Cape Peninsula
University of Technology

THE POSITION OF HUMAN-CENTRED GRAPHIC DESIGN IN A POSTHUMANIST CONTEXT

by

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Thesis submitted in fulfilment of the requirements for the degree:

Doctor of Applied Arts in Design

in the Faculty of Informatics and Design

at the Cape Peninsula University of Technology

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Cape Town

Date submitted: January 2024

DECLARATION

I, **Katarzyna Anna Chmela-Jones** hereby declare that the content of this thesis represents my own unaided work and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology (CPUT).

Signed:

ABSTRACT

This study considers the transformative potential of posthumanism and *Ubuntu* philosophies for graphic design practice in South Africa. Through in-depth conversations with fourteen designers, six key Dimensions emerge as vital catalysts for change: Relationality, Visceral engagement, More-than-human agency, Hybrid identities, Ubuntu-informed ethics, and Beyond anthropocentrism. These Dimensions, woven from themes like human interconnectedness, embodiment, and social justice, call for a considered, inclusive, and sustainable approach to graphic design.

However, the industry faces hurdles. Designers may grapple with adapting to evolving landscapes, clinging to traditional methods. The study suggests potential solutions, including interdisciplinary collaboration, embracing new technologies, and fostering a culture of continuous learning and reflection. Here, *Ubuntu's* emphasis on interconnectedness, empathy, and social justice serves as a powerful companion to posthumanist principles, guiding designers towards inclusive and socially responsible design.

Employing a qualitative, phenomenological approach, the study allows for a nuanced exploration of designers' experiences. Rigorous thematic analysis using *ATLAS.ti 23*™ ensures accuracy and depth in this study and ethical considerations were paramount throughout.

This study's significance lies in its exploration of posthumanism and *Ubuntu's* impact, offering valuable insights for both practitioners and researchers. Notably, it introduces the six Dimensions as actionable frameworks for reimagining design practice. Recognising its limitations in sample size and scope, the study paves the way for further research, inviting exploration of these methodologies in diverse contexts.

Keywords: Design profession, Design in a South African context, Dimensions for change, Graphic design, Inclusive design, Posthumanism, *Ubuntu,*

IN-TEXT CITATION CONVENTIONS

Dates of publication and page numbers are provided for all authors whose ideas are quoted or paraphrased. Double quotation marks or indentations are used in the case of direct quotations. Exceptions to providing dates and page numbers are where the general focus of an author(s) is referred to or material sourced from the internet for which no dates or page numbers exist.

ACKNOWLEDGEMENTS

I would like to extend my heartfelt gratitude to the persons listed below, whose advice, direction, and assistance were crucial in the successful completion of my thesis:

- My supervisor Prof. Johannes Cronjé;
- My co-supervisor Dr Bruce Snaddon;
- All my colleagues at TERPS, but especially Bongie, Zandie, Ian and Jorietha;
- Dr Pat Harpur for language editing;
- My Head of Department at VUT, Prof. Hanlie van Staden;
- Dr Hayley Walker-Williams for giving me the confidence to try again;
- Haydn and Severyn for their love, patience and support.

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GLOSSARY

Anthropocene - This description refers to a hypothesised time within the Quaternary Period, which is underway since the mid-20th century. This phenomenon is marked by the initiation of human activities that have led to significant environmental consequences, specifically regarding ecosystems and climate (dictionary.com, 2023).

Graphic design – The discipline or profession of visual communication, encompassing the integration of images, words, and concepts to effectively transmit information to a targeted audience, with the primary objective of eliciting a predetermined effect (dictionary.com, 2023).

Human-centred design - Human-centred design (HCD) is founded upon the use of many strategies that facilitate communication, interaction, empathy, and stimulation among people, so enabling an in-depth understanding of their wants, desires, and experiences. This knowledge frequently surpasses the individuals' own awareness of these aspects (Giacomin, 2014).

Posthumanism – This critical perspective suggests that the era of Humanism has reached its conclusion. The underlying premise of this argument is that the twin assumptions of Humanism, namely that people are both knowable and rational, are flawed. The rejection of the notion that people can be fully understood is mostly based on the inherent challenge of establishing a clear demarcation between human beings and other entities, such as non-human beings or animals, which is further complicated by the porous nature of this distinction. Furthermore, it challenges the notion that human beings, by virtue of possessing reason, have the only authority to choose the destiny of the Earth and its many non-human inhabitants. Posthumanism is a paradigm that places significant emphasis on ecological consciousness (Wolfe, 2010).

Ubuntu – *Ubuntu* means that “A person’s humanity is dependent on the appreciation, preservation and affirmation of other person’s humanity. To be a person is to recognise therefore that my subjectivity is in part constituted by other persons with whom I share the social world” (Eze, 2008, p.107).

CHAPTER ONE: INTRODUCTION

1.1 Introduction

The goal of this study is to establish a connection between the current body of literature on posthuman graphic design and the firsthand experiences of graphic design professionals in South Africa. This is achieved through an exploration into the present state of contemporary graphic design practice, with the aim of reimagining the field from a posthuman standpoint.

In the past graphic designers focused on the development of physical artifacts as the primary outputs of their practice. As the nature of the graphic design industry is continuously changing, the purpose of some design outcomes is shifting to also include considerations of social transformation (Steen, 2008; Sanders & Stappers, 2014; Forlano, 2017). In contrast to the commercial inclinations of past graphic design practice, since the 1990s humanistic approaches to design practice such as human-centred design (HCD), enable designers to develop socially relevant outputs often in collaboration with clients and audiences.

During the past decade however, the scope and considerations of design practitioners can be said to have been broadened by the philosophy of posthumanism to include not only human participants. Research suggests that there is a changing social, cultural, economic and technological landscape that requires the re-examination of human-centred design's underlying assumptions. Human agency and decision making is complex when taking into account technological innovations such as the Internet of Things[1], where non-humans also play a role (Cruickshank & Trivedi, 2017). The field of graphic design involves the use of creative thinking and is subject to the impact of automation. With the rapid progression of technology and the increasing reliance on computer-based graphic design, the integration of artificial intelligence (AI) applications within the design industry has become an inevitable development (Karaata, 2018).

In an African context the philosophy of *Ubuntu* in practice implies that people should look at whether their actions empower the community around them and help it improve (Khomba,

[1] Internet of Things refers to physical objects with sensors, processing ability, software, and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks.

2011). The notion of *Ubuntu/botho* is a Nguni ideology that is articulated in the Sesotho phrase, *'Motho ke motho ka batho ba bang'* translated to: “A person is a person through other people” (LenkaBula, 2008, p, 381; iTranslate, 2024). This phrase conveys the idea that an individual cannot achieve full humanity in isolation, but rather by being interconnected with the entirety of existence, including both the natural world and the act of creation (LenkaBula, 2008). Drawing on an *Ubuntu* understanding of Humanism, this study explores whether posthumanism and *Ubuntu* may not be mutually exclusive[2]. An objective of this study is the discovery of whether and how *Ubuntu* and posthumanism overlap, through the observation of graphic designers and discussions with them.

The role of design has undergone considerable expansion beyond its initial focus on human considerations in several domains. Several instances of design engagement extend beyond the scope of human factors. Notable examples include the re-evaluation and modification of agricultural practises to improve the welfare of farmed animals, as well as the acknowledgement of legal rights for a river in New Zealand following a determined advocacy by a local Maori tribe, who argued for its recognition as an ancestral entity (Forlano, 2017). Within the South African context, the Cape Town Water Crisis in 2017 presented a chance for designers, marketers, and city officials to create awareness campaigns to change consumer behaviour and prevent the occurrence of Day Zero, which would have initiated Level 7 water restrictions and a significant reduction in municipal water supplies. There is some evidence that in this instance water was perceived as an autonomous entity with frequent media references to “Day Zero” and “water rationing” that attributed agency and decision-making to the resource itself (Baker, 2017). These examples serve as a medium via which non-human phenomena, such as water, may have their voices and concerns recognised[3].

[2] The use of a non-Western viewpoint, such as *Ubuntu*, by Western individuals raises concerns due to the risks associated with illegitimate, unfair, and neocolonial appropriation. This includes the tendency to oversimplify and misinterpret non-Western cultures only through a Western lens, resulting in a one-dimensional and idealised portrayal of the other culture. Consequently, the appropriateness of employing a non-Western perspective like *Ubuntu* by Westerners becomes controversial. It is imperative to refrain from adopting a colonial mindset. Recognising and embracing variety and hybridity in both descriptive and normative terms can yield advantageous outcomes (Coeckelbergh, 2022).

[3] Although it is technically incorrect to ascribe genuine autonomy to water, the Cape Town water crisis undeniably resulted in a pervasive impression of water as a formidable, maybe even vindictive, force. This perception emerged because of a confluence of cognitive processes, cultural influences, and emotional reactions to the grave circumstances. Acknowledging this complex comprehension of water introduces an additional dimension to the historical and cultural recollection of the catastrophe. It's important to remember that assigning agency to objects is a common human propensity, especially in

Additionally, to augment human experiences, designers have focussed on the centrality of objects. For instance, one such effort involved providing a scooter's perspective of the streets of Taipei, aiming to foster collaboration between individuals and their surrounding artefacts (Chang, 2017). Another notable project, known as the "Morse Thing", entailed the creation of a collection of cups and bowls that interacted with one another through the utilisation of Morse code. Chang's work presents an imaging of home items that transcends the traditional focus on either human or object-centred perspectives. It aims to establish a novel and distinctive relationship that stimulates continuous contemplation and interpretation, recognising that these processes are inherently open-ended and cannot be definitively resolved (Wakkery, 2017). The adoption of innovative perspectives on non-human elements is revolutionising the way designers interact with design processes and challenge the notion of the 'human' as the exclusive originator and beneficiary of design results.

Critics of a human-centred design process maintain that the prevailing viewpoint during the era of industrialisation has been anthropocentrism, which has resulted in a wide range of ecological and societal challenges that we confront daily. The ethical position of an individual designer should not be presented as a mere marketing strategy to attract clients. Instead, it should permeate their overall outlook and influence the choices they make, acknowledging the political implications inherent in all design decisions. "If humans are at the 'centre', then things like environmental sustainability, social justice, care for us, economic equality... most political aspects of design, cannot be adequately considered" (Wendt, 2017).

In addition, the advent of AI (artificial intelligence) technologies, including digitisation and automation, has caused significant disruption in businesses that traditionally relied on manual processes, such as graphic design. Recent literature (Dziobczenski & Person, 2017; Kaiser, 2019; Matthews, Shannon & Roxburgh, 2023) highlights a prospective scenario wherein machines assume most design responsibilities, leading to the near-complete obsolescence of human designers. This phenomenon, commonly referred to as the "death" of design, is anticipated as computers progressively excel at executing the conventional activities typically performed by human designers (Rolston, 2016). The apprehension stems from valid concerns regarding alterations in the execution of graphic design tasks and the context in which these changes occur. Additionally, there is a perceived competition between traditional design firms, comprised of professionals with university education, and self-trained designers who use

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times of crisis or uncertainty. This story highlights the intricate connection between humans and nature, as well as the significant influence our views have on how we react to environmental issues.

readily available software to offer design services. The latter encompass web-based interfaces and graphic editing software that employ templates to automatically generate design content (Matthews et al., 2023).

Within this context it is evident that the theories associated with graphic design practices have changed radically over the past decade, yet novel approaches to professional practice remain underdeveloped (Forlano, 2017). There is a paucity of literature on the connectedness between posthuman contexts, *Ubuntu* and graphic design practice in South Africa[4]. At present a representation of what exactly may be included under the umbrella of human-centred and Posthuman-centred graphic design practice in a South African context, has yet to take place.

This research explores how an expanded view of graphic design practice might be reimagined through the lens of posthumanism. The purpose of the phenomenological interpretivist study is to contribute to the body of knowledge on graphic design and to uncover a current and future agenda for graphic design from a posthuman perspective. Using a hermeneutic approach[5], the study explores current graphic design practices in the context of an emerging posthumanist world.

1.2 Background

The background of this study is framed within a discussion of how graphic design is adjusting to accommodate changing expectations in society and technological advancements in practice. The background section explains the concepts of social change and technological advancement in design in a world predominantly bound within Humanist ways of thinking.

Humanism takes on several forms, including Renaissance Humanism, modern Humanism, and African Humanism, among others. From an ontological viewpoint, Humanist assumptions

[4] A Boolean search using the keywords “design” AND Posthumanism (17 200 results with minimal results in graphic or visual communication design), "graphic design" AND Posthumanism (474 results), "graphic design practice" AND Posthumanism (1 result), "graphic design" AND Posthumanism AND *Ubuntu* (2 results), found research limited to general topics on design and Posthumanism (Wakkary, 2020; Forlano, 2017) but none on graphic design practice, Posthumanism and *Ubuntu*. This search was expanded to consider alternate designations of graphic design and included “communication design” and “visual communication design” using the same search parameters with negligible results.

[5] A hermeneutic phenomenology was used in this study as a research approach since it gave graphic designers the best chance to "give voice" to their experiences within the setting of the study. The phenomenological view of experience is multifaceted and complex and thus appropriate to describe complex experience (Smith, 2016).

assert that graphic design is solely a human activity and, subsequently, they promote human values and perceptions (Wakkery, 2020). More specifically, this study considers African Humanism in the form of *Ubuntu,* its relation to posthumanism and the possibilities this offers graphic design practice.

Humanism views agency as the ability to act on the world which is inherent in the intentional subject (Mazzei, 2013). Human-centred (anthropocentric) design processes such as co-design aim to develop creative solutions in partnership with stakeholders (Sanders & Stappers, 2008). Although human-centred design (HCD) principles have proven effective in achieving favourable design outcomes for various products and services, an unintended consequence of this approach is the tendency to render certain aspects of the design "invisible" to users. This invisibility serves to conceal the underlying complexities of a product, particularly in cases involving technology. The concealing of internal mechanisms in certain successful goods is regarded favourably since it enhances the user experience by simplifying product usage. The act of concealing the interconnections of technology or revealing just partial information about its functioning to create a perception of magic in products and behaviours aligns with the HCD tenet of usability (Pilling & Coulton, 2019). Similarly, from a posthuman perspective it is crucial to prioritise usability by ensuring the smooth integration of technology and the user's experience. This approach acknowledges the interdependent relationship between the user and the technology. Furthermore, posthumanism suggests that agency lies not only with humans but is “attributable to a complex network of human and nonhuman agents” (Barad, 2007, p.23). For contemporary designers, agency is an entanglement of human and nonhuman forces that exert influence on the creation of a design outcome.

1.3 Research problem

1.4 Rationale

This study responds to the need to add to the discourse on the emergent shifts in graphic design and considers alternative conceptual framings such as posthumanism and *Ubuntu* that could improve the practice of graphic design. Graphic design practice has shifted from the material to the immaterial, from products and services to systems. The purpose of this study is to contribute to the body of knowledge on graphic design practice from a posthuman perspective.

Two objectives guide this research. The first describes graphic design in relation to the concept of posthumanism in South Africa. Secondly, it explores the connections and intersections between posthuman graphic design practices and the notion of *Ubuntu.*

1.5 Aim, Objectives and Research Questions

1.5.1 Aim

The study aimed to explore the intersections between posthumanism and emergent graphic design practice.

The aim of this doctoral study is to explore and understand the emerging connections and intersections between graphic design practice, posthumanism, and *Ubuntu* within the context of South African graphic design. By investigating these connections, the study seeks to shed light on how they intersect in contemporary South African graphic design practice. Through a comprehensive examination of theoretical frameworks, design methodologies, and exploration into professional practice, this research aims to contribute to the existing body of knowledge and provide insights into the intersection of graphic design, posthumanism, and *Ubuntu,* thereby fostering a deeper understanding of the evolving nature of graphic design practice in South Africa.

1.5.2 Objectives

The seven research objectives of this study (O1 – O7) are listed here as:

- **O1:** To conduct a comprehensive literature review on graphic design practice, posthumanism, and Ubuntu, focusing specifically on their individual characteristics and theoretical frameworks.
- **O2:** To analyse and identify the emerging connections between graphic design practice, posthumanism, and Ubuntu within the South African design context, by examining relevant design practice and scholarly discourse.
- **O3:** To explore the philosophical underpinnings of posthumanism and Ubuntu and their potential implications for graphic design practice in South Africa, considering aspects such as collaboration, community engagement, and social responsibility.
- **O4:** To investigate the role of graphic designers in shaping and interpreting the connections between posthumanism, Ubuntu, and graphic design practice in South Africa, through individual interviews with graphic design practitioners.
- **O5:** To examine the ways in which contemporary South African graphic designers describe how they incorporate posthumanism and Ubuntu principles into their creative processes, visual communication strategies, and design outputs.

- **O6:** To propose recommendations for graphic designers, design educators, and design institutions in South Africa, outlining practical strategies for integrating posthumanism and Ubuntu principles into graphic design practice, pedagogy, and industry standards.
- **O7:** To contribute to the broader academic discourse by generating new insights and knowledge about the connections between graphic design practice, posthumanism, and *Ubuntu* in the context of South Africa, and potentially identifying opportunities for further research and interdisciplinary collaborations.

1.5.3 Research Questions

The following two research questions (RQ1 and RQ2) drive this study:

- **RQ1:** What are the emerging connections between graphic design practice, posthumanism and Ubuntu in a South African design context?
- **RQ2:** How do these connections between graphic design, posthumanism and Ubuntu intersect in contemporary South African graphic design practice?

The research objectives (Section 1.5.2) and research questions (Section 1.5.3) of the study are set out in Table 1.1 below. Data collection instruments associated with both research objectives and questions comprised literature review sources and individual interviews.

Table 1.1: Research questions and objectives.

Objectives	Research questions
O1: To conduct a comprehensive literature review on graphic design practice, posthumanism, and *Ubuntu*, focusing specifically on their individual characteristics and theoretical frameworks. **O2:** To analyse and identify the emerging connections between graphic design practice, posthumanism, and *Ubuntu* within the South African design context, by examining relevant design practice and scholarly discourse. **O3:** To explore the philosophical underpinnings of posthumanism and *Ubuntu* and their potential implications for graphic design practice in South Africa, considering aspects such as collaboration, community engagement, and social responsibility. **O4:** To investigate the role of graphic designers in shaping and interpreting the connections between posthumanism, *Ubuntu*, and graphic design practice in South Africa, through individual interviews with graphic design practitioners.	**RQ1:** What are the emerging connections between graphic design practice, posthumanism and *Ubuntu* in a South African design context?
O5: To examine the ways in which contemporary South African graphic designers incorporate posthumanism and *Ubuntu* principles into their creative processes, visual communication strategies, and design outputs. **O6:** To propose recommendations for graphic designers, design educators, and design institutions in South Africa, outlining practical strategies for integrating posthumanism and *Ubuntu* principles into graphic design practice, pedagogy, and industry standards. **O7:** To contribute to the broader academic discourse by generating new insights and knowledge about the connections between graphic design practice, posthumanism, and *Ubuntu* in the context of South Africa, and potentially identifying opportunities for further research and interdisciplinary collaborations.	**RQ2:** How do these connections between graphic design, posthumanism and *Ubuntu* intersect in contemporary South African graphic design practice?

1.6 Research design

This study is a qualitative or narrative study because the use of qualitative research uncovers human experience and methods such as observation enable the researcher to be more attuned to the practices of the study population. In this study design practitioners are asked to comment on developments in their practice to determine how posthumanism is affecting the field of graphic design.

The proposed case study applies a phenomenological orientation grounded in posthumanism to explore posthumanist interactions and patterns in graphic design practice. The methodology is underpinned by an interpretivist philosophy and initially employs an inductive research approach in its consideration of the interview data. Thereafter a deductive method is employed in the generation of the themes that were used to categorise the data. This method is in keeping with the emphasis of posthumanism on the creation of meaning by investigating how designers understand the ambiguous boundaries between human and non-human entities in their work. Posthumanism highlights the artificiality of reality, whereas interpretivism recognises that design is influenced by cultural settings and the interpretations of designers.

A qualitative approach is used within a hermeneutic spiral research design, that highlights collective enquiry and investigation supported in experience and social history. Qualitative data enquiry elicits thick descriptions of human social action. These describe not just physical behaviours, but also the context of the behaviour and how they are interpreted by the participants. The data collected by a thick description can be used more effectively by other social scientists since it includes the subjective explanations and meanings provided by those engaged in the behaviours (Lincoln & Guba, 1985).

The results cannot be generalised to greater populations and neither statistical nor mathematical tools will be used to derive results, however it is hoped that the study will resonate with similar studies in the field of design.

1.7 Research methods

1.7.1 Unit of research and analysis

This study focuses on the integration of *Ubuntu* and posthumanism in the context of South African graphic design practice (unit of research). The primary unit of analysis is the professional practice of graphic designers in South Africa.

1.7.2 Population and Sample

The population was limited to professional graphic designers in South Africa. The sample comprised 14 professional graphic designers in South Africa who participated in individual interviews. The purposively selected participants were diverse in terms of gender, age, race, years of experience and socio-economic context.

According to Creswell and Creswell (2018) a sample of between 4-12 participants is sufficient for homogenous populations and between 12 – 30 participants for heterogenous populations. For this study, graphic designers with between two- and twenty-five-years' experience were chosen as participants. The sampling procedure was non-probability purposive and convenience sampling with the sampling population guided by the theoretical underpinnings of this research and limited to fifteen graphic designers fitting specific profiles of expertise, practice, and commercial engagement (Miles & Huberman, 1994: 28).

1.7.3 Data collection

Data collection instruments include transcribed semi-structured individual interviews with the identified participants. Additionally note-taking as well as obtaining feedback from the participants through open-ended interviews was employed for data collection.

The research problem, aim, questions and objectives provided a background to the structure of the interview questions.

Research Aim: To explore the intersections between posthumanism and emergent graphic design practice.

The line of inquiry revolves around the following aspects:

1. Knowing the emerging connections between graphic design practice, posthumanism and *Ubuntu* in a South African design context.

2. Knowing how do these connections between graphic design, posthumanism and *Ubuntu* intersect in contemporary South African graphic design practice.

Open-ended questions were presented by the interviewer, with a spoken phrase representing the answers provided. Table 1.2 outlines the interview protocol of the study, providing a framework for the types of enquiries posed to probe and elicit further information.

Table 1.2: Outline of the Interview Questions.

	Interview Questions
RQ1: What are the emerging connections between graphic design practice, posthumanism and *Ubuntu* in a South African design context?	• What are your responsibilities as a graphic designer? • What software and applications do you use in your daily practice? • Who are the audiences of your design outcomes? • Do you have the opportunity to co-design outcomes with your clients? • How do you consider your outcomes' impact on the intended audience of your design? • What challenges do you encounter as part of the co-design process? • How do you keep updated on new technology for your practice? • Please explain how technology has changed in your practice. • Who are the stakeholders of your design practice? • How do you feel about the proliferation of AI technology in design?

RQ2: How do these connections between graphic design, posthumanism and *Ubuntu* intersect in contemporary South African graphic design practice?	• Indicate your level of "graphic design practice in South Africa" knowledge.
	• What is your firm's policy on collaboration with designers outside of your firm?
	• Do you collaborate with graphic and visual designers not employed by your firm?
	• Do you participate in national design competitions?
	• As a South African designer do you consider the concept of *Ubuntu* as relevant to your practice?
	• How important is the concept of community to your practice?
	• How important are Afro-centric modes of thinking to your practice?
	• How important is the idea of agency in your practice?
	• What is your opinion of the consequences of your design practice:
	  – To people?
	  – To environment?
	  – To services and systems?
	• In your opinion does your design practice "do good"?

1.7.4 Analysis and interpretation

The coding and categorisation of data was completed using *ATLAS.ti. 23*™ software. It was envisioned that utilising the hermeneutic spiral as part of the data gathering process will result in rich data that will assist in deriving multiple categories that may be used as guides in developing themes for easy mapping of patterns or sequence, causations, correspondence and differences. Thematic analysis was used for interpretation of data.

1.7.5 Limitations

In terms of scope the study is limited to graphic design practitioners in South Africa. The study is limited to assessing only the practical approach to graphic design practice. The empirical component of this study does not consider practitioners in other fields of design however the literature review goes beyond graphic design to consider design from a broader perspective.

1.7.6 Validity

The validity of the study is ensured through multiple means such as the triangulation of data sources and the purposive selection of the sample as well as verification with the participants following the data reduction. Reflexivity is adhered to through the constant testing and reviewing of subjective interpretations and participants' construction of meaning. The audit trail includes a collection of many components, such as raw data, data reduction and analysis outputs, data reconstruction and synthesis outputs, process notes, materials pertaining to objectives and dispositions, and information related to instrument creation (Lincoln & Guba, 1985).

Through thick description of the emergent qualitative findings and analysis of the data, the study hopes that graphic design practitioners, educators and researchers may find resonance and affinity in the processes described.

1.8 Ethical considerations

Core ethical considerations such as informed consent and voluntary participation were adhered to in the study. Participants were informed of the key considerations of the study and no incentives were offered. Anonymity of external participants was assured. The risk to all participants was determined to be minimal. Permission and informed consent were obtained from the participants as stipulated by the ethical regulations of the Cape Peninsula University of Technology.

1.9 Outcomes and Contribution

1.9.1 Outcomes of the study

This research explores the current state of graphic design practice in South Africa and specifically the links between graphic design and posthumanism and *Ubuntu* through an interpretative hermeneutic process. Although literature on posthumanism in various contexts exists there is a paucity of literature on the incorporation of posthuman practices and *Ubuntu* principles in graphic design practice.

1.9.2 Contribution of the study

The study proposes recommendations for graphic designers, design educators, and design institutions in South Africa, outlining practical strategies for integrating posthumanism and *Ubuntu* principles into graphic design practice, pedagogy, and industry standards.

Further, the study contributes to the broader academic discourse by generating new insights and knowledge about the connections between graphic design practice, posthumanism, and *Ubuntu* in the context of South Africa, and potentially identifying opportunities for further research and interdisciplinary collaborations.

On a theoretical level the study adds to the available literature on graphic design practice in a South African context, by presenting a systematic and methodical inquiry into graphic designers' experiences of their professional practice. The practical value of the study lies in documenting ways of mapping evidence of posthuman practices in the graphic design profession.

1.10 Outline of the thesis

Chapter Two provides a comprehensive examination of the pertinent academic literature that is the foundation of this research. The literature review establishes a framework for and contextualises the study, underlining its significance and laying the path for further scholarly contributions in subsequent chapters.

This chapter examines the literature on design, graphic design, Humanism and posthumanist developments in the design discipline, and considers Braidotti's (2019) framework on critical posthumanities as a theoretical perspective.

Further the second chapter provides an overview of the existing scholarly works on design, an examination of the shifts in design's social obligations and the incorporation and changes brought on by technology. Human-centred design is recognised as a methodology that aids graphic designers in acknowledging the significance of society and the audience within the design process. Furthermore, this chapter provides a detailed exposition of the theoretical foundations that support the notions being examined. It delves into the theoretical framework of posthumanism, as formulated by Braidotti (2019). Lastly, Chapter Two explores the ideology of *Ubuntu* as a potential guideline for South African design practitioners to contextualise and support the implementation of a Western notion such as Posthuman-centred design.

Chapter Three outlines the philosophical and methodological framework that guided the research.

The research utilised a qualitative, phenomenological approach to gather insights from graphic designers and their professional activities in different areas of the industry. The interpretivist, inductive approach to raw data and deductive approach from posthumanist philosophy

allowed for the exploration of graphic designers' practices in a South African context. Because of this, insight was gained into the participants' experiences and points of view. Fourteen graphic designers were surveyed to gain insight into how the profession is adjusting to posthuman shifts. The *ATLAS.ti 23*™ programme was used to thematically analyse the transcripts of the interviews and provide reflective notes that explain the nature and origin of any new insights that emerged from the data. The necessary ethical guidelines were adhered to during all data collection activities to ensure the acquisition of genuine and reliable data.

Chapter Four: The analysis of the research data is conducted thematically, utilising concepts derived from the existing literature on posthumanism and *Ubuntu*. The themes of human interconnectedness, embodiment, non-human entities, multiplicity, social justice and ethics and transcendence served to underpin the development of questions that appear in the interview. The results are classified according to the interview questions derived from the study questions and sub-questions, and then organised into themes related to graphic design practise, posthumanism, and *Ubuntu*, as identified in the literature. The subsequent analysis delves deeply into the data and scrutinises it through the lens of deductive themes to ascertain the impact of posthumanism on the field of graphic design within a South African setting. The chapter concludes with a summary of the key take-outs gathered from the interviews.

Chapter Five: The thesis is concluded in this chapter. Chapter Five provides a summary of the thesis, followed by recommendations that are derived from the findings of the empirical component of the study. Moreover, this chapter elucidates the study's contributions to methodology, theory, and knowledge. The chapter finishes by enumerating the limitations of the study and raising questions concerning the applicability of posthuman and *Ubuntu*-led methodologies in the context of sustainable practises for graphic design practitioners in South Africa.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Chapter Two discusses the literature on design, graphic design and Humanist and posthumanist trends in the field. The objectives of the study are to explore the intersections between posthumanism and emergent graphic design practice and evolving connections between graphic design practice, posthumanism and *Ubuntu* in a South African design context. Thus, the relevance and scope of this research topic are limited to the exploration of posthuman practices in the graphic design profession.

This study encompasses an examination of the existing literature using a systematic review. The purpose of employing a systematic literature review was to find and analyse all available empirical data that aligns with the predetermined inclusion criteria, with the aim of addressing a specific research inquiry (Snyder, 2019). A literature review found limited previous research around graphic design practice, posthumanism and *Ubuntu* in a South African design context. A Boolean search using the keywords "graphic design" AND posthumanism, "graphic design practice" AND posthumanism, "graphic design" AND posthumanism AND *Ubuntu* found research limited to general topics on design and posthumanism (Wakkary, 2020; Forlano, 2017) but none on graphic design practice, posthumanism and *Ubuntu.* This search was expanded to consider alternate designations of graphic design and included “communication design” and “visual communication design” using the same search parameters with negligible results.

To expand the range of the inquiry, a bibliographic snowball method was also employed. The methodology employed in this study encompassed two approaches: "backward snowballing," which involved a comprehensive examination of the reference lists, and "forward snowballing," which entailed looking for more recent publications that mentioned the initial studies. This methodology is subject to some constraints, especially stemming from the continuous input of new scholarly publications pertaining to the subject matter. To avoid this issue, inclusion and exclusion criteria must be applied (Greenhalgh et al., 2005).

The inclusion criteria were that all sources must be written in the English language. The assessment of publications included an evaluation of their appropriateness to the study topic, alignment with the research objectives, and the existence of relevant results pertaining to graphic and human-centred design, posthumanism and design, and *Ubuntu* and design (Wohlin et al., 2022). Articles that did not meet these criteria or did not align with the objectives of the study were excluded.

The search procedure was conducted until a point of saturation was achieved, when no further pertinent items could be identified. A lack of prior research demonstrates that there is a gap in the topic of posthumanism and graphic design in a South African context, which highlights a need for further investigation.

The preliminary literature survey is divided into several sections. Firstly, it introduces the current literature on design, a brief history of design from a Buchanian (1992) perspective and the changes in relation to the social responsibilities of design and the use of technology in design that have taken place. Here, the practice of graphic design is presented to highlight the gaps present in graphic design in meeting these social obligations. Human-centred design is identified as an approach to assist graphic designers in acknowledging the importance of society and the audience in the design process. Secondly, the theories underpinning the concepts discussed in this study are elaborated on, specifically the theoretical framework on critical posthumanism as developed by Rosi Braidotti. The philosophy of *Ubuntu* discussed in this section provides a possible means for South African practitioners to underpin a Western concept like Posthuman-centred design in a local context.

Figure 2.1 depicts the shift in emphasis within design practice, transitioning from traditional disciplines to emergent ones, as examined in the literature review conducted for this study.

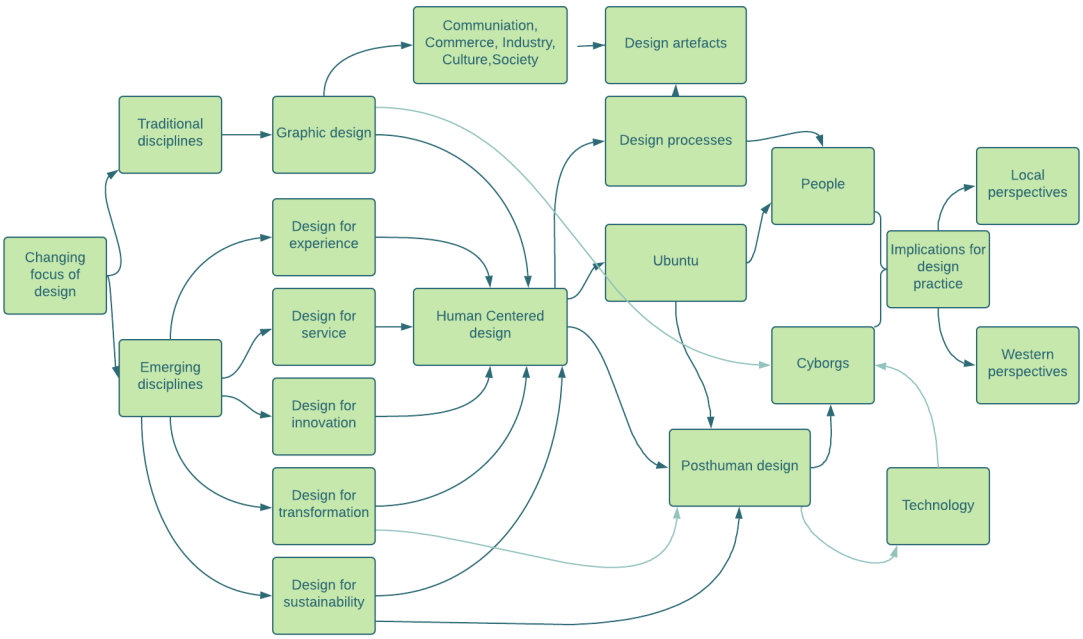

Figure 2.1. Literature tree diagram

Design is a comprehensive field that encompasses several specialised areas of practise, including graphic design, interaction design, fashion design, and industrial or product design.

Each of these disciplines possesses its own distinct domain knowledge and skill sets (Sanders & Stappers, 2014). The term "design" has commonly been linked to the abstract conceptualisation of a typically creative outcome, as well as the practical methods necessary to achieve that result.

Several concepts pertaining to the topic of design are of interest to this study. Social responsibility and design and associated concepts such as the role of the audience in the design process and novel approaches and considerations of the consumer have been discussed in the work of Papanek (1971), Frascara (1997) and Margolin and Margolin (2002). The importance of persuasion and rhetoric in design and the developing shifts in design practice have been elaborated on by Buchanan (1992) and underpin his further discussions of design theory (2001) and practice (2009). The role of design in systems and the environment appear in the work of Fry (2009) and Dorst (2010), whereas more recent sources discuss the rise of posthuman design thinking (Faste, 2016; Forlano 2017). This literature review follows a chronological path whilst bearing in mind that in the present moment, and in the context of significant technological changes and environmental damage, a Humanist or human-focused approach to design needs re-consideration.

Table 2.1 presents a compilation of primary sources that are featured in the literature study pertaining to the subject of design. It tabulates a preliminary literature review that examines the evolving concepts that have shaped the advancement of graphic design practise. These concepts include the impact of societal responsibility on design, the emphasis on user-centeredness, the relationship between rhetoric and design, innovative approaches to design, and the exploration of design and its inherent meaning, among other relevant perspectives.

Table 2.1: Key Preliminary Literature Review Sources Linked to Design.

Concept	Author/s (Year)	Title	Source	Findings	Recommendations
Societal responsibility in design	Papanek (1971)	*Design for the Real World: human ecology and social change.*	Book	Criticises design that is wasteful and removed from the needs of users.	Re-consideration of design curricula to include social and political aspects of design.
User-centredness	Norman (1986)	*The Design of Everyday Things.*	Book	Design (Artefacts, experiences, services etc.) is by humans for humans.	Poor design, as opposed to human error, leads to malfunction of products.
Rhetoric in design and shift in what design is	Buchanan (1992)	*Wicked Problems in Design Thinking.*	Literature survey	Design is a liberal art and design processes affect all areas of life.	New integrations between designed objects and people.
Novel approaches	Frascara et al. (1997)	*User-centred graphic design: mass communication and social change.*	Book	Communication (graphic) design is an important resource in solving social problems.	Presents a new professional profile for graphic designers that considers the complexities of cultural, psychological, political and economic factors that affect, construct, and contextualise our daily communication.
Role of audience in design	Margolin V. and Margolin S. (2002)	*A "Social Model" of Design: Issues of Practice and Research*	Literature survey	Proposes a model for design that focuses on development of outcomes for societal needs.	Addresses urgency in lack of research to demonstrate how a designer can contribute to human welfare.

Concept	Author/s (Year)	Title	Source	Findings	Recommendations
Design and meaning	Krippendorff (2006)	*The semantic turn: a new foundation for design.*	Book	Reflects on a paradigm shift in the design of artefacts – from function of the artefact to what they mean to those affected by them.	A foundation for design that is both practical and philosophical, a science of making and a philosophy of realising artefacts with and for others.
Democratisation of Design	Fry (2009)	*Design futuring: sustainability ethics and new practice*	Book	Discusses the nature of design in terms of 're-directive' practice.	Suggests a more materially grounded objective and agency and acknowledges design as a means for a "radical change of direction" for humankind.
Design thinking	Dorst (2010)	*The Nature of Design Thinking*	Literature survey	Designers have developed specific ways of thinking in dealing with design problems.	Design thinking is a deliberate and specific way of reasoning that has been professionalised by design disciplines. A broader framework must be developed.
Posthuman design	Faste (2016)	*A Posthuman World is Coming. Design has never mattered more.*	Blog post	Designers need to look beyond human intelligence and consider the effects of their practice on the world and on what it means to be human.	A new breed of post-human-centred designer is needed to maximise the potential of post-evolutionary life and transcend the limitation of human-centred design.
Post-humanism and design	Forlano (2017)	*Post-humanism and design*	Literature survey	Considers examples from emerging design practices that emphasise the interrelations between human and nonhuman actors.	Presents critiques of posthumanism from critical race theory and decolonial theory to consider how emergent design perspectives might better support values such as equality and justice for humans and nonhumans that have been traditionally ignored in design processes.

Concept	Author/s (Year)	Title	Source	Findings	Recommendations
Social justice and cosmopolitan localism	Escobar (2018)	*Design for the pluriverse*	Book	Presents a new vision of design theory and practice aimed at channelling design's world-making capacity toward ways of being and doing that are deeply attuned to social and environmental concerns.	Refiguring current design practices could lead to the creation of more just and sustainable social orders.

Table 2.1 presents a literature analysis that explores the progressive ideas that have influenced the development of graphic design profession. The literature has put forth several significant recommendations, including novel design approaches that propose a revised professional profile for graphic designers. These approaches consider the intricate influences of cultural, psychological, political, and economic factors on our daily communication. Additionally, an exploration of how design practice responds to posthuman ideas has been instrumental in shaping the research questions that form the foundation of this study.

Figure 2.2 below places the literature that informed this study in a timeline format, discerning between scholarship of the Global North and the Global South.

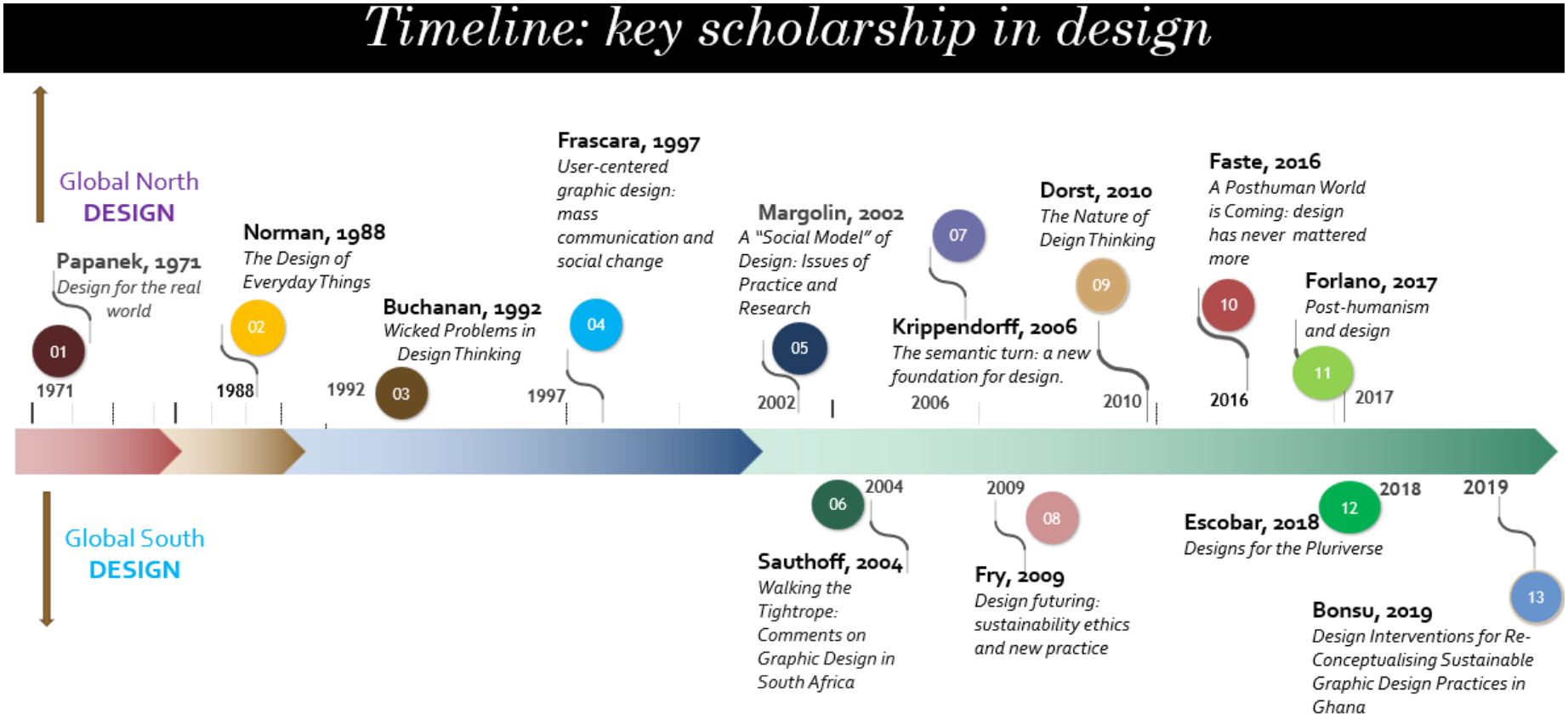

Figure 2.2. A timeline showing the key scholarship in design with a focus on Global North and Global South

Figure 2.2 depicted above illustrates that during Papanek's (1971) consideration of the social and cultural ramifications of design within the United States, there was a noticeable absence of substantial scholarly contributions pertaining to the role of design originating from the Global South. Consequently, one can infer that scholarship in the Global South lags significantly behind in this domain. The initial discussions surrounding the roles and functions of design in the Northern region were characterised by a prevailing mechanical perspective. The early scholarship of both Papanek and Norman (1988) is grounded in the principles of modernist thought. The literature in question exhibits a shift towards post-modernism, as seen by Buchanan's exploration of ‘wicked problems in design’ in 1992 and Frascara's examination of user-centred design in 1997. The scholarly work of Margolin (2002) first focused on the broader systems implicated in the production of design, whereas Krippendorff (2006) examined the semantic aspects of objects and the concealed connotations within design.

Presently, there is an established corpus of academic literature about the domain of graphic design in the context of South Africa, which originated with Sauthoff's PhD thesis in 1999. Fry (2009) and Dorst (2010) conducted research in Australia and the North, respectively, to investigate the concepts of ethics, sustainability, and human-centred design. Faste (2016) and Forlano (2017) have advocated for the potential of posthuman approaches to design in the Northern hemisphere, whilst Escobar (2018) has introduced the concept of the "pluriverse" and "glocal" thinking in the Southern hemisphere. While previous studies have explored sustainable graphic design practice within the realm of graphic design education (Sutherland, 2004; Costandius, 2006; Costandius & Botes, 2018), there is a gap in the literature addressing the examination of sustainable practices within professional graphic design contexts in South Africa. From an African perspective, in 2019 Bonsu completed his study on sustainable graphic design practices in a Ghanaian context and more recently Oluyemi (2021) explored consumer behaviour in relation to graphic design from a mostly Nigerian perspective. The ideas of *Ubuntu* and design have been explored by several authors including Broodryk (2005), Winschiers-Theophilus, Bidwell and Blake, (2012), Wolff (2012), Chmela-Jones, (2015; 2017), Coeckelbergh (2022) and Moalosi and Rapitsenyane (2023).

The preceding section illustrates that an extensive literature assessment was undertaken to fulfil the objectives of the research, focusing primarily on design and graphic design practise. The subsequent portion of this study centres on literature that exemplifies the significant transformations that have occurred within the design disciplines. These changes entail a shift in emphasis from the mere creation of artefacts to the inclusion of human considerations as crucial concerns.

2.1.1 The process of graphic design

Rapid developments in technology and environmental decline are impacting on the way that designers approach the design process (Laing & Masoodian, 2015). Design processes involve complex problem solving and idea generation, according to research in architecture (Lawson, 2006), product design (Dorst & Cross, 2001), and engineering design (Kruger & Cross, 2006). In the graphic design process, idea generation and the interpretation of the set parameters are key aspects of addressing a brief. A designer's idea generation stage begins with an investigation and research into the design problem and ends when they begin preparing for client presentation. Individual decision-making and creative processes, along with the use of appropriate tools and strategies, are typical at this early stage (Tan & Melles, 2010). Idea generation for graphic design may include the use of professional image databases for inspiration and more recently, the utilisation of artificial intelligence (AI) supported software applications.

Research into the full design process specifically in graphic design is defined by Paul Nini's 1995 graphic design process model (Nini, 1996; de Rooij et al., 2021). Nini's design process model is characterised by two distinct phases (Figure 2.3). The first focuses on researching the problem and developing strategies to address the relevant issues, and the second develops design concepts and subsequently refines prototypes and solutions. Throughout the second phase, the needs of the audience or users are tested iteratively during each stage of the development process, enabling specific improvements to be made before implementation. At this point, the entire process can be repeated, as user or audience testing after introduction of the communication may reveal potential for subsequent editions (Nini, 2006).

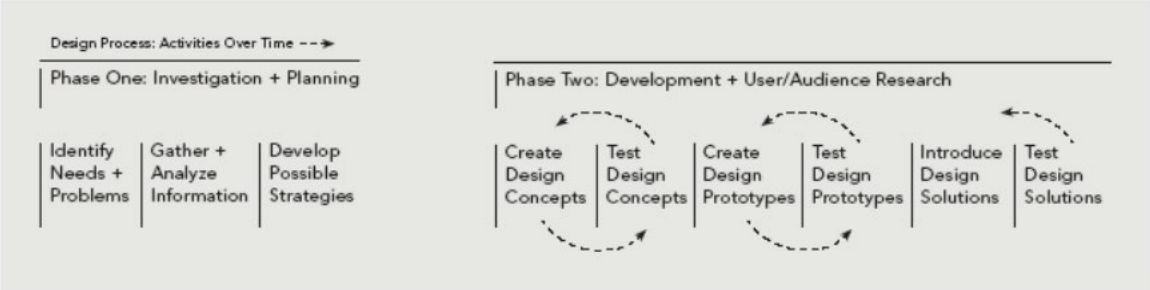

Figure 2.3. The two phases of the graphic design process (Nini, 2006).

The significance of Nini's model of the graphic design process can be contingent upon several elements, encompassing technological advancements, design trends, and the dynamic characteristics of the discipline. While Nini's (2006) model remains applicable in contemporary

times, it is necessary to reassess the concepts depicted in the visualisation to ensure their alignment with current design best practises and technological advancements. Of interest to this study is the validity of Nini's model to contemporary graphic designers given the broader considerations of what may constitute audiences and users (not always human) and the changes in technology that have recently taken place.

While an exact definition of creativity remains elusive, its significance to the graphic design industry is undeniable. Numerous methodologies have been devised within the realm of graphic design with the aim of stimulating creative thinking and facilitating the discovery of innovative problem-solving approaches. As discussed above, every designer possesses a unique and individualised approach to their creative process. Currently, the development of artificial intelligence applications involves the use of preprogrammed algorithms and the implementation of machine learning techniques to replicate and automate user activities. In this scenario, the designer artificial intelligence operates devoid of a formalised design process and does not require any external sources of energy or inspiration to stimulate its creative capabilities (Karaata, 2018). Artificial intelligence (AI) does not allocate time to the process and, in the context of layout for example, it does not commit errors. For clients whose primary concerns revolve around time and money constraints, utilising an automated design system might be a feasible alternative to engaging a human designer.

2.1.2 Changing nature of design practice

Considering the dynamic social, economic, and technological changes that characterised the early 1970s, the Design Methods[6] approach emerged as a response aimed at redirecting design education and practise. It aimed to move away from a narrow focus on products and materials, and instead, foster an exploration of the interconnectedness between these elements. This approach also emphasised the examination of the systems involved in the manufacturing, distribution, and promotion of products. Following this, a variety of interconnected design practises oriented around users have arisen, emphasising the

[6] The movement known as design methods exerted a significant impact on the advancement of scholarly attention towards design and the act of designing, as well as the establishment of research and studies in the field of design. The Design Research Society (DRS) was established in the United Kingdom in 1966 because of the 1962 Conference on Design Methods. Its primary objective is to further the examination and investigation of the design process across several domains. The society encompasses a diverse range of disciplines, fostering an interdisciplinary environment that accommodates professionals from all fields (INTERNATIONAL COUNCIL OF DESIGN, 2024).

collaborative design of artefacts, processes, and systems alongside users, rather than solely for them (Sanders & Stappers, 2008).

The contemporary design professional is evolving into a facilitator rather than the person who translates insights into designs suitable for the relevant technologies of production, moving from gatekeeper to innkeeper (Cruickshank, 2014). The evolution of Open design[7] goes beyond participation in that it gives power to the average person or non-professional designer. Open design, downloadable design and distributed design democratise the processes of design and suggest that anyone can be a designer or a producer. In such situations, design and innovation processes often lack professional design input (Abel et al., 2011; Cruickshank 2014). Professional designers must consider the opportunities provided by factors such as Open design when quoting for design work or developing design solutions.

Further, networking and digital technologies are fundamentally changing the way people interact with objects. The Internet of Things (IoT) is a term that refers to non-human actors' capabilities to influence the environment. Within this setting developing a design no longer follows a sequential human-led process (brainstorm - scamp/ideate - review) but rather a process that relies on ever-present technology that accumulates, sifts and adjusts existing available information, fonts and images to create a 'new' design (Laing & Masoodian, 2015). Using this process allows graphic design practitioners to use software, applications and digital resources to create design products in the shortest available time (Wu, 2020).

Developed design outcomes are continually shared with wide audiences through the creative commons (CC), the library of images that continually expands the range of creative works available for others to build upon legally and to share.

Graphic designers rely on the *Adobe Creative Cloud* (CC)™ suite of software applications for the creation of most of their deliverables. Adobe *Sensei's*™ artificial intelligence (AI) and machine learning (ML)[8] technologies have the capability to analyse and consider the analytics

[7] The open-design movement involves the development of physical products, machines and systems through use of publicly shared design information (Pilling & Coulton, 2019).

[8] The term "Machine Learning" was introduced by Arthur Samuel, a computer scientist, in the year 1959. It refers to the capability of computers to acquire knowledge and improve performance through learning, without the need for explicit programming. Machine Learning (ML), a specialised domain within the study of Artificial Intelligence (AI), employs pre-programmed algorithms to assess data and make predictions based on trained models. These models are developed using a predefined definition of success, which is continuously refined over time (Pilling & Coulton, 2019).

and user behaviour data that has been previously generated through interactions with various digital platforms including websites, mobile apps, and newsletters. By leveraging this data, Adobe *Sensei*™ can generate new targeted experiences that are tailored to each specific audience segment. Furthermore, these experiences can be delivered in a design layout that is optimised for maximum impact and effectiveness (Kaiser, 2019, p. 175).

Additionally, Adobe has recently acquired *Behance*®, which is recognised as one of the leading global collections of design images. Adobe has the capability to provide training to *Sensei*™*,* its AI system, based on the material that is published to *Behance*®. This training process involves analysing user engagement and feedback, particularly through the metric of user 'appreciations'. By leveraging this data, Adobe can effectively evaluate and monitor the popularity and emerging trends within the *Behance*® community. S*ensei*™ has the capability to provide customers with a wider range of design alternatives that are more pertinent and customised, spanning across the many applications within the *Adobe Creative Cloud (CC)*™ suite. Over the course of time, it is probable that the process of automating design will gradually become more accessible and effective. This will be achieved by leveraging data obtained from user behaviour and current design methodologies, hence fostering self-propagation and hastening progress (Kaiser, 2019; Matthews, Shannon & Roxburgh 2023).

In a post-anthropocentric world, it is conceivable that designers may assume the position of mediators, facilitating communication between clients and computer-generated products. An illustrative instance is the utilisation of the AI-enabled tool *Dreamcatcher*®, which incorporates human input through the involvement of a skilled designer. This designer's skill and proficiency are employed to ease the production process, as well as to interpret and refine the outcomes to meet the client's requirements and expectations. Consequently, designers assume a diminished role in shaping the physical aesthetics of the product, instead prioritising the assurance of its structural integrity and adherence to suitable standards of quality (Matthews, Shannon & Roxburgh 2023).

This study explores how graphic design practice has evolved in a symbiosis with technology consequently creating what posthumanist philosophers might refer to as a cyborg reality in the development of design outcomes.

2.1.3 Socially focused design

The publication of the *First Things First 2000* manifesto by *Adbusters* magazine in 1999 emphasised design’s consumerist agenda and attempted to highlight an evolving humanist approach to graphic design. It fuelled the debate amongst the international design community

regarding an emerging schism between self-serving commercial design practice and socially responsible design. Subsequently the emphasis of (some) design outcomes changed from commercial products to ones with a new humanist social focus (Sanders & Stappers, 2014).

For designers to be agents of societal change the design process may be enhanced through the incorporation of a social dimension by a methodology such as human-centred design. Proponents of human-centred design processes claim that designers can use human-centred design principles to collaboratively co-create designs which can meet the needs of their stakeholders.

Opponents of human-centred processes suggest that the human-centred notion of 'knowing' all users and stakeholders in a design process is flawed when considering that the outcomes of a design process may be made for a global audience (Norman, 2018). Additionally, human-centred design prioritises the consideration of human needs over corporate and technology requirements. If a design fails to fulfil a specified human requirement, the significance of its business viability and technological feasibility becomes inconsequential. The current human-business-technology approach fails to include additional elements of design, including sustainability, ethics, and egalitarianism (Norman, 2018). One could contend that these issues can be encompassed within the realm of the "human" aspect. However, in practical terms, superficial interpretations of empathy tend to prevail over comprehensive definitions that could incorporate more politically charged concepts (Wendt, 2017).

Further, human-centred approaches such as IDEO's *Field Guide to Human-Centred Design* may inadvertently place the designer in a position of power suggestive of Said's (2013, p.214) view of "flexible positional superiority". IDEO's model for human-centred design focuses on vulnerable, often non-Western communities[9]. However, the designer's agenda is often rooted

[9] There is a scarcity of scholarly literature on the history of design in a non-Western context (Munyai & M'Rithaa, 2012). The industrialised West views itself as the centre of professional expertise and design production which has resulted in most reviews of design history being focused on the West (otherwise known as the Global North). The terms Global North and Global South commonly refer to the social-economic and political divide that exists between developed First and some Second World countries [North America, Western Europe and developed countries in East Asia] and mainly Third World countries situated in Africa, Latin America, the developing countries in Asia including the Middle East (Davis, 2012).

From a human-centred perspective, design is meaningful only when the focus of its activities and outcomes accommodates the largest possible number of people and considers diversity (Moalosi, Popovic & Hickling-Hudson, 2007). In the past, a legacy of colonialism resulted in the undermining of local talent, practices and concepts in favour of more Westernised ideas as well as the production of elitist products based on Western templates to serve a minority of consumers rather than the development of products to serve the more urgent needs of the community at large. As social and

in a desire for commercial success. IDEO's design methodology allows designers to engage in global communities, but the designer operates from a position of power, converting stakeholders from non-Western contexts into what Cesaire (1972, p.63) calls "instruments of production". Human-centred approaches uncritically place the human subject (stakeholder) at the centre of the design process, often without interrogating the humanist theoretical position. Human-centred design practices and approaches often contribute to a humanist agenda that, according to posthuman theory, can support structures that are patriarchal, colonial, and capitalist (Braidotti, 2019). Viewed through a posthuman lens, the beneficiaries of design interventions should not be limited to solely human stakeholders but may include animals, environments and technology.

2.1.4 Posthumanism and *Ubuntu*

This thesis proposes research in response to a paper by Braidotti (2013, p.8) who suggests that “the crisis of Humanism inaugurates the Posthuman by empowering the … racialised human ‘others’ to emancipate themselves from the dialectics of master–slave relations … Animals, insects, plants and the environment, in fact the planet and the cosmos”.

Both *Ubuntu* and Braidotti's posthumanism suggest that there is an interconnectedness among all life and that humans hold no privileged position in the universe (Le Grange, 2018). According to Ewuoso and Fayemi (2021), posthumanism is shown to be supported by *Ubuntu* Humanism and *Ubuntu* may serve as a guide to protecting posthumanist trajectories.

Not all authors agree. Nhemachena (2018, p.128) views posthumanism as a “cannibalistic figure” that is “deconstructive of the figure of the African human being, including the Humanism that inheres in *Ubuntu*”. Similarly, Mbembe (2016, p. 42) views the development of human beings as something that “will be constituted through and within digital technologies and

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cultural factors affect all facets of user behaviour, socio-cultural issues are significant to designers when developing and considering the characteristics, functionality, interaction, and form of artefacts particularly when these artefacts are being developed for a specific user group. To create positive human experiences, an assumption exists that artefacts are successful when they echo the values, norms and behaviours of users (Roberts in Moalosi 2007, p.38).

computational media" and that in a posthuman future "contempt will be extended to anyone who has nothing to sell".

In graphic design practice, continual adjustment to new ways of thinking and technological advancements is common. Designers ask what tools and methodologies are being used to address cultural differences, perspectives, and power dynamics on contemporary design practice? Design methodologies are largely developed and created using the same Eurocentric and Anglocentric mindsets that have shaped relations between the Global North and the Global South in the past (Lima, 2021). This research acknowledges that the integration of technology in the practise of graphic design has grown widespread. Furthermore, this research probes whether graphic design practitioners in South Africa possess knowledge and understanding of the notion of *Ubuntu*, as well as its related humanistic and social settings.

It could be argued that the visual communication design sector and the educational programmes that cater to it may be inadequately equipped to handle the significant changes in work practises that lie ahead. Although design researchers and practitioners are recognising the value of posthuman theories, the associated practices are underdeveloped, leaving scope for advancement to move from theory to practice. This study focuses on how graphic design practice and graphic design practitioners have responded to these changing theoretical and technological paradigms.

2.2 The transformation of traditional design disciplines

Graphic designers are primarily responsible for solving problems related to visual communication (Collins & Koechlin, 2012). The inclusion of a client is expressly recognised while delineating the responsibilities of graphic designers as individuals who "work in small or large offices to give form to the books, magazines, websites, advertisements, and other graphic messages that their clients want to communicate through print and digital media" (Marcus, 2002, p. 17). When a graphic designer is hired by a client, he or she receives a design brief that contains a visual communication problem to be addressed. To solve visual challenges and create appropriate visual messages designers collaborate with art directors and others to develop ideas.

The graphic designer, in conjunction with the art director or client, determines the objectives of the visual communication project according to the design process (Collins & Koechlin, 2012, p. 26). The designer is responsible for strategising and organising communication with the target audience on behalf of the client. Throughout the design process, the client may act as a mediator between the designer and the audience (Cornish et al., 2015, p. 177).

Nevertheless, it is important to note that the literature emphasises that clients should not be mistaken for the actual audience (Leonard & Ambrose, 2012).

For effective graphic design communication to occur, it is widely acknowledged in the literature that a thorough understanding of the target audience is essential (Leonard & Ambrose, 2012; Visocky O'Grady & Visocky O'Grady, 2006). However, it should be noted that some authors argue that designers are often tasked with designing for an audience that is broad and diverse (Miaskiewicz & Kozar, 2011).

Taking into consideration the objectives of the brief, the graphic designer must conceptualise the appropriate ideas that will reach the audience and influence them to take an intended action (Galkina, 2010). To achieve exceptional performance in the domain, designers must engage in efficient collaboration with their counterparts from various disciplines. The integration of many disciplines within a team is crucial for the design process, as it facilitates the inclusion of diverse viewpoints, talents, and experiences among designers. Through collaborative efforts, designers from diverse disciplines can leverage their respective expertise and insights to generate groundbreaking and impactful solutions (Imonlemen, 2023).

In addition to manipulating text and images through design principles, other factors are taken into consideration, such as the medium to convey the message and the audience's knowledge level. Traditionally a graphic designer was responsible for the design component in the graphic design process. Additionally, art directors and clients supported graphic designers' activities. Plate makers, printing machine operators, paper cutters, and binders were also involved in producing graphic design outcomes (Bonsu, 2019). Advancements in technology mean that some aspects of the design and production process can now be executed by AI or automated.

2.2.1 The skills of graphic designers

The skills of a graphic designer can be categorised into two main groups: technical skills and soft skills. Technical skills are job-specific competencies that are acquired via training and experience, enabling individuals to perform specific tasks or functions within their respective roles. On the other hand, soft skills encompass a range of interpersonal and personal attributes that contribute to one's overall effectiveness and success in any professional capacity. Proficiency in using *Adobe Creative Cloud (CC)*™ suite of design software, encompassing *Photoshop*™, *InDesign*™, and *Illustrator*™, is a paramount technical competence for graphic designers, enabling them to successfully execute design undertakings (Fleck, 2022).

The centrality of graphic designers within the creative process has been facilitated by technological advancements. Frequently, a graphic designer assumes the responsibility of overseeing and finalising the tasks carried out by other creative disciplines within the context of the creative process. According to Ambrose, Harris, and Ball (2019), the range of tasks assigned to graphic designers has expanded to encompass several areas such as print procurement, photography, illustration, art direction, project management, and pre-press production.

Design review and feedback play a crucial role in achieving creative success across various domains. Designers develop a familiarity with the practice of receiving critique and feedback as part of their training. The integration of work and school activity systems is more likely to occur due to the significant role that feedback, provided by professional guest critics and academic instructors, plays in critiques. In the realm of professional practise, the provision of feedback holds significant importance in determining the success of outcomes. However, it is worth noting that such input may not always align with the creative vision of the designers. Design competitions are advantageous in that they allow designers the opportunity to obtain feedback on their creative efforts, without being hindered by the financial limitations typically connected with professional practise. Moreover, the observed phenomena of collaboration and competition in online design contests exhibit similarities to the concept of competition among enterprises. The integration of concept and design contests within the innovation process of a design company yields considerable value, as it showcases individuals' inclination to share their ideas, propose distinctive solutions, provide valuable feedback, and offer insights for enhancement (Hutter, Hautz, Dennhardt & Füller, 2013).

