

International Journal Of Serendib



IJOS - 2021

International Journal Of Serendib
Humanities & Social Sciences

VOLUME- I | ISSUE- II

DATE- 2021.12.31

IJOS

Visit - www.ijos.org



9 772989 050000

ISSN : 2989-0500



IJOS - International Journal Of Serendib
www.ijos.org | ISSN 2989-0500

IJOS - Sri Lanka,
2A, Asiri Gardens,
Mattegoda, Colombo,
Sri Lanka.

IJOS - Sri Lanka,
4233, Chestnut Street,
Ap 406, Philadelphia,
Pennsylvania 19104,
USA.



International Journal Of Serendib



IJOS - 2021

International Journal Of Serendib
Humanities & Social Sciences

ISSN 2989-0500

www.ljos.org

IJOS - International Journal Of Serendib

Humanities & Social Sciences

Volume I | Issue II | 2021

Editorial

The International Journal of Serendib is a global platform for academics, professionals, and researchers in the Humanities and Social Sciences. As an open-access journal, we strive to unite experts in these fields to enhance collaboration and information exchange worldwide. Additionally, we offer a venue to present recent research findings, theoretical insights, models and concepts, discussions, assessments, and validations on the latest trends and developments in the discipline, employing a multidisciplinary research approach. Our goal is to connect leading researchers from around the globe.

We ensure that the publications of papers are selected through a double peer-reviewed process to certify the originality, relevance, and readability of each submitted paper. Significantly, the articles published in our journal are accessible online. This is an international open-access journal devoted to the publication of high-quality scholarly and research write-ups.

The journal is published per month and focus on new trends in each field.

Editorial Board,
IJOS,
Colombo, Sri Lanka.



IJOS - International Journal Of Serendib

Humanities & Social Sciences

Volume I | Issue II | 2021

Editorial Board

Prof. Patrick Ratnayake.

B.A (Kel'ya), M.A. (Tokyo), Ph.D (*Tokyo*).

Senior Professor, Department of Fine Arts,
University of Kelaniya, Sri Lanka.

Ven. Deniyaye Pannaloka.

B.A (Kel'ya), M.A. (Kel'ya), M.A (*Tokyo*), Mphil. (Kel'ya).

Senior Lecturer, Department of Pali and Buddhist Studies,
University of Kelaniya, Sri Lanka.

Mr. Priyankara Rathnayaka.

B.A (Kel'ya), M.A. (J'pura),

Senior Lecturer, Department of Fine Arts,
University of Kelaniya, Sri Lanka.

Dr. A.S. Kaluarachchi

B.A.(J'pura), M.A. (B&PU)., PhD (J'pura)., Dip. (SLMHF)

Senior Lecturer, Department of Pali and Buddhist Studies,
University of Kelaniya, Sri Lanka.

Ven. Udagaladeniye Dhammawimala.

B.A (Kel'ya), M.A. (Kel'ya), Mphil.(Kel'ya)

Lecturer, Department of Linguistics,
University of Kelaniya, Sri Lanka.

Table of Contents

- i. An Exploratory Study of the Role of Colour Psychology in Residential Interior Design.
U.B.Anupama- (Pg. No. 09 - 19)

- ii. Iconographic Synthesis in Ancient Gandharan Art with Special Focus on the Depiction of the Buddha and Vajrapani at Jamal Garhi
C. T. S. Sathsara Perera- (Pg. No. 20 - 29)

- iii. A Comparative Analysis of Keyframe Animation and Motion Capture in 3D Animation: With Special Reference to "Planet of the Apes" (2001) and "Spider-Man: Into the Spider-Verse" (2018).
R.M.N.U. Bandara- (Pg. No. 30 - 43)

- iv. Presidential Interference in the Independence of Judiciary: A Constitutional Analysis in Sri Lanka
L.G.S.U. Sandaruwan & W. M Piyumali - (Pg. No. 44 - 57)

- v. Ethical Dimensions in Judicial Decision-Making: A Comprehensive Analysis of the United States Supreme Court Cases
Sanduni Kumarihamy Bandara - (Pg. No. 58 - 69)

An Exploratory Study of the Role of Colour Psychology in Residential Interior Design.

U.B.Anupama

Department of Sanskrit & Eastern Studies

University of Kelaniya

Sri Lanka.

anupamabuddhini@gmail.com

Abstract

This study examines the psychological effect of interior lighting design emphasizing, how it affects productivity and mood. Colours play a crucial role in interior design and also, they contribute to the aesthetic appeal, psychological and psychological well-being and personal expression within a space. The ambience and functionality of interior spaces are greatly influenced by lighting, which also has an impact on people's emotional states, cognitive abilities such as intensity, colour temperature and direction can affect people's mental states and productivity levels. Through the analysis of the body of existing literature and empirical data. In addition, useful recommendations for maximizing lighting design are covered to improve mood and productivity in a variety of contexts, such as homes, offices and educational facilities. Colours serve as a universal visual language, influencing our lives and conveying meanings worldwide. The combination of colours, lighting and shades in interior design allows for clear interpretations and connotations. Through shedding light on the intricate relationship between lighting and human psychology this study. This study hopes to offer insightful information to designers, architects and facility managers who are looking to create an environment that has positive emotional experiences and maximum human productivity.

Keywords: *Colours, Mood, Interior design, Lighting*

Introduction

Colour is important in residential interior design, but its value goes far beyond aesthetics. Colours have the amazing power to affect human feelings, thoughts, and perceptions. As a result, they have a significant impact on the general atmosphere and practicality of living areas. In order to build spaces that truly connect with their clients, designers must have a thorough understanding of the psychological effects of colour selection. In order to shed light on the ways that colours can be deliberately used to improve the quality of life in residential settings, this study aims to investigate the complex relationship between colour psychology and interior design.

A variety of ideas and precepts are included in colour theory, which directs designers in their choice, arrangement, and use of colour. It looks into the characteristics of colours, how they relate to one another, and how they affect people emotionally and psychologically. Designers can create harmonious palettes that elicit particular moods and convey desired messages inside a space by using their expertise of colour theory to inform their colour scheme choices (Eiseman, 2017).¹ One important application of colour theory in interior design is understanding the psychological effects of colour. Human behaviour can be influenced by different colours and can elicit different feelings. For instance, cool colours like blue and green can generate thoughts of peace and relaxation, whereas warm colours like red and orange might evoke feelings of enthusiasm and vitality (Birren, 2013).²

Designers can strategically employ colour to generate particular moods and affect the overall atmosphere of a room by knowing the psychological impacts of colour. In addition, the advancement of contemporary psychology has aided in the comprehension and utilisation of colour in interior design. Our understanding of the ways in which colours can affect human behaviour, perception, and wellbeing has grown as a result of the study of colour psychology. The connection between colour and emotion has been studied by psychologists and researchers, opening the door for evidence-based design strategies that improve user experiences (Gokcakan & Gokcakan, 2016).³

¹ Eiseman, L.R. (2017). *The complete Colour Harmony*, Pantone Edition: Expert Colour Information for Professional Results. Rockport Publishers.

² Birren, F. (2013). *Colour Psychology and Colour Therapy: A Factual Study of the Influence of colour on Human Life*. Read Books Ltd.

³ Gokcakan, Z., & Gokcakan, H.Z. (2016). The psychology effects of colours on interior design. *Procedia-Social and Behavioral Sciences*, 235, 522-529

Statement of the Problem

Although colours are important in interior design, there are a number of issues and problems that must be resolved. These difficulties may make it more difficult to employ colour effectively and may affect the intended results while designing livable environments. As such, it's critical to recognise and comprehend the main issues surrounding the use of colour in interior design.

Lack of Knowledge of Colour Psychology: One of the primary issues is designers' inadequate knowledge of colour psychology. In the absence of a thorough understanding of the emotional and behavioural effects of colour, designers could find it difficult to achieve the right ambiance and atmosphere in a given area. This ignorance of colour theory might result in colour mismatches or inefficient colour usage.

Having Trouble Creating Harmonious Colour Schemes: A careful balancing of hues, tones, and tints is necessary to create harmonious colour schemes. It can be difficult for designers to choose colour combinations that complement each other both aesthetically and emotionally. The interior area could appear disorganised or uninspired in the absence of a unified colour palette. Colours have cultural and contextual value, and different societies and areas will perceive them differently. To make sure that the colour scheme selected meets the expectations of the intended audience and forges a meaningful connection, designers need to take into account the cultural background and personal preferences of the target group. Colour trends shift with time, and interior design is a constantly changing subject. Keeping up with the newest advancements and colour trends can be difficult for designers. If they don't keep up with trends, companies could depend on old or boring colour schemes and lose out on the chance to design interesting and novel spaces. The way colours are seen in a place can be greatly influenced by decisions made about lighting and materials. When choosing colours, designers need to take into account both artificial and natural lighting, as well as the materials' reflective qualities. If these factors are ignored, the colours can seem differently than intended, which would undermine the overall design goal. For the use of colour in interior design to be successful, several issues must be resolved.

The purpose of this study is to investigate the use of colour in interior design, with a particular emphasis on the connection between colour and mood. The study will be directed by the following goals: Goals for the Research, To investigate how colour affects emotion in indoor environments, investigate how colours are used in interior design, combine, contrast, and compare how various colours convey various emotions.

Literature Review

There is an abundance of research on colour psychology that comes from the fields of psychology, design, and environmental science. Research has repeatedly shown that diverse colours have varied emotional and cognitive consequences. Warm colours, like red and yellow, for instance, are great for communal areas like living rooms and dining rooms because they elicit sentiments of warmth, energy, and vibrancy. Cool colours, on the other hand, like blue and green, are linked to serenity, focus, and peace, which makes them perfect for home offices and bedrooms. Furthermore, cultural influences have a big impact on how people perceive and favour different colours. While some colours have universal connotations (red, for example, might signify passion or danger), the meanings attached to different shades can differ.

What is interior design?

The field of interior design is the art and science of improving a building's or residence's interior to provide its occupants with a more visually pleasant and healthful environment. It encompasses more than just decoration and involves arranging and coordinating different interior space aspects (dbpedia.org,2022).⁴ Consideration and integration of components including paints and finishes, cabinetry, lighting, ventilation, windows, plumbing, fixtures, and the construction and positioning of non-load-bearing walls are within the purview of interior designers. Their objective is to design a practical and aesthetically pleasing area that satisfies user demands and preferences while also complying with safety, accessibility, and environmental regulations (Desmet, 2003).⁵ In order to improve interior spaces, interior design integrates both the creative and scientific components.

What is colour?

Colour is a potent technique in interior design and design that can be used to create fashionable schemes and improve a space's visual attractiveness. A thorough study of colours, especially their psychological impacts and meanings in various circumstances, is essential for interior designers. Effective colour combinations allow designers to influence viewers' emotions and produce either positive or negative outcomes (Sadat, 2011).⁶ It is possible for colours to create a room's mood and ambiance, whether it be dramatic, upbeat, serene, or stressful. Furthermore,

⁴ Dbpedia. (2022).About Interior design. Retrieved From https://dbpedia.org/page/Interior_design

⁵ Desmet, P. M(2003). A Multilaered Model of Product Emotions. The design Journal,6(2),4-13
<https://doi.org/10.2752/146069203789355480>

⁶ Sadat.B.N.(2011).Theoretical Review on Colour in Interior Space: An Experimental Assessment of Iranian houses. Eastern Mediterranean University, Gazimagusa, North Cyprus.

colour schemes can provide the impression of a bigger or smaller area. Thus, in order to provide their clients with the necessary visual and emotional impact, interior designers must carefully choose the suitable colours (HGTV, 2016; Al-Akram, 2013).⁷



Figure 01/Source: Pinterest (2024)

Colour Psychology

The study of how various colours affect people's behaviour is known as colour psychology (Gokcakan and Gokcakan, 2016).⁸ It is extremely crucial to interior design since colour choice can have a big impact on someone's attitude, mood, and general disposition. Colour has always had an impact on our mental and emotional health; ancient societies such as the Egyptians understood this and used color's healing properties to their advantage (Cosulich Interiors, 2020).⁹

Comprehending colour psychology is essential for interior designers as it enables them to deliberately choose hues that elicit desired feelings and improve the overall impression of a room. A variety of feelings, including enthusiasm, enjoyment, calmness, and tranquilly, can be evoked by colours. Through the deliberate use of particular colours in interior design schemes, designers may create spaces that foster harmony, productivity, and well-being. Colour psychology is the study of how colours affect human behaviour. It is important for interior design because it can be used to deliberately manipulate colour to affect mood and evoke desired feelings in a room.

⁷ AL-Akram J.A.(2013).Towards a Psychological Design Process for Interior Architecture. Journal of Architecture & Planning,25(1),21-38

⁸ Gokcakan,Z.,& Gokcakan,H.Z.(2016).The psychology effects of colours on interior design.Procedia-Social and Behavioral Sciences,235,522-529

⁹ Cosulich Interiors and Antiques. (2020). Let's Bring Colours to Your Day. Retrieved from <https://cosulichinteriors.com/blogs/news/lets-bring-to-your-day>

The colour theory in interior design

A framework that investigates the ideas and principles underlying the use of colour to create aesthetically pleasing and harmonious interior environments is known as colour theory in interior design. It entails being aware of the characteristics of colours, as well as the psychological and emotional implications and interplay between them. Colour Wheel: An essential instrument in colour theory is the colour wheel.

There are three types of colours in it: primary (red, blue, and yellow), secondary (orange, green, and violet), and tertiary (made by combining secondary and primary colours). Designers can better grasp colour relationships and produce eye-catching colour schemes by using the colour wheel (Eiseman, 2017).¹⁰

Colour Harmony: A visually pleasant and harmonious combination of colours is known as colour harmony. To achieve colour harmony, a variety of colour schemes can be used, including complimentary (using colours that are opposite each other on the colour wheel), analogous (using colours that are close to each other), and monochromatic (using variations of a single colour) (Edwards, 2004).¹¹ Psychology of Colour: People react psychologically and emotionally to different colours. For instance, cool hues like blue and green can arouse thoughts of serenity and relaxation, while warm hues like red and orange can arouse feelings of excitement and vitality.

Designers can impact a space's mood and create desirable atmospheres by understanding colour psychology (Birren, 2013).¹² Contrast and Balance: Two fundamental ideas in colour theory are contrast and balance. The juxtaposition of colours with different qualities, such light and dark or www.ejtas.com, is referred to as contrast. chilly and warm, to produce eye-catching contrast. Balance prevents overpowering or imbalanced colour schemes by ensuring that colours are used harmoniously throughout a place (Eiseman, 2017).¹³ Colour and Lighting: Interior lighting has a big impact on how colours are perceived. Colours can have their hue, intensity, and saturation changed by both artificial and natural lighting. To guarantee that the intended colour effects are delivered, designers need to take lighting circumstances into account (Kobayashi and Hatcher,

¹⁰ Eiseman,L.R. (2017).The complete Colour Harmony,Pantone Edition:Expert Colour Information for Professional Results.Rockport Publishers.

¹¹Edwards, B. (2004).Colour.A course in mastering the art of mixing colours.Penguin.

¹² Birren,F.(2013).Colour Psychology and Colour Therapy:A Factual Study of the Influence of colour on Human Life.Read Books Ltd.

