## Embodied Cognition in '1st appeal': Integrating Spoken Word, Sound, And Movement as Choreographic Tools

Muhammad Fairul Azreen Mohd Zahid¹™, Mohd Kipli Abdul Rahman², Ahmad Kamal Basyah Salehuddin², Syahrul Fithri Musa², Yanti Heriyawati³

<sup>1</sup>LASALLE College of the Arts, School of Dance and Theatre, Singapore <sup>2</sup>Universiti Teknologi MARA, Malaysia <sup>3</sup>Universitas Pendidikan Indonesia, Indonesia

Submitted: March 15, 2025. Revised: May 24, 2025. Accepted: June 9, 2025

#### **Abstract**

This research investigates the intersections of embodied cognition, language, and culture in dance, drawing on theoretical frameworks from anthropology and performance studies. Through an Auto Ethnomethodological approach, using the case study of "1st APPEAL" self-creation, this study examines how dancers employ spoken word, sound, and movement to interpret and negotiate choreographic intentions. By applying embodied cognition as a lens, this research reveals the complex relationships between language, culture, and embodiment in dance. This research lies in its innovative application of embodied cognition to dance practices, highlighting the crucial role of embodied experiences in shaping dancers' understanding and execution of choreographic intentions. This research will contribute to a deeper understanding of the intricate relationships between language, culture, and embodiment in dance, providing valuable insights for dance practitioners, choreographers, and educators. The findings also underscore the importance of considering embodied and cultural contexts in dance practices, ultimately enriching our understanding of choreographic tools and creative processes.

Keywords: cognition; contemporary dance; choreographic; ethnomethodology

How to Cite: Zahid, M. F. A. M., Rahman, M. K. A., Salehuddin, A. J. B., Musa, S. F., & Heriyawati, Y. (2025). Embodied Cognition in '1st appeal': Integrating Spoken Word, Sound, And Movement as Choreographic Tools. *Harmonia: Journal of Arts Research and Education*, 25(1), 227-252

### **INTRODUCTION**

Embodied cognition is a theoretical framework that posits that cognitive processes, including perception, attention, and memory, are deeply rooted in the body's sensorimotor experiences (Barsalou, 2008); (Wilson, 2002). This framework challenges the traditional view of cognition as a purely mental process, instead emphasizing the integral role of the body in shaping our experiences and understanding of the world.

In the context of dance, embodied cognition offers a powerful lens through which to examine the complex relationships between spoken word, sound, movement, and the dancer's mind and body.

One key aspect of embodied cognition is embodied culture, which refers to the ways in which cultural norms, values, and practices shape our bodily experiences and perceptions (Csordas, 2002). In dance, embodied culture plays a crucial role in shaping the ways in which dancers inter-

pret and respond to spoken word, sound, and movement. For example, a dancer's cultural background may influence their understanding of specific dance styles, such as ballet or hip-hop, and the ways in which they embody these styles in their movement. Another important subtopic within embodied cognition is embodied psychology, which examines the ways in which bodily experiences and sensations shape our emotional and psychological states (Damasio, 2003). In dance, embodied psychology is essential for understanding how dancers' bodily experiences and sensations influence their emotional and psychological responses to spoken word, sound, and movement. For instance, a dancer's bodily experience of tension or relaxation may shape their emotional response to a particular piece of music or spoken word.

Embodied simulation is a third key subtopic within embodied cognition, which refers to the process by which we simulate others' bodily experiences and sensations in order to understand their emotions, intentions, and actions (Gallese, 2003). In dance, embodied simulation plays a critical role in shaping the ways in which dancers interpret and respond to spoken word, sound, and movement. For example, a dancer's ability to simulate the bodily experiences and sensations of a choreographer or fellow dancer may influence their understanding of specific dance movements or phrases. In addition to these concepts, the notions of Performative and Constative acts can further enhance our understanding of how the body and brain function and relate to the choreographic tools. According to (Austin, 2025), performative acts refer to the ways in which language and speech can be used to perform actions, such as making promises or giving orders. In dance, Performative acts can be seen in the ways in which spoken word and movement can be used to create and negotiate meaning. For example, a dancer's use of spoken word can be seen as a Performative act, as it can be used to create a particular atmosphere or mood.

Constative acts, on the other hand, refer to the ways in which language and speech can be used to describe or state facts (Austin, 2025). In dance, constative acts can be seen in the ways in which spoken word and movement can be used to convey information or tell a story. For example, a dancer's use of spoken word can be seen as a Constative act, as it can be used to convey a particular message or theme. By incorporating the concepts of Performative and Constative acts into our understanding of embodied cognition, we can gain a deeper understanding of how the body and brain function and relate to the choreographic tools. This can help us to better understand how dancers use spoken word and movement to create and negotiate meaning, and how the complex relationships between language, culture, and embodiment shape these processes.

The theory of embodied cognition, extensively researched by cognitive psychologist Arthur Glenberg, posits that the body plays a pivotal role in shaping our cognitive processes and perceptions. Glenberg's seminal work (2010, 2015) challenges the traditional view of cognition, which situates the brain as the sole controller of the body. Instead, embodied cognition suggests that the brain functions in tandem with the body, drawing upon collective experiences and sensory information to inform our understanding of the world. Glenberg's research has yielded profound insights into the intricate interconnectedness of body and mind. For instance, studies have demonstrated that individuals' perceptions can be influenced by their bodily experiences, such as handedness or posture. Moreover, the use of language can also be embodied, with words and phrases evoking physical sensations and emotional responses (Edvardsen, 2018; Glenberg, 2010).

The cognition framework is valuable for understanding how the intervention of spoken words can affect choreography. Cognition is not only a mental process, but it is also shaped by the experience of our body and the context of our envi-

ronment. In the context of choreography, embodied cognition suggests that spoken words can impact the way the body moves and convey meaning through movement. The embodied culture is an important aspect in interpreting words, depending on the background and cultural context of the listener (Barthes, 1977). For instance, a choreographer using spoken word interventions must consider the cultural and social context of their dancers and audience to craft work that resonates strongly with them (Eco, 1979). By understanding the embodied culture of their dancers, choreographers can create work that is more effective and meaningful.

In the realm of dance, embodied cognition and cognitive function converge, enabling dancers to convey meaning and express emotions through movement. The intricate relationship between body and mind is exemplified in the way dancers' bodies respond to spoken words, music, and other sensory stimuli, illustrating the profound impact of embodied cognition on cognitive function. When dancers hear or read a poem, they may unconsciously simulate the bodily sensations and movements associated with its meaning, which then influences and shapes their movements accordingly. This process is evident in the work of choreographers like Bill T. Jones, who often incorporates spoken word into his choreographies as inspiration. For example, his piece "Still/Here" incorporates text from interviews with people living with life-threatening illnesses, and the movement responds to these emotional and physical experiences expressed. Dance practice is one of embodiment. It will be shown that in dance scholarship in general, developments have located the specificity of embodiment to research in dance, and that these new perspectives have identified how scholarship that focuses on embodiment poses a challenge to other forms of critical analysis. Embodying is a practical process not necessarily compatible with verbal speech (Guy, 2021).

The use of Embodied Cognition and Speech Act Theory also provides the dan-

cers' bodily experience and use of language is shaped by the cultural and social context in which they perform The body is a site of cultural and social inscription, and how we use our bodies is shaped by the cultural and social norms and values that we have internalized (Bourdieu, 1990). The intersection of language, movement, and embodied cognition in dance choreography is a complex and multifaceted topic that has been explored through various research lenses. This research builds upon the foundational work of ethnomethodologists like Harold (Garfinkel, 2023), who emphasized the importance of understanding social interactions and practical actions in everyday life. Autoethnographic studies, such as those by Carolyn (Ellis, 2004) and Arthur Bochner (2012), have also informed our approach. Some studies have explored the intersection of embodied cognition and movement, including research on high-altitude mountaineering (Hockey, 2006) and classical ballet (Prinz, 2011). These studies demonstrate the value of examining the embodied experiences of individuals in various contexts.

This study focuses on how dancers' body experiences and language use are shaped by cultural and social contexts. The main goal is to gain a deeper understanding of how choreographic approaches are influenced by and reflect the cultural and social context in which they are taken. The complex relationship between language, body, and meaning in dance influences the process of shaping their appearance.

## **METHOD**

## Approach

Auto Ethnomethodology or Auto Ethnography is a qualitative research method that combines elements of autobiography and ethnography to explore the researcher's own experiences and cultural context (Ellis, 2004). It involves systematic introspection, where the researcher reflects on their own thoughts, feelings, and experiences to gain insight into a particular phenomenon or cultural context. Auto

Ethnomethodology is characterized by its focus on the researcher's personal experiences and perspectives, which are often used to illustrate broader cultural or social issues (Reed-Danahay, 2021). This approach acknowledges that the researcher is not an objective observer, but rather an active participant in the research process, whose own experiences and biases shape the narrative. Autoethnography is important in self-creation work for several reasons.

Autoethnography offers several benefits as a research methodology. By allowing researchers to explore their own experiences and narratives, autoethnography provides a rich and nuanced understanding of their own cultural context (Bochner & Ellis, 2002)). Additionally, autoethnography promotes reflexivity and self-awareness in the research process, encouraging researchers to reflect on their own biases and assumptions (Muncey, 2010). Furthermore, by exploring their own experiences, researchers can gain insight into broader cultural or social issues, providing a unique perspective on the research topic(Denzin, 2013). Overall, autoethnography offers a powerful tool for understanding personal experiences and cultural context. Meanwhile Autobiography is a written account of a person's own life experiences and history. It often includes personal reflections, memories, and insights, providing a powerful tool for self-expression and self-discovery. Autobiography allows individuals to reflect on their own experiences, identifying patterns, themes, and meanings that shape their lives.