However, the International Council of Design (2024) warns designers against the practice of ‘spec’ competitions which involve soliciting designers to create new work. A distinction may be drawn between competitions that recognise and incentivise pre-existing work or ‘spec’ competitions which require new content to be produced. The term 'spec', derived from the abbreviation of speculative work, is employed to denote instances wherein designers are solicited to render professional services without remuneration. The speculative aspect of the scenario stems from the limited number of designers who will receive remuneration in the form of prize money, compared to the potentially large pool of individuals involved.

Graphic designers may utilise data obtained from LSM (living standards measure)/SEM (socio-economic measure) data sources to research potential audiences for their design outputs (AIGA, 2021). The necessity for graphic designers to possess knowledge of LSM data to develop effective design solutions is contingent upon the project and its contextual factors.

Although having knowledge of LSM data might be advantageous in some design scenarios, such as working for clients in medical or scientific fields it is not a necessary skill for all graphic designers. The necessity for such expertise is contingent upon the specific circumstances of the project, the level of data engagement, and the expectations of the customer. Designers may nonetheless thrive without possessing direct LSM expertise by prioritising other vital abilities and engaging in collaboration with data specialists as needed.

2.2.2 Developments in design

Considering the innovations in design practice it is evident that design is undergoing rapid changes. Design is treated as an integral discipline with specialist areas of practice such as graphic design, interaction design, fashion design, industrial or product design, each with its own domain knowledge and skills. In terms of contemporary practice, however, Sanders and Stappers (2013) argue that design practice is changing from what is made to that which is experienced (Figure 2.4).

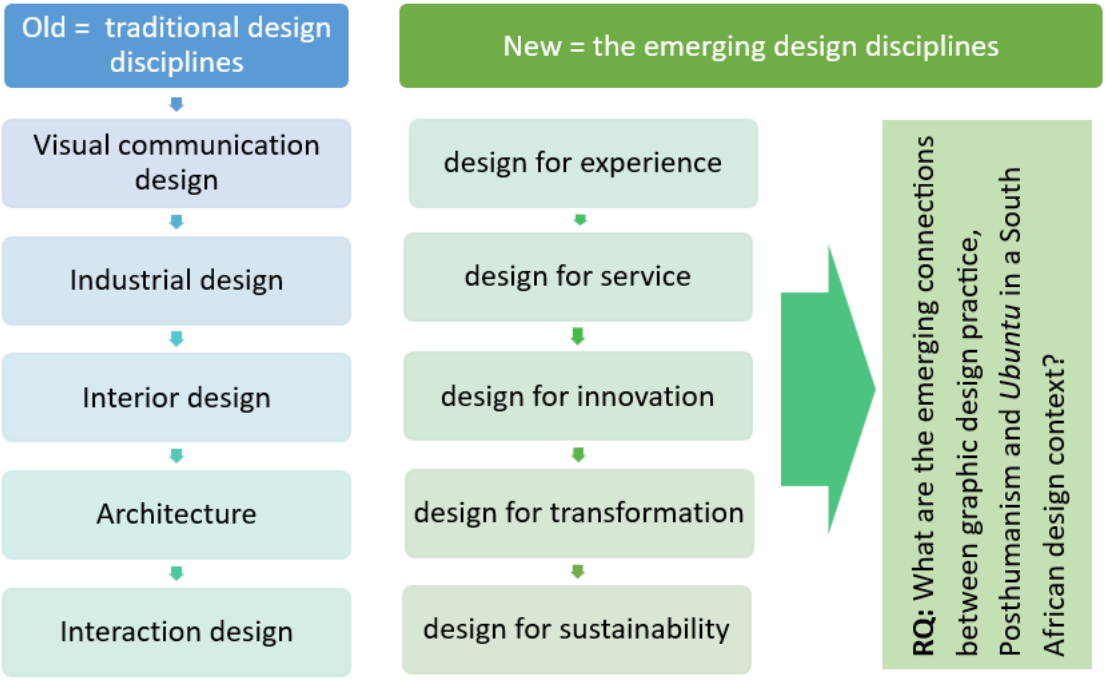

Figure 2.4. The transformation of the disciplines of design from the objects of design (old) to a focus on the purpose of design (new) (adapted from Sanders and Stappers 2014) and its contextualisation to this study.

A post-industrial, information age designer faces a greater complexity of choices than the industrial-era designer, who was primarily concerned with improving the appearance and function of messages, products, and services (Normoyle, 2019). Today, a wide range of disciplines, activities, and practices are being included in design's disciplinary, conceptual,

theoretical, and methodological frameworks. There continues to be a disbanding of the characteristics of what were once recognised as traditional and distinct design disciplines, such as product, graphic, textile, and fashion design. This change has manifested itself in the blurring of professional boundaries, as well as the fluidity of employment patterns within and across traditional design fields (Rodgers & Bremner, 2017).

In contemporary design practice, traditional disciplines of design are being replaced with emerging disciplines that focus on "people in the context of their lives" (Sanders & Stappers (2013, p.12). Hence, today's design practices are characterised by flexible, constantly changing paradigms that regularly transcend conceptual and disciplinary differences.

The three commonest theoretical approaches used to analyse graphic design are rhetoric, semantics and a pragmatism (Barnhurst, Vari & Rodriguez, 2004). Using rhetorical approaches, images and texts are encoded in a way that persuades targeted audiences. Using semantic approaches, visual images are examined as texts, in terms of their form, content, and context, while pragmatic approaches examine how visual artefacts are produced and received (Raff, 2012). A pragmatic approach to graphic design is the focus of this study.

In the past, the professional practice of design was traditionally found sandwiched between business and the fine arts (Ockerse 2012). This is no longer the case as contemporary design professions have links to fields as diverse as computing, anthropology and the social sciences, cultural studies, politics, philosophy, and ethics (Ockerse 2012). Herbert A. Simon (1996, p.111) in *The Sciences of the Artificial* emphasises design to be the meta-discipline of all occupations:

> *… engineers are not the only professional designers. Everyone designs who devises courses of action aimed at changing existing situations into preferred ones. The intellectual activity that produces material artefacts is no different fundamentally from the one that prescribes remedies for a sick patient or the one that devises a new sales plan for a company or a social welfare policy for a state. Design, so construed, is the core of all professional training; it is the principal mark that distinguishes the professions from the sciences. Schools of engineering, as well as schools of architecture, business, education, law, and medicine, are all centrally concerned with the process of design …*

Simon is known for his positivist view of the boundaries of design that stemmed from design's early definition as a design science (1969).

This study focuses on the traditional graphic design process employed by practitioners in their field and examines any potential modifications that may have arisen considering notable advancements in the design disciplines.

2.2.3 Design and rhetoric

Any discussion of design must first consider rhetoric. Rhetoric may be defined as the art of persuasion and design has been linked to persuasive techniques through its links to consumerism. The concept of rhetoric in the field of graphic design pertains to the intentional application of visual and textual components with the aim of effectively persuading, informing, or communicating a message. The process entails the deliberate and thoughtful use of design components, including colours, font, layout, and images, with the aim of exerting influence and capturing the attention of the intended viewership. The utilisation of classical persuasive strategies such as ethos, pathos, and logos is a common practise in graphic design to effectively establish credibility, provoke emotions, and express logical reasoning. Posthuman design practises are predicated upon the notion that modern design surpasses anthropocentric viewpoints. This statement recognises the increasing convergence of humans, technology, and the environment, resulting in blurred boundaries. Posthumanism acknowledges the vast societal implications of technology, prompting a reassessment of the human condition and the dynamics between humans and non-human entities, encompassing artificial intelligence, machines, and the natural environment. The field of posthuman design investigates the ways in which design might accommodate and transcend the shift towards a posthuman paradigm, moving away from traditional human-centred approaches.

Design academic Richard Buchanan has written extensively about design and rhetoric over the last thirty years (1985, 1990, 1995, 2001, 2007, 2010) and holds that “[d]esign is a discipline where the conception of subject matter, method and purpose is an integral part of the activity and the results” (Buchanan, 1995, p. 26). This subject matter in design is not fixed but constantly evolving (Buchanan 1995). Buchanan argues that rhetorical studies of design may shape a “new understanding of the role of human agency in shaping technological development” and contribute to the advance of a novel form of dialectic[10] based on values and principles that inform professional practice (2001, p. 203). Furthermore, there exists a legitimate association between conventional rhetoric and verbal communication in the field of

[10] Buchanan categorises dialectic as “the explanation of design and the products of design within a larger whole or system, emphasising the social and cultural contexts of design” (in Joseph 2010, p.190).

design. This relationship arises from designers' profound preoccupations with the art of persuasion and the process of negotiation, which are essential in engaging with both customers and audiences (Buchanan 2001).

Buchanan observes that the “subject matter of design may be indeterminate … universal in scope, because design may be applied to new and changing situations … limited only by the inventiveness of the designer – then the subject matter of design is not products, but the art of conceiving and planning products” (1995, p. 26). Furthermore, Buchanan’s notion of rhetoric in design artefacts[11] is understood to be the study of how “products come to be vehicles of persuasion and argument about the desirable qualities of life” (1995, p. 26) and is all-embracing – this notion includes all stakeholders in the design process of creating artefacts and services for a “human-made world” (2001, p. 189) and considers the technology required for the creation of those artefacts. However, as Buchanan pointed out in 1995, "all design is rhetoric," therefore it stands to reason that biases and competing worldviews held by humans will inevitably find their way into artificial intelligence (Pilling & Coulton, 2019).

Buchanan alludes to the seventeenth century philosopher Francis Bacon as an important influence on the development of design research as Bacon came to recognise the coming together of art and nature on the creation of what he called “artificial things”(2001, p. 4).[12] Moreover, Buchanan (1995) recognises that the studies of design are compounded by the diversity of design ‘products’ or artefacts and that identifying commonalities within design is almost impossible owing to the vast array of histories and theories on design that represent a wide collection of thoughts on what design is. What Buchanan (1995, p. 24) proposes as the ‘golden thread’ that unifies all aspects of design, a recognition that design is a “humanistic enterprise” with a rhetorical dimension as being essential to all design thinking.[13]

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[11] Joseph (2010, p.164) explains that while “[e]arly definitions of the term artefact, associated with design science, were based on a notion of functional objects that were created by human beings for practical purposes, later considerations focus on the meaning of things (semantics) to include abstract conceptual structures as systems and discourse”.

[12] Buchanan identifies Bacon’s “deep humanism” and relates this to his understanding of “the role that rhetoric plays in human culture and the advancement of learning” (2001, p.4). It is this understanding of rhetoric that, according to Buchanan will “clarify the nature of design in the contemporary world and contribute to its continued formation along humanistic lines” (2001, p.189).

[13] Design thinking is similar to a human-centred methodology for problem solving that draws on specific creative skills from engineering and design and allows for meaningful solutions to human problems.

Within the realm of posthuman design, the notion of the audience undergoes a significant expansion, encompassing not only human beings, but also non-human entities such as algorithms, robots, and artificial intelligence. To effectively communicate and persuade non-human audiences, rhetoric in graphic design must be adapted, necessitating the implementation of distinct visual and linguistic tactics. In addition, to effectively convey and persuade non-human audiences, rhetorical and persuasive techniques in graphic design must adapt and employ distinct visual and linguistic strategies that may not have been previously considered.

One could suggest that various epochs in history yield distinct legacies. For instance, in the Roman era, architecture was accorded a comparable level of importance as rhetoric, mathematics, music, and grammar. To the ancients the focus of rhetoric was on "the inventive and ethical character of the artist or designer whilst productive science focused on the discipline and products of making" (Buchanan, 2009). Buchanan speculates that the twentieth century's legacy may lie in the development of design thinking[14] and its impact on all aspects of human experience (1990).

In his paper *Wicked problems in design thinking* (a revisit of Rittel and Webber's[15] 1960s concept) Buchanan suggests that design thinking may formulate "new integrations of signs, things, actions and environment that address the concrete needs and values of human beings in diverse circumstances" (1992, p. 3). Similarly design disciplines have developed from a concern with commercial products and manufacturing to much broader areas of interest that

[14] The concept of design as a mode of thinking can be found in Herbert Simon's book *The Sciences of the Artificial* (1969) wherein Simon attempted to find a scientific basis for design and proposed that everyone would benefit from an understanding of the place of design within contemporary society. Considering the complexities of contemporary environments Simon stresses the most important factor for successful solutions is a shared understanding amongst all stakeholders. For this understanding to be accessible Simon (1988, p. 69) supports the notion of the 'science of design' as an emergent theme in higher education and defines it as "a body of intellectually tough, analytic, partly formalisable, partly empirical, teachable doctrine about the design process" (1969, p. 58). The first decade of the twenty-first century saw the expansion of the debate surrounding design thinking. Prominent designers including Mau and Brown advocated design thinking as a means for "massive change", or "breakthrough thinking in complex problem domains", such as the social mandate of sustainability (Berger, 2010; Brown, 2008).

[15] Horst Rittel and Melvin Webber coined the term 'wicked problems' in 1973. *Dilemmas in a General Theory of Planning* (1973) their groundbreaking text establishes the design thinking approach by taking into consideration the notion of complexity within a societal reality by "delimiting the area of contextual relevancy through the positioning of the design problem" (Fenn & Hobbs, 2011, p. 87). Thus, because of issues of complexity and/or changing requirements, 'wicked' problems are often perceived as being too difficult to deal with and may be abandoned.

include communication, systems and environments. Contemporary designers must not only conceptualise and create design outcomes but must be able to explain and defend the position of those outcomes in society.

However, a significant portion of the academic literature pertaining to the intersection of graphic design and social responsibility predominantly concentrates on Western contexts and conventional design practises. There is a growing need for expanded academic investigation that integrates intersectional perspectives and critically examines the capacity of design to tackle issues related to race, gender, class, and other forms of social inequality. However, there exists a discernible gap in the literature, necessitating further scholarly inquiry that actively incorporates non-Western viewpoints. Such research endeavours should aim to explore how design may effectively tackle issues that are unique to diverse cultural situations. There exists a pressing demand for increased scholarly inquiry on the impact of design education on fostering social responsibility within the designer community. This encompasses both undergraduate and graduate education, along with ongoing educational options for professional designers.

In a post-anthropocentric future where human-centred perspectives are no longer dominant, the merging of rhetoric in graphic design and posthuman design practises becomes significant. This convergence underscores the necessity for designers to consider novel methods of persuasion, broaden their understanding of target audiences, and embrace the intricate and diverse connections between humans, technology, and the environment. The utilisation of rhetoric emerges as an essential instrument for effectively expressing and manoeuvring within the dynamic realm of design.

This research examines the influence of rhetorical foundations on posthuman concerns and practises in contemporary graphic design. Given that graphic design practise relies on persuasive visual communication to engage audiences, understanding the impact of rhetorical foundations becomes crucial.

2.3 Development of discrete fields of professional practice in design

The professional practice of design is an economic activity (Friedman 2012). Design can be described as a system of creating human-made artefacts or products. At the start of the twentieth century, the definition of artefact was a manufactured physical object. The beginning of the twenty-first century sees a broadening of that same definition to products and services that influence all features of the contemporary world. Therefore, the pre-industrial era can be defined by production methods that focused on the extraction of raw materials, the industrial

era by industrial fabrication and financial capital and the post-industrial era by information technologies and human capital (Friedman 2012).

Friedman (2012) argues that although the focus of the methods of production has changed in a contemporary world human beings continue to use ancient resources such as raw materials and human energy in a new context. To be effective within these new contexts contemporary designers require a range of skills and knowledge. The development of these multifaceted skills and broad knowledge base is discussed in the following section as the emergence of the discrete professions in design which began at the turn of the twentieth century.

A repositioning of the traditional roles associated with specific fields of professional design practice are becoming increasingly evident. Buchanan (1992) illustrates this repositioning with an example from the professional practice of graphic design. He argues that in the past graphic designers were tasked with the coding of corporate messages which were in turn decoded by the audience. In contemporary graphic design, designers regard visual communication as "persuasive communication" whereby the role of the audience has shifted from a passive decoder of messages to an active participant in reaching conclusions regarding the message content. Thereby Buchanan upholds the notion of human-centredness in design and notes that design must remain fluid and inspired in its response to specific human problems (Harrison, 2012). Going beyond human considerations, posthuman design frequently prioritises ecological considerations and the interdependence of both animate and inanimate phenomena. The utilisation of a Buchanian perspective in graphic design enables the effective communication of ecological messages. This approach employs a combination of visual elements and textual content to persuade audiences to embrace more sustainable practises. By doing so, it aligns with the overarching posthuman concern for the environment.

At the turn of the twentieth century design was already associated with manufacturing and production and thereby with the developing notion of consumerism and the creation of wealth. The two design methods of production that emerged during the early days of mass manufacturing were: the 'traditional' craft method and a design process with a foundation in drawing. The importance of visualisation and drawing has always been important in the development of design outcomes. By utilising this method, the designer interprets the needs of the client and acts as mediator by explaining them to the manufacturer. This method of design played an important role not only in graphic communication, but also in industrial and engineering design and architecture (Buchanan, 2009). The importance of drawing in visual communication can also be linked to corresponding developments in typography, technological advancements in photography, as well as printing and eventually mass

communication (Buchanan, 2009). During the second decade of the twenty-first century, however, technological advancements such as the development of artificial intelligence (AI) supported software is increasingly enabling designers to create products without the needs of these basic skills.

At this time, mass production and standardisation were already common, and the use of technology was embraced as a modern tool that could be used for the purposes of the production of essential elements that could contribute to the creation of artefacts (Lees-Maffei & Houze, 2010). Under these circumstances the relationship between mechanisation, technology, design, and the human experience is multifaceted and requires greater scrutiny. As an example, in the first decades of the twentieth century the homogeneous appearance of the automobile reflected its means of production as it was “both a new product and one that did not infiltrate the home and its conventional values” (Sparke, 1987, p. 52). However, an artefact intended for domestic use like the sewing machine, had to be continually updated as a symbol of affluence and social status for the home. The examination of design and technology within the context of the social and economic experience, led to a greater cognisance of the responsibility humans should take for the creation of artefacts.

By the 1920s the United States was at the forefront of the retail and consumer explosion brought on by an increase in wages and manufacturing. The car manufacturer General Motors introduced design innovations such as an annual model renovation and began to rapidly take over the market where the principal of standardisation was becoming obsolete. It was at this time that the first specialisations in design professions began to emerge as specialist designers who focused solely on automobile manufacturing began to provide innovative visual identities for these functional artefacts associated with a continuously changing market. The occupation of the designer had changed, and this new role became the standard across the mass manufacturing industry (Sparke, 1987; Heskett, 2002). It was at this time that designers began to understand that their professional role includes being convincing in their dealing with consumers as well as finding techniques for the evaluation of the various viewpoints from which their products are viewed by clients, manufacturers, business and other technical experts, and potential users (Buchanan, 1995). The consideration of the various challenges within professional environments that include design as part of their process manifested in the increasing variety of design professions in evidence today.

Buchanan (2001, 2009) defines the development of design products and services as a set of placements which he names the Four Orders of Design centred on the four central themes of *Symbols, Things, Action* and *Thought* to reflect on the fundamental issues designers must

tackle in their practice. These Four Orders are manifest in the design practice of all designers. Buchanan, however, chooses to associate each with a specific design profession which may tackle such problems as part of their daily processes and practice. Importantly, the Four Orders are grounded in the skills and abilities of designers ("inventing, judging, deciding and evaluating") and not in the differentiation between the various fields of design professional practice (Buchanan, 1992).

According to Golsby-Smith (1996), the First and Second order enable the designer to interact with the brief as stipulated by the client in two-dimensional and three-dimensional spheres, the Third Order enables the designer to consider the processes associated with the brief whilst the Fourth Order engages with a deeper consideration of the brief's purpose (Figure 2.5).

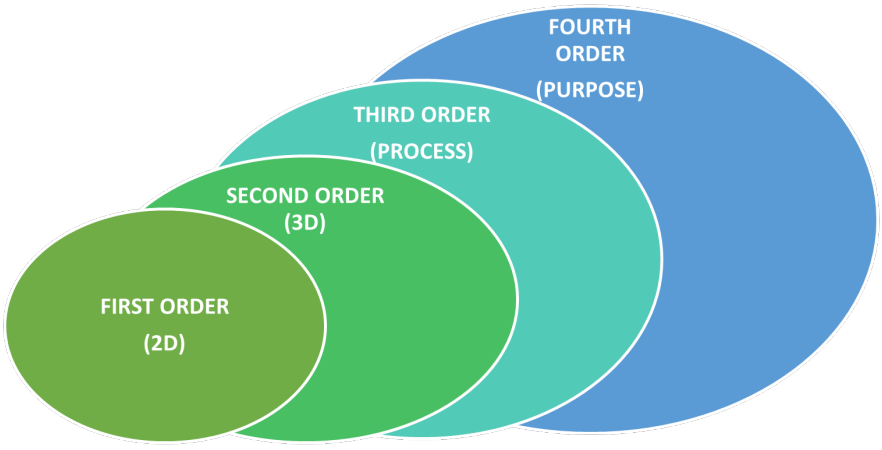


Figure 2.5. Revised illustration of Buchanan's Four Orders of design after Golsby-Smith (1996)

Traditionally, visual communication and the profession of graphic design is reflected in the First Order centred on the theme of signs and *Symbols.* Although the roots of visual communication are in print, it has evolved to include photography, film, sound and the digital outcomes. The fabrication of artefacts is situated in the Second Order: *Things*, and Buchanan links this most strongly to the fields of professional practice of Industrial and Product design. These two universally renowned design disciplines form the First and Second Orders of design and reflect a trajectory in practice from two-dimensional to three-dimensional engagement with design artefacts. Within these two orders, the designer appreciates that the restrictions on the artefact "are stable and defined, while the form is unstable and undefined" (Golsby-Smith, 1996, p. 6). Within this context designers engage with briefs provided by a client which the designer then answers based on individual experience and skill. At this stage of engagement this interaction may be limited by the specifications of the client brief or imposed by the culture of the design studio within which the designer operates. As the experience and skill levels of

the designer increase however, the client - designer interactions may evolve to provide activities, services and solutions based in the Third Order (Anderson, 2007).

The planning and deliberations of actions, systems, services, activities and processes commonly found in Interaction design is situated in the Third Order of *Action or Process.* Buchanan (2013, p. 4) mentions that in terms of contemporary design, the Third Order relates to "how people deal with people" and, therefore, could be considered a step towards the consideration of human-centred principles, as within the context of the Third Order a graphic designer may consider more than only the client brief and extend his consideration to additionally include reflection of the needs of the audience. The designer now has greater influence over the processes by which the problem is framed, and the design is executed (Anderson, 2007).

Lastly the Fourth Order – *Thought or Purpose* - encompasses systems action thinking and such disciplines as Environmental Design (Buchanan, 2009, p. 410) and deals with the environments and systems within which the three preceding orders are situated. The development of understanding how these systems work, what core ideas and values bind them is symbolic of this order (Buchanan, 2013, p. 5). Buchanan's theory of Fourth Order design highlights the escalating role of the designer in the preceding Third Order processes and, according to Anderson (2007, p. 16), "if Third Order design is a consideration of the processes surrounding a task, the Fourth Order is a study of the purposes driving these processes". Commenting on Fourth Order design, Ebenreuter (2009, np.) notes:

> *… a product should give its audience (or users) the freedom to choose how they may fulfill (sic) their goals rather than being forced to accomplish a task via a limited system of interaction. This is where the idea of participating or communicating with a product, service or system is much greater than its physical manifestation and transcends the materiality of a product. This is because of the focus of Fourth Order design and the notion of an organised integrated whole that interconnects people with their environment. When all the parts of a design solution are connected, everything is in harmony …*

Buchanan (1992) further describes the amalgamation formed by these Four Orders of design (*communication*: representation of words and images; *construction*: tangible products; *strategic planning*: systems thinking; *systemic integration*: collaboration and dialogue) and designer abilities (inventing, judging, deciding and evaluating) as the historical basis for design thinking and practice which is continually developing through encounters with new problems. For Buchanan (1992, p. 10):

> *Individual designers often possess a personal set of placements, developed and tested by experience. The inventiveness of the designer lies in a natural or cultivated and artful ability to return to the placements and apply them to a new situation, discovering aspects of the situation that affect the final design. What is regarded as the designer's style, then, is sometime more than just a personal preference for certain types of visual forms, materials, or techniques; it is a characteristic way of seeing possibilities through conceptual placements.*

Buchanan (1992) argues that these four placements address certain objectivities in the human experience but maintains that these conceptual placements are interwoven with none being more important than the other as it is up to the designer to determine how he/she would choose to address specific problems within the human experience and design.[16]

Bremner and Rodgers (2013) have noted that the boundaries of the discrete fields of professional practice in contemporary design have become blurred and continue to "dissolve". New types of design practice have influenced contemporary professions in design which now rely on collaboration and cross/multi and interdisciplinarity as well as fluid patterns of employment that transcend traditional disciplinary boundaries. Several design professions such as some product design (the design of electronic equipment and communications devices for example) require "a core of designerly activity supported by other specialist areas, such as engineering, anthropology, business and other areas of expertise" (Bremner & Rodgers, 2013, p. 8). Atkinson (2009) argues that these significant changes to the status quo of the design practice have placed the design profession in crisis, but that these changes also have "the potential to create a new role for the designer".

The preceding section analysed the historical progression of distinct areas of specialisation in design to illustrate the transformation of design from a concentration on objects and mechanisation to a more comprehensive consideration of larger social systems. Within this

[16] In terms of graphic design practice, Julian Jenkins (2009) graphic designer at the management consultancy 2nd road in Australia, describes the following considerations when working within the Four Orders of design: "1) First order – typography and layout; 2) Second order – document structure and usability; 3) Third order – the system or process in which the document sits e.g. the organisational planning system, the application process for an insurance product; 4) Fourth order – the structures, values and cultural elements of the organisational environment that impact upon how the way that system or process is designed or implemented". Jenkins (2009) stresses the importance of utilising Buchanan's Four Orders to "undertake transformative interventions that go much further than just the document itself".

theoretical framework, unique posthuman perspectives on both human and non-human entities, as well as the environment and technology, become increasingly evident.

2.4 The influence of technology on design

Aristotle's definition of design implicit in his concept of *techne* is also the source of the word "technology". This is significant because design (a process of making) is usually understood as the essence of technological invention (Wang, 2013). The contemporary process of making has embraced two divergent methods of production – one focused on aesthetics and the other on technology. The technical aspects of making or designing focuses on operational and functional associations within mechanical or similar processes and artefacts and, as these aspects are often a concern to engineering or product (industrial) design, these may result in very complex artefacts lacking in decoration. On the other hand, the aesthetic form of designing focuses on the external appearance of the final artefact and may result in beautiful artefacts that are ambiguous in meaning (Mitcham, 1995).

Figure 2.6 describes the perceived relationships between the role of designers, the role of clients and how these may be influenced by technological and societal changes.

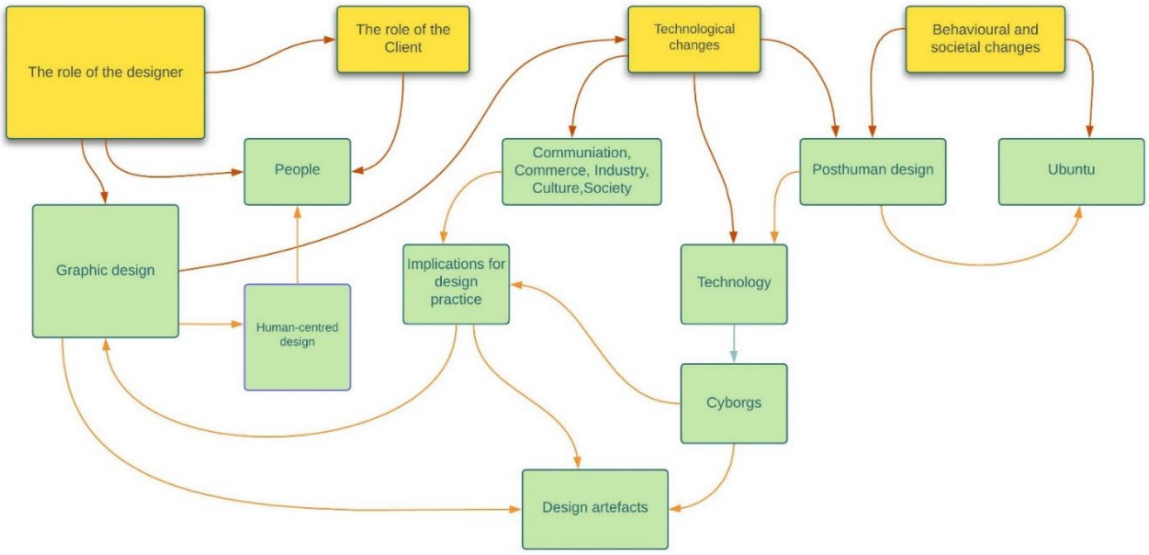


Figure 2.6. A visual description of the relationships between designers, people and society

Graphic designers engage in the professional practise of disseminating information, exerting persuasive influence, imparting knowledge, and managing various tasks (administration) (Frascara, 2007). The design for information encompasses a range of tools (tickets, stock documents, banknotes), graphs and diagrams, teaching aids, manuals, reports, and catalogues (Frascara, 2007). The field of persuasion design encompasses three distinct spheres, namely advertising, propaganda, and social agenda. These disciplines share a common objective of altering societal opinions (Frascara, 2007). The design for education is concerned with both persuasion and information to facilitate the development of individuals or groups (Frascara, 2007). The design for administration encompasses the utilisation of information, persuasion, and education to influence societal regulations and foster organisational growth. Design employs rhetorical, semantic, and pragmatic tactics in each of these four domains as integral components of its production procedures (Frascara, 2007).

Other perspectives hold to three methods of production (Buchanan, 1995). The first concept revolves around the technologies used in creating objects and is backed by the advancements in machines and computers. For instance, engineering serves as an example of this approach, where the focus is on designing for the material aspects. The second perspective is based on recognising the social and psychological needs that drive the utilisation of artefacts, as exemplified by industrial designers who cater to these needs. Lastly, the third factor to consider revolves around the concept of "the appeal of the aesthetics of forms" (Buchanan,

1995, p. 50). This idea originates from the social sciences and is occasionally expressed through the desire for a 'science' of design. Design can have a foundation in science, but it is the designers' personal interpretations in meeting human needs that enhance the widespread appeal of design through aesthetics (Buchanan 1995).

The philosopher and educator Marshall McLuhan identified that the onset of technologies has a direct effect on human experiences and behaviour and that it affects the forms and scale of social organisation as well as individual lives. His focus on the study of communication media independent of its message resulted in the famous maxim “the medium is the message” (1964).[17] McLuhan (1964, p. 22) argues that “a medium affects the society in which it plays a role not through the content delivered over the medium, but by the characteristics of the medium itself”. Controversially, McLuhan (1964) suggested that content had only a slight influence on society thus: for example, suggests that it is of no consequence what content is broadcast by television (programmes directed at children or violent programming) and that the influence of television on society would be the same. According to McLuhan (1964) machine technology is always persuasive and may have either a positive or negative impact on human beings as a medium for the restructuring of human activities. Automation technology on the other hand is decentralised and integral to the human experience. McLuhan (1964) contends that technology is amoral and functions as an instrument that forms individual and societal concepts of self and realisation. Further his concept of technology encompasses the notion that media are an extension of human capabilities as it accelerates or changes the scale of human activities.

Design theorist Bruce Archer observes that technology has pushed design towards a “system” rather than an “artefact” approach (Buchanan, 2009, p. 435). A systems design approach is based on the cross-disciplinary teamwork evident in the attitude to problems in war-time enterprises during the Second World War (Archer, 1999). The development of systems to deal with concerns distinctive to circumstances at a time of war, for example, the identification and pursuit of U-boats, optimisation of food production and distribution as well as the examination and development of defensive programmes gave rise to the establishment of a novel research discipline known as Operational Research. Operational Research was characterised by the work of multi-disciplinary teams who made a concerted effort to create solutions for persistent wartime problems and who consolidated a Systems Approach to the analysis of such

17 McLuhan’s views of technology originate from his roots in the study of rhetoric and in the diffusion of rhetoric during the Renaissance (Guillory, 2015).

problems. The later Design Methods movement borrowed heavily from the methodologies of the Operational Research approach and systems analysis ruled the initial thinking of members of the Design Methods movement (Archer, 1999). Thus, in the post-war period the focus of design changed from the aesthetic to the technological. Additionally, new disciplines such as ergonomics, management science, cybernetics and marketing came into being and have had an impact on the further evolution of design.

The shift from an industrial to a post-industrial society led to the development of new technologies that changed the importance of design actions and practice (Krippendorff, 2006). Technology can be limiting as argued by Armstrong (2009) who also notes that the technology necessary for the creation of the contemporary design artefact has embedded a kind of 'universality' back into the substance of many of the designs lauded as exemplary today, by inadvertently limiting what designers can do within the scope of the software available. Furthermore, technology can be ordinary and amount to simply understanding the day-to-day artefacts that we surround ourselves with or it can offer new experiences for human involvement. It has been embraced by designers in all domains from architecture to systems and multi-user domain (MUD) participant environments that have been employed successfully for learning opportunities, sport and gaming (Krippendorff, 2006).

According to Donna Haraway (1991), technology is changing the nature of labour and blurring the lines between human and non-human actors. She refers to this as a form of cyborg feminism, in which the conventional borders between human and machine are demolished to establish a new type of being. This might be understood in the context of graphic design practise as designers becoming cyborgs, who are no longer restricted by their physical talents but can instead rely on technology to augment their abilities. Graphic designers, however, have always relied on a variety of tools to create their work, from brushes and pens to computer software. It may be argued that the use of digital tools is simply the latest evolution in this ongoing process of tool development and adoption. As such, it is unlikely that designers are becoming cyborgs in the sense that they are becoming dependent on technology to the point where they are unable to function without it.

While technology is undoubtedly changing the nature of design work, designers are also shaping its development and use, and the use of digital tools is merely the latest evolution in an ongoing process of tool development and implementation. Nonetheless, it is important for designers to be conscious of the potential impact of technology on their work and to use it in ways that enhance rather than replace their creative abilities.

Technology may also enhance the abilities of non-designers. The availability of technology has begun the trend of what Dmitri Siegel (in Armstrong, 2006) refers to as the 'prosumer' – a consumer who partakes in 'simultaneous production and consumption', a consumer so aware of what technology can offer in terms of design templates that he/she is prepared to design their own products to the detriment of the design professions. This easy access to the technologies of design simplifies the design process for the average person whilst not providing the adequate theoretical background that supports true design innovation. Although Siegel (in Armstrong, 2006) sees the rise of the 'prosumer' as a powerful indicator of the impact of technology on the information economy changing the way people share information as well as changing their traditional view of what may constitute an artefact, graphic designers may feel threatened by the availability of AI augmented tools and software such as *Canva*® for example.

The rise of the 'prosumer' raises important questions about human centredness in practice and the future role of the professional designer. Renowned designer Dieter Rams (in Bremner & Rodgers, 2013, p. 5) has stated "…design is a serious profession, and for our future welfare we need to take the profession of design seriously". Rams is lamenting the rise of the 'prosumer' in contemporary society and bemoans the devaluing of the word 'design'. Sanders and Westerlund (2011) state that several problematic issues may arise when "novices" participate in the design process. Bremner and Rodgers (2013, p. 6) cite the designer Ettore Sottsass who warned that "design has deep and durable ethical and political dimensions and requires knowledge and consideration of our relationship with each other and the world we are changing (our anthropological condition) because, while the effect of design can be short-lived, it can also last a very long time". In support of this view, when discussing the democratisation of design processes, design theorist and author Tony Fry (2009) refers to the pluralisation of design activity. According to Fry, this process is driven by the availability of cheap design software which allows anyone to participate in design activity. Fry is critical of the processes of design being thus "trivialized" and "reduced to a mere style gallery" from which prospective clients can select their chosen solution (2009, p. 6).

Siegel, Rams, Sottsass and Fry are questioning the democratisation of design in contemporary society brought on by the easy availability of technology such as design software and free access to design learning resources via the internet, however, it is unlikely that this trend will cease, or that (untrained) creatives will stop making contributions to the world of designed artefacts. This tendency for people to want to contribute to the process of making and thereby have a say in the final design outcome is human-centred, but questions arise nonetheless, whether contributions made by untrained designers are as meaningful and

capable of meeting stakeholder needs as those made in the context of the professional practice of design. Additionally, problems such as a lack of basic design knowledge and skills, the inability to articulate one's ideas sufficiently and conflicting perspectives may arise in the process of designer – community member participation.

In recent years, technological advancements, particularly artificial intelligence (AI), have propelled a new rate of technological change that has profoundly influenced how work is done and how people live their lives. Buchanan (1995) notes that from the perspective of design as an instrument of power, the numbers of individuals who now have the means to practice design has increased significantly since the Industrial Revolution. The automation provided by AI and ML (machine learning) may impact the employability of designers who have not fully mastered creative and social intelligence (Girling, 2023). The production of simple design outcomes may become outsourced to AI and may lead to a trend toward increasingly unusual specialisations as more designers seek to remain competitive.

Numerous design software applications are available that use artificial intelligence and employ the machine learning approach. Websites such as *Looka*® and *Logomaster*® employ artificial intelligence algorithms to generate and market a diverse range of logos, eliminating the need for human graphic designers. The technique employed by *Looka*® (Paris, 2022) encompasses four distinct steps. The user inputs the designated brand name and selects from a range of logos and colours provided on the website. In other cases, the possibilities may include the addition of phrases and icons that are pertinent to the brand. Within a brief timeframe, the algorithm implemented on the website generates a variety of logo designs by using the provided input. Subsequently, the user is afforded the opportunity to select a preferred design from the available options. Mock-up templates, which are integral to the logo creation process in the field of graphic design, are also produced through the utilisation of artificial intelligence (AI) technology. During the last stage, the user is promptly presented with the selected logo shown on several mock-up templates. The efficiency of the website's user interface facilitates a streamlined and expeditious operation, requiring minimal time investment (Karaata, 2018).

The field of image processing has undergone a notable evolution because of the widespread availability of various software applications and mobile apps. This includes well-established tools like *Adobe Photoshop*™, which necessitates expertise in graphic design, as well as the emergence of new smartphone applications like *Lensa*™, that offers user-friendly image manipulation capabilities accessible to individuals of any skill level.

Template generation tools, such as *Canva*® and *Design.AI*®, have become valuable resources for assisting graphic designers and amateurs with layout design. A wide range of

AI-powered tools catering to several design domains, such as website design (*Fronty*®), 3D modelling (*Alpaca*®), and illustration (*Nvidia Canvas*®), are readily accessible to both professional designers and those with less expertise in these fields. There is a potential for artificial intelligence to mitigate time-intensive tasks, so affording graphic artists additional time to engage in the creative process, without compromising the stability of their employment.

Parametric design, enabled by AI, allows designers to create millions of variations of a design quickly and easily, resulting in substantial productivity increases. By reducing development time, designers will be able to explore a wider variety of alternative directions. Consequently, amateur designers may be able to produce acceptable results more easily, resulting in lower prices for professional designers (Girling, 2023). Although AI is evolving at a rapid pace there are still some problems that are difficult for AI to resolve and require the intervention of a human designer. For humans, understanding the subtleties of emotional cues is a learned behaviour based on cultural and societal norms. Presently AI technologies struggle to grasp some nuances of human interaction like flirtation and sarcasm for example (Oh et al., 2019). Further, AI has difficulties in learning morality and recognising bias as these are not quantifiable metrics that are simple for a computer to process. Thus, the role of future designers is likely to change from producers of design outcomes to curators of design outcomes that set parameters and goals for algorithms to determine the behaviour of systems (Oh et a.l, 2019). Oh et al. (2019) and Girling (2023) speculate that AI may be likely to replace today's designers, but as design (and designers) continuously evolve, it is possible that in the future designers will work in partnership with AI technologies to meet and resolve new challenges.

This research focuses on the notable advancements in technology and their influence on the field of graphic design. This research examines the potential consequences of technological progress on the daily activities of designers in South Africa. It explores the evolving role that designers may need to adapt to in the future, as well as the potential impact of AI technologies and outsourcing certain aspects of the graphic design process. The study investigates whether this outsourcing trend is beneficial in terms of reducing designers' workload or if it poses a risk of rendering their jobs obsolete.

2.5 Design emergent disciplines

A discipline once recognised as design, whose origins go back to the separation of idea from production, now has little to do with production and is seldom centred around a single idea. Multidisciplinarity, cross-disciplinary endeavours, interdisciplinarity, trans disciplinarity, and

beyond are all part of the new idea of design (Rodgers & Bremner, 2017). A 2017 Design Census (designcensus, 2017) found that "consumer versus social impact focus" ranks among the top ten challenges currently facing all design disciplines. When addressing a given design problem, industrial-era designers tended to focus primarily on a specific consumer or end-user. Today's designer must take many stakeholder groups into account and consider their opinions. According to the *AIGA Designer 2025* report, contemporary designers must be able to “negotiate the concerns of various stakeholders within projects and also evaluate their work in terms of its potential social, cultural, technological, economic and environmental impact” (Davis, 2017). Creative and social intelligence are the most important attributes of most design jobs today. Several skills are needed to achieve these outcomes, including empathy, creative problem-solving, and persuasive communication. Designers are required to devise comprehensive solutions that may effectively address complex challenges arising from both natural and anthropogenic factors. These challenges encompass a wide range of issues, including but not limited to risks and accessibility pertaining to vital resources such as water, food, health, and energy (Amatullo et al., 2019).

Human-centred design is an approach to design that is associated with humanistic paradigms such as social responsibility in design, user-centredness and the role of the audience in the design process. By utilising a human-centred design approach practitioners focus on developing outcomes for the betterment of societal needs rather than for purely commercial gain (Steen, 2008). Human-centred design has been linked to the process of design thinking and cosmopolitan localism (Manzini, 2015) whereby new approaches to design lead to a more just society.

When referring explicitly to graphic design, Jorge Frascara (1988, p. 21) has stated that societal impact and human-centredness in design can only be accomplished by:

> *[t]he impact that all visual communication has in the community and the way in which it influences people; the impact that all visual communication has in the visual environment; the need to ensure that communications related to the safety of the community are properly implemented.*

The basis of human-centred design is a view of the human as a single, discrete entity. These previous perceptions of the world are being challenged by our new relationships to the natural world and to socio-technical systems.

Posthuman design, by contrast, focuses on design approaches that are inclusive of all people, animals, technology and the environment (Forlano, 2017). Posthumanism allows a better

understanding of human and nonhuman knowledge, and supports the development of design methods, frameworks, and practices that are more appropriate for the challenges we face as a species.

As seen above, design practitioners have long questioned the role of design in society (Papanek, 1984). Some have focused on considering innovative approaches to design practice (Norman & Draper, 1986; Dorst, 2010) but most (Margolin & Margolin, 2002; Buchanan, 2013) highlighted concerns with the lack of educational foundations that focus on the considerations of human and societal needs for sustainable design practice. Most recent discussions focus on design beyond current practices that not only consider (local) social and environmental issues (Escobar, 2018) but go beyond the consideration of human needs to support those of non-human actors (Forlano, 2017).

In his influential work titled "Design for the Real World: Human Ecology and Social Change," published in 1971, Victor Papanek advocated for designers to have a heightened sense of societal and moral responsibility. The current perspective prompts a continuous re-evaluation of the responsibilities of graphic designers, aiming to challenge the notion that design is just a service-oriented profession. The approaches and methodologies employed within the field of design are subject to continuous evolution, enabling designers to effectively tackle a wide range of social, cultural, and environmental concerns in their modern practise. As a result, there is an evolving understanding of the concept of 'design' as the design industry adapts to engage with these novel systems of practise.

Internationally, graphic design theorists acknowledge the economic nature of design, while also endeavouring to situate graphic design within a coherent framework of a post-industrial society that encompasses socio-cultural aspects (Harland, 2008; Friedman, 2012; Manzini, 2015). The field of design is dependent on the manipulation of commodities and services within expansive industrial economies. Friedman (2012) emphasises the significance of possessing a diverse set of skills and knowledge, which enables designers to navigate and succeed in this evolving context. The subject matter encompasses the study of "the human being," which encompasses various aspects such as behaviour, physiology, ergonomics, and behavioural economics. Additionally, it includes the examination of "society," which encompasses trends, media, social economics, and communication. These topics are explored within the broader framework of cultural theory and the interconnected sociologies of knowledge and taste, considering the theoretical context of global trade and cross-cultural issues (Friedman, 2012).

Design has also been criticised for its contribution to environmental decline through the proliferation of fast fashion and the creation of products and services which are unsustainable and contribute the depletion of the earth's resources (Fry, 2009). Designers must consider the effect that their practice has on the environment through a considered selection of tools and materials to minimise the negative consequences on the environment, society and the economy. The word 'sustain-ability' instead of sustainability has been suggested to advocate for a more materially grounded objective and an acknowledgment that design may serve as a means for a "radical change of direction" for humankind (Fry, 2009, p. 7).

The importance of new design modalities that go beyond 'traditional' divisions of economics versus culture, "private versus public, local versus global, consumer versus producer, need versus wish" have been a part of academic discussion for at least twenty years (Manzini, 2015). In practice these discussions lead to a multidimensional engagement for graphic designers. The area of interest to this study is to explore how graphic design practitioners adapt to changing practices and demands of the industry and whether graphic designers have had to alter their design process to accommodate a synergy with technology, animals or environments.

In addition to the ability to work on multidimensional levels, graphic design practitioners use the tools and methods of several fields to interpret client briefs. This multidisciplinarity suggests the capacity to approach a problem from various perspectives, and thus the ability to uncover solutions in multiple domains of design, technology and society (Harland, 2008; Wankhade & Balakrishnan, 2010).

The close association between graphic design, people and culture is summarised by design academic Audrey Bennett (2006, p. 193) who affirms:

> *… graphic designers are producers of interdisciplinary knowledge and not just visual translators of a client's knowledge. Its theories and methods span many disciplines from cognitive to social science, and the contributors are both seasoned and emerging design scholars and practitioners.*

In a similar vein, Kees Dorst (2006), a Dutch designer and scholar, advocates for the notion that graphic designers serve as cultural issue solvers and proposes a more comprehensive involvement of all stakeholders in the design process. Klaus Krippendorff (2006) has further developed the perspective put forward by Papanek by proposing that the fundamental aspect of any design endeavour is in the significance that an object, service, or system conveys to its intended recipients. The objective of human-centred design practises is to bridge the divide

between designers and their target audiences. However, it is important to note that in the context of posthuman theory, this objective should not be restricted just to human audiences.

Recent considerations of posthuman design, especially considering discussions of the 4IR demonstrate that nonhuman actors - such as animals or artificial intelligence – require the development of new knowledge and expertise (Forlano, 2017). Whereas designers focused on human-centred projects consider the impact of design solutions on (human) audiences, designers that engage with the field of posthuman design will have to contemplate a broader set of criteria when developing design solutions.

Human-centred design is founded on understandings of the human as a discrete, individual subject. Yet, our new relations to the natural world and to socio-technical systems are calling these previous understandings into question (Forlano, 2017). Academics and designers agree that design must continually stay relevant with theoretical and methodological advances (Forlano, 2017). It may be argued that a novel approach to design considers contexts centred not only on humans but on the needs of animals, the environment and technology.

Rosi Braidotti (2013, p. 47) rejects design's "self-centred individualism" and proposes a posthuman approach to promote communal well-being that is based on "environmental inter-connections". Thus, design in a posthuman context considers novel methods, models and frameworks in the development of design knowledge.

In response to the recent reconsideration of human-centred design as a panacea for design problems faced by contemporary society, Haakon Faste (2016) argues that human-centred design approaches are too limited to deal with the complexity of present-day problems that are being impacted by rapid advances in technology and environmental decline. Faste (2016, np.) points out that these changes are impacting on the approaching obsolescence of human labour and that design practices ought to acknowledge the "reciprocal relationship that values intelligent systems as partners".

Designers' understanding, enactment, and response to the complex interconnections, interdependencies, and structural problems of the world is always evident in the way that objects, processes, and environments are designed. Through its conception of people's ability to respond to the world and to be impacted by it, posthumanism disrupts anthropocentrism and some of the objectionable facets of Humanism and allows us to gain a better understanding of our interrelationships with our living surroundings and with society at large.

This research is concerned with the evolution of design's emphasis, shifting from a primary focus on the object to a more prominent focus on human-centred processes and beyond. Increasingly issues of technology, sustainability and the environment are impacting on the practice of design and this study questions how design practitioners deal with progressively complex problems. Human-environment interactions continue to be re-imagined by designers interested in sustainability. It is especially evident today that designers are progressively interested in sustainability issues, with a movement towards “green” and “sustainable” design, which encompasses everything from used and recyclable products to eco-friendly services to the application of “design thinking” to reorganise systems (Hroch, 2014).

This study explores how South African graphic designers are responding to these pressures in the design industry. Further, this study aims at developing a snapshot of current graphic design practice to uncover a current and future agenda for graphic design practice.

2.6 Theoretical underpinning

The ideals of 18th-century Humanism are no longer relevant to the notion of being human in the 21st century. Our understanding of what it means to be human has expanded to include perspectives from women, queers, post colonialists, and people with disabilities. We are gradually becoming aware that man is not the centre of the universe.

This section introduces the theoretical framework employed in this study, namely critical posthumanism. Critical posthumanism offers a suitable framework for examining this topic, as it enables the exploration of the interplay between graphic designers (as human agents), technology (as non-human entities), and the wider societal ramifications involved.

This study follows Braidotti’s (2019) framework of critical posthumanism. Rosi Braidotti is a highly regarded feminist philosopher and critical theorist recognised for her contributions to the fields of posthumanism and posthuman feminism. One of the theoretical frameworks that has had a significant impact on her work is the concept of the "nomadic subject" or "nomadic thinking." This idea underscores the dynamic and malleable nature of subjectivity within a globalised society characterised by technological progress and intricate social and cultural interactions. Braidotti's (2013, 2019, 2022) scholarly inquiry delves into the ways in which these aspects provide challenges to conventional conceptions of identity, gender, and human existence. Her views have exerted significant influence within the academic domains of gender studies, cultural studies, and posthumanism.

Braidotti's (2011) nomadic theory and critical posthumanism are interconnected concepts, although they should be distinguished as separate theoretical frameworks. Both subjects explore themes about human identity, subjectivity, and the interplay between people and technology, but from slightly distinct perspectives. Braidotti's nomadic theory delves into the concept of becoming and transformation as fundamental to comprehending both the self and the world. On the other hand, critical posthumanism focuses on scrutinising the consequences of the posthuman condition, which entails reevaluating human identity within the framework of swift technological and cultural shifts.

According to Braidotti (2019), in contrast to human exceptionalism, the critical posthumanist believes that human existence is shaped by the convergence of posthuman studies, ecocriticism, technology studies, and ethics. The humanistic and anthropocentric paradigm is being replaced by a relationship-based paradigm, in which subjects are asked to reflect on their relationship with others, especially non-humans in their environment. In posthumanism, the emphasis is on a re-evaluation of the self in relation to nature, technology, biotechnology, design, and artifacts. To clarify these concepts, it is necessary to first provide some background to understandings of Humanism and posthumanism.

Humanism encapsulates a wide array of philosophical and ethical movements that are unified by the unwavering principle of the distinctive value, agency, and moral supremacy of human beings. Thus, Humanism is a philosophical stance that emphasises the individual and social potential and agency of human beings. According to Humanism all philosophical and moral inquiry begins with human beings (Susen, 2022).

Humanist concepts in the West originated in ancient Greece. As part of the Renaissance, interest in classical Greek literature was revived and humanistic ideas were rediscovered and, according to Braidotti (Braidotti, 2019) became the dominant model in shaping civilization. Humanism became a key critical element for cultural practices and is pervasive in a wide range of human affairs, from political ideals to legal principles to educational practices (Braidotti, 2019a). According to epistemological assumptions, design knowledge is both acquired and structured in accordance with humanist assumptions.

Posthumanism, informed by emerging feminist thought and post-structuralist thinking, evolved in the 1960s and was influenced by the anti-humanist stance of the student revolts that took place at the time (Braidotti, 2019a). The relationality principle or the requirement to ‘think-with’ is related to Haraway's (1988) concept of posthumanism. While humans are typically privileged, critical posthumanism commits to ‘think-with’ humans and nonhumans alike (Wakkery, 2020). Unlike Humanism, posthumanism deconstructs any ontological hierarchy

and excludes the distinction between human and Other. In posthumanism, human beings are entangled with other (non-human) beings in a complex matrix of interconnection (Anderson, 2019).

As a theoretical approach, critical posthumanism examines the ongoing deconstruction of the human and considers posthumanism to be a social discourse negotiated under the conditions of globalisation, technology, late capitalism, and climate change that addresses the pressing question of what it means to be human (Braidotti & Hlavajova, 2018).

Critical posthumanities are foregrounded in several ways, including: (1) thematically, (2) methodologically, (3) conceptually, and (4) politically (Susen, 2022):

- Thematically, posthumanism, unlike classical humanities, engages with a wide range of human subjects, as well as non-human objects, including technological forces, particularly digital ones.
- Posthumanism's commitment to inter-, trans-, and even supra-disciplinary inquiry is one of its' most notable methodological characteristics. In this sense, it exhibits a deeply critical stance, motivated by the ambition to dislodge – and, where appropriate, transcend – the self-referential mechanisms that maintain a certain social and epistemic comfort in the normative norms of mainstream academia.
- Conceptually, a posthumanist perspective rejects the myth of a denaturalised social order that is detachable and abstracted from its natural foundations.
- Politically, the posthumanities are both within and outside the neoliberal forms of governance associated with advanced capitalism. In some ways, they are able and willing to influence movement of capital across the globe and engage in corporate culture, finance, and industry. On the other hand, they strive to deconstruct and undermine the neoliberal domination of popular opinion.

In this way "the critical posthumanities remind us of the fact that 'we', the inhabitants of planet earth, are not only interconnected – across space and time, as well as across ontological boundaries defined by zoe/geo/techno-related forces – but also internally fractured" (Susen, 2022, p. 72).

The idea of entanglement, derived from quantum physics, has a significant role within the theoretical framework of critical posthumanism. This paradigm aims to question conventional beliefs around human uniqueness and instead promotes a more comprehensive understanding of the self and its interconnectedness with the surrounding universe (Barad, 2007).

Within the framework of critical posthumanism, the concept of entanglement denotes the complicated and interrelated nature of all phenomena, encompassing both human and non-human elements, within a multifaceted network of interactions. This perspective highlights the inherent interconnectedness between human beings and their environment, hence questioning the prevailing belief that humans exist as independent and self-governing entities. The notion of 'agential realism' was established by Karen Barad, a highly regarded philosopher within the critical posthumanist field. Barad (2007) employed this term to interpret the phenomenon of entanglement. Agential realism assumes that the composition of the universe does not consist of pre-existing, autonomous entities, but rather arises via intra-actions, which are dynamic processes of transformation where things are mutually produced.

From this perspective, entanglement is not simply a static condition, but rather a dynamic process characterised by continuous involvement and change. Entities, whether they be of human or non-human nature, are not passive recipients of external influences, but rather play an active role in constructing the environment in which they exist.

The notion of entanglement holds significant ramifications for the field of critical posthumanism. The statement challenges the concept of anthropocentrism, which asserts that humans occupy a central position in the universe. Instead, it promotes a post-anthropocentric viewpoint that acknowledges the equitable worth and capacity for action of all entities.

The phenomenon of entanglement also gives rise to ethical considerations. The proposition suggests that our ethical obligations extend beyond the realm of human beings to encompass non-human things, including animals, plants, and the environment. Through acknowledging the inherent interdependence of individuals and many systems, it becomes possible to cultivate ethical and sustainable approaches to existence within the global context (Barad, 2007).

The concept of entanglement within the framework of critical posthumanism functions as a potent metaphor that facilitates understanding of the intricate interconnections between human beings and their surrounding environment. This perspective questions conventional binary oppositions and advocates for a comprehensive comprehension of the individual and their position within the cosmos.

Barad's (2007) agential realism offers valuable insights for forging a link between critical posthumanism and the philosophy of *Ubuntu*. Both ideologies emphasise the interconnectedness of all occurrences and the importance of individual action in shaping the surrounding universe. Posthumanism is distinguished by its focus on rigorous analysis and

scrutiny, challenging anthropocentrism and Cartesian dualism by emphasising the active involvement of non-human beings and technology. Furthermore, critical posthumanism places great importance on the cooperative generation of knowledge through interactions involving both human and non-human elements (Wolfe, 2010). Its advocates aim to develop a genuinely ethical and long-lasting relationship between people and the environment.

Similarly, *Ubuntu* emphasises the interconnectedness of all living beings, promoting a sense of commonality and shared responsibility (Ramose, 1999). *Ubuntu* prioritises the importance of interpersonal ties and communication in building a just and unbiased society, while aiming to create a global community where all people's needs are met, and everyone could prosper.

Barad's agential realism introduces the concept of "intra-action", which pertains to the interconnectivity and mutual formation of entities through their interactions. Similarly, Wolfe (2010) utilises the ideas of object-oriented ontologists (OOO) such as Graham Harman and Levi Bryant to assert that objects have their own agency and are capable of autonomous action, separate from human involvement. This is consistent with Barad's notion of intra-action, which refers to the mutual constitution of things through their interactions. Thus, agential realism challenges the notion of pre-existing entities by asserting that all things originate from ongoing processes of emergence.

The concept of agential realism offers a framework for understanding the interconnectedness of human and non-human entities, drawing from both *Ubuntu* and critical posthumanism. It emphasises the importance of agency in shaping the world and suggests that both humans and non-humans play a role in creating a more sustainable future. Barad (2003, 2007) and Wolfe (2010), in their conceptualisation of posthumanism, refute the idea of pre-existing entities and instead highlight the continuous processes of transformation and ‘becoming’. According to Wolfe (2010), posthumanism is not a static condition but rather a dynamic process of transforming into something new. He characterises this process as a "becoming-with", in which humans and non-humans are continuously intertwined and mutually shaping one another. Similarly, van der Merwe (2020) considers the notion of ‘becoming’ when considering *Ubuntu*:

> *Within the web of life, each participant plays a particular role, and ubuntu (sic), by inviting us into the process of becoming more fully human, is inviting us to develop our knowledge of our place within that web of life.*

This idea of becoming may resonate with designers who are familiar with the continual development and adjustment to the practices and the technologies of their profession.

Further, the ethical implications of design decisions may be analysed via the lens of agential realism, which acknowledges that our actions have repercussions for both humans and non-humans alike. This approach is further supported by the concept of co-created knowledge, which is in line with both posthumanism and *Ubuntu*.

To improve their accountability and efficiency as catalysts for transformation, designers may better their understanding and use of agential realism. Designers should go beyond anthropocentric perspectives and thoroughly evaluate the consequences of their work on the broader ecological and social system. Designers should focus on the enduring health and well-being of both humans and the environment while considering strategies such as biomimicry when developing their creative outputs. Engaging in critical reflection entails designers continuously questioning their preconceived notions and biases, while being open to gaining information from others through participatory and co-design methods.

Design theorist Tony Fry (2010, p, 9) contends that designers are self-deluded when it comes to confronting the destructive qualities of anthropocentricism. He upholds the view that:

> *To be human is to be anthropocentric and to be anthropocentric is to be violent — here is the core of human violence. To confront what we are and to take responsibility for it means we are effectively at war with ourselves …*

Fry argues that people, by their inherent nature, are not only driven by self-interest but also possess an underlying inclination towards causing destruction. Consequently, he contends that environmental issues are mostly rooted in moral introspection and the determination of political leaders, rather than being just material or technological in origin.

Fry (2010) justifies his argument for design's increased participation in a new political and future-oriented context based on ontological and moral principles. He argues that designers' ability to create and the responsibility of its practitioners to use its outcomes have a profound impact on future consequences. Due to intentional design, humans currently inhabit a heavily mediated world, where natural elements do not directly interact with humans until they have passed through some form of designed intervention. Considering this, designers should acknowledge and accept the disruptive nature inherent in their work. They should transform themselves into responsible individuals who are willing to eliminate anything that is unsustainable and prioritise the greater common good of transcending human limitations.

Design, as a discipline, is inherently practical in nature. While it does involve intellectual aspects, its ultimate and essential purpose is to be implemented in the actual world. It should

be acknowledged that embracing Fry's (2010) argument for radical transformation in design may be difficult for most designers. However, to explore the incorporation of environmental issues, historically marginalised entities, such as nonhuman beings, other life forms, and technology, it is crucial to conduct an analysis of the foundations of design development within the prevailing theoretical frameworks of the previous century.

By adopting the concept of entanglement, designers could shift away from anthropocentric methodologies and develop products, services and systems that are both environmentally and ethically accountable. Designers may enhance the harmony and sustainability of their outcomes by integrating the notion and the consequences of entanglement into their practise. This approach promotes a deeper understanding of our connection with the planet, aligning with a posthumanist and an *Ubuntu*-focused perspective.

Several designers have engaged with posthuman concepts in their projects. Some notable examples are:

1. The "Mycelium Chair" (2013): A project by Ecovative Design (Flaherty, 2013). This chair, designed by Ecovative Design, is made of mycelium, the root structure of mushrooms. This material is grown in a mould, requiring no harmful chemicals or deforestation. The chair demonstrates the concept of biomimicry, drawing inspiration from nature to create sustainable designs. This project aligns with critical posthumanism by recognising the agency and potential of non-human entities in developing design solutions.

2. The "Rooted" Project (2013): A project by Terreform ONE (Jackson, Grant & Davila, 2016). This project explored the potential for urban agriculture to revitalise abandoned spaces in Detroit. Working with local communities, the designers created vertical gardens and hydroponic systems that not only provided fresh food but also fostered social connection and environmental awareness. This collaborative project focused on visualising information, developing systems for interaction and integrating concepts of social inclusion, health and diversity to improve a specific environment. This project exemplifies *Ubuntu's* focus on community and the interconnectedness of all living things.

3. The "Food Forest Project" (Ongoing): A project by Permaculture Institute (thefoodforestproject.org, 2024). The objective of this project is to establish edible landscapes in both urban and rural regions, employing permaculture principles to develop self-sufficient ecosystems. The initiative advocates for the preservation of a wide range of species, ensuring access to sufficient and nutritious food, and actively involving the community, therefore adhering to all three principles (agential realism, critical posthumanism and *Ubuntu*). Through

its emphasis on the collaborative effort to create a more sustainable future and the importance of community and connection this project considers posthumanism and *Ubuntu*. Additionally, it touches on agential realism, which recognises the agency of all parts within an ecosystem.