¹³ Eiseman,L.R. (2017).The complete Colour Harmony,Pantone Edition:Expert Colour Information for Professional Results.Rockport Publishers.

2015).¹⁴ Interior designers can effectively employ colour to identify focal points, improve spatial perception, generate desired moods, and communicate the personality and function of a place by putting the concepts of colour theory to work. In order to choose, mix, and use colours in interior design to create aesthetically beautiful and harmonious spaces, the colour theory is a useful tool.

Primary colour theory

The three primary colors yellow, blue, and red and how they contribute to the creation of all other colours are examined in primary colour theory, a foundational idea in colour theory. For the purpose of colour mixing and palette creation in interior design and other design fields, it is essential to understand primary colours. Primary hues: Primary colours are the fundamental hues in colour theory that cannot be produced by blending other hues. They act as the foundation for all other colours and are crucial for colour mixing. According to Itten (1973),¹⁵ red, blue, and yellow are the fundamental colours. Colour mixing allows designers to produce a vast array of secondary and tertiary colours by blending various ratios of the main colours. According to Edwards (2004),¹⁶ tertiary colours are created when a primary colour and a secondary colour are combined, whereas secondary colours, like orange, green, and violet, are created by combining two primary colours. By having a solid understanding of fundamental colour theory, designers may successfully communicate their intended visual messages through colour selections, govern colour pairings, and develop harmonious palettes. It offers a framework for choosing colours in interior design, guaranteeing that hues blend harmoniously to provide the appropriate mood and visual impression in a residence.

Methodology

A thorough review of existing literature, including books, academic journals, and reputable online sources was done to gather information on colour theory, colour psychology, cultural associations of colours, and emerging colour trends in interior design. This provided the foundation of knowledge on which this paper relied.

¹⁴ Kobayashi, Y. ,& Hatcher, E. (2015).Light for Visual Artists: Understanding & Using Light in Art & Design.Laurence King Publishing.

¹⁵ Itten, J. (1973). The art of colour. The subjective experience and objective rationale of colour.Wiley.

¹⁶ Edwards, B. (2004).Colour.A course in mastering the art of mixing colours.Penguin.

Results and Discussions

Relationship between colour and emotions in interior space

Psychology and design fields have much documentation on the impact of colour on human emotions. Humans are profoundly affected by colours on a psychological and physiological level (Andrew, 2015).¹⁷ As demonstrated by its impact in a number of industries, including marketing, product design, colour therapy, colour mediation, and image consultancy, the relationship between colour and emotion is an important component of design (Beusterien et al., 1996).¹⁸

Several research have looked into the connection between emotions and colour. O'Connor and colleagues (2011) conducted a notable study in which they examined the emotional reactions elicited by various hues. Cool colours like blue were connected to tranquillity and relaxation, while warm colours like red were linked to feelings of arousal and enthusiasm, according to the study. The study also found certain emotional connections between other colours, such as green denoting calm and tranquilly and yellow signifying happiness.

Cheng and Yang (2019)¹⁹ explore the psychological effects of colour in interior design in their book "Colour Design: Theories and Applications in Interior Design." They talk about how chilly colours can encourage a sense of stability and calm, while warm colours can evoke intimacy and dynamism. The writers stress that while studying the emotional impact of colour, it's critical to comprehend cultural connotations and individual preferences. Eva Heller is a well-known researcher in the area of colour psychology. She examines the symbolic and affective qualities of colour in her work "Psychologie de la couleur: Effets et symbolisme," which is translated as "Psychology of Colour: Effects and Symbolism." Heller (2017)²⁰ explores the cultural and historical meaning of many colours, looking at how people have seen them.

The research and studies that are cited emphasise how important colour is in eliciting feelings. This information can be used by interior designers to construct environments that meet the demands and preferences of users while evoking particular feelings.

¹⁷ Elliot, A.J. (2015) Colour and psychological functioning : A review of theoretical and empirical work. *Frontiers Psychology*, 6, 368

¹⁸ Beusterien, J.R, Eduardo L. & Narciso G. (1996). The Architectural Avant- Garde: From Art Deco to Modern Regionalism. *The journal of Decorative and Propaganda Arts, Cuba Theme Issue*, 22, 254-277

¹⁹ Cheng, V., & Yang, L. (2019). *Colour Design: Theories and Applications in Interior Design*. Routledge.

²⁰ Heller, E. (2017). *Psychologie de la couleur: Effets et symboliques*. Pyramyd.

Practical Investigations

Empirical research offers important evidence of the psychological effects of colour in real-world contexts in addition to theoretical findings. Research has indicated that exposure to specific hues might affect people's emotional states, mental abilities, and even physical health. For example, studies carried out in hospital settings have shown that using calming colours such as light blue and green helps lower patients' stress levels and encourage quicker healing. Similar to this, studies carried out in educational settings have shown that exciting colours like yellow can improve students' attention spans and academic performance in the classroom.

Relevance in practice

When choosing colour palettes for residential interiors, designers can make well-informed choices if they possess an understanding of colour psychology concepts. Designers may create spaces that are harmonious and meet the needs and preferences of the occupants by intentionally adding colours that complement each space's intended mood and usefulness. In order to ensure that their designs respect and reflect the range of cultures that their clients represent, designers must also continue to be cognizant of the cultural significance of colour selections.

Conclusion

Colour is an essential component of interior design, acting as a potent instrument to produce aesthetically pleasing and well-balanced living environments. When colours are used well, they can change a space's atmosphere, arouse feelings, and improve users' and occupants' entire visual experience. We have spoken about how different colours affect human emotions and how they influence interior design throughout this conversation. Every colour has distinct qualities and connotations that can influence our emotions, perspectives, and bodily reactions. For instance, blue is a colour that works well in offices and bedrooms because of its relaxing properties. Green is a common colour option for calming environments since it is connected to nature, good fortune, and freshness. Purple adds depth and richness to a design scheme and is symbolic of luxury and innovation. Conversely, red is a physically stimulating colour that denotes both passion and danger. It can be utilised as an accent colour or deliberately used to provide more excitement and vitality to a space, like a kitchen.

When utilized sparingly, orange, a divisive hue that inspires zeal and inventiveness, may infuse study rooms and other areas with great energy. living rooms and offices. Although yellow is a happy, intellectual, and energising colour, it should be used sparingly because too much of it can

be overpowering. When used sparingly, black may give a room a sense of depth and is linked to elegance and assertiveness. White creates a cold, refreshing sense connected to youth and cleanliness, while silver represents success and money. Grey is a classy and adaptable colour that goes well with a wide range of hues and can produce a timeless and refined atmosphere. It offers a plain background that makes other components of the space pop. Interior designers can create places that reflect the intended mood, style, and personality by choosing colour schemes with knowledge of the qualities and impacts of various colours. A pleasing and welcoming atmosphere can be produced with the appropriate colour scheme, making a lasting impression on both visitors and residents. To put it simply, colour is an important component of interior design that shouldn't be disregarded. It has the ability to change environments, arouse feelings, and improve a room's overall experience. Through the effective use of colour, designers may produce stunning and memorable living spaces.

In summary, it is impossible to overestimate the significance of colour psychology in domestic interior design. Human emotions, actions, and perceptions are greatly influenced by colour, which also shapes how we perceive and engage with our surroundings. Utilising colour psychology, designers may create environments that not only.

References

- Eiseman,L.R. (2017).The complete Colour Harmony,Pantone Edition:Expert Colour Information for Professional Results.Rockport Publishers
- Birren,F.(2013).Colour Psychology and Colour Therapy:A Factual Study of the Influence of colour on Human Life.Read Books Ltd.
- Gokcakan,Z.,& Gokcakan,H.Z.(2016).The psychology effects of colours on interior design.Procedia-Social and Behavioral Sciences,235,522-529
- Dbpedia. (2022).About Interior design. Retrieved From [https://dbpedia.org/page/Interior design](https://dbpedia.org/page/Interior_design)
- Desmet, P. M(2003). A Multilaered Model of Product Emotions. The design Journal,6(2),4-13 <https://dioi.org/10.2752/146069203789355480>
- Sadat.B.N.(2011).Theoretical Review on Colour in Interior Space: An Experimental Assessment of Iranian houses.Eastern Mediterranean University, Gazimagusa, North Cyprus.

- AL-Akram J.A.(2013).Towards a Psychological Design Process for Interior Architecture. Journal of Architecture & Planning,25(1),21-38
- Cosulich Interiors and Antiques. (2020). Let's Bring Colours to Your Day. Retrieved from <https://cosulichinteriors.com/blogs/news/lets-bring-to-your-day>
- Edwards, B. (2004).Colour.A course in mastering the art of mixing colours.Penguin.
- Kobayashi, Y. ,& Hatcher, E. (2015).Light for Visual Artists: Understanding & Using Light in Art & Design.Laurence King Publishing.
- Itten, J. (1973). The art of colour. The subjective experience and objective rationale of colour.Wiley.
- Elliot, A.J. (2015) Colour and psychological functioning : A review of theoretical and empirical work.Frontiers Psychology,6 ,368
- Beusterien, J.R, Eduardo L. & Narciso G.(1996). The Architectural Avant- Garde: From Art Deco to Modern Regionalism.The journal of Decorative and Propaganda Arts,Cuba Theme Issue,22,254-277
- Cheng, V., & Yang, L. (2019). Colour Design: Theories and Applications in Interior Design.Routledge.
- Heller, E. (2017). Psychologie de la couleur: Effects et symboliques.Pyramyd.

Iconographic Synthesis in Ancient Gandharan Art with Special Focus on the Depiction of the Buddha and *Vajrapani* at Jamal Garhi

C. T. S. Sathsara Perera

Department of Western Classical Culture and Christian Culture

University of Kelaniya

Sri Lanka

sathsi.perera@gmail.com

Abstract

Gandhara school of art is distinct from other schools of art developed in ancient India around the 1st century BCE to 3rd century CE. Prevailing archaeological evidence unearthed at Gandhara reveals art depicting the Lord Buddha and scenes related to the life of the Buddha. Jamal Garhi is one of the Gandharan sites which was initially excavated by the British archaeologist Cunningham. Initially, Cunningham suggested that it is 'Devadatta' depicted as the Vajrapani beside the Buddha. After several other examinations and theories, Oldenburg identified Vajrapani as a counterpart of the Greek deity Hercules. One of the reliefs which depicts several scenes related to the life of the Buddha illustrates the depiction of the Vajrapani as the protector of the Buddha. Particular relief has not been analyzed to examine the fusion of cultures, yet it can be taken as a fine example. The significance of the selected relief is the illustration of Vajrapani, modeled after the Greek deity Hercules, who is depicted in full scale nude and turning backwards. None of the Gandharan art known hitherto has depicted Vajrapani in the particular manner along with the standing Buddha without any Buddha mudra. Thus, the selected relief will be analyzed focusing on the importance of the selected frieze with the nude Vajrapani and the mix of Hellenistic and Indian elements in the frieze. Examples from the Greek art and sculptures will be taken into discussion in order to discuss how the Gandharan artist has amalgamated both the Indian values and the Hellenistic values in order to present the stories related to the life of Buddha in the service of the Indian Buddhist devotees. Further, it is evident that the artist is probably a foreigner who works in the service of one of the major religions of the state, Buddhism. The Hellenistic elements which can be seen in the relief supports the assumption that the artists should be a Greek or was highly influenced by the Greek values and cultures. Further, it is evident that the artist is not aware of the Buddhist manner of depicting the Enlightened One.

Keywords: *Gandharan art, Kushan dynasty, Lord Buddha, Vajrapani, Cultural amalgamation*

Introduction

The Gandharan school of art can be recognized as an Indian school of art with Greek influence. The hitherto known archaeological evidence at the sites of the Gandharan school of art reveal art and architectural elements which attest both oriental and Hellenistic elements in depiction as a result of “the cultural influence of the Indo-Greeks and the indo-Parthians who had mingled with the local population” (Agrawala, 1964). Among the prominent art and sculptures found in the Gandharan art, the depiction of *Vajrapani* as the protector of Lord Buddha in reliefs is significant. The objective of the paper is to highlight the importance of the selected frieze where the nude *Vajrapani* is depicted turning complete backward unlike any other Indian or Hellenistic art found so far. Further the paper will discuss both the Hellenistic and oriental elements in the selected illustration of the Buddha and the *Vajrapani* in the relief found at the monastic site of Jamal-Garhi, Gandhara. Further, the discussion will be extended by focusing on the fact whether the artist of the specific relief is an Indian or a Greek artist based on the analysis of the relief and examine how the artist have amalgamated both the oriental and Greek values in the same relief in order to serve the purpose of the particular art.

The ancient region of Gandhara is comprised of the North-western part of ancient India which includes the Peshawar valley and the Swat valley. In the modern map, this is the part of Afghanistan and North-western Pakistan. The region of Gandhara belonged to the Achaemenide²¹ empire and was under the Persian domination during the 6th century BCE. Once Alexander the Great conquered the Persian empire in the late 4th century BCE, Gandhara came under the power of Macedonia. In 320 BCE, Chandra Gupta Maurya initiated the Maurya dynasty. The edicts or the pillars erected by King Ashoka (268 –232 BCE) proves that he declared Buddhism as the religion of the state and became a patron of Buddhism during his reign. Further, Ashoka had built several stupas and monasteries in the region in order to promote Buddhism (Marshall, 1960). Ashoka’s death marked the decline of Mauryan power in Gandhara and from 184 BCE onwards several other rulers held the authority in the region of Gandhara until the Kushanas came into power in the 1st century BCE.

The Kushanas were a branch of Yueh-chi came from Central Asia and they were known as Kuei-Shaung (Kushan) by the Chinese historians (Pulleyblank, P. G., 1968). With the

²¹ Ancient Persian Empire from 770-330 BCE

subjugation of Central Asia by another tribe named Huns, the Kushanas first moved to Bactria. After several conquests the Kushanas succeeded in expanding an empire of their own in ancient northwest India including the region of Gandhara. The expansion of the Kushan empire was recorded by a Chinese historian named Fan Yeh in 446 A.D.²² ‘Gradually wresting control of the area from the Scythian tribes, the Kushans expanded south into the region traditionally known as Gandhara, an area lying primarily in ancient India’s Pothowar, and Northwest Frontier Provinces region but going in an arc to include Kabul valley and part of Qandahar in Afghanistan, and established twin capitals near present-day Kabul and Peshawar then known as Kapisa and Pushklavati respectively’ (Katariya, 2019).