The term "auto" refers to "self" or "own," implying a focus on the researcher's own experiences, thoughts, and feelings. In research, this prefix suggests an introspective approach, where the researcher examines their own life, experiences, and cultural context. Ethnography, on the other hand, is a research methodology that studies people and cultures. It involves observing and participating in a culture or community to gain a deeper understanding of its practices, values, and meanings.

Ethnography typically involves qualitative data collection and analysis, allowing researchers to gather rich and nuanced data.

The current study will adopt the Qualitative research method, in an autoethnomethodology approach, which is explained briefly here. The Auto Ethnomethodology approach is focused on the choreographer's creative process in making the choreography title 1st APPEAL (Zahid, 2024) which refers to exploratory design. The auto-ethnomethodological approach is divided into two approaches, which are the cognitive approach and post-textual analysis. The cognition approach is more focused on the process of making, which is the 1st APPEAL. This choreography will be an exploratory design to collect the primary data (Flower & Hayes, 2016). The Cognitive Process Model of Composition serves as a base for evaluating composition activities. The textual analysis approach will be applied after getting the information from the dancer's body and transforming it into writing. Identify three key cognitive elements of the writing process: the writer's knowledge of the topic, audience and context (also termed the 'long-term memory'); the task environment (including everything external to the writer, the rhetorical problem, and the developing text); and the writing process itself (including planning activities, the actual writing of the text, and ongoing revision of the text) (Flower & Hayes, 2016).

This model is a hierarchical model of composition, as opposed to a stage-based model: it describes the more fluid mental processes of composition, rather than a linear progression of activities from one stage to the next. Based on aforesaid mentioned, the main approach is to answer the problem that occurs and achieve the first objective. The process of exploratory research using Auto Ethnomethodology research in research design will be used simultaneously. This is because, as mentioned earlier, the exploratory is a process that happens inside the Auto Ethnographical approach.

Post-textual analysis provides additional insight into the practitioner's process and work, as well as adding robustness to auto-ethnomethodological observations. Post-textual analysis methods will vary according to the art, genre, practice, and/ or research question at hand. Both the cognitive approach and post-textual analysis serve the four targeted outcomes, which are: to establish the research problem, conduct background research, conduct empirical research, and conduct contextual research. After all these phases have been conducted, the researcher will revise the research problem to emphasize the practice. This method will explain how the intervention of spoken words and sound using 'nouns' and 'verbs' to choose words to be spoken can be related and become one of the new tools in making Contemporary dance choreography. The existence of the spoken word and sound will not abandon the movements, but it is integrated into each other to create a new approach in choreographic practice. Throughout the process of pasting both spoken words and sounds inside the choreography, the researcher will describe more about how both spoken words can help to convey meaning by using important words from 'nouns' and 'verbs.' It helps to make dancers understand the meaning behind the work, where the meaning behind the 'noun' will refer to the performative and 'verb' to the constative situation.

The sound appears later after the exploration of the spoken word is established. This is because the sound appears to prove that spoken word and sound are much needed by each other; spoken word is an oral form of expression that relies on sound and vocalization to communicate its message. Without sound, the words spoken aloud would not be perceivable or comprehensible to the listener. In spoken word performances, dancers use their voice and intonation to convey meaning and emotions, making sound an essential component of this art form. All these exploratory processes will become qualitative and premier data collection. Based on the qualitative research approach, as suggested in the study by (Santosa, 2013) In which more focus is given to the uniqueness of each, and textual data is used to collect better information regarding the opinions and reflections of participants (dancers and choreographers) on different aspects related to the phenomenon. The qualitative research approach focuses not on the statistical validity of the data, but rather on the uniqueness of each individual; hence, each response is considered in the analysis.

## **Reasoning Approach**

The reasoning approach employed in this study is based on the methodological framework outlined. This approach involves deriving conclusions from the collected and analyzed data, with the aim of applying them to the general population. In contrast, inductive reasoning involves deriving specific conclusions from information collected from certain members of the sample (Oaksford & Chater, 2020). These conclusions are then assumed to be applicable to the general population.

This study adopts an inductive reasoning approach to build recommendations for the general population interested in contemporary dance choreography. This approach is particularly useful when dealing with complex phenomena that involve multiple factors and unique individual experiences (Pellegrino & Glaser, 2021). Inductive reasoning allows for the effective analysis of data when different factors impact the variables and when each dataset is treated as unique (Bucher, 2021). The adoption of inductive reasoning in this study is justified due to the unique nature of the research question. The relationship between spoken word, sound, and movement function in contemporary dance choreography is influenced by several factors, including balance, repetition, and individual experiences. Each dataset must be treated as unique, and general conclusions may not be applicable. Therefore, inductive reasoning provides a suitable approach for deriving conclusions based on the collected data.

The reasoning approach is necessary in this research to achieve the desired outcome of developing choreographic tools. By employing inductive reasoning, this study can:

- Identify patterns and relationships between spoken word, sound, and movement function in contemporary dance choreography.
- 2. Develop a deeper understanding of how these elements interact and influence one another.
- 3. Create a framework for analyzing and evaluating the effectiveness of choreographic tools.
- 4. Provide recommendations for choreographers, dancers, and educators on how to integrate spoken word, sound, and movement function in their practice.

Without a systematic reasoning approach, the development of choreographic tools would be based on intuition or personal experience, rather than empirical evidence. By using inductive reasoning, this study can provide a rigorous and systematic approach to understanding the complex relationships between spoken word, sound, and movement function in contemporary dance choreography, ultimately leading to the development of effective choreographic tools.

## Case Study

1st APPEAL" is a groundbreaking dance piece created in 2024 at the Damansara Performing Arts Centre in Malaysia. This thought-provoking work tackles pressing societal, cultural, and political issues, sparking important conversations and reflections. Beyond its narrative, "1st APPEAL" innovatively introduces a novel choreographic approach, seamlessly integrating spoken words, sounds, and movements as essential components of its choreographic tools.

This pioneering methodology enables the dancers to convey complex emotions, ideas, and experiences, fostering a deeper connection with the audience. By incorporating spoken words and sounds,

the piece transcends traditional dance boundaries, entering a realm where movement, language, and culture intersect. Set against the rich cultural backdrop of Malaysia, "1st APPEAL" brings together dancers from diverse ethnic backgrounds, including Chinese, Indian, and Malay. This deliberate choice celebrates the country's multicultural heritage while also highlighting the complexities and nuances of Malaysian identity. The choreographer's decision to work with dancers from different cultural backgrounds was a deliberate attempt to reflect the diversity of Malaysian society. By doing so, the choreographer aimed to create a work that not only showcased the country's rich cultural heritage (Fei & Wong, 2024) but also explored the tensions and contradictions that arise from living in a multicultural society. Through this case study, we will delve into the creative process behind "1st APPEAL," examining how the choreographer's use of spoken words, sounds, and movements facilitated a powerful exploration of societal, cultural, and political themes. We will also analyze the ways in which the dancers' cultural backgrounds influenced their interpretation and execution of the choreography through the embodied cognition perspective.

## **RESULT AND DISCUSSION**

# Core Concept of Choreological Perspective Through Embodied Cognition

The implementation of the way cognition works is realized through the process of interpretation and interaction with the use of words that are part of the form of choreographic work 1st APPEAL. The form of words is an important aspect of language that shapes the experience and movement of the body. Embodied word is another essential aspect of embodied cognition theory, as it highlights the role of language in shaping our bodily experiences and movements. Embodied sound also plays a significant role in shaping movement and meaning in contemporary dance choreography, particularly in this

research. The use of spoken word interventions can activate similar neural and motor systems as music, influencing the way dancers move and respond to the sound. Embodied movement is the physical manifestation of this process, as dancers' bodies respond to the spoken words and sounds, creating a unique and meaningful movement vocabulary.

Embodied psychology is another critical aspect of embodied cognition theory, as it acknowledges the role of emotions, thoughts, and intentions in shaping movement and meaning. When dancers engage with spoken word interventions, they bring their own embodied experiences and psychological perspectives to the movement, influencing the way they respond to the words and sounds. Embodied simulation is the process by which dancers unconsciously simulate the bodily sensations and movements associated with the spoken words, creating a sense of empathy and connection with the movement.

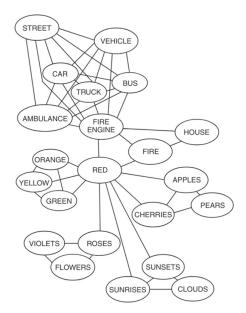
Interviews with choreographers and dancers, as well as observations of rehearsals and performances, contribute to the interpretive process of the complex relationship between language, movement, and meaning in contemporary dance choreography. In the choreography of 1st AP-PEAL, the dancer's body plays a role in interpreting and conveying the meaning of the words spoken, such as "Kedaulatan undang-undang." Even in the absence of spoken language, the dancers' movements can still convey the intended meaning, highlighting the intricate connection between body and mind. Cognitive function, a critical aspect of embodied cognition, refers to an individual's ability to process thoughts, perceive information, and respond accordingly. Cognition encompasses various phenomena, including memory, learning, speech, and reading comprehension. It is concerned with understanding how people represent, process, and store information, and how these processes are

influenced by bodily experiences and sensory information.