4. Rhode Island School of Design, Anastasia Raina's "Design in the Posthuman Age" (2020). Raina's graphic design-based project explores N. Katherine Hayles' (2012) concept of technogenesis, which refers to humans' simultaneous development with tools and technology, and how it is profoundly embedded in the field of design. Designers have been actively engaged in discussions around the digitisation of labour and the advancement of technology since the 19th century. Raina's project integrates scientific investigation with design study, thereby gaining the capacity to create novel and enhanced metaphors for understanding and communicating intricate information. By actively engaging with the remarkable advancements occurring in information technology and biotechnology, Raina claims that humans get a deeper understanding of our role in the cosmos, enabling us to navigate the forthcoming posthuman era more effectively (Albanese, 2020).

These case studies exemplify the effectiveness of design in incorporating agential realism, critical posthumanism, and *Ubuntu* ideals. Designers may make a substantial contribution to creating a fairer and more sustainable future by questioning human-centred beliefs, promoting cooperation, and emphasising sustainability.

2.7 Moving past Modernism and Postmodernism

The guiding principles of modernism were idealism and reason, whereas the guiding principles of postmodernism are scepticism and suspicion. During the first decades of the 20th century, avant-garde artists envisioned a world free from conflict, greed, and inequality, and hoped that this future world would emerge after the Great War and the Russian Revolution. The first world war and belief in the development of a utopian society shaped by the Russian revolution, inspired rational approaches to graphic design that adapted to newly established mass markets and sought to mediate design choices.

Postmodernism came to the fore in the 1960s and contested the notion of universal truth and certainty. Unlike modernism that scorned commercial mass culture, postmodern graphic design embraced it and the resulting products of graphic design often employed appropriation, no visible organisation of design elements and experimental typography.

In its broadest sense, postmodernism is characterised by a broad sense of scepticism, subjectivism, or relativism; a general suspicion of reason; and an acute awareness of how

ideology contributes to the assertion and maintenance of power. Furthermore, postmodernism has spawned a wide range of critical theories, such as deconstruction and its offshoots, and has led to an erosion of the distinction between high and low culture (Duignan, 2024). Postmodernism proposes that knowledge is dependent on and shaped by language, discourse, and power relations. O'Shaughnessy and Stadler (2012) provide a thought-provoking analysis of the concept of "knowingness" in the postmodern by examining the various aspects that shape and influence our comprehension and formation of knowledge.

The postmodern world has given rise to the most knowledgeable generation, with easy access to an extensive range of information (O'Shaughnessy & Stadler, 2012). This period is defined by a phenomenon called "knowingness", where humans are inundated with an excessive amount of information, leading them to adopt "non-rational modes of knowledge" and succumb to a condition of "passive uncertainty" (O'Shaughnessy & Stadler, 2012, p. 448). Knowledge exposes the social and media frameworks that exist, frequently causing individuals to develop a sceptical and suspicious mindset upon recognising power hierarchies. O'Shaughnessy and Stadler (2012) contend that while information has the capacity to enhance our understanding of others, it often leads to cynicism and a feeling of helplessness. The sense of helplessness stems from the recognition that corporate entities possess an enormous level of influence that is difficult to oppose, injustices are so immense that they are challenging to respond to, and individuals may eventually become unsure about whom to trust or support (O'Shaughnessy & Stadler, 2012, p. 449). The inherent risk of this postmodern cycle is in its potential to lead to a rejection of tangible existence and the perpetuation of unfairness, stemming from the prevailing atmosphere of ambiguity and manipulation by the media (O'Shaughnessy & Stadler, 2012).

It is evident that postmodernism encourages deconstructing and critiquing power structures that influence knowledge production and dissemination. Among the facets of postmodern design theory is a form of anti-Humanism, which claims no universal principle can be shared by all human beings and that principles must be determined from historical and cultural contexts. Although posthumanism is not an anti-Humanism concept it extends Humanism to embrace human and non-human actors in the development of design outcomes.

Posthumanism can be seen as an extension of a postmodern theoretical framework due to its inclination to question the conventional humanist assumptions rooted in Enlightenment-era ideals that have exerted significant influence on Western intellectual discourse over an extended period. Posthumanism critically examines the notion of human superiority and

distinctiveness from the non-human realm, while also questioning the concept of a static and unchanging human identity.

Postmodernism is distinguished by its repudiation of the overarching narratives and universal truths that were emblematic of modernist ideology. Posthumanism, in a similar vein, challenges the notion of a unified and unchanging human identity, acknowledging instead the manifold ways in which human identity is shaped and influenced by social, cultural, and technical factors. Postmodernism places significant emphasis on the acts of deconstruction and critique, whereas posthumanism similarly underscores the imperative to engage in critical analysis of the processes through which human identity is formed and the dynamics that shape the interaction between humans and the non-human realm.

This section of the literature is of interest as it situates the study within a broader theoretical framework. Postmodernism, as a theoretical framework, presents a critique of the notion of a singular and objective reality, opting instead to underscore the significance of diverse views and subjectivities. Posthumanism acknowledges the significance of varied viewpoints and underscores the necessity of comprehending the autonomy and multiplicity of phenomena that are not human. This study considers the viewpoints of graphic designers in relation to both human and non-human phenomena and highlights the reciprocal influence between these entities and human identity and society.

2.8 Implications of Posthumanism for graphic design practice

Graphic design practice is a continuously expanding field and recently the roles and responsibilities of graphic designers have changed due to technological advancements and rapid globalisation. Therefore, the skills-set required for graphic design practitioners is constantly changing and is impacted on by developments in technology or changing theoretical positions.

Historically, societies characterised by consumerism have exhibited a persistent need for a continuous influx of goods and services to generate economic gains. Presently, however, there are indications that these prevailing views may be undergoing a transformation towards a post-consumerist framework (di Ruvo, 2021). The increasing availability of information and educational opportunities has been significant in enhancing individuals' understanding of the adverse consequences associated with excessive consumerism. The increasing accessibility of information has led to heightened awareness among individuals, resulting in a gradual influence on consumer buying patterns and therefore affecting the demands faced by the (graphic) design sector (Irani & Frankel, 2020; Oluyemi, 2021). In the context of the information

era, graphic designers are faced with the task of acknowledging the complexities of extensive and interconnected design issues. These issues necessitate the use of multidisciplinary and collaborative approaches to successfully define and resolve problems. Thus, in contemporary times, graphic designers operate within a multitude of interrelated and varied settings. This evolution of the field has expanded its scope beyond the creation of individual objects, to encompass the design of systems, networks, and communities. These encompass a wide range of services, policies, experiences, interactions, and engagements[18] (Normoyle, 2019).

Graphic design instructors understand that delivering productive design graduates requires a focus on technical skills, educating students for real-world situations, and cultivating their ability to think critically and develop sophisticated outcomes (Ganci & Lahey, 2017). However, once employed, professional designers rank communication skills and adaptability as critical skills for success in the contemporary design industry (AIGA, 2021).

Design organisations such as AIGA based in the United States conduct their own research on the state of the design industry. The AIGA POV (Point of View) Research Report utilises qualitative data to gain insights into the prevailing issues affecting the design community and to develop resources that enhance understanding of their needs. As per the most recent 2021 AIGA[19] POV Research Report (2021), designers anticipate a few future changes in their profession. 42% of respondents anticipate that the future of design will be characterised by an increasing emphasis on digital, mobile, and interactive platforms. Another 41% believe that design will become more multifaceted, requiring a broader range of skills. 25% of respondents expect design to become more data-driven, while an equal percentage believe it will become more focused on community, society, and human needs. 18% foresee a trend towards more experiential digital applications in design. Additionally, 17% predict that some design tasks will

[18] The field of graphic design has witnessed significant development, leading to the evolution of terms such as "graphic design" and "graphic designer" to encompass a broader scope. These terms now encompass various related roles, including visual communication design, user-experience design, experience design, interactive design, service design, and systems design, among others. It is worth noting that each of these terms may imply slight variations based on specialised areas within the discipline (Normoyle, 2019).

[19] AIGA The American Institute of Graphic Arts (AIGA) is a design-focused professional organisation. The members of this group engage in many aspects of communication design, encompassing graphic design, typography, interaction design, user experience, branding, and identity. The organization's objective is to establish itself as the exemplar for professional ethics and practices within the design profession. In 2005, AIGA modified its name to "AIGA, the professional association for design," eliminating the "American Institute of Graphic Arts" to include all design fields (online).

be automated and performed by machines. Finally, 17% believe that design will play an integral role in business strategy.

The AIGA POV report highlights a disparity between academic programmes and industry expectations in terms of required competencies. Graphic design students may have exceptional skills in conventional design tools and processes, although they may lack expertise in areas such as project management, client relations, and commercial acumen. Further the report emphasises a discrepancy in understanding the evolving terrain of the design sector. Students may possess the necessary skills for typical agency or freelance employment, but they may lack the necessary preparation for the emergence of in-house design teams, remote work, or specialised design niches (AIGA, 2021).

Researchers have in many ways fallen short of answering fundamental questions concerning how graphic designers enter organisations and what employers look for in candidates with design skills (Dziobczenski, Person & Meriläinen, 2018). The AIGA POV Research Report (2021) highlights the growing need for certain skillsets, including user experience (UX) design, data visualisation, and design thinking. These talents have the potential to unlock opportunities for alternative career routes beyond conventional graphic design positions.

The AIGA POV Research Report (2021) also examines the emergence of alternative career trajectories for designers, including entrepreneurship, social impact design, and teaching. Gaining a comprehensive understanding of various alternatives might assist designers in expanding their perspectives and discovering rewarding professional paths.

In 2018 a study based in the European Union defined the skills for graphic designers as (1) process management skills, (2) conceptual design skills, (3) technical design skills and (4) digital and software skills (Dziobczenski, Person & Meriläinen, 2018). These skills were identified based on the ones that appear most frequently in graphic design job advertisements. The ability to work as part of a multidisciplinary team and proficiency in design software are still seen as being particularly valuable and have been a feature of graphic design job advertisements for some time. The acquisition of these skills is further reinforced by the AIGA Designer 2025 report (Davis et al., 2017), which emphasises the importance of taking responsibility for the consequences of design and the need to address the immediate, intermediate, and long-term effects that the creation of a particular body of work will have on various social groups, economic and manufacturing sectors, political agendas, and other relevant contexts.

Consequently, graphic design dictates trends and issues that affect society, such as what people buy and value and influences consumers' lifestyles, their decisions about products and how they use them (Reeves et al., 2012). As a result, graphic designers are likely to play a significant role in determining people's aspirations, desires, choice of products, and spending patterns (Bonsu, 2019). Designers thus hold a position as intermediaries between clients and their target audiences. However, it is important to note that designers are also inherently disadvantaged in certain aspects. They cannot be held accountable for marketing objectives, merchandise selection, or the decision-making process regarding the inclusion or exclusion of information in a design outcome (Bonsu, 2019; Glaser 2015).

Most of the extant scholarly work focuses on analysing the development of graphic design practises and competences in relation to market demands (Udris-Borodavko et al., 2021). Graphic designers have experienced a significant increase in the demand for interaction design in recent years due to the rapid advancements in technology. This surge can be attributed to the widespread adoption of mobile devices for visual communication and the rising popularity of various online platforms such as social media, e-commerce, and online banking applications.

Automation powered by artificial intelligence (AI) and machine learning (ML) possesses the capability to do computations, predictions, designs, and project executions with unparalleled precision and speed, surpassing the capabilities of human counterparts. These technologies have the potential to blur the boundaries between the physical, digital, and biological realms (Ferrari, 2017). Moreover, they have the capacity to disrupt conventional manual industries that have already been significantly impacted by mechanical automation. There is a growing apprehension over the ramifications for nearly all (semi)professional sectors including administration, design, data processing, and analysis. Graphic design is identified as one of the occupations that is experiencing changes in qualifications, work, and employment dynamics because of AI and ML (Pennington & Stanford, 2019).

In 2019 the website *eyeondesign.com* reported that over a period of two years a start-up company based in Toronto provided nearly 5.5 million customers with custom AI-generated logos. Users' mood boards are used to create logos in under 30 seconds for half the cost of what a human designer would charge (Andersen 2019). Despite the presence of multiple interconnections between humans and non-human entities, the acknowledgement of the rights and agency of the latter remains limited (Böhm, Carrington, Cornelius et al., 2022). The concept of agency refers to the idea that an entity possesses cognitive abilities, the capacity to formulate plans, and the capability to engage in actions (Grey & Wegner, 2012).

Contemporary artificial intelligence (AI) technologies, characterised by their ability to acquire knowledge and make decisions autonomously rather than relying only on pre-programmed instructions, exist in a unique position that lies between human agency and non-living technology. Scholars such as Kim and Hinds (2006) and Banks (2019) have extensively explored the extent to which these AI systems are seen as possessing agency.

Computerisation is already automating tasks such as layout and production. The future of graphic design may include robot partners or non-human life forms. With the advancement of new technologies, the design industry will need to develop and evolve. There exists a pressing necessity to understand and engage in the ethical considerations and difficulties associated with the integration of artificial intelligence (AI) into human labour. Furthermore, this necessitates a transformation in our design paradigms. Matt Jones, designer at Google AI, is advocating for the adoption of a human-centric approach in designing human engagement with artificial intelligence. This approach goes beyond the existing design paradigms in the industry, which are mostly based on techniques of human-computer interaction and user experience toolkits (Lalioti, 2019).

The progress of digitising graphic design raises inquiries on the fundamental nature of design practise. According to Sauthoff (2004), the utilisation of digital technology in a democratic manner, the involvement of diverse teams, and the consideration of authorship raise inquiries regarding the individuals who can rightfully identify themselves as professional graphic designers.

However, there are some aspects of graphic design that cannot be replicated by machine. To design for society and interact with problems within multifaceted sociotechnical systems, it is important to consider the beliefs that have underpinned earlier methods, models, and frameworks, and aim to incorporate new social theories. Designing objects, processes, and environments reveals an understanding of, and represents a creative reaction to, the intricate fundamental and functional problems, interconnections, and interdependencies of our world (Hroch, 2014). Certain designers have adopted the concept of digitisation, artificial intelligence (AI), and the posthuman in their professional practice:

> *Human design with all of its imperfections and flaws is an important distinguishing component in the age of technology, and it needs to be made visible in the design work that we produce. Faced with machines that outperform humans in a variety of tasks, we are forced to re-examine the roles and design methods for the posthuman epoch and develop radically human creative approaches to pave the way for formal experimentation in the age of the algorithm* (Raina in Andersen, 2019).

This research examines the transformations in human behaviour resulting from the increasingly interconnected global society, and their impact on the field of graphic design. It explores the evolving nature of graphic design practise and offers insights on designing effectively for audiences with varied cultural backgrounds. The posthuman context encompasses not just sentient and non-sentient beings, but also includes the realm of flora, fungus, and microorganisms (Braidotti, 2013a). In her work, Braidotti (2013a, p. 46) offers a critical analysis of the process by which "all that lives" gets commodified within the framework of the "political economy of advanced capitalism". The process of commodification encompasses several elements such as data, aspirations, and desires, which are essential aspects of graphic design practise. This study focuses on the impact of these emerging factors on the professional activities of graphic designers in South Africa.

2.9 Graphic design in South Africa

According to a report on the transformation of the graphic design sector in South Africa (2004)[20] in the past, graphic designers in South Africa were mostly employed in the studios of advertising firms, printers, and publishers. More recently, the rapid evolution of technology and the increasing knowledge of the public have changed the way people communicate in all aspects of society. This has also led to the emergence of new visual information needs that are different from the traditional advertising industry. However, many graphic design firms in South Africa are small-scale businesses. Typically, an independent graphic design agency is comprised of a sole designer/owner, or sometimes a duo. A significant number of these enterprises operate from a private home and a considerable portion of them do not employ additional designers. Only a minority consists of more than 8 - 10 individuals. There are possibly less than ten information design businesses in the country that have a workforce of 50 or more individuals (GCIS, 2024).

The development of graphic design in South Africa as a professional discipline has been significantly influenced by its colonial past. The emergence of contemporary advertising and graphic design had a crucial role in the advancement of printed media throughout the 19th century. In its capacity as the colonial power, Britain engaged in the exportation of commodities intended for sale within the military and settler markets. It was customary during

[20] The report, entitled: Presentations by Advertising and Marketing industry: Transformation and the Graphic Design Sector was made to the South African government by think (Graphic Design Council of South Africa), an organisation that changed its name to The Brand Design Council in 2009 and later The Brand Council in 2012. It is no longer operational.

this period for advertisements and design work to be commissioned in Britain and subsequently published (Sutherland, 2004). During the first half of the century, the position of local South African graphic designers, referred to as "commercial artists" at the time, was not highly esteemed, considering the significance of London-based studios.

One could assume that the pre-eminence of Britain in terms of political and cultural impact persisted until the aftermath of the Second World War, at which point the United States emerged as a formidable economic and cultural power in South Africa. Under the colonial framework, artists and designers were compelled to seek inspiration from outside sources and actively sought validation and acknowledgement through adherence to European or American standards. The creative expression and innovative design in South Africa were subject to limitations. As a result, indigenous art and culture were devalued or disregarded within the framework of colonialism.

The Nationalist Party, which came into power in 1948, promptly implemented the policy of apartheid. This programme employed culture as a means of division and selectively discouraged the expression of innovation and originality. During the era of apartheid, South Africa implemented extensive legislation that enforced racial discrimination, resulting in the suppression of the livelihoods, well-being, cultures, and aspirations of those who were categorised as "non-white" at the time (Joubert, 2022). Prior to the early 1990s, the legislation in place effectively marginalised the majority of black South Africans from participating in the design sector. This exclusionary practise severely restricted educational opportunities, resulting in only a small number of design institutions accepting African students (Kembo, 2018). As a result, art education has always been perceived as a "luxury" and has not been widely accessible to the general population. On a more expansive level, the regulation of all forms of communication became exceedingly stringent, to the extent that the government declined to introduce television until the year 1976. During the 1950s and 1960s, graphic designers predominantly relied on print media as their primary medium. The prevailing market conditions and the specific requirements of the print industry necessitated the cultivation of a larger pool of locally trained artists. Consequently, this prompted the establishment of "commercial art" courses within Art and Crafts schools in the 1950s. Moreover, the designation "graphic design" was exclusively employed in reference to the National Diploma in Graphic Design, which was introduced in 1966 as a means of providing advanced technical education in colleges (Sauthoff, 2004).

In the 1980s, the field of design in South Africa was mostly influenced by the preferences and priorities of the economically privileged individuals, predominantly of white ethnicity. During

the era of apartheid, the full potential of local graphic designers remained unrealised due to the limited earning opportunities available to the majority population. As a result, South African advertising exclusively employed the two official languages, notably Afrikaans and English. In this context, it was evident that a cultural hegemony existed, as the Afrikaans rendition of the advertisement frequently relied on a literal translation from English, resulting in a diminished impact due to its lack of colloquial expression. During this period, the influence of the so-called "black market" gradually diminished, until the increasing significance of black consumer power became impossible to overlook by the late 1970s. The pre-1990 market in South Africa was perceived by advertising as predominantly catering to a white clientele (Sauthoff, 2004).

The period of democratisation in South Africa resulted in the emergence of various social, economic, and creative possibilities. However, it is crucial to acknowledge the significance of recognising the influence of colonial powers in altering and eradicating the identities, cultures, and knowledge of colonised individuals, as well as their inherent human dignity, to fully grasp the process of reclaiming displaced cultures with their unique histories (Bhabha, 1999; Smith, 2012).

To understand the role of graphic design as a means of visual communication, designers are required to recognise and appreciate the cultural values that are inherent in their creative output. Designers must recognise the influence of culture on perception; thus, it is imperative for graphic designers to demonstrate cultural sensitivity in their work, recognising and valuing the multitude of viewpoints through which people of different cultural backgrounds interpret the world. Considering the significant influence that art and design have on the development and manifestation of visual identities in South Africa after 1994, it is imperative for graphic designers to critically evaluate their design methodology to produce communication that is both ethically sound and visually suitable for a society characterised by cultural diversity in the postcolonial era (Faber, 2009). According to Dunworth (2008, p. 98), instances of “cultural misunderstandings and communication failures were regularly identified as contributing factors to problems, whereas positive encounters were generally attributed to effective communication and shared cultural values”.

Following the 1994 elections, designers began to actively engage in urban spaces to explore a vernacular language that effectively conveyed a robust feeling of a local cultural identity. The *i-jusi* publication, created by Durban designer Garth Walker, operates inside the framework distinctiveness against the prevailing trend of global uniformity. *I-jusi* is a unique journal created by Walker's agency, Orange Juice Design (OJD), with the intention of fostering

discourse about the essence of national, regional, and local identity within the realm of graphic design in South Africa (Sauthoff, 2004).

Graphic designers as individuals in society identify with individual characteristics like race, ethnicity, gender, age, religious affiliation, sexual orientation, and socioeconomic status. According to Blauvelt (1994), the graphic designer finds themselves in a complex position where they are torn between their role in the creation of cultural products and their existence within the societal framework responsible for their distribution. Graphic designers coexist with their own creations as well as the creations of fellow designers. Designers are required to possess expertise in both cultural and non-cultural domains. The predicament of simultaneously existing within and being influenced by culture also manifests itself on an individual level, namely in terms of subjective experience (Joubert, 2022)

In the context of a multicultural society such as South Africa, it is imperative that the determination of appropriate use of relevant information be entrusted to the custodians of indigenous knowledge in all situations. According to a recent report published by the South African cultural observatory affiliated to Nelson Mandela University, the creative workforce in South Africa is undergoing ongoing diversification, with individuals of Black African, Coloured, and Indian/Asian descent accounting for a significant proportion. Specifically, 86.7% of those employed in cultural occupations in South Africa are of Black ethnicity, which represents an increase from 83.6% in 2017. The demographic composition of individuals in younger age groups is more inclusive in cultural vocations compared to older individuals. Men dominate cultural vocations, accounting for 57.3% of the workforce, while women make up for 42.7%. This pattern closely resembles the gender distribution observed in non-cultural professions (South African Cultural Observatory, 2024).

To ensure ethical engagement with local and indigenous knowledge in the portrayal of indigenous culture through graphic design outcomes, designers should demonstrate sensitivity and engage in extensive consultations regarding permissions and intellectual property rights. Graphic designers are required to collaborate with various stakeholders to identify design solutions that are appealing to a wide range of recipients. These recipients, who possess a significant emotional attachment to the presented representation, may have varying perspectives and preferences. The potential of successful collaboration through processes such as design thinking or human-centred design (HCD), particularly in the context of Africa, resides in its capacity for empathy, a characteristic it shares with the African idea of *Ubuntu*.

2.10 The Role of *Ubuntu* in Shaping Inclusive Graphic Design in South Africa

The concept of *Ubuntu* offers a significant lens through which collaboration and collaborative, participatory processes can be examined in a complementary manner. *Ubuntu,* by its intrinsic qualities, strives to foster consensus (M'Rithaa, 2022). Van der Merwe (2020, p. 53) describes *Ubuntu* as:

> *… not an expression of anthropocentrism nor a structure of biological hierarchy; in the web of life where all is connected to all, such distinctions are simply not helpful … by suggesting that humans participate within a web of life, ubuntu (sic) is also not attempting to erase difference or unique identities.*

According to Praeg and Magadla (2014), the concept of precolonial *Ubuntu* primarily manifested as a praxis, signifying a way of life or established set of practises, rather than a theoretical abstraction. The emergence of colonialism prompted the adoption of *Ubuntu* as a guiding and cohesive ideology, enabling the colonised population to comprehend and define their African identity in contrast to the European lifestyle.

In the context of South African design, the interrelationships among graphic design practise, posthumanism, and *Ubuntu* could potentially underscore the significance of inclusion, sustainability, and community participation. Following these paradigms, designers can develop designs that are more sensitive, socially conscious, and reflective of the different experiences and viewpoints within South African society by considering the relationships between humans, non-humans, and cultures.

Within this framework, *Ubuntu* transcends its historical origins and assumes the role of a dynamic philosophy capable of influencing and moulding the design process. By emphasising empathy, cooperation, and shared responsibility, *Ubuntu* serves as a guiding principle that informs and shapes the overall approach. By adopting a posthumanist perspective in the field of graphic design, designers in South Africa could gain inspiration from the philosophy of *Ubuntu*, which places significant importance on interconnection and community. By integrating these ideas into their design methodologies, designers may produce designs that possess greater depth, significance, and influence. The interconnection between *Ubuntu*, posthumanism, and graphic design in the South African context lies in their shared focus on inclusion, sustainability, and community participation.

Cultural imperialism[21] refers to the phenomenon in which the cultural and media products of one community infiltrate and exert dominance over the cultural and media products of another community. This includes various aspects such as fashion, music, films, vocabulary, humour, and social practices (O'Shaughnessy & Stadler, 2012). Exposure to and pressure to adopt global design trends, often originating from Western economies, can lead to homogenisation of visual landscapes. This can suppress distinct South African design styles and expressions, diminishing cultural identity and diversity.

Within the existing framework of South African graphic design practice, the prevailing paradigm is characterised by the dominance of the Western perspective, which places emphasis on notions of competition, consumption, and a society heavily influenced by media. Additionally, the convergence between South African design and Western paradigms is extremely evident and significantly shapes contemporary design practise. Designers catering to international audiences or mimicking global trends may create work that lacks relevance to local communities and contexts, potentially weakening its effectiveness and impact. Additionally, reliance on foreign design resources, software, and aesthetics can create economic dependence and limit opportunities for local development and growth within the South African design industry.

The establishment of a distinct design identity in South Africa appears to align with a Western paradigm characterised by Western ideologies (Sauthoff, 2004). There has been a paucity of scholarly discourse around the evolution of a distinct graphic design identity in South Africa. The matter of cultural appropriation has not been thoroughly addressed, and the establishment of distinct identities, such as *Walker's i-jusi* magazine, has predominantly been perceived as a practical decision made by the designer, rather than a deliberate effort towards fostering a distinctive South African visual expression (Sauthoff 2004; Joubert 2022).

In the noughties, designer and academic Saki Mafundikwa (2011), expressed support for the use of an African design aesthetic and emphasised the global nature of design, advocating for

[21] Cultural imperialism mirrors historical imperialism by establishing a standard for local creations and exerting dominance over native cultures through Western ideals (O'Shaughnessy & Stadler, 2012). Stereotypes, the act of categorising and generalising people, the process of creating a "us vs. them" mentality, and the division of concepts into opposing pairs were created during the time of imperialism. However, these lingering ideas and ways of thinking continue to be present in our shared language due to the constant repeating of these ideas in the media. Throughout history, Western activists, missionaries, and benefactors have often approached indigenous communities with an imperialistic perspective that undermines the significance of native culture and diversity.

its widespread dissemination and engagement among many ethnic groups, rather than limiting it to Western perspectives. He advocated for the use of African-inspired typography as a means of graphically representing indigenous languages and conveying ideas or philosophies. The visual language of South Africa is slowly evolving to encompass a diverse range of cultural elements, such as popular culture, everyday life, street signs, vernacular language, and traditional crafts (Lange & Van Eeden, 2016). These elements are used to effectively communicate the country's evolving identity.

The African approach to the process of design, characterised by its emphasis on spontaneity and irregularity, contrasts with Western notions of balance and information hierarchy (Lange & Van Eeden, 2016). To further advance the establishment of a distinct visual identity for South Africa, it is imperative to sustain the ongoing efforts in this area. According to Cloete and Auriacombe (2019), there is a need to restore and refocus indigenous African value systems and practises to better align them with African contexts, cultures, and societies. This is seen as a necessary step to replace the Eurocentric colonial value systems and practises that have historically and currently dominated.

The resurgence of the *Ubuntu* concept in public discourse in the 1990s, spearheaded by former President Nelson Mandela, was perceived as being closely intertwined with the formation of a fresh national identity. Since the early 1990s, academics and business leaders in South Africa have actively advocated for the adoption of *Ubuntu* as a domestically developed management philosophy. Their argument is that embracing *Ubuntu* not only enhances corporate governance and social responsibility, but also improves financial performance and ensures the stability of the market economy (McDonald, 2010). The explicit manifestation of the *Ubuntu* concept can be observed in various television advertising and marketing campaigns within the realm of South African graphic design. The emergence of the term "*Ubuntu* capitalism" has generated optimism that this widely recognised expression will resonate with a significant portion of economically disadvantaged individuals in South Africa (McDonald, 2010).

Of interest to this study is the professional practise of graphic designers in South Africa that is informed by historical developments in the profession. This study examines whether the perspectives of South African graphic designers are underpinned by African ideals, particularly those rooted in *Ubuntu*, and whether this is evident in their practice.

2.11 Humanity-centred design, design anthropology, *Ubuntu* and Posthumanism

2.11.1 Humanity-centred design

The term human-centred design emphasises the individual user, whereas "humanity-centred" (design) broadens this perspective to encompass the societal level, considering the global population that confronts numerous intricate and interconnected challenges primarily stemming from complex systems that are predominantly influenced by human actions. Thus, humanity-centred design is a design approach that prioritises the needs of people, considering them not merely as individuals but as members of societies grappling with intricate and deeply entrenched challenges. Following this approach, designers can collaboratively generate appropriate solutions by engaging with diverse people, identifying pertinent issues, doing comprehensive systems assessments, and engaging in the co-design of simple and uncomplicated interventions (Norman, 2022).

Both human-centred and humanity-centred design approaches have a common emphasis on understanding and effectively responding to the needs, preferences, and behaviours of individuals and communities. Both strategies share a joint focus on the significance of empathy and the desire to gain insight into the viewpoints, encounters, and sentiments of the individuals for whom the design is directed. The iterative design process plays a crucial role in both approaches, as designers consistently collect input, conduct testing, and make refinements to their ideas to ensure they align with the intended objectives. Both human-centred and humanity-centred design approaches incorporate ethical considerations and aim to develop solutions that are responsible and exhibit respect for both individuals and society at large. However, the two approaches differ in terms of scope, time limitations, project scale, stakeholders and values (IDF, 2024).

Humanity-centred design encompasses a more comprehensive outlook compared to human-centred design, since it considers the enduring and extensive consequences of design choices on the entirety of the human population. The consideration encompasses the welfare of future generations and the global ecosystem. This approach adopts a broader perspective than HCD, considering the long-term implications of design decisions on both society and the environment. The primary objective is to develop strategies that foster sustainability, equity, and well-being for forthcoming generations. Moreover, humanity-centred design encompasses a broader scope compared to HCD, with the objective of tackling intricate global challenges such as climate change, inequality, and systemic problems that have wide-ranging implications for the welfare of the entire human population. To address complex global issues

this approach involves a broad range of stakeholders including policymakers and environmental leaders. Finally, whereas HCD considers the development of solutions that address immediate needs, humanity-focused design takes a future-oriented perspective, aiming to create solutions that benefit all of humanity and the planet (IDF, 2024).

Figure 2.7 describes the position of humanity-centred design in the context of the paradigm shifts that have taken place in design practice according to Norman (2022).

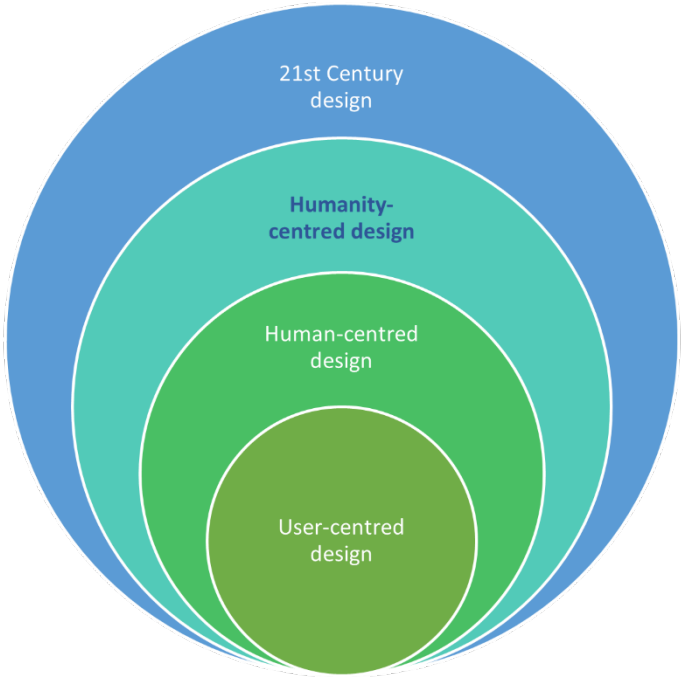


Figure 2.7. The position of humanity-centred design (Adapted from Norman, 2022)

The notion of twenty-first century design, as proposed by Norman (2022), signifies a paradigm shift in the actions, perspectives, and methodologies employed by designers. Rather than solely focusing on the creation of exceptional products and experiences, designers adopt a reflective approach that regards design as a cognitive process. The present methodology aligns closely with Braidotti's (2019) conceptualisation of critical posthumanism, since it acknowledges the inclusion of people within the broader intricate framework of the planet, encompassing both the natural environment and technological elements.

According to Braidotti (2022), people learn about themselves by observing those around them, especially those who are different. Designers are inevitably influenced by cultural biases and therefore, it is imperative for them to engage in thorough study on the culture within which they are designing (McMullen, 2016). Frequently, market research pertaining to the visual portrayal of information is commonly approached in a shallow manner (Kirstein 2014; Joubert 2022). A

lack of education among graphic designers in recognising, incorporating, and comprehending design processes that cater to the preferences and principles of diverse cultural audiences or user groups may be a contributing factor to this issue (Joubert 2022).

Human-centred design places emphasis on developing solutions that are user-friendly and efficient, customised to meet the needs of people. In contrast, humanity-centred design expands upon this approach by considering the wider consequences of design on a global level, with a particular emphasis on ethical, social, and environmental considerations.

Of interest to this study is the need for graphic design practitioners to be familiar with concepts such as humanity-centred design to produce designs that possess not just aesthetic appeal but also demonstrate accountability, inclusivity, and pertinence to the multifaceted and ever-changing demands of society. Designers are empowered to make well-informed judgements that consider the wider consequences of their work on individuals and communities.

2.11.2 Design anthropology (DA)

Another way for designers to approach cultural diversity is through the method of design anthropology (DA). Design anthropology is a field that has emerged from the intellectual traditions of the social sciences. Its origins can be traced back to the interdisciplinary domain of material culture, which fostered collaboration between various disciplines such as history, sociology, psychology, archaeology, and anthropology. This interdisciplinary approach aimed to comprehensively comprehend the processes of object creation and consumption, as well as the multifaceted meanings attributed to these objects (Clarke, 2017). Additionally, the incorporation of ethnographically informed design approaches has significantly influenced the development of methods and methodologies in the field of user-centred and participatory design (Kjaersgaard, 2011). The field of design anthropology advocates for a deliberate and unhurried approach to design, placing emphasis on the centrality of individuals and cultural factors across the entirety of the design process. Further, design anthropology enables the examination of how issues related to control and power disparities are addressed, as well as the establishment and sustenance of trust (Manzini, 2015).

Design anthropology should not be regarded as synonymous with design thinking. Design thinking and design anthropology share a common focus on human-centred practises; however, they are distinguishable from each other. Furthermore, it does not encompass research conducted for the purpose of creating designed artefacts, nor does it encompass research conducted as an anthropological study of design. Design anthropology should be conceptualised as a philosophical and practical approach aimed at fostering genuine

collaboration among stakeholders, with the objective of designing for the betterment of society. This entails acknowledging historical contexts while actively striving to enact beneficial transformations for the future (Gunn & Donovan, 2012).

Design anthropology promotes the need for designers to acquire an in-depth understanding of the cultural context within which they operate. Through active participation in the local culture and society, designers could develop solutions that are in accordance with the principles of *Ubuntu*, thereby promoting a collective sense of unity and interconnectedness among individuals. Additionally, design anthropology emphasises the principles of co-creation and collaboration with the target audience of a design. By including community members in the design process, designers could develop solutions that align with their beliefs and requirements, so enhancing the notion of *Ubuntu* within the design process. The methods highlighted in design anthropology place emphasis on ensuring that designs do not contribute to the perpetuation of inequities and are accessible to all members of the community.

Like *Ubuntu's* emphasis on interconnection that is also extended to the realm of the environment, design anthropology offers valuable insights for designers to include considerations of long-term sustainability into their design processes. By embracing the principles of *Ubuntu*, which highlights respect for the Earth and future generations, designers can align their work with a more holistic and responsible approach.

Further, design anthropology promotes the critical examination of designers' inherent biases and positions of privilege. Recognising one's position within the design process aligns with the principles of *Ubuntu*, which stresses reciprocity and the acknowledgment of the inherent humanity in others. The integration of *Ubuntu* into design practise, as viewed through the perspective of design anthropology, necessitates a reflective understanding and appreciation of the interdependence of persons and communities. Through the utilisation of a design anthropology approach, designers could develop solutions that not only fulfil practical requirements but also foster a collective spirit, a shared sense of humanity, and considerations of the concept of *Ubuntu*.

2.11.3 *Ubuntu* and Posthumanism

To engage in design practises within a multicultural context such as South Africa, designers must acknowledge and respect the legitimacy of diverse cultural perspectives and visual expressions. *Ubuntu* places a strong emphasis on the interdependence and interconnection of individuals within a community. The concept acknowledges the inherent connectivity of human life and underscores the significance of empathy, compassion, and communal ideals.

Both *Ubuntu* and posthumanism challenge the notion of power as centralised and hierarchical. In Braidotti's (2019) framework, power is not held by a single entity or institution but is dispersed throughout culture and society. Braidotti further claims that power is neither centralised nor created. Instead, it is polycentric, vibrant, and distributed across culture and society, functioning through culture — frameworks for theory, ways of representation, and "social modes of identification" (Braidotti, 2022, p.12). Similarly, *Ubuntu* rejects hierarchical power structures and instead promotes a more egalitarian understanding of power, where everyone within a community has a role and contributes to the collective well-being.

Braidotti (2011) contends that any process of constructive transformation necessitates a process of disidentification. Transformation necessitates a significant shift in the stance of the subject who possesses knowledge, instead of depending on preconceived rational viewpoints that prioritise human control. This disidentification neither aims to establish a single opposing identity, as proposed by modernists, or a variety of equally legitimate opposing identities, as argued by postmodernists (Dolphijn & Van der Tuin, 2012). Instead, its objective is to both recognise and oppose the current systems, so encouraging more powerful transformations (Dolphijn & Van der Tuin, 2012).

Transformation can only take place when we consciously acknowledge the connectivity and interdependence of all entities, including humans, animals, and the environment (Braidotti, 2013b). Braidotti (2013b) argues that by recognising our posthuman situation, we might facilitate significant and effective transformation. By adopting this viewpoint, we may establish a more comprehensive and enduring future for design in South Africa.

Ubuntu and critical posthumanism emphasise the role of culture in shaping power dynamics. Braidotti (2019) suggests that power operates through culture, including frameworks for theory, ways of representation, and social modes of identification. Similarly, *Ubuntu* recognises the significance of culture in shaping relationships, ethics, and social norms (Metz, 2019). *Ubuntu* underlines the idea that power is embedded in social practices, rituals, and shared values, all of which are influenced by culture. Furthermore, both concepts stress the importance of relationality and interconnection.

Braidotti's (2006) understanding of power as polycentric highlights the multiple connections and interactions that contribute to power dynamics. Similarly, *Ubuntu* focuses the interconnectedness of individuals within a community, recognising that one's well-being is interconnected with the well-being of others. Engaging in discussions, talks, and critique is a prevalent practise within the design process, wherein many stakeholders actively participate. During these talks, a shared vocabulary and language are formed in order to enhance

communication among all those involved. The dialogic process plays a crucial role in establishing and enhancing the working relationship among individuals. It allows for the questioning of assumptions, the illumination of expectations and values, the sharing and critique of ideas, the resolution of issues, and the clarification and negotiation of objectives (Akama, 2007). Both approaches acknowledge that power and agency originate through relational networks and interactions. Finally, both concepts have a transformative dimension. Braidotti's concept of power as vibrant and dynamic suggests that power is constantly evolving, and capable of change. Similarly, *Ubuntu* emphasises the potential for transformation through communal practices, empathy, and recognising the humanity in others. Both concepts offer a framework for reimagining power relations and envisioning more inclusive and equitable societies.

Designers frequently have specialised knowledge and experience in their profession, creating a power imbalance between them and their clients. Because of their skill, the designer may have power and influence over design decisions, thus marginalising the client's involvement and agency (Dziobczenski, Person & Meriläinen, 2018). This power dynamic may be minimised by encouraging open communication, mutual respect, and acknowledging the client's subject expertise and ideas. Cultural and societal conventions have a strong effect on design practises, and designers frequently play a part in developing and preserving these standards. Power hierarchies and prevailing ideologies can be reflected and reinforced through design decisions, thereby excluding or marginalising specific groups or viewpoints. Designers must be conscious of their cultural prejudices and actively engage in inclusive design practises that consider varied viewpoints and challenge power disparities.

In the South African context, where there is a pressing need for transformation and justice, one may argue that Spinozist monism and relational ontology could serve as a suitable philosophical basis for the examination of design and its pedagogy. The adoption of a monistic political ontology, influenced by Spinoza, places emphasis on processes, vital politics, and non-deterministic evolutionary theories (Braidotti 2013a). In this context, the attention is directed towards intricate dynamics of interpersonal relationships, involving an ethical perspective influenced by posthumanism that examines the interconnectedness between physical and symbolic elements, as well as tangible and abstract influences (Costandius & Botes, 2018).

The notion of a "knowing" designer assumes that humans possess the capacity to exercise absolute authority over world. Monism proposes that all forms of matter, regardless of their nature or characteristics, coexist on an equitable basis and rely on each other for existence.

To adopt a more interconnected perspective, designers should actively challenge and transcend disciplinary barriers through ongoing processes of disidentification (Braidotti, 2011, 2013a). Monism promotes the exploration of ideas that go beyond prevailing Western narratives and acknowledges the importance of multiple viewpoints. This has the potential to foster a deeper recognition for the design and intellectual traditions of indigenous South Africa. It involves incorporating these traditions into design solutions in a manner that is both respectful and genuine. The focus on oneness in monism aligns with South Africa's notion of *Ubuntu*, which venerates the shared humanity and interdependence of everyone. This has the potential to motivate designers to produce artwork that fosters social integration, cooperation, and comprehension among different ethnic and cultural groups.

Building a strong and thriving local design industry can empower designers and communities economically and culturally. However, in the present era, brands have emerged as the foremost domain for design and advertising. Global brands are a significant and highly desirable phenomenon, possessing substantial influence as tastemakers and determinants of consumer preferences. The most influential components, the visual representations that captivate the global audience, are the embodiments of ingenuity in the field of marketing, showcasing the allure and potency of design in both a captivating and detrimental way. The influence of global companies on the creative decisions of designers can be damaging, as it has the capacity to erode cultural diversity (Blackwell, 2001).

Fundamentally, cultural differentiation refers to the uniqueness of individuals in relation to their origins. At their most detrimental, multinational corporations strive to eradicate individual historical narratives. The utilisation of global economies of scale and deliberate adoption of aggressive and subsidised pricing techniques are employed with the aim of eliminating local competitors, perhaps endangering the preservation of our sentimental attachments and deep relationships. The process of replacing certain elements involves exchanging them with representations that are considered fundamental and widely acknowledged, typically distinguished by their simplicity and absence of complexity.

South African designers have the capacity to integrate the intricate and traumatic historical narrative of our nation into their design pursuits. In the interim, it is imperative to use discretion when dealing with corporations that exhibit a deficiency in their readiness to adjust and embrace cultural diversity. Many multinational corporations demonstrate attributes that are consistent with imperialism and a deficiency in upholding democratic norms (Blackwell, 2001).

It is this dichotomy between design and designers' service to people whilst being part of what Marenko and Brassett (2015) call the "Capitalist Machine" that is of interest to this thesis. The

field of graphic design practise is significantly impacted by posthumanism, as it presents a challenge to conventional beliefs regarding the influence of design on human identity and society. The field of design holds a strategic position in its ability to analyse, represent, and interrogate the dynamics between human and non-human actors, evoking emotional responses, presenting narratives, and stimulating critical thinking through action.

The notion of the *action* of designers or designer's agency underscores the considerable potential for both favourable outcomes and adverse repercussions in all design pursuits, particularly in the absence of meticulous deliberation. This research benefits from the incorporation of a posthumanist viewpoint, which offers a philosophical and conceptual structure for understanding and analysing the complex dynamics of design practises across different professional contexts. Designers, practitioners and theorists are experiencing a growing inclination to engage in shared consideration and reaction towards the transformations occurring in established design practises. This can be observed through their efforts to reconsider the foundational economic models of design, explore the limits of technology in design processes, and challenge the conventional hierarchical approach of designers and producers regarding end-users (Marenko & Brassett, 2015).

The prevailing perspective on design asserts that it is a task-oriented and performance-driven process, characterised by a linear progression, with the goal of minimising uncertainty through the enhancement of functional competence. The posthumanist approach has gradually shifted towards problem identification. The concept of design as problem finding involves the exploration of increasing complexity, the identification of existing problems, and the cultivation of a critical and conceptual viewpoint, mostly focused on the field of design (Marenko & Brassett, 2015). This approach has generated significant interest in the exploration of new views regarding the interconnected and dynamic nature of humanity's ontology, including the ontology of knowledge (Barad, 2007, p. 73).

2.12 Considerations of *Ubuntu* in graphic design practice

Western philosophies consider *Anthropos* as human, thus emphasising the individual and unwittingly relegating human-centredness to a form of anthropocentricism. Being human-centred is criticised for perpetuating this anthropocentric position further contributing to humanity’ s self-centredness and environmentally destructive behaviour (Akama, 2014). By considering the humanness through the lens of Eastern philosophy, designers such as Akama emphasise humanness in relation to others (Akama, Keen & West, 2016).

The specific African Humanism this study considers is the African philosophy of *Ubuntu. Ubuntu* is a predominant and significant worldview in sub- Saharan Africa. This African philosophy rose to prominence in the post- apartheid philosophical literature. Notable scholarship on this philosophy has been embarked on by Mogote Ramose, Thaddeus Metz, Desmond Tutu, Christian Gade, Kevin Behrens, and Motsamai Molefe (Ewuoso & Fayemi, 2021). Nelson Mandela, former president of South Africa defined *Ubuntu* as a philosophy establishing "a universal truth, a way of life, which underpins an open society" (Modise, 2006). Accordingly, the philosophy of *Ubuntu* embodies the concept of human beings and their relationship with the community that characterises the ethics that define Africans and their social behaviours (Dia, 1992; Mbigi & Maree, 2005; Van den Heuvel, Mangaliso & Van de Bunt, 2006).

A societal environment dominated by western/neoliberal discourse presents and endorses adversarial relationships for humans and emphasises material resources and dominance in human relations. In contrast, *Ubuntu* is a paradigm that emphasises harmony, cohesiveness, and relationships between people (Tavernaro-Haidarian, 2020). Veneration and respect between the community play a significant role within this African framework. This interpretation of personhood discards the view that a person can be identified in terms of physical and psychological features and forms the foundation for communal cultural life (Modise, 2006). *Ubuntu* expresses the interconnectedness, common humanity and the responsibility of individuals to each other (Koster, 1996; Nussbaum, 2003).

Broodryk (2005) creatively uses the African word "*Ubuntu*" as an acronym for the positive attributes of the term (Table 2.3).

Table 2.2: Attributing positive connections to Ubuntu (Broodryk 2005, p. 175).

***Ubuntu* quality**	***Ubuntu* meaning**
U - Universal	International, intercultural brotherhood
B - Behaviour	Humanitarian, considerate, sharing, respectful, compassionate
U - United	Unity, solidarity, community, family
N - Negotiation	Agreement, compromise, egalitarianism
T - Tolerance	Patience, mediation
U - Understanding	Understanding, empathy

Ubuntu defines relationships as human being is regarded as a human being only through his or her relationships to other human beings (Tutu, 2004). Hence, communalism and collectivism are essential to the spirit of the African *Ubuntu* philosophy. Similarly, essential is the characteristic of teamwork (English, 2002; Poovan, Du Toit & Engelbrecht, 2006). Traditionally people in African societies would contribute to communal goals by farming, fishing or gathering resources as a group. Through *Ubuntu* individuals contribute their best efforts for the betterment of the entire group (Khomba, 2011). For example, when examining the notion of an *Ubuntu* robot, Coeckelbergh (2022), proposes that a robot originating from Western culture would prioritise addressing individual wants, whereas a robot influenced by the *Ubuntu* philosophy would need to acknowledge the person's connection within a community.

While developing design outcomes, designers use their personal experiences as individuals to produce artworks intended for the consumption of others. According to Suchman (1987), designers possess a situated understanding of individuals that is rooted in their actions, as opposed to a fixed, detached, and objective comprehension that is not characterised by those who passively observe an event as mere spectators. The designer's perspective, their engagements and interactions with others, inherently shape and enhance their comprehension of design (Akama, 2007). In contemporary society the spirit of *Ubuntu* underpins values that also contribute to posthumanist goals such as environmental responsibility and the compassionate consideration of others.

Ubuntu means to make humans and Posthumans more humane in the moral sense, and to create or increase opportunities for the individual, to enjoy deep communal relationships with

others; to actualise their capacity to be true subjects and objects of relationships, and consequently, foster or enhance their dignity. Likewise, through the application of a human-centred process designers have the capacity to positively affect the lives of certain groups through a communal, participatory approach to developing design outcomes. In South Africa, *Ubuntu* may be seen as an “endogenous discourse” (Pieterse, 2006, p. 76) and thus design practice underpinned by *Ubuntu* could aim at channelling design's capacity toward ways of being and doing that are deeply attuned to local social and environmental concerns as advocated by anthropologist Arturo Escobar (Escobar, 2018).

The consideration of *Ubuntu* in graphic design practice may appease the criticism of the posthuman that arises from the field of critical race studies. Scholars argue that the traditional humanist notion of the ‘human’ is based on a “universal subject—usually white, male, privileged, well-off, and young—that does not exist in reality” (Forlano, 2017, p. 27). Given the circumstances, it may be unwarranted to attribute the influence of technology and the environment, as a significant percentage of the population (including non-white individuals, women, the underprivileged, and persons with disabilities) have historically been excluded from being seen as fully human.

In human-centred design, the use of qualitative research methods such as observation enables the designer to be more attuned to the needs of people as users and consumers. However, Forlano (2017) argues that the results of human-centred projects are often reductive as the market ignores the needs of certain groups of people in favour of others. To develop an inclusive and decolonised design practice graphic designers must know to consider all (human and non-human) agents in the design process.

Ubuntu takes a relational view that emphasises the importance of an individual's close ties to and deep respect for other individuals as well as “animals living or dead, rocks, insects, the land and so forth” (Schreiber & Tomm-Bonde, 2015, p. 658-659). This ontology is a direct contradiction to the dualistic thinking that typified Enlightenment philosophy and through colonialism had significant implications on what became known as design (Kotze, Perold-Bull, Costandius & Alexander 2018). Additionally, through its embrace of nature, *Ubuntu* further contrasts Haraway’s use of the term cyborg as employed by posthumanism. In the first place, Haraway's cyborg should be viewed as a feminist project, since it aims to reimagine identity politics, particularly as it relates to gender norms (Miah, 2009).

In Badmington’s (2003) view of posthumanism, the term refers to the imagining of Otherness as it is expressed in culture and as such speaks to the ‘othering’ of groups of people. It may be argued that globalisation has contributed to the notion of the ‘other’ through the highlighting

of not only the interconnectedness between people but also their differences. The *Ubuntu* humanist emphasis on the capacity for communal relationships can be a useful tool for reducing harm since it ensures that harmonious communal relationships are central in all uses of emerging technologies.

This thesis explores the tension between design and designers' role in serving people within the context of a capitalist society driven by consumption. The domain of graphic design practise is subject to substantial influence from posthumanism since it poses a challenge to traditional notions regarding the impact of design on human identity and society. In the South African context, graphic designers who are well-versed in the concept of *Ubuntu* may have a competitive edge in making informed decisions that cater to the needs of their clients.

2.13 Cosmopolitan Localism

Through globalisation there exists a sense of interconnectedness in the way people think, dress, live and design. However, academics such as Arturo Escobar (2015; 2018) support the notion that such interconnectedness must be underpinned by a strong tether to local traditions and ways of thinking. According to Escobar (2018), design needs to cater to a pluriverse that includes a wide range of human and non-human entities. In this regard, it is also relevant to consider the concepts of Ecospheric Design as proposed by Gabriel García-Acosta and Carles Riba Romeva in 2010, as well as the Non-anthropocentric Framework proposed by Li Jönsson in 2014. These theoretical frameworks offer valuable insights that might contribute to the ongoing discussion. It is imperative to develop a comprehension of design that possesses a core devoid of anthropocentrism. This action has the potential to be ethically justifiable. Paradoxically, adopting a post-anthropocentric viewpoint on design allows for a renewed examination of human interests. By considering the interests of non-human things, we become aware of our inherent dependency on them (Quadflieg, 2021).

Escobar (2015) criticises the “One World” model as proposed by John Law (2011) as being rooted solely in the Euro-American perspective and historical experience and disseminated globally through colonialism, development, and globalisation. In contrast, Escobar proposes a concept he calls *transiciones* (transitions) as a less destructive model of a socio-natural life. This concept is linked to his proposed notion of the ‘pluriverse’ and is especially valid when considering an industry, like graphic design, that in South Africa is heavily influenced by Western approaches and stylistic influences.

It is recognised in the literature (Manzini, 2015; Escobar, 2018) that design can be a powerful force for social change. Escobar (2015) calls for a reconsideration of epistemic and

institutional boundaries to bring about the necessary change in our environmental degradation and decline. To bring about a shift towards pluriversal thinking, Escobar (2015, p. 14) suggests that design and communication are…

> *…enabling the ecological, social, and technological conditions where multiple worlds and knowledges, involving humans and non-humans, can flourish in mutually enhancing ways …*

Designers can impact positively on physical problems (environment, architecture, artefacts) and on the way that people understand and 'make sense' of the environment around them (graphic design; experience design; design systems). This impact has also been recognised by non-designers who now freely participate in design activity through the availability of design software and filters on social media.

The qualities that drive cosmopolitan localism are smallness, locality, openness, and connectivity (SLOC). These interconnected systems make it easy to manage and control, as well as enable the creative utilisation of global ideas in local ways from a potential openness perspective. Considering the results of twenty years of discussion and concrete experiences, Manzini (2010) argues these four qualities are relevant as designing sustainable solutions cannot be achieved without considering the notions of locality and the community.

Taking these localities into consideration within the framework of contemporary transformations is essential for implementing sustainable solutions (Manzini, 2010). As graphic designers seek to advance the concept of cosmopolitan localism by incorporating small, local, open, and connected qualities, they must modify global solutions to their contexts. Thus, sustainable solutions will vary from region to region. As a result, it is crucial to find solutions in a local context, to reveal whether they are viable, potent, and applicable so that they can be distributed for the benefit of the whole graphic design community (Bonsu, 2019).

This democratisation of design processes is referred to by Fry (2009) as the pluralisation of design activity. According to Fry, this process is driven by the availability of cheap design software which allows anyone to participate in design activity. Fry (2009) is critical of the processes of design being 'trivialized' and reduced to a mere style gallery from which prospective clients can select their chosen solution.

Manzini and M"Rithaa (2016) view cosmopolitan localism as a creative balance between being rooted in a locality and being open to global flows of ideas, people and things. Although some scholars have engaged with the concept of cosmopolitan localism in specific settings (Bonsu,

2019), the majority of literature views design as a whole and does not provide precise guidelines for how to successfully implement change into specialised design foci (graphic design for example).

For consideration in this study the incorporation of cosmopolitan localism within the realm of graphic design practise can serve as a valuable contribution to the development of a posthuman perspective. This could potentially be achieved through the prioritisation of contextual relevance, communal engagement, and sustainable practises. Through the adoption of a cosmopolitan localism approach, designers have the potential to cultivate products that exhibit heightened social responsibility, thereby fostering cultural variety, social fairness, and environmental sustainability.

2.14 Conclusion

The Chapter acknowledges the significance of human agency in creating the history and evolution of design disciplines through its concise examination of design history and rhetoric. It elucidates the need of incorporating a historical perspective on design that centres on the human experience, highlighting its relevance to the professional practice of most present-day designers. The selection of Buchanan's rhetorical lens in design was motivated by its alignment with the objectives of this study. Buchanan acknowledges the significance of artefacts in relation to their impact on human experience, and he views design as a humanistic endeavour encompassing philosophies and methodologies such as human-centred design.

The section pertaining to the origins of design history primarily addressed the diverse methodologies employed in analysing the historical narrative of design within popular literature. Conversely, the section dedicated to the evolution of the design discipline emphasised the integration of design practises and cognitive processes as an intrinsic element of human existence. The transition from a culture mostly driven by human craftsmanship to one heavily influenced by technology has had a significant impact on the subsequent advancement of numerous design disciplines. The present study aims to contextualise itself within the professional domain of graphic design by examining the evolution of this discrete field of design professional practise.

One of the objectives of this literature review was to examine the influence of rhetorical principles on the problems and practises of posthuman graphic design. The understanding of these rhetorical foundations has importance because of the function that graphic design plays in utilising persuasive visual communication to captivate its audience. The evolution of design specialisations throughout history demonstrates a shift from a primary emphasis on physical

items and mechanisation to a more comprehensive examination of social systems. The theoretical framework presented here engenders unique posthuman insights about the interplay between people, non-human beings, the environment, and technology.

Additionally, the literature review examined the impact of technical improvements on the domain of graphic design, with a specific focus on the work of South African designers. This study explores the dynamic nature of designers' responsibilities and examines the potential effect of artificial intelligence and outsourcing on the field of graphic design. A crucial component of this inquiry entails an analysis of whether the practise of outsourcing results in a decrease in the burden of graphic designers or perhaps renders their employment superfluous.

Within the realm of scholarly discourse, the literature presents the notion of critical posthumanism as a theoretical framework that enables an exploration of the complex dynamics between graphic designers (as human actors), technology (as non-human entities), and the larger societal implications that arise from their interactions. The following initial deductive themes were based on Rosi Braidotti's theory of posthumanism as described in *Posthuman Feminism* (2022):

- **Embodiment and Technological Enhancement**: Code data related to how individuals understand and experience their own bodies, and how they interact with technology in a way that enhances or alters their embodied experience.
- **Non-Human Agency:** Code data related to the agency of non-human entities, such as animals, plants, and technology, and how humans interact with these entities in a posthuman world.
- **Ecological Consciousness:** Code data related to the ways in which individuals understand and respond to ecological crises, and how they view their own relationship to the natural world.
- **Hybridity and Multiplicity:** Code data related to the idea of hybridity and multiplicity, and how individuals experience and navigate their own multiple identities and embodiments.
- **Post-anthropocentrism:** Code data related to the idea of post-anthropocentrism, and how individuals understand the relationship between humans and the rest of the world in a posthuman context.
- **Transhumanism:** Code data related to the idea of transhumanism, and how individuals understand and engage with the possibilities of human enhancement and transformation through technology.

The themes provided the foundational framework for the final selection of categories, which then guided the formulation of interview questions in the empirical phase of the study.

Furthermore, this research examines the influence of globalisation on human behaviour and its subsequent implications for the domain of graphic design, particularly in relation to the creation of designs that cater to culturally varied audiences.

The scope of the research in the posthuman context extends beyond sentient creatures to include non-sentient things such as flora, fungus, and bacteria, as discussed by Braidotti (2013a). Moreover, the examination of historical progressions within the realm of South African graphic design has significant importance in the context of this study. This study aims to examine the extent to which the attitudes and practises of graphic designers in South Africa are influenced by African ideals, with a particular focus on the notion of *Ubuntu*.

Figure 2.8 below is a representation of the conceptual framework emerging from the literature review that leads to the empirical component of the study.

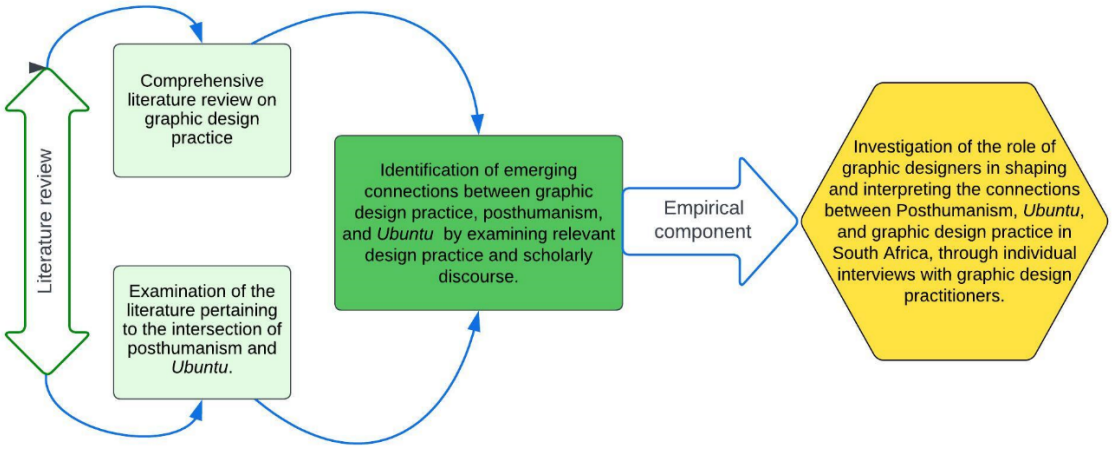


Figure 2.8: Conceptual model leading to the empirical component of the study

The following chapter introduces the research approach, philosophy, methodology and ethics that guided the empirical component of the study,

CHAPTER THREE: RESEARCH APPROACH

3.1 Introduction

This research followed a qualitative and hermeneutic phenomenological approach using individual interviews to uncover the contemporary design practise of graphic designers in South Africa. This allowed the researcher to access the experiences and perspectives of the participants and to interpret their views. Fourteen graphic designers were questioned on how graphic design professionals adapt to posthuman changes in their profession. The verbatim transcriptions of the audio-recorded interviews were then examined using the *ATLAS.ti 23*™ software to provide reflective notes that detail the kind and source of any emerging interpretations. The resultant coding themes were based on a comparison between the theories of critical posthumanism and *Ubuntu* that emerged from the literature.

3.2 Research philosophy

From a philosophical standpoint, this qualitative or narrative study (Plowright, 2011) may be positioned within the theoretical framework that lies between interpretivism and critical realism, as discussed by Saunders, Lewis and Thornhill (2003). The study employs a methodologically interpretative approach, while also exhibiting traits of critical realism due to its exploratory nature. The use of qualitative research uncovers human experience and methods such as observation enable the researcher to be more attuned to the practices of the study population. In this case study design, practitioners were asked to comment on developments in their practice to determine how posthumanism and the designer's own knowledge of the philosophy of *Ubuntu* is affecting the field of graphic design.