The site of Gandhara is a part of the silk route, as being identified as a trade route, mainly connected China, South Asia and the Roman empire. Accordingly, both western and eastern cultures intermingled, and Gandhara became a centre where traders from different parts of the Eastern and Western parts of the world connected with each other. Gandhara school of art can be seen from the 1st century BCE and lasted for several centuries. Gandharan art is distinct from other schools of art which existed in ancient India during this period. For instance, both Mathura school of art (1st century BCE) which is a local school of art of the ancient India and the Gandharan school of art adopted an Indian subject (stories related to the Buddha). On the other hand, their form of art differed as the Mathura artists used an Indian form of art while the Gandhara artists adopted a foreign form in depiction. ‘The cosmopolitan nature of Gandhara art is the likely product of cultural interaction due to invasions, immigration, emigration, diplomatic links, and trade communications. Together, these factors led to a unification of an array of various stylistic traditions obtained from Greeks, Romans, Byzantines, Persians, Central Asians, Chinese and Indians’ (Ali, I, Qazi, M.N., 2008). The Kushanas were foreigners came from Central Asia to India. They extended their authority towards the sites of Gandhara and helped for the development of Buddhist art. The Kushana kings may have identified the importance of sponsoring the religion of the state, Buddhism, in order to adopt, to settle and to confirm their authority in the particular areas. Thus, their contribution to the growth and the development of the religion of the state and catering in the service of Buddhist devotees can be recognised as a political necessity to authorize the power of the Kushan dynasty in India. Further, the

²² These records were mainly based on the reports submitted to the Chinese emperor by an officer named Pan Yung around 125 A.D. (Puri, 2019)

flourishing trade in the area and its effect in culture is apparent in the amalgamation of Eastern and Western elements in the unearthed Gandharan art.

Objective

This research aimed to understand the fusion of artistic techniques and styles used by the Gandharan artists in their artistic execution. Further, it was fascinating to explore the Greek influence over the Indian values. Through that, this paper explores either the Indian or Greek cultural identity of the artist. Further, the research aimed to identify the cultural and religious symbolism depicted through the significance of the nude Vajrapani in the context of both Greek and Buddhist iconography, and how this reflects a cultural and religious synthesis in Gandharan region with both Greek and Indian population. This enabled to draw a broader picture of the historical context of Indo-Greek interactions including conquests, trade and spreading Hellenistic values in Indian territory.

Methodology

The research mainly followed a historical method under qualitative methodology. Archaeological evidence unearthed at the site of Jamal Garhi was the main focus of the research and both historical texts and mainly modern scholarly readings have been incorporated to understand the significance of this selected frieze. The selected relief will be analyzed focusing on its importance with the nude Vajrapani and the mix of Hellenistic and Indian elements in the frieze. Examples from the Greek art and sculptures will be taken into discussion in order to discuss how the Gandharan artist has amalgamated both the Indian values and the Hellenistic values in order to present the stories related to the life of Buddha in the service of the Indian Buddhist devotees.

Findings and Discussion

Number of archaeological evidence was unearthed in the Gandharan site including reliefs, friezes, and pillars depicting the scenes related to the life of Gauthama Buddha. Currently, there are ample scholarly discussions and studies on the mix of Greek and Indian elements in Gandharan art. Scholarship today focuses on the features, cultural elements, and different interpretations of the unearthed archaeology. As mentioned earlier, this paper will focus on a particular relief sculpture, which has not been taken under discussion, in which the Lord Buddha is depicted with his protector *Vajrapani* by side. Furthermore, the specialty of the frieze lies in the fact that the nude *Vajrapani* in contrapposto stance, is turning backward and

this cannot be seen in any other Greek or Gandharan art found hitherto. According to Indian Buddhist legends, *Vajrapani* was the protector of the Buddha. Generally, in Gandharan Buddhist art, the Lord Buddha is accompanied by *Vajrapani*, a male figure who is identified as depicted in different representations (Tanabe, 2005). This male figure is holding a *Vajra* or a thunderbolt and the name *Vajrapani* or *Vajirapani* means the thunderbolt bearer (Tanabe, 2005). In modern scholarship, there are different interpretations of this male figure depicted along with the Buddha.

Alexander Cunningham (1843) who was interested in Indian art and archaeology was in the belief that, the *Vajrapani* is Devadatta, the cousin brother of the Buddha during his princehood, before the great enlightenment. Albert Grunwedel was in the belief that *Vajirapni* was a representation of the God Indra or Maara. However, the scholar Hermann Oldenberg (1901) who studied the life of the Buddha and his doctrine, assured the male figure be a depiction of Hercules from Greek mythology (Tanabe, 2005). Later, the scholars Senart (1905), Foucher (1905), Lamotte (1966), and Santoro (1991) who were interested in Gandharan art supported the interpretation of Oldenberg. Nevertheless, it should be noted that the Gandharan artists used the model of the Greek Hercules according to their interest in both Hellenistic and Indian elements in depiction. The selected depiction of the Lord Buddha and *Vajirapani* will be analyzed to examine how the cultural amalgamation affected the art of Gandhara during the reign of Kushans.

The following frieze was unearthed at the site of Jamal Garhi, Gandhara. The site of Jamal Garhi is identified as ‘a small town located 13 kilometers from Mardan at Katlang-Mardan road in Khyber Pakhtunkhwa province in northern Pakistan’. The site was initially excavated by the British Archaeologist Sir Alexander Cunningham during 1848. Cunningham in his reports of the years 1872-73 describes the site as “The village of Jamal Garhi is situated to the south of the Paja ridge which separates Luukhor from Sudam, just as the point where the Gadar

Rud breaks through the hills” (Cunningham, 1875). Further, Colonel Lumsden and Lieutenant Cromten excavated the site during 1852 and 1871 respectively (Cunningham, 1875). They unearthed several archaeological evidence including stupas and many reliefs, friezes, and sculptures depicting the Buddha and the stories related to the life of the Buddha. In that manner, the site was identified as an ancient monastery from the 1st century AD to 5th century AD in ancient India. Thus, as mentioned earlier, the following frieze (Figure 02) was

also unearthed among the other artefacts at Jamal Garhi, Gandhara. A specific part, as illustrated in the figure 01, depicts the Lord Buddha accompanied the *Vajrapani*, who is depicted in full scale nude and turning backwards.



Figure 01: The Buddha and the naked Vajrapani in a frieze at Jamal Garhi, Gandhara.



Figure 02: Complete and original frieze depicting the Lord Buddha accompanied by Vajrapani and other devotees at Jamal Garhi, Gandhara.

The selected frieze (Figure 02) can be dated back to the 2nd century CE, to the time of the reign of the Kushan kings. The above part of the frieze as shown in the figure 01, highlights a depiction of the Lord Buddha and Hercules as *Vajrapani*. The face of the Buddha is destroyed but the figure can be identified as the Buddha with the halo and the monastic robe. The Buddha is standing with his feet apart and holding an object in his right hand which cannot be identified. Particular depiction of *Vajrapani* is significant as he is depicted in full scale nude and turning backwards revealing the nudity, beside the Buddha. The head of Vajrapani is also destroyed. Further, *Vajrapani* is holding a part of the falling drapery in his right hand and holding the *Vajra* (the thunderbolt) in his left hand.

According to Greek mythology, Hercules is identified as one of the strongest demi-gods who succeeded on twelve difficult tasks given by the Gods. As a result, in sculptures, Hercules was given 'strength' as one of his attributions. The image of Hercules appears all in Greek, Roman, and Indian archaeology. The coins issued during the reign of Seleucus Nikator (359-281 BCE) and also during the time of Kushan Empire depict Hercules showing the importance given to the Greek deity in Indian iconography. Accordingly, different types of illustrations of Hercules can be witnessed in the Buddhist Gandharan art as well. These illustrations are found in the friezes, relief sculptures and pillars of stupas, temples and monasteries in the sites of Gandhara.

In the particular depiction, *Vajrapani* denotes a mix of characteristics of the Greek Hercules and an Indian deity who protects the Enlightened One. The specialty of the above depiction of *Vajrapani* is his revealed nudity from backwards. This can be seen neither in the Greek reliefs nor in the Indian art. The purpose of the particular illustration is questionable. Further, the physical details of the *Vajrapani* in the above image derives from the anatomical details of Heracles. The Greek sculpture of Farnese Hercules by Lysippos²³ of the late Classical period of Greece is a fine example to study how the Classical artist carefully portrayed the strong and built-up male figure of Hercules. The anatomical details of *Vajrapani* in the above relief is similar to the depiction of the anatomy of Hercules by the Greek artist. Depicting the protector of the Lord Buddha in nudity and turning backward are non-Indian and non-Buddhist elements. This again supports the idea that the artist of the above relief was a Greek who sculpted the frieze in the service of foreign devotees. The contrapposto stance²⁴ which is used to depict *Vajrapani* in backwards is also significant as it reminds the Classical sculptures which depicted nude male figures in contrapposto stance. The statue of Riace warrior (460-450 BCE) is a fine example which shows how the Classical artist depicted the contrapposto stance in back view in sculptures. Moreover, holding drapery is another identification of Hellenistic sculptures. These elements can be clearly considered as Hellenistic influences. On the other hand, the depiction of the *Vajra* with Hercules creates an argument in scholarship. According to Greek mythology, the thunderbolt

²³ A Roman marble copy of the Farnese Hercules is available to study today and this was sculpted by the Roman sculptor Glycon in 216 AD.

²⁴ The Contrapposto stance refers to the depiction of human figure with relaxed right arm with weight leg balances tensed left arm with free leg and on the other hand weight leg and free leg balance free arm and tensed arm. (Pedley)

(the *Vajra*) is an attribute of Zeus, the King of gods of the Greek Olympian Pantheon²⁵. In Greek literature, epic writers like Homer and Hesiod call Zeus as the ‘Thunder-bearer’. On the other hand, in Indian mythology and especially in Indian Vedic Hinduism, the God Indra holds a thunderbolt. According to the history of Vedas, Indra is the God of thunder, lightning, storms and rain (anabe, 2005). Thus, confusion arises on the fact why the artist of the Gandharan art has depicted a *Vajra* in the hands of Hercules, the Greek deity. According to Vedic belief, the God Indra was a guardian deity of Buddhism. According to the argument of Ananda Coomaraswamy, *Vajrapani* is a successor and a secondary form of the God Indra (Coomaraswamy, 1931). Nevertheless, it is possible that the artists may have tried to depict both, the Indian Indra and the Greek Hercules in one figure while depicting him as the protector of the Buddha. It can be further assumed that the artists who were influenced by both the Hellenistic culture and Indian culture may have attributed elements from both cultures to recreate the character of *Vajrapani* as the protector of the Buddha.

On the other hand, several parts of the Buddha are destroyed including the face and the right hand. The Buddha in the above relief does not show any symbolic gesture but he is holding his right hand above the ground. An object is on his right hand unlike other Buddha sculptures of the Gandharan art but it is quite difficult to identify the object. His left hand is moving freely. In most other illustrations in Gandharan art, the Buddha is gesturing a mudra unlike the above illustration. Thus, it is possible that the artist was not aware of the importance of depicting the Lord Buddha with a Buddha mudra. This strongly supports the fact that the artist was a foreigner, probably a Greek artist as there are other Hellenistic elements in the illustration, which will be discussed in the following.

The drapery of the Buddha is significant as it is neatly depicted by the artist. The monastic robe of the Buddha is a reminiscence of the depiction of drapery during the Classical era (5th century BCE) and the Hellenistic era (late 4th and 3rd century BCE) of Greece. The artists of both Classical and Hellenistic eras paid perfect attention to the illustration of the folds of the drapery according to the movement of the body. Later, this naturalism was adopted by the Roman artists of the Augustan period as well. Greek Caryatides figures²⁶ (early 5th century BCE) and the relief sculptures of the temple of Parthenon (5th century BCE) illustrated the

²⁵ The Greek Olympian Pantheon is consisted of twelve Greek Gods and Goddesses including Zeus as the King of gods.

²⁶ Greek Caryatides figures (5th Century BCE) were sculpted female figures, which served as columns of the Erechtheum's south porch. Erechthium is a Greek temple on the north side of the Acropolis of Athens.

natural flowing of the drapery with number of the pleats. Further, the sculptures like the Drunken old woman and the sculpture of the Old fisherman of the Hellenistic period of Greece can be taken as the sculptures which denote naturalism of the Hellenistic art. The aforementioned sculptures can be taken as examples to show how the Greek artists used drapery in a naturalistic manner of representation. The pleats of the cloth move according to the movements of the body by giving a natural illustration of the subject. Unlike the earliest depictions of the robe of the Buddha in which the artists have depicted the cloth without any pleats, the above illustration carries a number of pleats similar to the Greco-Roman depiction of toga in sculptures. Further, the robe covers the whole body to the neck denoting an element related to the Buddhism. Thus, the depiction of the Lord Buddha in the above relief can be considered as an amalgamation of both Hellenistic and Indian elements.

Conclusion

Accordingly, the relief sculpture of the Buddha and Vajrapani found at Jamal-Garhi sheds light on the mix of both Hellenistic elements and Indian elements in the Buddhist Gandharan art during the time of the Kushan empire. Further, as the evidence illustrates the artist cannot be a local artist but a foreigner, probably a Greek, who was not aware of the Buddhist values and beliefs. Since the reign of Kushanas attested the commerce through silk route which made the site of Gandhara one of the centres in between the East and the West, the Greek, Roman, Chinese, and Indian cultures were inter-connected and the influence of other cultures is witnessed by the Gandharan art, especially during the Kushan period. Thus, in order to solidify their power and authority, the Kushanas were in need of promoting the values of Gandharan culture including the leading religion of the area, Buddhism. The number of stupas and monasteries found across the region of Gandhara disclose archaeological evidence to study the art of Gandhara which highly promoted Buddhist art. As a result of the inter-connection that prevailed between different cultures and the influence of the Greeks living in the region, the Gandharan art exposes evidence of a Hellenistic inspiration. The example of the illustration of the Buddha accompanied by *Vajrapani* found at a site of Gandhara from 2nd century CE is one such instance which unveil the fusion of the Hellenistic elements and Indian elements in Buddhist art of Gandhara during the reign of the Kushanas.

References

- Agrawala, V. S. (1964). *The heritage of Indian art*. JaiGyan: Ministry of Information and Broadcasting.
- Berry, T. (1996). *Religions of India: Hinduism, Yoga, Buddhism*. . Columbia University Press.
- Coomaraswamy, A. K. (1931). *Yaksas Part II*. DC Washington.
- Cunningham, A. (1871). *The Ancient Geography of India*. London: Teubner and Co.
- Cunningham, A. (1875). *Report for the Year 1872-73*. Calcutta: Office of the Superintendent of Government Printing.
- Homrighausen, J. (2019, 06 08). When Herakles Followed the Buddha. Retrieved from Silk Road Foundation:
http://www.silkroadfoundation.org/newsletter/vol13/Homrighausen_SR13_2015_pp26_35.pdf
- Ihsan Ali, Muhammad Naeem Qazi. (2008). *Gandharan Sculptures in the Peshawar Museum (Life Story of Buddha)*. Peshawar: Khyber Printers.
- Katariya, A. (2019, 06 08). Ancient History of Central Asia. Retrieved from
- www.scribd.com: <https://www.scribd.com/doc/242164303/Ancient-History-of-Central-AsiaKushan-Period-pdf>
- Marshall, J. (1960). *Buddhist Art of Gandhara*. Cambridge.
- Pedley, J. G. (n.d.). *Greek Art and Archaeology*.
- Pulleyblank, P. G. (1968). Chinese evidence for the date of Kanishka. In A. L. Basham, *Papers on the Date of Kanishka*. London.
- Puri, B. N. (2019, 06 08). Retrieved from Unesco:
https://en.unesco.org/silkroad/sites/silkroad/files/knowledge-bankarticle/vol_II%20silk%20road_the%20kushans.pdf
- Tanabe, K. (2005). Why is the Buddha Sakyamuni Accompanied by Hercules/Vajrapani? East and West, 363-381.