Embodying is a process that gives tangible form to ideas. It is also a process by which the ideas dormant in practice emerge. In dance, it fuses the ideas with the movement and with the performer of the movement. Indeed, embodying a dance work fuses all the participants in the event in a multi-layered, tangible process. Tangible form emerges in sound and sight in a variety of media, particular to each performance and each event. However, in this particular research, the researcher will explain the ideology in making 1st AP-PEAL using spoken words and sound as a choreographic tool. The explanation of this function in a way will construe the ability of the intervention and affect the choreographic making.

The embodiment of movement by performers is a more complex process than the word suggests. The complexity of understanding the movement together with words will require strong embodiment in both. It is more than getting the word, sound, and movement into the performers' bodies, more than their physical muscles, bones, and skin. The embodiment of movement involves the whole person, a person conscious of being a living body, living that experience, giving intention to the movement material. Embodiment of the word through speech requires various factors, including the brain. It involves perceiving oneself in the space and hearing one's sound, with a kinesthetic awareness of creating and controlling the movement.<sup>1</sup> Embodying a dance technique requires that the dancer identifies him/herself with the technique's culture. That culture is unique. A jazz culture is distinct from the Cunningham Studio or the Bolshoi. As Thea Nerissa Barnes discusses:

> a frame of mind is needed that takes account of the historical flux of the technique in the culture/sub-culture/ city in which it flourishes or is acquired.



**Figure 1**. A schematic frame of mind representation of concept relatedness in a stereotypical fragment of human memory

This frame of mind (Figure 1) takes into account the priorities that each technique requires, such as clothing, attitude towards the teacher, personal investment in the movement, attitude towards interpreting the movement, or exact acquisition of its form. The shorter the line, the easier it is for the body to adapt to the meaning and situation, and the longer the line, the harder it is for the dancers to remember or engage. This is based on whether the dancers are able to or know those particular situations; if the choreographer tells the story about Syed Saddiq has been sentenced to two years in jail and the dancers know the story well, it is much easier for them to remember it no matter what kind of word, the sound of movement will be thrown to them by the choreographer. This is because the psychomotor dominantly triggered the experience of the dancers, what they saw, and what they heard. This has made the dancers generally embody the culture in general. Then an understanding of the form's content, learned by living it and experiencing its layered potential, enables the embodying person to give the physicality required or the interpretation chosen. Learning motor patterns and transforming

them through identifying with the feeling states that belong to them are further parts of the embodying process. Then the lived experience of the technique gradually seeps into long-term memory, inscribed into the body and person, to be used as opportunity provides.

# The Use of Speech Act to Support Choreographic Tools

The intricate relationship between language and dance has garnered significant attention across various disciplines, including linguistics, dance studies, and performance theory. This discussion endeavors to explore the notion of speech acts in dance choreography, drawing upon theoretical frameworks from both linguistic and dance-based paradigms to examine the manner in which movement vocabulary and gestures can be employed to convey specific meanings, intentions, or actions.

Speech act theory, as posited by philosophers such as J.L. Austin and John Searle, suggests that language transcends mere informational conveyance, instead functioning as a form of action that can shape reality and instantiate social relationships. Within the context of dance, speech act theory can be applied to elucidate how choreographers utilize movement to communicate ideas, narrate stories, and evoke emotions. Notably, André Lepecki's conceptualization of dance as a form of "kinesthetic speech" underscores the capacity of dancers to communicate through movement (Lepecki, 2006). This notion is corroborated by Susan Leigh Foster's assertion that dance constitutes a "language of the body" capable of conveying complex meanings and narratives (Foster, 1996).

In dance choreography, movement vocabulary and gestures can be deployed to perform specific speech acts, such as assertion, interrogation, or command. For instance, a choreographer may utilize a particular movement sequence to convey a sense of urgency or importance, analogous to the manner in which a speaker might employ tone of voice or emphasis to convey meaning. The utilization of movement

vocabulary and gestures in dance choreography can also be perceived as a form of performative utterance, wherein the dancer's body becomes an instrument for communicating meaning and instantiating reality. As Judith Butler argues, performative utterances possess the capacity to shape reality and create social relationships (Butler & Trouble, 1990).

Furthermore, the concept of embodied cognition posits that the mind is not solely localized to the brain, but rather is distributed throughout the body and shaped by its interactions with the environment (Varela Francisco et al., 1991). In dance, embodied cognition is manifest in the manner in which dancers utilize their bodies to convey meaning and narrate stories. Additionally, kinesthetic empathy, a concept developed by dance scholar Dee Reynolds, refers to the ability of a choreographer to empathize with dancers through movement (Reynolds, 2007). This empathy is rooted in the embodied experience of creating the dance work, wherein the choreographer's own bodily sensations and movements can influence the dancer's interpretation of the performance.

# The creation of the work 1st APPEAL has been lined up through various processes of interaction

from the choreographer and dancer. It becomes easy when each of the words has its movement; however, what makes it more difficult is that the use of the word only plays a small part, and this project focuses more on the body language. Many methods can be used to find the movement that fits the given facts. For example, some sections require improvisation. Every dancer must explore and find any movements that are related and based on the text given, but at the same time, must not run from the facts studied (storyline). The dancers need to understand the meaning behind the lines that they choose to speak. The meaning is one of the main functions to ensure the ability of the dancers to achieve embodied cognition. This has been mentioned by Austin, where all phrases must be clear in terms of the conditions that are necessary for a performative statement. Once the speech takes place and if all the condition is met, then the action can be simplified as (happy) or *felicitous* (2016). This idea of adapting the meaning will be discussed in this chapter.

According to Austin, the term felicitous emerges when dancers convey words with a profound understanding of their meaning. This concept relates to the ideology of speech acts, where every utterance requires a concrete purpose and reason. To achieve this, each word or sound must be deeply understood to ensure alignment with what is right or wrong, and to persuade the audience. Performative sentences can be seen as either having truth value or as non-assertive utterances. In this work, the choreographer assigns permanent movements to the dancers, which are more related to "Sequences." (Austin, 2025). Each sequence serves as a reference for improvement. The use of words in this work helps describe the situation and circumstances, drawing from Austin's "speech act" theory. This linguistic approach is divided into two divisions: "constative" and "performative". Constative speech acts convey meaning to explain or show something, which can sometimes be true or false. The success of constative speech acts depends on the choreographer's intention (Derrida & Bass, 2025).

Speech act theory can be applied to understand how choreographers use movement vocabulary and gestures to convey specific meanings and intentions in their work, such as in 1st APPEAL. This theory is supported by concepts like embodied cognition, which suggests that the mind is distributed throughout the body and shaped by its interactions with the environment, and symbolism, where specific movements represent abstract ideas. Choreographers like Mette Edvardsen in her work "Black" (Edvardsen, 2012), and Daniel Linehan in "The Body of Simon Says" (Linehan, 2014), have used spoken language and movement to explore the relationship between language and dance,

demonstrating how words and gestures can convey meaning.

By analyzing movement vocabulary and gestures through the lens of speech act theory, we can gain a deeper understanding of how dance communicates complex ideas and emotions, as seen in 1st APPEAL, where specific movements may represent abstract ideas or emotions like longing or yearning. Notably, the incorporation of words and sound in 1st APPEAL was not intended to study language purposes per se, but rather to explore the potential of language and dance as complementary tools for choreographers (as seen in the works of Edvardsen, 2012, and Linehan, 2014). The use of words and sound in 1st APPEAL aims to inspire choreographers to consider novel approaches and tools in their work, highlighting the intersection of language and movement as a rich area for further study. Moreover, this approach has allowed the choreographer to gain a deeper understanding of how dance can be used to communicate complex ideas and emotions, particularly in relation to heavy issues where words alone may be insufficient. As dance scholar Susan Leigh Foster notes, "the body can be a powerful tool for expressing the inexpressible" (Foster, 1996). This idea is echoed by André Lepecki, who argues that dance can "make visible the invisible" (Lepecki, 2006). This analysis can also highlight the ways in which dance choreography can be seen as a form of performative utterance, where the dancer's body becomes a tool for shaping reality and creating social relationships (Figure 2).

The meaning behind the lines in the choice of text can differ according to individual needs and perspectives. Seminal work "Death of the Author" posits that every written or created word holds multiple meanings, influenced by factors such as context, situation, individuals, and communities. Barthes argues that the essential meaning of a work depends on the reader's impressions, rather than the writer's intentions or personal taste (Barthes, 2016). In the 1st APPEAL, each line has a distinct es-

sence, diverging from the choreographer's original ideology. The text's meaning can be applied to various current issues, such as corruption, freedom of speech, and equal rights. Even simple phrases, like "let's start," can be interpreted in countless ways. The choreographer's words are rooted in their personal experiences, rendering them authentic and felicitous (valid). From the choreographer's perspective, every word in 1st APPEAL is grounded in their observations, feelings, experiences, knowledge, and perceptions. The choreographer has embodied each word's meaning, ensuring that the text aligns with their vision and the dancers' interpretations.