Emerging connections between posthumanism and *Ubuntu* that are considered in this study include emphasis on collaboration, the integration of non-human entities, multiplicity of entities, consideration of the transcendence of the self and a focus on ethics and social responsibility (Braidotti, 2013; Metz, 2019). *Ubuntu* and posthumanism both place a strong emphasis on teamwork and the notion that people are connected to one another and their surroundings. As graphic design is a collaborative process, its practice involves working with clients, other designers, and audiences to produce effective visual communication.

Posthumanism emphasises the agency and significance of non-human entities, such as animals, plants, and technology. *Ubuntu* highlights the interconnectedness of humans with non-human entities, such as nature and the environment. Both *Ubuntu* and posthumanism acknowledge the diverse range of human identities and the concept that individuals are not

only defined by a single aspect of their existence. Graphic design practises may foster diversity and inclusion by creating designs that accurately represent the varied and abundant human experience. The theories of posthumanism and *Ubuntu* surpass the limitations of the individual by focusing on the interconnectedness of everything. Graphic designers may facilitate this process by developing designs that foster empathy and establish connections with individuals. Both *Ubuntu* and posthumanism prioritise moral and social duty, as well as ethical issues. Graphic design practice can address these concerns by creating designs that promote positive social change and advocate for social justice.

This study applies a hermeneutic phenomenological orientation grounded in posthumanism to explore posthumanist patterns in graphic design practice. The methodology is underpinned by an interpretivist philosophy and employs a deductive research approach.

Table 3.1 below provides an overview of the correlation between the constructivist interpretive paradigm and the investigation, while also examining the epistemological, ontological, and axiological viewpoints that shape the research.

Table 3.1*:* Relationship between the constructivist interpretivism paradigm and the study.

Constructivist interpretivism paradigm		
Perspectives	**Criteria**	**Form of theory**
	Trustworthiness, credibility, transferability, confirmability (Denzin & Lincoln, 2005).	Substantive-formal (Denzin & Lincoln, 2005).
	General Beliefs	**Beliefs upheld in this study**
Epistemological	Radical humanist paradigm. Interpretivism aims to include richness in the insights gathered rather than attempting to provide definite and universal laws that can be generalised and applicable to everyone regardless of some key variables and factors (Myers, 2008; Saunders et al., 2012; Bhattacherjee, 2012).	This study was conducted within the interpretive paradigm in which the central goal is to interpret the social world, "(and where) knowledge … comprises constructions arising from the minds and bodies of knowing, conscious and feeling beings ... generated through a search for meaning, beliefs, and values, and through looking for wholes and relationships with other wholes" (Higgs, 2001, p.49.).
Ontological	A philosophical belief system about the nature of social reality.	The study considers the notion of wicked problems in design and the ontology of deconstruction[22]. The human is understood to be tied to the world and only conceivable as through and with it, as opposed to being seen as an independent being that is observant of the outside environment.

[22] According to Hillis Miller (1991) deconstruction in hermeneutics is characterised as a method of interpretation that involves meticulous and cautious exploration of the intricate complexities within each literary labyrinth. The critic navigates through various figures, concepts, and mythical motifs, employing a repetitive approach that is not intended as a parody. However, it harnesses the subversive potential inherent in even the most precise and sarcastic duplicity. The objective of the deconstructive critic is to identify, through the process of retracing, the element within the examined system that lacks logical coherence, the thread inside the text under examination that will lead to its complete unravelling, or the loose stone that will result in the collapse of the entire structure. The process of deconstruction serves to undermine the foundational basis upon which a text is constructed, revealing that the text itself has

Constructivist interpretivism paradigm		
Perspectives	**Criteria**	**Form of theory**
	Trustworthiness, credibility, transferability, confirmability (Denzin & Lincoln, 2005).	Substantive-formal (Denzin & Lincoln, 2005).
	General Beliefs	**Beliefs upheld in this study**
Axiological	Axiology refers to the ethical issues that need to be considered when planning a research project. It considers the philosophical approach to making decisions of value or the right decisions (Finnis, 1980)	Values of participatory practice, empathy and community

Table 3.1 delivers a description of the interpretative paradigm that underpins this study, which is characterised by its fundamental purpose of interpreting the social world. The study is grounded in ontological assumptions that acknowledge the concept of wicked problems in design and recognise the interconnectedness of humans with the world. It assumes that humans are inseparable from their environment and can only be comprehended in relation to it, rather than being viewed as independent entities merely observing the external surroundings. The study's axiological assumptions are grounded in the notion of *Ubuntu* and encompass values such as participatory practise, empathy, and community.

In phenomenology the “aim of the researcher is to describe as accurately as possible the phenomenon, refraining from any pre-given framework, but remaining true to the facts” (Groenewald, 2004, p. 84). An in-depth understanding of meaning that is possible with hermeneutic analysis which involves eliciting meanings from human practices, culture, artwork, and texts. This process is known as a hermeneutic circle. Details are interpreted differently than entire phenomena; reviewing these interpretations deepens understanding of the whole. A hermeneutic analysis can be combined with other methods of analysis that aim

already undermined that basis, whether intentionally or unintentionally. According to Miller in "Theory Now and Then" (1991, p. 126), deconstruction is not the act of deconstructing a structure, but rather a demonstration that the structure has already disassembled itself. Miller's argument suggests that the process of deconstruction does not possess the ability to bring about any significant transformative impact on the text, nor does it result in the disintegration of the text. The text is revealed to contain multiple meanings that are uncertain and internally inconsistent, and it is also analysed in terms of its structure.

to interpret and understand meanings. Phenomenological hermeneutic analysis combines hermeneutic principles with phenomenology. A phenomenological approach is appropriate to this study as it proposes an exploration of how graphic designers are adapting to the changing nature of the design industry through the lens of posthuman realities enhanced by swift advances in technology and ways of thinking.

According to Willis (2007), interpretivism usually seeks to understand a particular context, and the core belief of the interpretive paradigm is that reality is socially constructed. As most research conducted into graphic design practice is from a Western context (Thanh & Thanh, 2015), interpretivism is a suitable lens to investigate the practice of graphic designers of different cultural and social backgrounds. Consideration of approaches to Posthuman-centred graphic design in this study is based on interpretation of relevant literature and of the individual perspectives of the research participants. The interpretative paradigm is grounded in the philosophy of idealism where the emphasis is on “embodied knowing as a determinant of social reality, (with recognition of) multiple constructed realities” (Higgs, 1998, p. 146).

Hermeneutics is about the shared understanding people have with one another through language (Koch, 1999). The hermeneutic method advocates the utilisation of an internal perspective, enabling us to endeavour to perceive the world as a participant does by comprehending the many elements that shape their view. Gadamer's (1989) focus within the field of hermeneutics revolved around the exploration of how language serves to uncover the essence of existence. He adopted a philosophical position asserting that all forms of comprehension are inherently phenomenological, and that the process of understanding can solely be achieved through the medium of language (Sloan & Bowe, 2013). Langdridge (2007) and Rapport (2005) argue that language, understanding, and interpretation are interconnected and cannot be separated. According to Gadamer, language is not a separate entity from the world; rather, it serves as a means of representing the world. Language derives its reality from its capacity to encompass and reflect the world within its confines. Gadamer (1989) established a connection between language and ontology, emphasising a style of being influenced by Heidegger's work, rather than focusing on the epistemological aspect. Phenomenology and hermeneutic phenomenology are the prevailing modes of knowledge in philosophy prior to the time discussed by Rapport in Holloway (2005).

Gadamer (1989) used the metaphor of a ‘fusion of horizons’ to explain how various versions of an issue under investigation are combined, through dialogue, to result in mutual understanding.

- Thus, dialogue produces knowledge, meaning emerges from the interaction between a text and its inquirer (Koch, 1999). According to Packer (1985, p. 1091) a “unique characteristic of hermeneutics is its openly dialogical nature: the returning to the object of inquiry again and again, each time with an increased understanding and a more complete interpretive account”.
- Gadamer used Heidegger’s metaphor of the hermeneutic circle “to describe the experience of moving dialectically between the parts and the whole” (Koch, 1999, p. 176). Therefore, the nature of hermeneutic enquiry may be visualised as a circle or spiral. By interpreting parts of the text and interpreting the whole, the researcher participates in this circle, resulting in an ever-evolving understanding of the phenomenon.

Max van Manen (2014) has been engaged in the advancement of the hermeneutic method within the field of phenomenology. Drawing on Gadamer's philosophy, this study uses interpretations of the language of graphic design professional practise to explore the meaning of existence within historical and cultural contexts. This understanding is achieved by the active engagement of both the participant and researcher, utilising various forms of language, including the language employed during the interview process (Langdridge, 2007). The hermeneutic phenomenology developed by Max van Manen has the potential to elucidate several phenomena in practical domains such as teaching, psychology, and nursing. According to van Manen (2014), phenomenology plays a formative role in shaping, reforming, transforming, performing, and preforming the relationship between being and practise. The statement suggests that hermeneutic phenomenology has undergone a transformation, transitioning from a philosophical framework to a methodological approach (Sloan & Bowe, 2013).

According to Raimon Panikkar (1979), hermeneutics promotes harmony and connection via the lens of cultural incompatibility and heterogeneity. Maintaining diversity and promoting multicultural engagement while avoiding homogeneity may be a challenging endeavour. Panikkar proposed the concept of ontological pluralism as an alternative to universalism, positing that existence is characterised by multiplicity. Panikkar (1979) suggests that intercultural dialogue had to encompass introspection and exploration of our own culture, incorporating both its myths and unexplored realms. The phenomenon of intercultural discourse inherently involves elements of intracultural dynamics, hence prompting individuals to critically assess their cultural narratives and question prevailing notions of truth (Coeckelbergh, 2022).

This study employs a qualitative approach used within the hermeneutic spiral research design described above. This approach highlights collective enquiry and investigation supported in experience and social history. Additionally, qualitative data enquiry elicits thick descriptions of

human social action. These describe not just physical behaviours, but also the context of the behaviour and how they are interpreted by the participants. The data collected by a thick description can be used more effectively by other social scientists since it includes the subjective explanations and meanings provided by those engaged in the behaviours (Lincoln & Guba, 1985).

The hermeneutic spiral employed in this research design (Figure 3.1) enables the researcher to complete several iterations in the information gathering and subsequent interview process, each time enhancing the researchers' understanding and interpretation of the viewpoints shared by the interviewees. The 5-point spiral process enables the developing of themes and the fusing of perspectives that help in creating questions that result in an enhanced understanding of the interviewees' experience.

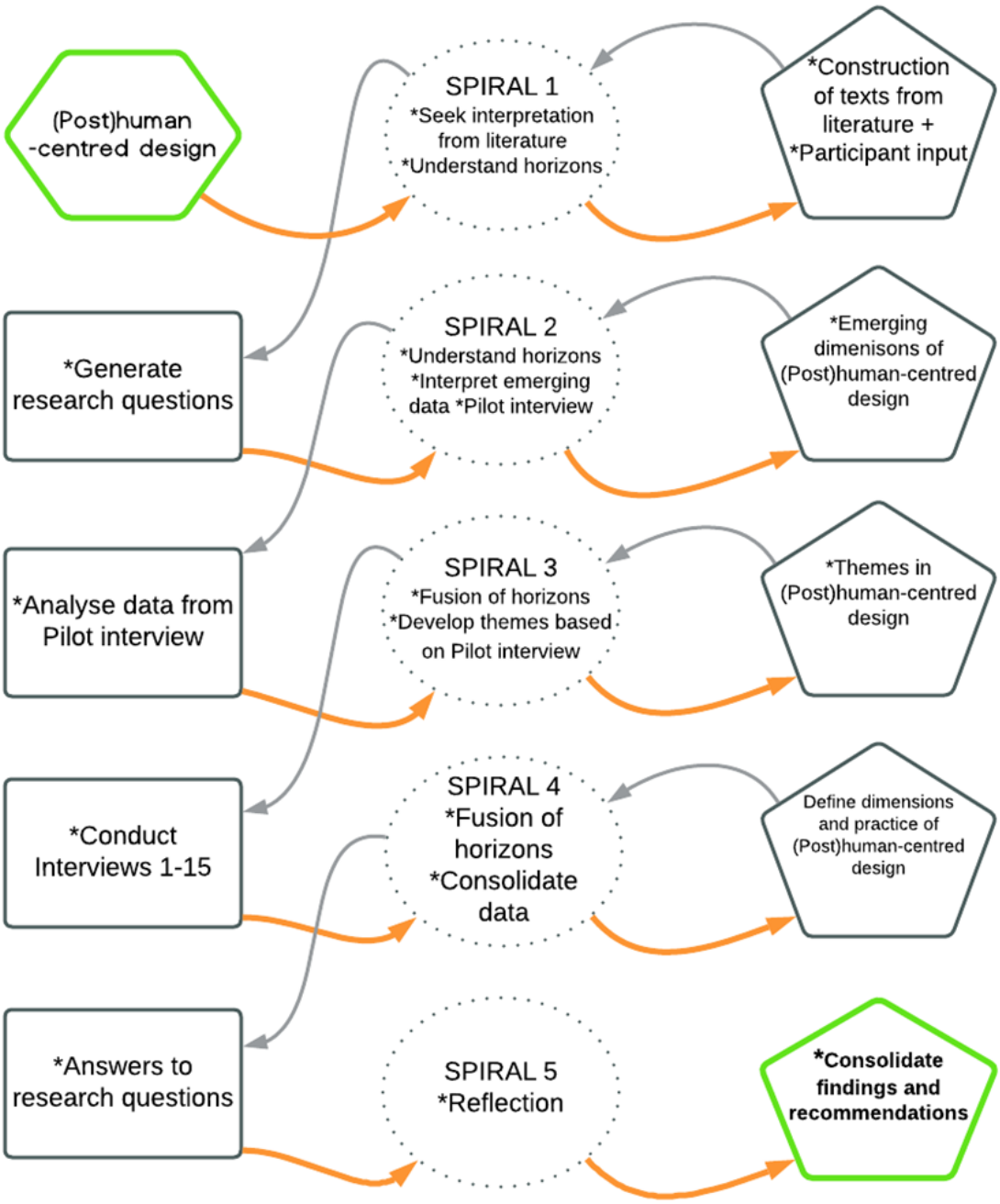


Figure 3.1. Hermeneutic spiral for research design

3.3 Research methodology and design, application of research methodology and participants

3.3.1 Research methodology and design

The layout of this section is informed by on the “research onion” model as first developed by Saunders et al. (2003). The study follows an interpretivist *research philosophy* that acknowledges the importance of understanding participants' subjective experiences and

interpretations of their practice. The *research approach* is initially inductive in the consideration of interview data, as the study aims to gather data through interviews and then generate themes and insights from that data, rather than testing existing hypotheses. Thereafter a deductive approach considers corresponding deductive themes from the literature to analyse the results. The study follows a case study approach in its' *research strategy* by focusing on the experiences of a specific group of graphic design practitioners. Further, the study adapts a qualitative phenomenological *choice for methodology* as it aims to understand the lived experiences of participants as they describe their own practice in relation to posthumanism. Additionally, the study makes use of a cross-sectional *time horizon* meaning that the data is collected at a single point in time, capturing a snapshot of participants' experiences. The *techniques and procedures* used in this study include qualitative data collection using semi-structured interviews with graphic design practitioners to explore their experiences and perspectives on posthumanism in their practice followed by interpretive thematic analysis to identify common themes and patterns across the interview data.

3.3.2 Purpose of research

The purpose of this study is to determine how the functions of graphic design practice are changed by posthuman perspectives, specifically in a South African context. This study is driven by two objectives. The first is to explore and investigate graphic design practice in South Africa in relation to the idea of posthumanism and the principles inherent in *Ubuntu*. Second, it aims to explore the relationships and intersections between posthuman graphic design methodologies and the idea of *Ubuntu* and how they reflect in professional practice. Contemporary graphic design practice exhibits a discernible trend towards the immaterial, transitioning from a focus on tangible outputs like products and services to the orchestration of complex, interconnected systems. This study aims to add to the discourse on the emergent shifts in graphic design and considers alternative conceptual framings such as posthumanism and *Ubuntu* that could improve the practice of graphic design.

3.3.3 Application of research methodology

Figure 3.2 illustrates the application of the research methodology in relation to the narrative paradigm that underpins the study and the research questions and purpose.

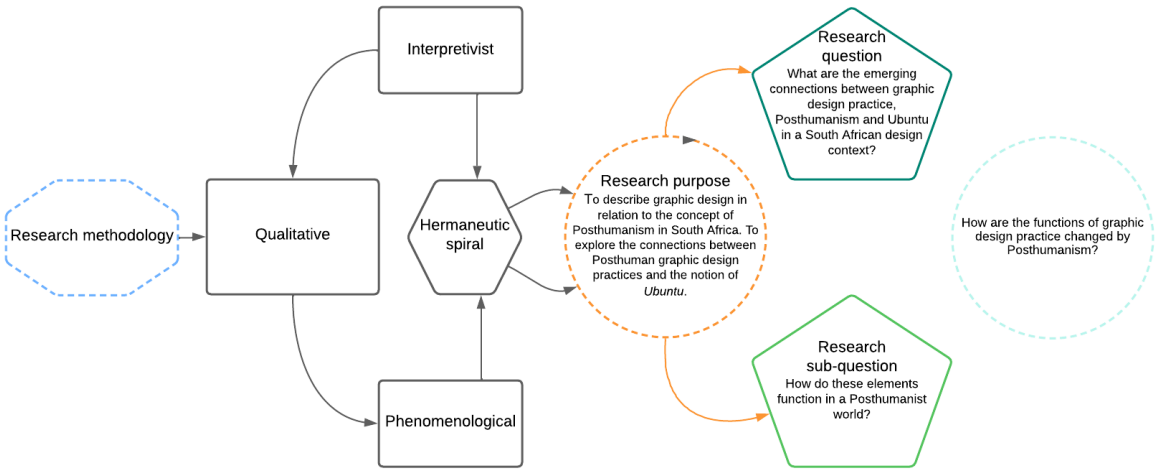


Figure 3.2. Application of research methodology

3.3.4 Participants

This study made use of semi-structured interviews as recommended by Leedy and Ormrod (2001) for qualitative research. The sample method employed in this study is a combination of non-probability purposive sampling and convenience snowball sampling, with the selection of participants directed by the characteristics of the target population. The sample is limited to fewer than fifteen graphic designers fitting specific profiles of expertise, practice, and commercial engagement (Miles & Huberman, 1994). Among the six attributes proposed by Miles and Huberman (1994, p. 34), are that sampling strategies can be evaluated by their adherence to a set of six categories. It is suggested that for the sampling technique to yield successful results, it is imperative that it aligns with the conceptual framework and research issues under investigation. The sample should be likely to generate rich information on the type of phenomena which need to be studied. Increasing the sample size can improve findings' generalisability. The sample should produce believable descriptions/explanations (in the sense of being true to real life). The sample strategy must be ethical and feasible (Miles & Huberman, 1994).

Adapted from Gangwal (2020), Figure 3.3 visually presents the multi-stage sampling process employed in this study.

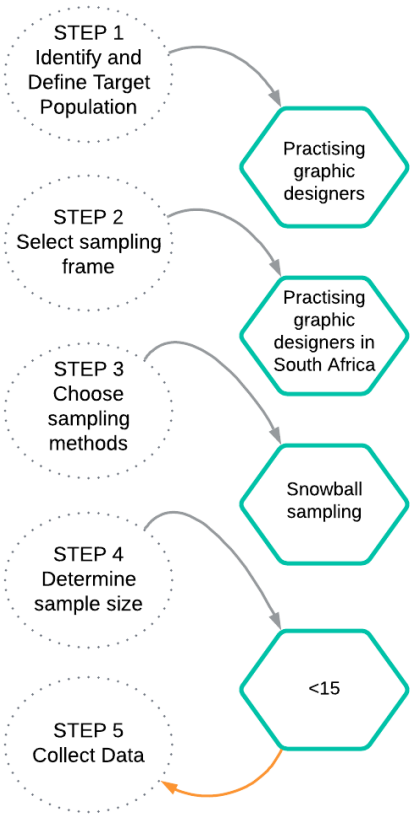


Figure 3.3. Sampling process (Adapted from Gangwal, 2020).

Following the pilot interview, it became clear that to obtain rich and diverse data it was advisable to focus the target population and include a broad scope of expertise and to consider junior and experienced designers in various specialisations of the design industry.

The sample was increased by applying snowball sampling (Marshall, 1996), asking the selected participants to recommend additional graphic designers they knew who could be ready to offer pertinent feedback on the research issue. The researcher solicited these potential participants, and those who satisfied the criteria and consented to participate in the study were then interviewed. The final sample included graphic design practitioners with between one and twenty years of experience who practise as freelancers, illustrators, art directors, designers at publishing firms, lithographic printing firms and the advertising and music industry. All the participants had a graduate qualification (or higher) in graphic design in common.

The participants were contacted via email and/or WhatsApp and an invitation introducing myself and giving a brief overview of the study was sent. The initial correspondence also

included an outline and purpose of the study, an example of some of the questions and a participation agreement to be signed by the participants. Once the participants confirmed their availability to participate a suitable date and time for a *Teams*™ interview was scheduled with them.

The exact number of participants in a qualitative study cannot be predetermined. The number of participants in a qualitative study is contingent upon the extent to which the research issue has been adequately addressed (McLeod, 2002). The researcher can conclude that there is no need for additional interviews once the data has reached a point of saturation, or when new themes stop appearing (Orbele, 2002). Hence, the sample size for this study was not predetermined, but rather decided based on the data collected from previous interviews. The interviews were conducted until the researcher decided that the study's objective could be adequately addressed, and the data had reached a point of sufficient saturation. There were 14 interviews in total, and it was discovered that after the ninth interview, limited new information was being learned. To verify the attainment of the saturation threshold, further interviews were conducted.

The information obtained has reached a point of saturation because the most recent interviews confirmed the knowledge gained in earlier interviews. At this point, the researcher made the choice to end the interviewing process and move on to the transcription and analysis stage of the data collection.

Table 3.2 illustrates the research questions in relation to the sampling frameworks, participants and reasons for sampling used in the study.

Table 3.2: Sampling scheme (Adapted from Onwuegbuzie & Leech, 2007).

Research questions	Sampling framework	Participants (n=15)	Reason for sampling
RQ1: What are the emerging connections between graphic design practice, posthumanism and Ubuntu in a South African design context?	• Cross-case analysis. • Nested sampling. • Individual interviews. • Non-probability snowball sampling	• Selected practicing graphic designers in South Africa	• Design practitioners are asked to comment on developments in their practice to determine how posthumanism is affecting the field of graphic design.
RQ2: How do these connections between graphic design, posthumanism and Ubuntu intersect in contemporary South African graphic design practice?		• Selected informants. Practicing graphic designers in South Africa with minimum graduate-level qualification and minimum 5 years' experience in industry.	

The discourse around the phenomena under consideration was open to the individual participants' own interpretations (Mouton & Marais, 1991). The researcher was able to explore particularly fascinating conversational strands that developed during the session by using semi-structured interviews. The researcher held the view that the participants were experts in their field, and they were given the freedom to elaborate and describe their experiences. Because of this, the researcher was able to relate to the participants in subjective ways that were more in line with their needs than with his or her own (Edwards, 1990).

The following qualitative research interview procedure, as suggested by Neuman (2000), served as the foundation for the interview format:

- The interviewer shows interest in the answers and prompted further explanation.
- A conversational interview is like a pleasant discussion with the interviewer providing a little more guidance.
- Informal conversation tropes such as jokes, stories, and other diversions that are also recorded are inserted throughout an interview.
- Probing and open-ended queries are frequently used.
- The interviewer and participant work together to set the interview's tempo and course.
- The interviewer adapts to the norms and linguistic style of the participant.

Eligibility criteria

This study solely applies to graphic designers working in South Africa. The following inclusion criteria were considered for this study:

- Participants had to be practising graphic designers.
- Resident and practising in South Africa.
- Minimum graduate-level qualification.
- Minimum 1 years' experience in industry.
- Willing to return for follow-up interview if necessary.

The eligibility criteria were purposefully kept broad to ensure that a sample reflective of the general population of professional South African graphic design practitioners is included in the study.

Participant identification

Navigating the ethical tension between maintaining participant anonymity and acknowledging their social and cultural backgrounds, Ferguson (2022) proposes a nuanced approach to pseudonym selection in social research. While anonymisation protects participant confidentiality, Ferguson (2022) advocates for preserving certain social and cultural identifiers within pseudonyms. This practice, it is argued, can support accurate interview recall during data analysis and acknowledge participants' diverse contributions to the study.

Table 3.3 illustrates the participant's code and pseudonyms, occupation and years of experience in the graphic design industry. Participant pseudonyms are determined by the interview number and the individual's initials, such as I1RT. The original pseudonym pertains to the pilot interview and the participant's initials (PIDP).

Table 3.3: Participant identification.

Code	Participant Pseudonym	Occupation	Design Industry Experience (years)
PIDP	Danie	Freelance graphic designer	12
I1RT	Rita	Graphic designer for publishing company	10
I2KH	Kabelo	Graphic designer at advertising company	2
I3AV	Alet	Freelance graphic designer and illustrator	13
I4LM	Lesego	Graphic designer at ceramic company	1
I5BA	Barend	Graphic and UX designer	4
I6LM	Lerato	Graphic designer working for an estate agency	2
I7MM	Mandla	Freelance graphic designer	5
I8TE	Therese	Graphic designer for publishing company	10
I9CO	Carien	Graphic designer at HE institution	20
I10VV	Vicky	Graphic designer at flexographic printing company	14
I11MM	Musa	Graphic designer/art director in advertising agency	11
I12CM	Conrad	Company director of strategic branding and marketing firm	20
I13MV	Martha	Owner of design agency	19

Role of researcher in the data collection

In both post-structuralist and post-modern theories, the researcher is considered an integral element of the research process (Matsumoto, 1996; Miller, 2000). All interpretivist research operates on the idea that knowledge is embedded within the interconnections and interactions among individuals. Qualitative research places significant emphasis on the researcher as a primary instrument for data collection and analysis (Creswell, 1994). As qualitative research is an interactive process that cannot be value-free, it is impossible for interviews to be unbiased (Seroka, 1999). Any research project is carried out by subjective persons, and this subjectivity needs to be acknowledged (Parker, 1994; Bukamal, 2022).

In this study the researcher acknowledges her positionality as both an outsider and an insider. By virtue of the researcher's qualifications and professional experience, she understands the professional practice of graphic designers as an insider. However, as the researcher does not

actively participate in the practice of graphic design in her day-to-day career, she is also an outsider. Therefore, the researcher is aware that both her voice as well as the voice of the participants may be evident in this study.

3.4 Data collection

Data collection instruments include transcribed semi-structured individual interviews with the identified participants. The steps in the analysis of the individual interview data included verbatim transcription, reading and rereading, initial noting, generating emergent themes, looking for links between emerging themes, and interpreting the data. By deleting any names or locations from the transcriptions, the recordings were made anonymous.

The process of data gathering with the chosen participants was initiated through the utilisation of *Teams*™ in December 2022 and was completed by March 2023. An initial pilot interview with one participant was held to determine the scope and length of the interview questions. Following the pilot interview, appropriate adjustments were made and a further thirteen graphic designers from various branches of the graphic design profession were interviewed between December 2022 and March 2023.

Using *Teams*™ and *DeScript*® software, the audio-recorded interviews were transcribed verbatim. Repeatedly listening to the audio recordings during transcription presented a significant opportunity for the researcher to become absorbed in the material, as noted by Creswell (2015). Following the transcription and cleaning of each interview, *ATLAS.ti 23*™ software was used to analyse the material, specifically to pick out, code, annotate, and compare significant text passages. The researcher created codes, quotations, and notes in the *ATLAS.ti 23*™ programme. Through reflective notetaking, information about the type and source of emerging interpretations was documented. This facilitated the development of a coding scheme guided by the research questions and conceptual framework, enabling effective data categorisation.

As the participants resided in Gauteng province, Free State province, North West province and the Western Cape province, it was decided that online interviews held on the *Teams*™ platform would be most convenient and accessible to everyone. A benefit of holding the interviews on *Teams*™ was the recording function available in the application which made accessing and reviewing interview data easy. Participants gave permission for the interviews to be recorded.

3.5 Background to the structure of the proposed interview questions

Research Aim: To explore the relations between posthumanism and emergent graphic design practice.

The line of inquiry revolved around the following aspects:

- Knowing the emerging connections between graphic design practice, posthumanism and Ubuntu in a South African design context.
- Knowing how do these connections between graphic design, posthumanism and Ubuntu intersect in contemporary South African graphic design practice.

Table 3.4 provides an overview of the two primary research questions (RQ1 and RQ2), illustrating their underlying rationale and the characteristics of the sampled population.

Table 3.4: Rationale for the Research Questions.

Research questions	Rationale	Sample participants
RQ1 What are the emerging connections between graphic design practice, posthumanism and *Ubuntu* in a South African design context?	To understand the emerging connections between graphic design practice and posthumanism.	Practicing graphic designers in South Africa (n=14)
	To understand the emerging connections between graphic design practice and *Ubuntu.*	
RQ2 How do these connections between graphic design, posthumanism and *Ubuntu* intersect in contemporary South African graphic design practice?	To explain how these connections between graphic design, posthumanism and *Ubuntu* intersect in contemporary South African graphic design practice.	

Table 3.5 presents the deductive coding categories that emerged from the work of Braidotti (2022) and Ramose (1999, 2014), and outlines their adaptation to incorporate the concepts of posthumanism and *Ubuntu* inside the framework of the study.

Table 3.5: Deductive description and development of coding categories.

Initial deductive coding categories (Braidotti, 2022; Ramose 1999, 2014)	**Coding categories based on author's construct of posthumanism and *Ubuntu***
Embodiment and Technological Enhancement	Embodiment
Transhumanism	Human interconnectedness
Non-human agency	Non-human entities
Hybridity and Multiplicity	Multiplicity
Ecological consciousness	Social justice and ethics
Post-anthropocentrism	Transcendence

Therefore, the categories highlighted in the list above of Human interconnectedness, Embodiment, Non-human entities, Multiplicity, Social justice, Transcendence and Ethics served to underpin the development of questions that appear in the interview.

The interviewer presented open-ended questions with a spoken phrase. Table 3.6, lists key interview questions, categorised according to emergent coding themes. Additionally, it indicates association to RQ1, the first research question. Similarly, Table 3.7 sets out interview question which relate to RQ2' the second research question. It provides a framework for the types of inquiries that aimed to elicit further information based on the deductive categories as described in Tables 3.6 (RQ1) and 3.7 (RQ2).

The open-ended interview questions were categorised into six sets according to the original research inquiries. The initial series of inquiries (question sets one to three) sought to gather data regarding the participants' level of acquaintance with graphic design practise (RQ1). These questions mostly centred around their professional obligations as graphic designers and the many challenges encountered in their day-to-day professional endeavours. The subsequent series of inquiries aimed to gather data regarding the designers' level of acquaintance with the notion of *Ubuntu* and their perception of the significance they attribute to the social dimensions of design in relation to the category of Human Interconnectedness. The final set of interview questions linked to RQ1 encompassed the participants' attitudes on

engaging in the domain of Non-Human Entities, incorporating inquiries pertaining to technology and the environment.

Question sets four, five, and six were designed to address the second research question (RQ2) pertaining to the operational aspects of the relationships between South African graphic design practise and the notions of *Ubuntu* and posthumanism. These sets of questions encompassed inquiries related to the topics of Social Justice and Ethics, Multiplicity and Transcendence. The demographic questions in the final set were completed by the participant designers by email responses to adhere to the time constraint of 45 minutes to 1 hour for the interview.

Table 3.6: Interview questions based on the first three categories emerging from the literature.

***RQ1:* What are the emerging connections between graphic design practice, posthumanism and *Ubuntu* in a South African design context?**
Embodiment (Q1 – Q4)
How long have you worked as a graphic designer?
What are your responsibilities as a graphic designer?
What software and applications do you use in your daily practice?
How much oversight (in terms of your design practice) by senior staff members is there in your firm?
Human interconnectedness (Q5 – Q7)
Who are the audiences of your design outcomes?
Do you have the opportunity to co-design outcomes with your clients?
Who are the beneficiaries of your design outcomes?
Non-human entities (Q8 – Q10)
How do you keep updated on new technology for your practice?
Please explain how technology has changed in your practice?
Who are the stakeholders of your design practice?

Table 3.7: Interview questions based on the final three categories emerging from the literature.

RQ2: How do these connections between graphic design, posthumanism and Ubuntu intersect in contemporary South African graphic design practice?
Multiplicity (Q11 – Q14)
Indicate your level of "graphic design practice in South Africa" knowledge.
What is your firm's policy on collaboration with designers outside of your firm?
Do you collaborate with graphic and visual designers not employed by your firm?
Do you participate in national design competitions?
Social Justice and Ethics (Q15 – Q17)
As a South African designer do you consider the concept of Ubuntu as relevant to your practice?
How important is the concept of community to your practice?
How important are Afro-centric modes of thinking to your practice?
Transcendence (Q18 – Q20)
How important is the idea of agency in your practice?
What is your opinion of the consequences of your design practise to: • People? • Environment? • Services and systems?
In your opinion does your design practice "do good"?

3.6 Analysis and interpretation

The conducted interviews yielded a dataset of audio recordings. The audio data underwent transcription, which involved summarising nonverbal communication and excluding comments that were perceived as inappropriate or sensitive in nature.

The data that was gathered underwent a thematic analysis. The coding and categorisation of data was done using *ATLAS.ti. 23*™. Utilising the hermeneutic spiral as part of the data gathering process resulted in rich data that assisted in deriving multiple categories that were used as guides in developing themes for easy categorisation.

Since the data was encoded by a single coder, the calculation of inter-coder reliability was not performed. In accordance with a thematic analysis methodology, the coding scheme was developed and subsequently validated against the data to confirm its alignment and accuracy.

The data analysis followed a phenomenological approach using a combination of the hermeneutic spiral and thematic mapping to aid in the interpretation of results. The goals and purpose of following various qualitative approaches are explained in Table 3.8.

Table 3.8 highlights the three phenomenological approaches that guided the data analysis. Firstly, a hermeneutic phenomenological approach was undertaken as it places significant importance on attaining a comprehensive and profound understanding of human experiences, while also highlighting the crucial function of interpretation in revealing the inherent meaning hidden within these experiences. The acknowledgement is made that the researcher's personal background and viewpoint have a substantial impact on the process of interpretation, and it promotes the practise of reflexivity throughout the entirety of the research activity (Adu, 2019). The subject of analysis in this study encompassed the transcribed individual interviews. The analysis was also guided by an interpretative phenomenological approach that proved to be advantageous for the analysis of the data, since it seeks to explore and understand the complexities of participants' experiences in way that is characterised by both rigour and empathy. Finally, aspects of the transcendental phenomenological approach were considered to ensure that the final themes chosen to underpin the analysis reflected the experiences of the participants.

Table 3.8. Research method and goal of data analysis highlighting the combination of the main approaches used in this study (Adapted from Adu, 2019)

Qualitative research method	Purpose of method	Goal of data analysis
Phenomenological approach	Examine the experience of the participants	Create themes that represent the experiences of the participants.
Hermeneutic phenomenological approach	**Making sense of text through analysing documents to determine their underlying meaning**	**Provide a simplified version of the text's meaning.**
Interpretative phenomenological approach	**Investigate what participants thought about a phenomenon they experienced**	**Assess and interpret participants' thoughts on the experience.**
Transcendental phenomenological approach	**Examine the experience of participants while following a bias-free approach**	**Develop themes that mirror participants' experiences and determine the substance of the experience in an unbiased state.**
Ethnography	Explore an event as it happens in a natural setting.	Create themes to describe or build a theory to explain an event or process that occurred in its natural environment.

A phenomenological approach using thematic or content analysis or a combination of both is the most frequent approach used in studies of graphic design practice and was thus chosen as appropriate for this study (Aston, 1999; Giloi & du Toit, 2012; Dziobczenski, Person & Meriläinen, 2018). Significant issues and divergent perspectives in design practice may be observed when these are mapped out. By using a hermeneutic methodology that follows a series of interviews with graphic design practitioners this research draws a snapshot of South African graphic design practice viewed through a posthumanist lens. The use of the hermeneutic spiral was included as it provided a deep and nuanced understanding of the participants' experience. The use of the hermeneutic spiral helps to acknowledge that meaning is not fixed or easily discernible but is constructed and interpreted by participants within their social and cultural contexts. By employing a hermeneutic spiral, the researcher engaged in iterative cycles of interpretation, allowing for a more comprehensive exploration of the multiple layers of meaning embedded in the data.

By combining the outcomes of the hermeneutic spiral with thematic mapping, the results' ultimate interpretation was arrived at. This entails identifying the main themes, the supporting ideas, and the complex relationships between them. With a focus on graphic design practises and *Ubuntu* within the context of this research, the findings are divided into the main themes based on a critical posthumanist approach.

Since the thesis did not prioritise quantifying the outcome of the data but rather emphasising the richness of the outcomes, themes and categories were not graded using frequencies while

presenting the findings. An interpretivist epistemology, however, considered every piece of information gathered as meaningful as it emphasises the importance of understanding the broader social, cultural, and economic context in which graphic design practice takes place. In accordance with its objectives the primary aim of the study was to investigate how graphic designers in South Africa interpreted the relationships between posthumanism, *Ubuntu*, and graphic design practise.

3.7 Context of research

This study addresses the knowledge gap as described in Chapter Two, by exploring how an expanded view of graphic design practice might be reimagined through the lens of posthumanism.

The following research questions focused the direction of gathering of data:

- **RQ1**: What are the emerging connections between graphic design practice, posthumanism and Ubuntu in a South African design context?
- **RQ2**: How do these connections between graphic design, posthumanism and Ubuntu intersect in contemporary South African graphic design practice?

This study explores how a combination of factors including existing graphic design practice, posthumanism and *Ubuntu* shape contemporary graphic design practice in South Africa.

3.8 Method of analysis

According to Bannister, Burman, Parker, Taylor and Tindall (1994), thematic content analysis is a method of analysis for narrative content and an interpretive application of content analysis in which the focus of analysis is on theme material that is recognised, categorised, and expanded based on systematic inspection. It makes it possible for experts, observers, or practitioners to use a range of information in a methodical way. Themes can be developed inductively from raw data, or deductively from theory and previous study (Boyatzis, 1998). The themes in this study were both deductive (based on Rosi Braidotti's theory of posthumanism as described in *Posthuman Feminism,* 2022) and inductive as emergent from the data collected during the Pilot Interview (see previous chapter for description of the themes).

This study followed the steps for thematic analysis as recommended by Braun and Clarke (2006) and described in Figure 3.4 below. This approach to analysis is an iterative procedure comprising of six steps: (1) familiarisation with the data, (2) generation of codes, (3) generation

of themes, (4) review of themes, (5) defining and identifying themes, and (6) production of report.

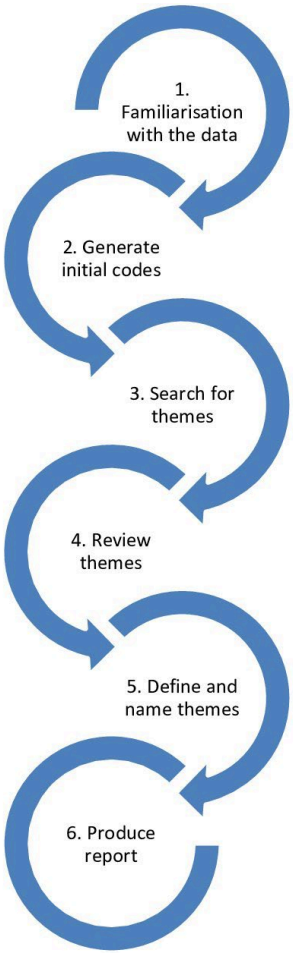


Figure 3.4. Six step approach to thematic analysis (Braun & Clarke, 2006)

Whilst conducting the data analysis, the researcher reflected on her background as a graphic design educator and was aware that this may formulate certain biases in my interpretation. The researcher adhered to Adu's (2019) recommended procedure for hermeneutic phenomenological data analysis. This involved cleaning the data and identifying sections of the transcripts that were pertinent to the research questions and objectives of the study, as well as the previously established theoretical themes. Subsequently, the researcher generated codes through open coding and assigned these codes to the corresponding themes. The process of analysis involved an iterative approach between the research question, purpose and data that enabled the continual refinement of interpretations and deepened understanding of the complexity the complexity and interconnectedness of the qualitative findings.

It is advised in the literature that themes be investigated for the following relationships: causal, contemporaneous, chronological, exploratory, embedding, or overlapping (Adu, 2019). This was adhered to during the data analysis process and is described in Figure 4.2.

3.9 Limitations

In terms of scope the study is limited to graphic design practitioners in South Africa. The study is restricted to evaluating the expertise, actions, and range of graphic design practise among professionals. The empirical component of the study does not consider practitioners in other fields of design.

3.10 Trustworthiness

The validity of the study is ensured through multiple means such as the triangulation of data sources and the purposive selection of the sample as well as verification with the participants following the data reduction. Reflexivity is adhered to through the constant testing and reviewing of subjective interpretations and participants' construction of meaning. The audit trail encompasses a collection of many components, such as raw data, data reduction and analysis outputs, data reconstruction and synthesis outputs, process notes, materials pertaining to objectives and dispositions, and information related to instrument creation (Lincoln & Guba, 1985).

Lincoln and Guba (1985) propose four criteria that he believes should be considered by qualitative researchers to ensure trustworthiness in their research.

- Credibility (in preference to internal validity);
- Transferability (in preference to external validity/generalisability);
- Dependability (in preference to reliability);
- Confirmability (in preference to objectivity).

The above criteria are described in relation to this study below.

3.10.1 Credibility

Shenton (2004) suggests the following methods to ensure credibility in qualitative research:

- The use of known and established research methods for qualitative analysis;
- Prior the data collection, the creation of an early familiarity with the cultures of participants;
- A random sampling approach to negate bias;

- Triangulation, which can include using a variety of techniques, is particularly useful when collecting data for many qualitative studies, especially when doing so through individual interviews, focus groups, and observation.
- Iterative questioning;
- Member checking.

Thus, to ensure trustworthiness during the data collection and analysis process, in this study the researcher used established data collection, analysis, and reporting tools and continually questioned her own assumptions, judgements, practises, and belief systems that could have an impact on the research. Triangulation was ensured by subjecting the draft versions of the research to supervisor and peer scrutiny and comment. It was important for the study to be subjected to these critical viewpoints to ensure that it was thoroughly reviewed. Additionally, the collected data interviews were made available to the participants following the interview sessions. Through thick description of the emergent qualitative findings and analysis of the data, the study hopes that graphic design practitioners, educators and researchers may find resonance and affinity in the processes described.

3.10.2 Transferability

External validity, according to Merriam (2009, p. 98), "is concerned with the extent to which the results of one study can be applied to other situations". Within the realm of positivist research, a common worry often revolves on the ability to establish the generalisability of the findings to a broader population. Demonstrating the applicability of qualitative research findings and conclusions to diverse contexts and people is challenging due to the inherent specificity of context and findings, which are often limited to a narrow range of specific locales and persons.

3.10.3 Dependability

By emphasising how each contributed to the study, the researcher clearly explained the justification for choosing the research technique, data collection procedure, and instruments. Others will be able to undertake data collection in comparable circumstances or contexts thanks to this.

3.10.4 Confirmability

The assertions made were supported by evidence derived from the gathered data. The assertions were further supported by a clear connection between theoretical frameworks and previously published literature used to understand and explain the findings.

3.11 Ethical considerations

The following section describes the ethical considerations that guided this study.

Permission and informed consent were obtained from the Cape Peninsula University of Technology, Faculty of Informatics and Design ethics committee (Annexure 1).

- The purpose of the study and data collection and reporting processes was explained to the participants.
- Confidentiality, privacy and anonymity of the participants and their professional affiliations was ensured by not using real names in reporting the findings. Numbers were assigned to design studios and pseudonyms, which resemble the demographic of the designer interviewed were used to report designer's comments and findings.
- Participants were given the option of not having the interview recorded and were able to withdraw from the interview at any time.
- Negligence and careless errors were avoided by carefully and critically examining own work.
- Human dignity and intellectual property were respected.
- Data, results, methods and procedures, and publication status were reported responsibly.
- Integrity was ensured by not fabricating, falsifying, or misrepresenting data.
- Social responsibility was ensured by promoting social good and preventing or mitigating social harm.
- The researcher maintained objectivity by avoiding bias in experimental design, data analysis, data interpretation, data reporting, and other aspects of research.

Core ethical considerations such as informed consent and voluntary participation were adhered to. Participants were informed of the key considerations of the study and no incentives were offered. While Annexure 3 provides details of the interview schedule, Annexure 4 offers an example of the participant ethical consent document associated with data collection via interviews. Anonymity of external participants was assured. The risk to all participants was minimal.

3.12 Conclusion

This chapter delves into the examination of the research philosophy, methods, and ethics that were adhered to during this study. This study employs a hermeneutic phenomenology as a research methodology, as it offers graphic designers the optimal opportunity to articulate their experiences within the context of the study. According to Smith (2016), the phenomenological perspective on experience is characterised by its multidimensional and intricate nature. This study employs a hermeneutic phenomenological approach rooted in posthumanism to examine the presence of posthumanist tendencies in the field of graphic design. The study methodology is grounded in an interpretivist philosophical framework and employs an initial inductive approach to consider the interview data followed by a deductive method with the subsequent development of emergent themes and their analysis.

In Chapter Three, a comprehensive account of the empirical aspect of the study is provided, encompassing the methodology employed and the subsequent research process undertaken. The chapter provided an overview of the interview process employed for data collection purposes, as well as the deductive theme that emerged from the literature that informed the data collection. The subsequent chapter will undertake a more comprehensive examination of the emerging data, with a particular focus on areas that may be subject to debate or provide challenges. The subsequent chapter provides a discussion of the individual participant interviews that were conducted for the purpose of data collection.

CHAPTER FOUR: RESULTS

4.1 Introduction

Chapter Four presents a comprehensive analysis and interpretation of the data collected. The research tool employed for this study was individual participant interviews, as detailed in the previous chapter. The analysis and interpretation will be followed by a concise summary and conclusion that encapsulate the results of the study. Consequently, these findings inform the recommendations explored further in the subsequent chapter.

This chapter reports on the contemporary practices of graphic designers describing the developments in their professional practice in South Africa. A qualitative approach was used to gather responses from fourteen graphic designers who participated in individual interviews. The interviews were analysed to explore how graphic designer professionals adapt to posthuman changes in their practice. The results of the investigation have been classified into two separate divisions. Sections 4.1.1 and 4.1.2, overview the research topics and concepts that serve as the guiding framework for the study. Thereafter, Section 4.2, comprising sub-sections 4.2.1 to 4.2.6, addresses emergent categories, highlighting the findings of the study. Section 4.3 reviews principal takeaways and Section 4.4 concludes Chapter Four.

4.1.1 Research Questions and Findings

Sections 4.2.1 to 4.2.6 provide an exposition of the fundamental concepts that underlie the interrelationships of graphic design practise, posthumanism, and *Ubuntu* within the context of South African design. Additionally, these sections present a summary of participant quotes, selected at random, to address each question posed for each subject. The present analysis presents a comprehensive examination of the results, accompanied by a broader theoretical framework derived from existing literature.

The questions that drive this study were:

- **RQ1**: What are the emerging connections between graphic design practice, posthumanism and Ubuntu in a South African design context?
- **RQ2**: How do these connections between graphic design, posthumanism and Ubuntu intersect in contemporary South African graphic design practice?

Table 4.1 lists a portion of participant details from Section 3.3.4, Table 3.3, and is inserted here as a convenient point of reference.

Table 4.1: Summary of participant codes, pseudonyms and occupation.

Code	Participant Pseudonym	Occupation
PIDP	Danie	Freelance graphic designer
I1RT	Rita	Graphic designer for publishing company
I2KH	Kabelo	Graphic designer at advertising company
I3AV	Alet	Freelance graphic designer and illustrator
I4LM	Lesego	Graphic designer at ceramic company
I5BA	Barend	Graphic and UX designer
I6LM	Lerato	Graphic designer working for an estate agency
I7MM	Mandla	Freelance graphic designer
I8TE	Therese	Graphic designer for publishing company
I9CO	Carien	Graphic designer at HE institution
I10VV	Vicky	Graphic designer at flexographic printing company
I11MM	Musa	Graphic designer/art director in advertising agency
I12CM	Conrad	Company director of strategic branding and marketing firm
I13MV	Martha	Owner of design agency

A review of the data collected (Figure 4.1) shows that Interviews 2, 3, 11, 12 and 13 generated the newest codes with a marked slump in Interviews 4, 7 and 9. The ninth interview had the lowest new codes generated out of the sample. This indicated that data saturation had been reached. Although Interviews 11, 12 and 13 generated new codes these were seldom situated in the specific themes that served to underpin the research questions of the study.

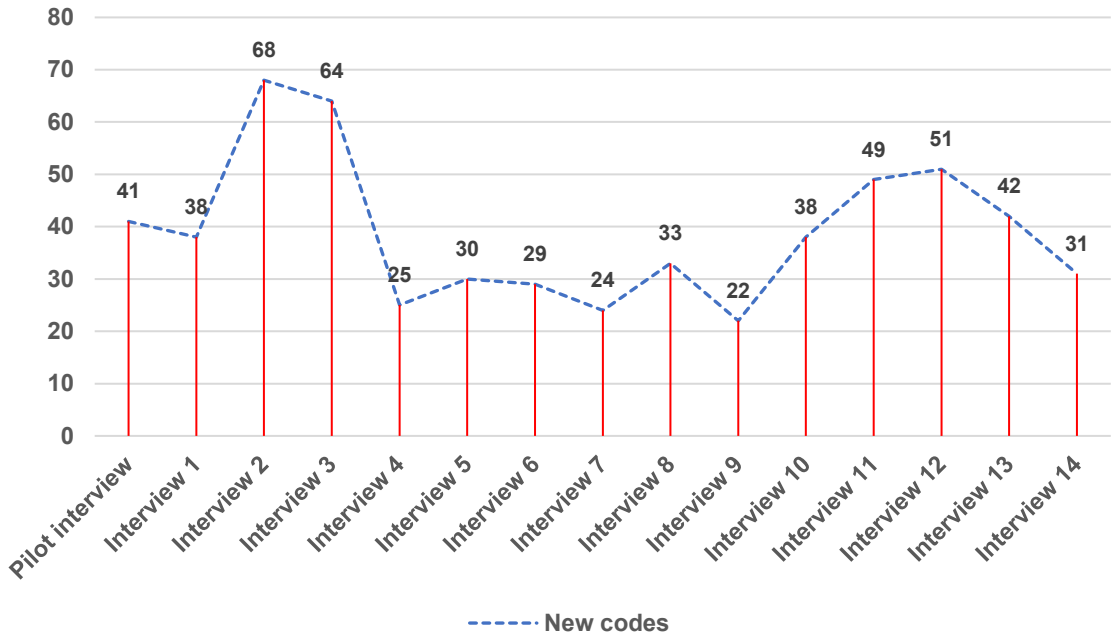


Figure 4.1. Review of code distribution per interview

Figure 4.1 incorporates pilot interview data as collected feedback from the participant was deemed to be both interesting and informative, indicating relevance for the study.

4.1.2 Intersections between graphic design practice, posthumanism and *Ubuntu* in a South African design context.

Following the completion of all interviews the transcribed data was entered into *ATLAS.ti 23*™ software and a total of 549 individual codes was created. By further exploring a comparison of the deductive themes rising out of posthumanism and the theory of *Ubuntu* the potential coding categories of the study were narrowed down to the following:

- **Embodiment:** Code data related to the idea that human embodiment is a fundamental aspect of human experience, which is emphasised in both posthumanism and Ubuntu.
- **Human interconnectedness:** Code data related to the idea that humans are fundamentally interconnected with each other and the world around them, which is central to the philosophy of Ubuntu.
- **Non-human entities:** Code data related to how posthumanism and Ubuntu view the relationship between humans and non-human entities, such as animals, nature, and technology.
- **Multiplicity:** Code data related to the idea that humans have multiple identities and are not defined by any single aspect of their being, which is emphasised in both posthumanism and Ubuntu.

- **Social justice:** Code data related to the ways in which posthumanism and Ubuntu address social justice issues, such as equality, diversity, and inclusion.
- **Transcendence:** Code data related to the idea of transcending the limitations of the self, which is emphasised in both posthumanism and Ubuntu, but in different ways.
- **Ethics:** Code data related to the ethical implications of posthumanism and Ubuntu, including how they address issues such as responsibility, accountability, and community.

The findings are presented in the format of deductive categories which then gave rise to specific subject-related themes through the analysis process assisted by *ATLAS.ti 23*™. The theoretical framework gave rise to six distinct topics. The initial three categories provided insights that addressed the primary research question, while the latter three categories contributed to addressing the second research question.

The categories are further described as follows:

Category 1: The concept of **Embodiment** played a significant role in shaping the level of familiarity that practitioners had with graphic design practise. Category 1 (Table 4.2) gave rise to the four subject specific themes of *Changing technology, Hand rendering, Job satisfaction* and *Job title*. Inquiries pertaining to this subject matter encompassed queries regarding the duration of experience as a graphic designer, the duties and obligations associated with the role of a graphic designer, and an inquiry necessitating a clarification of the tools and software employed in routine professional practise.

Table 4.2: Category 1: Embodiment – emergent themes, theme characterises together with an example of an empirical indicator.

EMBODIMENT			
Emergent Themes	**Theme Characteristics**	**Codes connected to theme**	**Example empirical indicator, pseudonym, reference.**
Changing Technology	The theme encompasses the levels of change over the span of the participants' career, specifically in the technology the participant engages with most frequently as part of his/her graphic design practice.	Adaptation, Adaptation: resistance to change, Awareness: technological awareness	*"For me it was, it stayed quite the same".* Rita 1:13, 123.
Hand-rendering	The theme considers the amount of hand-rendering the participant engages in as part of his/her practice.	Creativity, Creative process, Design	*"It really depends on the nature of the project. But I have hundreds of notebooks that I've filled with sketches".* Alet 5:13, 52.
Job satisfaction	The theme considers the levels of job satisfaction the participant experiences.	Career development, Professional development, Adaptability	"Graphic design was a tremendous help in, you know, it just gave me that push to really excel in this industry as well". Barend 8:40, 18.
Job title	The theme encompasses the participant's current job title.	Education, Professional experience, Design focus	"Graphic designer". Lesego 7:90, 88.

Category 2 addresses the examination of **Human Interconnectedness** (Table 4.3) involved assessing the participants' degree of acquaintance with themes pertaining to the notion of *Ubuntu*. The three emergent themes associated with this category focused on *Collaboration, Qualities of a Graphic Designer* and *Future Design Skills*. The inquiries pertaining to this subject matter encompassed the examination of audiences, identification of co-design prospects, and evaluation of the influence of design outputs on the target audience.

Table 4.3: Category 2: Human Interconnectedness – emergent themes, theme characterises together with an example of an empirical indicator.

HUMAN INTERCONNECTEDNESS			
Emergent Themes	**Theme Characteristics**	**Codes connected to theme**	**Example empirical indicator, pseudonym, reference.**
Collaboration	The theme considers the participants' experience of collaboration within the industry (colleagues/co-designers etc) as well as with clients.	Inclusivity, Designer relationships/Client relationships	*"We do collaborate with certain designers at certain times".* Kabelo 3:3, 20.
Qualities of graphic designer	The theme includes the qualities the participants' view as essential for successful graphic designers.	Diversity: soft skills, Teamwork, Values	*"Soft skills and art skills, but in between there is things like proactiveness and tenacity".* Conrad 15:27, 77.
Future design skills	The theme encompasses the skills perceived by the participants' as essential for future design practice.	Adaptability, Continuous learning	*"Resilience, I guess".* Musa 14:18, 69.

Category 3 of **Non-human Entities** (Table 4.4) explores the link between graphic designers, technology and the environment with a particular emphasis on recent technological advancements such as the widespread usage of artificial intelligence (AI) and AI-enabled software in the field of design. *Applicability of AI* was the theme that emerged from this category. This theme delves into several inquiries relating to these technological developments and their impact on design practise.

Table 4.4: Category 3: Non-human Entities – emergent themes, theme characterises together with an example of an empirical indicator.

NON-HUMAN ENTITIES			
Emergent Themes	**Theme Characteristics**	**Codes connected to theme**	**Example empirical indicator, pseudonym, reference.**
Applicability of AI	The theme considers the levels of engagement with commonly used AI technologies in the participants' practice.	Anticipation, Interest in AI, Skills development	*"I can't wait to see how AI is gonna go further. It's like in the design industry as well. But I think it's definitely a very helpful tool".* Danie 17:98, 116

Categories four through six provided support in addressing the second research question. **Multiplicity** (Table 4.5) as the fourth category explored the functional roles of the participants within the specific context of graphic design practise in South Africa. The *Focus of Design Practice, Focus of Design Work, Qualifications* and *Years of Experience in the Industry* emerged as appropriate themes for further inquiry in this category. The inquiries pertaining to this subject matter revolved around the collaborative methods employed by design professionals, their overall understanding of current design practises, and their inclination to participate in design competitions as a means of staying abreast of contemporary trends.

Table 4.5: Category 4: Multiplicity – emergent themes, theme characterises together with an example of an empirical indicator.

MULTIPLICITY			
Emergent Themes	**Theme Characteristics**	**Codes connected to theme**	**Example empirical indicator, pseudonym, reference.**
Design practice focus	The theme considers the professional environment the participant is employed in.	Adaptability, Communication, Design-centric	*"I'm an inhouse designer for a publishing and product development company".* Therese 11:2, 24.
Focus of design work	The theme encompasses the specific focus the participant engages with daily.	Communication, Digital design, Career	*"I'm a freelancer. Like full-time. I'm working in the music industry now".* Mandla 10:2, 18.
Qualification	The theme considers the current qualification of the participant.	Education level, Qualification, Experience	*"I only have a diploma".* Conrad 15:1, 25.
Years experience in graphic design industry	The theme considers the total years of professional graphic design experience of the participant.	Creativity, Expertise, Responsibility	*"I've been an art director for the past 10, 11 years I think".* Musa 14:2, 21.

The inclusion of **Social Justice** (Table 4.6) as a constituent of Category Five aimed to tackle the participants' efficacy within the framework of *Ubuntu*-inspired design. The participants' perspective on the significance of *Ubuntu*, the relevance of community, and Afro-centric styles of thought were assessed through a series of questions, thereby determining their attitude on the matter.

Table 4.6: Category 5: Social Justice – emergent themes, theme characterises together with an example of an empirical indicator.

SOCIAL JUSTICE			
Emergent Themes	**Theme Characteristics**	**Codes connected to theme**	**Example empirical indicator, pseudonym, reference.**
Diverse audiences	The theme considers the engagement with	Graphic design: cultural identity,	*"I always try to incorporate as much of*

SOCIAL JUSTICE			
Emergent Themes	**Theme Characteristics**	**Codes connected to theme**	**Example empirical indicator, pseudonym, reference.**
	diverse audiences as part of the participants' practice.	Graphic design: heritage, Diversity	*my heritage as I can through my culture so that people can be able to distinguish that this person is from a specific place, thinks in a certain way and does things in a certain way".* Kabelo 4:3, 21.
Free design software	The theme considers the participants' feelings towards the proliferation and usage of free design software.	Time constraints, Limited resources, Budget constraints	*"Sometimes I make use of free template software just to speed up the process because frankly you don't have time to create this beautiful illustration. Time is of the essence. Your output needs to run".* Carien 12:33, 27
Gender roles	The theme considers the participants' experience with gender roles as part of their design practice.	Empathy, Workplace challenges: gender roles	*"We are empathetic. My business partner, we are both female…most of our freelancers actually as well… I would say 80 to 90% women. I think it might also be just because the type of clients that we work with, we don't sell hard".* Martha 16:42, 111.
Understanding of *Ubuntu*	The theme encompasses the participants understanding and considerations of *Ubuntu* as part of their design practice.	*Ubuntu*, Empathy, Diverse audiences	*"Ubuntu is still very relevant in our practice in South Africa".* Therese 11:22, 124.

The ultimate categories of **Transcendence** (Table 4.7) and **Ethics** (Table 4.8) sought to assess the participants' efficacy within the realm of graphic design practise and posthumanism. This inquiry pertains to the significance of agency, the ramifications of design

outputs, and the notion of "good" design. The themes that emerged from this category focused on the designers' usage of *Commonly Used Technology* and *Prototyping* as part of their professional practice.

Table 4.7: Category 6: Transcendence – emergent themes, theme characterises together with an example of an empirical indicator.

TRANSCENDENCE			
Emergent Themes	**Theme Characteristics**	**Codes connected to theme**	**Example empirical indicator, pseudonym, reference.**
Commonly used technology	The theme encompasses the technology the participant engages with daily within his/her practice.	Graphic design tools, Awareness: technological awareness	*"We use Illustrator and InDesign and Photoshop".* Lerato 9:5, 26.
Prototyping	The theme considers the level of engagement in the development of prototypes in the participants' practice.	Collaboration, Communication, Out-sourcing, User-experience	*"We have (done prototypes) especially for websites where there's a lot of interaction that needs to happen with the product where it's more interactive, I think that's very, very important actually".* Martha 16:29, 85.

Table 4.8 demonstrates the final deductive category of Ethics. This category gave rise to the themes of *Environmental Considerations* and *Power Relationships* as areas of interest in the analysis.

Table 4.8: Category 7: Ethics – emergent themes, theme characterises together with an example of an empirical indicator.

ETHICS			
Emergent Themes	**Theme Characteristics**	**Codes connected to theme**	**Example empirical indicator, pseudonym, reference.**
Environmental considerations	The theme encompasses the environmental considerations undertaken as part of the participants' practice.	Longevity, Sustainability	*"Whenever we do a print job, we try to either print as close as possible to the person, to the place where it's going to be distributed".* Martha 16:32, 99.
Power relationships	The theme considers the consideration of authorship and power relationships between designer and client as evident in the participants' practice.	Agency, Creativity, Problem solving	*"You as the designer are the tool, the software according to the customer. They give you the parameters and you execute the way they need it to".* Vicky 13:99, 87.

Once the themes were identified and codes allocated to the interview transcripts the themes were mapped using *ATLAS.ti 23*™ and *Lucidchart*® software. Using a concept or theme map, data can be visualised and communicated, facilitating meaningful connections. This visual technique assists in representing and organising complex relationships between themes and concepts (Creswell, 2009). To not get lost in the data, the researcher frequently reflected on both the research questions and aims of the study. The initial theme map was very broad but subsequently it became progressively easier to reduce information from such an extensive foundation.