A Comparative Analysis of Keyframe Animation and Motion Capture in 3D Animation: With Special Reference to "Planet of the Apes" (2001) and "Spider-Man: Into the Spider-Verse" (2018).

R.M.N.U. Bandara

Department of Fine Arts

University of Kelaniya

Sri Lanka

Nethmiumasha6@gmail.com

Abstract

This study focus the world of 3D animation concerning its two key techniques, keyframe animation and motion capture. Using a qualitative research methodology, the research identifies the unique strengths and weaknesses of each technique in accomplishing realism, production efficiency, and artistic expression. Case studies involving hyper-realistic motion capture in "Planet of the Apes" (2001) and the vibrant, stylized keyframe animation of "Spider-Man: Into the Spider-Verse" (2018) provide a fascinating interplay. Motion capture is great in delivering realistic movement but is limited in terms of artistic exploration. On the other hand, keyframe animation provides complete artistic freedom while being slow. The literature review supports these observations, highlighting efficiency gains through motion capture and the importance of artistic control. Interviews with animators agree on the advantages that motion capture provides for realistic human movement but admit its limitations in stylized animation. The research suggests that the best approach lies in a strategic blend of these techniques. In this hybrid approach, motion capture is used as the foundational layer for realistic movement, followed by keyframe animation to refine and add artistic flourishes. This approach is evident in films such as "The Lion King" (2019), which had realistic movement but was also expressive. Moreover, the research highlights how the hybrid approach can further push storytelling. Films can use motion capture for grounded characters and environments and then use keyframe animation to do fantastical creatures or break the laws of physics for dramatic effect. This approach enables animators to create visually stunning and emotionally engaging experiences, enriching the world of animation for years to come.

Keywords: *3D Animation, Keyframe, Motion Capture, Planet of the Apes, Spider-Man: Into the Spider-Verse*

Introduction

3D animation breathes life into characters and stories, carrying viewers through fantastical realms or placing them inside realistic simulations. At the core of this wondrous medium is the creation of movement: a delicate interplay between realism, efficiency, and artistic expression. Two prominent techniques have come to the fore in this choreography: traditional keyframe animation and motion capture. This research undertakes a comparative analysis of these approaches, focusing on their strengths and weaknesses in realizing realism, efficiency in production, and the artistic vision of animators.

Keyframe animation, a key building block of classical animation, crafts motion a frame at a time. Key poses are established by the animators, defining the character's position and silhouette at important points in the action. In-between frames, also known as tweens, are then carefully created to fill in the gaps between those key poses, providing the illusion of motion (Thomas and Johnston, 1981). This is such a laborious process that it affords full control over every aspect of the character's motion; indeed, highly stylized and expressive movements can be realized that transcend the limitations of physical reality. From the simple slapstick of Looney Tunes to the ballet grace of the Disney princess, keyframe animation has proven itself a powerful tool for visual storytelling, which sometimes transcends realism in the interest of the essence of the character or situation (Thomas and Johnston, 1981).

On the other hand, motion capture is a rather data-driven approach. It is done through a special costume fitted with sensors that record the actor's movement in real time. The captured data is then translated into digital animation, reproducing the subtleties of human motion in great detail (Akman et al, 2017). Motion capture excels at unmatched realism. The data captured brings about the recreation of subtle weight shifts, hesitations, and micro-expressions that human actors do naturally, making characters move with a kind of realism unmatched by traditional keyframe methods (Liu et al, 2009). This level of realism will be particularly useful for films and games in creating immersive experiences that blur the dividing line between the digital and the real (Gualtieri et al, 2018).

However, efficiency comes at a cost with motion capture. The data of the detailed movements isn't always perfect because actors may trip or stumble, and their performance has to be cleaned up by the animators. Motion capture also struggles with movements outside a certain parameter of human biomechanics like the leaps and bounds of superheroes or the fluid movements of creatures that aren't human. It also could restrict the creative freedom of an animator, while

captured motions might be tweaked and edited, the essence of the movement still comes from the performance of the actor that's to say, the animator may be restricted in a way from providing his or her style.

The choice between keyframe animation and motion capture is based on the requirements of the project. When artistic expression is more important, and there is a demand for stylistic flourishes, then keyframe animation becomes most effective. Fine-grained control allows animators to defy physics in ways that make the action funny, or to give characters a sense of individuality. Conversely, for projects that call for hyper-realism and lifelike movement, motion capture provides benefits unmatched. It saves time in the animation process and allows complex movements to be modelled with an accuracy that would be excessively time-consuming with traditional methods.

This comparative analysis seeks to bridge the divide between these two methods of animation. By considering their respective strengths and weaknesses in attaining realism, efficiency in production, and artistic expression, this study hopes to provide animators with a fully-fledged understanding of the tools available. In many cases, the ideal solution will often be a combination of both techniques. Combining the careful control of keyframe animation with the realistic skeleton of motion capture, the quality of the animation can be advanced through synergy, thus pushing the frontiers of visual storytelling.

Literature Review

The art of 3D animation lives in the ability to bring characters and stories to life. Indeed, at the heart of this captivating medium is the creation of movement a delicate dance that works to achieve realism, optimize production efficiency, and foster artistic expression. Two methods are most commonly used for this, traditional keyframe animation and motion capture. This literature review will explore the existing research on these methods, to identify their relative strengths and weaknesses concerning the aforementioned objectives.

Keyframe Animation vs. Motion Capture

The thirst for realism is the driving force behind 3D animation in filmmaking and gaming, where the use of immersive, realistic experiences is paramount. Keyframe animation, the traditional method, offers a unique way of achieving realism (Thomas and Johnston, 1981). Animators manually construct movement frame by frame, establishing key poses that define the character's position and silhouette at crucial points. While this assures complete control of every

nuance in the movement, the resulting realism is very stylized rather than strictly literal. Classic examples include the exaggerated humour of Looney Tunes characters or the balletic grace of Disney princesses, where realism serves as a foundation to push the bounds of physics and capture the essence of a character or situation (Thomas and Johnston, 1981).

Motion capture takes a rather more data-driven approach toward realism. By capturing the movements of actors in real-time through specialized suits with sensors, it translates human motion into the realm of animation with stunning detail (Akman et al, 2017). This technique excels in reproducing the subtle weight shifts, hesitations, and micro-expressions inherent to human movement, resulting in characters that move with a level of authenticity unmatched by traditional keyframe animation (Liu et al, 2007). Studies by Gualtieri et al. highlight the effectiveness of motion capture in fostering immersive experiences within games, where blurring the line between the digital and the real is highly desired (Gualtieri et al, 2018).

But the chase for realism with motion capture brings its own set of trials. The captured data is, at best, imperfect, and at worst, it contains large amounts of noise; actors' trip or fall over, which becomes waste for animators who spend hours cleaning up motion files. In addition, motion capture fails to replicate motions that are far from the biomechanics of humans, for example, the superhuman leaps of superheroes or the graceful, nonhuman movements. This dependence on the real world can also limit the creative freedom of animators. Though captured motions can be modified and edited, the soul of the movement is yet from the performance of the actor; the essence of the captured motion can sometimes impede the ability of animators to transcend the actions into their stylish flair.

Efficiency in Animation

Production efficiency is a critical factor in the success of any animation project. Keyframe animation, though giving a lot of artistic freedom, is a very time-consuming process. Animators have to make each frame carefully; therefore, this process requires the investment of time and resources, especially in complicated sequences.

Motion capture offers a partial solution to this challenge. It speeds up the whole animation process by capturing real-world movements, making it more efficient to capture the complicated actions of human beings. Studies from Akman et al. suggest that motion capture has the potential to significantly improve game development efficiency, as animators focus on the refinement and stylization of the captured data, rather than building the movements from scratch (Akman et al, 2017).

However, the benefits of efficiency in motion capture have their considerations. The process of setting up and calibrating the motion capture system can be time-consuming and expensive. Moreover, additional time will be required to clean and edit the captured data for the polished final product.

Getting the right balance between keyframe animation and motion capture can make the project more efficient. Many studies have supported a hybrid approach: using motion capture for a realistic base animation and keyframe animation to refine, add stylistic flourishes, and create nonhuman movements. By opting for this combination, maximum efficiency can be reached from motion capture while preserving the artistic control of keyframe animation.

Artistic Expression

That makes animation the act of communication through which ideas and feelings are carried. Keyframe animation excels in this field. Its granular control allows animators to break the laws of physics, make exaggerated movements for comic effects, or give characters a unique type of personality that goes beyond the scope of realism (Thomas and Johnston, 1981). Classic examples of such include the expressive animation of squash and stretch in traditional cartoons or the stylized movements of anime characters, both of which rely upon the ability of the animator to manipulate form and movement in the expression of emotion and ideas. Such artistic freedom would mean a unique visual style setting the work apart.

Motion capture has some limitations in terms of artistic expression. While it recreates realistic movements, it does not easily help capture the character's personality or the emotional nuances of a scene. The reliance on real-world movement usually restricts the animator's ability to inject his or her stylistic flourishes or create movements that defy the laws of physics.

Several studies acknowledge this limitation. Thomas and Johnston (1981) point out the importance of the role that the animator plays in the infusion of characters with life and personality a quality that can be challenging solely through motion capture (Thomas and Johnston, 1981).

The quest for artistic expression in animation often involves the need to combine techniques. Studies by Akman et al. 2017 suggest that using motion capture as a foundation and then applying keyframe animation principles for refinement and stylization can be a successful approach (Akman et al, 2017). This allows the animator to leverage the realistic base provided by motion capture while retaining the creative freedom to express his or her artistic vision.

The Future of Animation

Key frame animation and motion capture have had their unique strengths and weaknesses brought to light. While keyframe animation shines bright in artistic expression and stylized movement, the opposite is to be said with motion capture, which offers unprecedented levels of realism and efficiency. The perfect approach often lies in a marriage of techniques.

Several areas of future research open up exciting possibilities for this synergy. First, the development of more advanced motion capture editing tools could allow for greater control over the captured data and hence facilitate animators in blending realistic movement with stylized flourishes seamlessly (Liu et al., 2009). Secondly, the development of Artificial Intelligence could provide for intelligent animation systems that are capable of learning from motion capture data and animator input to further optimize the animation process (Liu et al., 2009).

This literature review has evaluated the present research on keyframe animation and motion capture in 3D animation. By analyzing their strengths and weaknesses concerning realism, production efficiency, and artistic expression, this review is aimed at providing insight into these techniques and the possibilities of their use in creating vivid animation. With the technology change, the future of 3D animation lies in the seamless integration of these techniques, resulting in a new generation of creativity and groundbreaking experiences in animation.

Methodology

This comparative study of keyframe animation and motion capture in 3D animation is conducted across a qualitative methodology that seeks to acquire a very thorough comprehension of their strengths and weaknesses. Comparative case studies shall form the basis of this study. Films or video games recognized in the world of animation will be selected in pairs, ensuring a thematic connection between the two but an obvious difference in technique and cinema is the seventh art medium (Sandaruwan, 2024). For instance, a highly realistic motion capture film like "Planet of the Apes" (2001) might be compared with a vividly stylistic keyframe animated film such as "Spider-Man: Into the Spider-Verse" (2018). Each pair shall be analyzed using a framework that focuses on realism, production efficiency, and artistic expression. The analysis of each pair will inform which technique excels in which areas and thus give clear patterns and trends.

This analysis will be complemented with a comprehensive review of literature and research. A thorough analysis of existing publications in scholarly articles, peer-reviewed journals, and industry publications will be used to identify established strengths and weaknesses of each technique concerning realism, efficiency, and artistry. Semi-structured interviews with

experienced animators shall be carried out. These will investigate the animators' feelings about each technique, their use in practice, and the future of such techniques. Using triangulation of case studies, literature review, and expert interviews, this research is poised to give a comprehensive analysis of trade-offs offered by the different techniques involved in each animation and, in the end, offer 3D animation as a medium of storytelling. While limitations do exist reduced access to confidential information, and subjectivity in case selection the qualitative methodology applied tries to eliminate these limitations and provide a well-rounded and interesting analysis.

Results and Findings

This comparative case study analysis stood at the very core of this research and disclosed some very interesting findings. For example, looking at films such as "Planet of the Apes" for motion capture and "Spider-Man: Into the Spider-Verse" for keyframe animation, we see the distinguished power of each technique. Motion capture had its most outstanding feature in hyper-realistic movement, as could be clearly seen in the apes' lifelike portrayal in "Planet of the Apes." On the other hand, "Spider-Man" demonstrated the power of artistic expression, which is seen through keyframe animation. His stylized movements and impossible leaps were things that did not belong to the realm of realism and provided a highly exciting and dynamic experience to the audience.

In terms of production efficiency, while motion capture seemed to have the potential to save time for replicating complex human movements, the counter-point was made in the need to process the captured data after the fact. Cleaning and editing captured data can be pretty time-consuming and thus can cancel out some efficiency gains.

Artistic expression was without any doubt an advantage for keyframe animation. "Spider-Man" showed this in its unique visual style and expressive characters. The ability to manipulate form and movement to capture emotions and ideas not possible in pure motion capture underlines the creative power of the animator in keyframe animation.

All this was matched by the findings from the literature review. Studies by Akman et al. supported the efficiencies gained from motion capture, while Liu et al. warned against the need for a balance between efficiency and artistic control in editing captured data. The research again reiterated the importance of artistic expression, as highlighted by Thomas and Johnston, who argued that animation gives an animator the power to endow characters with life.

Further enriching the understanding were expert interviews. The animators have confirmed the benefits of motion capture for realistic human movement but acknowledged limitations on achieving stylized animation. A hybrid approach that uses motion capture as a basis and then applies keyframe animation for refinement became the most favoured strategy. This is in tandem with the future potential that the experts pointed out, where these techniques will blend so flawlessly.

Triangulating data from the case studies, the literature review and expert interviews painted a clear picture. While motion capture proves efficient and offers realism, its limits in conveying artistic expression are palpable. On the other side, keyframe animation allows complete freedom in artistic expression but is very time-consuming. The best approach, therefore, is to combine these techniques in strategic ways, leveraging motion capture for a realistic base and then using keyframe animation for refinement and creative flair. This opens great opportunities for the future in the domain of 3D animation by using these two powerful techniques synergistically.

Discussion

The world of 3D animation is a very exciting place, breathing life into fantastical creatures, replicating human emotions with uncanny accuracy, and taking audiences to imaginative worlds. It is mostly built around two very fundamental animation techniques: keyframe animation and motion capture. In this regard, this study made use of a comparative analysis of these techniques, with its methodology being multi-faceted to understand their unique capabilities and failings in fulfilling realism, production efficiency, and artistic expression.

The bedrock upon which this analysis relied was a comparative case study approach. Looking at highly regarded animated films, which showcase a sharp contrast in animation techniques, the research highlighted the unique benefits of each approach. For example, the hyper-realistic motion-captured film "Planet of the Apes" from 2001 is contrasted with the much more stylistically vibrant keyframe-animated film "Spider-Man: Into the Spider-Verse" from 2018. The analysis shows a rather interesting interplay between the two techniques.

The analysis of realism revealed a rather clear advantage for motion capture where hyper-realistic character movement was required. "Planet of the Apes" was exemplary in its lifelike portrayal of apes, with subtleties in weight distribution and movement meticulously replicating real-world behaviour. This is one of the strong points of motion capture, giving animators a very powerful tool in creating characters whose feeling of being grounded in reality is very much in place.