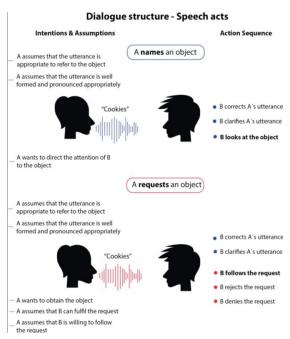


Figure 2. Dialogue Structure- Speech Act

The choreographer must grasp the concept of (intention and assumption) words, which are crucial for achieving the desired outcome of the dancers' understanding and embodying the cognition. The assumption must come with the support of progressive subjectivity, which involves being diligently aware of a priori assumptions and their potential influence on the inquiry and analysis processes (Guba & Lincoln, 1989). The selection of words based on the 'noun' and 'verbs' methods must carry meaning, as both the choreographer and dancers require autho-

rity over the words. This authority stems from ownership and embodiment of the words, which convey intention. The choice of words cannot rely solely on assumption; instead, it must incorporate both assumption and intention. However, these two aspects do not necessarily occur concurrently. The choreographer's experience with the words 1957, and that was when the incident happened, illustrates this point. Initially, the choreographer assumed the dancers were familiar with these words, but during the investigation process, the dancers struggled to provide answers. This outcome underscores the importance of transmitting information between parties to ensure they can adapt to the given words. The words 1957 and that was when the incident happened hold significant meaning, particularly in historical and contextual terms. However, the dancers' lack of understanding highlights the need for clear communication and shared knowledge to effectively convey the intended message. For example:

The concept of words as tools with diverse functions was first introduced by Wittgenstein (1953), who argued that language is intertwined with actions, governed by rules and context, which he termed "language games." This perspective influenced (Searle, 1969) speech act theory, where utterances are viewed as linguistic actions that convey information and perform specific actions, such as promises, requests, or warnings. Each speech act encompasses three distinct acts:

- 1. Locutionary act: The propositional content of the utterance (give me an apple).
- 2. Illocutionary act: The speaker's intentions and goals (requesting an apple).
- 3. Perlocutionary act: The effect of the linguistic action on the listener (B gives an apple to A).

Building on Austin's work, proposed five primary classes of speech acts based on their illocutionary force:

- 1. Assertive: Express facts or things in the external world (naming, stating).
- 2. Directives: Influence the addressee to perform an action (requesting, com-

- manding).
- Expressive: Describe the speaker's inner emotional state (thanking, apologizing).
- Commissive: Commit the speaker to a future action (promising, threatening).
- 5. Declaratives: Change the state of the world (baptizing or arresting).

Extensive research has built upon the philosophical and linguistic considerations outlined above, focusing on the essential features of speech acts, dialogue structures, and communication (Alston, 2013; Clark, 2006; Fritz, 2017; Fritz & Hundsnurscher, 2013; Grice, 1975; Horn & Ward, 2004; Meibauer, 2001 Pierrehumbert, 1980). The concept of utterance itself is closely tied to 'intentionality' and 'assumption.' Performative utterances, in particular, do not describe anything; instead, they convey meaning through the feelings, attitudes, emotions, and thoughts of the person performing the linguistic act. In the context of the performance, a single word like 1957 can hold significant meaning. As discussed in Chapter Three, 1957 becomes a 'noun,' a crucial word that requires understanding. The surrounding words can be considered 'verbs,' representing movements or sounds. However, assuming the dancers understand the word 1957 without clarification can render the method "un-felicitous" (invalid). To ensure the validity of the words, actions, sounds, and movements, the choreographer must engage with the dancers, inquiring about their understanding of the words. Questions like Where do you know this from? How do you know this? And what happens when you hear these words? It can make the words more meaningful and felicitous.

Embodying a role necessitates a layered process of assimilation and investment, wherein the dancer's habitual bodily inscription adapts to the choreographer's demands. A notable example is of Death (Jooss, 1932). This process of intervention highlights the importance of cultural understanding between the choreographer and dancer. For a successful embodiment of the choreographer's vision, both parties

must possess a strong cultural foundation, aligned with each other's background (Jones et al., 2021; Parker et al., 2015). In the context of 1st APPEAL, the spoken words were infused with Malaysia's multi-cultural background. To dominate the act, the choreographer must comprehend the dancers' cultural background. This research adopts an embodiment perspective, examining how dancers embody words, interpret their meaning, and integrate them into their bodily expression. This process involves all aspects of embodiment, which can be categorized into six types to achieve targeted embodiments (refer to Figure 3).

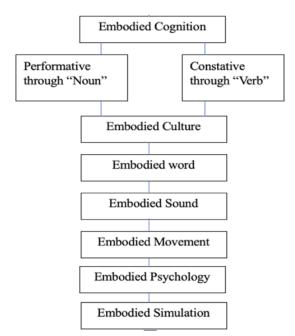


Figure 3. Embodiment Hierarchy

The theoretical framework will be complemented by speech act theory, which will provide additional support for the data collection and analysis process. The integration of these two theoretical frameworks will not only confirm the validity of the methodology but also ensure that the researcher has a robust foundation of support material to develop the choreographic tools. By leveraging the strengths of both embodied cognition and speech act theory, this research will be able to provide a comprehensive and rigorous examination of the role of spoken word interventions in contemporary dance choreography. Ulti-

mately, this theoretical framework will facilitate the development of innovative and effective choreographic tools that can be applied in a variety of contexts.

Embodied cognition theory offers a valuable framework for understanding how spoken word interventions can influence movement in contemporary dance choreography. This theory posits that cognition is not solely a mental process, but is also shaped by our bodily experiences and environmental contexts (Gibbs Jr, 2005). In the context of choreography, embodied cognition suggests that spoken words can impact the way the body moves and convey meaning through movement. Building on this theoretical foundation, the research explores how spoken words can be used to guide and shape movement in contemporary dance, potentially enhancing the expressive qualities of the performance. By examining the relationship between spoken words, embodied cognition, and movement, this study aims to provide insights into the cognitive and motor processes that underlie the creation and interpretation of dance. This understanding can inform the development of new choreographic approaches that leverage the embodied nature of cognition to create more nuanced and meaningful performances.

## **Embodied Culture: From Choreographer** to Dancers

As mentioned earlier, the intervention of this spoken word requires a strong understanding of the word itself or the language that has been used. The dancers are all from Malaysia and speak in Bahasa Melayu, even though some of the dancers are not Malay; however, they can understand, embody, and execute the character on each word given, either in Bahasa Melayu or English. Given that a great deal of our experience involves language, it seems reasonable to wonder whether language itself should be viewed as a significant source of embodiment. Despite the initial plausibility of this conjecture, researchers in embodied cognition have generally excluded language from their conception of embodiment (Alduais et al., 2022). This exclusion comes in two primary forms. The first explicitly denies that language contributes to conceptual processing and holds that language merely engages simulations that are grounded in non-linguistic sensorimotor experience.

This theoretical perspective underlies the orthodox understanding of the term embodied in the words. The second acknowledges that spoken word plays a role in our concepts, but treats it as a fundamentally disembodied symbol system that has no connection to the mechanisms associated with embodiment (Clark, 2006). In other words, the 1st APPEAL choreography incorporating spoken word is made in the context of an embodied/symbolic hybrid approach. The intervention of spoken word in 1st APPEAL is not only based on how strong their understanding of the language is, but it is more on how strongly the word meant to them as dancers. The words that the dancers speak will integrate the cognition simulation, the simulation has transferred from the brain itself when the dancers repetitively say the word in contrast with what they are doing with the body or movements.

Moreover, the choreographer's understanding of the dancers' cultural backgrounds is crucial in selecting spoken words or sounds that resonate with them. For instance, in a dance piece that explores themes of identity and community, a choreographer might use spoken words like "home" or "belonging" to evoke emotions and connections among dancers from diverse cultural backgrounds (Edvardsen, 2018). The meaning and connotation of these words can vary significantly across cultures. For example, the concept of "home" might evoke feelings of warmth and security for dancers from collectivist cultures, whereas for those from individualist cultures, it might represent independence and autonomy (Triandis, 2018). By acknowledging and respecting these cultural differences, choreographers can create a more inclusive and effective dance practice.

For instance, in the case of "1st AP-

PEAL," the dancers came from diverse backgrounds, including Chinese, Indian, and Malay. While many of them were familiar with the choreographer, the success of the piece relied on a deeper understanding of their cultural nuances. It was not merely about the duration of their acquaintance or shared experiences, but rather about implicitly understanding their cultural roots, including the way they communicated with their families or the dialects they used. By tapping into these implicit cultural references, the choreographer could create a more authentic and resonant dance experience that honored the diversity of the dancers.

The use of sound in dance performance can also be a significant aspect of cultural expression. For example, in some Malaysian dance styles, dancers may use sounds like haihh or sighs to convey emotions and intensity. These sounds can be reflective of the cultural background of the dancers and may hold different meanings in different cultural contexts. In some cases, these sounds may be used to express frustration or annoyance, but in the context of Malaysian culture, they may be used to convey a sense of passion or energy. The use of these sounds can be seen as a form of embodied cognition, where the dancers' sensorimotor experiences are shaped by their cultural background and are influenced by the cultural norms and values of Malaysian society. For instance, the word kedaulatan may be accompanied by a movement that conveys a sense of power and authority, such as a strong gesture or a dramatic pose. The sound haihh may be used to emphasize the emotion and intensity of the movement, conveying a sense of urgency or determination. In contrast, the word objection may be accompanied by a movement that conveys a sense of resistance or defiance, such as a sharp gesture or a sudden change in direction. The sound of a sigh may be used to convey a sense of frustration or disappointment, adding depth and nuance to the performance.