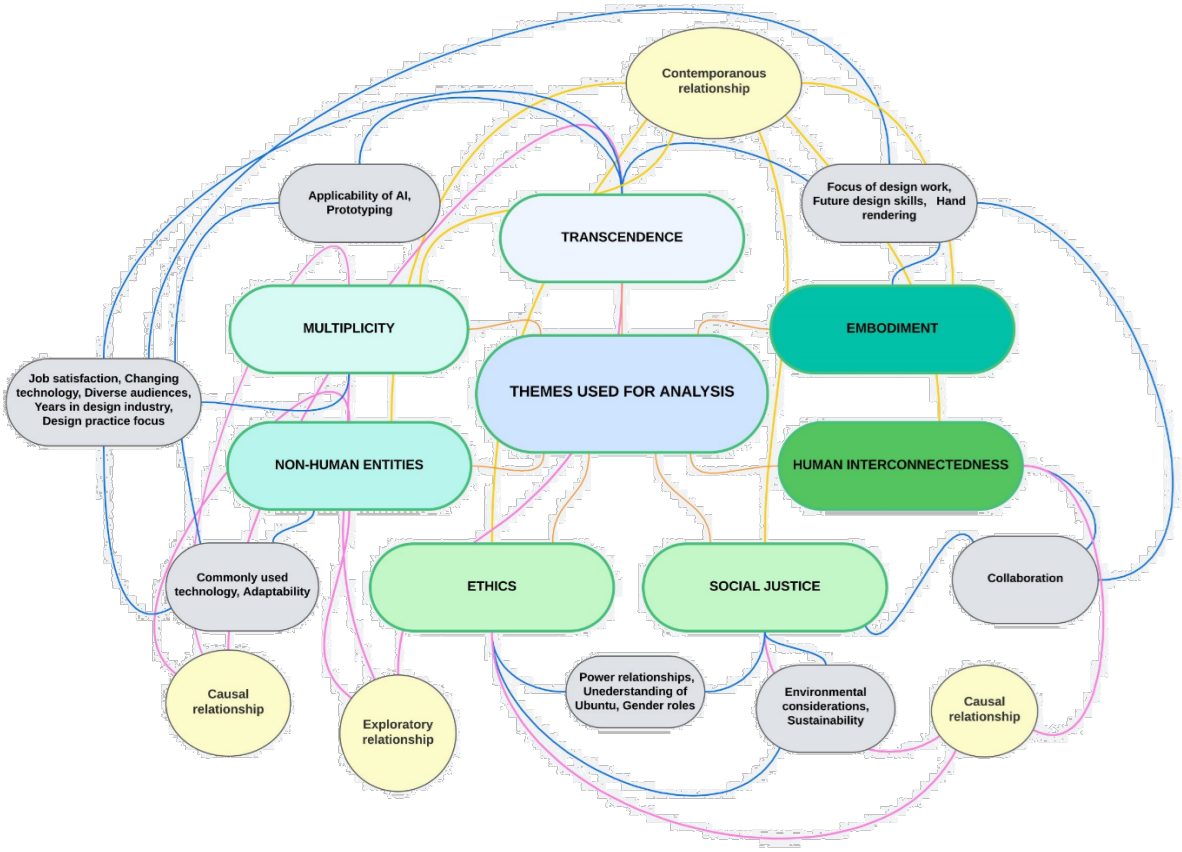


Figure 4.2. Diagram of deductive and inductive categories and emergent themes used in the study

Figure 4.2 represents the deductive and inductive categories that were used for the coding of the data. This map served as a starting point for organising and understanding the relationships between the themes. Following the development of the initial map the researcher engaged in the hermeneutic spiral by considering a deeper analysis of the data. This involved moving back and forth between the conceptual map and the data, refining interpretations, and exploring the relationships between the categories and the themes. Using the map as a tool to guide the interpretation process, the researcher noted connections, overlaps, and gaps between categories and emergent themes.

Figure 4.2 also illustrates the occurrence of relationships between the various categories and resultant themes. A causal relationship was identified between the categories of *Ethics*, *Social Justice* and *Human Interconnectedness*. A causal link between themes implies that one category directly impacts or causes the occurrence of another category. It also implies that the presence of one aspect or concept (theme) causes the appearance or modification of another aspect (theme). A contemporaneous theme relationship is a thematic association that occurs between two or more themes at the same time, thus all the deductive themes fall into

this category (Byrne, 2022). The categories of *Multiplicity* and *Non-Human entities* were found to have an exploratory relationship, as the codes of *Applicability to AI*, *Commonly used technology* and *Adaptability* were associated with all three themes. These relationships are described in greater detail in the next chapter.

Both the deductive and inductive themes that emerged from the literature and subsequent interviews gave rise to the themes and then the codes that became apparent using *ATLAS.ti 23*™ software. These codes were considered in terms of the frequency of appearance in the dataset as well as the relevance to answering the research questions. The themes have been categorised into two primary sections to address the research questions. The first portion seeks to clarify the connections among South African graphic design practise, posthumanism, and *Ubuntu*. The second section delves into an examination of how these interconnections intersect within the realm of South African graphic design practise.

Table 4.9 demonstrates the code keywords that were derived from data gathered through the individual interviews and document reviews considering **RQ1** – the main research question: *"What are the emerging connections between graphic design practice, posthumanism and Ubuntu in a South African design context?"*

Table 4.9: RQ1 linked to themes and codes emerging during data analysis.

Unit based on Research Question	Category based on posthuman critical theory	Themes emerging from interviews	Code keywords emerging from interviews	
Graphic Design practice	**Multiplicity**	Design practice focus		
		Focus of design work		
		Qualification	**Importance of qualification**	
		Years experience in graphic design industry	**Motivation**	**Self**
				Client
				Publicity
				Economic
	Transcendence	Commonly used technology	**Physical tools and materials**	**Skills and knowledge**
		Prototyping		

Unit based on Research Question	Category based on posthuman critical theory	Themes emerging from interviews	Code keywords emerging from interviews	
Posthumanism	**Embodiment**	Changing Technology		
		Hand-rendering		
		Job satisfaction		
		Job title		
	Non-human entities	Applicability of AI		
		Environmental considerations	**Sustainability**	
Ubuntu	**Ethics**		**Professional ethics**	
		Power relationships		
	Human interconnectedness	Collaboration	**Negative aspects of collaboration**	
			Positive aspects of collaboration	
		Qualities of graphic designer	**Adaptability**	
		Future design skills		
		Motivation (Mind set)		
	Social justice	Diverse audiences	**Afrocentric design**	
		Free design software		
		Gender roles		
		Understanding of *Ubuntu*		

Once the analysis process was underway additional related codes became apparent. To enable a further consideration of the relationship between the themes and emerging codes, individual thematic maps were constructed for each deductively identified code group (see Figures 4.3 – 4.8). The category of *Human-Interconnectedness* (Figure 4.3) resonated

strongly with the participants and emerged in their responses as being linked to *Collaboration* (both in terms of positive and negative aspects relating to client and co-designer relationships), *Diversity, Power relationships, Adaptability, Motivation (Mind set), Ethics* and *Empathy*. Here interviewees mentioned their professional relationships with clients, opportunities for co-design or design partnerships and multidisciplinary teamwork. Additionally, codes related to the abilities of designers and emerging technology such as *Future design skills* were also frequently associated with the theme of *Collaboration. Collaboration* was identified as one of the most frequently occurring codes with 62 occurrences over the fourteen interviews. The emergent codes ranged from the obvious "I… work within a tea …" [I2KHM Kabelo] to the more unexpected "…my entire process is built on client feedback …" [I3AV Alet].

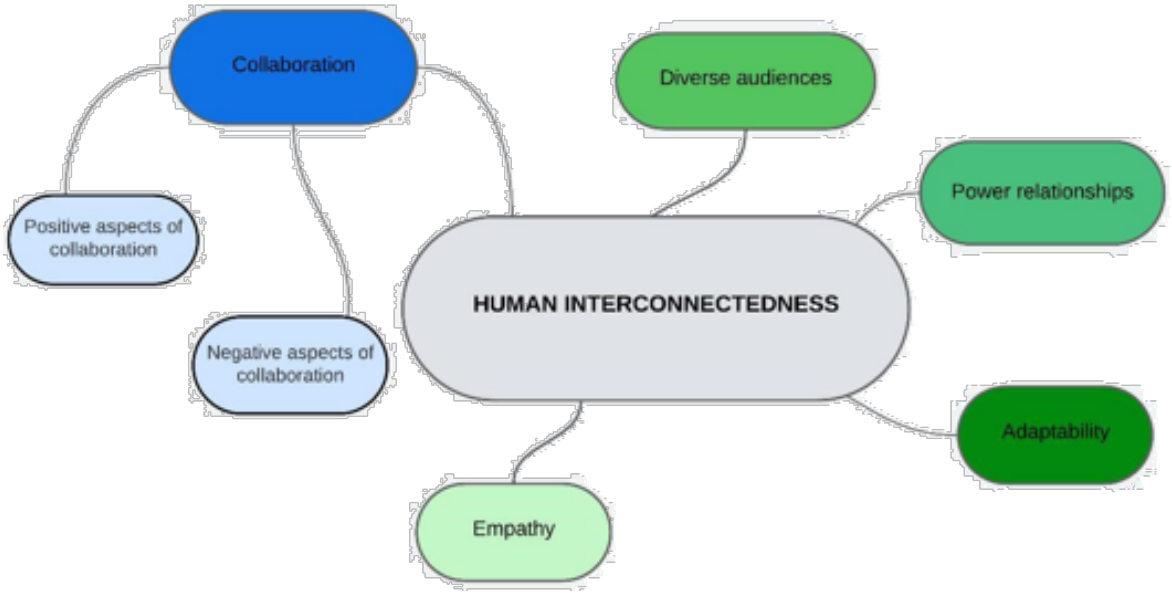


Figure 4.3. Diagram of codes linked to Human interconnectedness

Figure 4.4 considers the deductive category of *Embodiment. Embodiment* focuses on the embodied experience of designers in terms of their relationship to their practice. Here their perception of their position in terms of the greater practice (as demonstrated by the focus of *Job title)* as well as their consideration of the lifelong learning and development necessary to thrive in their practice (*Future design skills*) became apparent as prominent themes. The most notable aspect, however, is the connection that graphic designers at various levels and in different types of practises have with technology. This is evident in the emerging codes related to the *Applicability of AI*, the *Engagement with technology*, the considerations of *Hand-rendering*, and the description of the *Focus of design work*.

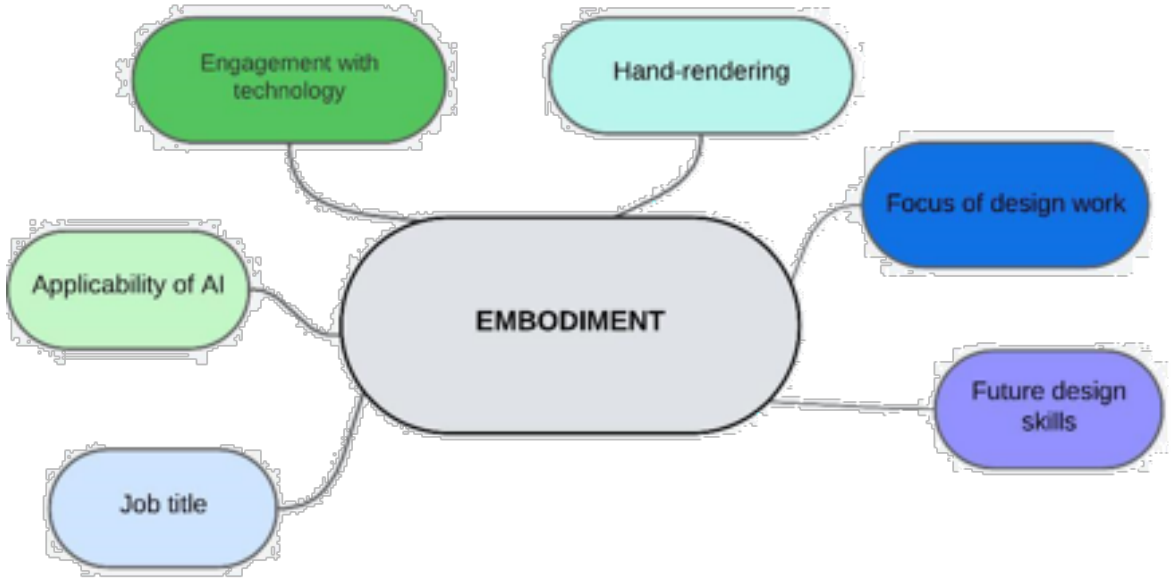


Figure 4.4. Diagram of codes linked to the category of Embodiment

The sub-theme of *Engagement with Technology* under the theme of *Transcendence* (Figure 4.5) had the second largest cluster of codes (60) and appeared in interviewees' comments related to tradition, advancements in practice, technological tools and challenges and technological dependence. According to Hayles (1999), technology is gradually becoming an extension of the human body, to the point that the lines between the human and the machine are blurring. She characterises it as a type of cyborgian hybridisation, in which humans and non-humans' fuse to generate a new form of being. In the context of graphic design practise this may be viewed as designers becoming cyborgs who rely on technology to boost their abilities and extend their reach.

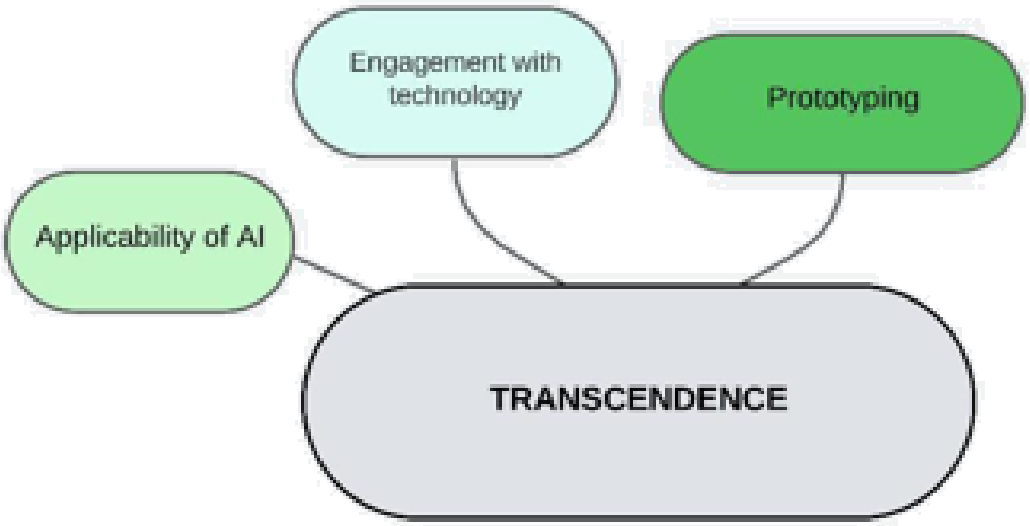


Figure 4.5. Diagram of codes linked to Transcendence

The category *Transcendence* (Figure 4.5) focuses on designers *Engagement with technology*, consideration of artificial intelligence in their practice (*applicability of AI*) and their understanding and development of *prototypes*. The deductive themes of *Transcendence* (Figure 4.5) and *Multiplicity* (Figure 4.6) share considerations of designers' practice and engagement with technology and emerging considerations of artificial intelligence. Designers' relationship with the theme of *Technology* was further considered in terms of *Skills and Knowledge, Advancements in technology* and *Adaptability*.

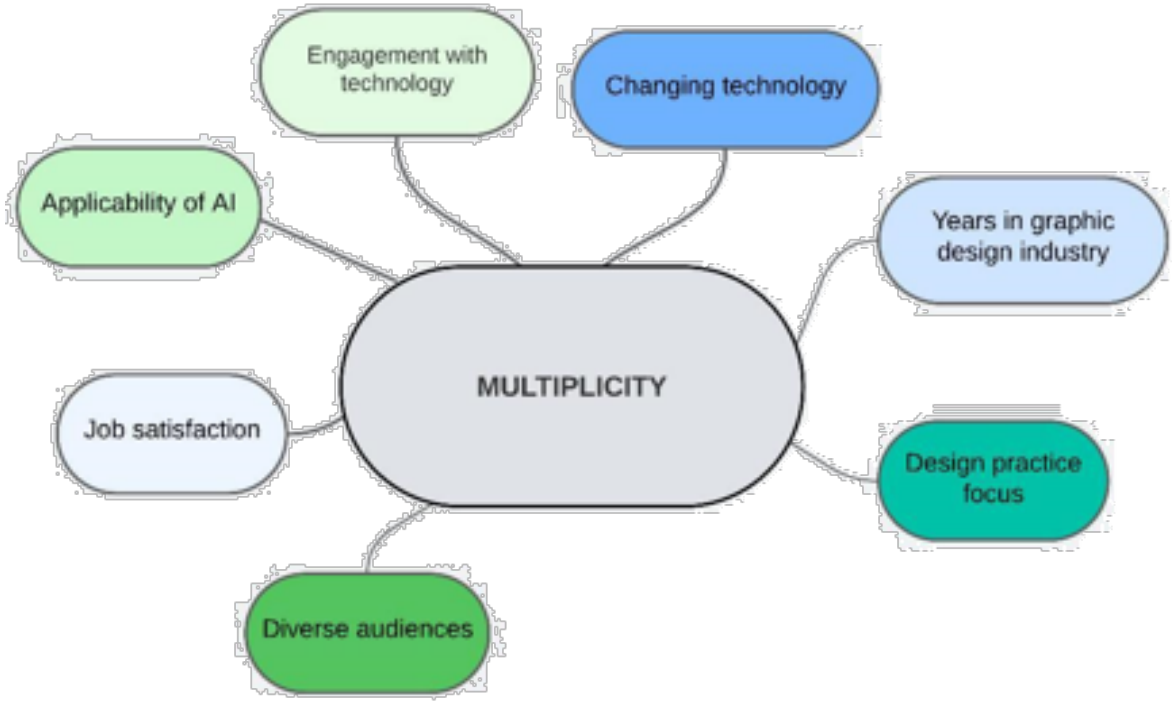


Figure 4.6. Diagram of emergent codes linked to the category of Multiplicity

According to Braidotti's (2013) conceptualisation of the Posthuman, *Multiplicity* refers to the notion that individuals and identities are not static, but rather fluid and interconnected with various elements. Rather than holding on to the traditional notion of a stable, unified self, Braidotti (2017) proposes that people are constantly influenced and shaped by the environment, culture, technology, and society. This conceptualisation influenced the development of the themes around Multiplicity used for analysis. In graphic design, embracing *Multiplicity* means considering the diverse perspectives and backgrounds of the audience for whom the design is intended. Hence one of the key themes here is *Diverse Audiences* that acknowledges that designers must recognise that individuals have varied experiences, cultures, and values which shape their understanding and interpretation of visual messages. This theme also extends into the corresponding categories of *Ethics* and *Social Justice* which deals with designers' perceptions of *Environmental considerations* and *Sustainability*. Acknowledging the interconnectedness of human beings with the environment, both *Multiplicity* and *Ubuntu* can inspire graphic designers to create sustainable and environmentally conscious designs.

During the analysis the category of *Multiplicity* generated 114 total codes however these were divided between the themes of Changing Technology (5), Diverse Audiences (8), Design

Practice Focus (36), Focus of design work (13), Importance of qualification (11), Job satisfaction (8), Qualification (9) and Years in graphic design industry (24).

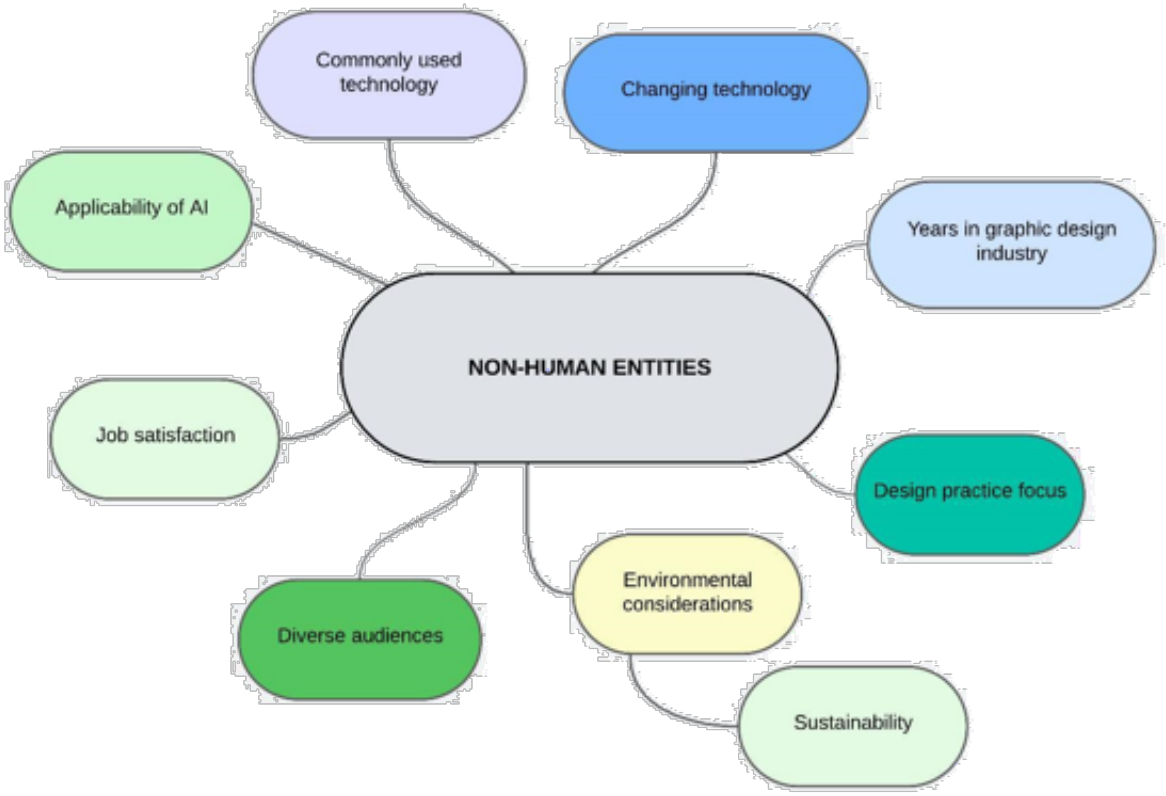


Figure 4.7. Diagram of emergent codes linked to non-human entities

The non-human entities category, depicted in Figure 4.7, seeks to clarify the intersection between posthumanism, *Ubuntu*, and graphic design practice in a South African design environment, as addressed by the second research question (RQ2). The analysis reveals that the effectiveness of the practices and the connections between posthuman practice and *Ubuntu* applications among the interviewed graphic designers were influenced by both their level of education and the prevailing culture in their industry.

When developing the thematic map for illustrating Figure 4.8 it was noted that the deductive categories of *Ethics* and *Social Justice* shared many overlapping and connected codes resulting in a combined map of the two concepts.

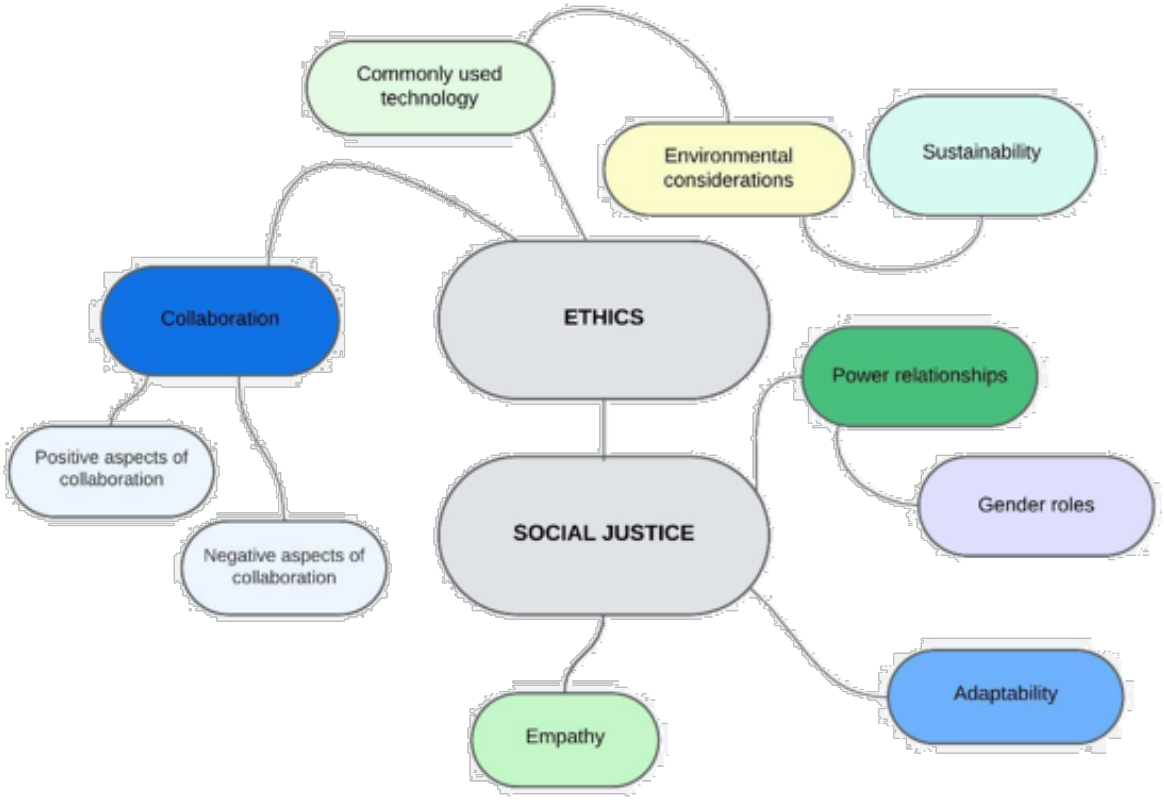


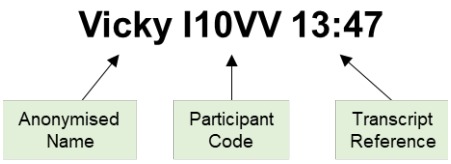
Figure 4.8. Diagram of combined codes linked to Ethics and Social

Combining the concepts of *Ethics* and *Social justice* also allowed for the collapsing of some of emergent codes and streamlining the process of analysis. All interviewees echoed Fry's (2010, p. 99) comments that "designers must critically engage with issues of sustainability", however only one (I13MV; Martha) named the practical steps taken in her practice to mitigate poor environmental considerations.

The final interpretations of the analysis were reached following the synthesis of the thematic maps and the hermeneutic spiral process.

4.2 Findings emergent from themes

The interview schedule is provided in Annexure 3. This section provides a depiction of the questions posed to the participants, along with a sample of their responses, followed by a subsequent discussion and summary. Responses provided by participants were anonymised as depicted earlier in Table 4.1. Additionally, segments of recorded and transcribed textual feedback included reference to the transcript documents as shown in the following example:



4.2.1 Embodiment - To determine familiarity with graphic design practice

Each interview question is presented in a block style and is thereafter accompanied by a random variety of four quotations selected from the interviews. These quotes are intended to assist the reader in contextualising the analysis. Every quotation is accompanied by a participant pseudonym identifier and a timestamp indicating where in the recording the quotation may be found. The comprehensive compilation of all quotations can be found in Annexure 2[23]. The included lengthier participant quotes illustrate the diversity of views provided by the participants when answering the question.

Question 1- What are your responsibilities as a graphic designer?

Table 4.10: Question 1- What are your responsibilities as a graphic designer?

Vicky I10VV 13:47	Musa I11MM 14:64	Conrad I12CM 15:71	Martha I13MV 16:58
To come up with a nice idea, make your customer happy, solve a problem.	You are the visual consciousness of the project.	To come up with visual solutions. that would follow a communication brief, so it's a solution driven deliverable.	Core responsibility for me is to either produce work or help a project really answer the brief

The initial inquiry focused on the duties and responsibilities of the participants within their professional practise. The four short quotes above illustrate the varied ways in which graphic designers describe their responsibilities and practice. The significance of identifying the responsibilities of graphic designers is in its ability to discern the specific specialty within the graphic design business in which the participants are engaged.

[23] It is imperative to acknowledge that not all the participants in this study are English first language speakers. The participants agreed to an interview conducted in English and it is the language of instruction and practice in most graphic design courses in South Africa.

For example, in a lengthier quote Rita described her role as a graphic designer in a publishing firm:

> *I do obviously design products, mostly typography with artwork that we purchase. And then I also do planning for the design that needs to happen inside our department. Handling all the requests of what needs are required and then giving it through to the designers, make sure it is happening. Because our process takes quite a long time. It's kind of a year to get a product out on the market. So, from the design, from the idea to design production, it's a year. We work according to those deadlines, all that. And then I also inspect all the products before they ship. So yeah, it's interesting to see what happens*. [Rita: I1RT 1:55].

The roles and responsibilities of graphic designers have changed due to technological advancements and rapid globalisation. Therefore, the skills-set required for graphic design practitioners is constantly changing and is impacted on by developments in technology or changing theoretical positions (Dziobczenski, Person & Meriläinen, 2018). While existing literature indicates a notable shift in the roles and responsibilities of graphic designers in recent years, the participants interviewed in this study described their professional roles using more conventional terminology. They emphasised the importance of satisfying clients, generating visual solutions, and delivering optimal outcomes to clients. For example, Musa's description of the work required of him as a former graphic designer, now Creative Director shows the scope of difference between the roles required of graphic designers:

> *So basically, it's more like I would say applied design. Or design that you first have to create a creative strategy for. So, before you design, you have to first solve the problem. What's the need that I'm trying to solve? So, if the client need is driving volume for, for instance beers cause they're introducing a new bottle, I have to find a solution for them. They come with a problem that you have to solve, you know. So obviously their need is driving volume. So, we have to come up with a campaign that solves that need. So, they would've had to design, accordingly, so we touch on print design, social media design etc. We'll get into film; we'll get into even designing experiences. Like anything that you can imagine that is a human touchpoint, we end up designing, we design that.* [Musa: I11MM 14:59].

The analysis of relevant literature and empirical findings indicates a discernible transformation in the duties and obligations of graphic designers. However, the individuals interviewed for this research, from a diverse range of professionals in the graphic design sector in South Africa all, employed traditional terminology when describing their professional activities. The significance of client satisfaction, the creation of visual solutions, and the delivery of optimal

outcomes to clients were underscored, with a particular emphasis on adhering to budgetary constraints and prioritising the principle of "client knows best". This observation implies that the academic assumptions around the roles of graphic designers have changed but little has changed in practice.

The literature reviewed in this study suggests that graphic designers may have the potential to undergo evolution and adaptation in response to shifting demands and expectations, potentially incorporating novel methodologies and technology into their professional practise. The empirical component of this research revealed a client-centred approach that places significant importance on ensuring client happiness and prioritising the principle that the client possesses superior knowledge regarding their own needs. This approach underscores the need for designers to cultivate robust client connections and provide customised solutions.

There are several potential barriers that may hinder progress or impede the achievement of desired outcomes. These barriers can arise from various sources as well as an inherent resistance to change on the part of the practitioners. The utilisation of conventional terminology by professionals may serve as an indication of a prevailing resistance to change within the industry, hence impeding the acceptance of novel ideas and practises. The discernible lack of substantial changes in practical applications, despite evolving academic assumptions, indicates the existence of a disparity between scholarly discourse and real-world implementation. This discrepancy may provide a significant obstacle to the advancement of knowledge and practise. The reference to budget limits by the design practitioners suggests that the presence of limited financial resources could potentially hinder the implementation of creative design ideas.

This study found a discernible shift in the duties and obligations of graphic designers, as evidenced by extant scholarly works and empirical data. Nevertheless, it is worth noting that experts within the graphic design business in South Africa continue to employ conventional terminology while discussing their craft during interviews. This observation implies that although there may exist theoretical expectations of change within academic circles, the practical implementation of such change is constrained and remains limited. The responses emphasise the ongoing significance of ensuring client happiness, generating visual solutions, and achieving favourable results within the confines of budgetary limitations and the guiding concept of prioritising the client's preferences. This suggests the existence of a possible conflict between theoretical progress and practical application within the domain of graphic design, presenting certain prospects for growth and enhancement.

Summarised response to Question 1

Analysis of interview responses to Question 1 given as *'What are your responsibilities as a graphic designer?'* indicate academic assumptions around the roles of graphic designers have changed but little has changed in practice.

Question 2 – What software and applications do you use in your daily practice?

Table 4.11: Question 2 – What software and applications do you use in your daily practice?

Therese I8TE 11:49	Carien I9CO 12:5	Vicky I10VV 13:59	Musa I11MM 14:8 37
My Mac and the internet … Adobe Illustrator, Photoshop and InDesign.	Adobe Suite. So, it's InDesign, Illustrator, Photoshop.	My iMac … Illustrator and Photoshop I use daily.	My brain... Adobe. The Master collection.

The ability to work as part of a multidisciplinary team and proficiency in design software are still seen as being particularly valuable and have been a feature of graphic design job advertisements for some time (Dziobczenski, Person & Meriläinen, 2018). As seen in the short quotes listed above, a substantial number of respondents underscored the importance of obtaining an advanced level of proficiency in the *Adobe Creative Cloud (CC)*™ suite of design software as an essential prerequisite in their routine activities at work. In most cases within their respective professional domains, the professionals who were interviewed affirmed their engagement in collaborative endeavours involving diverse disciplines, often encompassing the participation of illustrators, copywriters, and UX designers.

Both the literature and the findings of the empirical investigation substantiate the significance of acquiring a proficient level of skill in the *Adobe Creative Cloud (CC)*™ suite of design software as an essential prerequisite in the execution of routine professional graphic design tasks. While a few participants highlighted the use of additional design applications such as *Figma*®, *Canva*®, and *Corel Draw*®, the majority saw the *Adobe Creative Cloud (CC)*™ suite as an essential and indispensable tool for graphic design practise. Additionally, participants included basic, expected technical aspects such as access to a smartphone, computer and the internet as essential to the success of their practice. Kabelo's comment below illustrates this point:

> *So basically, one thing that's key, that I need wifi. I need my laptop. I think those are the main tools. I think there's the most essential tool that I need, cause if the power is off, I do not have access to the wifi, then I can't do anything. I can't be able*

> *to send emails, I can't send layouts for approval, and I can't do research on stuff that I need to do research on. Yeah, it's very frustrating.* [Musa: I11MM 14:59].

Furthermore, some participants mentioned the importance of social media such as *Pinterest*® and *Instagram*® as a tool for inspiration:

> *Tools would probably be the software that we use, the Adobe Suite, and apart from the pen and paper and all the meeting tools like Teams or Zoom. Besides Adobe? Probably like the Office tools. I don't know if that counts? Social media things for research, we're still working with Pinterest. I know that's not very cool anymore. Technology that helps me kind of make mood boards and put ideas together that I found quite useful.* [Martha: I14 MV 16:59].

The empirical component of the study further supports the existing literature's results that graphic design experts, where feasible within their professional sector, commonly collaborate with interdisciplinary teams. These teams often include of illustrators, copywriters, and UX designers. The results underscore the significance that graphic design practitioners place on attaining expertise in Adobe software, indicating the potential for individuals to boost their graphic design aptitude by learning these industry-standard tools. The inclusion of other design applications such as *Figma*®, *Canva*®, and *Corel Draw*® suggests that graphic designers could expand their toolset and accommodate diverse project needs.

Six respondents mentioned working with interdisciplinary teams when answering this question. These results emphasise the prevalent phenomenon of graphic designers engaging in interdisciplinary collaboration with other professionals such as illustrators, copywriters, and UX designers. This underscores the possibility for multidisciplinary collaboration and project diversity as supported by the literature. It should be noted that excessive dependence on the *Adobe Creative Cloud (CC)*™ suite may provide a hindrance when designers overly rely on a singular software ecosystem, hence potentially constraining their capacity to adapt to novel technologies or industry shifts. The financial implications associated with Adobe software might provide a significant obstacle for certain designers, especially those who are embarking on their professional journeys or operating within limited resource settings.

The acquisition of competency in software tools can provide a challenge for certain individuals, particularly those who are inexperienced in the subject or have limited access to training resources. In summary, the results highlight the need of possessing a high degree of proficiency in the *Adobe Creative Cloud (CC)*™ suite of tools as an essential prerequisite for regular graphic design assignments. Although a few respondents acknowledged the utilisation

of alternative design applications, the prevailing sentiment among participants was that the *Adobe Creative Cloud (CC)*™ suite is essential in the field of graphic design.

The empirical evidence further substantiates the notion that professionals in the field of graphic design frequently engage in collaborative endeavours with interdisciplinary teams, which may consist of individuals specialising in illustration, copywriting, and user experience design. This observation underscores the industry's significant emphasis on collaborative work. Thus, the results emphasise the importance of software proficiency and teamwork in the current graphic design industry. Additionally, they also highlight potential difficulties associated with reliance on software and the acquisition of skills.

Summarised response to Question 2

Key findings associated with responses to Question 2 posed as '*What software and applications do you use in your daily practice?'* suggest a high degree of proficiency in the *Adobe Creative Cloud (CC)*™ suite of tools is an essential prerequisite for regular graphic design assignments.

4.2.2 Human Interconnectedness – To determine familiarity with concepts associated with *Ubuntu*

Question 3 -Who are the audiences of your design outcomes?

Table 4.12: Question 3 -Who are the audiences of your design outcomes?

Vicky I10VV 13:94	Musa I11MM 14:89	Conrad I12CM 15:108	Martha I13MV 16:90
The people that ultimately see your product on the shelf. I mean because I design so much for the customer.	You deal with audiences all the time, so you have to be able to speak to as many audiences as we can.	It's more important almost than the brief that the client gives me because when a client briefs me or when client's talking to me about the challenge, I'm trying to understand what they actually want…	That's vital. That's one of the vital things that we do during the briefing meeting. Or the briefing stage is to really try and understand who the audience is.

Klaus Krippendorff (2006) has expanded on Papanek's view by suggesting that the key to all design activity is the meaning that an artefact, service or system offers its audience. Human-centred design aims to close the gap between designers and audiences, however considering posthumanism that should not be limited to (human) audiences alone. While most participants

acknowledged the significance of understanding the audience for their design outcomes, they predominantly depended on external entities such as the agency research team or the client to identify and define these audiences. Several participants asserted their familiarity with their audience, but upon closer examination, it became apparent that their knowledge was confined to general LSM (living standards measure)/SEM (socio-economic measure) data.

The importance of understanding the target audience for design outputs was recognised by most participants. However, it is worth noting that none of the participants identified any audiences beyond those that are human. Mandla mentions the designers' understanding of the social space that communities inhabit as very important to developing successful design products.

> *Understanding them is a very important thing for like the creative output, understanding what they like, how they behave, how they look, what they eat, how a lot of things are around them. What around that particular community or audience is very important to understand that your creative output it matches with them, you know, and it serves the purpose of whatever it is that they are doing, or they want done.* [Mandla: I7MM 10:67].

The participants primarily relied on other entities, such as the research team from the agency or the client, to identify and define these audiences. Several participants claimed to possess a comprehensive understanding of their target audience. However, upon closer scrutiny, it became evident that their expertise was limited to broad generalisations, primarily based on wide-ranging data. Lerato's observation below acknowledges the importance of knowing the audience however she admits that her understanding of the audience is limited to generalisations based on LSM data and not on any additional research:

> *You always need to know where your audience is. Yeah, you always need to know because I can't be designing for a person in Braamfontein whereby they are a lot of students and young people. I can't not be creating something that's vibrant, that's not catchy compared to when I'm creating something for people who are in Sandhurst, in Hyde Park. So, you need to know your audience very well. For the outcome that you're going to create, for the artwork that you're going to create, that has a very huge impact, I'd say.* [Lerato: I6LM 9:71].

This observation indicates that although South African graphic designers acknowledge the significance of understanding their target audience, they may allocate insufficient effort towards conducting thorough research on these consumers. This implies that graphic

designers allocate a restricted amount of time for research-oriented tasks, as there is a heightened focus on completing the design and receiving compensation.

The research findings of the empirical component indicate that many participants acknowledge the significance of understanding the target audience in relation to design outputs. This observation implies that there is a potential avenue for designers to enhance their proficiency in analysing their target audience. The identification and definition of target audiences are dependent on external entities such as research teams or clients, as perceived by the participants. This situation offers a chance for designers to actively participate in collaborative processes and assume a more proactive role in doing audience research.

Although certain individuals asserted that they possessed a full understanding of their target audience, the findings indicate that this comprehension may be founded on overarching generalisations. Designers can improve their research approaches and acquire a more comprehensive comprehension of their target market. The participants' failure to recognise audiences beyond humans suggests a potential limitation in their capacity to encompass a wider array of target demographics, such as non-human audiences like algorithms, bots, or AI systems.

The identification that certain designers may dedicate inadequate attention to audience research implies the presence of a hindrance related to the management of time and allocation of resources. The increased emphasis on finalising the design and obtaining remuneration may present an obstacle to allocating additional time and resources towards audience research.

The results underscore the value of understanding the target audience for design outputs, with many participants acknowledging this importance. Nevertheless, the text also discloses that none of the participants recognised audiences outside human beings, and their main reliance was on other entities for the purpose of defining these audiences. Several interviewees asserted that they possessed a full comprehension of their target audience; nevertheless, this comprehension frequently relied on overarching generalisations generated from data obtained from LSM (living standards measure)/SEM (socio-economic measure) data.

The results imply that there may be a lack of enough investment in performing comprehensive audience research by graphic designers in South Africa. The phenomenon may arise from a prioritisation of design completion and remuneration, which could result in a narrow perspective on the target audience and a need for improvement in audience analysis abilities.

Summarised response to Question 3

Question 3 asked '*Who are the audiences of your design outcomes?'.* Participants acknowledged the importance of understanding the audiences of their design outcomes however most relied on generalisations to determine this information. No participants acknowledged the possibility of non-human audiences.

Question 4 – Do you have the opportunity to co-design outcomes with your clients?

Table 4.13: Question 4 – Do you have the opportunity to co-design outcomes with your clients?

Danie PIDP 17:83	Rita I1RT 1:206	Kabelo I2KHM 2:25	Conrad I12CM 15:120
The client needs to be involved throughout the whole process.	No, they don't have it in input at all.	(I like) being a co-designer on projects that end up having a success.	It depends on project, but in my experience, it doesn't work if the skills are overlapping.

To solve visual challenges and create appropriate visual messages designers collaborate with art directors and others to develop ideas. The graphic designer, in conjunction with the art director or client, determines the objectives of the visual communication project according to the design process (Collins & Koechlin, 2012, p. 26). The spectrum of comments pertaining to co-design activities exhibited a wide variety, encompassing viewpoints that acknowledge the inherent occurrence of co-design in designers' everyday practise, as well as assertions from certain practitioners who acknowledge a lack of opportunities for engaging in co-design. Vicky's comment sheds a light on the unwillingness of co-design activities from the part of the client.

> *In all the years I've been designing what I like and what I want to do usually doesn't really matter. I do what I'm told, and I know that doesn't really sound very appealing to most graphic designers, but ultimately, we are just a tool for our customers. We are there to advise them about what would look best. But I mean, it doesn't help you come up with this grand design and all they wanted was a couple of black lines on a white table. So, I found that since I've been working in the industry your creativity isn't nearly as, I want to say useful as it was when you were studying. Because when you're studying and when you're doing something for yourself, you can really come up with these elaborate designs and there's no legal implication, that you need to consider. There's nobody else's opinion. So, I want to say that ultimately the person that has the most say about the design is the customer.* [Vicky: I10 VV 13:61].

Several participants recognised the significance of customer engagement during the design process, although they were unable to definitively verify its actual implementation in practise.

The remarks made by the participants regarding co-design activities validate the conclusions drawn from the literature research, which recognise the intrinsic presence of co-design and varying degrees of collaboration in the daily professional activities of designers. A minority of the practitioners surveyed recognised the limited availability of co-design opportunities within their practice. This observation was primarily made by participants employed in smaller businesses, where collaborative endeavours are less common and the demand for rapid design output may be higher. Several participants acknowledged the importance of customer engagement in the design process. However, they were unable to conclusively confirm its practical implementation. This finding suggests that South African graphic designers possess knowledge of the advantages of collaboration in principle but may not have had the chance to actively engage in it.

The statements provided by the participants serve to substantiate the conclusions derived from the literature research, indicating that co-design and cooperation are inherent components of designers' routine professional endeavours. This acknowledgment underscores the prospect of ongoing expansion and advancement in the realm of collaborative design methodologies. The findings of the study suggest that a considerable proportion of the participants recognised the significance of consumer engagement during the design phase. This observation highlights the possibility for designers to place emphasis on customer-centric methods in their professional endeavours.

While a subset of participants acknowledged the constrained availability of co-design chances, this observation also suggests the existence of prospects for the proliferation of collaborative practises, particularly within smaller enterprises. The findings suggest that design practitioners working in smaller organisations perceive a lack of co-design opportunities as a significant impediment. This limitation may be an obstacle to collaborative activities, either stemming from limitations in resources or an increased need for expedient design output.

Several participants recognised the significance of consumer interaction; nonetheless, they expressed uncertainty regarding its practical application. The presence of ambiguity has the potential to impede the successful incorporation of client participation within the design process. The findings of the study suggest that the comments made by the participants are consistent with the conclusions drawn from previous research in the literature. The authors confirm the existence of co-design and different levels of collaboration in the routine tasks performed by designers. Nevertheless, it is worth mentioning that a tiny proportion of

professionals, notably those working in smaller enterprises, acknowledged restricted co-design possibilities within their work. This could be attributed to a heightened focus on expeditious design deliverables.

Furthermore, it was observed that the participants recognised the significance of customer interaction; yet there existed a lack of clarity regarding its operational execution. This implies that graphic designers in South Africa may have theoretical understanding of the advantages of collaboration and client interaction but encounter practical obstacles when attempting to use these ideas in their professional practise.

Summarised response to Question 4

Question 4 explored the following item: '*Do you have the opportunity to co-design outcomes with your clients?'.* A considerable proportion of the participants recognised the significance of consumer engagement during the design phase however some stressed the lack of opportunity to do so.

Question 5 – How do you consider your outcomes' impact on the intended audience of your design?

Table 4.14: Question 5 – How do you consider your outcomes' impact on the intended audience of your design?

Lesego I4LM 7:64	Barend I5BA 8:86	Lerato I6LM 9:74	Mandla I7MM 10:67
"(Design) it's not just knowledge, but it has a huge impact".	"I don't really know what's going on there. I would get feedback".	"I like getting feedbacks just to know if my work is being recognised, if people are liking it or they're seeing it".	"Audience is very important to understand that your creative output is, it matches with them".

The incorporation of audience considerations is a fundamental aspect of the graphic design process. Throughout the process, the designer endeavours to convince the audience to embrace a belief that is exhibited or implied by the two-dimensional product (Tyler, 1992). The inclusion of feedback and critique is essential in the framework of any design plan (Dannels & Norris, 2008). Design review and feedback are essential components in achieving creative success across diverse fields in professional practise (Greenberg et al., 2015).

There appeared to be a noticeable disparity between the recognition of design practitioners regarding the significance of audiences in theory and the real factors that influenced the outputs of their design products in practise, which primarily revolved on financial

considerations. The short participant quotes above illustrate the disparity between the designers' opinions regarding the opportunity for soliciting feedback.

Several design practitioners have recognised the significance of soliciting audience feedback as a means of influencing the outcomes of forthcoming products. One practitioner recognised that the significance of design solutions is inconsequential, as the entirety of the design process is exclusively defined by the financial constraints imposed by the client. The comments from participant Alet indicate that feedback is dependent upon the type of project that she engages in and is not a standard expectation in her practice.

> *I think a lot of my, sort of more my own work has quite a big, kind of sociocultural slant, but of like sort of a social justice agenda. So, the kind of being a South African and being situated in the community that I am, and sort of feminist agendas and things are very important to me. I think community is very important in terms of my work. And then the other dimension is also things like the, the community of musicians and bands and things that I work with the communities of writers and artists. And then in terms of, probably less so, in terms of more commercial, traditionally graphic design gigs that I do, I would say, the audience is sort of more a commercial audience, so then the impact it's more important to the client than it is to me.* [Alet: I4AV 6:29].

The significance of audience consideration, critique, and feedback in the design process is supported by existing literature. Designers are well-acquainted with this practise, as it constitutes a key framework in the organisation of most design courses offered at institutions of higher education. The empirical research, however, indicates that in practise, audience consideration and feedback are primarily confined to interactions with the client. In addition to such exchanges, no further solicitation of audience feedback is pursued.

The findings of the empirical portion of the study indicate that designers possess a strong understanding of the importance of audience consideration, critique and feedback because of their formal training in design. This implies that designers could extend their professional activities beyond client engagements and proactively seek input from a wider range of individuals, potentially resulting in designs that are more focused on user needs. There exists a potential to incorporate formal feedback mechanisms into design projects, so enabling continuous communication with the target audience throughout the entirety of the design process. This has the potential to lead to design decisions that are better informed and improved.

The empirical research suggests that audience consideration and input are predominantly limited to engagements with the client. This constraint may impede designers in their efforts to obtain feedback from a wider range of individuals, possibly due to time limitations or a dearth of established feedback channels. The statement implies that designers place a high emphasis on customer interactions, thereby hindering their ability to shift their focus towards other audience segments. The potential cause of this phenomenon may be attributed to the expectations of clients and the limitations imposed by project limits.

The results emphasise the significance of considering the audience, engaging in critique, and seeking input during the design process. This topic has been extensively discussed in existing scholarly literature and is widely recognised in the field of design education. Nevertheless, empirical research indicates that designers predominantly deal with clients in audience-related contexts during their professional practise. In addition to client interactions, there is a scarcity of active efforts to obtain audience feedback. This suggests that there may be a discrepancy between the conceptual comprehension of the significance of audience involvement and the practical execution of integrating audience feedback in design endeavours. Designers have the potential for further advancement in their ability to engage a wider range of individuals in the design process and incorporate structured feedback methods to enhance the user-centric nature of their designs.

Summarised response to Question 5

Question 5 asked '*How do you consider your outcomes' impact on the intended audience of your design?'.* Key findings indicate that, in practice, considerations of the designers' audience are predominantly limited to the client's conception of their audience.

Question 6 – What challenges do you encounter as part of the co-design process?

Table 4.15: Question 6 – What challenges do you encounter as part of the co-design process?

Rita I1RT 1:173	Kabelo I2KHM 2:39	Alet I3AV 6:48	Lesego I4LM 7:69
"At the end of the day, they are not designing with the product in mind".	"Someone being undecided...just gets annoying".	"The designers came from quite privileged backgrounds and the people that they were designing for came from under-resourced backgrounds".	"People won't be in the same mood as I am, or they're not willing to do that design".

According to the AIGA Designer 2025 report contemporary designers must be able to "negotiate the concerns of various stakeholders within projects and also evaluate their work in terms of its potential social, cultural, technological, economic and environmental impact." Creative and social intelligence are the most important attributes of most design jobs today. Several skills are needed to achieve these outcomes, including empathy, creative problem-solving, and persuasive communication. Designers need to develop more integrated solutions that can solve wicked problems caused by natural and human-made changes, including threats and access to resources such as water, food, health and energy (Amatullo et al., 2019). As demonstrated by the short quotes listed above, designers have recognised that the indecisiveness and limited design expertise of clients pose significant barriers to the successful execution of co-design projects.

The findings of this study demonstrate the significance of problem-solving and the cultivation of innovative solutions within the field of design. The empirical component of this study reveals that designers frequently experience frustration due to the constraints imposed by their clients on the final consequences of their designs. The comment by Barend demonstrates the frustration designers experience when the scope of the project is unclear.

> *My biggest struggle currently is if we engage with the clients and beforehand the actual scope was not a hundred percent defined. What are we doing for Mr MVP? The, you know, your most viable product to markets, the first step is going into markets. If that hasn't been defined to the T then it's a problem, I'm struggling with that. [Barend:* I5BA 8:99].

Moreover, designers have expressed their observations regarding the challenges associated with persuading certain clients to adhere to both artistic and legal responsibilities while fulfilling a client's requirements. In general, the designers who were questioned expressed a lack of satisfaction when it came to operating within the prescribed limitations established by the client or engaging in collaborative efforts with the customer to develop design solutions. Moreover, some designers expressed similar frustrations with working on collaborative projects with their colleagues. In certain cases, co-design between colleagues works well and designers are not precious regarding who takes the credit for the work, as demonstrated by Lesego's comment below:

> *Yeah, sometimes we work on a design, maybe a few of my colleagues will assist me and from there we just have to present it as it is to the client. Doesn't matter if it's done by me or the other person, but that's how we cooperate.* [Lesego: I4LM 7:67]

The literature review underscores the importance of problem-solving and fostering innovative solutions within the field of design. The empirical evidence indicates that designers have the potential to enhance their problem-solving abilities to effectively negotiate limits imposed by clients. Furthermore, it is possible for designers to prioritise the task of informing clients about the advantages of upholding aesthetic and legal obligations while simultaneously fulfilling their needs. This has the potential to foster increased collaboration and enhance the overall satisfaction of client-designer partnerships.

Designers could engage in collaborative endeavours with clients to cultivate design solutions. This could entail increased client involvement and interaction throughout the design process, potentially resulting in more innovative and client-centric products. With regards to obstacles, designers often encounter feelings of irritation because of limits imposed by clients on the ultimate design outcomes. The presence of these limits has the potential to impede creative freedom and hinder creativity, so serving as an obstacle to completely actualising one's creative capabilities.

The findings highlight the difficulties encountered in convincing specific clientele to comply with both aesthetic and legal obligations. The presence of resistance from clients may provide a significant obstacle in the pursuit of design solutions that successfully adhere to both artistic and legal criteria. Designers have conveyed a sense of dissatisfaction when working within constraints imposed by clients or participating in collaborative endeavours that they perceive as unsatisfactory. The presence of dissatisfaction has the potential to impede the progress of collaborative design processes, hence hindering their effectiveness.

The empirical study provides support for the importance of problem-solving and inventive solutions within the domain of design, as demonstrated by the findings of the literature review. Nevertheless, it is evident that designers frequently encounter feelings of frustration because of the limitations imposed by clients on the ultimate design deliverables. Designers encounter difficulties in effectively convincing certain clients to strike a harmonious equilibrium between artistic expression and legal obligations, all the while fulfilling client demands.

In general, the designers who were interviewed conveyed a sense of dissatisfaction when faced with constraints imposed by clients or when involved in collaborative endeavours with customers to create design solutions. This implies that there are possible avenues for increasing client-designer relationships, improving problem-solving abilities, and investigating more collaborative ways to design.

Summarised response to Question 6

Key findings gleaned from responses to Question 6 posed as '*What challenges do you encounter as part of the co-design process?'* suggest limitations imposed by clients may cause irritation for designers' as it impedes their creative process.

4.2.3 Non-human entities – To determine familiarity with the concept of posthumanism in practice

Question 7 – How do you keep updated on new technology for your practice?

Table 4.16: Question 7 – How do you keep updated on new technology for your practice?

Mandla I7MM 10:51	Therese I8TE 11:62	Carien I9CO 12:23	Vicky I10VV 13:115
"I think (AI) the drastic change that has come into the, the industry".	"Our boss that we are working for now will be the one coming to us and say, Hey, have you seen this?"	"I don't think we are really technology driven as such. Because we don't do anything in-house".	"I've got a lot of technical knowledge, but when it comes to change, it's, it's not something I spend a lot of time doing".

According to Donna Haraway (1991), technology is changing the nature of labour and blurring the lines between human and non-human actors. She refers to this as a form of cyborg feminism, in which the conventional borders between human and machine are demolished to establish a new type of being. This might be understood in the context of graphic design practise as designers becoming cyborgs, who are no longer restricted by their physical talents but can instead rely on technology to augment their abilities. Graphic designers, however, have always relied on a variety of tools to create their work, from brushes and pens to computer software. It may be argued that the use of digital tools is simply the latest evolution in this ongoing process of tool development and adoption. As such, it is unlikely that designers are becoming cyborgs in the sense that they are becoming dependent on technology to the point where they are unable to function without it.

Practitioners in the field of design acknowledge that the advancement of design technology typically unfolds in an organic manner across several industries. According to the short participant comments above the relationship between designers and technology is quite ambiguous. It was apparent that a limited number of designers possessed authority over the technology employed in their professional endeavours, as the allocation of resources for technical advancements is overseen by alternative departments. Fewer than 50% of individuals have actively used artificial intelligence (AI) technologies that were not integrated

within pre-existing software as an integral component of their professional activities. Graphic designers have always depended on a diverse range of manual and, more recently, digital tools to support their professional endeavours. The observation was evident that just a small subset of individuals held control over the technology employed in their respective professional domains, while the distribution of resources for technological progress was managed by alternative departments. In general, graphic designers commonly employ well-established software, such as the *Adobe Creative Cloud (CC)*™ suite, to create their works, and they rarely venture into unfamiliar technological tools unless it is for personal experimentation. Fewer than half of persons have actively employed artificial intelligence (AI) technologies that were not integrated within pre-existing software as an intrinsic component of their professional endeavours. The comments from Conrad are illustrative of designers' ambivalence towards new and emerging technologies:

> *I ask everybody to always question if there is a better way of doing things. I don't shy away from trying to figure out new things as soon as I hear about it. For instance, a good example is Canva. When Canva came along, all the designers said, yeah, how stupid. Now everybody thinks they're a designer. But my message to the studio was, well, you better learn. You must know Canva better than anybody else because otherwise there is not differentiator because it's how you use it that matters, you know, so we keep, we try to keep track of what's happening out there. And then we test we don't jump, we test, so we'll test this, we'll test this. I know with websites there's a lot of change that's happened in how we prepare and design for websites. We are using Envision and then we are using Sketch, and now we are using whatever the Adobe thing is. Yeah. So, we try to sort of keep up with things from that perspective.* [Conrad: I12CM 15:87]

The empirical findings suggest that there is potential for graphic designers to expand their utilisation of emerging technologies, moving beyond their conventional tools and predominant dependence on Adobe software. This has the potential to result in enhanced levels of innovation and efficiency within design processes. The observation that fewer than 50% of the participants in the survey regularly use AI technologies indicates a potential avenue for designers to include AI more extensively into their work processes, which might potentially result in improved productivity and creativity. Enabling a greater number of designers to exert influence over the technological tools employed within their respective professional domains has the potential to cultivate a more dynamic and adaptable approach to design, hence promoting creativity and self-sufficiency.

Most participants noted that a limited group of individuals has authority over the technology used within their respective fields. This observation implies the existence of a barrier in terms of access and decision-making power, which could potentially hinder the widespread adoption of innovative technologies. The allocation of technological resources by different departments may be a hindrance to designers' capacity to explore and embrace novel technologies, as their power to influence resource allocation may be constrained. Designers who predominantly adhere to widely used software such as the *Adobe Creative Cloud (CC)*™ suite may demonstrate a propensity to be hesitant or resistant towards embracing change, thereby impeding the integration of novel technological solutions.

The empirical findings emphasise that graphic designers commonly use a wide array of both manual and digital tools to facilitate their professional endeavours. Nevertheless, it is worth noting that a significant observation indicated that a select group of individuals holds a disproportionate amount of power over technology.

Additionally, the allocation of money for the advancement of technology is overseen by different departments. Consequently, designers frequently rely on widely recognised software such as the *Adobe Creative Cloud (CC)*™ suite and never venture into novel technological tools, unless it is for personal exploration. Moreover, a minority of persons, specifically fewer than 50%, have actively use artificial intelligence (AI) technologies that are not integrated into pre-existing software as a fundamental element of their professional endeavours. This implies that there is a possibility for designers to adopt emerging technologies, including artificial intelligence (AI), and for organisations to grant designers greater autonomy in selecting the technology they employ. This would facilitate the advancement of creativity and flexibility within the realm of graphic design.

Summarised response to Question 7

Question 7 asked '*How do you keep updated on new technology for your practice?'*. Participants indicated loyalty to established graphic design software applications like the *Adobe Creative Cloud (CC)*™ suite. In terms of emergent technologies participants expressed a certain amount of ambivalence.

Question 8 – Please explain how technology has changed in your practice

Table 4.17: Question 8 – Please explain how technology has changed in your practice

Barend I5BA 8:32	Lerato I6LM 9:59	Mandla I7MM 10:50	Therese I8TE 11:64
"New technology being made every day which kind of eliminates a lot of people's day-to-day jobs".	"Changed to … doing digital things, your digital business card, digital letterheads".	"I think it's become more easily more accessible".	"Definitely … when we started working there, we all had these normal screens and Mac boxes. And today we all have only like iMacs".

While technology is undoubtedly changing the nature of design work, designers are also shaping its development and use, and the use of digital tools is simply the latest evolution in an ongoing process of tool adoption. Designers acknowledge the dynamic nature of technology, which undergoes constant change. Obviously the most experienced designers acknowledged the greatest developments in technology. This change can be characterised by either dramatic shifts that necessitate the acquisition of new skills, such as the obsolescence of software like Freehand or the emergence of social media, or more gradual yet persistent advancements, such as the continuous development of improved Mac technology. Two participant designers recognised that technology might be perceived solely as a tool and emphasised that effective design solutions will remain functional irrespective of the specific technological means employed.

The literature review highlights the dynamic nature of technology and emphasises the importance for designers to stay updated with the newest advancements in their respective domains. The findings from the empirical interviews indicate that designers possess knowledge of the most recent upgrades in their frequently used software, such as the *Adobe Creative Cloud (CC)*™ suite. However, they tend to exhibit limited exploration of alternative software or technologies for the purpose of design development. In addition to AI, some interviewees expressed their utilisation of project management tools such as *Asana*® and Excel, as well as communication platforms like *Teams*™ and *Zoom*™, as the second most often employed technologies inside their respective office environments.

Rita's comments below are quite typical of the general feelings towards technological change as expressed by the participant designers:

> *No, not so much. I think maybe if I had experience in different companies, it might be a different answer. But for me it has… it stayed quite the same. It's just obviously the programs that need updates. Obviously during Covid we had to get a bit more*

> *technology aware to know what you can do. Like we've never used Teams before Covid. We used to use Skype, before Teams for our USA meetings. But that was it. And so obviously in terms of that, in terms of working online, more up to date. [*Rita: I1RT 1:40].

The empirical aspect of the research corresponds with the literature review's focus on the dynamic nature of technology within the field of design. The participating designers show a common understanding of new enhancements in commonly used software applications, such as the *Adobe Creative Cloud (CC)*™ suite. Nevertheless, their tendency is to demonstrate a restricted inclination towards exploring other software or technologies for the purpose of design development.

Several designers reported utilising project management applications such as *Asana*®, as well as communication platforms like *Teams*™ and *Zoom*™, as the second most often used technologies inside their office settings. This implies that designers possess knowledge of technology improvements, but they may exhibit a limited inclination to thoroughly investigate or adopt alternative techniques beyond their familiar domain. Designers can expand their skill sets and foster cooperation by incorporating a wider array of tools and technology into their design workflows.

The findings indicate that designers may benefit from researching different software and technologies beyond their conventional tools, such as the *Adobe Creative Cloud (CC)*™ suite. This exploration has the potential to yield the identification of more efficient or novel solutions. Furthermore, the incorporation of a broader array of tools and technologies has the potential to enhance the skill sets of designers, hence increasing their adaptability and competitiveness within the industry.