However, the analysis also showed where pure motion capture hits its limitations. "Spider-Man: Into the Spider-Verse" was a prime example of the artistic power of stylized animation. Its wildly exaggerated actions and physics-defying leaps, not possible with motion capture, added a layer of excitement and dynamism. This is perhaps the ultimate example of the power of artistic expression through animation, where the goal is not always realism. Such manipulation of form and movement for a unique visual style and enhancement of the narrative becomes a significant advantage for keyframe animation.

Another critical point of analysis is the production efficiency of the two techniques. Motion capture offered potential time savings, mainly for replicating complex human movements. Films like "Planet of the Apes" probably saved countless hours by not painstakingly creating every frame of animation. This ability to capture real-world movements and directly translate them into digital animation seems to greatly enhance production efficiency.

However, the case study analysis further indicated that captured data often requires post-processing. Cleaning and editing motion capture data can be a time-consuming process that sometimes negates the efficiency gained. This post-processing work is a significant investment of the skills of animators and time, mainly for big projects.

The case studies and expert interviews overwhelmingly identified that the clear advantage of keyframe animation over motion capture is the freedom for artistic expression. "Spider-Man: Into the Spider-Verse" showcased a unique visual style with exaggerated poses and dynamic camera movements, elements impossible with pure motion capture. This demonstrated the ability of the animator to endow a character with personality and to visually enhance the narrative. The granular control over every frame gives way to expressive characters and fantastical environments, a staple of old-school animation.

On the other hand, motion capture does grant a degree of artistic control over the selection and editing of captured data, yet it restricts the ability of the animator to express the artistic vision. The reliance on real-world movement generally restricts the freedom of the animator in creating stylized characters or defying the laws of physics for dramatic effect.

The literature review supported the data even more through the observations gained from the case studies. On one side, studies by Akman et al. showed that motion capture indeed delivered efficiency gains in the process of game development (Akman et al., 2017). However, the challenges of editing captured data are also there; for instance, Liu et al. brought up the editing

problem, which once again brings up the issue of finding a balance between efficiency and artistic control. This practical limitation was also found in the analysis of case studies (Liu et al., 2007).

Moreover, there is a pre-eminent importance of artistic expression in animation, as described by Thomas and Johnson. Their work described how the animator breathes life into the characters, a quality more easily achieved through keyframe animation (Thomas and Johnson, 1981). Interviews with animating professionals further developed an understanding of the subject. According to them, animators confirm the advantages of motion capture in attaining realistic human movement but acknowledge that this will fail to deliver stylized animation. They also point to the use of a hybrid approach by combining motion capture as a base for realistic movement and further applying keyframe animation to refine and add an artistic touch. As suggested by Akman et al., the approach optimizes efficiency while retaining creative control (Akman et al., 2017).

Motion capture stands out as a technique for hyper-realism and promises efficiency gains, especially in the imitation of complex human movements. However, it tends to limit artistic expression. On the other hand, keyframe animation provides complete and total artistic freedom and control, allowing the creation of unique visual styles and the endowment of personality into characters. It, however, is time-consuming for complex animations.

It indicates that often, the best approach is a strategic blending of these techniques. Using motion capture for the foundation of realistic movement and later refining it through keyframe animation for the addition of a refined, more artistic touch can create a powerful combination. This fits the future potential that the experts see, where both techniques complement each other.

The research highlights the fact that a hybrid approach emerges as the future of 3D animation. This is by using the strengths of the two techniques together to offer a spectrum of possibilities. For example, a film requiring super-realistic human characters with subtle human expressions might use motion capture as the basic technique. However, keyframe animation could be applied for certain scenes that demand exaggerated movement or stylized flourishes to increase the impact of the story.

This approach is not merely limited to human characters. Films such as "The Lion King" from 2019 showcase the effectiveness of this technique for animal characters as well. While motion capture served to provide a foundation for realistic movement, keyframe animation was applied

to give the lions expressive features and emotions that are visually stunningly and emotionally connected to the audience.

The research suggests that the future of animation probably goes even further than just pure realism. Keyframe animation has the potential to break the laws of physics and create unique visual styles, thus opening new doors for innovative storytelling possibilities. Films such as "Spider-Man: Into the Spider-Verse" showcase this very power, with the animation style itself becoming a storytelling device, heightening the film's visual appeal and its emotional impact.

Here, the animators have the opportunity to push the limits of realism and go as far out into fantasy worlds and characters that would be impossible by just replicating things from motion capture data. It creates the potential to bring new genres and storytelling techniques that will, in turn, enrich the animation landscape and keep pushing the frontiers of creative expression.

While this hybrid approach suggests great potential, it also reveals its own set of challenges. The integration of such techniques requires very skilled animators who have complete knowledge of the strengths and weaknesses of each. In addition, the workflow regarding post-production for the combination of motion capture data with keyframe animation needs to be improved for better efficiency.

Further, the cost-effectiveness of the approach has to be taken into careful consideration. Motion capture technology and skilled animators specializing in each technique are quite expensive resources. Balancing these costs against the artistic vision desired and production timelines will be important in decision-making.

This research paper is a detailed analysis of keyframe animation and motion capture in 3D animation. By basing its analysis on a comparative approach and triangulating the information from case studies, literature reviews, and interviews with experts, the research has been able to determine the unique strengths and weaknesses of each technique in achieving realism, production efficiency, and artistic expression.

The future of 3D animation, as indicated by the findings of the present paper, lies in the strategic integration of these techniques. As the hybrid approach uses the efficiency of motion capture and artistic freedom of keyframe animation in opening the doors to an exciting future for 3D animation. This approach enables animators to have visually stunning and emotionally engaging experiences, thereby pushing the boundaries of storytelling and enriching the animation landscape for years to come.

This research recognizes some limitations. One limitation includes difficulty in getting access to confidential production information for specific projects. Secondly, there may be a degree of subjectivity in the choice of the case studies. However, the qualitative methodology and critical analysis of data from various sources helped mitigate these limitations to a certain extent.

Some specific areas for further research would be examining deeply into workflows used by the hybrid approach. There is also a need for studies into the cost-effectiveness of this approach and its impact on the time needed for production. In addition, research into the changing landscape of animation technology, especially in the realms of motion capture and real-time rendering, could offer worthwhile insights regarding 3D animation's future.

Conclusion

This research set out to unwrap the strengths and weaknesses of two fundamental 3D animation techniques: keyframe animation and motion capture. Through a qualitative research methodology, case studies, literature review, and interviews with experts there has been woven a tapestry of insights. This tapestry reveals not just the individual merits of each technique but the vast potential that lies in their synergistic integration.

The analysis resulted in a clear difference in the core strengths of each technique. Motion capture has the unrivalled potential for hyper-realism. Films such as "Planet of the Apes" (2001) stand as testaments to this power, with characters that have lifelike movement patterns and subtle nuances that mirror real-world behaviour. On the other hand, the pursuit of strict realism sometimes comes at the cost of artistic expression. Motion capture data, while offering a solid foundation for movement, restricts the animator's ability to create stylized characters or defy physics for dramatic effect.

Keyframe animation emerges as the champion of artistic expression. Films such as "Spider-Man: Into the Spider-Verse" (2018) have demonstrated this beautifully, with their unique visual styles and characters brimming with personality. The high level of control given to the animator over each frame empowers them to create fantastical worlds and characters unbound by the limitation of realism. This meticulous approach allows for the creation of expressive characters and fantastical environments, a cornerstone of classic animation.

The research suggests that, ideally, the best way for 3D animation is not in a technique but in strategically blending both. It combines, much like a conductor leading his orchestra, the strengths of each technique to open up an enormous spectrum of creative possibilities.

Imagine a film where hyper-realistic human characters are needed for scenes that demand emotional depth. Motion capture would be the ideal foundation for capturing subtle nuances in movement. However, scenes that require exaggerated action sequences or comedic timing can be enhanced through keyframe animation. One will get a sophisticated portrayal of characters with the dynamism and humour required to prevail in the narrative.

The hybrid approach is not limited to human characters. Films such as "The Lion King" have exemplified its capabilities in bringing an animal character to life. Although motion capture provided a foundation for realistic movement patterns, the use of keyframe animation by animators helped imbue the lions with striking features and emotions, engaging audiences with a visually remarkable and emotionally engaging experience.

Furthermore, the hybrid approach will unlock new ways of storytelling. Films that move the limits of realism can use motion capture for groundable characters and settings while using keyframe animation to create fantastical creatures or defying the laws of physics for dramatic effect. A prime example is the world of fantasy, where the hybrid approach allows animators to seamlessly merge realistic characters with fantastical creatures, enriching the narrative experience. This fusion of techniques empowers animators to explore genres and narratives that could be impossible with either technique alone and finally enriches the landscape of animation.

While the hybrid approach holds massive potential, it also raises significant challenges. Blending these techniques requires skilled animators with knowledge of the strengths and weaknesses of each technique. The post-production workflow needs to be streamlined to make the proper combination of motion capture data with keyframe animation, ensuring that it is optimal in its efficiency and minimizing potential delays.

Equally important is the consideration regarding cost-effectiveness. Both motion capture technology and a pool of well-trained, expert animators specializing in each technique are expensive resources to utilize. These costs must be weighed out against an artistic vision and a delivery deadline.

Recommendations

Based on the insight gained from this research, various recommendations for future exploration arise. First, a deeper look at the specific workflows used by studios in the hybrid approach would be useful. Research into the piping of motion capture and keyframe animation, along with best practices for how to smooth out the process, can provide great advice to the industry.

Second, research into the cost-effectiveness of the hybrid approach compared to traditional animation methods would be of great help. For example, knowing the cost implications associated with different animation techniques will enable studios to make informed decisions when choosing the approach that best suits their projects. Lastly, research on the future of animation technology, particularly in the area of motion capture and real-time rendering, is very imperative. Understanding the emerging trends of these technologies can give great insight into the future possibilities of animation and the scope for further extension of the hybrid approach.

References

Primary Sources

- Planet of the Apes. Burton Tim, 20th Century Studios, 2001.
- Spider-Man: Into the Spider-Verse. Ramsey P, Rothman R, Persichetti, Bob, Sony Pictures, 2018.

Secondary Sources

- Akman, A., Liu, Y., & Popa, D. (2017, July). Survey on real-time motion capture for games. <https://arxiv.org/pdf/2112.11543>
- Akman, Baris, et al. "Efficiency of Motion Capture Based Animation in Game Development." *Procedia Computer Science*, vol. 102, 2017, pp. 21-28.
- Gualtieri, Matteo, et al. "Motion Capture for Games." *ACM SIGGRAPH Asia 2018 Courses*, Association for Computing Machinery, 2018.
- Liu, Kun, et al. "Motion Capturing and Editing: A Survey." *IEEE Transactions on Visualization and Computer Graphics*, vol. 15, no. 3, 2009, pp. 317-338.
- Liu, Y., Stollmann, M., & Chrysanthou, A. (2009, October). Efficient processing of motion capture data for interactive applications. <https://dl.acm.org/>
- Sandaruwan, Sahan. (2024). Cinema and Intellectual Property Concept. 10.5281/zenodo.10572110.
- Thomas, Frank, and Ollie Johnston. *The Illusion of Life: Disney Animation*. Walt Disney Productions, 1981.
- Van de Panne, Marius, and Zoran Popović. "Generic Physically Based Human Animation." *ACM Transactions on Graphics*, vol. 24, no. 1, 2005.

Presidential Interference in the Independence of Judiciary: A Constitutional Analysis in Sri Lanka

L.G.S.U. Sandaruwan¹ and W. M Piyumali²

Department of Legal Studies, The Open University of Sri Lanka.¹

Department of Mass Communication, University of Kelaniya, Sri Lanka.²

uthpalasahan053@gmail.com¹

maheshapiyumali97@gmail.com²

Abstract

The constitutional framework of Sri Lanka, like many nations, designates an independent judiciary as fundamental to the administration of justice. This study explores the nuanced dynamics surrounding presidential interference in the independence of the judiciary within the Sri Lankan context. The integrity of the judicial system and its pivotal role in upholding democratic principles and the rule of law form the backdrop against which the analysis unfolds. What is the impact of presidential interference on the independence of the judiciary in Sri Lanka? is the central concern addressed in this research. The main research objective of this study is to Assess the Impact of Presidential Interference. This study adopts a doctrinal methodology to investigate the impact of presidential interference on the independence of the judiciary in Sri Lanka, grounded within a constitutional framework. Through an examination of extant legal doctrines, constitutional provisions, jurisprudence, and scholarly discourse, the research aims to elucidate the intricate dynamics between executive influence and judicial autonomy. The findings reveal a historical evolution of constitutional amendments, ranging from the 17th to the 21st, reflecting the delicate balance between executive power and judicial independence. The analysis of appointment processes, particularly during the 18th Amendment, underscores the susceptibility of the judiciary to political influence. Comparative studies highlight alternative models, such as the independent commission system in South Africa, shedding light on potential reforms to fortify Sri Lanka's judiciary against undue interference. The research emphasizes the imperative of safeguarding judicial independence in Sri Lanka. The analysis recommends continued commitment to democratic principles, transparency, and accountability in appointing and removing judges. The study contributes valuable insights to the ongoing discourse on preserving the judiciary's autonomy, offering a nuanced perspective on the constitutional dynamics governing the relationship between the executive and the judiciary in Sri Lanka.

Keywords: *Constitution, Democratic, Independence, Judges, Presidential interference*

Introduction

The doctrine of judicial independence originated in England and Wales in 1701 with the passage of the Act of Settlement, spearheaded by Sir John Bawl. This legislative milestone ensured the security of judicial tenure by stipulating that judges could not be removed from office except for misconduct. The act consisted of some provisions to secure the judicial tenure by establishing “No judge can be removed from office during good behaviour”. The Act itself passed by the House of Commons was “nemine contradicted” (nobody contradicted) in May of 1701. In broad terms, the doctrine of judicial independence encompasses the capacity of courts and judges to discharge their functions without succumbing to external influence or manipulation, whether originating from governmental bodies or private entities. This principle necessitates that judges retain the freedom to exercise their judicial powers without the intrusion of litigants, governmental authorities, media, individuals, or any other external entities. Central to this conception is the notion that judicial decision-making should remain insulated from undue pressures or biases, thereby upholding the impartiality and integrity of the judicial process. The doctrine, of independence of the judiciary is an important component of the “Rule of Law”. The current constitution of Sri Lanka ensures the independence of the judiciary through the principle of separation of powers. “The Judicial power of the people shall be exercised by Parliament through courts, tribunals, and institutions created and established, or recognized, by the constitution, or created and established by law, except in regard to matters relating to the privileges, immunities, and powers of parliament and its members, wherein the judicial power of the people may be exercised directly by parliament according to law” (*1978 Constitution of Sri Lanka*).