The dancers' embodiment of cognition is also influenced by their individual experiences and backgrounds. Each dan-

cer brings their own unique perspective and understanding to the performance, shaped by their cultural background, personal history, and experiences. This diversity of perspectives can enrich the performance, adding depth and complexity to the choreography. Furthermore, the explanation of the cultural background of the original words can potentially change the neuro-mindedness of the dancers and switch their cognitive psychology. By understanding the cultural significance of the words and movements, dancers can gain a deeper appreciation of the cultural context and embody the movements with more nuance and authenticity. The cultural context of Malaysia, with its complex history of colonialism, multiculturalism, and Islam & Aldaihani, 2022), influences the dancers' understanding and delivery of the choreography. The dancers' repeated practice and performance of the choreography can lead to changes in brain structure and function, particularly in areas involved in motor control, language processing, and cultural cognition. This can be understood through the concept of neural plasticity, which refers to the brain's ability to reorganize itself in response to new experiences and learning.

In the 1st APPEAL, the deliberate choice of words, such as 'they are not going to know' and 'perlembagaan', has been spoken together to signify a crucial aspect of the Malaysian cultural context that transcends direct conveyance through movement. These words require an understanding of the historical and cultural background of Malaysia's Rukun Negara, a national ideology that underpins the country's values and principles. Initially, dancers may not fully grasp the significance of these words, but through repetition, they become ingrained in their muscle memory. By mastering these elements, the dancers demonstrate a profound engagement with the material, showcasing how embodied cognition can enrich artistic expression and communication

### **Spoken Word and Concept**

Viewing the spoken word as a component of multimodal embodied cognition suggests that the presence, or indeed the absence, of spoken words should influence our reasoning. Spoken Word intervention in this choreographic research should enhance and transform cognition in specific ways. I outline three plausible below:

One possibility is that spoken word intervention facilitates generalization. They may serve as representational anchors that help stabilize and organize embodied simulations of experience. Spoken Words have been found to help a person with object individuation (Xu, 2002)). Verbal cues such as the word dog appear to activate more general category representations than non-verbal cues such as the sound of a dog barking (Carroll, 1964).

A second possibility is that spoken words help us attend to specific conceptual features that integrate movement that is hard to understand for the "doer". Some movements are easy for dancers to embody; however, having this intervention helps the dancers to get into a depth of meaning while doing the movements. This will enhance the dancer's ability to transmit the information confidently. Support for this hypothesis is provided by neuropsychological case studies referring to movements and language analysis, indicating that aphasia can lead to impairments in non-linguistic tasks (McCullough & Emmorey, 2021). Aphasics often struggle with taxonomic tasks that involve identifying a specific attribute rather than a global comparison. One study compared the responses of 12 aphasics with those of 12 age and education-matched controls on a categorization task (Lupyan & Mirman, 2013). The aphasics were impaired on low-dimensional versions of the task (e.g., green things) but not on the high-dimensional versions (e.g., farm animals). A related study using neurologically intact participants found a similarly selective impairment induced by a verbal interference task (Lupyan et al., 2020). An embodied perspective not only predicts that the presence of a spoken word should alter how we conceptualize

a category but also predicts that words themselves should be understood in a way that is tied to situations. This makes the spoken word intervention enable the dancers to embody the cognition very well. The speech from the dancers will reflect the act of what they do. This is similar to what she did in her work Black and No Title, where the word and the movement complement each other, making it A+A=A (what the dancer speaks, the body does) (Edvardsen, 2018).

A third possibility is that words may engage background frames or schemas. For instance, the meanings of the English words buy, cost, pay, and sell are all understood relative to a commercial event frame. A word like vegetarian makes sense in a society where many people eat meat.

In sum, viewing spoken word intervention as a component of multimodal embodied cognition supports choreography, making three hypotheses concerning the role that words might play in cognitive tasks. First, as labels, they may help us generalize away from experiential particulars. Second, their presence might actively modulate our categorization processes. Third, their connection to frames and schemas may generate expectations and influence our conceptualization of objects and events. These multimodal connections provide a solution to one of our initial prima facie problems faced by the hypothesis that words serve as a source of embodiment. Words help link together non-linguistically embodied content. Homonyms and homographs can be distinguished by their different associations.

# Psychology Cognition in the Dancer's Body

Embodied psychology is part of the theory that researchers use to explain the inter-relationship of these choreographic tools. To make the choreography successful, it is necessary to understand the ideology of embodied cognition. As mentioned above, following the order in Figure 3, cognitive psychology is the study of knowledge representation and use in human

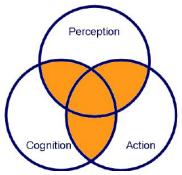
beings. "Cognitive psychology refers to the processes whereby the sensory input is transformed, reduced, elaborated, stored, recovered and used" (Neisser, 2014). However, Thinus-Blanc and Gaunet is of the position that cognition "is a dynamic process of knowing" (Thinus-Blanc & Gaunet, 1997).

The above assertions explain the meaning of cognition from different perspectives, but all point to the fact that cognition is a mental process of acquiring, storing, and processing information. Bearing these assertions in mind, some of the phenomenological factors, which are imagination, perception, memory, and recreation factors in cognition, will be considered in the course of this work. Imitation requires attention, observation, and perception. For instance, when students are learning how to spin, they first pay attention to people doing it; secondly, they try to do one spin and might lose balance. Later, after practice, they can do two or three spins, and after they have developed these skills, they should be able to do three or four spins to the timing of music. Humans learn through different processes, but importantly, most of it comes from an understanding of the environment they live in; they observe their surroundings to be able to get clues and cues about the kind of lifestyle expected of them. In most healthy individuals, the brain is capable of learning new skills, especially in early childhood, and of developing personal and individual thoughts about the world. This is so because, as Batson and Wilson opine, "cognition results from experiencefrom dynamic worldly engagement and interaction. The brain needs a world to make thoughts. Dance making is a particular kind of worldly engagement" (Wilson, 2002). As can be rightly said, a man is a product of the society within which he may find himself, whether as a dancer or a choreographer. His training, experiences, and observations are the factors that contribute to his creative abilities.

This highlights the fact that the environment of an artist, and especially a

choreographer, has a huge influence on the dances they create. This environment is not particularly the immediate one where he finds himself, but an accumulation of different paths of learning, either in choreography or in other courses of survival. The choreographer has a drop-box of ideas where he consciously and unconsciously stores mental images of his experiences: imagined, seen, or felt. Therefore, it suffices to say that the creation and execution of dance requires a thinking process that can be referred to as choreographic cognition. Choreographic cognition in the opinion of Catherine Stevens and Renee Glass, "refers to the cognitive and mental processes involved in constructing and refining movement material to create a work of art." (Stevens et al., 2003). This thinking process takes a lot from the experiential. This is not to say that dances cannot be motivated by theories, but in the end, the foundation is always on the personal encounters and interactions of the choreographer and their ability. A dance performance starts with the clicking of an idea, a thought, an assumed possibility, which then sprouts into a performance by careful thinking and immaculate execution. These ideas are then expressed through movement, tension, space, stillness, sound, and gestures.

For the choreographer, it is thinking to create or recreate dance movements, and for the dancers, it is learning to emulate and/or recreate. The ability to create and recreate is a cognitive function that helps in solving the question of learning. Mental images play a major role in determining how dance is composed and conceived by the choreographer and the dancer, for whom the artwork is being created. What readily drives a choreographer in creating dance movements can easily be at least one of the following factors: the need to fulfil a function with the dance, to embellish the intervention, a response to an outside stimulus, the need to work with a particular dancer or the need to move to the structure of movement, spoken words and sounds. Ultimately, there is a craving to be satisfied. Mason opines that "the processes of dance making have been likened to an irrepressible 'evolutionary urge'. Creativity always seeks to do certain tasks in different ways rather than adhering to conventions. Choreographers also employ such in creating movements and/or when reworking conventional dance sequences to allow for freshness and newness in performance. With that, this research must establish this intervention as part of the choreographic tools.



**Figure 4**. Embodied view of the mind, with large overlaps between cognition, perception, and action.

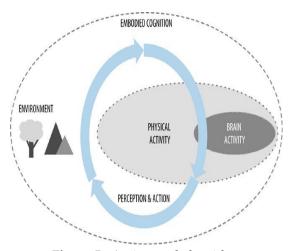
The dancer's embodiment in 1st APPEAL is a culmination of perception, cognition, and action, as they convey the words, sound, and movement in a harmonious unity. As illustrated in Figure 4, the process of embodiment involves a dynamic interplay between perception, cognition, and action. Perception plays a crucial role as the dancer receives and interprets the sensory information from the choreographer, music, and fellow dancers. For instance, when the choreographer instructs the dancer to convey the phrase "Believe in God" accompanied by a deep, resonant "hurm" sound and a series of expansive, upward-reaching movements, the dancer must first perceive the nuances of the phrase, sound, and movement. They must then cognitively process this information, understanding the emotional and spiritual connotations of the phrase, the sonic quality of the "hurm" sound, and the physicality of the movements. Finally, the dancer takes action, embodying the phrase, sound, and movement through their physical expression, conveying a sense of devotion, conviction, and spiritual ascension. This seamless integration of perception, cognition, and action enables the dancer to authentically embody the choreographer's vision, creating a powerful and moving performance

Dancers and choreographers, logically, regularly use their bodies as tools to think with. They spend much of their time thinking non-propositionally (Samson,2016; Kirsh, 2011). Thinking in this sense is a continuous effort, even through performances. Unlike drama, the playwright thinks and expresses himself in words, while dancers' and choreographers' thoughts and expressions are principally in movements. In corroborating this idea, (Sheets-Johnstone, 2015) says that thinking in movement "is not the assemblage of discreet gestures happening, one after the next, but an enfolding of all movement into a perpetually moving present". It is not just about creating movements that give definitive linkages to what is intended, but a suggestion, a signifier to that which can easily prompt a line of thought, both for the choreographer and dancer. Same as in this research practice, where the choreographer puts the spoken word as part of the proposition to enhance the ability of the dancers to embody the work before transmitting the work publicly. This, therefore, emphasizes the need for the choreographer to be attuned to current developments of his art to enhance his communicative horizon for the creation of movements that can at least be suggestive of what is intended. Sheet-Johnstone further states that thinking in movement is not the work of a symbol-making body, a body mediating its way through the world using language...it is the work of an existentially resonant body - such thinking is different 'not in degree', but in kind from thinking in words. Words are not sharper tools, but more precise instruments by which to think about dynamics, by which to hone our sense of space, time, energy, causality, or 'agentivity'. Referring to the case study in this research following the Auto Ethnographic method, whether or not the audience understands the underlining factor that may have led to the creation of dance a piece as a whole, and how this spoken word and sound intervention has derived to make the choreography different and how the dancers able to embody it, understand it and give a strong character understanding towards the work. Baston and Wilson suggest that thinking-while-dancing expands our understanding of the human capacity for creativity in communication" (Wilson, 2002).