The empirical evidence indicates that designers often demonstrate a limited inclination to explore alternate software or technologies, maybe attributable to their knowledge and preference for their current tools. The lack of extensive exploration may impede the adoption of more efficient or innovative solutions. The potential constraints on designers' capacity to investigate and embrace alternative tools may also arise from the limited availability of resources and assistance within their workplace contexts, hence impeding their ability to experiment with new technology. Furthermore, designers may encounter time-based limitations that restrict their capacity to investigate novel technologies, particularly when their primary emphasis is on the completion of project deliverables and adherence to deadlines.

Summarised response to Question 8

Question 8 asked for participant feedback in the following manner*: 'Please explain how technology has changed in your practice'.* Responses suggest participating designers keep abreast of new developments in terms of their most utilised software, the *Adobe Creative Cloud (CC)*™ suite. Additionally, since the Covid-19 pandemic they have embraced online communication platforms such as *Teams*™ and *Zoom*™. Although they are aware of technological improvements, they exhibit a limited inclination to thoroughly investigate or adopt alternative techniques beyond their familiar domain.

Question 9 – Who are the stakeholders of your design practice?

Table 4.18: Question 9 – Who are the stakeholders of your design practice?

Lesego I4LM 7:58	Carien I9CO 12:77	Musa I11MM14:23
"The audience … most of the important thing is to do something that the audience will like".	"Ultimately we work with the (University) community".	"The audience … most of the important thing is to do something that the audience will like".

Buchanan's notion of rhetoric in design artefacts is understood to be the study of how "products come to be vehicles of persuasion and argument about the desirable qualities of life" (1995: 26) and is all-embracing – this notion includes all stakeholders in the design process of creating artefacts and services for a "human-made world" (2001: 189) and considers the technology required for the creation of those artefacts.

A significant proportion of the participants refrained from responding to the query regarding stakeholders. There seems to be a degree of ambiguity and a dearth of consensus on the identification of stakeholders in the design process, specifically in relation to whether clients/audiences or other designers should be included. Carien, a graphic designer for the Corporate Communications office at a University explained:

> *Ultimately, we work with the community. I think [the University] is not an entity on its own. We serve the community. And if, if we didn't have a community, [the University] would not exist. So, there's outcomes that are relevant to the community. It's really important, yes.* [Carien: I9CO 12:77]

While existing literature emphasises the significance of involving all stakeholders in the design process (Buchanan, 1998; Akama, 2009), designers often appear to maintain a certain distance from these stakeholders in their actual practise. The organisation acknowledges the

significance of stakeholders but opts to concentrate their communication efforts primarily on clients or delegate stakeholder engagement responsibilities to research teams situated within their offices. Musa, who works for a large advertising agency explains how this unfolds in his context:

> *You deal with audiences all the time, so you have to be able to speak to as many audiences as we can. So South Africa is one of those countries where you probably have about nine or 10 audiences. So having a good research team is also good…and also within that, the research sometimes might be done with somebody who doesn't know nuances of that particular group of people. So, you have to know what potential pitfalls you might fall into. Cause something might be true in some respect when it comes to that particular group of people. But the interpretation, when you send it out to the market, like how is it going to appear? Is it going to sound like a micro aggression when you say it like this? So those things that you have to consider.* [Musa: I11MM 14:89]

The findings indicate that South African graphic designers possess the capability to formulate methodologies aimed at actively engaging a broader spectrum of stakeholders inside the design process, including end-users, community members, and subject matter experts. This engagement has the potential to result in design solutions that prioritise the needs and preferences of users and are tailored to the specific context in which they will be used.

Designers could investigate various methods for enhancing communication with stakeholders, so ensuring that their viewpoints, requirements, and input are duly considered throughout the entirety of the design process. The implementation of this approach has the potential to facilitate collaboration among individuals and thus result in more favourable design outputs.

Further, the results show that designers frequently adopt a certain level of detachment from stakeholders in their professional activities. The observed phenomenon of distancing amongst stakeholders may be attributed to a deficiency in well-defined procedures for engaging with stakeholders or a prioritisation of communication that is centred upon clients.

The exclusive focus on clients in communication activities may suggest a limitation in engaging a wider range of stakeholders. The prominence of client priorities and expectations may overwhelm the perspectives and input of other stakeholders.

The assignment of stakeholder engagement duties to research teams within organisations could be a hindrance to direct interactions between designers and stakeholders, potentially constraining designers' access to a wide range of perspectives. The empirical aspect of the

study is in accordance with the existing literature's emphasis on the significance of including all stakeholders in the design process.

Nevertheless, it is noted that designers frequently maintain a certain level of detachment from stakeholders in their professional endeavours. The organisation recognises the importance of stakeholders; yet, their communication endeavours generally focus on clients, with stakeholder engagement obligations often delegated to research teams situated within their offices. This observation indicates a potential disparity between the theoretical focus placed on stakeholder involvement and the practical implementation thereof inside the organisation. Designers have the potential to devise ways that facilitate greater engagement of stakeholders and enhance communication to generate design solutions that are more inclusive and aligned with the specific environment.

Summarised response to Question 9

Question 9 asked '*Who are the stakeholders of your design practice?'.* The findings indicate that South African graphic designers maintain a level of detachment from engaging with an extensive range of stakeholders in their practice.

Question 10 – How do you feel about the proliferation of AI technology in design?

Table 4.19: Question 10 – How do you feel about the proliferation of AI technology in design?

Vicky I10VV 13:86	Musa I11MM 14:78	Conrad I12CM 15:91	Martha I13MV 16:73
"We haven't invested in that … but I prefer having the knowledge to physically be able to do the job".	"There's something fresh about seeing what AI can design if you feed it something quite fresh".	"We don't use AI to generate or help us come up with ideas yet. But I'm not against it. I think it's quite interesting".	"We've kind of used it but we haven't really delved in there".

It must be noted that the empirical component of this study took place within a month of the launch of ChatGPT and associated widespread popularity of AI (artificial intelligence) design software such as Dall-e and Dall-e 2. This is evident in many of the responses noted above, AI is something that graphic designers are aware of but only a few acknowledge engaging with it. Interestingly, none of the participating designers acknowledged the ubiquity of AI technology built into their design and illustration software.

The automation provided by AI may impact the employability of designers who have not fully mastered creative and social intelligence (Girling, 2022). In support of this view, when

discussing the democratisation of design processes, design theorist and author Tony Fry (2009) refers to the pluralisation of design activity. According to Fry, this process is driven by the availability of cheap design software which allows anyone to participate in design activity. Fry is critical of the processes of design being thus “trivialized” and “reduced to a mere style gallery” from which prospective clients can select their chosen solution (2009, p. 6).

While it is true that all participants acknowledged the development and rise in popularity of artificial intelligence technology, their responses to this technology varied. There are some who perceive the advancement of computers as a potential menace to their workplace security since they anticipate a future where computers will assume all tasks. Conversely, there are those who view computers as a supplementary instrument that can be harnessed to facilitate the creation of design solutions. Danie, for example, expressed enthusiasm for the assistance that AI provides in developing initial design concepts:

> *There's actually like a vast amount of programs at the moment that you can use for AI. But I think, again, it's like it’s getting original ideas in a sense. I like to get inspiration for a project, it's easy. Instead of going to Pinterest or whatever and get existing ideas and trying to pull a mood board together, you can now use your own content. Yeah. Like your own keywords to generate images and then work from there. So, I think it's a pretty cool tool.* [Danie: PIDP 17:97]

The participants did not exhibit a clear stance of either explicit criticism and rejection or welcoming of AI.

According to Fry (2009) and the consensus among practitioners in the field, the creation of specific software empowered by artificial intelligence has the potential to diminish the significance of professional designers' work, a phenomenon commonly referred to as "trivialization." The prevailing sentiment among professional designers, as revealed through interviews, is a lack of concern regarding these technological advancements. They express confidence in the enduring superiority of their acquired talents over any potential breakthroughs in AI technologies.

> *We haven't really used it; we haven't really delved in there. We've heard that it's that it is good for generating, say, like body copy and things for that, for websites where the client doesn't actually have the resources to do it and maybe a starting point. So, we've looked at that, but we haven't actually completed a project where we have used it. I have heard other designers suggest that it's very good for the more visual apps. For kind of putting concepts together. Or just for logo development, branding, just to get these say concepts and kind of get them to put*

> *it together. So, it's more of a brainstorming place to start for us at this stage, rather than using it for end product.* [Martha: I14 16:73]

The empirical component of the research examines the phenomenon of "trivialization" within the domain of design, proposing that some software powered by artificial intelligence has the potential to lessen the importance of the work carried out by professional designers. Nevertheless, based on interviews conducted with professional designers, it is evident that there is a pervasive feeling of confidence and a lack of apprehension about these technological breakthroughs.

Designers assert their conviction in the ongoing supremacy of their acquired skills in comparison to prospective advancements in AI technologies. This implies that although there are ongoing arguments over the influence of artificial intelligence (AI) on the field of design, a significant number of designers presently do not perceive it as a substantial threat. Designers have the potential to adopt artificial intelligence (AI) as a means of augmenting their work and to actively pursue ongoing education to remain flexible within a dynamic technological environment. Designers have the capacity to construct a perspective wherein they perceive artificial intelligence (AI) to augment their creative endeavours, rather than perceiving it as a source of apprehension or concern. Organisations could investigate methods of incorporating artificial intelligence (AI) into their operational processes with the aim of enhancing both efficiency and innovation.

Moreover, designers may opt to partake in ongoing education to be abreast of the most recent developments and improvements in artificial intelligence technologies. The implementation of a proactive approach can facilitate their ability to effectively adjust to industry changes. The current widespread sense of confidence exhibited by professional designers may give rise to a state of complacency, wherein they may underestimate the potential impact of artificial intelligence (AI) on their professional endeavours. The presence of complacency could potentially impede their capacity to effectively adjust to technological improvements. Notably, designers that exhibit resistance towards the integration of artificial intelligence (AI) into their workflows may encounter obstacles in their ability to fully embrace technology as a means of enhancing their work processes. The presence of resistance to change can potentially impede an individual's capacity to properly harness the capabilities of artificial intelligence.

The acquisition of new skills may be necessary for designers to effectively adapt to AI technology. The potential obstacle to achieving success may manifest in the form of the time-based and cognitive investment required to cultivate expertise in artificial intelligence (AI)-related technologies and methodologies.

Summarised response to Question 10

Question 10 asked '*How do you feel about the proliferation of AI technology in design?'*. At the time of the study most participating designers did not view AI as either a threat or a tool that could be used to supplement their professional practice.

4.2.4 Multiplicity –To determine functionality within context of graphic design practice in South Africa

Question 11 – Indicate your level of knowledge of graphic design practice in South Africa

Table 4.20: Question 11 – Indicate your level of knowledge of graphic design practice in South Africa.

Therese I8TE 11:85	Carien I9CO 12:60	Vicky I10VV 13:77	Musa I11MM 14:112
"I am aware of it. I'm not going out of my way".	"Design is everywhere. Whether it's interiors, it's part of culinary experience, it's part of fashion... you feed off it everywhere".	"You go in and Google…"	"You are exposed to that kind of information all the time. It's like one of those things where you have to constantly looking at something like graphic design". doesn't stop.

Bremner and Rodgers (2013, p. 6) cite the designer Ettore Sottsass who warned that "design has deep and durable ethical and political dimensions and requires knowledge and consideration of our relationship with each other and the world we are changing … while the effect of design can be short-lived, it can also last a very long time". All participants self-identified as possessing a high level of expertise pertaining to the current condition of design in South Africa. The prevailing viewpoint suggests that due to the ubiquitous nature of design, designers would possess a certain level of familiarity with design practise, even in the absence of deliberate pursuit. The literature review highlights the significance of graphic designers possessing comprehensive knowledge of design principles and their influence on the surrounding world. All participants in the study indicated that they have a significant level of competence regarding the present state of design in South Africa. The dominant perspective suggests that designers are likely to acquire a certain degree of acquaintance with design practise, even without intentional effort, given the pervasive nature of design as indicated by Lesego's response blow:

> *I'm very interested to know what other graphic designers design, to know what they do now. Like I said, being in this space now where I'm at, it I was like, okay, let me just see what it is all about. I'm very interested to know what other graphic designers are doing out there… I'm willing to learn more of what is happening for other graphic designers and then I have that knowledge or experience …* [Lesego: I4LM 7:70]

Based on the findings, it is advisable for designers to embrace a proactive stance towards ongoing learning and study to remain abreast of emerging advancements and trends in the field of design. This can assist individuals in improving their abilities and maintaining a competitive edge. The examination of nascent design trends and principles can provide designers with the potential to foster innovation and make valuable contributions to the dynamic field of design. The dissemination of information regarding new advances and best practises within the design community can be facilitated through collaborative learning and knowledge-sharing among designers. In South Africa annual design-focused conferences such as the Design Indaba provide such opportunities. Unfortunately, some participants view the high cost of admission to the Design Indaba as prohibitive:

> *We feel like there's a kind of a disconnect. I don't think we've really found our awards or conference, that feels like it speaks really to, specifically to what we do. But I would say like the Design Indaba … our world would probably be the one that we get the most use from or inspired by just because it is very much along the lines of how design can positively influence the world even though it's not that specifically related to graphic design. So, I would love to do more, but the cost is a big, big consideration for us especially if we are a small agency and I'm sure the same for you. Where the budgets are quite tight, so I would love to do more. But at the moment, not.* [Martha: I14 16:103].

The discovery that a small fraction of participants engaged in active investigation of new breakthroughs implies that the hindrances to designers remaining informed about industry advancements may stem from complacency or a dearth of motivation. Certain designers may depend on preexisting knowledge without actively pursuing future advancement. It is important to acknowledge that designers frequently operate within constrained timeframes and may face limitations in conducting research and pursuing personal development opportunities. The limitations imposed by time can impede individuals' capacity to actively participate in ongoing educational pursuits.

The prevailing viewpoint suggests that designers can acquire knowledge through being exposed to the ubiquitous nature of design, which may result in an excessive dependence on passive learning. The phenomenon has the potential to deter deliberate study endeavours and

proactive attempts to remain well-informed. The empirical findings are consistent with the literature review's focus on the importance of graphic designers having a thorough understanding of design principles and their impact on the surrounding environment. All participants expressed a noteworthy amount of familiarity with the current state of design in South Africa. Nevertheless, it is worth noting that a mere fraction of individuals engaged in active research pertaining to novel advancements or opportunities in the field such as awards and competitions.

Given the widespread presence of design, empirical evidence of this research indicates that designers perceive themselves to encounter instances of design in their everyday lives leading them to believe that they do not need to actively search for emerging examples of design. This advocates that designers, albeit possessing a foundational grasp of design, can further develop their expertise and abilities by ongoing education, investigation of current design trends, and collaborative information exchange within the design community. Potential developments may face obstacles such as complacency, time limits, and an excessive dependence on pervasive exposure.

Summarised response to Question 11

Question 11 asked participants to indicate their 'level of knowledge of graphic design practice in South Africa'. All participants expressed a noteworthy amount of familiarity with the current state of design in South Africa. Nevertheless, it is worth noting that a mere fraction of individuals engaged in active research pertaining to novel advancements or opportunities in the field such as awards and competitions.

Question 12 – What is your firm's policy on collaboration with designers outside of your firm?

Table 4.21: Question 12 – What is your firm's policy on collaboration with designers outside of your firm?

Kabelo I2KHM 3:11	Alet I3AV 6:57	Lesego I4LM 7:73	Barend I5BA 8:103
"We do collaborate with certain designers".	"Do quite a lot of collaboration".	"There's a policy that we cannot work with anyone outside the firm".	"I'm working closely with actual marketing teams".

Buchanan (1992) describes the amalgamation formed by the Four Orders of Design (communication: representation of words and images; construction: tangible products; strategic planning: systems thinking; systemic integration: collaboration and dialogue) and

designer abilities (inventing, judging, deciding and evaluating) as the historical basis for design thinking and practice which is continually developing through encounters with new problems. The graphic designer, in conjunction with the art director or client, determines the objectives of the visual communication project according to the design process (Collins & Koechlin, 2012, p. 26). Taking into consideration the objectives of the brief, the graphic designer must conceptualise the appropriate ideas that will reach the audience and influence them to take an intended action (Galkina, 2010). To achieve exceptional performance in the domain, designers' must engage in efficient collaboration with their counterparts from various disciplines (Imonlemen, 2023).

Only one participant designer admitted that their firm did not allow any collaboration with design professionals employed outside of the company. The great majority of designers admitted to at least some levels of collaboration with other design professionals.

The significance of cooperation is well recognised among participant designers, who understand its value in working with clients and fellow practitioners. The establishment of collaboration among designers is crucial for the attainment of a successful design process. To achieve exceptional performance in the domain, designers must demonstrate proficient collaboration skills with their counterparts from many disciplines. As an example, Rita, who mostly engages in packaging and product design admitted to collaborating with a firm on brand development:

> *So, we don't collaborate with [outside firms] on our product designs. But we do have a company in Jo'burg that we use for our branding for our brand development. So, basically, they revamp the whole [of our] books brand.* [Rita: I1RT 1:172]

On the other hand, Alet described collaborating with other designers on larger projects however when it comes to her Illustration work, she works on her own:

> *I feel like I'm quite connected with the new generation and then sort of the established industry, but I think that's still, that's not entirely the, yeah, the whole picture. But so mostly for my own practice, I just do my own thing.* [Alet: I13AV 6:55].

The literature extensively examines the historical underpinnings of design thinking and practise, with a particular focus on the synthesis resulting from the integration of the Four Orders of Design and the capabilities of designers. This statement emphasises the significance of graphic designers in the identification of project goals, development of conceptual ideas, and influence on the desired response of the audience through visual communication endeavours. The importance of collaborating with colleagues from many

disciplines is recognised as a critical factor in attaining outstanding performance within the field of design. The literature emphasises the significance of designers cultivating proficient collaboration abilities to effectively engage with experts from various backgrounds.

Additionally, it implies that the maintenance of relevance and innovation within the profession necessitates a commitment to ongoing learning and adaptation. In general, the scholarly literature highlights the dynamic characteristics of design thinking and its application, which are influenced by the emergence of novel challenges and the importance of effective collaboration among designers and interdisciplinary groups.

The findings indicate that designers have the potential to cultivate and improve their collaborative abilities to effectively engage with professionals from diverse fields. This phenomenon has the potential to result in more efficacious design procedures and results.

Moreover, it is imperative for Graphic Designers to actively participate in ongoing education and demonstrate adaptability to remain abreast of emerging problem-solving techniques and design thinking methodologies. The experience of encountering novel challenges has the potential to foster innovation and facilitate the development of design thinking and practise.

Several participant designers expressed their inclination towards working individually or their limited exposure to interdisciplinary teamwork as reasons for their resistance towards collaboration. Overcoming the resistance encountered can pose a significant obstacle in attaining successful teamwork.

The successful implementation of collaboration often necessitates supplementary resources, including time and communication tools. Inadequate provision of these resources by the organisation or team might be a potential barrier to effective collaboration. The efficacy of collaborative efforts is contingent upon the presence of unambiguous communication. In a multi-cultural society such as South Africa, effective collaboration may be impeded by many communication obstacles, such as language barriers and misalignment of aims.

Summarised response to Question 12

Question 12 asked '*What is your firm's policy on collaboration with designers outside of your firm?'*. Only one participant indicated that their company forbade collaboration with designers employed outside of the firm. The majority of designers admitted to at least some levels of collaboration with other design professionals.

Question 13 – Do you collaborate with graphic and visual designers not employed by your firm?

Table 4.22: Question 13 – Do you collaborate with graphic and visual designers not employed by your firm?

Carien I9CO 12:55	Musa I11MM 14:113	Conrad I12 CM 15:126	Martha I13 MV 16:105
"It's very structured and formal. Everybody knows basically what their role is and you focus on what you need to do".	"People like illustrators... some specialised design skill that we don't have internally".	"Sometimes we'll get collaboratives to help us…sometimes other designers or other companies would ask us to collaborate with them".	"We do it on most projects. Just because we work at such a wide range of projects, so for websites for example, we might do two or three a year".

Bremner and Rodgers (2013, p. 7) have noted that the boundaries of the discrete fields of professional practice in contemporary design have become blurred and continue to "dissolve". New types of design practice have influenced contemporary professions in design which now rely on collaboration and cross/multi and interdisciplinarity as well as fluid patterns of employment that transcend traditional disciplinary boundaries.

The degree of collaboration is contingent upon the organisational framework of the designer's organisation. In larger agencies and studios, where specialised titles such as illustrator, photographer, and UX designer are more prevalent, collaboration tends to be more formal and structured. The incorporation of interdisciplinary cooperation within a team is crucial for the design process, as it facilitates the integration of diverse viewpoints, abilities, and experiences among designers. Through collaborative efforts, designers from diverse disciplines can synergistically integrate their unique expertise and insights, thereby fostering the development of groundbreaking and efficient solutions as described by Musa:

> *Yes. So, people like illustrators... some specialised design skills that we don't have internally. That's what we end up going forward, like for instance specialised 3D design. So, say for instance, somebody's a style that we like, who can also, you*

> *know, tap into that. Obviously, video editors as well. Sometimes, cause editing is a skill that we only have one editor, but the jobs are a lot, so we end up outsourcing them a lot. So, I've mentioned 3D design, I've mentioning illustration, editing, sometimes retouching as well. Photoshop, retouching. I can retouch, but I don't have the time. So, my time has to be used elsewhere, so we have to end up finding other talents to use for that as well.* [Musa: I11MV 14:113].

The literature emphasises the significance of interdisciplinary collaboration within the design process, as it enables the integration of multiple perspectives and specialised knowledge. Within the framework of a posthuman paradigm, prospective advancements encompass an emphasis on ethical considerations pertaining to posthuman design, augmented transdisciplinary cooperation, and the assimilation of artificial intelligence (AI) and emerging technologies. Nevertheless, there exist other obstacles that can impede the achievement of success, such as a reluctance to embrace change, ethical dilemmas, limitations in resources, and a dearth of proficiency in emerging domains of design. The successful integration of posthuman notions into design practise necessitates the overcoming of these barriers.

The existing body of literature indicates that designers could investigate and cultivate ethical frameworks and considerations within a posthuman paradigm, wherein the interplay between technology and human interaction is intricately entwined. This can encompass deliberations on the ethical considerations of artificial intelligence, the protection of data privacy, and the influence of design on entities that are not of human nature.

Moreover, within the framework of posthumanism, designers could augment multidisciplinary collaboration by incorporating specialists from disciplines such as ethics, ecology, and technology. This inclusive approach guarantees a comprehensive and enduring approach to design that considers the interconnectedness of various domains. Significantly, the concept of posthuman design encompasses the essential incorporation of artificial intelligence (AI), the Internet of Things (IoT), and other developing technologies. This integration aims to provide design solutions that possess the capability to adapt and effectively address the ever-changing requirements of both human beings and non-human entities.

Designers may exhibit resistance towards embracing posthuman concepts and engaging in interdisciplinary cooperation, primarily stemming from factors such as lack of familiarity, resistance to change, or a preference for conventional design methodologies. Furthermore, the incorporation of ethical considerations in posthuman design, specifically pertaining to matters like privacy, consent, and the treatment of non-human beings, may pose intricate obstacles that necessitate the attention and resolution of designers. The incorporation of

nascent technologies and the fostering of interdisciplinary cooperation may necessitate the acquisition of specialised knowledge and skills that may not be readily available to designers and teams, therefore impeding the attainment of innovative and pioneering solutions.

Summarised response to Question 13

Question 13 asked '*Do you collaborate with graphic and visual designers not employed by your firm?* Participating graphic designers recognised the value of interdisciplinary collaboration however reluctance to embrace change, ethical dilemmas, limitations in time and resources and a lack of skills were mentioned as impeding successful collaboration on a significant scale.

Question 14 – Do you participate in national design competitions?

Table 4.23: Question 14 – Do you participate in national design competitions?

Therese I8TE 11:89	Carien I9CO 12:15 69	Vicky I19VV 13:116 "Gold	Musa I11MM 14:114
"No, … but there's just no time".	"We used to a couple years ago…"	Pack … specifically was more from the customer point of view".	"Yeah. Every (year). I think it becomes a very specialised kind of competition as well".

The observed behaviours of cooperation and competition in online design contests bear resemblance to the notion of competition among firms. The inclusion of concept and design contests in a design company's innovation process contributes significant value, as it demonstrates individuals' willingness to share their ideas, propose unique solutions, offer valuable feedback, and provide insights for improvement (Hutter, Hautz, Dennhardt & Füller, 2013).

Designers within the confines of an advertising agency environment are the sole individuals who are known to regularly participate in design competitions. The remaining practitioners either saw contests as inconsequential to their professional development or expressed constraints in allocating time for participation in such events. According to existing literature, design contests have been found to be beneficial due to their ability to closely resemble the briefs and outcomes typically encountered in professional design practise. The sole participant who acknowledged engaging in design competitions on a regular basis was the individual employed by the prominent advertising company, as this is a customary practise within their profession. The remaining participants had abstained from engaging in design competitions since their time as students and expressed remorse for their current lack of availability and

time to partake in such endeavours. Vicky was the only other participant who was encouraged to enter national competitions however these were specialised events aimed at the packaging industry and the flexographic printing association:

> *That was the Gold Pack [competition] and it specifically was more from the customer point of view. We entered their product into the awards ceremony two years ago, we as a company, actually me and my fellow designer decided we want to enter in the Flexor Technical Association, South Africa Awards for 2021. Now this is literally flexographic technical achievements. It's got very little to do with the actual design… Now we entered four, no, five projects and we won awards in four.* [Vicky: I10VV 13:116].

The literature explores the advantages of design contests, due to their strong resemblance to the requirements and outcomes seen in professional design practise. Nevertheless, it is worth noting that among the participants, only one individual, who happens to be employed by a well-established advertising firm, consistently participates in design competitions. The individuals who are not currently engaged in design contests express their remorse for their limited availability and time constraints that prevent them from engaging in such initiatives.

Design practitioners may consider investigating potential avenues for enhancing their engagement in design competitions. This objective could be achieved by effectively managing one's time to accommodate these activities or actively searching for contests that are congruent with their vocational pursuits. Moreover, engagement in design competitions has the potential to strengthen one's skills and provide exposure to authentic design problems. Designers could investigate the potential impact of participating in these contests on their professional growth. The participants expressed remorse for their limited availability to engage in design competitions. The presence of time limitations might provide a substantial obstacle for designers who are engrossed in their job-related responsibilities.

It is worth mentioning that certain designers may lack awareness on relevant design competitions or possess incomplete understanding of the potential advantages, hence impeding their participation. Design professionals may have limitations in their ability to participate in design challenges due to a lack of essential resources, such as access to design software or adequate team assistance. Designers may place a higher emphasis on fulfilling client obligations and attending to other professional duties, so impeding their involvement in design competitions. In general, the literature and one participant recognise the advantages associated with design contests. However, the text emphasises the various obstacles that

designers commonly encounter, such as limited time availability, insufficient information about these contests, and the need to prioritise their professional obligations.

Possible future advancements may entail designers proactively pursuing chances for involvement and investigating how participation in design contests might enhance their abilities and professional growth.

Summarised response to Question 14

Key findings associated with responses to Question 14 given as '*Do you participate in national design competitions?'* suggest most graphic designers expressed a desire to participate in competitions but indicated that the presence of time limitations provides a substantial obstacle for designers who are engrossed in their job-related responsibilities.

4.2.5 Social Justice and Ethics –To determine intersections between graphic design practice and the concept of *Ubuntu*

Question 15 – As a South African designer do you consider the concept of Ubuntu as relevant to your practice?

Table 4.24: Question 15 – As a South African designer do you consider the concept of Ubuntu as relevant to your practice?

Kabelo I2 KHM 2:96	Alet I3AV 6:29	Lesego I4LM 7:14	Barend I5BA 8:88
"Ubuntu is one element that has always managed to keep us together."	"I would say quite important...my own work has quite a big, kind of sociocultural slant, but of like sort of a social justice agenda".	"(Ubuntu) is love among other people, whether you know the person or not".	"The whole community working together type of scenario, I won't say it's really a thing".

Many designers who participated in the study understood the notion of *Ubuntu*, yet only one participant designer is recognised for actively incorporating the principles of *Ubuntu* into their design methodology.

Ubuntu emphasises the interconnectedness and interdependence of individuals within a community. It recognises the relational nature of human existence and emphasises the importance of empathy, compassion, and communal values. Both concepts challenge the notion of power as centralised and hierarchical. In Braidotti's (2022) framework, power is not held by a single entity or institution but is dispersed throughout culture and society. Similarly,

Ubuntu rejects hierarchical power structures and instead promotes a more egalitarian understanding of power, where everyone within a community has a role and contributes to the collective well-being (Metz, 2019).

The existing body of research supports the notion that processes such as design thinking possess significant promise, particularly when applied within the African setting. This potential stems from its inherent ability to foster empathy, a feature that aligns with the African concept of *Ubuntu*. *Ubuntu* offers a valuable lens through which to analyse cooperation and collaborative, participatory processes from a complementary vantage point. *Ubuntu*, by its intrinsic qualities, strives to foster consensus. While most designer participants demonstrated familiarity with the notion of *Ubuntu*, just one designer actively integrates its principles into their design process. Conrad describes his understanding of *Ubuntu* and its link to design practice below:

> *Ubuntu is basically for me it's selflessness. And what makes it relevant is because our world's getting selfish and getting more self-serving… so whether it's for jobs or whether it's for brands, everything is about being self-serving. Yeah. Even, even being woke to a certain degree, self-serving…so Ubuntu for me is where it's almost a selfish outlook, and it happens to be always in your first port of call. So, it's your closest, which is your community. So, you need to be selfless in that community. And then the theory is that abundance lies behind that. We, our belief is that by being selfish we will be more abundant. But the theory as I understand it, is by being selfless I am being, I'm getting to more buttons. And it might have a different perception of what abundance might mean. Abundance for me might mean, I mean, selfish environment ownership …But in a selfish environment it might mean more happiness or contentment? Because others, joys and others gives me joy. So, in that environment, I think designers still play roles as facilitated curators. So, it would manifest in design because of the outcomes that you're trying to achieve. Because we are interpreters. So, we should, we should all designers should very be, be very high on empathy. Because a better empathy is what we need to do our job. And for environment, if I understand the question correctly, you can only be selfless by being empathetic.* [Conrad: I13CM 15:117].

The existing body of literature indicates that designers have the potential to investigate the wider implementation of *Ubuntu* principles inside their design methodologies. This may entail a more comprehensive understanding of *Ubuntu*, particularly within the context of South Africa, and its practical incorporation into design thinking approaches. Budgetary constraints can potentially restrict the allocation of resources for research, teaching, and the integration of *Ubuntu* ideals inside design processes. In addition, designers may have time-based

limitations that impede their capacity to comprehensively include Ubuntu concepts inside their design methodologies, particularly in projects characterised by strict deadlines.

The integration of *Ubuntu* into design thinking practises may be hindered by a lack of awareness or comprehension among certain designers. The adoption of *Ubuntu* principles may encounter obstacles inside organisations or design teams due to resistance to change. This resistance stems from the need to modify traditional design methods and workflows. In essence, the results underscore the potential efficacy of design thinking and the *Ubuntu* principles when implemented within the African context, with a particular emphasis on the cultivation of empathy and the facilitation of consensus-building.

Designers have a certain level of acquaintance with *Ubuntu*; nevertheless, the extent to which it is actively integrated into design processes is limited, possibly owing to financial and time-based limitations. Enhancing understanding of *Ubuntu*, fostering scholarly investigation and educational endeavours, and tackling limitations may facilitate the wider integration of these principles within the realm of design practise.

Summarised response to Question 15

Question 15 asked '*As a South African designer do you consider the concept of Ubuntu as relevant to your practice?'.* Findings indicate South African designers are mostly familiar with the concept of Ubuntu however most do not consider it as a part of their practice.

Question 16 How important is the concept of community to your practice?

Table 4.25: Question 16 How important is the concept of community to your practice?

Rita I1RT 1:22	Alet I3AV 2:88	Lesego I4LM 6:77	Barend I5BA 7:15
"I also think in terms of design really you can come together and like even as designers, you can come together, work together to make something work for your market".	"I consider the client first, but now the client is also part of each community".	"I think community is very important in terms of my work".	"Our design doesn't select certain people. So, we design for everyone".

Through the application of a human-centred process, designers have the capacity to positively affect the lives of certain groups through a communal, participatory approach to developing design outcomes. In South Africa, *Ubuntu* may be seen as an "endogenous discourse" (Pieterse, 2006) and thus design practice underpinned by *Ubuntu* could aim at channelling

design's capacity toward ways of being and doing that are deeply attuned to local social and environmental concerns as advocated by anthropologist Arturo Escobar (Escobar, 2018).

All participant designers recognised the significance of community in South African design, although one expressed scepticism over its applicability to the majority of clientele. Some participants reflected that community was “very important” but did not indicate how it was considered in their practice. Many of the participating designers have recognised the need to accommodate South Africa's diverse cultures by considering additional languages and contextual factors in their design outputs.

According to existing research, it has been observed that designers often possess specific knowledge and extensive expertise within their professional domain, hence establishing a power asymmetry between themselves and their clients. The designer's expertise may grant them authority and sway in design-related choices, thus diminishing the client's participation and autonomy (Dziobczenski, Person, & Meriläinen, 2018). The integration of *Ubuntu* principles can potentially aid designers in cultivating awareness of their cultural biases and actively participating in inclusive design practises that consider diverse perspectives and question power imbalances. A significant portion of the designers who were questioned acknowledged the importance of incorporating extra languages and contextual variables into their design outputs to cater to the varied cultures present in South Africa. Some of the participating designers conflated the concept of community with civic engagement:

> *I won't say [community] really a thing. Within the company, well, as far as I understand, it's [not] really about community and stuff like that. We are not really intertwined with, you know the actual community and different aspects in different, backgrounds within a specific target audience. I'm interested about that audience and what we are offering that audience as a value proposition or as a product. And how does that affect all the way from your top tier? From the lower-class line, to the privileged, all the way to your financially stable individuals.* [Barend: I5BA 8:89].

The results explore the presence of power asymmetry between designers and their clients, which arises from the designers' possession of specialised knowledge and experience. The proposition suggests that the incorporation of *Ubuntu* principles has the potential to enhance designers' consciousness of their cultural predispositions and facilitate the adoption of inclusive design methodologies that encompass a wide range of views and question prevailing power dynamics. Several designers who were interviewed recognise the significance of integrating supplementary languages and contextual elements into their design outputs to accommodate the varied cultures present in South Africa.

Designers have the capacity to proactively cultivate cultural consciousness and inclusiveness through their design methodologies through the adoption of ideals such as *Ubuntu.* This may entail the pursuit of varied viewpoints, the interrogation of power differentials, and the contemplation of the cultural milieu within which their work is situated. Conrad explains how he considers community and diversity in his work:

> *The audience is diverse everywhere. I think we just have a different sense of diversity. So, if I did a lot of work in Indonesia and there's as much diversity, if not more there. Then yeah, it's just because everybody's from the same nationality and race, you are not, you're not, it's not apparent diversity… so when it looks at diversity, sometimes you're asking, is it diversity within my target audience?... is it finding my audience in a diverse environment? And looking at it almost from that side, the key thing is culture actually, diversity of culture and culture defines how different people behave, in different environments and what's important to them.* [Conrad: I13CM 15:112].

Designers could investigate methods for integrating supplementary languages and contextual variables into their designs, so guaranteeing that their work is inclusive and pertinent to a wider array of cultural backgrounds. Resistance to change in established power relations can be observed among designers and clients, particularly in situations where designers have traditionally held a greater degree of influence.

The barrier of transitioning towards more inclusive design practises might be a challenge in overcoming resistance. The inclusion of supplementary languages and contextual factors in design outputs may necessitate the allocation of extra resources, such as time and translation services, potentially posing a hindrance. In essence, the results highlight the existing power imbalance between designers and clients, while also emphasising the potential of *Ubuntu* ideals in fostering cultural consciousness, inclusivity, and the incorporation of varied viewpoints. Furthermore, it stresses the significance of integrating supplementary languages and contextual factors into design outcomes within the context of South Africa. There are several obstacles that can impede success, such as a reluctance to embrace change, limitations in available resources, insufficient cultural understanding, and the challenge of balancing client expectations with the promotion of inclusive design principles.

Summarised response to Question 16

Question 16 asked '*How important is the concept of community to your practice?'.* All participant designers acknowledged the importance of community in South African design, however only one could describe how community is actively considered in their practice.

Question 17 - How important are Afrocentric modes of thinking to your practice?

Table 4.26: Question 17 - How important are Afrocentric modes of thinking to your practice?

Danie PIDP 18:58	Lesego I4LM 7:66	Kabelo I2KHM 4:18	Alet I3AV 6:13
"Stay true to African design and trying to incorporate all those cultures and diversity that we have".	"We're trying to tell a story about the unity that we have as Africans".	"Most of my work is revolves around my African aesthetics".	"The aims of commerce and marketing and sales is not entirely doesn't sit quite neatly within the paradigm Ubuntu".

Some of the study participants found it easy to incorporate an Afrocentric perspective into their design work as their work is specifically aimed at an international market that expects an African perspective from a South African design firm. The participants who are self-employed also expressed an ease in expressing their culture and identity in their work. This perspective was not shared by those participants who are employed by larger firms, design studios and agencies, here the obligation to meet client expectations and budgetary requirements was key.

In the meanwhile, it is important to exercise caution towards businesses that demonstrate a lack of preparedness to adapt and embrace cultural diversity. The observed entities exhibit characteristics that align with imperialism and a lack of adherence to democratic principles (Blackwell, 2001).

In a similar vein to the notion of community, many participant designers demonstrated an awareness of African aesthetics, however few actively incorporated them into their design outputs. Certain terms such as "kitsch" and "old-fashioned" have been employed to characterise Afrocentric design. One designer acknowledged that the final design result is contingent upon the client's vision and their desired outcome for the design project. In a manner consistent with their position on engaging with the community, participant designers exhibited a level of consciousness regarding African aesthetics. A participating designer acknowledged that the ultimate outcome of a design project is dependent on the client's vision and their desired objectives:

> *The people that I've been working with, it's people from outside of South Africa… most of the time from Spain and Portugal. So, when we give them the design, with the African design pattern and patterning, we're trying to tell them the story and the unity behind us Africans. So, we're trying to tell a story about who we are and how we do things this side.* [Lesego: I4LM 7:66]

Existing literature indicates that designers have the potential to delve deeper into the incorporation of African aesthetics and historical narratives into their design practises. This attempt would result in a more diverse and culturally encompassing design landscape, thereby enhancing its overall richness. Enhanced consciousness and educational efforts within the design community on the importance and worth of Afrocentric design have the potential to facilitate its broader incorporation and yield design outcomes that deviate from a strictly Western aesthetic framework. Kabelo, a self-employed freelancer agrees:

> *I think in most cases, when a person asks me what type of designer [I am], I make sure that within my description, I always include how most of my work revolves around my African aesthetics. And, at all times. I always try to incorporate as much of my heritage as I can through my culture in my design, so that people are able to distinguish that no, this person is from a specific place, thinks in a certain way and does things in a certain way. That's important.* [Kabelo: I2KHM 4:18]

The findings of the empirical study indicate that designers frequently encounter the necessity to harmonise their work with the vision and objectives of their clients. However, it is worth noting that these priorities may not consistently prioritise the integration of intricate historical narratives or Afrocentric aesthetics. The utilisation of descriptors such as "kitsch" and "old-fashioned" when categorising Afrocentric design has the potential to sustain prejudices or dissuade designers from wholeheartedly embracing these aesthetic principles. The incorporation of intricate historical stories or vast cultural components may necessitate further resources, such as additional time and materials for study, hence potentially becoming a hindrance.

The education and training provided to designers may not consistently prioritise the significance of cultural integration and historical narratives within the field of design, resulting in a deficiency of understanding and proficiency in this domain. In conclusion, the findings underscore the capacity of South African designers to integrate the intricate historical context of the aesthetics of Africa into their creative endeavours. Nevertheless, there are other obstacles that can impede success in the field, such as client preferences, perceived terminology, resource limits, and deficiencies in design education. Possible advancements encompass enhanced cultural assimilation and heightened consciousness and education among the design community regarding the significance of Afrocentric design.

Summarised response to Question 17

Key findings linked to responses to Question 17 voiced as '*How important are Afrocentric modes of thinking to your practice?'*, suggest that participant designers hold strong opinions regarding their (South)African identities. Most agree that the incorporation of what can be perceived as African aesthetics into a design outcome depends entirely on a client's personal preference.

4.2.6 Transcendence –To determine intersections between graphic design practice and the concept of posthumanism

Question 18 – How important is the idea of (designers') agency in your practice?

Table 4.27: Question 18 – How important is the idea of (designers') agency in your practice?

Therese I8TE 11:93	Carien I9CO 12:67	Vicky I10VV 13:99	Musa I11MM 14:117
It is important, but I think there must also be a good balance because you can't always just steer the graphic designer in a different direction.	I try and sort of take on projects where I've got a creative output where I'm in charge and I sort of get free reign about the output.	You are the designer is the software according to the customer. They give you the parameters and you execute the way they need it to.	I'm not precious about ideas anymore.

Buchanan (2001, p. 203) argues that rhetorical studies in design may shape a "new understanding of the role of agency in shaping technological development" and contribute to a novel dialectic based on values and principles that inform professional practice. The consensus among participant designers in this study is that while they appreciate receiving recognition for their contributions in the field of design, the significance of being acknowledged for their design authorship is not as paramount as it was during their early post-graduate years. According to Buchanan (2001), existing research indicates that designers possess the capacity to influence technological advancements within the design industry and initiate fresh dialogues regarding the fundamental principles that underpin their professional activities.

The prevailing viewpoint among designers who took part in the study indicates that they value recognition for their design contributions. However, they perceive that the importance of being recognised as the creator of their designs is not as crucial as it was in the initial stages of their careers. Therese acknowledges the critical role that designers' agency plays in the success of a design outcome:

> *It is important, but I think there must also be a good balance because you can't always just steer the graphic designer in a different direction. At the end of the day, you're going to kill the designer. You need to give them the playground to play around and steer it in a different direction. But they need to be balanced because you also need to be able to do what the client wants and still make a success out of it and still deliver a good design within the brief of your client, and then, you need to know when to push.* [Therese: I8TE 11:93].

The literature highlights the influential role that designers possess in shaping technology breakthroughs within the design sector and instigating novel discussions pertaining to core design concepts (Buchanan, 2001). The results of the empirical component stress that designers place significance on receiving acknowledgment for their design contributions. However, the significance of being acknowledged as the sole originator of their designs has lessened as their careers progress. Musa expresses ambivalence for acknowledgement of his design contribution:

> *I'm not precious about ideas anymore. Sometimes I was precious with the idea. Somebody does polish a scamp but you can tell that it's a bad idea. Sometimes it's about the idea ...is the idea good? does it work? Does it do the job that it intends to do? But I suppose what I'm saying is sometimes, obviously I do work with the creative director and the client's input as well. If my design is improved and made better, if the feedback makes the idea better, yes, I would, I would be proud of it. But if the feedback that I get makes the idea terrible, I do go ahead with it and finish it. But sometimes I don't put my name on it.* [Musa: I11 MM 14:117].

Designers have the capacity to actively engage in the shaping of technological breakthroughs by their willingness to adopt novel technology, involvement in research and development endeavours, and promotion of inventive design methodologies. However, this can only be the case when they accept recognition for their contributions to the design outcome. As indicated by the findings of this study, designers' voices may get lost if they are a part of a larger firm.

To integrate posthuman concepts in their practice, designers could prioritise the recognition and celebration of collaborative design endeavours, honouring the involvement of various team members, including non-human entities, in many projects. One of the primary challenges that designers may encounter is the expectations of clients, who tend to prioritise individual acknowledgment and ownership of design work. This emphasis on personal recognition may deter designers from adopting more collaborative techniques. On the other hand, the dominant culture within the design business, which may place a higher value on personal recognition

and ownership, can impede the transition towards more collaborative and dialogue-oriented methodologies.

Summarised response to Question 18

Question 18 asked '*How important is the idea of (designers') agency in your practice?'.* Although participating designers want acknowledgment for their contribution towards the success of design outcomes, client expectations and ownership of design work may not make this possible.

Question 19 - What is your opinion of the consequences of your design practice? *To people *to environment *to services and systems?

Table 4.28: Question 19 - What is your opinion of the consequences of your design practice? *To people *to environment *to services and systems?

Therese I8TE 11:67	Carien I9CO 12:69	Vicky I10VV 13:104	Musa I11MM 14:84
"(More in) the product development department".	"I don't think (management) see it as an important thing".	"90% of the concern doing packaging is expenses. And what will this do to my brand or for my brand rather than a concern for, how will people respond? Am I killing the dolphins?	"Within our own organisation we do recycle, we do set of things where we consider the environment internally".

Designers must consider the effect that their practice has on the environment through a considered selection of tools and materials to minimise the negative consequences on society, the environment and economy. As can be seen from the selection of participant quotes included above, participant designers are aware of sustainable practices but feel that enacting any "real" change may not be their purview.

The significance of sustainable design practise is widely acknowledged by the participant designers; nonetheless, most of them assert limited control or influence over the ultimate outputs of the design process. Merely a single individual participant recognised exerting a deliberate endeavour in their practise to mitigate environmental damage.

It is widely acknowledged within academic circles that sustainability holds significant importance in the realm of design (Akama, 2009; Fry, 2009). The word 'sustain-ability' instead of sustainability has been suggested to advocate for a more materially grounded objective and

an acknowledgment that design may serve as a means for a “radical change of direction” for humankind (Fry, 2009, p. 7).

The importance of sustainable design practise is widely recognised by participating designers. However, most of them express limited control or influence over the final outcomes of the design process. A solitary participant was identified as acknowledging the intentional effort made in their practise to mitigate environmental harm.

> *Normally, whenever we do a print job, we try to either print as close as possible to the person, to the place where it's going to be distributed. So, we don't courier things unnecessarily. If it's going to be used in Mozambique, use a Mozambique printer. We normally quote on a C certified paper. And where there is an option for inks that are not as harmful, we would quote on that. So that's kind of for the printing for longevity for the design. I think that that comes from not really following trends that closely. We would say, if this manual's going to be used for the next five to 10 years let's keep it as accessible and clean and that is a consideration. And we also try to steer people away from just using promotional material for the sake of it… such a waste of, of plastic and, and resources … those pull-out banners are the worst for me. I can't handle them … that's a very big consideration that we do for longevity of design. It's when it's for social media and things like that, that obviously doesn't impact so much. So, it would depend on the project again.* [Martha: I14 MV16:34].

One of the obstacles hindering the achievement of more efficient engagement in sustainable practises appears to be the designers' inclination to transfer responsibility to other departments or participants within their working environment.

The empirical component of the study examines a key obstacle encountered by designers, namely the demand from clients for recognition and exclusive ownership of design work. The prioritisation of personal recognition may serve as a deterrent for designers to embrace collaborative techniques. Moreover, the dominant culture within the design industry, which places importance on individual recognition and ownership, could impede the transition towards more collaborative and dialogue-driven approaches. To mitigate this issue, designers may opt to engage in client education initiatives aimed at fostering client comprehension of the advantages associated with collaborative techniques, as well as the significance of acknowledging the contributions made by a design team.

Additionally, it is imperative for design industry organisations and experts to actively promote a cultural transformation within the field. This transformation should prioritise the significance of collaboration and recognise that numerous design endeavours entail the involvement of

several contributors. Furthermore, designers and organisations could disseminate success narratives that emphasise the favourable results of joint endeavours, thereby demonstrating the advantages of this methodology to customers and the broader industry. One potential obstacle may arise from deeply entrenched client expectations, which can pose a significant challenge when attempting to modify these expectations, particularly if clients place a heavy emphasis on individual recognition.

It is worth noting that the prevailing culture within the design industry places a high emphasis on individual recognition and ownership, hence creating a potential barrier to change. Consequently, a deliberate and coordinated endeavour is necessary to foster a move towards a more collaborative mindset. Possible advancements encompass the dissemination of knowledge to clients, active support for the sector, and the endorsement of successful collaborative endeavours. The impediments to achieving success encompass client expectations that are deeply embedded, resistance stemming from the prevailing industry culture, and a hesitancy to deviate from established practises.

Summarised response to Question 19

Question 19 asked '*What is your opinion of the consequences of your design practice? *To people *to environment *to services and systems?'*. The findings underscore the difficulty designers face posed by client expectations and the prevailing industrial culture that places emphasis on individual recognition and proprietorship within the realm of design activities.

Question 20 – In your opinion does your design "do good"?

Table 4.29: Question 20 – In your opinion does your design "do good"?

Alet I3AV 5:87	Martha I13MMV 16:122
"The environment is quite central".	"The projects that we work on aren't selling you things. Mostly it's very much around education and helping people".

The notion of a designer's agency underscores the considerable potential for both favourable and adverse outcomes in design practice, particularly in the absence of careful consideration (Snaddon, 2020). This research benefits from the incorporation of a posthumanist viewpoint, which offers a philosophical and conceptual structure for understanding and analysing the complex dynamics of design practises across different professional contexts.

Two participant designers opted to respond to this inquiry and acknowledged the challenge of achieving "good" design within a commercial organisation. The concept of "good" design and "design for good" holds significant prominence in the existing body of literature (Rams, online). Nevertheless, designers who actively engage in practical work are often constrained by the limitations imposed by project requirements or the specific expectations of their clients regarding the desired design outcomes. Alet, a self-employed graphic designer who focuses on illustration states:

> *I would say, and, and a lot of my business models even before that, was based on sort of made to order principles. I wouldn't produce things until they're actually sold. So, you know, kind of being quiet, in terms of materialism, being very thrifty with resources, the use of resources and not producing things that don't, you know, aren't assigned to a home or will end up in a cupboard somewhere in storage.* [Alet: I3 AV 5:86].

The existing literature extensively examines the notion of "good" design and "design for good" as highly significant concepts. Nevertheless, the findings of the empirical component indicate that designers who actively participate in practical work frequently encounter limitations that are imposed by project specifications or client demands with regards to design deliverables. Participating designers acknowledge the significance of pushing for ethical design practises that prioritise the well-being of society and the environment, in line with the notion of "design for good." Mandla, for example, equates “design for good” with the idea of environmental consideration and sustainability:

> *[Sustainability] it’s removed. I don't know how to fully answer that one, but I think, it's removed … sustainability as in like for the environment, right? Is it that am I using less electricity or…no. If my paper's out, I just go to the store and buy everything.* [Mandla: I7 MM 10:55].

Nevertheless, the incorporation of these practises into the final design outcomes may, on occasion, prove impractical. Designers recognise that they may encounter difficulties when clients place greater importance on certain design objectives that are not in line with ethical or socially responsible design principles. Moreover, designers may encounter limitations imposed by project specifications, financial constraints, or time constraints, which may hinder their capacity to fully adopt ethical or socially responsible design principles.

In brief, the importance of "good" design and "design for good" is emphasised within the literature, while acknowledging the practical restrictions that designers frequently encounter because of project constraints and client demands. Possible advancements encompass the

assimilation of *Ubuntu* principles and the promotion of ethical and socially responsible design. Various obstacles can impede the achievement of success, such as the expectations set by clients, limitations imposed by project limits, and, in certain instances, a lack of awareness.

Summarised response to Question 20

Question 20 asked '*In your opinion does your design practice "do good"?'* Responses suggest most participants chose not to answer this question. Those who did answer acknowledged the limitations posed on design outcomes by client expectations and budgetary constraints.

4.3 Principal takeaways

The data suggests that South African designers are cautious in adopting new technologies and incorporating social factors into their profession when it comes to the intersections between graphic design practice, posthumanism, and *Ubuntu*. While many participants recognise a general understanding of both notions, there is a hesitancy to fully adopt new technology and innovative modes of thinking. This might be attributed to the dominant culture within the graphic design industry, which appears to prioritise customer happiness, satisfaction and budgetary limitations. Furthermore, it appears that in the South African setting, particularly in smaller organisations and studios, graphic designers tend to work independently and have limited chances to collaborate and co-design with other specialist designers, illustrators, clients, and audiences. This varies according to the experience level of the graphic designer and the scale of the organisation they are employed in. It is important to acknowledge that the specific focus of the business (such as print or manufacturing in the case of these participants) restricts the level of creative adaptability and independence in graphic design. In addition, graphic designers who have less than ten years of expertise are also less likely to actively pursue new technologies and approaches in their professional practice although they may "dabble" with it in their private capacity.

According to the literature both the South African government and corporations in South Africa acknowledge the significance of promoting high-quality design and nurturing the growth of robust and diversified design industries (Stassen, 2019). Based on the revised 2015 GDP statistics published by Statistics South Africa in 2021, a Cultural Satellite Account revealed that the Cultural and Creative Industries (CCIs) made a direct contribution of 2.97%, to South Africa's GDP in 2020. As evidenced by earlier mapping studies and worldwide literature, the creative economy has rapid expansion during periods of economic prosperity but is prone to decrease at a faster rate than other sectors during periods of economic slowdown. After experiencing a high year-on-year growth rate of 3.4% in 2017, the creative sector began to

exhibit symptoms of decelerating development even prior to the pandemic, with a year-on-year growth rate of -1.1% in 2019. In 2020, there was a substantial overall decline of -6.6% in the creative economy, compared to a -5.9% loss in the total economy (South African Cultural Observatory, 2023).

Considering the precariousness of the economy following COVID-19, job security and retention is crucial for graphic designers. South Africa is not a first-world economy and employment opportunities are scarce. Moreover, due to the wide range of abilities demanded from graphic designers, they may have challenges in finding employment in their specific area of expertise while changing professions (Dziobczenski, Person & Meriläinen, 2018). The perception among employers that graphic designers should have knowledge in several (related) design domains rather than being highly specialised in one area may reduce the perceived worth of the profession (Dziobczenski, Person & Meriläinen, 2018). However, it does create job opportunities in other sectors as evidenced by the participants employed in the estate agency and ceramic manufacturing industries. Further, out of the 14 participants, three were engaged in self-employment as freelancers, suggesting the presence of viable opportunities for self-employment in South Africa.

To enhance the accessibility of the findings derived from the data collection Tables 4.30 and 4.32 display the participants' replies concerning important aspects in posthuman engagement, as well as their self-reported knowledge of *Ubuntu* ideals compared to their actual involvement with those principles.

The shortfalls in posthuman interactions (Table 4.31) reveal that 50% of participants do not actively seek out new advancements in technology, 64% do not actively contemplate ethical design practices, and 78% do not consider design issues beyond those related to humans.

The data indicates that experienced design professionals working in design-focused organisations, such as advertising agencies, design studios, and branding firms, are more inclined to actively address posthuman concerns. This might be attributed to the higher level of experience and authority within the business, the availability of more financial resources, and increased opportunities for innovation and exploration. Inexperienced designers employed in organisations where graphic design held a lesser role within the overall corporate framework show a lower inclination to explore novel technologies, conduct in-depth client and audience research, or go into inventive approaches to design challenges.

The next chapter explores recommendations for modifications in graphic design education, the graphic design profession, and government policy to enhance the future integration of posthuman ideas into graphic design.

Table 4.30: Summary of participants responses regarding posthuman factors.

			Posthuman engagement		
Participant pseudonym	**Participant occupation**	**Participant experience in design industry**	**Focus on: New technology**	**Focus on: Ethical engagement**	**Focus on: Beyond anthropocentric considerations**
(DP) Danie	Freelance graphic designer	12 years	YES	YES	NO
(RT) Rita	Graphic designer for publishing company	10 years	NO	NO	NO
(KHM) Kabelo	Graphic designer at advertising company	2 years	NO	NO	NO
(AV) Alet	Freelance graphic designer and illustrator	13 years	YES	YES	NO
(LM) Lesego	Graphic designer at ceramic company	1 year	NO	NO	NO
(BA) Barend	Graphic and UX designer	4 years	YES	NO	NO
(LM) Lerato	Graphic designer working for an estate agency	2 years	NO	NO	NO

			Posthuman engagement		
Participant pseudonym	**Participant occupation**	**Participant experience in design industry**	**Focus on: New technology**	**Focus on: Ethical engagement**	**Focus on: Beyond anthropocentric considerations**
(MM) Mandla	Freelance graphic designer	5 years	YES	NO	NO
(TE) Therese	Graphic designer for publishing company	10 years	NO	NO	NO
(CO) Carien	Graphic designer at HE institution	20 years	NO	NO	NO
(VV) Vicky	Graphic designer at flexographic printing company	14 years	NO	NO	NO
(MM) Musa	Graphic designer/art director in advertising agency	11 years	YES	YES	NO
(CM) Conrad	Company director of strategic branding and marketing firm	20 years	YES	YES	NO
(MV) Martha	Owner of design agency	19 years	YES	YES	YES

When analysing the main findings obtained from the data collection, it is essential to consider the existing literature. Design theorist Tony Fry (2010) considers designers to be makers and world-builders and challenges them to actively transform their practice to confront ecological and political issues in society. By embracing the concepts of *Ubuntu* within the framework of South African design, designers may effectively facilitate societal and sustainable transformations, therefore positioning South African designers towards achieving posthuman objectives.

Several participants indicated having a familiarity with the notion of *Ubuntu* and possess a rudimentary understanding of its principles. By building upon Broodryk's (2005) identified positive attributes and incorporating the positive characteristics of *Ubuntu* as they pertain to graphic design practice, we may gain a better understanding of the significance of the participants' answers (Table 4.31) relating to the manifestation of *Ubuntu* in graphic design.

Table 4.31: Possible manifestations of Ubuntu in graphic design practice.

Brooderyk's (2005) positive attributes of Ubuntu		
***Ubuntu* quality**	***Ubuntu* meaning**	**Possible manifestation of *Ubuntu* in graphic design practice**
U - Universal	International, intercultural brotherhood	Inclusive representation: Designing visuals that authentically represent diverse communities and challenge stereotypes.
B - Behaviour	Humanitarian, considerate, sharing, respectful, compassionate	Accessible design: Ensuring all designs are accessible to people with disabilities, considering different needs and abilities.
U - United	Unity, solidarity, community, family	Collaborative design: Working with diverse stakeholders, including community members, to ensure designs are relevant and meet their needs.
N - Negotiation	Agreement, compromise, egalitarianism	Client collaboration: Engaging in open and respectful dialogue and negotiation with clients to understand their needs and perspectives, fostering collaboration and trust.
T - Tolerance	Patience, mediation	Diversity in the design team: Building a diverse design team that reflects the world and fosters a more inclusive creative environment.
U - Understanding	Understanding, empathy	Environmental consciousness: Choosing sustainable materials and production methods, reducing environmental footprint, and promoting eco-friendly design practices.

While *Ubuntu* may be elusive to define, Table 4.31 provides insight into how the favourable qualities of *Ubuntu* (according to Brooderyk, 2005) may be observed in the field of graphic design. This includes considerations of representation, accessible and collaborative design, client-design collaboration, diversity in the design team and considerations of environment and sustainability in design.

Table 4.32 illustrates the extent to which the participants incorporate the principles of *Ubuntu* in their design work.

Table 4.32: Summary of participant responses regarding factors related to Ubuntu

			Engagement with *Ubuntu*		
Participant pseudonym	**Participant occupation**	**Participant experience in design industry**	**Knowledge of *Ubuntu***	**Desire to include *Ubuntu* principles in practice**	**Incorporation of *Ubuntu* principles in practice**
(DP) Danie	Freelance graphic designer	12 years	YES (minimal)	NO	NO
(RT) Rita	Graphic designer for publishing company	10 years	YES (minimal)	NO	NO
(KHM) Kabelo	Graphic designer at advertising company	2 years	YES	YES	NO
(AV) Alet	Freelance graphic designer and illustrator	13 years	YES	YES	YES
(LM) Lesego	Graphic designer at ceramic company	1 year	YES	NO	NO
(BA) Barend	Graphic and UX designer	4 years	NO	NO	NO
(LM) Lerato	Graphic designer working for an estate agency	2 years	YES	NO	NO
(MM) Mandla	Freelance graphic designer	5 years	YES	YES	YES

			Engagement with *Ubuntu*		
Participant pseudonym	**Participant occupation**	**Participant experience in design industry**	**Knowledge of *Ubuntu***	**Desire to include *Ubuntu* principles in practice**	**Incorporation of *Ubuntu* principles in practice**
(TE) Therese	Graphic designer for publishing company	10 years	YES	NO	NO
(CO) Carien	Graphic designer at HE institution	20 years	NO	NO	NO
(VV) Vicky	Graphic designer at flexographic printing company	14 years	NO	NO	NO
(MM) Musa	Graphic designer/art director in advertising agency	11 years	YES	NO	NO
(CM) Conrad	Company director of strategic branding and marketing firm	20 years	YES	NO	NO
(MV) Martha	Owner of design agency	19 years	YES	YES	YES

Based on “Yes” and “No” responses highlighted in Table 4.32, the gathered data suggests that 79% of participants were aware of *Ubuntu*. However, 71% of participants showed no inclination or intention to incorporate the ideals of *Ubuntu* into their graphic design work. Additionally, only 21% of participants could describe instances where they intentionally incorporated *Ubuntu* into their graphic design practice.

Research on the integration of social elements into the field of design through civic education such as citizenship, as demonstrated by Costandius and Botes (2018) and Cassim (2013), reveals that these features are actively included in higher education institutions in South Africa. Additionally, the concept of *Ubuntu*, which prioritises communal advantages over personal interests, is well understood among South Africans. Moreover, several design sectors, such as architecture, appear to provide greater prospects for socially oriented projects within their professional scope (Combrinck, 2018). Professional graphic designers often refrain from participating in socially oriented projects due to limitations in time and financial resources. This begs the question of why education initiatives are not effectively transferring to the industry?

The disparities between the principles of social and community-oriented design education and the practicalities of professional practice in South Africa prompt significant inquiries over how to reconcile this divide. Some possible suggestions to bridge this divide may include closing the disparity between education and practical application by curricular integration of *Ubuntu*-based design projects as well as a focus on negotiation, alternative design solutions, and working with pro bono clients to gain experience in social impact design and assist in clearing possible limitations brought on by client and budgetary restrictions. In South Africa *Ubuntu* is a powerful tool for fostering a sense of national identity so promoting a national dialogue on the role of design in shaping a fair and inclusive society may empower designers to adopt *Ubuntu* and actively participate to nurturing positive transformation.

Chapter Five explores further recommendations for reforms in graphic design education, the graphic design profession, and government policy to enhance the future integration of *Ubuntu*-based ideals into graphic design practice.

4.4 Conclusion

This chapter explored the outcomes of an investigation of the methodologies employed by graphic designers in South Africa, approached via the lens of posthumanism. The chapter examined the reactions of graphic designers to inquiries designed to evaluate their level of involvement with the principles of posthumanism within their professional activities. The interrogations were derived from deductive concepts originating from Braidotti's (2013, 2017, 2022) theory of critical posthumanism and included the key themes of Embodiment; Human Interconnectedness; Non-human entities; Multiplicity; Social justice and Ethics and Transcendence.