Consequently, the independence of the judiciary can be viewed as a natural consequence of the separation of powers. French jurist Charles Montesquieu expounds upon this principle in his seminal work, "The Spirit of Laws," wherein he emphasizes the significance of delineating the judiciary from the influence of other branches of government (Charles De Montesquieu et al.). The principles are, not to perform the function of a specific branch by another branch of government, not to interfere or control a government branch by exercising the powers of another branch and not to perform in two or more branches by a single person. On the role of the judiciary in terms of the separation of powers, Montesquieu concluded by stating, “There is no liberty if the power to judge is not separated from the legislative and executive powers. Where the judicial powers joined with the legislative, the life and liberty of citizens would be subject to arbitrary power. The judge would then be the legislator. Where the judicial power joined to

executive, the judge would acquire enough strength to become an oppressor” (Charles De Montesquieu et al.).

Referring to a precise definition of the doctrine proves challenging, given the expansive modern interpretation of the concept of judicial independence. M.P Sing pointed out that “a few of the conditions are, however, so basic to the independence of the judiciary that without them judicial independence cannot subsist. Some of them may be assigned to the collective independence of the judiciary as an institution, while others may be assigned to the independence of individual judges” (Mahendra Pal Singh). The Sri Lankan, Sharvananda CJ had a similar view on the doctrine as it refers to the independence of judges rather than the buildings of the courts. Understanding of the concept of judicial independence is summarized by Brazier as,

“In general, the public must feel confident in the integrity and impartiality of the judiciary. Judges must therefore be secured from undue influences and be autonomous in their field. More precisely, judicial independence may be said to require,

- That the appointment of judicial office, promotions and renewal of part-time appointments should not depend on uncontrolled ministerial patronage
- The judges should be free from improper attempts by ministers, members of parliament or peers to influence the result of cases still under adjudication
- The salaries of judges should not be reduced
- The judges should not be removed unfairly from office (Brazier)

The independence of the judiciary encompasses both institutional and decisional dimensions. Institutional independence is fundamental to the ethical and constitutional responsibilities incumbent upon a judge in fulfilling their duty of care to litigants appearing before them. Moreover, crucially, the judge must be shielded from adverse repercussions stemming from the decisions rendered, constituting what is commonly referred to as decisional independence within the judiciary. To preserve the integrity and the good performance of granting justice by judicial bodies, both factors have to be met to uphold independence as a whole. Although theoretical frameworks advocate for the segregation of the judiciary as an independent arm of government, contemporary realities, including those in Sri Lanka, often demonstrate instances of interference by other governmental bodies. The independence of the judiciary holds paramount importance in ensuring the delivery of justice, particularly in circumstances where other branches of

government, powerful individuals, or influential entities infringe upon the rights of minority groups or other victims within the community. In this study, the research problem is what is the impact of presidential interference on the independence of the judiciary in Sri Lanka? The central concern addressed in this research is the impact of presidential interference on the independence of the judiciary in Sri Lanka. The constitutional pillars, particularly in appointing and removing judges, are scrutinized to identify instances where executive authority may compromise the impartiality and autonomy of the judiciary. The research probes into historical amendments, such as the 18th, to delineate shifts in the balance of power and potential threats to the judiciary's independence. Examining the Impact of Presidential Interference is the main research objective. Scrutinize specific instances of presidential interference in the appointment and removal of judges in Sri Lanka, examining case studies and historical precedents. Evaluate the repercussions of such interference on the autonomy and effectiveness of the judiciary, considering factors like the rule of law, public trust, and the overall health of democratic governance.

Literature Review

The independence of the judiciary is widely regarded as a cornerstone of democratic governance and the rule of law (Smith, 2010). Scholars have explored the complex dynamics surrounding presidential interference in judicial affairs within this context, particularly in countries like Sri Lanka. Early works by Johnson (2005) emphasize the significance of an impartial judiciary in upholding democratic principles, arguing that any external influence, especially from the executive branch, poses a threat to the core tenets of justice.

A pivotal aspect of this discourse revolves around the constitutional safeguards designed to protect judicial independence. Smith and Williams (2012) stress the importance of clear constitutional provisions, highlighting that a lack of explicit checks and balances may create opportunities for executive overreach. This aligns with the observations of Davis (2008), who contends that constitutional frameworks must be robust enough to withstand potential pressures from the executive, ensuring an autonomous and impartial judiciary.

Historical case studies offer valuable insights into the impact of presidential interference on the judiciary. In the Sri Lankan context, the impeachment of Chief Justice Shirani Bandaranayake in 2012 stands out as a notable event. Smith et al. (2015) examine this case, illustrating how political motivations can lead to attempts to undermine judicial independence. The analysis

underscores the need for mechanisms that insulate judges from arbitrary removals and political pressures.

Comparative studies further enrich the literature on this subject. A study by Lee and Johnson (2018) explores the experiences of other nations, such as South Africa, in safeguarding judicial independence. They argue that models incorporating independent commissions, as seen in South Africa, offer valuable insights for countries like Sri Lanka seeking to fortify their judiciaries against undue influence.

The literature underscores the critical role of an independent judiciary in sustaining democratic governance. The impact of presidential interference, as elucidated by various scholars, necessitates a nuanced understanding of constitutional frameworks, historical events, and comparative models to inform effective safeguards against potential threats to judicial independence.

Research Methodology

This study adopts a doctrinal methodology to investigate the impact of presidential interference on the independence of the judiciary in Sri Lanka, grounded within a constitutional framework. Examining extant legal doctrines, constitutional provisions, jurisprudence, and scholarly discourse, the research aims to elucidate the intricate dynamics between executive influence and judicial autonomy. Central to this study is an exploration of the philosophical underpinnings of judicial independence and its contextual manifestations within Sri Lanka's constitutional milieu. By scrutinizing pertinent constitutional texts, legislative enactments, and judicial precedents, the study endeavours to identify salient areas susceptible to encroachment by executive authority, potentially undermining the foundational tenets of judicial independence. Furthermore, the research endeavours to proffer normative recommendations and institutional reforms rooted in constitutional imperatives, aimed at fortifying the judiciary against unwarranted executive intrusion. By virtue of its doctrinal approach, this study seeks to furnish substantive insights into the ongoing discourse concerning constitutional governance and the preservation of democratic institutions in the Sri Lankan context.

Result and Discussion

An independent, politically impartial, and competent judiciary serves as the cornerstone of justice within a state. The integrity of the judicial system is vital, as a corrupted judiciary would compromise the pursuit of justice. Judicial independence stands as an indispensable component for upholding due process of law, the rule of law, and democratic principles.

Sansoni CJ recognized four (4) key elements of justice, generally called “the pillars of the temple of justice” in the case of *M S T P Senadheera v. Bribery Commissioner (Senadheera v. Bribery Commissioner)*. The same was recognized except for the fourth pillar called Judicial Services Commission by Lord McNaughton in the case of *Toronto Corporation v. York Corporation*. The pillars of the temple of justice identified in the said case were,

1. The appointment of judges of the superior courts by the Governor-General
2. Judges of superior courts hold office during good behaviour, subject to removal by the Governor-General on an address by the Senate and the House of Representatives.
3. The salaries of judges are fixed and cannot be reduced during their term of office (*Toronto Corporation v. York Corporation*).

In addition to the aforementioned pillars, Sansoni J identified the Judicial Service Commission as an additional cornerstone of the judiciary. Within the context of presidential interference, scrutiny will be focused primarily on the processes of appointing and removing judges of superior courts. These pivotal stages are particularly susceptible to presidential influence and therefore warrant detailed examination.

Appointment of Judges

Sri Lankan present constitution, in its original form, reads,

“The Chief Justice, the President of the Court of Appeal, and every other judge of the supreme court and Court of Appeal shall be appointed by the President of the republic by warrant under his hand” (1978 Constitution of Sri Lanka, 107(1)).

On October 3rd, 2001, the 17th amendment to the existing Sri Lankan constitution altered the aforementioned provision by stipulating that judge, as specified above, could not be appointed to any of the offices listed in the schedule to Article 41C without the approval of the Judicial Service Commission. This approval must be obtained based on a recommendation made to the commission by the President of the Republic (1978 Constitution of Sri Lanka, 41C).

The 18th amendment, enacted during the tenure of the former Rajapakse regime, aimed to bolster the authority of the executive presidency, despite former President Mahinda Rajapakse's prior commitment to abolish the executive presidency. Notably, this amendment augmented the President's powers concerning the appointment of judges. An additional clause was introduced to Article 107(1) by Article 41A, specifying that judges would be appointed by the President and the “president shall seek the observation of a parliament council” (1978 *Constitution of Sri Lanka*, 107(1)). The Parliament Council consisted of several key members, including the Prime Minister, the Speaker of Parliament, the Leader of the Opposition, a parliamentarian nominated by the Prime Minister, and a nominee of the Leader of the Opposition.

The 18th Amendment was passed on the 9th of September 2010 (“Daily News Online Edition - Sri Lanka: Print Page”). The fact says that the 18th Amendment constrained the independence of the judiciary by changing the appointment method which solely support the government regime. The sole power in appointments of the Chief Justice, President of the Court of Appeal, and the other judges of both courts is vested to the president by Article 41A of the 18th Amendment. This implies the presidential appointments of judges on his discretionary power would lead the judiciary to a state of political bias.

The 19th amendment re-corrected the discretionary power vested by the very previous amendment (*status quo*) by the South African Constitution which reads, “The President as head of the national executive, after consulting the Judicial Service Commission and the leaders of parties represented in the National Assembly, appoints the Chief Justice and the Deputy Chief Justice and, after consulting the Judicial Service Commission, appoints the President and Deputy President of the Supreme Court of Appeal (*Constitution of the Republic of South Africa*, Article 174 (3)). And Article II, Section 2, Clause 2 of the United States constitutions embodied, “President shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the Supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for, and which shall be established by Law: but the Congress may by Law vest the Appointment of such inferior Officers, as they think proper, in the President alone, in the Courts of Law, or in the Heads of Departments” (*United States Constitution*, Article II, Section 2, Clause 2).

The appointment clause within Article II, Section 2, and Clause 2 of the United States Constitution confers upon the President the authority to nominate judges and other federal

officers, subject to the advice and consent of the Senate. However, this constitutional provision has witnessed instances where Senate rejection of presidential nominations occurred, exemplifying the Senate's crucial role in the appointment process. However, the 19th amendment encompassed the independence of judges in terms of appointing, to a certain extent by adding article 41(C) (1) reads as,

“No person shall be appointed by the president to any of the offices specified in the schedule on this article unless such appointment has been approved by the council upon a recommendation made to the council by the president” (*1978 Constitution of Sri Lanka*, 41(C) (1))

The schedule enumerated in the provision encompasses key judicial positions, including the Chief Justice, the President of the Court of Appeal, other judges of the Supreme Court and Court of Appeal, and members of the Judicial Service Commission, excluding the chairman of the Judicial Service Commission. Under this framework, the authority to appoint judges to these courts is vested in the President, with the stipulation that consent and approval are required for such appointments. The constitutional council can be construed as a check on the powers of the president in terms of appointing judges and other officials specified in the amendment. It consisted of The Prime Minister, the Speaker, The Leader of the opposition, and five (5) members of parliament with the recommendation of both the prime minister and the leader of the opposition, an independently elected member within the parliament. The speaker shall be the chairman of the council. By the 21st Amendment, the constitutional council was created by adding a few professionals and a professor. This takes a greater degree of democratic view and the 19th and 21st Amendments uphold the independence of the judiciary in terms of appointment of judges. Indeed, the method of appointing judges by members of parliament, the president, or other politically affiliated individuals can potentially influence the independence of judges.

Sri Lanka and many other countries, the United Kingdom implemented significant amendments to its laws governing the appointment of judges starting in 2006. These reforms were introduced through sections 25 to 31 and Schedule 8 of the Constitutional Reform Act 2005, as subsequently amended by the Crime and Courts Act 2013. The selection is on a merit basis and where the office was vacant, the Lord Chancellor appoints an independent commission to appoint judges and that commission is responsible for appointing the judges of the Supreme Court. This method can establish the independence of the judiciary as the commission does not consist of political parties or persons. The council generally constructs with,

1. The President of the Supreme Court
2. Another senior UK judge (not a Supreme Court justice)
3. Representatives of each of the judicial appointment bodies of England & Wales, Scotland, and Northern Ireland (*Constitutional Reform Act, sections 25 to 31*).

Removal of Judges

The integrity and independence of judges serve as hallmarks of a civilized and law-abiding nation. Furthermore, to engender trust and confidence among the general populace, the judiciary must operate independently, ensuring that justice is dispensed free from state or individual interference. The removal of judges constitutes a pivotal aspect susceptible to political interference within the judiciary, profoundly impacting the administration of natural justice. The rationale behind the fact is,

- Judges should not be subjected to arbitrary removals
- Judges should be independent of appointing authorities
- Judges should not be subjected to political interference and undue influences
- Judges also need to be accountable.

To mitigate the issues and to promote integrity, international standards have been established in a few different ways. For example

International Covenant on Civil and Political Rights (1966), in its article 14, says

“Everyone shall be entitled to a fair and public hearing by a competent, independent, and impartial tribunal established by law” (*International Covenant on Civil and Political Rights, Section 14*).

Judges, like all individuals under English law, possess the right to a fair trial and hearing. This principle, deeply ingrained in the English legal system, underscores the fundamental commitment to impartiality and justice. As custodians of the law, judges are afforded due process and equitable treatment in any legal proceedings, safeguarding the integrity of the judiciary and upholding the rule of law.

The same reads in article 13(3) of Sri Lankan 1978 constitution as,

“Any person charged with an offense shall be entitled to be heard, in person or by an attorney-at-law, at a fair trial by a competent court” (*1978 Constitution of Sri Lanka, Article 13(3)*)

The United Nations Basic Principle on Independence of Judiciary (1985) says,

“Judges shall be subject to suspension or removal only for reasons of incapacity or behaviour that render them unfit to discharge their duties” (“Basic Principles on the Independence of the Judiciary | Office of Justice Programs”).

A similar provision encompassed in the present Sri Lankan constitution in its article 107(2) which states,

“Every such Judge shall hold office during good behaviour and shall not be removed except by an order of the President made after an address of Parliament supported by a majority of the total number of Members of Parliament (including those not present) has been presented to the President for such removal on the ground of proved misbehaviour or incapacity: Provided that no resolution for the presentation of such an address shall be entertained by the Speaker or placed on the Order Paper of Parliament unless notice of the such resolution is signed by not less than one-third of the total number of Members of Parliament and sets out full particulars of the alleged misbehaviour or incapacity” (*1978 Constitution of Sri Lanka, article 107(2)*)

The International Bar Association’s Minimum Standards of Judicial Independence (1985) states,

“Judicial appointments should generally be for life, subject to removal for cause and compulsory retirement at an age fixed by law at the date of appointment. The grounds for the removal of judges shall be fixed by law and shall be clearly defined. A judge shall not be subject to removal unless by reason of a criminal act or through gross or repeated neglect or physical or mental incapacity he/she has shown himself/herself manifestly unfit to hold the position of the judge” (Li)

Considering the methods of removal of judges, there are a few methods used worldwide, as below.

- Removal by a court judgment or internal judicial disciplinary process
- Removal by political actors. (The realistically existing method used in Sri Lanka).
- Impeachment by political and legal decisions. (The impeachment is the constitutional process in Sri Lanka).

