and Discussions

This chapter consists detailed overviews of the main discovery organized by theme that represents key aspects of them. Also provides a comprehensive exploration of this research findings and their implications.

Chapter V: Conclusions

This chapter consists a review and summarization of this research thesis. The conclusions are formulated from the accumulation of previous chapters.