The objective of this chapter was to analyse the practises of graphic designers in South Africa with respect to the following research questions:

- **RQ1**: What are the emerging connections between graphic design practice, posthumanism and Ubuntu in a South African design context?
- **RQ2**: How do these connections between graphic design, posthumanism and Ubuntu intersect in contemporary South African graphic design practice?

Based on the available data, it is evident that the duties and responsibilities of graphic designers in South Africa have not undergone significant changes, contrary to what the existing literature says. The existing body of literature indicates a significant change in the domain of roles and responsibilities pertaining to graphic designers. However, interviews

conducted with graphic designers within the South African graphic design sector reveal that they still adhere to conventional terminology and refer to "traditional" graphic design projects when describing their professional endeavours. Despite being aware of the significance of audiences, co-design, and participatory activities, the designers that were interviewed frequently neglect to incorporate these elements into their practise. They attribute this omission to constraints related to time and cost limitations.

Similarly, designers in South Africa face constraints when it comes to understanding their audience. This might be ascribed to the diverse demographics of South Africa, which may not necessarily align with the graphic design profession. Moreover, undertakings to engage wider audiences are typically confined to prominent advertising agencies and design studios that possess the requisite financial resources and specialised personnel to conduct audience research. The participants' inability to acknowledge audiences beyond human beings indicates a potential constraint in their ability to cater to a broader range of target demographics, including non-human audiences such as animals, algorithms or AI systems. The observation that some designers do not sufficiently prioritise audience research suggests the existence of a barrier associated with time management and resource allocation. The results imply that there may be a lack of investment in performing comprehensive audience research by graphic designers in South Africa. This phenomenon may arise from a prioritisation of client project completion within short deadlines and the rush to bill for work done, which could result in a narrow perspective on the target audience and a need for improvement in audience analysis abilities.

The participants encompassed a broad spectrum of South Africa's population, and their responses to inquiries regarding the influence of *Ubuntu* on their professional endeavours predominantly mirrored their cultural heritage. There is potential for the development of additional research initiatives and educational programmes aimed at fostering a deeper understanding and practical implementation of *Ubuntu* within design contexts. This has the capacity to facilitate a broader acceptance and implementation of empathetic and consensus-driven design methodologies that align with the principles of posthuman design practise.

While an awareness of *Ubuntu* and posthumanism permeates South African academic design discourse, a closer examination reveals a persistent disconnect between theoretical understanding and practical application. This dissonance manifests in several ways. Firstly, some designers grapple with the inherent complexities of these concepts, often misinterpreting *Ubuntu's* communal ethos as mere aesthetic appropriation or reducing posthumanism to a technocratic vision devoid of its ethical considerations. Secondly, a deficit

in cultural sensitivity leads to the overlooking of diverse viewpoints, particularly those of marginalised communities. This stems not only from limited exposure to alternative perspectives but also from the inherent power dynamics within the graphic design industry, where client expectations and legal restrictions can override ethical considerations and suppress inclusivity.

Furthermore, even amongst designers claiming familiarity with the concepts associated with *Ubuntu,* a tendency towards superficial application emerges. The concept is either relegated to tokenistic visual elements or deployed as a convenient buzzword lacking its profound weight in fostering interconnectedness and addressing inequalities. This superficiality underscores the need for deeper engagement with these concepts, moving beyond mere theoretical knowledge to grapple with their practical implications within the South African context.

Empowering designers to champion inclusive solutions necessitates a multifaceted approach. Firstly, design education must move beyond technical skills training to incorporate critical discussions on ethics, diverse perspectives, and the social impact of design choices. Secondly, collaborative partnerships with community leaders and diverse stakeholders can provide valuable insights and challenge siloed graphic design processes. Finally, the industry itself must prioritise inclusivity, granting designers the agency to advocate for ethical solutions without compromising project goals or alienating clients. This may involve flexible training programmes, fostering open dialogue about challenges, and promoting design practices that focus on community engagement and shared decision-making.

In terms of sustainability and environmental awareness, designers recognise that they encounter difficulties when clients place greater importance on certain design objectives that are not in line with ethical or socially responsible design principles. Moreover, designers encounter limitations imposed by project specifications, financial constraints, or time constraints, which may hinder their capacity to fully adopt ethical or socially responsible design principles.

In conclusion, the data suggests that the duties and responsibilities of graphic designers in South Africa have not significantly changed, despite existing literature indicating otherwise. Designers still adhere to traditional practices and often neglect to incorporate elements such as audience understanding and engagement. This may be due to constraints related to time, cost, and resources. There is a potential lack of investment in comprehensive audience research, which could be attributed to a prioritisation of design completion and remuneration. Additionally, designers face challenges in incorporating cultural ideals such as *Ubuntu* and addressing power inequalities. Furthermore, designers may encounter difficulties in adopting

ethical and socially responsible design principles due to client preferences and project limitations. Overall, there is a need for further research and educational programs to foster a deeper understanding and implementation of inclusive and sustainable design methodologies in South Africa.

The current investigation acknowledges its dependence on a restricted sample size and self-reported assertions from the individuals involved. Despite efforts to provide a diverse participant sample that encompasses all aspects of graphic design practise, it is important to recognise that generalising the findings may present challenges. Therefore, it is imperative to conduct a more extensive investigation to ascertain the extent to which these documented practises truly represent the behaviours of a broader range of graphic designers in South Africa.

CHAPTER FIVE: INTERPRETATIONS, RECOMMENDATIONS AND CONCLUSIONS

5.1 Introduction

This chapter functions as the conclusion segment of the thesis, wherein a thorough overview of the research activities and outcomes is provided, alongside an examination of the significance of the study. Furthermore, this chapter offers a comprehensive analysis of the methodology and content of the study, while also delineating the limitations of the research. Finally, Chapter Five offers an analysis of the study's contribution, encompassing its implications for practical applications as well as its potential for future research endeavours.

5.2 Summary of Chapters

Chapter One introduces the study on the interrelations between posthumanism and the first-hand encounters of graphic design practitioners in the context of South Africa. This study centres around the dynamic evolution of graphic design practise and explores the potential convergence of posthumanism and the African ideology of *Ubuntu* within the realm of graphic design. The objective of this study is to investigate the integration of posthumanism and *Ubuntu* ideals in the creative processes, visual communication techniques, and design outputs of current South African graphic designers.

Chapter One describes the changes in the professional practice of graphic designers that have taken place because of the evolution of technology and evolving approaches and considerations of clients and society. The chapter also briefly introduces the theory of critical posthumanism and describes how it relates to graphic design by offering a new perspective and framework for understanding and practicing design. Posthumanism challenges traditional notions of human-centred design and emphasises the interconnectedness of humans, technology, and the environment. It encourages designers to consider the ethical, social, and environmental implications of their work and to embrace collaborative and inclusive approaches. In the context of graphic design, posthumanism prompts designers to explore new ways of creating and communicating, incorporating emerging technologies, and engaging with diverse communities. It encourages a shift from a focus on individual expression to a more collective and participatory design process. In this way posthumanism reflects the notion of *Ubuntu*. By incorporating posthumanist principles, graphic design can become more responsive, sustainable, and socially responsible.

The study was grounded on the premise that there may be an emergent intersection between the principles of posthumanism and *Ubuntu* in the professional activities of graphic designers in South Africa. To investigate this proposition, a comprehensive examination of existing scholarly works was conducted. The study's primary aims were achieved by firstly conducting a comprehensive literature review (Chapter Two) and thereafter interviewing fourteen South African graphic design practitioners to gain insight into their professional practice (Chapter Three).

Chapter Two aimed to investigate the fundamental attributes of graphic design practise, posthumanism, and *Ubuntu*. The literature review addressed the limited previous research on the topics of posthumanism and graphic design practice by conducting a systematic review of the existing literature. A comprehensive search strategy using keywords related to graphic design, posthumanism, and *Ubuntu* was employed. The initial search focused on specific terms like "graphic design" and "posthumanism" and then was expanded to include alternate designations like "communication design" and "visual communication design."

The inclusion criteria for the publications were that they had to be written in English and align with the research objectives of the study. The assessment of the publications included evaluating their appropriateness to the study topic and the existence of relevant results pertaining to graphic and human-centred design, posthumanism and design, and *Ubuntu* and design. Articles that did not meet these criteria or did not align with the objectives of the study were excluded.

The search procedure continued until a point of saturation was achieved, meaning that no further pertinent items could be identified. The lack of prior research in the field highlighted the need for further investigation. A bibliographic snowball method was utilised in the search, which involved examining the reference lists of the identified studies and looking for more recent publications that mentioned the initial studies.

Chapter Two also examines the evolving characteristics of design practise, the advancements in socially oriented design, and their potential connections to the theoretical frameworks of posthumanism and *Ubuntu*. The literature review revealed several important concepts that were associated with both posthumanism and *Ubuntu*, namely the categories of: Embodiment, Human interconnectedness, Non-human entities, Multiplicity, Social justice and Ethics and lastly Transcendence. These concepts were used as the basis for the deductive categories and expanded themes that guided the development of the interview questions in the empirical phase of the project.

Chapter Three describes the research approach taken to the empirical component of the study conducted on graphic designers in South Africa, focusing on the connections between graphic design practice, posthumanism, and *Ubuntu*. The study employed a qualitative and hermeneutic phenomenological approach, using individual interviews with 14 graphic designers. A series of one-on-one interviews were conducted with graphic design professionals from South Africa throughout the latter part of 2022 and the early months of 2023.

The interviews were conducted to uncover the contemporary design practice of graphic designers and how they adapt to posthuman changes in their profession. The verbatim transcriptions of the interviews were analysed using *ATLAS.ti 23*™ software, and coding themes were developed based on an evaluation of critical posthumanism and *Ubuntu* as derived from the literature. The research methods aimed to explore the relationships between graphic design practice, posthumanism, and *Ubuntu* in the South African context. The Chapter also emphasised the importance of understanding the broader social, cultural, and economic context in which graphic design practice takes place.

Chapter Four describes the results of the study. Based on the available data, it was found that the duties and responsibilities of graphic designers in South Africa have not undergone significant changes, contrary to what the existing literature suggests (Scott, 2012; Sanders & Stappes, 2014; Forlano, 2017). The study examined the reactions of graphic designers to inquiries related to the principles of posthumanism, including themes such as embodiment, human interconnectedness, non-human entities, multiplicity, social justice, transcendence, and ethics.

The study also explores the relevance of the concept of *Ubuntu* to the practice of South African designers. Further, the study examined the participants' perspectives on the significance of *Ubuntu*, the relevance of community, and Afro-centric thinking. It was found that *Ubuntu's* influence on professional activities of graphic designers is largely influenced by the designer's cultural heritage. Further research and educational programs could help promote *Ubuntu's* practical implementation in design, promoting empathetic and consensus-driven methodologies. However, some designers lack cultural competency, making it challenging to incorporate *Ubuntu* ideals and accommodate diverse views. Balancing client expectations, power inequalities, and diversity is a complex task especially in a culturally diverse country such as South Africa.

Further, Chapter Four reveals that South African graphic designers face challenges in sustainability and environmental awareness when clients prioritise design objectives that do not align with ethical or socially responsible principles, and project specifications, financial constraints, or time constraints may hinder their ability to fully adopt these principles. Additionally, South African graphic designers frequently have challenges in understanding their target audience, since smaller firms

and design studios generally face difficulties in effectively connecting with broader segments of the population. This weakness in awareness spans audiences beyond human beings, including animals, machines, and artificial intelligence systems. Certain designers may not give priority to conducting audience research, which suggests that there may be obstacles related to time management and resource allocation. The absence of substantial investment in extensive audience research may be attributed to a prioritisation on design finalisation and compensation, resulting in a limited understanding of the target audience and a necessity for enhancing audience analysis capabilities.

5.3 Reflection and Discussion

5.3.1 Methodological reflection

The first section of this reflection focuses on a methodological reflection and considers the implications of the research choices made in this study.

In this study, a hermeneutic phenomenology was employed as a research methodology due to its ability to provide graphic designers with an optimal opportunity to articulate and express their experiences within the context of the study. According to Smith (2016), the perspective of phenomenology about the nature of experience is characterised by its intricate and varied nature. This research employs a hermeneutic phenomenological approach rooted in posthumanism to investigate the presence of posthumanist tendencies in the field of graphic design.

The study sample was restricted to individuals who were classified as professional graphic designers residing in South Africa. The study included a total of 14 professional graphic designers from South Africa who were selected to participate in individual interviews. The study's participants exhibited a wide range of diversity with respect to gender, age, ethnicity, years of professional experience, and socio-economic background. Creswell and Creswell (2018) suggest that a sample size ranging from 4 to 12 participants is adequate for homogeneous groups, while a sample size ranging from 12 to 30 participants is recommended for heterogenous populations. Table 5.1 below illustrates the research approach and its implications.

Table 5.1. The research approach and its' implications.

Research choice	Advantage for	Disadvantage or constraint,	Implications
A combination of a Hermeneutic phenomenological approach, an Interpretative phenomenological approach and a Transcendental phenomenological approach was used	Understanding written content by examining its inherent meaning and exploring the viewpoints of the lived experience of those involved in certain phenomena, all while adhering to an objective and impartial methodology.	It is difficult for the researcher to approach a subject from a 'blank slate' perspective (Neubauer et al., 2019). The process of following the hermeneutic spiral is time consuming.	Subjectivity and bias and complexity and interpretative challenges are the biggest implications for this type of research design. These may be mitigated through the maintenance of reflexivity in the research process and the preservation of a rigorous and systematic method of analysis. Adequate planning and allocation of resources could mitigate the time intensive nature of the process.
Snowball sampling method	Ease of participant selection as relies on existing connections and referrals.	Biased samples that do not represent the broader population.	Setting specific inclusion criteria to diversify the sample.

Although the snowball sampling procedure ensures ease of participant selection it could encourage bias. Setting very specific inclusion criteria could mitigate a bias and ensure that the sample is diverse. To address and minimise potential bias in the analysis the researcher could promote the practise of reflexivity throughout the entirety of the research endeavour, which is something that I adhered to in this study. It is important for researchers to engage in ongoing introspection on their personal biases and preconceived notions, duly recognising the influence these factors exert on the process of interpretation. It is recommended to partake in peer debriefing or employ numerous researchers to ensure the validation of interpretations (Miles & Huberman, 1994). To mitigate the time-intensive nature of a phenomenological approach the researcher can include adequate planning and allocation of resources are essential. Researchers should consider realistic timelines and allocate sufficient time for data collection, analysis, and reflection.

Alternative choices are illustrated in Table 5.2 below.

Table 5.2: Alternative choices for methodology.

Alternative choice	Why it was not done	Potential benefits
Grounded theory	Grounded theory is a very time-consuming process, with a noted complexity in analysis and potential for researcher bias. Additionally, grounded theory is challenging to theoretical subjectivity with a potential of overlooking existing literature.	Although using multiple researchers or peer debriefing to cross-validate interpretations can enhance objectivity in grounded theory research, existing time constraints prevented this approach from being viable in the case of this study.
Combination of snowball and random sampling or convenience and purposeful sampling are good alternatives.	Limited researcher knowledge of practicing designers from various backgrounds and employed in diverse design environments.	It allows researchers to reach those who are easiest to access

5.3.2 Substantive reflection

This section presents an interpretation of the results obtained in Chapter 4, examining them through the lens of both the empirical component and the existing literature. The structure of the discussion adheres to the thematic framework derived from critical posthumanism as outlined by Braidotti (2019).

This study was underpinned by the following research questions:

- **RQ1**: What are the emerging connections between graphic design practice, posthumanism and Ubuntu in a South African design context?
- **RQ2**: How do these connections between graphic design, posthumanism and Ubuntu intersect in contemporary South African graphic design practice?

The study aimed to explore and understand the emerging connections between graphic design practice, posthumanism, and *Ubuntu* within the context of South African design.

The results of the study consider the research questions, emergent deductive categories used in the data analysis, the codes based on these categories that underpinned the development

of the interview questions and finally, the emergent outcomes. This may be illustrated as the following visualisation (Figure 5.1).

The diagram in Figure 5.1 illustrates the primary hierarchy of the study, consisting of two interview questions. This is followed by the deductive categories of Transcendence, Multiplicity, Non-human creatures, Embodiment, Human interconnectivity, Social Justice, and Ethics. These categories gave rise to the primary codes that surfaced from the interview inquiries and were employed in the data analysis. The last layer represents the outcomes derived from the interview replies, as represented by the frequency of mentions of the resulting keywords where light blue denotes low mentions, while dark blue denotes high mentions. The categories, codes, and replies are connected and overlapped by lines that indicate important associations.

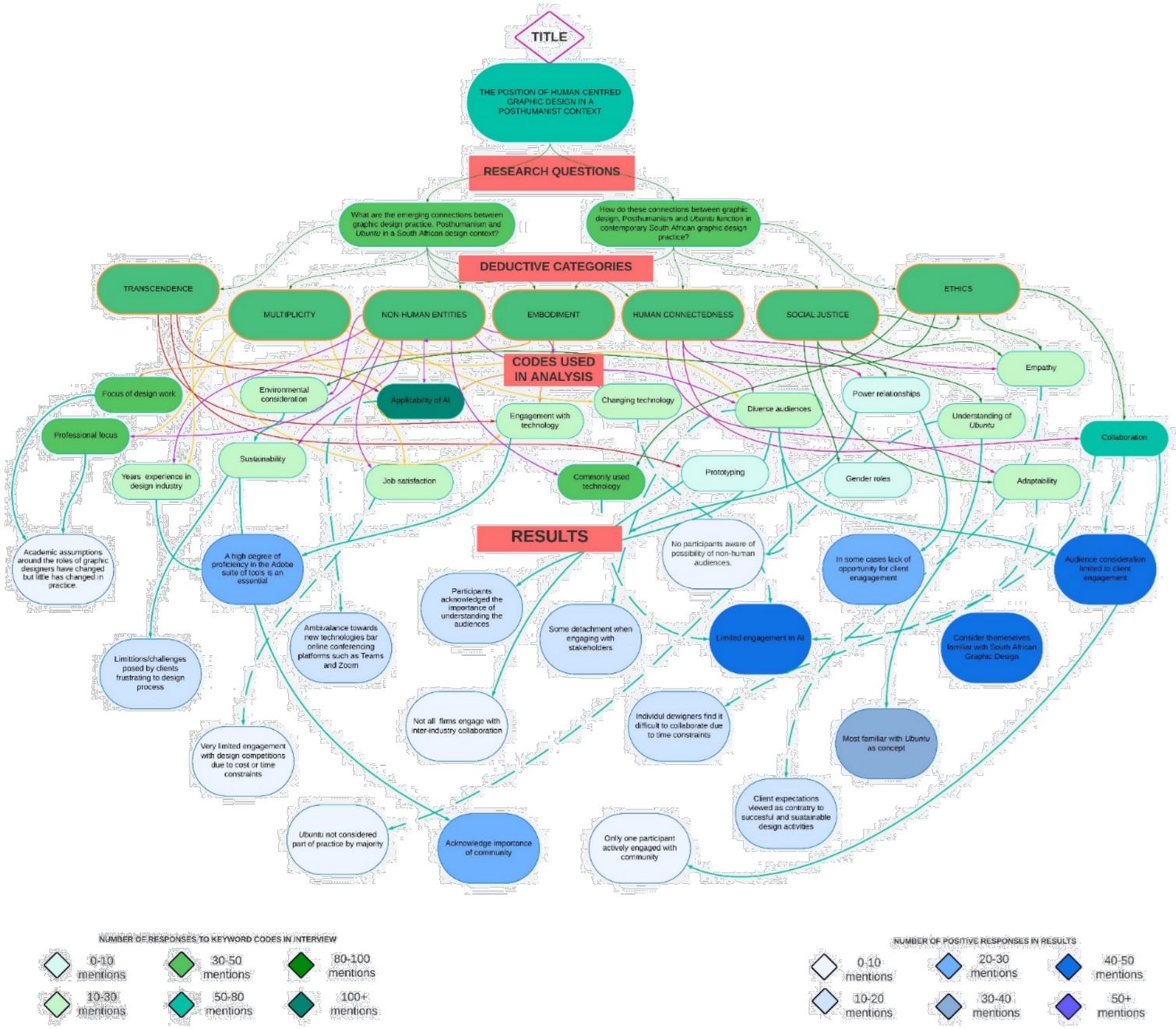


Figure 5.1 Final visualisation of the study incorporating the results

Figure 5.1 offers a visual representation of the entangled interconnections between graphic designers, posthumanism, and *Ubuntu* within the context of this research process, illustrating the dynamic interactions among these concepts. The presented entanglement visualisation illustrates the mutual influence and interdependence of these components and the resulting data which illustrates the engagement with posthuman and *Ubuntu* concepts by South African graphic designers.

The following sections demonstrate the dynamic interaction between South African graphic designers, posthumanism and *Ubuntu* by answering the research questions and describing the limitations as well as the contributions made by this study.

To address the primary research questions of this study, a reflective analysis is undertaken below, in connection with the sub questions that served as the basis for the investigation, as well as the themes identified in the empirical segment of the research.

Answering RQ1

In answering the first research question the findings of this study suggest that the relationship between posthumanism, *Ubuntu*, and South African graphic design practise is tangential and limited. Within academic circles, there exist theoretical expectations regarding the potential for change within the graphic design profession. However, the practical implementation of such change is both restricted and hindered. The observed disparity between the theoretical advancements in the field of graphic design and the persistent adoption of conventional vocabulary and practises by graphic designers in South Africa suggests a misalignment between the expected theoretical transformations and their actual application in practise.

Table 5.3 below indicates a substantive reflection of the first Research Question.

Table 5.3: Substantive reflection of Research Question.

RQ1: What are the emerging connections between graphic design practice, posthumanism and Ubuntu in a South African design context?			
Answers from the literature		**Data indicates**	**Implications**
1	The connections between posthumanism and design lie in the advancements in technology and the potential for computers to have computational power equivalent to human intelligence. Designers need to consider the effects of their practice on the world and on what it means to be human, as technology has the potential to empower humans but also make them obsolete in the workplace. The article suggests that designers should look beyond human intelligence and consider the implications of a post-human future (Faste, 2016).	South African graphic designers underscore the continued importance of prioritising client satisfaction, creating visual solutions, and attaining good design outcomes while adhering to budgetary constraints and the guiding principle of prioritising client preferences,	The implications of these connections are that design can become more sustainable, inclusive, and responsive to the changing world by considering posthuman principles however this may be limited by client expectations, budgetary and time constraints.
2	The article suggests posthumanism can inform new design practices that consider the environmental and socio-technical changes in the world (Forlano, 2017).	South African graphic designers continue to prioritise human-centric perspectives and have limited control over environmental and technological changes in their practice.	Posthuman practices are limited in graphic design however they may have the potential to gain greater traction in the field of sustainable design, leading to more widespread adoption of environmentally friendly and socially conscious design practices.

The literature suggests that graphic design is a creative profession that involves the development of visual elements, encompassing a range of specialised disciplines. The scope of this field spans several creative elements such as art direction, layout design, typography, multimedia integration, and other related components. Graphic designers integrate elements of meaning, identity, and communication into their creative creations, with a particular emphasis on branding (Barnard, 2013; Ambrose et al., 2019). The shifts in the approach to graphic design work and the contextual setting in which it transpires have instilled apprehension regarding the potential extinction of conventional design practise (Matthews et al., 2023). The utilisation of computers integrating artificial intelligence (AI) and machine

learning has facilitated the cost-effective and rapid design and generation of products that traditionally necessitate substantial human effort, accumulated expertise over an extended period, and substantial investments in specialised education. As algorithms continue to advance in intelligence and efficiency, acquiring the ability to perform an increasing range of practical tasks that have conventionally constituted the core responsibilities of graphic design, it is incumbent upon design educators and researchers to raise inquiries regarding the prospective role of humans in this domain (Kaiser, 2019; Matthews et al., 2023).

This study explored a noticeable change in the responsibilities and tasks of graphic designers, supported by existing academic literature and empirical evidence. However, it is important to acknowledge that based on the empirical evidence, professionals in the graphic design industry in South Africa still employ traditional vocabulary while discussing their profession in interviews. The data suggests that while there may be theoretical expectations for change within academic circles, the actual implementation of such change is circumscribed and remains restricted. The participant replies underscore the continued importance of prioritising client satisfaction, creating visual solutions, and attaining good design outcomes while adhering to budgetary constraints and the guiding principle of prioritising client preferences. This implies the potential for a conflict to arise between theoretical advancements and practical implementation in the field of graphic design, hence offering opportunities for development and improvement.

The design practitioners who were interviewed acknowledged the *Adobe Creative Cloud (CC)*™ suite of creative software as an essential tool for the achievement of their professional objectives. The mastery of software tools such as the *Adobe Creative Cloud (CC)*™ suite can be a significant obstacle for individuals, especially those who lack experience in the field or have restricted access to training materials and financial support. The findings underscore the necessity of maintaining a significant level of skill in the *Adobe Creative Cloud (CC)*™ suite of tools as a fundamental requirement for routine graphic design tasks. While several participants acknowledged the use of alternative design applications, the predominant viewpoint among respondents was that the *Adobe Creative Cloud (CC)*™ suite is indispensable in the realm of graphic design.

The available empirical information provides additional support for the idea that professionals working in the graphic design industry often participate in collaborative projects with interdisciplinary teams. These teams typically include persons who specialise in areas such as illustration, copywriting, and user experience design. This insight highlights the industry's notable focus on collaborative effort. The findings underscore the significance of software

proficiency and teamwork within the contemporary graphic design industry. Additionally, the results of this study also underscore the potential difficulties that could occur from reliance on specific software and the acquisition of essential skills.

The results derived from the empirical component of the study demonstrate how the field of graphic design in South Africa encompasses elements of traditional language, technology, collaborative efforts, and reliance on software. These characteristics can be linked to the posthuman theme of embodiment, so emphasising the intricate interaction between human and technological elements within the discipline of graphic design. The discrepancy between the theoretical developments in graphic design and the continued utilisation of traditional terminology and practises by graphic designers in South Africa indicates a lack of alignment between the anticipated theoretical changes and their practical implementation. The connection between this phenomenon and the posthuman theme of embodiment can be explained by emphasising how entrenched practises and conventional modes of thought can serve as embodied limitations, so restricting the complete actualisation of posthuman potentials within the discipline of graphic design.

The data indicates that South African graphic designers limit their acknowledgement of people in the graphic design process to their clients. Although many acknowledge the importance of audiences, they seldom have time to engage in audience-related research. In terms of the posthuman theme of human-interconnectedness and its link to the theory of *Ubuntu* the results of the study suggest that graphic designers predominantly prioritise the understanding of human audiences, while frequently overlooking the presence of non-human audiences. The absence of acknowledgment indicates a design approach that prioritises human-centric perspectives. Within the framework of *Ubuntu*, this constraint brings attention to a plausible deficiency in acknowledging the interdependence between human beings and the wider natural surroundings, encompassing entities outside the human realm. In *Ubuntu* there exists a fundamental interconnectedness and interdependence among all its constituent pieces. In South Africa, graphic designers depend on the utilisation of broad generalisations obtained from data, namely LSM/SEM metrics, to comprehend and analyse their intended audience. The utilisation of a data-driven approach suggests that designers may not entirely understand the intricate nuances associated with human connectivity and individuality as encouraged by *Ubuntu*.

Although the significance of human-centred and co-design activities is well recognised by designers, they frequently encounter pragmatic obstacles when attempting to implement these principles with optimal efficacy. This observation implies a discrepancy between theoretical

understanding and real-world application, which is consistent with the notion that acknowledging interconnections and promoting collaboration can present difficulties in practical contexts.

Designers may experience frustration when clients enforce constraints or when collaborative initiatives fail to attain their anticipated outcomes. The presence of resistance and discontentment might be perceived as obstacles that impede the achievement of effective collaboration, hence potentially obstructing the manifestation of *Ubuntu's* core values of harmony and cooperation. *Ubuntu* promotes the cultivation of mutual respect and comprehension within partnerships, necessitating the adoption of more collaborative methodologies by designers and clients.

Within the realm of design, the ideas of *Ubuntu* have the potential to materialise in posthuman design practise through several avenues. Posthuman design can include the principle of *Ubuntu* by recognising the intrinsic interconnectedness and interdependence among all entities. Designers are obligated to consider the broader ecological ramifications of their designs, which involve the well-being of non-human entities, including animals, plants, and the surrounding environment. It is crucial for individuals to recognise the inherent social and cultural implications associated with design choices, as they have the potential to exert a profound influence on human populations.

Furthermore, the practise of posthuman design can exemplify the notion of *Ubuntu* through the facilitation of collaboration and cooperation. It is imperative for designers to acknowledge their integration within a broader ecosystem encompassing fellow designers, stakeholders, and consumers. Collaborative efforts are necessary to develop designs that embody principles of sustainability, ethics, and inclusivity. The incorporation of the principle of *Ubuntu* into posthuman design practise can be observed through its promotion of empathy and compassion. Designers are required to acknowledge the requirements and views of all entities, encompassing those that are non-human. In addition, it is imperative for designers to consider the requirements and viewpoints of marginalised or underrepresented communities, while making concerted efforts to develop designs that foster social justice and equality.

The application of posthuman design can successfully embody the notion of *Ubuntu* by fostering a sense of community responsibility. Designers must recognise that their designs have ethical, social, and environmental implications that extend beyond their individual professional domain. The essential principles that regulate the relationship between posthumanism and *Ubuntu* have enabled the development of six broad themes that have been valuable in answering the research inquiries at hand.

Designers encounter difficulties in effectively navigating the delicate equilibrium between artistic creativity and legal obligations, all the while striving to fulfil the expectations of their clients. These issues underscore the intricate nature of human interactions and emphasise the necessity of reaching compromises and fostering understanding. The concept of achieving a harmonious balance between many elements and views holds significant importance in *Ubuntu*. These obstacles also indicate possible opportunities for improving client-designer relationships, problem-solving abilities, and embracing more collaborative techniques in alignment with the principles of *Ubuntu*.

Answering RQ2

In terms of the second research question the results indicate that South African graphic designers are knowledgeable of the concept of *Ubuntu,* have limited opportunity to engage with technological innovations and seldom consider non-human entities in their practice. Although the notion of *Ubuntu* is generally familiar to South African designers, the application of *Ubuntu* principles in graphic design is restricted due to client expectations, time restrictions, and financial limitations.

Table 5.4 below illustrates a substantive reflection of Research Question 2.

Table 5.4.: Substantive reflection of Research Question 2.

RQ2: How do these connections between graphic design, posthumanism and Ubuntu intersect in contemporary South African graphic design practice?			
Problems/Answers from the literature		**Data indicates**	**Implications**
1	These connections intersect by challenging designers to think beyond human intelligence and consider the implications of their practice on the world and on what it means to be human. Designers need to anticipate and guide rapid changes, as design is inherently more future-oriented than other fields. The article suggests that designers should explore speculative and hypothetical scenarios to evaluate possibilities and determine how best to proceed (Faste, 2016).	South African graphic designers are conservative in their explorations of new technologies.	The reliance on a particular set of tools highlights the potential for a broader approach in the education of graphic designers.
2	These connections between posthumanism and design intersect by challenging traditional human-centred design practices and incorporating a broader understanding of the relationships between humans and nonhumans. The article mentions shifts in design practices, such as moving from the user to their activities and network, from problem-solving to cultural invention, and from empathy to perspective-taking (Forlano, 2017).	South African graphic designers have limited knowledge of their audiences but nevertheless prioritise human audiences.	Designers must be taught to consider the broader ramifications of their design outcomes.

In terms of the posthuman theme of non-human entities the identification of a distinct subgroup of individuals exhibiting an uneven distribution of power over technology implies the existence of a hierarchical dynamic between humans and technology. This gap underscores the concept of posthumanism, which holds that non-human entities, specifically technology, can exert substantial influence over human activities and occupations such as graphic design. This statement highlights that technology is a significant factor in influencing and affecting the work of designers.

Graphic designers heavily depend on widely recognised software such as the *Adobe Creative Cloud (CC)*™ suite, which is a non-human entity. The reliance on tools signifies the incorporation of non-human elements within the design process. Additionally, this suggests that these tools possess a certain level of influence in moulding the work of designers, as they determine the technological options and opportunities available to designers.

The limited utilisation of artificial intelligence (AI) in the field of graphic design highlights the untapped potential for AI to assume a more prominent role in the industry. Additionally, it illustrates the designers' apprehension or unwillingness to adopt emerging technologies. The use of artificial intelligence (AI) into design processes signifies a collaborative endeavour between human agents and non-human entities, aimed at attaining innovative results.

In the contemporary context, it is imperative for graphic designers to adopt a pivotal position in actively participating in discussions related to artificial intelligence. Active engagement is crucial to ensure that AI tools and applications adhere to ethical design standards and other key parts of the design process. Designers have the capacity to contribute to the development of intuitive and user-friendly artificial intelligence interfaces that are both easily navigable and efficient in facilitating the completion of design tasks.

The proficiency of graphic designers in design principles, aesthetics, and quality evaluation and monitoring can contribute to the refinement of AI tools, hence enhancing the precision and usefulness of design outcomes generated by AI. Graphic design professionals must verify that any artificial intelligence (AI) design is in accordance with the brand identity, customer specifications, and ethical standards associated with the design profession. Professional graphic designers may help guarantee that any AI-generated design matches with brand identity, customer objectives and ethical norms. Designers have the potential to engage in collaborative efforts with software developers and data scientists to gain a comprehensive understanding of the capabilities and constraints associated with AI design tools (Gould, 2023).

The suggestion that designers may enhance their skill set by delving into alternative software and technologies embodies the concept of designers broadening their range of skills to encompass a wider array of non-human entities. This exploration serves as a means of actively involving and integrating various technology components into one's practise, hence fostering adaptability and building a culture of innovation. The constrained inclination of designers to study new applications or technologies can be ascribed to a range of factors, including restricted resources and time constraints. The restrictions refer to external variables that impact the interactions between designers and non-human entities, specifically technology instruments. These constraints play a significant role in influencing the practises and potential outcomes of designers.

The notion that designers maintain a certain level of separation from stakeholders underscores the significance of stakeholders as entities apart from human individuals inside the design process. The apparent discrepancy between the theoretical focus placed on stakeholder

involvement and its practical implementation implies that designers have the potential to improve their level of engagement with non-human stakeholders, such as the natural world, AI and technology and the visualisation and communication of information systems. This increased level of engagement can result in the creation of design solutions that are more inclusive and better tailored to the specific context in which they are utilised. This finding aligns with the conclusions drawn from the literature review and is further supported by the empirical study, which identified a discrepancy between the theoretical understanding of these concepts and their practical application in graphic design.

The premise that designers may augment their skills and knowledge through ongoing education, investigation of current design trends, and active engagement in knowledge dissemination within the design community embodies a diverse array of knowledge sources and learning opportunities. Designers possess the ability to transcend the confines of conventional schooling and instead leverage a wide array of resources and experiences to augment their knowledge and skills. This perspective is consistent with the posthuman notion that knowledge creation and educational processes can be enabled with and through diverse sources beyond conventional educational frameworks.

The various obstacles that designers encounter in their attempt of advancement, including insufficient motivation, time limitations, and excessive dependence on easily accessible materials, exemplify the multitude of elements that impact their professional growth. These problems arise from a combination of internal and external factors, illustrating the intricate interaction of various influences that affect their operational methods and goals. The necessity for supplementary resources and proficient communication within collaborative projects underscores the diverse array of components essential for achieving successful collaboration. Collaboration encompasses the effective coordination of diverse resources, such as time allocation and communication mechanisms, and necessitates the utilisation of unambiguous and explicit communication. The complex aspect of collaborative work is underscored by the existence of various components, including both internal issues such as resource allocation and external factors such as communication challenges.

The hesitance exhibited by certain designers in participating in interdisciplinary collaboration can be ascribed to a variety of issues, such as a limited familiarity with emerging ideas, an intolerance towards change, and a preference for conventional methodologies. The opposition observed can be attributed to the wide range of perspectives present within the design community, highlighting the coexistence of various belief systems and attitudes towards posthumanism.

The ethical issues designers face while designing with posthuman technologies, such as privacy, consent, and the inclusion of non-human entities such as AI, are numerous. Designers must address complicated ethical issues while acknowledging the many ethical viewpoints and factors in their work. The idea that designers can actively pursue chances for engagement and skill enhancement by participating in design competitions highlights the diverse range of avenues for professional development. The limitations encountered by designers when participating in design competitions, however, including a lack of awareness, inadequate resources, and professional priorities, are indicative of various variables that influence their involvement in these endeavours. Designers are required to manage multiple tasks and considerations, and their capacity to engage is influenced by a variety of internal and external factors.

Although South African graphic designers possess knowledge of *Ubuntu*, the full incorporation of this concept into design processes is restricted by financial and logistical limitations. This statement highlights the difficulty of integrating cultural and social justice concepts into professional practise. To effectively tackle this issue, it is imperative to foster a holistic understanding of *Ubuntu* and facilitate its incorporation through rigorous academic inquiry, educational initiatives, and the resolution of existing limitations.

Overcoming the resistance to the adoption of more inclusive design practises poses a substantial challenge for South African graphic designers. The inclusion of other languages and contextual factors may necessitate further resources, and this reluctance may originate from established power imbalances between designers and clients. The ideals of *Ubuntu* possess the capacity to foster cultural consciousness, inclusiveness, and the incorporation of varied viewpoints. This statement underscores the significance of *Ubuntu* in advancing principles of social justice and inclusivity within the realm of design.

The education and training provided to designers may not consistently place sufficient emphasis on the significance of cultural integration and historical narratives within the field of design. Therefore, there is a lack of understanding and expertise in this field. South African designers have the capability to incorporate their country's historical backdrop and African aesthetics into their creative activities. However, the integration of these elements is impeded by obstacles such as client preferences and limitations in available resources. Recommendations include the strengthening of cultural integration and the amplification of knowledge and education regarding Afrocentric design within the design community.

The integration of posthuman concepts into design practise can underscore the recognition of collaborative design efforts, acknowledging the involvement of a varied range of team

members, including a recognition of the agency inherent in non-human entities. Nevertheless, the shift towards prioritising personal recognition and ownership is exacerbated by client expectations. The prevailing culture within the South African graphic design industry also assigns significance to individual recognition and ownership, so inhibiting the progress towards more collaborative methodologies. There is a need to undertake endeavours aimed at fostering a mindset that places a higher value on collaboration. The scholarly literature places significant emphasis on the significance of "good" design and "design for good," while simultaneously acknowledging the pragmatic limits that designers have because of project limitations and client demands. The integration of *Ubuntu* ideals and the promotion of ethical and socially responsible design exhibit considerable potential. Nonetheless, many obstacles, such as client expectations, project limits, and gaps in awareness, can hinder advancements in this direction.

5.4 Limitations of the study

The study's findings suggest that the impact of *Ubuntu* on the professional endeavours of graphic designers is predominantly shaped by their cultural background. Additional investigation might be conducted to examine the influence of cultural heritage on the formation of graphic designers' viewpoints, principles, and cognitive processes.

Furthermore, the research reveals the difficulties encountered by graphic designers in South Africa when it comes to complying with principles of sustainability and environmental consciousness. Further investigation might delve into the precise obstacles and limitations that impede graphic designers' capacity to embrace ethical or socially responsible ideals within their professional endeavours.

This study records a momentary depiction of the professional endeavours undertaken by graphic designers within a defined temporal scope (2022-2023). A longitudinal study has the potential to offer a more thorough comprehension of the evolution of the tasks and obligations of graphic designers in South Africa over time, as well as to ascertain whether any noteworthy changes align with the proposals put out in the current literature.

The scope of this study was limited to a sample size of 14 graphic designers from South Africa. The examination of how graphic designers in various regions of Africa and globally adapt to evolving demands within their profession presents a compelling area of further inquiry. Furthermore, it is important to acknowledge that all individuals included in the study exhibited a high level of enthusiasm in sharing their experiences. They showed honesty in discussing their practises and willingly dedicated a substantial amount of time, namely 90 minutes, to

participate in the interviews. It is crucial to recognise that the outcomes of the study would have been influenced if a group of participants who were hesitant to engage had been selected.

The current study acknowledges its dependence on a restricted sample size and self-reported assertions from the individuals involved. Despite efforts to provide a diverse participant sample that encompasses all aspects of graphic design practise, it is important to recognise that generalising the findings may present challenges. Therefore, it is imperative to conduct a more extensive investigation to ascertain the extent to which these documented practises truly represent the behaviours of a broader range of graphic designers in South Africa.

5.5 Contributions of the study

The aim of this study was to investigate the potential convergence between the principles of posthumanism and *Ubuntu* in the professional activities of graphic designers in South Africa. Through a comprehensive examination of existing scholarly works and interviews with South African graphic design practitioners, this study sought to gain insight into the influence of these philosophical frameworks on the practice of graphic design in the country.

The study contributes to the understanding of the duties and responsibilities of graphic designers in South Africa indicating through the results of the empirical study undertaken that these have not undergone significant changes, contrary to what the existing literature suggests. While posthumanism and *Ubuntu* may offer new perspectives on the role of graphic designers in society, it appears that these principles have not yet been fully integrated into professional practice. This may be due to a variety of factors, including a lack of awareness or understanding of these frameworks, as well as practical constraints such as project specifications, financial limitations, and time constraints.

By reframing the identified six categories of Embodiment, Human Interconnectedness, Non-human entities, Multiplicity, Social Justice and Ethics and Transcendence that underpinned the empirical investigation of this study, as Dimensions that speak to the ideologies of posthumanism and *Ubuntu*, we may emphasise their specific significance to graphic design in the South African context and perhaps inspire inventive approaches that integrate philosophy and pragmatism (Table 5.5).

Table 5.5: Framework of categories, themes, codes and guidelines for best practices re-considering design practice.

Categories	Dimensions	Guiding Principles of Dimension
Embodiment	**Visceral engagement**	Emphasises the use of design to evoke embodied experiences and emotional responses.
Human Interconnectedness	**Relationality**	Focuses on the inherent connections between humans, nature, and technology, instead of viewing them as separate entities.
Non-human entities	**More-than-human agency**	Acknowledges the inherent agency and influence of non-human entities like animals, technologies, and ecosystems.
Multiplicity	**Hybrid identities**	Celebrates the interconnectedness and fluidity of individual and collective identities, rejecting fixed binary categories.
Social Justice and Ethics	***Ubuntu*-informed ethics**	Positions design as a tool for social commentary, activism, and promoting positive change whilst emphasising communal responsibility as a guiding principle for graphic design practice.
Transcendence	**Beyond anthropocentrism**	Encourages design to move beyond human-centeredness and consider the needs and perspectives of all beings.

Dimensions enable the quantification and evaluation of various attributes throughout a spectrum. Figure 5.2 demonstrates the shift in the order of Dimensions based on the frequency of reference by the participants. Beyond anthropocentrism is mentioned the least, while More-than-human agency is mentioned the most. This does not imply the significance of the concept as perceived by the participants, but it does suggest that the participants showed greater interest in discussing subjects related to technology and AI, and less interest in topics such as prototyping and gender roles.

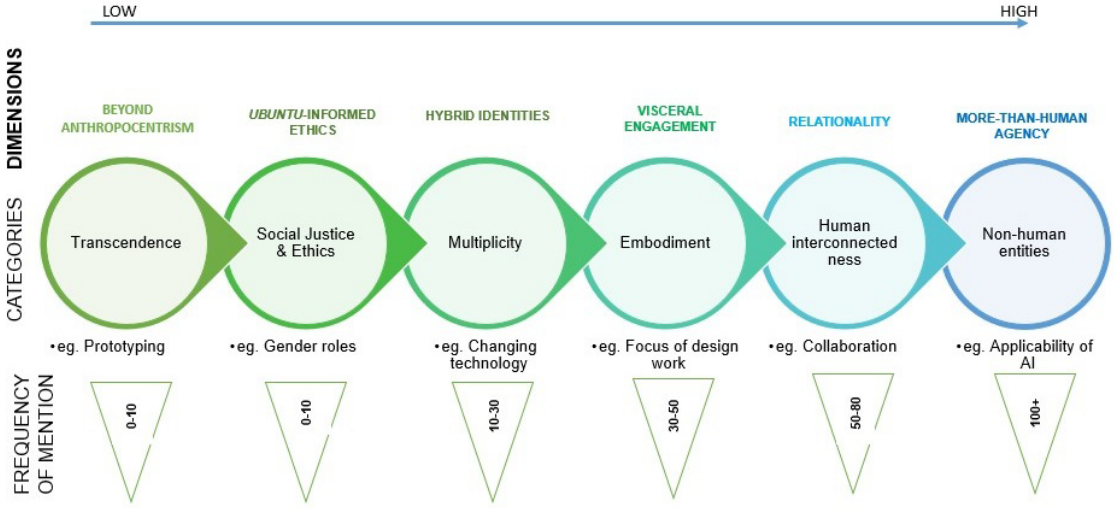


Figure 5.2 Emergent Dimensions Linked to Categories and Frequency of Mention

While traditional design frameworks have often confined themselves to the anthropocentric lens of human agency, the South African context, steeped in the narratives of posthumanism and *Ubuntu*, demands a more expansive approach. This thesis proposes six re-conceptualised dimensions that go beyond thematic categorisation, serving as analytical guidelines for reimagining graphic design practice within this intricate landscape. These dimensions embrace the complex tapestry of human and more-than-human interactions, defying reductionist quantifications and inviting a nuanced understanding of design's multifaceted nature.

The dimension of *Visceral engagement* moves beyond the purely cognitive, encouraging graphic design practices that resonate with the embodied experiences and emotions of the user. *Relationality* necessitates a shift from the designer-as-sole-actor model to one of co-creation, acknowledging the reciprocal influences between the designer, the audience, and the environment. The Dimension of *More-than-human agency* recognises the role of non-human entities, from the materiality of objects to the agency of digital networks, in shaping design outcomes. *Hybrid identities* challenge the binary of human/non-human actors, acknowledging the fluidity and interconnectedness of all entities within the design ecosystem. *Ubuntu-informed ethics* draws on the South African philosophy of interconnectedness to emphasise the ethical implications of design decisions, ensuring consideration, respect and responsibility towards all beings and ecosystems. Finally, the Dimension named *Beyond anthropocentrism* dismantles the human as the sole focus of design, advocating for a design practice that privileges the well-being of all actors within the design sphere, human and non-human alike.

These dimensions are not merely thematic labels; they are a set of dynamic guidelines that invite us to re-envision design as a relational, embodied, and ethically driven practice, attuned to the complex interplay between the human and the more-than-human in the South African context. By embracing these Dimensions, South African designers may move beyond the limitations of traditional frameworks and embark on a journey towards a more responsible and transformative design practice.

Furthermore, this study sheds light on the interplay between cultural heritage and the adoption of *Ubuntu* principles in South African graphic design practice. Notably, the empirical component of the study revealed that designers with a deeper connection to their cultural heritage demonstrated a stronger proclivity toward integrating *Ubuntu* values into their work. This finding underscores the significance of cultural identity in shaping the ethical and socially responsible practices of graphic designers within the South African context. Through the lens of the Dimension of *Hybrid identities*, we can begin to understand how cultural heritage blends with professional identities, influencing design decisions and shaping ethical frameworks. Moreover, *Ubuntu-informed ethics* becomes a particularly potent Dimension when viewed through the prism of cultural diversity, as designers draw upon their unique heritage to inform responsible and inclusive design practices. This suggests that a nuanced understanding of cultural heritage is crucial for effectively applying *Ubuntu* principles within graphic design, enriching both the designer's practice and the communities they serve.

A further noteworthy contribution of this study is the recognition of the problems encountered by South African graphic designers with regards to sustainability and environmental consciousness within the South African context. It reveals the challenges faced by designers navigating client priorities that may not align with the Dimensions of *Ubuntu-informed ethics* or *Beyond anthropocentrism*. When project specifications lean towards immediate commercial interests or disregard environmental impact, designers struggle to fully embrace responsible design practices. This struggle is further amplified by constraints such as tight financial limits and timelines, leaving little room for incorporating a Dimension such as *More-than-human agency* or prioritising the well-being of ecosystems alongside human considerations. These findings point towards the need for a transformative shift. Cultivating the Dimension of *Relationality* between designers, clients, and stakeholders becomes crucial in this context. Through open dialogue and collaborative efforts, we can move beyond these limitations and establish design processes that prioritise both immediate needs and the long-term sustainability of the environment and communities. The Dimension of *Visceral engagement* can play a key role in this shift, by designing experiences that resonate with the deeper values of sustainability and responsibility, while *Hybrid identities* can be leveraged to draw upon

diverse cultural perspectives and knowledge systems to shape more holistic and inclusive design solutions. Ultimately, overcoming these challenges requires a collective commitment to a design practice that transcends individual limitations and embraces the interconnectedness of human and more-than-human worlds, a principle at the heart of both posthumanist and *Ubuntu* philosophies.

This study navigates the complex landscape of graphic design practice in South Africa, tracing the potential convergence and intersections between posthumanism and *Ubuntu* in this context. While their full integration may still seem unattainable, the identified Dimensions serve as stepping stones toward this future. To do so, recognising the interplay between cultural heritage and *Hybrid identities* highlights the critical role that diverse perspectives play in shaping ethical and socially responsible design frameworks. Moreover, the challenges surrounding sustainability and environmental consciousness, illuminated by the Dimensions of both *Beyond anthropocentrism* and *More-than-human agency*, necessitate a shift towards collaborative engagement across the design sphere. Cultivating *Relationality* between designers, clients, and stakeholders becomes paramount, paving the way for design practices that resonate with the values of interconnectedness embedded within both posthumanist and *Ubuntu* philosophies. Ultimately, this study serves as a catalyst for reimagining graphic design not as a solitary act, but as a dynamic, responsible dialogue between the human and the more-than-human, weaving a future where *Ubuntu-infused ethics* flourish within the contextual frame of posthumanist thought.

To illustrate the successful achievement of this study's objectives, Table 5.6 provides a chapter-by-chapter roadmap. Each entry in the table links to the relevant section within the thesis, showcasing how the theoretical framework has been translated into tangible evidence that supports the fulfilment of each objective.

Table 5.6: Meeting the objectives of the study.

Meeting the objectives of the study	
Objective (O1 – O7)	**Answer**
O1: To conduct a comprehensive literature review on graphic design practice, posthumanism, and *Ubuntu*, focusing specifically on their individual characteristics and theoretical frameworks.	Chapter Two
O2: To analyse and identify the emerging connections between graphic design practice, posthumanism, and *Ubuntu* within the South African design context, by examining relevant design practice and scholarly discourse.	Chapter Two Chapter Four
Q3: To explore the philosophical underpinnings of posthumanism and *Ubuntu* and their potential implications for graphic design practice in South Africa, considering aspects such as collaboration, community engagement, and social responsibility.	Chapter Two
O4: To investigate the role of graphic designers in shaping and interpreting the connections between posthumanism, *Ubuntu*, and graphic design practice in South Africa, through individual interviews with graphic design practitioners.	Chapter Four
O5: To examine the ways in which contemporary South African graphic designers incorporate posthumanism and *Ubuntu* principles into their creative processes, visual communication strategies, and design outputs.	Chapter Three Chapter Four
O6: To propose recommendations for graphic designers, design educators, and design institutions in South Africa, outlining practical strategies for integrating posthumanism and Ubuntu principles into graphic design practice, pedagogy, and industry standards.	Chapter Five
O7: To contribute to the broader academic discourse by generating new insights and knowledge about the connections between graphic design practice, posthumanism, and *Ubuntu* in the context of South Africa, and potentially identifying opportunities for further research and interdisciplinary collaborations.	Thesis

In conclusion, this section describes the contributions of this study by extending the deductive themes which underpinned the empirical components into tangible Dimensions that offer a concrete framework for reimagining graphic design practice in South Africa, through the lenses of posthumanism and *Ubuntu*. By integrating these Dimensions into the core of their work, South African graphic designers can transcend anthropocentric constraints and pursue a more responsible, ethical, and interconnected design practice. This shift, anchored in South African cultural heritage, has the potential to reshape not only the form and function of South African graphic design, but also the communities and ecosystems it intersects. Ultimately, embracing

these Dimensions transforms design from a service into a catalyst for positive change and shared well-being, paving the way for a future where design flourishes as a force for good.

An integrated codebook arising from emergent categories, themes, codes and guidelines for best practices emanates from the findings of the study. The codebook offers a meaningful theoretical contribution to the body of knowledge concerning the position of human-centred graphic design in a posthumanist context. Table 5.7 illustrates all facets of this contribution. It additionally complements the structured synopsis offered earlier in Table 5.5.

Table 5.7: Categories, themes, codes and guidelines for best practices.

CATEGORY 1: EMBODIMENT		
THEMES	**CODES**	**GUIDELINES FOR BEST PRACTICE**
Changing Technology	Modification	• Recognize and celebrate design projects that successfully integrate posthuman concepts and practices.
	Resistance to change	• Accommodate for evolving requirements for continuous modification and improvement.
	Technological awareness	• Respond to market trends and changes in technology.
Hand-rendering	Creative process	• Accommodate unique preferences in style and applicability.
	Design development	• Promote diverse creative uses encompassing both manual and digital techniques.
	Innovation	• Support the development of hand-rendered outcomes to incorporate a wide range of viewpoints.
Job satisfaction	Adaptability	• Encourage opportunities provided by collaborative projects, the consideration of human and non-human participants and design initiatives rooted in exploratory practices.
	Career self-development	• Consider client satisfaction, pleasure, and endorsement.
	Professional industry development	• Evaluate the approach towards the evolution of technology in professional settings.
Job title	Design focus	• Inform clients about innovative methods, techniques, and instruments.

CATEGORY 1: EMBODIMENT		
THEMES	**CODES**	**GUIDELINES FOR BEST PRACTICE**
	Education	• Promote the acquisition of knowledge and understanding of new tools and techniques outside of the traditional classroom setting.
	Professional experience	• Adjust to changing trends to meet client demands.

CATEGORY 2: HUMAN INTERCONNECTEDNESS		
THEMES	**CODES**	**GUIDELINES FOR BEST PRACTICE**
Collaboration	Designer/Client relationships	• Provide customers with knowledge and guidance about ethical and inclusive strategies that align with their specific requirements.
	Inclusivity	• Propose the incorporation of modules on posthumanism, ethical design, power relations in design and design beyond the human within graphic design curricula as part of curricular reform.
Future design skills	Continuous learning	• Encourage the exploration of novel technologies and techniques.
	Flexibility	• Promote the integration of design programmes with other disciplines such as robotics, artificial intelligence, and social sciences.
Qualities of graphic designer	Soft skills	• Arrange for scholars in the fields of posthumanism, Artificial Intelligence (AI), and ethics to give lectures and conduct workshops for both students and professional designers.
	Teamwork	• Promote teamwork and cooperation among clients and fellow design experts.
	Values	• Provide education to designers and clients on ethical methods and promote their acceptance and support.

CATEGORY 3: NON-HUMAN ENTITIES		
THEMES	**CODES**	**GUIDELINES FOR BEST PRACTICE**
Applicability of AI	Anticipation	• Conduct public awareness campaigns to disseminate information about posthumanism and its ramifications for design, with the aim of encouraging responsible involvement.
	Interest in AI	• Promote the consideration of responsible use of AI technologies in developing design outcomes.
	Skills development	• Encourage experimentation with AI and other non-human entities in design development.

CATEGORY 4: MULTIPLICITY		
THEMES	**CODES**	**GUIDELINES FOR BEST PRACTICE**
Design practice focus	Compliance	• Establish forums for designers to engage in discourse on posthumanism, exchange exemplary methodologies, and cooperate on posthuman design initiatives.
	Design-centric	• Promote knowledge sharing in design by encouraging participation in design conferences, expos and competitions.
	Verbal communication	• Promote the exchange of ideas and discussions around matters of inclusivity, diversity, and agency.
Focus of design work	Career	• Provide guidelines for career development opportunities.
	Digital design	• Educate designers on new applications, software and technologies that could enhance their design practice.
	Visual communication	• Propose design competitions that are explicitly centred around posthuman themes and issues to address the design challenges associated with posthumanism.
Qualification	Education level	• Encourage and incentivize skills development opportunities for professional designers.
	Experience	• Promote engagement in innovative projects that enhance and develop the skills of participating designers.
	Qualification	• Promote the development of new skills and awareness of diverse social contexts.

CATEGORY 4: MULTIPLICITY		
THEMES	**CODES**	**GUIDELINES FOR BEST PRACTICE**
Years experience in graphic design industry	Creativity	• Create comprehensive standards at a national level that outline ethical design methods, specifically addressing the unique challenges and issues posed by posthuman environments.
	Expertise	• Facilitate collaborations between educators and design experts to foster the advancement of sustainable posthuman design methodologies.
	Responsibility	• Promote and provide incentives for the establishment of ethical professional standards for design that are supervised by a professional organisation.

CATEGORY 5: SOCIAL JUSTICE AND ETHICS		
THEMES	**CODES**	**GUIDELINES FOR BEST PRACTICE**
Diverse audiences	Diversity	• Define *Ubuntu*, ethics, diversity and inclusion in context of design outcomes.
	Graphic design: cultural identity	• Encourage and commemorate design work that successfully incorporates diverse viewpoints.
	Graphic design: heritage	• Encourage and commemorate design work that successfully incorporates viewpoints informed by local heritage.
Environmental considerations	Longevity	• Facilitate collaborations between government organisations and design experts to foster the advancement of sustainable posthuman design methodologies.
	Sustainability	• Facilitate the development of new skills and knowledge.
	Time constraints	• Encourage professional designers to experiment with new technologies by providing incentives and inspiration.
Gender roles	Empathy	• Establish connections between students and experienced designers that actively integrate *Ubuntu* principles into their work, providing mentorship and opportunities for real-world application.
	Workplace challenges: gender roles	• Integrate openness and integration into the process of recruiting designers.

CATEGORY 5: SOCIAL JUSTICE AND ETHICS		
THEMES	**CODES**	**GUIDELINES FOR BEST PRACTICE**
Power relationships	Agency	• Advocate for designers to provide comprehensive instruction to clients on *Ubuntu* and its capacity as a design framework, showcasing its advantages for communities and societal influence.
	Inventiveness	• Encourage opportunities provided by diverse projects and the consideration of novel solutions and design initiatives.
	Problem solving	• Integrate a broad spectrum of distinctive groups, ideas, and societal norms whilst maintaining the integrity of the client brief.
Understanding of *Ubuntu*	Diverse audiences	• Encourage thorough research into the identification and acknowledgment of target audiences.
	Empathy	• Educate student designers on the benefits of empathy, inclusion and diversity in the context of design outcomes.
	Ubuntu	• Deepen understanding by moving beyond rudimentary knowledge of *Ubuntu* by engaging students in its historical, philosophical, and practical aspects and contextualising its principles to graphic design.

CATEGORY 6: TRANSCENDENCE		
THEMES	**CODES**	**GUIDELINES FOR BEST PRACTICE**
Commonly used technology	Awareness: technological awareness	• Encourage and commemorate design work that successfully incorporates evolving technology.
	Graphic design tools	• Recognize and celebrate design projects that successfully integrate new technologies, viewpoints or collaborative practices.
Prototyping	Collaboration	• Incentivise collaborative projects.
	Communication	• Encourage the utilisation of digital communication for facilitating collaboration across long distances.
	Out-sourcing	• Promote diversity in out-sourcing opportunities.
	User-experience	• Encourage development of design solutions for positive and considerate user experiences.

5.6 Recommendations for further research

5.6.1 Recommendations for education, professional practice and policy

The available data on posthuman involvement in South African graphic design indicates a notable deficiency in both knowledge and implementation. Although literature points to significant engagement with posthumanism in the higher education sphere, this does not seem to translate into practice. To close this disparity, interventions can be applied in the realms of education, design practice, and government policy.

Recommendations for Graphic Design education:

- Propose the incorporation of modules on posthumanism, ethical design, power relations in design and design beyond the human within graphic design curricula as part of curricular reform;
- Arrange for scholars in the fields of posthumanism, Artificial Intelligence, and ethics to give lectures and conduct workshops for both students and professional designers;
- Promote the integration of design programmes with other disciplines such as robotics, artificial intelligence, and social sciences.
- Allocate research funding to investigate the applications of posthumanism in design and analyse their influence on South African settings.

Recommendation for Graphic Design Practice:

- Establish forums for designers to engage in discourse on posthumanism, exchange exemplary methodologies, and cooperate on posthuman design initiatives.
- Propose design competitions that are explicitly centred around posthuman themes and issues to address the design challenges associated with posthumanism.
- Conduct public awareness campaigns to disseminate information about posthumanism and its ramifications for design, with the aim of encouraging responsible involvement.
- Recognise and celebrate design projects that successfully integrate posthuman concepts and practices.

Guidelines for government policy:

- Provide financial resources for posthuman design initiatives: Distribute grants and aid advanced posthuman design research, development, and commercialisation.
- Create comprehensive standards at a national level that outline ethical design methods, specifically addressing the unique challenges and issues posed by posthuman environments.

- Advocate for the reform of design education by allocating financial resources and providing necessary materials for design schools to include posthumanism into their academic programmes.
- Facilitate collaborations between government organisations and design experts to foster the advancement of posthuman design methodologies.

These recommendations are only prospective options, and the most efficient strategy will vary based on the requirements and circumstances of South African graphic design. Nevertheless, via implementing a comprehensive strategy including education, design practice, and government policy, increased consideration and engagement of posthuman practices may result.

The emergent data regarding the intersection of *Ubuntu* in South African graphic design reveals a significant gap between awareness and application. The literature shows that many South African design education institutions include considerations of *Ubuntu*, citizenship and ethics into their design curricula (Cassim 2013, Chmela-Jones 2017, Costandius & Botes 2018). However, in professional practice designers are inhibited from implementing them by client demands and budgetary constraints. Currently, South African graphic designers do not embody a posthuman approach. They do not actively explore the theory's implications for power dynamics and the assumed dominance of human-centred interactions. Additionally, they are not quick to embrace evolving design technologies and are slower to implement professional changes compared to what is suggested in the literature. To bridge this divide, the following recommendations for education, design practice, and government policy could be considered:

Recommendations for Graphic Design education:

- Deepen understanding by moving beyond rudimentary knowledge of Ubuntu by engaging students in its historical, philosophical, and practical aspects and contextualising its principles to graphic design.
- Incorporating practical exploration through interactive sessions, assignments, and real-life examples that necessitate students to convert Ubuntu principles into practical design solutions.
- Promote students' critical examination of the constraints and difficulties associated with using Ubuntu in modern design settings.
- Establish connections between students and experienced designers that actively integrate Ubuntu principles into their work, providing mentorship and opportunities for real-world application.

Recommendation for Graphic Design Practice:

- Develop community resources specifically for graphic design practice. Create online repositories and toolkits that feature exemplary instances of Ubuntu-inspired graphic design, providing designers with universal access.
- Encourage and commemorate design work that successfully incorporate Ubuntu ideals through the presentation of competitions, prizes, exhibits, and publications.
- Advocate for designers to provide comprehensive instruction to clients on Ubuntu and its capacity as a design framework, showcasing its advantages for communities and societal influence.
- Foster industry collaboration and alliances between design businesses and organisations aligned with Ubuntu values to provide tangible design prospects.