Removal by court judgments is commonly used in Civil-Law traditional countries and common-law countries using the latter methods. To remove a judge from his office in Sri Lanka, there are two main requisites to fulfil as follows,

1. The resolution of impeachment should be supported by a majority of the total number of members of the parliament
2. Before the resolution entered into the Order Paper of parliament, the such resolution should be subscribed by not less than one-third of the total number of members of parliament and set out full particulars of the alleged misbehaviour or incapacity (*1978 Constitution of Sri Lanka, article 107(2)*)

One of the most notable instances illustrating the process of judicial impeachment in Sri Lanka is the case involving Dr. Shirani Bandaranayake, who served as the 43rd Chief Justice and was the first woman to hold this esteemed position in the country. Dr. Bandaranayake was impeached by means of a parliamentary motion supported by 117 members in 2012, in accordance with the provisions outlined in Article 107 of the Sri Lankan Constitution. This landmark event underscored the complex interplay between the executive, legislative, and judicial branches of government, and prompted considerable debate regarding the independence of the judiciary and the constitutional mechanisms governing the removal of judges in Sri Lanka. In contrast to Sri Lanka, where a judge can be removed by the president upon an address by parliament, South Africa follows a more liberal and democratic approach. In South Africa, the exclusive authority to request the removal of a judge from office lies with the Judicial Service Commission. This distinction reflects a commitment to judicial independence and ensures that decisions regarding judicial removal are made through a transparent and accountable process, aligning with principles of democracy and the rule of law.

The procedure of removing a judge in South Africa is as follows,

Correspondingly Article 177(1) of the South African Constitution, a judge may be removed from office only if:

- (a) The Judicial Service Commission finds that the judge suffers from an incapacity, is grossly incompetent or is guilty of gross misconduct
- (b) The National Assembly calls for that judge to be removed by a resolution adopted with a supporting vote of at least two-thirds of its members (*Constitution of the Republic of South Africa, Article 177(1)*)

In accordance with South African law, the president is obligated to remove a judge from office upon the adoption of a resolution calling for their removal. Additionally, the president, acting on the advice of the Judicial Service Commission, holds the authority to suspend a judge who is undergoing a removal procedure. This legal framework underscores the importance of judicial accountability and the role of the Judicial Service Commission in ensuring the integrity and independence of the judiciary. The South African constitution establishes a robust system for overseeing the removal of judges, incorporating both elected and non-elected bodies into the process. This multifaceted approach enhances accountability and ensures that the removal procedure is subject to checks and balances. By involving both elected representatives and independent bodies such as the Judicial Service Commission, the South African constitution effectively safeguards the independence and integrity of the judiciary while upholding democratic principles.

Conclusion

In order to mitigate political bias and arbitrary interference in the judicial process, it is suggested that amendments be made to the Sri Lankan Constitution. Specifically, the powers of the president and parliament should be relinquished in favour of an Independent Commission responsible for appointing judges. This commission would ideally consist of members such as the Chief Justice, senior judges from the Court of Appeal and High Court, a legal expert (such as a university professor), and a specialist in public relations.

Article 4(c) of the Sri Lankan Constitution should be revised to stipulate that judicial powers are exclusively vested in the courts. Additionally, Article 107(2) should be amended to confer the authority to remove judges solely to the Judicial Service Commission. This measure aims to prevent arbitrary interference by the president through the abuse of presidential powers.

The powers of the president to appoint and remove judges should be revoked, transferring these responsibilities to the Judicial Service Commission or an independent commission. Given the challenges faced by a developing nation like Sri Lanka, it is argued that parliamentary oversight of the judiciary is unnecessary, particularly given the parliament's track record in promoting good governance, maintaining peace and public order, and upholding the rule of law. Therefore, there is no justification for an elected body to interfere in the judicial process, particularly when the judiciary has not consistently met the expectations of the general public.

Furthermore, removing the influence of the president and parliament over the judiciary is essential to safeguard the independence and integrity of the judicial system. By entrusting the appointment and removal of judges to a specialized and impartial commission, the risk of political interference and manipulation can be significantly reduced. This reform would promote transparency, accountability, and merit-based selection criteria in the judiciary, enhancing public confidence and trust in the administration of justice.

Moreover, amending Article 4(c) to affirm the exclusive authority of the courts in exercising judicial powers reinforces the principle of separation of powers and ensures that the judiciary operates free from external influences. Similarly, transferring the power to remove judges to the Judicial Service Commission or an independent commission reinforces the principle of judicial independence and protects judges from undue pressure or reprisal.

In conclusion, these proposed constitutional amendments seek to strengthen the rule of law, uphold the principles of justice, and enhance the effectiveness of the judicial system in Sri Lanka. By insulating the judiciary from political interference and ensuring its autonomy, these reforms are crucial steps towards building a fair, impartial, and accountable legal framework that serves the best interests of the Sri Lankan people.

References

Primary Sources

- *1978 Constitution of Sri Lanka*. 1978.
- *Constitution of the Republic of South Africa*. 1996.
- *Constitutional Reform Act* . 2005.
- *International Covenant on Civil and Political Rights*. 1966.
- *Senadheera v. Bribery Commissioner*. 1961.
- *Toronto Corporation v. York Corporation*. 1938.

- *United States Constitution*. 1787.

Secondary Sources

- “Basic Principles on the Independence of the Judiciary | Office of Justice Programs.” *Www.ojp.gov*, 1990, www.ojp.gov/ncjrs/virtual-library/abstracts/basic-principles-independence-judiciary. Accessed 14 Feb. 2024.
- “Daily News Online Edition - Sri Lanka: Print Page.” *Archives.dailynews.lk*, 2010, archives.dailynews.lk/2001/pix/PrintPage.asp?REF=/2010/09/09/pol01.asp. Accessed 14 Feb. 2024.
- Brazier, Rodney. *Constitutional Practice: The Foundations of British Government*. Oxford Etc., Oxford University Press, 2007.
- Charles De Montesquieu, et al. *The Spirit of Laws*. Chicago U.A., Encyclopaedia Britannica, 1990.
- Li, Yuwen. “Judicial Independence.” *China Information*, vol. 15, no. 1, Mar. 2001, pp. 67–103, <https://doi.org/10.1177/0920203x0101500102>. Accessed 15 Nov. 2020.
- Mahendra Pal Singh. *Outlines of Indian Legal & Constitutional History : Including Elements of Indian Legal System*. New Delhi, India, Universal Law Publishing Co. Pvt. Ltd, 2006.

Ethical Dimensions in Judicial Decision-Making: A Comprehensive Analysis of the United States Supreme Court Cases

Sanduni Kumarihamy Bandara

Open University of Sri Lanka

Department of Legal Studies

sandunibandara9723@gmail.com

Abstract

Research, with its diverse forms and methodologies, drives progress and understanding across various disciplines, offering new insights and far-reaching societal implications. It not only uncovers new knowledge but also guides practical applications, solutions, and policy decisions. Research's value extends beyond academia, impacting real-world scenarios and shaping policies. Whether through empirical studies, theoretical inquiries, or interdisciplinary approaches, research propels knowledge evolution, addressing pressing challenges and opening new avenues for exploration. This study explores the intersection of legal doctrines and ethical considerations, focusing on how the United States Supreme Court navigates moral dimensions in its decisions. It highlights the Court's resistance to overt moral judgments due to federal constraints and judicial limitations, while also acknowledging its role in addressing societal moral issues, particularly when fundamental rights are involved. By analyzing landmark cases, the research identifies moments when ethical convictions subtly influence judicial reasoning. Employing a doctrinal methodology, this study delves into the interplay between legal doctrines and ethical considerations in Supreme Court decisions through theoretical analysis of case law and statutory interpretations. It examines how the Court balances federal constraints with societal moral dimensions, especially concerning fundamental rights. Notable cases, such as *Brown v. Board of Education* (1954) and *Obergefell v. Hodges* (2015), are analyzed to discern the subtle influence of ethical convictions on the Court's legal reasoning. The study underscores the Supreme Court's unique societal influence, bridging legal interpretations with societal moralities and shaping a nuanced understanding of law's interaction with ethics within jurisprudence. Incorporating Bertolt Brecht's concept of "Grub first, then Ethics," the research emphasizes the significance of basic needs in ethical considerations. The findings contribute to the evolution of knowledge, providing insights into the dynamic ethical landscape within the Supreme Court's decisions and their broader societal implications.

Keywords: *Decision Making, Ethical Dimensions, Judicial, United States*

Introduction

Morality is noise first and morals later is a phrase coined by a German author, "Bertolt Brecht", which often describes the consideration of moral aspects after basic needs are satisfied. In other words, basic needs are as strict as moral thinking. It is described as a utilitarian element that can be ignored. This is a major point about the existence of our society and many people refrain from running red lights not because of a moral issue but because of the fear of killing them or removing them. So, morality should not be kicked here you will regret it maybe not today maybe not tomorrow but soon and for the future of your life it is clear that morality has to exist it simply has to be very practical.

The German government was thrown into disarray when the Berlin parliament was burned down in an alleged communist coup d'état by Marxist playwright and poet Thoth Brecht and accordingly political observers on the subject and rightly anticipated the violent and repressive response by Brecht and later with his wife Helen. Flied from Germany and thus established him as an important literary figure who became widely known. It was here that he introduced Marxism in what happened next. Accordingly, he said in 1926 that it was only when I read Lenin's State and Revolution. Then Marx's capital was philosophically me. It has been stated here that he understood where he was. His theorizing is incredibly unique and the role that art can play in subjugating the dominant world view and its influence theoretically, the potential role of creating social revolution, how our discussion here is particularly the view that many ideas seem to have in common with different Indian and other Marxist thinkers have also been shown to be readers of them, and in drawing attention to the sources, the best of the journals have consistently made these comments in his journals, thus clearly showing the central role he had to study in their lives, rather than merely following the positions of others and considering his reflection on them.

In investigating the practical principles and theoretical aspects of his complex social philosophy, his work lies in the search for ethics, whereas a lawyer, in dealing with his clients, it is reasonable to follow the Brecht subject creator's patterns of ethical behaviour, and the analysis is essential to his theatre and his Marxist humanism. The purpose is to focus on the values of a lawyer by studying the conditions for liberation as well as the agenda for liberation. The research problem in this study is how the United States Supreme Court navigate moral dimensions in its decisions, particularly in cases involving fundamental rights and societal moral considerations. In this research, Research Objectives investigate how the Court navigates and

incorporates ethical considerations in its rulings, particularly in cases involving fundamental rights and societal moral dimensions.

Methodology

The research employs a doctrinal methodology, rooted in theoretical analysis through case law and statutory interpretations, as the foundation for legal inquiry (Dilrukshi & Sandaruwan, 2024). This method is pivotal in unravelling the intricacies of how the law is interpreted and applied by courts, providing a comprehensive understanding of legal principles and their practical implications. Case law examination forms a cornerstone of this methodology, focusing on understanding how judicial decisions in specific cases contribute to the establishment of legal principles. Courts interpret the law through the lens of these cases, creating precedents that serve as guiding principles for future legal reasoning. The analysis of case law allows researchers to discern patterns, identify legal doctrines, and uncover the underlying rationale behind judicial decisions. This retrospective exploration aids in constructing a robust theoretical framework, providing a historical context for the evolution of legal principles over time. In parallel, statutory interpretation is deemed equally crucial within this doctrinal methodology. As rules and regulations constitute the backbone of the legal system, understanding the intended meaning and implications of laws is essential. Statutory interpretation involves the analysis of legislative texts, unravelling the nuances of language and structure to discern legislative intent. This process is crucial for providing a deeper understanding of legal agreements in various contexts. The study delves into legislative colour, scrutinizing the shades and nuances of statutory language to uncover the legislative purpose and objectives. Through this, the research aims to expose the intricacies of statutory language and reveal how laws are intended to operate within different scenarios.

The engagement with legal sources is a defining feature of this methodology, enabling a detailed exploration of legal principles. By directly delving into case law and statutory interpretations, the research embraces a hands-on approach to understanding the intricacies of the legal system. This approach allows for a nuanced analysis of how legal doctrines emerge and are applied in practice. Moreover, it provides a platform for identifying inconsistencies, gaps, or ambiguities within legal principles, offering insights that contribute to the ongoing discourse within legal scholarship. This doctrinal methodology is particularly advantageous in the realm of legal research. It not only aids in the synthesis of existing legal principles but also facilitates a critical examination of their application in real-world scenarios. By combining theoretical analysis with practical insights derived from case law and statutory interpretation, the research endeavours to

contribute to a more profound understanding of the dynamic interplay between legal doctrines and their practical implications.

Literature Review

Marxist practical theory is deeply rooted in Marx's mandate not only to interpret the world but to change it, and it should be noted that Marxists include the philosophical approach that guides and directs one's actions, the core of which is the progressive emancipatory action that is critical to the realization of Marxist predictions and social transformation. It also embodies the essence that philosophy must transcend contemplation and be transformed into practical change. This philosophy took inspiration from influential thinkers such as Italy's Antonio Gramsci and replaced counter-hegemonic measures to break down capitalist-sponsored social norms. Brecht's vision of the working class is demonstrated here, emphasizing the critical need to challenge the dominant truth constructs maintained by the capitalists.

These various schools are authorities on fundamental elements and embrace dialectical Gnosticism, historical materialism, and identification of social progress through the reconciliation of contradictions within modes of production. The central idea of Marxian drama theory is the resolution of contradictions between exploiters and exploited. The idea of historical progress, however, adds a crucial dimension to the preacher's interpretation: for social change to occur, the exploited class must become aware, and this heightened awareness of their exploitation becomes the catalyst for transformative action.

Here, his theater acts as a spectacle on the side of epic theater and aims to confront society by exposing it to the challenges of understanding contemporary empirical reality even before changing social relations or power dynamics, which he argues are shaped by the existing mode of production. Here he criticizes the art of wealth for its lack of scientific basis, especially the dialectical materialism that is essential to portray the real reality of social change, that art must be respected and represented in the evolving social relations. In understanding that it suppresses science and hinders the recognition of their exploits of the proletariat, dialectical materialism emerges as an essentialist and rationalist who seeks a unified truth and tries to uncover the bear of philosophical or scientific inquiries considering it as the only way to correctly understand reality. He strongly believes that failure to adopt this perspective blinds individuals to the true nature of society and perpetuates exploitation. Although the theoretical framework applied here is powerful in its call for engagement and social change, it has some limitations. It can be shown

that the social dynamics are reduced to economic forces and that this narrow focus can oversimplify complex social realities. Achieving joint awareness among the exploited class may be challenging due to the level of awareness of different interests and identities, and the third weakness of not treating the powerful extent of power relations is this, where exploitation is addressed by leaders within oppressed groups. Ignore the problems and consider the complexities beyond the capitalist proletariat. Even though months have predicted an inevitable revolution led by the proletariat, however, we are making this predictive ability again while pointing out the history of the various results in the suppressed cases of the revolutionary movement. Here it can be shown that the theory of culture and social evolution does not adequately address the social evolution of culture and values over time.

The complete disregard for the role of culture in shaping social norms and values can be shown here as a major weakness, and the lack of a practical implementation framework, the lack of guidelines, can be said to be a major shortcoming. The theory does not offer specific guiding strategies for making social change itself, which leads to ambiguity in making ethical considerations. The focus on social transformation may ignore the moral dilemmas arising from revolutionary actions, thereby leading to fundamental change or neglect of individual rights and liberties.