When trying to create a new movement, dancers use their bodies as a cognitive medium, much the way a graphic artist uses drawing as a cognitive medium or a pianist uses the sound resonating from his piano as a cognitive medium. Just as an artist or musician develops a close coupling with their tools - pencil, and paper for the artist, piano for the pianist - so a dancer must have a tight control relation between body-as-tool and body-as-display-medium. Because of this, it is probable to state that there are two distinct the of embodied cognition at play. Using the body as a medium to think in - dancers do not think in words, they think physically, through their bodily form; Using sensory systems to think - dancers do not think in words, but in visual or perceptible forms. "As a communicative body-based art, dance engages all of cognition: perception, attention, intention, intuition, decision-making, memory, and more" (Baston and Wilson, 2014:37). Appearance bears on dance the way instruments bear on artistic or musical product. Change the instrument and you may change the form or style of the output. So too in dance, restriction of the body- as a tool, say by making parts of it rigid or fluid, leads to a change in form and style of dance. This places the mechanics of the body in front and central in the generation of 'dancerly' movements.

The intervention of spoken word, sound, and movement in 1st APPEAL, for instance, can demonstrate the dancer's embodied cognition, where the body becomes a cognitive medium, thinking physically

through the bodily form. For example, the choreographer uses spoken word to convey the idea of "disagreement" and the dancer speaks the phrase "no! no!" while moving a sharply pointed finger with the second position open leg and stomping the right leg to the floor, sweeping motion as if scanning the horizon for a sense of disagreement while the sound design complements this movement with a stomping effect that evokes a sense of emphasizing the words. This integration of spoken word, sound, and movement illustrates the dancer's embodied cognition, where the body thinks physically and uses sensory systems to think in visual or perceptible forms. The choreographer's use of spoken word, sound, and movement interventions enhances the dancer's ability to embody the cognition, creating a powerful and evocative performance. The dancer's body becomes a tool for thinking, where the mechanics of the body are central to generating "dancerly" movements. This intervention also expands the dancer's cognitive abilities, engaging all aspects of cognition, including perception, attention, intention, intuition, decision-making, and memory.



**Figure 5**. An internal algorithm

# The Importance of Embodied Simulation from Dancers' Perspective

Both the choreographer and the dancer rely on imagery in the visual, somatosensory, demonstrative, and motor systems to create novel movements. The choreographer explicitly gives his dancers tasks that require them to shift between modalities. For instance, he might ask them to imagine that their bodies are made of fragile movements, or that they should imagine the feeling that the parts of their bodies are being dismembered. Their task is to translate those feelings into movements. One reason to see this process of simulating in one sensory modality and then translating to another modality as embodied cognition is that it relies on each modality having its own way of coding input, and 'concepts'. Although embodied cognition has different meanings, a common element across most versions is that cognitive processes are grounded in specific brain systems. The way we acquire concepts through sight, sound, touch, and so on continues to affect our understanding of those concepts, long after they have been abstracted from specific senses. The idea of running is abstract, but we ground our understanding of it in the physical experience of having run.

In the 1st APPEAL, the tenets of embodied cognition shed light on how choreographers invent 'dancely' movements. To illustrate, consider a scenario where a dancer is tasked with conveying the emotional weight of blame and tension. To achieve this, the dancer works with a partner who accuses them, shouting "Your fault!" while stomping their leg. This phrase, laden with the implication of mistake and blame, sparks mental imagery in the dancer, closely tied to the sound and movement of the stomping leg. The resulting somatic or kinesthetic feelings of being blamed and experiencing tension serve as the foundation for the dancer's subsequent movements. Through this process, embodied cognition enables the creation of novel dance movements, with the dancer's body serving as a cognitive medium, thinking physically through the bodily form.

The image that appears in dancers' brains through the spoken word choice (by the choreographer) will be part of an important simulation, where the brain fun-

ctions as in Cognitive Psychology, making the dancers aware of the existence of each word, its meaning, and its relation to the movement. The latter parts will be body enhancement and executed together with the character that the dancer has collected throughout the process, including understanding the embodied culture from the choreographer (first-hand). As illustrated in Figure 5, perception and action are crucial components in the dancer's embodiment of cognition. The physical activities of movement, sound, and spoken words trigger a complex process within the body and brain. The brain collects and processes the sensory data from these physical activities, storing it in the dancer's memory. Through repetition, this data is reinforced, enabling the body to become increasingly aware of the movements, words, and sounds. This heightened awareness facilitates the development of muscle memory, allowing the dancer to execute the movements, words, and sounds with greater precision and expression. This integration of perception, action, and cognition enables the dancer to embody the choreographer's vision, conveying a rich and nuanced performance. Moreover, the brain's ability to process and store sensory data allows the body to adapt to its environment, becoming aware of the space and its constraints. This adaptability is crucial, as the dancer must be able to respond to changing circumstances, such as different performance venues or unexpected events.

The choreographer plays a vital role in observing and guiding this process, both within the studio and beyond. By monitoring the dancers' progress and adaptation throughout the rehearsal process, the choreographer can refine their vision and make adjustments as needed. Furthermore, the choreographer must consider how the performance will translate to different environments, taking into account factors such as spatial constraints, audience dynamics, and technical requirements. The outline of the basis of language and movement processing in the brain will refer to several parts for the choreographer to

understand.

# **Understanding the Meaning Through Performative and Constative Experience**

Speech act theory posits that language extends beyond mere word definitions, conveying meaning shaped by speech type, utterance structure, and contextual usage. Rooted in pragmatics, this theory examines how language functions in social contexts to create actions or outcomes. A speech act refers to any utterance serving a communicative purpose, such as statements, questions, apologies, descriptions, or persuasion. In this framework, words transcend mere expression, performing specific functions instead. The phrase "your fault" exemplifies this concept, serving as a purposeful statement that implies fault due to mistakes. Its usage is a deliberate choice, rather than mere improvisation, and requires dancers to understand the narrative context and purpose behind their utterances. Each word conveys a specific purpose and reason, highlighting the collaborative effort between dancers and choreographers to ensure the embodiment of cognition.

Austin first introduced speech act theory in his 1962 book *How to Do Things with Words*. This published series of lectures defined his theory about performatives. This is a type of speech in which a person's words cause something to happen and not just make a statement. Rather than simply describing or stating facts, some words act or create something new. For example, when both people in a marriage ceremony say "I do," they are causing the marriage to happen. Other examples of performatives include naming a ship and making a bet.

Austin described three main actions related to speech acts, and Searle (Searle, 1969) expanded on these ideas. 'Locution' refers to the specific words of a verbal or written message. In other words, it is the meaning of what is stated. The 'illocutionary' act is related to the speaker's intention or what the person communicating the message wants to happen. For examp-

le, consider the question, "Can you open the window?". The objective of asking this question is to have the listener open the window. The speaker is not asking if the listener can open the window. Instead, their intention goes beyond the literal meaning of the words to prompt someone to perform an action. Finally, the 'perlocutionary' act of speech refers to the effect that the words have on the receiver of the message, the person who hears or reads those words. When a person hears the statement, "Can you open the window?" they may execute that request by opening a window.

Many philosophers and linguists agreed that studying speech act theory is one way to better understand human communication. "A part of the joy of studying speech act theory, from my strictly firstperson point of view, is becoming more reminded of how many surprisingly different things we do when we talk to each other." Every word thrown by a dancer to another dancer is intended for the audience to understand what is conveyed, even if the word mentioned is only a phrase. Still, it must come with a purpose, as noted by (Williamon, 2004). As choreographers, we do not force the audience to read the piece based on what we want literally, but it is more about how they read and see throughout the journey. All the storylines presented in 1st APPEAL work aren't heavy all the way. Still, it was divided into a few sections where there was a moment the dancer played and gave some sense of humour along the way. The context or intention is critical, and the statement is not just performative by itself; it has to include all the facts to ensure the information is met with the "constative" and "performative" (Austin, 2006).

As Austin said, "Every word that exists needs to have a meaning to ensure that the message is effective." With that effectiveness, there is an act. As conveyed by Austin, constative and performative understanding lie on the same axis; however, measuring what is performative and what is not can be challenging. Jack Derrida has mentioned, "we cannot put a limit bet-

ween performative and constative because everything can be blended" (Derrida & Bass, 2025)

"...to the one who performs it, it is known as a kinetic experience; for example, it can replace it as an action and, more vaguely, as an effect. It appears as a visible motion of things, sliding, waving, or rolling around - it is seen and understood as a vital movement. So, it is subjective and objective, personal and public, willed (or evoked), and perceived." (Langer & Langer, 1953)

The meaning of each line of the sentence may be interpreted differently by the dancers, but for the choreographer himself, each line tells an "untold story" based on the issues arising from the choreographer. "Between constative and performative utterances, there is often ambiguity, particularly with incomplete or context-dependent sentences. For example, statements such as 'You have a nice car' or 'Murder is wrong' can be interpreted in various ways—either as descriptive, evaluative, cautionary, or even directive, depending on tone and context (Derrida & Bass, 2025). To embody such speech acts on stage, choreographers and dancers must collaboratively explore movement possibilities that align with the intended meaning of the utterance. "Every move is an act of speech, and every lesson can be both constative and performative, depending on the intention. The meaning of the word needs to have a "mutual agreement" in which both the dancer and the choreographer agree on the meaning of the word that they want to deliver. If not what Austin has mentioned, the process will become "felicitous" or "unhappy".

When work is already heavy in terms of its storyline, theme, and concept, the choreographer would think of an appropriate method to lighten the dancer's mind and understanding, which incorporates all the embodied perspectives as mentioned earlier. All the embodiment perspectives need to align between dancers and choreographers for the dancers to be able to execute these choreographic tools. This is because every spectator is present comprises various walks of life(Derrida & Bass,

2025). Therefore, it is very likely that the dancers and choreographers' acceptance is different according to the theory of the "Gap" approach (Vedic,1987) written in the book Transformation Within the Gap: Liminality and Principles of Vedic Language Theory in Performance. Anna states that everything done between the dancer and the choreographer has a different meaning and deliberation(Bonshek, 2000). It is divided into two parts where the dancers and choreographer have their imagination and understanding created based on their experiences throughout life or at that time. Every piece of information received through what is seen will be processed by the mind and, in return, give birth to the imagination and a storyline that may be different from what the performer is trying to convey.

The intersection of Speech Act theory with dance serves to underscore and clarify the intentional use of language, enabling dancers to convey the choreographer's vision with precision. This integration is crucial, as every word must carry intention and purpose, ensuring that the meaning effectively illustrates the dancers' embodiment of the work. By applying Speech Act theory, dancers can better comprehend the nuances of language, harnessing its power to communicate complex emotions, ideas, and narratives. This, in turn, fosters a deeper connection between the dancers and the choreographer, culminating in a richer, more impactful performance. The thoughtful application of Speech Act theory enhances the dancers' ability to convey the choreographer's intended meaning, bringing the work to life more authentically and compellingly.

Speech Act theory with dance serves to underscore and clarify the intentional use of language, enabling dancers to convey the choreographer's vision with precision. This integration is crucial, as every word must carry intention and purpose, ensuring that the meaning effectively illustrates the dancers' embodiment of the work. By applying Speech Act theory, dancers can better comprehend the nu-

ances of language, harnessing its power to communicate complex emotions, ideas, and narratives. This, in turn, fosters a deeper connection between the dancers and the choreographer, culminating in a richer, more impactful performance. The thoughtful application of Speech Act theory enhances the dancers' ability to convey the choreographer's intended meaning, bringing the work to life more authentically and compellingly.

However, this study's focus on the integration of Speech Act theory and dance is not solely about emphasizing language, but rather about exploring the intervention and cross-integration between the two disciplines. This intersection signifies the choreographer's ideology, which challenges the notion that spoken words can be used as a shortcut to facilitate understanding. Instead, the intervention highlights the importance of blending language with body language (dance) to create a more nuanced and multifaceted performance.

### **Limitations and Suggestions**

The study on the integration of spoken word and movement in dance has provided valuable insights into the complex relationships between these elements and their impact on the choreographic narrative. Limitations are apparent in the integration of spoken word and movement in dance, without exploring the cognitive, emotional, and cultural processes involved in this integration in greater depth. For instance, the study did not investigate the neural mechanisms underlying the processing of spoken words and movement, which could provide a more nuanced understanding of how these elements interact. Additionally, the study did not examine the role of cultural background and personal experiences in shaping the audience's perception of spoken word and movement in dance. Reliance on existing theoretical frameworks may limit its ability to provide new and innovative insights. While the study built upon established theories of dance and performance, it may not have fully captured the complexities of spoken word and movement integration in contemporary dance practice. For example, the study's framework may not have accounted for the impact of technological advancements on the use of spoken word in dance, such as the incorporation of digital media and live performance.

Furthermore, the study's focus on the choreographer's perspective may overlook the experiences and perspectives of the audience. The audience's interpretation of spoken word and movement may differ significantly from the choreographer's intention, and their feedback could provide valuable insights into the effectiveness of this technique. The audience members' emotional responses to music and dance performances were influenced by their personal experiences and cultural background, highlighting the importance of considering the audience's perspective (DeNora, 2000).

Based on the analysis of these limitations, suggestions for further studies can be made by applying various methodologies, including quantitative and qualitative approaches to obtain data from the audience through surveys, interviews, or experiments. Future studies could explore the impact of cultural background and personal experience on audience perception, examining how different cultural contexts shape interpretation and emotional response. For example, a study could investigate how audiences from different cultural backgrounds respond to the same dance performance, highlighting the role of cultural context in shaping interpretation. Additionally, research using neuroimaging techniques, such as fMRI, could provide insights into the neural mechanisms underlying the processing of spoken word and movement in dance, and how these mechanisms impact the audience's emotional response. Identification of the effectiveness of the use of words and movements is also important to create a nuanced and complex narrative in dance. Likewise, the exploration of technology in improving the integration of words and movements in dance, including the potential benefits

and limitations of the use of digital media in live performances.

The study will produce new insights into audience perception, effective strategies for narrative development, and innovative uses of technology, ultimately contributing to the development of new and innovative approaches to dance-making and performance. Future research could also inform the development of new pedagogies and practices for teaching dance, highlighting the importance of considering the complex relationships between spoken word, movement, and embodiment in dance education. By exploring the cognitive, emotional, and cultural processes involved in the integration of spoken word and movement in dance, researchers can provide new insights into the ways in which dance can be used to convey meaning, emotion, and narrative, and to engage audiences in new and innovative ways.

### **CONCLUSION**

The pioneering choreographers who have boldly incorporated spoken word into their choreography have not only expanded the boundaries of dance as an art form but have also opened up new avenues for creative expression. By seamlessly integrating spoken word with movement, these innovators have demonstrated the vast potential of spoken word as a choreographic tool, capable of adding depth, nuance, and complexity to the choreographic narrative. However, despite their groundbreaking work, a significant gap remains in understanding how these tools can be effectively applied and executed, particularly in relation to the dancer's body. While spoken word has been increasingly used in contemporary dance, there is still a need for a more nuanced understanding of the relationship between spoken word, movement, and embodiment.

This study suggests that the integration of spoken word and movement can actually enhance and diversify the expressive capabilities of dance. Rather than limiting the potential of movement, spoken

word can add a rich layer of meaning, context, and emotional resonance to the choreographic narrative. The findings of this study suggest that the effective integration of spoken word and movement requires a deep understanding of the ways in which spoken word can be embodied and expressed through movement. This involves not only a technical understanding of the physicality of spoken word but also a nuanced understanding of the emotional, cognitive, and cultural contexts in which spoken word is used. Ultimately, this study contribute to the ongoing evolution of dance as an art form, and to inspire future generations of choreographers to continue pushing the boundaries of what is possible. By exploring the intersections between spoken word, movement, and embodiment, this research seeks to provide insights into the ways in which choreographers can create more effective and expressive dance works, works that not only showcase technical proficiency but also convey meaning, emotion, and cultural resonance.

The implications of this study are far-reaching, with potential applications in a range of fields, including dance, theater, performance studies, and cognitive science. By shedding light on the complex relationships between spoken word, movement, and embodiment, this research aims to inspire new approaches to choreography, approaches that prioritize the expressive potential of spoken word and the dancer's body. In addition, this study highlights the need for further research into the cognitive, emotional, and cultural processes involved in the integration of spoken word and movement. By exploring these processes in greater depth, researchers can gain a more nuanced understanding of the ways in which spoken word can be used to enhance the expressive capabilities of dance and to create more impactful and memorable dance works. The integration of spoken word and movement in dance is a complex and multifaceted phenomenon, one that requires a deep understanding of the relationships between spoken word, movement, and embodiment. By

exploring these relationships in greater depth, this research aims to contribute to the ongoing evolution of dance as an art form and to inspire future generations of choreographers to continue pushing the boundaries of what is possible.

Ultimately, this study breaks new ground as the first Auto-Ethnomethodology study in Malaysia, offering a pioneering framework to explore the intersection of spoken word, sound, and movement in dance choreography. As a pioneering methodology in the Malaysian context, this study provides a valuable reference point for future researchers who wish to use auto-ethnomethodology. Notably, similar studies have been conducted in countries such as the United Kingdom, where scholars such as sociologist Harold Garfinkel have laid the foundation for ethnomethodological studies. For example, a study by researchers at the University of Manchester used Auto-Ethnomethodology to examine dancers' embodied experiences in contemporary dance practice. This study builds on these international precedents, adapting and applying Auto-Ethnomethodology to the unique cultural and artistic context of Malaysia, thereby contributing to the global conversation on dance, language, and embodied cognition.