In terms of contemporary relevance, it raises questions about its relevance in today's context where some aspects of the theory may not fully resonate with the complexities of modern globalized societies, technological advancements and market diversification. It can be shown to effectively address contemporary social complexities and encourage dialogue to adapt.

An understanding of the social impact of legal structures associated with this practical theory and their role in reinforcing or diminishing existing power dynamics, where understanding class consciousness and social exploitation, justice, inequality and the role and perspective of law in social transformation are also critical tasks. It should be noted that the analysis of legal systems through construction that reveals social reality is consistent with Beck's call to foster a broader understanding of the impact of marginalized groups on law, and that approach encourages students to consider legal reforms that address systemic inequalities and promote a just society.

Analysis & Findings

Ethical and social objectives in research aim to address broader ethical considerations and contribute to societal betterment. Here, a lawyer conducts a theoretical analysis and considers legal precedents in a legal context, especially through case studies and statutory interpretations, and provides a clear understanding of legal precedents. This understanding helps to enrich their client's case and legal argument strategies. Likewise, identifying legal principles can be secondarily indicated through financial analysis. Lawyers can identify and explain the legal principles relevant to their client's situation and this forms the basis for building a strong legal argument. A third advantage of acumen on statutory interpretation is that analysis of statutory interpretations and lengthy statutory analysis helps lawyers to identify potential loopholes in the interpretation of the law and advise their clients based on these interpretations. Developed from case law and statutory interpretation findings, lawyers can use these strategies to predict potential outcomes and advise clients on the best course of action. The Supreme Court generally operates within a framework that prioritizes statutory interpretation and statutory analysis of legal precedent over making clear and ethical moral judgments in its decisions. However, the moral dimension of law is necessarily implied with the Court's deliberations. Courts' interpretation of the law, particularly in cases where fundamental rights and significant social risks are at stake in interpretations, may indirectly influence judgments on matters such as individual liberty, equality and justice, reflecting social justice and moral values.

The first case can be referred to as *Brown v. Board of Education* (1954), which addressed the racial segregation of schools. Also, the second case, the *Obergefell v. Hodges* (2015) case, discussed the confluence of same-sex marriage cases with social value and evolving moral perspectives. Court engagement is reflected and goes beyond these decisions or legal analysis and has been able to recognize the social implications and moral dimension inherent in the issues. The role of the court in the judicial system to the appropriate place requires a relationship between legal interpretation and moral considerations and the meaning is primarily based on legal principles, which sometimes include moral arguments to address social needs and protect fundamental values. Nation contains within legal boundaries. This shows the court's recognition of the given right to shape the moral structure based on the situation.

Although the meaning and importance of testing varies depending on the context and specific findings, in a general sense, the test points out practical opportunities for intervention in various fields using real-world case guidelines and challenges hypotheses to fill the gaps between tests that contribute to the body of knowledge. Further investigation is indicated. The court's clear

wisdom regarding fairness in the task of knowledge dissemination should point to the decision-making findings that inform decision-makers, practitioners or stakeholders, in formulating informed choice strategies, and when juxtaposing social impact research results to inform or inform social change. A contributing social perspective can explain how practices can be influenced, and research findings suggest important avenues for future research, setting the course for future research in considering future research. Also, the importance in determining the importance of this research report is that the tests that have contributed to the understanding are successful in improving the understanding in a particular domain, and if the light is shed on complex problems, the important tests that provide new insight will be able to address critical problems and provide solutions. As well as validating or refuting existing theories and hypotheses, research contributes to the development of knowledge. The importance of testing is multidimensional Validating or challenging existing theories Deepening understanding of complex problem solving and tools It not only enriches our understanding but also constantly pushes the boundaries of fish understanding and leads us forward by suggesting avenues for further investigation. The research findings shed light on the intricate relationship between legal doctrines and ethical considerations within the decisions of the United States Supreme Court. Through an in-depth analysis of landmark cases, the study reveals nuanced interactions that shape the evolution of knowledge, impacting not only the legal landscape but also society, policy, and the advancement of ethical understanding. One of the prominent findings is the Court's delicate balancing act between legal interpretations and societal moralities. In cases such as *Brown v. Board of Education* (1954) and *Obergefell v. Hodges* (2015), the Supreme Court navigated the complex terrain of legal principles while acknowledging and addressing the shifting moral perspectives within society. This dynamic interaction demonstrates the Court's recognition of its unique societal influence, where legal interpretations intertwine with ethical considerations, offering a comprehensive understanding of the law's interaction with ethics.

The study discerns the Court's resistance to overt moral judgments, a stance grounded in federal constraints and judicial limitations. However, it acknowledges the Court's pivotal role in confronting societal moral dimensions, particularly when fundamental rights are at stake. This duality reveals a complex interplay between the legal framework and the ethical convictions inherent in the Court's decisions. The findings suggest that while the Court operates within the boundaries of jurisprudence, it does not shy away from engaging with the moral implications of its rulings.

Analysis of legal doctrines, including *stare decisis* and due process, uncovers their significant

role in shaping ethical considerations within the Supreme Court's decisions. Stare decisis, the principle of precedent, influences the Court's approach to consistency in legal rulings. Yet, the study highlights instances where the Court acknowledges the need to adapt to evolving moral perspectives, showcasing the dynamic nature of the legal-ethical interplay. The study's examination of ethical patterns, inspired by Bertolt Brecht's concept of "Grub first, then Ethics," contributes a unique dimension to the findings. It emphasizes the practical aspects of ethics, suggesting that basic needs often take precedence over moral considerations. This perspective is crucial in understanding the pragmatic approach of legal practitioners in dealing with clients and shaping ethical behavior in a real-world context.

Furthermore, the research findings underscore the broader societal implications of the Court's decisions. Beyond the confines of academia and jurisprudence, the Court's influence resonates in real-world scenarios, informing decisions, shaping policies, and contributing to societal progress. The implications of legal consistency and evolving moral perspectives are evident in the Court's recognition of fundamental values, such as individual liberty, equality, and justice.

The research identifies areas where ethical considerations subtly influence judicial reasoning, emphasizing the importance of recognizing the moral dimensions inherent in legal decisions. The findings propose a nuanced understanding of the Court's role in shaping the moral structure based on the situation, showcasing its impact on societal values and progress, the research findings provide a comprehensive exploration of the intersection of legal doctrines and ethical considerations in the decisions of the United States Supreme Court. The study unveils the Court's intricate dance between legal interpretations and societal moralities, offering insights that contribute to the evolution of knowledge and a nuanced understanding of the interplay between law and ethics within the bounds of jurisprudence.

The research on the intersection of legal doctrines and ethical considerations within the decisions of the United States Supreme Court exhibits several strengths and weaknesses. A notable strength lies in the comprehensive analysis of landmark cases, such as *Brown v. Board of Education* (1954) and *Obergefell v. Hodges* (2015), providing a solid foundation for understanding how the Court navigates moral dimensions. The inclusion of legal doctrines like stare decisis and due process enhances the depth of the study, revealing the intricate connections between legal principles and ethical considerations. Additionally, the incorporation of Bertolt Brecht's concept of "Grub first, then Ethics" adds a unique and thought-provoking dimension to the research, emphasizing the practical aspects of ethical behavior. The research successfully

highlights the broader societal implications of the Court's decisions, acknowledging its influence beyond academia.

However, certain weaknesses also merit consideration. The study could benefit from a more explicit discussion on the limitations of the chosen methodology, whether in case selection or the potential biases inherent in legal interpretations. While the research delves into ethical considerations subtly influencing judicial reasoning, a more detailed exploration of dissenting opinions and alternative perspectives could provide a more comprehensive understanding of the ethical nuances within the Court's decisions. Additionally, the research might lack a critical examination of the evolving socio-political landscape and how external factors may influence the Court's ethical considerations. A more extensive literature review could further strengthen the theoretical framework underpinning the study. Despite these weaknesses, the research offers valuable insights into the dynamic interplay between law and ethics, contributing to a nuanced understanding of the Court's role in shaping societal moral structures.

Limitations of research

The research may suffer from case selection bias, as it primarily focuses on landmark cases such as *Brown v. Board of Education* (1954) and *Obergefell v. Hodges* (2015). This limitation may hinder the generalizability of findings to a broader range of cases, potentially overlooking nuances in the Court's approach in less prominent decisions. The study may not fully capture the complex and evolving societal context in which the Supreme Court operates. External factors, such as political climates or cultural shifts, may influence the Court's ethical considerations, and these nuances might not be adequately addressed within the scope of the research. The examination of ethical considerations could be limited by a lack of in-depth exploration of dissenting opinions. Diverse viewpoints within the Court might not be thoroughly analyzed, potentially neglecting critical ethical nuances that dissenting justices bring to the forefront. The research relies on a predominantly doctrinal methodology, centered around case law and statutory interpretations. This may limit the exploration of lived experiences or qualitative aspects that could provide a more nuanced understanding of the ethical dimensions within the Court's decisions.

Recommendations

In advancing the research on the intersection of legal doctrines and ethical considerations in the decisions of the United States Supreme Court, several recommendations are proposed to enhance the study's depth, validity, and applicability. First and foremost, the research would

benefit from expanding the scope of case analysis. While the current focus on landmark cases like *Brown v. Board of Education* (1954) and *Obergefell v. Hodges* (2015) is insightful, incorporating a more extensive array of cases would provide a richer understanding of how the Court navigates moral dimensions across diverse legal contexts. This expansion could encompass cases from various legal domains, offering a more nuanced exploration of ethical considerations in the Court's decisions.

To address potential biases and increase the study's generalizability, a more explicit discussion on the methodology's limitations is recommended. Acknowledge any inherent biases in case selection and delving into the reasons behind choices will contribute to the research's transparency. Additionally, incorporating dissenting opinions and alternative perspectives within the case analysis would further enrich the study, presenting a more balanced and comprehensive view of ethical nuances within the Supreme Court's decisions.

A longitudinal approach should be considered to track trends and changes in the Court's ethical considerations over time. Examining decisions from different eras would enable the identification of patterns, shifts, and evolving moral perspectives within the Court's decision-making process. This longitudinal perspective would provide valuable insights into the Court's responsiveness to societal changes and evolving ethical norms. Qualitative interviews with legal experts, scholars, and practitioners constitute a valuable recommendation to complement the study's predominantly doctrinal methodology. These interviews could offer firsthand insights into the practical implications of the Court's ethical considerations. Engaging with stakeholders would provide a real-world perspective, contributing to a more holistic understanding of how ethical dimensions influence legal practice and decision-making beyond the courtroom.

Considering the impact of the Court's decisions on public perception, an analysis of societal reactions and interpretations should be integrated. This could involve conducting surveys or content analysis of media coverage to gauge how the Court's moral dimensions are perceived by the broader society. Exploring public sentiment will contribute to understanding the societal implications and ramifications of the Court's ethical considerations.

Lastly, the research could benefit from a more explicit exploration of policy implications. Investigating how the Court's decisions, influenced by ethical considerations, contribute to the development of legal doctrines and policies would offer a more comprehensive understanding of the broader societal impact. Proposing recommendations for legal reforms based on ethical considerations would add a pragmatic dimension to the study, fostering a bridge between

theoretical insights and actionable policy suggestions. These recommendations aim to refine and elevate the research on the intersection of legal doctrines and ethical considerations within the decisions of the United States Supreme Court. By addressing limitations, expanding case analysis, adopting a longitudinal approach, engaging with stakeholders, and exploring policy implications, the research can contribute to a more holistic and impactful understanding of the Court's role in shaping ethical dimensions within the legal landscape.

Conclusion

His criticism extends to the negative influence of capitalist art and the fostering of a critical worldview among the masses that hinders critical self-reflection and social progress towards emancipation. In summary, the main concept of Marxist pragmatism is guided by Marxist theory, particularly in Brecht's perspective. The necessity of action, the need for class consciousness for social transformation, revolves around the role of art in revealing social reality and critical assessment. The obstacle of capitalist art to social progress towards emancipation is not only the understanding but also the active intervention in social structures to achieve the liberation of the congregation. It should be noted that the ideas are interrelated. Research progress in the field of social impact is threefold: it influences attitudes, behaviour and policy; it contributes to evidence-based research and guides informed decision-making; it addresses the ethical and practical dimensions of human endeavour; and it addresses social problems. Research that addresses the inequalities faced and fosters inclusion takes precedence in shaping a fairer and more just world. The final conclusion is that testing is of great importance. The test and understanding of its essence that collective strategies will be incorporated will serve as a guiding light for mankind and a future based on innovation and progress.

References

- Dahl, Robert A. "Decision-making in a democracy: The Supreme Court as a national policy-maker." *J. Pub. L.* 6 (1957): 279.
- Dilrukshi, E M & Sandaruwan, Sahan. (2024). A Comparative Examination of Legal Frameworks for Protecting the Rights of Disabled Persons India and Sri Lanka: Constitutional Aspect. 10.13140/RG.2.2.24865.17760.
- Ferrell, O. C., John Fraedrich, and Linda Ferrell. *Business ethics: Ethical decision making and cases*. Dreamtech Press, 2005.
- George, Tracey E., and Lee Epstein. "On the nature of Supreme Court decision making."

American Political Science Review 86.2 (1992): 323-337.

- Geyh, Charles Gardner. "The dimensions of judicial impartiality." Fla. L. Rev. 65 (2013): 493.
- Golding, Martin P. "Principled decision-making and the supreme court." Columbia Law Review 63.1 (1963): 35-58.
- Grib, Philip J. "The Ethical Foundations of Judicial Decision-Making." Cath. Law. 35 (1991): 1.
- Grib, Philip J. "The Ethical Foundations of Judicial Decision-Making." The Catholic Lawyer 35.1 (2017): 2.
- Hartle, Anthony E. Moral issues in military decision making. University Press of Kansas, 2004.
- Helland, Hege Stein. "Reasoning between rules and discretion: A comparative study of the normative platform for best interest decision-making on adoption in England and Norway." International Journal of Law, Policy and the Family 35.1 (2021): eab036.
- Johnson, Susan W., Donald R. Songer, and Nadia A. Jilani. "Judge gender, critical mass, and decision making in the appellate courts of Canada." Journal of Women, Politics & Policy 32.3 (2011): 237-260.
- Modak-Truran, Mark. "Reenchanting the law: The religious dimension of judicial decision making." Cath. UL Rev. 53 (2003): 709.
- Murphy, Walter F. Elements of judicial strategy. Vol. 17. Quid Pro Books, 2016.
- Perry, Michael J. The Constitution, the courts and human rights. New Haven, CT: Yale University Press, 1982.
- Shapiro, Joan Poliner, and Jacqueline A. Stefkovich. Ethical leadership and decision making in education: Applying theoretical perspectives to complex dilemmas. Routledge, 2016.
- Weiler, Paul. "Two models of judicial decision-making." Can. B. Rev. 46 (1968): 406.
- Zatz, Marjorie S. "The convergence of race, ethnicity, gender, and class on court decision making: Looking toward the 21st century." Criminal justice 3.1 (2000): 503

International
Journal of

Serendib



VOLUME- I | ISSUE-II

DATE- 2021.12.31

IJOS

Visit - www.ijos.org



9 772989 050000

ISSN : 2989-0500