### **ACKNOWLEDGMENTS**

I would like to express my gratitude to JUXT Studio Malaysia for providing a supportive and supportive environment for my research practice. Damansara Performing Arts Centre for providing access to their facilities for the performance. LA-SALLE College of the Arts. UiTM Puncak Perdana for their support and collaboration. To all the dancers, choreographers, artists, colleagues, friends, and families who have provided emotional support, encouragement, and constructive feedback during this research journey. I would also like to thank the 1st APPEAL Dancers for their tireless efforts and commitment to this project. Steve Dixon, President of LA-SALLE College of the Arts; Prof. Venka Purushothaman, Rector of LASALLE College of the Arts; Leon Rubin, Dean of the Faculty of Performing Arts, LASALLE; Melissa Quek, Principal of the School of Dance and Theatre, LASALLE; and from UPI Juju Masunah, Saian Baharudin. Melinda Kwong Mei Kwan; Naim Syah Razad; World Dance Alliance Singapore; World Dance Alliance Asia Pacific.

### REFERENCES

- Alduais, A., Al-Khawlani, A., Almaghlouth, S., & Alfadda, H. (2022). Cognitive Linguistics: Analysis of Mapping Knowledge Domains. *J Intell*, 10(4). https://doi.org/10.3390/jintelligence10040093
- Alston, W. P. (2013). *Philosophy of Language*. Prentice-Hall. https://books.google.co.id/books?id=nzA\_ygEACAAJ
- Austin, J. L. (2025). How to do things with words: Lecture II. In *The performance studies reader* (pp. 177-182). Routledge.
- Barsalou, L. W. (2008). Grounded cognition. *Annu. Rev. Psychol.*, 59(1), 617-645
- Barthes, R. (1977). Image-music-text, trans. Stephen Heath (New York: Hill and Wang, 1977), 146.
- Barthes, R. (2016). The death of the author. In *Readings in the Theory of Religion* (pp. 141-145). Routledge.
- Bochner, A. P., & Ellis, C. (2002). Ethnographically speaking: Autoethnography, literature, and aesthetics (Vol. 9). Rowman Altamira.
- Bonshek, A. (2000). Transformations within the Gap: Liminality and Principles of Vedic Language Theory in Performance. *Body, Space & Technology,* 1(1).
- Bourdieu, P. (1990). *The logic of practice*. Stanford University Press.
- Butler, J., & Trouble, G. (1990). Feminism and the Subversion of Identity. *Gender trouble*, *3*(1), 3-17.
- Carroll, J. B. (1964). Language and thought. *Reading Improvement*, 2(1), 80.
- Clark, A. (2006). Language, embodiment,

- and the cognitive niche. *Trends in cognitive sciences*, 10(8), 370-374.
- Csordas, T. J. (2002). Embodiment as a Paradigm for Anthropology. In *Body/meaning/healing* (pp. 58-87). Springer.
- Damasio, A. R. (2003). Looking for Spinoza: Joy, sorrow, and the feeling brain. Houghton Mifflin Harcourt.
- DeNora, T. (2000). *Music in everyday life*. Cambridge University Press.
- Denzin, N. K. (2013). *Interpretive autoeth-nography*. Sage Publications.
- Derrida, J., & Bass, A. (2025). From "Signature Event Context". In *The Performance Studies Reader* (pp. 183-185). Routledge.
- Eco, U. (1979). *A theory of semiotics* (Vol. 217). Indiana University Press.
- Edvardsen, E. (2018). Black and no title. https://youtu.be/ IfHBRHgRpRI?si=Rk7elBIZLuuyX-
- Edvardsen, M. (2012). https://youtu.be/ 33vMopSruI?si=44ckKYsK6be0vw GD
- Ellis, C. (2004). *The ethnographic I: A meth-odological novel about autoethnography*. Rowman Altamira.
- Fei, D., & Wong, S.-C. (2024). Development of a Conghua Cat Head Lion Dance Animation as a Catalyst for Intangible Cultural Heritage Preservation. *Harmonia: Journal of Arts Research and Education*, 24(2), 427-443.
- Flower, L. S., & Hayes, J. R. (2016). The dynamics of composing: Making plans and juggling constraints. In *Cognitive processes in writing* (pp. 31-50). Routledge.
- Foster, S. L. C. (1996). Dancing Knowledge, Culture and Power. New York: Routledge.
- Fritz, G. (2017). Dynamische Texttheorie.
- Fritz, G., & Hundsnurscher, F. (2013). *Handbuch der Dialoganalyse*. Walter de Gruyter.
- Gallese, V. (2003). The roots of empathy: the shared manifold hypothesis and the neural basis of intersubjectivity. *Psychopathology*, *36*(4), 171-180.
- Garfinkel, H. (2023). Studies in ethnometh-

- odology. In *Social Theory Re-Wired* (pp. 58-66). Routledge.
- Gibbs Jr, R. W. (2005). *Embodiment and cognitive science*. Cambridge University Press.
- Glenberg, A. M. (2010). Embodiment as a unifying perspective for psychology. Wiley interdisciplinary reviews: Cognitive science, 1(4), 586-596.
- Grice, H. P. (1975). Logic and conversation. In *Speech acts* (pp. 41-58). Brill.
- Guba, E. G., & Lincoln, Y. S. (1989). Fourth generation evaluation. Sage.
- Guy, R. (2021). Embodying dance: A practical guide. https://llibrary.net/document/zl1nnm6y-embodying-dance-converging-values-identity-education-personal-journey.html
- Horn, L. R., & Ward, G. L. (2004). *The hand-book of pragmatics*. Wiley Online Library.
- Islam, M. A., & Aldaihani, F. M. F. (2022). Justification for adopting qualitative research method, research approaches, sampling strategy, sample size, interview method, saturation, and data analysis. *Journal of International Business and Management*, 5(1), 01-11.
- Jooss, K. (1932). The Green Table. https:// youtu.be/N4U2UecJ9oE?si=ARoDk Cy\_3TLDsYPA
- Langer, S. K., & Langer. (1953). Feeling and form (Vol. 3). Routledge and Kegan Paul London.
- Lepecki, A. (2006). *Exhausting dance: Performance and the politics of movement*. Routledge.
- Linehan, D. (2014). https://youtu.be/6Of4 SywULU?si=UgDXON1kR3RgBdR2
- Lupyan, G., & Mirman, D. (2013). Linking language and categorization: Evidence from aphasia. *Cortex*, 49(5), 1187-1194.
- Lupyan, G., Rahman, R. A., Boroditsky, L., & Clark, A. (2020). Effects of language on visual perception. *Trends in cognitive sciences*, 24(11), 930-944.
- McCullough, S., & Emmorey, K. (2021). Effects of deafness and sign language experience on the human brain: voxel-based and surface-based mor-

- phometry. *Lang Cogn Neurosci*, 36(4), 422-439. https://doi.org/10.1080/23 273798.2020.1854793
- Meibauer, J. (2001). Pragmatik: Eine Einführung. (*No Title*).
- Muncey, T. (2010). Creating autoethnographies.
- Neisser, U. (2014). Cognitive psychology: Classic edition. Psychology Press.
- Oaksford, M., & Chater, N. (2020). New paradigms in the psychology of reasoning. *Annual review of psychology*, 71(1), 305-330.
- Pellegrino, J. W., & Glaser, R. (2021). Components of inductive reasoning. In *Aptitude, learning, and instruction* (pp. 177-218). Routledge.
- Pierrehumbert, J. (1980). Teun A. van Dijk. Text and context: explorations in the semantics and pragmatics of discourse.(Longman linguistics library, 21.) London: Longman, 1977. Pp. xvii+ 261. *Journal of Linguistics*, 16(1), 113-119.
- Prinz, J. J. (2011). 174The Sensory Basis of Cognitive Phenomenology. In T. Bayne & M. Montague (Eds.), Cognitive Phenomenology (pp. 0). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199579938.003.0008
- Reed-Danahay, D. (2021). Auto/ethnography: Rewriting the self and the social. Routledge.
- Reynolds, D. (2007). Rhythmic subjects: Uses of energy in the dances of Mary Wigman, Martha Graham and Merce Cunningham. Dance Books Ltd.
- Santosa, D. H. (2013). Seni dolalak purworejo jawa tengah: peran perempuan dan pengaruh islam dalam seni pertunjukan. *Jurnal Kawistara*, 3(3).
- Searle, J. R. (1969). *Speech acts: An essay in the philosophy of language*. Cambridge University Press.
- Sheets-Johnstone, M. (2015). *The corporeal turn: An interdisciplinary reader*. Andrews UK Limited.
- Stevens, C., Malloch, S., McKechnie, S., & Steven, N. (2003). Choreographic cognition: The time-course and phe-

- nomenology of creating a dance. *Pragmatics & Cognition*, 11(2), 297-326.
- Thinus-Blanc, C., & Gaunet, F. (1997). Representation of space in blind persons: vision as a spatial sense? *Psychological bulletin*, 121(1), 20.
- Triandis, H. C. (2018). *Individualism and collectivism*. Routledge.
- Varela Francisco, J., Evan, T., & Eleanor, R. (1991). The embodied mind: Cognitive science and human experience. In: Cambridge, Mass.: MIT Press.
- Williamon, A. (2004). Musical excellence: Strategies and techniques to enhance performance. Oxford University Press.
- Wilson, M. (2002). Six views of embodied cognition. *Psychonomic bulletin & review*, 9, 625-636.
- Xu, F. (2002). The role of language in acquiring object kind concepts in infancy. *Cognition*, 85(3), 223-250.
- Zahid, M. F. A. M. (2024). 1st APPEAL https://www.youtube.com/watch?v=R-yH7UFLIDc