Guidelines for government policy:

- Include Ubuntu considerations as a criterion for design competitions and funding, motivating designers to investigate its implementation.
- Develop public awareness campaigns that emphasise the significance of Ubuntu-inspired design in fostering social togetherness, community advancement, and national sense of belonging.
- Promote the incorporation of Ubuntu-based design ideas into the curricula of design schools by means of national guidelines.
- Support projects focused on designing and improving communities. Provide financial backing and assistance to build initiatives that specifically target community requirements and difficulties, while utilising Ubuntu as a guiding principle.

It is crucial to recognise that the successful integration of *Ubuntu* into graphic design professional practice necessitates continuous communication and critical reflection by all stakeholders. It becomes essential for success to consistently assess the effectiveness of these efforts, adjust based on feedback, and ensure that the process stays inclusive and sensitive to the changing demands of designers and communities.

5.6.2 General recommendations

The primary objective of this research was to provide a comprehensive description of the prevailing professional practises within the field of graphic design in South Africa. Future research endeavours may delve into the potential ramifications of the results within the realm of professional graphic design practice. This might include an examination of the necessity for educational interventions or legislative modifications aimed at tackling the highlighted obstacles and fostering ethical and sustainable practises.

The research acknowledges the possible convergence that may exist between posthumanism and *Ubuntu* in the professional activities of graphic designers in South Africa. However, a comprehensive examination of this convergence was not an objective of this study. Additional investigation may explore the profound theoretical foundations and pragmatic ramifications of the interplay of these concepts.

The generalisability of the findings may be limited due to the study's exclusive focus on interviewing graphic design practitioners solely from South Africa. Potential avenues for future study may involve expanding the sample to encompass a wider range of participants, such as graphic designers hailing from various nations or cultural backgrounds. This approach would provide a more comprehensive understanding of the impact of *Ubuntu* on professional practise, so offering a more holistic view. Additionally, a future study with a quantitative methodological approach may need to be undertaken to calibrate the results of the empirical component of this study.

One potential avenue for future study is exploring the effects of integrating posthumanism and *Ubuntu* principles into the creative processes, visual communication strategies, and design outcomes of graphic designers in South Africa. This research could explore how these ideologies influence the design aesthetics, messaging, and overall effectiveness of graphic design in South Africa.

Another study could analyse the obstacles encountered by graphic designers in South Africa while attempting to embrace sustainable and environmentally conscious design methodologies. This suggested research study could delve deeper into the many difficulties associated with client requirements, project parameters, budgetary limits, and temporal constraints. Additionally, an examination of alternative methods and solutions for mitigating these hurdles and fostering the adoption of more sustainable design practises within the industry might be undertaken.

Further research could investigate the efficacy of audience research and analysis methodologies employed by graphic designers in South Africa. This research would delve into the existing methodologies, obstacles, and constraints associated with understanding and establishing connections with target demographics that extend beyond the human species, encompassing animals, robots, and artificial intelligence systems. Additionally, an examination might be conducted to assess the consequences of inadequate investment in audience research on the overall efficacy and pertinence of graphic design endeavours.

Furthermore, a study that examines the impact of education and training on the advancement of ethical and socially responsible graphic design practises within the context of South Africa could be undertaken. This study would investigate the existing curriculum and training programmes offered to graphic designers, with a specific focus on identifying potential deficiencies or opportunities for enhancement in the areas of sustainability education, environmental consciousness, and audience analysis proficiency. This study could additionally explore the possibility of integrating posthumanism and *Ubuntu* ideas into design education to cultivate design practises that are more socially aware and inclusive.

Finally, a comparative analysis of graphic designers and their practice in South Africa and their colleagues in other nations or areas could be undertaken. This study would have the potential to offer valuable insights into the distinct problems and possibilities encountered by designers in South Africa with regards to sustainability, audience understanding, and the incorporation of posthumanism and *Ubuntu* principles. Furthermore, it could illuminate areas of collaboration and information sharing among designers from diverse cultural backgrounds.

To further advance the understanding and application of posthumanism and *Ubuntu* in graphic design practice, future research could explore the development of educational programs and training initiatives that promote awareness and understanding of these frameworks among graphic designers. Additionally, research could investigate the role of design organisations and professional associations in promoting sustainability and environmental awareness within the industry. By addressing these areas, the graphic design community in South Africa can work towards a more inclusive, ethical, and socially responsible practice.

5.7 Conclusion

This thesis has explored the impact of posthumanism and *Ubuntu* on the field of graphic design in a South African context. Through a qualitative, phenomenological approach, insights were gathered from fourteen graphic designers working in different areas of the graphic design industry. The analysis of the research data was conducted thematically, utilising concepts derived from the nascent literature on design, posthumanism and *Ubuntu*.

The findings of this study indicate that the incorporation of posthuman ideas into graphic design practice can bring about significant shifts in the profession. The themes of human interconnectedness, embodiment, non-human entities, multiplicity, social justice, transcendence, and ethics emerged as key factors influencing the graphic designers' practices. These themes highlight the importance of considering the broader social and

environmental impacts of design, as well as the need to embrace a more inclusive and sustainable approach.

One of the main obstacles encountered by graphic designers in incorporating posthuman ideas into their practice is the resistance to change within the industry. Many designers are still rooted in traditional design practices, continue to work in silos and struggle to adapt to the evolving social and technological landscape. However, this study recommends potential solutions for effectively incorporating posthuman ideas, such as promoting interdisciplinary collaboration, embracing new technologies, and fostering a culture of continuous learning and reflection.

The study also highlights the potential of *Ubuntu* as a guideline for South African design practitioners to contextualise and support the implementation of Posthuman-centred design. *Ubuntu*, with its emphasis on interconnectedness, empathy, and social justice, aligns well with the principles of posthumanism and can serve as a guiding philosophy for designers seeking to create more inclusive and socially responsible designs.

In terms of methodology, this study utilised a qualitative, phenomenological approach, which allowed for an exploration of the experiences and perspectives of graphic designers. The use of the *ATLAS.ti 23*™ programme for thematic analysis of the interview transcripts ensured a rigorous and systematic analysis of the data. The adherence to ethical guidelines throughout the data collection process further ensured the reliability and validity of the findings.

The contributions of this study lie in its exploration of the intersections of posthumanism and *Ubuntu* on graphic design practice in a South African context. This study offers useful insights for both practitioners and scholars in the field of graphic design by highlighting the obstacles and possibilities they encounter. It also contributes to the existing literature on posthumanism and *Ubuntu* by offering a practical application of these theoretical frameworks within the context of graphic design. This study's contributions extend beyond a superficial exploration of posthumanism and *Ubuntu's* impact on South African graphic design by delving into the heart of design practice, offering a transformative journey from deductive themes to actionable Dimensions. These Dimensions – *Relationality, Visceral engagement, More-than-human agency, Hybrid identities, Ubuntu-informed ethics,* and *Beyond anthropocentrism* – serve not only as abstract concepts but as tangible guidelines for South African practitioners seeking to reimagine their professional landscape. By adopting these Dimensions as lenses through which to view and engage with design practice, graphic designers can move beyond anthropocentric limitations, embrace interconnectedness, and pursue a more responsible and ethical design ethos.

While this study focuses on a transformative path for South African graphic design, it's crucial to acknowledge its inherent limitations. The select voices of fourteen practitioners may not fully resonate with the entire industry's diverse perspectives. Likewise, the use of only South African practitioners restricts the study's immediate generalisability to other geographical and cultural contexts. Future research can embark on the vital task of testing the applicability of these posthuman and *Ubuntu*-led methodologies in broader cultural landscapes. While this study is focused on South Africa, the proposed guidelines with its emphasis on responsibility, ethics, and interconnectedness can be tested and further developed in diverse design contexts around the world. This global exchange of ideas and methodologies can enrich the practice of graphic design but also build a future where different design practices, informed by their own unique cultural landscapes, find common ground through their shared values.

In conclusion, this study highlights the significance of incorporating posthuman ideas into graphic design practice and the potential of *Ubuntu* as a guiding philosophy. By embracing a more inclusive and sustainable approach, graphic designers can create designs that are not only aesthetically pleasing but also socially responsible. The findings of this study contribute to the growing body of knowledge on posthumanism and *Ubuntu* in the field of graphic design and may provide valuable insights for practitioners and researchers alike.

REFERENCES

Abel, B. van, Evers, L., Klaassen, R., & Troxler, P. (2011) *Open Design Now: Why Design Cannot Remain Exclusive*, Amsterdam: BIS Publishers.

Adu, P. (2019). A Step-by-Step Guide to Qualitative Data Coding (1st ed.). Routledge.

AIGA, (2021) *Design POV: An in-depth look at the Design Industry Now.* [Available:] https://www.aiga.org/design/design-research-insights (Accessed: 4 October 2023).

Akama, Y (2007) Kaleidoscope of roles: Valuing the agencies of the audience, client and the designer. Proceedings of the Designing with people conference (London, United Kingdom, 01/04/2007 - 04/04/2007) pp.1–9.

Akama, Y. (2014) Attuning to Ma (between-ness) in designing, *ACM International Conference Proceeding Series*, 2, 21–24.

Akama, Y., Keen, S., West, P., (2016) Speculative Design and Heterogeneity in Indigenous Nation Building, DIS '16: Proceedings of the 2016 ACM Conference on Designing Interactive Systems, 895–899.

Albanese, R. (2020) Speculations on the Posthuman age. [Available:] https://www.risd.edu/news/stories/graphic-design-faculty-anastasiia-raina-on-posthumanism-and-design (Accessed: 11 July 2023).

Amatullo, M.V., Lyytinen, K. & Tang, J. (2019) Measuring a Design Attitude in Accelerating Social Innovation: Scale Development and Validation. *Academy of Management Proceedings.* [Available:] https://journals.aom.org/doi/abs/10.5465/AMBPP.2019.13907 (Accessed: 18 July 2021).

Ambrose, G., Harris, P., & Ball, N. (2019) *The fundamentals of graphic design.* London: Bloomsbury publishing.

Anderson, G.P. (2007). *Sound thinking in Fourth Order design*. MA thesis, University of Notre Dame, Indiana, United States.

Appiah, E., & Cronje, J. (2013) Information Communication and Technology (ICT) and the Challenges of Ideation in Graphic Design: An Activity Theory Focus. International Journal of Computer Applications, 63(6), pp.13–23.

Archer, B. (1999) Viewpoint: design, innovation, agility. In *Design Studies*, 20(6), 565-571.

Atkinson, P. (2009) *Boundaries? What Boundaries? The Crisis of Design in a Post-Professional Era*, in Proceedings of the 8th European Academy of Design Conference (Aberdeen: The Robert Gordon University), 34.

Badmington, N. (2003) Theorizing Posthumanism, *Cultural Critique 53*, Posthumanism (Winter, 2003), pp.10-27.

Baker, A. (2017) What It's Like to Live Through Cape Town's Massive Water Crisis, [Available:] https://time.com/cape-town-south-africa-water-crisis/. (Accessed: 17 March 2020).

Banks, J. (2019) A perceived moral agency scale: Development and validation of a metric for humans and social machines, *Computers in Human Behavior,* 90, 363-371.

Barad, K. (2003) Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs: Journal of Women in Culture and Society*, 28(3), 801–831.

Barad, K. (2007) Meeting the universe halfway: Quantum physics and the entanglement of meaning. Durham: Duke University Press.

Barnard, M. (2013) *Graphic design as communication.* Oxfordshire: Routledge.

Bennett, A (ed). (2006) *Design Studies: Theory and Research in Graphic Design.* New York: Princeton Architectural Press. pp.179-197.

Bhabha, H. (1999) Culture's in Between. *In* Multicultural States. Oxfordshire: Routledge.

Blackwell, L. (2001) Think Local. Very Local, *The Design Indaba magazine*, [Available:] https://www.designindaba.com/projects/magazine/q1-01-launch-issue. (Accessed: 6 October 2019).

Blauvelt, A. (1994) An Opening: Graphic Design's Discursive Spaces. *Visible Language*, 28(3), 205-17

Böhm, S., Carrington, M., Cornelius, N., de Bruin, B., Greenwood, M., Hassan, L., Jain, T., Karam, C., Kourula, A., Romani, L. and Riaz, S., Ethics at the Centre of Global and Local Challenges: Thoughts on the Future of Business Ethics. *Journal of Business Ethics,* 180, pp.835–86

Bonsu, G.A. (2019) *Design Interventions for Re-Conceptualising Sustainable Graphic Design Practices in Ghana*. Doctoral thesis: Cape Peninsula University of Technology.

Bonsu, G.A., Chisin, A.V., Cronje, J. (2022) Cosmopolitan localism as a research framework for sustainability in graphic design practices, *International Journal of Design Creativity and Innovation,* 10(2), 123-140.

Braidotti, R. (2006) Posthuman, All Too Human: Towards a New Process Ontology, *Theory, Culture & Society*, 23(8), 197–208.

Braidotti, R. (2011) Nomadic Theory. The portable Rosi Braidotti. New York Chichester: Columbia University Press.

Braidotti, R. (2013a) Posthuman Humanities. European Educational Research Journal, 12(1), 1-19.

Braidotti, R. (2013b) *The Posthuman.* Cambridge: Polity Press.

Braidotti, R. (2019) A Theoretical Framework for the Critical Posthumanities, *Theory, Culture and Society*, 36(6), 31–61.

Braidotti, R. & Hlavajova, M. (2018) *Posthuman Glossary*. London: Bloomsbury.

Bremner, C & Rodgers, T. (2013) Design without discipline. *Design Issues* 29(3), 4-13.

Broodryk, J. (2005) *Ubuntu management philosophy: exporting ancient African wisdom into the global world.* Johannesburg: Knowles.

Brown, T. (2008) *Change by design: how design thinking transforms organizations and inspires innovation.* New York: Harper Business.

Buchanan, R. (1985). Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice. *Design Issues*, 2(1), 4–22.

Buchanan, R. (1990). Myth and Maturity: Toward a New Order in the Decade of Design. *Design Issues*, 6(2), 70–80.

Buchanan, R. (2001) Design research and the new Learning. *Design Issues* 17 (4), 3-23.

Buchanan, R. (2007). Strategies of Design Research: Productive Science and Rhetorical Inquiry. In R. Michel (Ed.), *Design Research Now: Essays and Selected Projects*, 55-66.

Buchanan, R. (2013) Wicked problems in design thinking, *Design Issues* 8(2), 5–21.

Buchanan, R., & Margolin, V. (1995) Discovering Design: Explorations in Design Studies. Chicago: University of Chicago Press.

Bukamal, H. (2022) Deconstructing insider–outsider researcher positionality. *British Journal of Special Education* 49(3), 327-349.

Byrne, D. (2022) A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, 56(2), 1391–1412.

Cassim, F. (2013) Hands On, Hearts On, Minds On: Design Thinking within an Education Context. *International Journal of Art and Design,* 32(2), 190-202.

Cesaire, A. (1972) *Discourse on colonialism.* New York: Monthly Review Press.

Chang, W.W., Giaccardi, E., Chen, L.L. & Liang, R.H. (2017) *Interview with Things: A First-thing Perspective to Understand the Scooter's Everyday Socio-Material Network in Taiwan*. Proceedings of the 2017 Conference on Designing Interactive Systems, ACM, Edinburgh, United Kingdom, June 10–14,1001–1012.

Chmela-Jones, K.A. (2017) *Flourishing in graphic design education: incorporating Ubuntu as a curricular strategy.* EAD12/Design for Next conference 2017, 12-14 April 2017, Sapienza University of Rome, Italy.

Chmela-Jones, K.A. (2015) *The ethics of Ubuntu and community participation in design.* Ethics and Accountability in Design: Do they matter? – DEFSA conference**,** MGI.

Clarke, A. (2017) *Design Anthropology: Object Cultures in Transition*. London: Bloomsbury Academic.

Cloete, F. & Auriacombe, C. (2019) Revisiting decoloniality for more effective research and evaluation. *African Evaluation Journal*, 7(1), a363.

Coeckelbergh, M. (2022) The Ubuntu Robot: Towards a Relational Conceptual Framework for Intercultural Robotics. *Science and Engineering Ethics,* 28:16.

Collins, A., & Koechlin, E. (2012) Reasoning, Learning, and Creativity: Frontal Lobe Function and Human Decision-Making. PLoS Biol 10(3): e1001293.

Combrinck, C. (2018) Socially responsive research-based design in an architecture studio. *Frontiers of Architectural Research*, 7(2), 211-234.

Cornish, K., Goodman-Deane, J., Ruggeri, K., & Clarkson, P. J. (2015). Visual accessibility in graphic design: A client–designer communication failure. Design Studies, 40, 176–195.

Costandius, E. (2006) *OBE: The only way forward for design education?* Proceedings of DEFSA 2006 Redesigning design education. 21-22 September. Nelson Mandela Metropolitan University, Port Elizabeth, South Africa.

Costandius, E. & Botes, H. (2018) Educating citizen designers in South Africa. Stellenbosch: Sun Press.

Coulton, P. & Lindley, J.G. (2019) More-Than Human Centred Design: Considering Other Things, *The Design Journal*, 22:4, 463-481

Creswell, J. (2003) Research design, qualitative, quantitative, and mixed methods approaches, 2nd edition. Thousand Oaks: Sage Publications.

Creswell, J.W. and Creswell, J.D. (2018) Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage, Los Angeles.

Cronje, J. C. (2020). Designing Questions for Research Design and Design Research in e-Learning, *Electronic Journal of E-Learning,* 18(1),13–24.

Cruickshank, L. (2014) Open Design and Innovation: Facilitating Creativity in Everyone, London: Ashgate Publishing Limited.

Cruickshank, L., Trivedi, N. (2017) When Your Toaster is a Client, how do you design? Going Beyond Human Centred Design, *The Design Journal*, 20:sup1.

Dannels, D.P. & Norris, K. (2008) Critiquing Critiques: A Genre Analysis of Feedback Across Novice to Expert Design Studios. *Journal of Business and Technical Communication*, 22(2):135-159.

Davis, T.W.D. (2012) Globalisation and the North/South Divide: An Overview, *Handbook on International Political Economy*, 231-247.

Davis, M. (2017) AIGA Designer 2025: Why design education should pay attention to trends, *aiga Design Educators Community*, August 21, 2017. [Available:] https://educators.aiga.org/wp-content/ uploads/2017/08/DESIGNER-2025-SUMMARY.pdf (Accessed: 23 January 2019).

Denzin, N., & Lincoln, Y. (Eds.). (2003) The landscape of qualitative research, theories and issues. Thousand Oaks: Sage Publications

Design Council, (2019) Framework for Innovation: Design Council's evolved Double Diamond. [Available:] https://www.designcouncil.org.uk/our-work/skills-learning/tools-frameworks/framework-for-innovation-design-councils-evolved-double-diamond/ (Accessed: 14 October 2020).

de Rooij, A., Dekker, E., Slegers, K. & Biskjaer, M.M. (2021) How graphic designers rely on intuition as an ephemeral facility to support their creative design process, *International Journal of Design Creativity and Innovation*, 9:4, 252-268.

Dia, M. (1992) Indigenous management practices: Lessons for African management in the 1990's., *Culture and Development in Africa*, 165–192.

Dictionary.com. (2020). In dictionary.com dictionary. [Available:] https://www.dictionary.com/ (Accessed: 21 October 2020).

Di Ruvo, M. (2021) *Towards resilience in South African craft enterprises, from design theory to craft practice.* Doctor of Applied Design thesis. Cape Peninsula University of Technology.

Dolphijn, R. & Van der Tuin, I. 2012. New materialism: Interviews & cartographies. London: Open Humanities Press.

Dorst, K. (2006) *Understanding design: 175 reflections on being a designer.* Amsterdam: Gingko Press.

Dorst, K. (2010) "The Nature of Design Thinking," *Proceedings of the 8th Design Thinking Research Symposium (DTRS8)*, 131–141.

Dorst, K. & Cross, N. (2001) Creativity in the Design Process: Co-Evolution of Problem–Solution. *Design Studies,* 22(5), 425-437.

Dreyfus, H., & Dreyfus, S. (1986). Mind over machine: The power of human intuition and expertise in the era of the computer. New York: Blackwell Publishers.

Duignan, B. (2024) *Postmodernism*, *Britannica*. [Available:] https://www.britannica.com/topic/postmodernism-philosophy#ref282558 (Accessed: 7 February 2022).

Dziobczenski, P. R. N., Person, O. (2017). Graphic designer wanted: A document analysis of the described skill set of graphic designers in job advertisements from the United Kingdom. *International Journal of Design*, 11(2), 41-55.

Dziobczenski, P. R. N., Person, O. Marlaininen, S. (2018) Designing Career Paths in Graphic Design: A Document Analysis of Job Advertisements for Graphic Design Positions in Finland. *The Design Journal*, 21(3), 1-22

Ebenreuter, N. 2009. *Design Thinkers. Fourth order design: what do you think?* [Available:] http://designthinkers.blogspot.com/2009/01/fourth-order-design-what-do-you-think.html (Accessed: 18 October 2014).

English, J. (2002) “Managing cultural differences to improve industrial efficiency,” *Building Research and Information*, 30(3), 196–204.

Escobar, A. (2015) Degrowth, postdevelopment, and transitions: a preliminary conversation. *Socially Sustainable Degrowth as a Social-Ecological Transformation,* Sustain Sci10. 451-461.

Escobar, A. (2018) *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds.* Durham and London: Duke University Press.

Ewuoso, C., & Fayemi, A.K. (2021) Transhumanism and African Humanism: How to Pursue the Transhumanist vision without jeopardising humanity, *Bioethics*, 35(7), 634-645.

Eze, O. (2008) What is African Communitarianism? Against Consensus as a regulative ideal, *South African Journal of Philosophy*. 27(4), 106-119.

Faber, L. (2009) Dis-location/Re-location: Colonial and post-colonial narratives of white displacement in South Africa. ACRAWASA e-journal, 5(1), 1-17.

Faste, H. (2016) A Posthuman World is coming: Design has never mattered more, [Available:] https://www.fastcompany.com/3060742/a-post-human-world-is-coming-design-has-never-mattered-more. (Accessed: 5 January 2021).

Fendler, R. (2013) Becoming-Learner: Coordinates for Mapping the Space and Subject of Nomadic Pedagogy, *Qualitative Inquiry*, 19(10), 786–793.

Fenn, T. & Hobbs. J, (2011) A Role for Information Architecture in Design Education: Developing Innovation through Structured Thinking, DEFSA Conference Proceedings, 20/20 Design Vision.

Ferguson, G. (2022) What’s in a name? The influence of pseudonyms on research activities. [Available:] https://www.open.ac.uk/blogs/welspgr/index.php/2022/07/19/whats-in-a-name-the-influence-of-pseudonyms-on-research-activities/(Accessed: 21 June 2023).

Ferrari, T. G. (2017) Design and the fourth industrial revolution. Dangers and opportunities for a mutating discipline, *The Design Journal*, 20(1), 2625–33.

Flaherty, J. (2013) No shiitake, this chair is made of mushrooms. [Available:] https://www.wired.com/2013/12/mushroom-chair/ (Accessed: 2 October 2022).

Forlano, L. (2017) Posthumanism and Design, *She Ji*, 3(1), 16–29. [Available:] https://doi.org/10.1016/j.sheji.2017.08.001 (Accessed: 18 May 2019).

Frascara, J. (2007) Bad words in design education. *Design Issues* 23(4), 62-68.

Frascara, J., Meurer, B., van Toorn, J. & Winkler, D. (1997) *User-Centred Graphic Design: Mass Communication and Social Change.* Padstow: Taylor & Francis.

Friedman, K. (2012) Models of Design: Envisioning a Future Design Education, *Visible Language*, 46.1(2), 132–153.

Fry, T. (2009) *Design Futuring: Sustainability, Ethics and New Practice.* Oxford: Berg Publishers.

Fry, T. (2010) *Design as Politics.* Oxford: Berg Publishers.

Gadamer, H.G. (1989) *Truth and Method*. New York: Continuum.

Ganci, A. & Lahey, M. (2017) Uncovering the importance of soft skills in user interface design-related fields. *Communication Design,* 5(1-2), 5-20.

Garbutt, M., (2016) Disciplinary kingdoms and the pursuit of pragmatism in research: a student perspective, *Electronic Journal of Information Systems in Developing Countries*, 77(1), 1–10.

García-Acosta, G. & Romeva, C. R. (2010). From anthropocentric design to ecospheric design: Questioning design epicentre. 11th International Design Conference, DESIGN 2010., 29–38.

GOVERNMENT COMMUNICATION AND INFORMATION SYSTEM. (2024) *Graphic design.* [Available:] https://www.gcis.gov.za/ (Accessed: 3 January 2024).

Giacomin, J. (2014) What is human centred design? *The Design Journal*, 17(4), 606-623.

Girling, R. 2023. *Exploring the Potential Impact of AI on the Role of Graphic Content Creators: Benefits, Challenges, and Collaborative Opportunities*. Master's Degree Thesis, Jonkoping University.

Glaser, M. 2015. *Graphic design.* [Available:] http://forward.library.wisconsin.edu/catalog/ocm10732631 (Accessed: 11 December 2017).

Golsby-Smith, T. 1996. Fourth Order design: a practical perspective. *Design Issues* 12(1), 5-25.

Gould, R. (2023). Graphic Design and Artificial Intelligence: What Designers Think About the AI Wave. [Available:] https://www.rasmussen.edu/degrees/design/blog/graphic-design-and-artificial-intelligence-what-designers-think/ (Accessed: 2 September 2023).

Gray, K., & Wegner, D. M. (2012). Feeling robots and human zombies: Mind perception and the uncanny valley. *Cognition,* 125(1), 125–130.

Greenberg, M.D., Easterday, M.W., & Gerber, E.M. (2015) Critiki: A Scaffolded Approach to Gathering Design Feedback from Paid Crowdworkers. [Available:] chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.researchgate.net/profile/Matthew-Easterday/publication/300484300_Critiki/links/59fb71a10f7e9b9968ba1828/Critiki.pdf (Accessed: 17 April 2022).

Greenhalgh, T. & Peacock, R. (2005) Effectiveness and efficiency of search methods in systematic reviews of complex evidence: audit of primary sources. *BMJ.* 331(7524), 1064-1065.

Guillory, J. (2015). Marshall McLuhan, Rhetoric, and the Prehistory of Media Studies. *Affirmations: of the modern*, 3(1).

Gunn, W., & Donovan, J. (2012) Design Anthropology: An introduction. *In* Design and Anthropology, by Wendy Gunn, Ton Otto and Rachel Charlotte Smith eds., pp.1-16. London: Routledge.

Haraway, D. J. (1991) *Simians, Cyborgs and Women: the reinvention of nature.* New York: Routledge.

Harland, R. (2008) The dimensions of graphic design: in theory, *New Views 2 conference in London*, (February), 3251–3262.

Harrison, AK. (2012) *Wicked problems/Weak designs.* PhD thesis. University of Sydney, Sydney, Australia.

Hayles, K.R. (2012) *How We Think: Digital Media and Contemporary Technogenesis.* Illinois: University of Chicago Press.

Heuvel van den, H., Mangaliso, M., & Van de Bunt, L. (2006) *Prophecies and protests: Ubuntu in glocal management.* Amsterdam: Rosenberg.

Hroch, P. (2014) *Sustaining Intensities: Materialism, Feminism and Posthumanism Meet Sustainable Design*. Doctor of Philosophy Thesis. University of Alberta, Canada.

Hutter, K., Hautz, J., Dennhardt, S. & Füller, J. (2013) The impact of user interactions in social media on brand awareness and purchase intention: The case of MINI on Facebook. *Journal of Product and Brand Management.* 22(5/6), 342 – 351.

Imonlemen, P. (2023) *Importance of interdisciplinary collaboration in design.* [Available:] https://www.linkedin.com/pulse/importance-interdisciplinary-collaboration-design-princely-imonlemen/ (Accessed: 11 August 2023).

INTERACTION DESIGN FOUNDATION. (2024) Humanity-centred design. [Available:] https://www.interaction-design.org/literature/topics/humanity-centered-design. (Accessed: 5 January 2024).

INTERNATIONAL COUNCIL OF DESIGN. (2024) [Available:] https://www.theicod.org/en/professional-design/design-ing/design-ing. (Accessed: 2 January 2024).

iTRANSLATE. (2024) [Available:] https://itranslate.com/translate/sesotho-to-english/'A%20person%20is%20a%20person%20through%20other%20people. (Accessed 4 February 2024).

Irani, R. & Frankel, L. (2020) The Role of Design in Consumer Behaviour: How Design Can Influence Consumer Decision Making at a Point of Purchase. *Advances in Industrial Design.* Proceedings of the AHFE 2020 Virtual Conferences on Design for Inclusion, Affective and Pleasurable Design, Interdisciplinary Practice in Industrial Design, Kansei Engineering and Human Factors for Apparel and Textile Engineering, July 16–20, 2020, USA.

Jackson, J.C., Grant, R. & Davila, P. (2016) *Urban Ecologies*. Toronto: OCAD University Press.

Jenkins, J. (2009) From data and measures to meaningful decisions: Designing useful information for senior managers and boards. Information Design Journal, 17(3), pp.188-201.Jönsson, L. (2014) *Design Events. On Explorations of a Non-anthropocentric Framework in Design,* Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation.

Joseph, F. (2010) *Mnemotechne of design – ontology and design research theories.* PhD thesis, Auckland University of Technology, Auckland.

Joubert, S.D. (2022) *An exploration of South African visual culture and identity: Case studies in graphic design.* MTech degree dissertation. Cape Peninsula University of Technology.

Kaiser, Z. (2019) Creativity as computation: Teaching design in the age of automation, *Design and Culture*, 11(2), 173–92.

Karaata, E. (2018) Usage of artificial intelligence in today's graphic design, *Online Journal of Art & Design*, 6(4), 183–98.

Kembo, B. (2018) *Exploring African-orientated aesthetics in Garth Walker's i-jusi issues of Afrika Typografika. .* MA degree dissertation. North West University.

Khomba, J.K. (2011) *Redesigning the balanced scorecard model: an African perspective*. University of Pretoria.

Kim, T., Hinds, P., (2006) *Who Should I Blame? Effects of Autonomy and Transparency on Attributions in Human-Robot Interaction*. In: Proceedings of the 15th IEEE International Symposium on Robot and Human Interactive Communication, 2006. ROMAN 2006 80–85.

Kirstein, M, 2014. *Exploring conversance with 'research for design' methods in communication design companies*. MA thesis, University of Pretoria, Pretoria.

Kjærsgaard, M.G. (2011) *Between the actual and the potential: the challenges of design anthropology*, Ph.D. dissertation, Department of Culture and Society, University of Aarhus.

Koch, T. (1999) An interpretive research process: Revisiting phenomenological and hermeneutical approaches, *Nurse Researcher, London.* 6(3), 20-34.

Koster, J.D. (1996) Managing the transformation. In: Bekker, K (ed.) *Citizen participation in local government* (99118). Pretoria: Van Schaik.

Kotze, R., Perold-Bull, K., Costandius, E., Alexander, N. (2018) Posthumanist and New Materialist Perspectives as Navigational Tool in Art Education Research: A Diffractive Analysis, *Cristal - Critical Studies in Teaching and Learning.* 6(1), 35-57.

Krippendorff, K. (2006) *The Semantic Turn a New Foundation for Design*. CRC Press.

Kruger, C. & Cross, N. (2006) Solution driven versus problem driven design: strategies and outcomes. *Design Studies*, 27(5) 527–548.

Laing, S. J. (2018). *The Role of Images in Support of Graphic Design Ideation*, Thesis, Doctor of Philosophy (PhD). The University of Waikato, Hamilton, New Zealand.

Laing, S., & Masoodian, M. (2015). A Study of the Role of Visual Information in Supporting Ideation in Graphic Design. *Journal of the Association for Information Science and Technology*, 66(6), 1199–1211.

Lange, J. & van. Eeden. J. (2016) Designing the South African Nation. *Designing Worlds: National Design Histories in an Age of Globalization*, 24, 60.

Lalioti, V. (2019) *RethinkAI™: Designing the Human and AI relationship in the Future of Work*, International Association of Societies of Design Research Conference 2019 DESIGN REVOLUTIONS, 2-5 September, Manchester Metropolitan University.

Lawson, B. (2006). *How Designers Think: The Design Process Demystified* (4th ed.). Oxford; Burlington, MA Elsevier/ Architectural Press.

Lees-Maffei, G & Houze, R (eds). (2010) *The design history reader*. Oxford: Berg.

Le Grange, L. (2018) The Notion of Ubuntu and the (Post) Humanist Condition, *Indigenous Philosophies of Education Around the World.* Oxfordshire: Routledge.

LenkaBula, P. (2008). Beyond anthropocentricity—Botho/Ubuntu and the quest for economic and ecological justice in Africa. *Religion & Theology*, 15(3–4), 375–394. https://doi.org/10.1163/157430108X376591

Leonard, N., & Ambrose, G. (2012) *Basics Graphic Design 02: Design Research: Investigation for successful creative solutions.* AVA Publishing SA, Switzerland.

Lima, J. (2021) *Introducing Relationality to Design Research.* Pivot Conference Proceedings July 22-23 2021 DISMANTLING / REASSEMBLING. [Available:] https://dl.designresearchsociety.org/cgi/viewcontent.cgi?article=1087&context=pluriversaldesign. (Accessed: 11 November 2021).

Lincoln, YS. & Guba, EG. (1985) Naturalistic Inquiry. Newbury Park, CA: Sage Publications.

Mafundikwa, S. (2011) *Design Education Manifesto: the view from Afrika.* ICOGRADA design manifesto 2011, 96-98.

Manzini, E. (2015) *Design, When Everybody Designs: An Introduction to Design for Social Innovation*. Cambridge Massachusetts: MIT Press.

Manzini, E. M'Rhitaa, M. (2016) Distributed Systems and Cosmopolitan Localism: an Emerging Design Scenario for Resilient Societies, *Sustainable Development.* 24(5), 275-280.

Marcus, G. H. (2002). *What is design today?* New York: Harry N. Abrams

Marenko, B. & Brassett, J. (2015) *Delauze and Design.* Edinburgh: Edinburgh University Press.

Margolin, V., & Margolin, S. (2002) A 'Social Model' of Design: Issues of Practice and Research, *Design Issues*. Edited by D. Durling and J. Shackleton, 18(4), 24–30.

Maringira, G. & Gukurume, S. (2021) Politics, (Re)Possession and Resurgence of Student Protests in South African Universities. *Politikon South African Journal of Political Studies.* 48(2), 1-20

Matthews, B., Shannon, B., & Roxburgh, M. (2023) Destroy all humans: The Dematerialisation of the Designer in an Age of Automation and its Impact on Graphic Design—A Literature Review. *The International Journal of Art and Design education.* 42.3, 367 – 383.

Mazzei, L. (2013) A voice without organs: Interviewing in posthumanist research. *Internal Journal of Qualitative Studies in Education.* 26(6), 732-740.

Mbembe, J.A. (2016). Decolonizing the university: New directions. *Arts and Humanities in Higher Education*, 15(1), 29-45.

Mbigi, L., Maree, J. (2005) *Ubuntu: The spirit of African transformation management*. Johannesburg: Knowledge Resources.

McDonald, D.A., (2010) Ubuntu bashing: the marketisation of 'African values' in South Africa, *Review of African Political Economy,* 37(124), 139-152.

McLuhan, M. (1964) *Understanding media: The extensions of man.* New York: McGraw Hill.

Merriam, S. (2009). *Qualitative research: A guide to design and implementation.* San Francisco, CA: Jossey-Bass.

Metz, T. (2021) Ubuntu, the good life. *Encyclopaedia of Quality of Life and Well-Being Research.* Switzerland: Springer Nature.

Miah, A. (2009) Posthumanism: a critical history, *Medical Enhancement and Posthumanity*. New York: Routledge. [Available:] https://doi.org/10.1007/978-1-4020-8852-0 (Accessed: 20 June 2013).

Miaskiewicz, T., & Kozar, K. A. (2011). Personas and user-centered design: How can personas benefit product design processes? *Design Studies*, 32(5), 417– 430.

Miles, M.B., Huberman, A.M. (1994) *Qualitative Data Analysis: a methods sourcebook,* London: Sage.

Miller, J.H. (1991). *Theory now and then*. Duke University Press.

Mitcham, C. 1995. Ethics and design, *Discovering design: explorations in design studies*, Chicago and London: University of Chicago Press,173-190.

Moalosi, R. (2007) *The impact of socio-cultural factors upon human-centred design in Botswana.* PhD thesis, Queensland University of Technology.

Moalosi, R., Popovic, V. & Hickling-Hudson, A.R. (2007) *Product analysis based on Botswana's postcolonial socio-cultural perspective.* Chinese Institute of Design, [Available:] http://www.ijdesign.org (Accessed: 7 May 2020).

Moalosi, R. & Rapitsenyane Y. (2023) *African Industrial Design Practice: Perspectives on Ubuntu Philosophy*. Routledge.

Modise T. (2006) Video: *Experience Ubuntu: Interview with Nelson Mandela.* [Available:] http://embraceubuntu.com/2006/06/01/the-meaning-of-ubuntu-explained-by-nelson-mandela/ (Accessed: 15 April 2018).

M'Rithaa, M.K. (2022) Video: *Futures of Design Ed 20: Educating for Social Innovation and Sustainability.* [Available:] https://www.hcs-afrika.com/futures-of-design-ed-20-educating-for-social-innovation-and-sustainability (Accessed: 2 February 2023).

Munyai, K. & M'Rithaa, M.K. (2012) Indigenous knowledge and design: humanising the story behind the aesthetic façade. *Proceedings of Design, Development & Research Conference*, 2012, Cape Town, South Africa. September 4-5, 2012.

Neubauer, B.E., Witkop, C.T. & Varpio, L. (2019) How phenomenology can help us learn from the experiences of others. *Perspectives Medical Education* 8, 90–97. https://doi.org/10.1007/s40037-019-0509-2

Nhemachena, A., & Kaundjua, M. 2018. *Incorporated or Cannibalised by Posthuman Others? Sanctions and Witchcraft in Contemporary Zimbabwe.* https://www.researchgate.net/profile/Maria-Bernadethe-Kaundjua/publication/331555984_Chapter_3_Incorporated_or_Cannibalised_by_Posthuman_Others_Sanctions_and_Witchcraft_in_Contemporary_Zimbabwe.127-156. (Accessed: 19 June 2021).

Nini, P. (1996). What Graphic Designers Say They Do, *Information Design Journal*, 8.2, 181–188.

Nini, P. (2006). Sharpening one's axe: making a case for a comprehensive approach to research in the graphic design process. *Theory and Research in Graphic Design*, Princeton Architectural Press, 117–129.

Norman, D. (2022) *Humanity-centered versus human-centered design.* Available at: https://jnd.org/humanity-centeredversus-human-centered-design/ (Accessed: 12 August 2023).

Norman, D. (2018) *Why Design Education must change*. Available at: https://jnd.org/why_design_education_must_change/ (Accessed: 6 February 2020).

Norman, D. and Draper, S. (1986) *User Centered System Design New Perspectives on Human-computer Interaction*. 1st edition. CRC Press.

Normoyle, C. (2019) A Blended Perspective: Social Impact Assessment in Graphic Design. *Dialectic*, 2.2: 71-94. Published by the AIGA Design Educators Community (DEC) and Michigan Publishing.

Nussbaum, B. (2003) *Ubuntu: reflections of a South African on our common humanity. Reflections*, 4(4), 2126.

Ockerse, T. (2012) Learn from the Core: Design from the Core. *Visible Language, Envisioning a Future Design Education*. (46) 1-2.

Oluyemi, A.S. (2021) Aspect of Consumer Behavioural Theory in the Context of Graphic Design, *Gazi University Journal of Science*, Part B, 9(4): 313-328.

Onwuegbuzie, A.J., Leech, N.L. (2007) Sampling Designs in Qualitative Research: Making the Sampling Process More Public *Qualitative Report*,12(2) 238-254.

O'Shaughnessy, M. & Stadler, J. 2012. *Media and society*. Fifth edition. Oxford: Oxford University Press.

Packer, M. J. (1985) Hermeneutic inquiry in the study of human conduct. *American Psychologist*, 40(10), 1081–1093.

Pannikar, R. (1979) *Myth, Faith, and Hermeneutics: Cross-cultural Studies.* Mahwah, New Jersey: Paulist Press.

Papanek, V. (1984) *Design for The Real World: Human ecology and social change*, London: Thames & Hudson.

Paris, S. (2022) Looka Logo Maker Review. [Available:] https://www.techradar.com/reviews/looka-logo-maker (Accessed: 5 July 2023).

Pennington, A. & Stanford, J. (2019) *The Future of Work for Australian graduates: The Changing Landscape of University Employment Transitions in Australia.* https://futurework.org.au/report/the-future-of-work-for-australian-graduates/ (Accessed: 13 February 2020).

Pieterse, J.N. (2006) Emancipatory cosmopolitanism: Towards an agenda, *Development and Change*, 37(6), 1247–1257.

Pilling, F. & Coulton, P. (2019) Forget the singularity, its mundane artificial intelligence that should be our immediate concern, *The Design Journal*, 22(1), 1135–46.

Plowright D. (2011) *Using Mixed Methods: Frameworks for an Integrated methodology.* London: SAGE.

Poovan, N., Du Toit, M. K., & Engelbrecht, A.S. (2006) The effect of the social values of Ubuntu on team effectiveness., *South African Journal of Business Management*, 37(3), 17–27.

Praeg, L., & Magadla, S. (2014). Introduction, *Ubuntu: Curating the archive*, 1–9. University of KwaZulu-Natal Press.

PRESENTATIONS BY ADVERTISING AND MARKETING INDUSTRY: TRANSFORMATION AND THE GRAPHIC DESIGN SECTOR. (2004). [Available:] https://www.gcis.gov.za/content/newsroom/speeches/pcomm/presentations-advertising-and-marketing-industry-transformation-and-graphic-design-sector (Accessed: 1 September 2019).

Pretorius, D. (2015) Graphic design in South Africa: a post-colonial perspective. Journal of Design History 28(3), 293-315.

Oh, S., Kim, J. H., Choi, S. W., Lee, H. J., Hong, J., Kwon, S. H. (2019). *Physician confidence in artificial intelligence: an online mobile survey*. J. Med. Internet Res. 21 (3)

Quadflieg, S. (2021) Post-anthropocentric Design: The problem of optimizing the relationship between humans and nature, Pivot Conference Proceedings 2021 DISMANTLING / REASSEMBLING.

Ramose, M.B. (1999) *African philosophy through Ubuntu.* Harare: Mond Books.

Ramose, M. B. (2014) Ubuntu: affirming a right and seeking remedies in South Africa. *In* Leonhard Praeg & Siphokazi Magadla (eds.), *Ubuntu: curating the archive.* University of KwaZulu-Natal Press.

Raff, J.H. (2012) Theoretical Frameworks for the Conceptualization of Graphic Design in Use, *Iridescent,* 2(2), 10-21.

Reeves, R. A., Baker, G. A., & Truluck, C. S. (2012). Celebrity worship, materialism, compulsive buying, and the empty self. *Psychology & Marketing.* 29(9), 674-679.

Rogers, P.A., & Bremner, C. (2017) The Concept of The Design Discipline. *Dialectic.* 1(1), 21-38.

Rolston, M. (2016) *Designers: Robots Are Coming For Your Jobs*, Fast Company Available at: https://www.fastcompany.com/3057266/designers-robots-are-coming-for-your-jobs. (Accessed: 19 February 2021).

Rowe, P.G. (1987) Design Thinking, Massachusetts: MIT Press.

Said, E.W. (2013) Orientalism reconsidered, *Arab Society: Continuity and Change*, (1),,105–122. Available at: https://doi.org/10.4324/9780203517345. (Accessed: 9 November 2016).

Sanders, E. B.-N. & Stappers, P. J. (2008) Co-creation and the new landscapes of design, *CoDesign*, 4(1), 5–18.

Sanders, E. B.-N. & Stappers, P. J. (2012) Convivial toolbox: generative research for the front end of design. Amsterdam: BIS.

Sanders, E.B.N., Stappers, P.J. (2014) “Probes, toolkits and prototypes: Three approaches to making in codesigning”, *CoDesign*, 10(1), 5–14.

Sanders, E.B.N., & Westurland, B. (2011) *Experiencing, exploring and experimenting in and with co-design spaces.* Nordic Design Research Conference 2011, Helsinki. [O] Available: http://www.maketools.com/articlespapers/SandersWesterlundNordes2011.pdf (Accessed: 3 October 2015).

Saunders, M.;Lewis, P.& Thornhill, A.(2003) *Research Methods for Business Students.* Harlow,Essex:Pearson Education.

Sauthoff, M.D. (1999) Conceptual frameworks and interpretative strategies in graphic design. Thesis submitted in partial fulfilment of the requirements for the degree of DPhil, Faculty of Arts, University of Pretoria. [O]. Available: http://repository.up.ac.za/bitstream/handle/2263/26943/thesis.pdf?sequence=1&isAllowed=y (Accessed: 5 February 2014).

Sauthoff, M.D. (2004) Walking the Tightrope: Comments on Graphic Design in South Africa'. *Design Issues*, 20(2), 34-50.

Schreiber, R., Tomm-Bonde, L. (2015) Ubuntu and constructivist grounded theory: an African methodology package, *Journal of Research in Nursing,* 20(8), 655-664.

Scott, D. (2012) *Designing for social change. Social responsibility and the Graphic Designer.* Malmö högskola.

Simon, H. (1996) *The Sciences of the Artificial.* 3rd ed. Cambridge MA: MIT Press.

Smith, J. (2016) *Experiencing Phenomenology: an Introduction*. London: Routledge.

Snaddon, B.R.A. (2020) *Learning for future knowing now : investigating transformative pedagogic processes within a design faculty in a South African university of technology.* PhD thesis, Oslo School of Architecture and Design.

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339.

SOUTH AFRICAN CULTURAL OBSERVATORY. (2024) [Available:] https://www.southafricanculturalobservatory.org.za/article/the-sa-cultural-observatory-measuring-and-valuing-sa-s-cultural-and-creative-industries. (Accessed: 11 October 2023).

Sparke, P. (1987) *Design in Context*. London: Bloomsbury.

Stassen, S. (2019) Status of Design in SA. [Available:] https://www.defsa.org.za/articles/status-design-sa#:~:text=Design%20is%20a%20wide%20field,being%20developed%20all%20the%20time. (Accessed: 7 March 2023).

Steen, M. (2008) *The fragility of human-centred design*. Delft Technical University.

Steen, M. (2011) Tensions in Human-Centred Design. *CoDesign* 7(1), 45–60.

Stoimenova, N. & Price, R. (2020) Exploring the nuances of designing (with/for) artificial intelligence, *Design Issues*, 36(4), 45–55.

Susen, S. (2022) Reflections on the (Post-)Human Condition: Towards New Forms of Engagement with the World?, *Social Epistemology*, 36(1), 63–94.

Sutherland, I. (2004). Paradigm Shift: The Challenge to Graphic Design Education and Professional Practice in Post-Apartheid South Africa. *Design Issues*, *20*(2), 51–60

Tan, S., and G. Melles. (2010) An Activity Theory Focused Case Study of Graphic Designers' Tool-Mediated Activities During the Conceptual Design Phase. *Design Studies* 31(5), 461–478.

Tavernaro-Haidarian, L. (2020). *Agency and Deliberative Communication in the Classroom.* SAGE Open, 10(1).

Thanh, N.C. & Thanh, T.T.L. (2015) The Interconnection Between Interpretivist Paradigm and Qualitative Methods in Education. *American Journal of Educational Science*, 1(2), 24-27.

Tutu, D. (2004) *God has a dream: A vision of hope for our future.* London: Rider.

Tyler, R. (1992) The long-term impact of the Dewey school. *The Curriculum Journal,* 3(2).

Udris-Borodavko, N., Bozhko, T. & Vezhbovska, L. (2021) The main trends in the graphic design development as a tool of visual communication in the information society, *Laplage Em Revista*, 7(3), 33–41.

Van Der Merwe, R.L. (2020) *We are not South African: decolonizing national identity in a post-apartheid state,* PhD Thesis, University of Colorado,

Van Manen, M. (2014) *Phenomenology of Practice: Meaning-Giving Methods in Phenomenological Research and Writing.* London and New York: Routledge.

Visocky O'Grady, J., & Visocky O'Grady, K. (2006). *A Designer's Research Manual: Succeed in Design by Knowing Your Clients and what They Really Need*. Rockport Publishers.

Wakkary, R., D. Oogjes, S. Hauser, H. Lin, C. Cao, L. Ma, & T. Duel. (2017) *Morse Things.* Proceedings of the 2017 Conference on Designing Interactive Systems - DIS '17, ACM Press, New York, NY, 503–514.

Wakkery, R. (2020) Nomadic Practices: A Posthuman Theory for Knowing Design, *International Journal of Design*, 14(3), 117–128.

Wang, J. 2013. Importance of Aristotle to design thinking. *Design Issues* 49(2), 4-15.

Wankhade, K. and Balakrishnan, K. (2010) *Sustainable settlements design: innovation in curriculum*. [Available:] http://www.ling.ohio-state.edu/-raja/Krishna/WankhadeBalakrishnan.pdf. (Accessed: March 23, 2012).

Wendt, T. (2017). Empathy as faux ethics. [Available:] https://www.epicpeople.org/empathy-faux-ethics/ (Accessed: 2 March 2021).

Winschiers-Theophilus, H., Bidwell, N. J., & Blake, E. (2012). Community Consensus: Design Beyond Participation. Design Issues, 28(3), 89–100.

Wohlin, C., Kalinowski, M., Romero Felizardo, K., & Mendes, E. (2022) Successful combination of database search and snowballing for identification of primary studies in systematic literature studies. *Information and Software Technology,* 147, 1-12

Wolfe, C. (2010) *What is Posthumanism? Volume 8 of Posthumanities Series.* Minneapolis: University of Minnesota Press.

Wolfe, C. (2021) *Art and Posthumanism. Essays, Encounters, Conversations.* Minneapolis: University of Minnesota Press.

Wolff, H. (2012) Designing in the Spirit of Ubuntu. [Available:] https://www.designindaba.com/articles/creative-work/designing-spirit-ubuntu/ (Accessed: 7 May 2019).

Wu, S. (2020) Development of Graphic Design Based on Artificial Intelligence. *Journal of Physics: Conference Series.* [Available:] https://www.researchgate.net/publication/342263117_Development_of_Graphic_Design_Based_on_Artificial_Intelligence (Accessed: 5 October 2021).

ANNEXURE 1 ETHICS APPROVAL LETTER

Cape Peninsula
University of Technology
creating futures

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Faculty of Informatics and Design
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Tel: 021-469 1012
Email: ndedem@cput.ac.za
Secretary: Mziyanda Ndede

20 September 2022

Ms Katarzyna Chmela-Jones
c/o Department of Design
CPUT

Reference no: 222767561/2022/22

Project title: The position of human-centred graphic design in a Posthumanist context

Approval period: 20 September 2022 – 31 December 2023

This is to certify that the Faculty of Informatics and Design Research Ethics Committee of the Cape Peninsula University of Technology approved the methodology and ethics of Ms Katarzyna Chmela-Jones (222767561) for Doctor of Applied Design.

Any amendments, extension or other modifications to the protocol must be submitted to the Research Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

Dr Blessing Makwambeni
Acting Chair: Research Ethics Committee
Faculty of Informatics and Design
Cape Peninsula University of Technology

ANNEXURE 2 THE CONCEPTUAL FRAMEWORK OF THE STUDY

Annexure 1 provided evidence of institutional ethical clearance. However, Annexure 2 sets out the conceptual framework of the study

Title:	**THE POSITION OF HUMAN-CENTRED GRAPHIC DESIGN IN A POSTHUMANIST CONTEXT**
Aim:	To explore the intersections between posthumanism and emergent graphic design practice.
Research Question:	**1. What are the emerging connections between graphic design practice, posthumanism and *Ubuntu* in a South African design context?** **2. How do these connections between graphic design, posthumanism and *Ubuntu* intersect in contemporary South African graphic design practice?**
Research Design:	• Narrative (qualitative research)
Philosophical underpinning:	
• **Paradigm**	Critical realism
• **Ontology:**	The understanding of reality is shaped by societal constructs, influenced by individual perspectives, and inherently subjective, hence rendering it unknowable. However, due to its lack of recognition, there is a possibility of the existence of different realities that can only be uncovered via the examination of many perspectives from both participants and respondents involved in the research.
• **Epistemology:**	An interpretivist epistemology will inform the empirical component of the study.
• **Axiology:**	This study was conducted within the interpretive paradigm in which the central goal is to interpret the social world, "(and where) knowledge … comprises constructions arising from the minds and bodies of knowing, conscious and feeling beings ... generated through a search for meaning, beliefs, and values, and through looking for wholes and relationships with other wholes". (Higgs, 2001, p.49) Consideration of approaches to Posthuman-centred graphic design in this study is based on interpretation of relevant literature and of the individual perspectives of the research participants. The interpretative paradigm is grounded in the philosophy of idealism where the emphasis is on "embodied knowing as a determinant of social reality, (with recognition of) multiple constructed realities" (Higgs, 1998: 146).
Theoretical lenses:	**Posthumanism**

Objective	Sub-Question	Literature Review (essential points)	Methods	Results	Recommendations
To conduct a comprehensive literature review on graphic design practice,	What is graphic design practice?	Societal responsibility in design, Papanek 1971 (Re-printed 1984), *Design for the Real World: human*	Literature review	Literature review examines the evolving concepts that have shaped	Further investigations into: novel and emerging design

focusing specifically on individual characteristics and theoretical frameworks.		*ecology and social change*. User-centredness, Norman 1986 [2013 (reprint), The Design of Everyday Things. Rhetoric in design: Shift in what design is, Buchanan 1992; *Wicked Problems in Design Thinking.* Novel approaches, Frascara1997, *User centred graphic design: mass communication and social change.* Role of audience in design, Margolin V. and Margolin S. 2002, *A "Social Model" of Design: Issues of Practice and Research.* South African graphic design practice, Sauthoff 2004, *Walking the Tightrope*. Design and meaning, Krippendorff 2006, *The semantic turn: a new foundation for design*. Democratisation of Design, Fry 2009, *Design futuring: sustainability ethics and new practice.* Design thinking, Dorst 2010, *The Nature of Design Thinking.* Posthuman design, Faste 2016*, A Posthuman World is Coming. Design has never mattered more.* Post-humanism and design, Forlano 2017, *Post-humanism and design.* Social justice and cosmopolitan localism, Escobar 2018, *Design for the pluriverse.*		the advancement of graphic design practise. These concepts include the impact of societal responsibility on design, the emphasis on user-centeredness, the relationship between rhetoric and design, innovative approaches to design, and the exploration of design and its inherent meaning, among other relevant perspectives.	practises, with a particular focus on those that challenge the human-centred perspective, in order to assess their potential in promoting both equality and justice for both humans and nonhuman entities.

To undertake an extensive examination of the existing body of literature pertaining to the intersection of posthumanism and *Ubuntu*. To analyse and identify the emerging connections between graphic design practice, posthumanism, and *Ubuntu* within the South African design context, by examining relevant design practice and scholarly discourse.	What is posthumanism? What is *Ubuntu*? How do these concepts relate to design practice?	• Posthumanism – Haraway (1998), Braidotti (2013, 2019, 2022), Braidotti and Hlavajova, (2018), Forlano (2017). • Ubuntu – McDonald (2010), Metz (2019), Ewuoso & Fayemi, (2021), M'Rithaa (2022).	•Literature review	According to Braidotti (2019), the critical posthumanist framework proposes that power is not concentrated inside a singular entity or institution, but rather is diffused throughout several aspects of culture and society. Braidotti asserts that power does neither manifest centralisation nor is it generated. On the contrary, the phenomenon exhibits characteristics of polycentricity, vibrancy, and distribution across cultural and societal contexts, operating through cultural frameworks that encompass theoretical constructs, modes of representation, and social mechanisms of identification (Braidotti, 2022). In a similar vein, *Ubuntu* espouses a rejection of hierarchical power systems and instead advocates for a more egalitarian conception of	Posthumanist perspectives and the concept of *Ubuntu* provide a challenge to the dominant viewpoint about design suggests that it is a process focused on tasks and performance, marked by a sequential progression, with the primary objective of reducing uncertainty by improving functional competence. The integration of these concepts should be considered as crucial for design curricula.

				power, wherein each member of a community assumes a distinct role and actively contributes to the overall welfare of the collective.	
To investigate the role of graphic designers in shaping and interpreting the connections between posthumanism, *Ubuntu*, and graphic design practice in South Africa, through individual interviews with graphic design practitioners.	What role do graphic designers play in interpreting the connections between posthumanism, *Ubuntu*, and graphic design practice in South Africa?	• The advent of technology has brought about significant transformations in the realm of labour, leading to a convergence of roles traditionally assigned to human and non-human entities. Haraway (1991) characterises this phenomenon as a manifestation of cyborg feminism, wherein the traditional boundaries delineating human and machine are dismantled to forge a novel form of existence. This concept might be interpreted within the realm of graphic design as creators transitioning into cyborgs, so transcending the limitations imposed by their inherent physical capabilities and instead leveraging technology to enhance their skills. • The visual lexicon of South Africa is gradually undergoing a transformation to incorporate a wide array of cultural components including but not limited to popular culture, everyday existence, street signage, colloquial language, and indigenous handicrafts (Lange & Van Eeden, 2016). There exists a need to undertake the restoration and reorientation of Indigenous African value systems and practises in order to harmonise them more effectively with African contexts, cultures, and	•Individual interviews	When clients impose limits or collaborative projects fail, designers become frustrated. Resistance and discontentment may hinder collaboration and *Ubuntu*'s key values of harmony and cooperation. The modest use of artificial intelligence (AI) in graphic design in South Africa shows its potential to grow in the industry. It also shows designers' reluctance to adopt new technologies. The lack of inclination by designers to study new applications or technologies can be ascribed to a range of factors, including restricted resources and time constraints. Posthuman concepts in design can emphasise collaboration and include non-human team members. Expectations from clients hinder the shift	The strengthening of cultural integration and the amplification of knowledge and education regarding Afrocentric design within the design community is recommended. Time allocation for exploration of new technologies.

		communities. The replacement of Eurocentric colonial value systems and practises in design, which have historically and currently exerted dominance, is widely regarded as an imperative measure (Cloete & Auriacombe 2019).		towards personal recognition and ownership which is valued in the South African graphic design industry.	
To examine the ways in which contemporary South African graphic designers incorporate posthumanism and *Ubuntu* principles into their creative processes, visual communication strategies, and design outputs.		•			

ANNEXURE 3 THE INTERVIEW SCHEDULE USED IN THE STUDY

Annexure 3 illustrates the interview schedule used in the study.

PHD RESEARCH PROJECT

Kate Chmela-Jones

Student number: 222767561

Cape Peninsula University of Technology

Doctor of Design in Applied Design

Title: The position of human-centred graphic design in a posthumanist context

This study aims to explore how an expanded view of graphic design practice might be reimagined through the lens of posthumanism.

The following research questions guide the study:

1. What are the emerging connections between graphic design practice, posthumanism and *Ubuntu* in a South African design context?

2. How do these connections between graphic design, posthumanism and *Ubuntu* intersect in contemporary South African graphic design practice?

Please note that the interview will be recorded. I would appreciate it if you answered each question as honestly as possible. There are no right or wrong answers. The interview can be terminated by you at any time. At no time will your name or identification number be published or associated with your responses. The information you provide will remain completely confidential and is subject to the ethics policies of the Cape Peninsula University of Technology (CPUT).

Do you have any questions before we begin?

QUALITATIVE INTERPRETAVIST DATA COLLECTION STRATEGY

RQ1: **What are the emerging connections between graphic design practice, posthumanism and *Ubuntu* in a South African design context?**

To determine familiarity with graphic design practice	To determine familiarity with the concept of posthumanism	To determine familiarity with the concept of *Ubuntu*
What made you decide on graphic design as a career?	**What do you consider more important to your practice - people or technology?**	**How important are audiences in terms of the outcomes of your practice?**
How long have you worked as a graphic designer? **What kind of firm do you work in (small, medium, large, design studio, advertising agency, in-house designer etc.)**	**Can you please give me an example of how you use technology in your practice?**	**Can you describe who the audiences of your design outcomes are?**
Can you please describe what your job as a graphic designer entails?	**What resources do you require to ensure that you keep up to date with technological innovations in your practice?**	**On a typical project how much do you know about the target audiences of your outcomes?**
Can you please describe your typical workday?	**Please explain how technology has changed in your practice.**	**Once your project is submitted do you consider your project's impact on the intended audience of your design?**
How many projects do you engage with on a typical day?	**Please describe how you consider the impact your design practice has on the environment?**	**Where do you think the boundary lies between people and design?**
Can you please describe your professional responsibilities as a graphic designer?	**Do you or have you considered using any AI software (for example *Khroma, Let's enhance, Uizard, Deep Dream***	**What is your understanding of *Ubuntu?***

	***Generator etc.*) to support your design process?**	
Please describe the essential tools of your practice?	**If you answered 'yes' to the previous question, can you elaborate how easy you find the incorporation of AI into your process? Would you consider it an essential component of your process?**	**Do you think that there is a place for *Ubuntu* in graphic design practice?**
Tell me what you do with a pencil? (any hand-rendering?)	**What do you perceive as new knowledges that are essential for the future development of graphic design practice?**	**How do you think *Ubuntu* manifests in graphic design practice?**
What software and applications do you use in your daily practice?	**Role play – imagine that I am a client and I would like you to develop a CI for my new small business. Please talk me through your client interaction process?**	**Can we talk about opportunities of co-designing outcomes with your clients? How do you feel about that?**
How do you ensure that your graphic design outcomes are original and "on trend"?		**What challenges do you encounter as part of the co-design process?**
How much oversight (in terms of your design practice) by senior staff members is there in your firm?		
***RQ2:* How do these connections between graphic design, posthumanism and *Ubuntu* intersect in contemporary South African graphic design practice?**		

To determine functionality within graphic design practice in SA context	To determine intersections between graphic design and the concept of posthumanism	To determine intersections between graphic design and the concept of *Ubuntu*
Indicate your level of "graphic design practice in South Africa" knowledge.	**How important is the idea of designers' agency in your practice?**	**As a South African designer do you consider the concept of *Ubuntu* as relevant to your practice?**
Are you familiar with the work of other local graphic designers?	**How important is design sustainability to you?**	**How important are Afro-centric modes of thinking to your practice?**
What is your firm's policy on collaboration with designers outside of your firm?	**What is your opinion of the consequences of your design practice?** ***to people** ***to environment** ***to services and systems?**	**How important is the concept of community to your practice?**
Do you collaborate with graphic and visual designers not employed by your firm?	**What do you think are the most important developments for the future of graphic design?**	**In your opinion who holds the most power in a designer/client relationship?**
Do you participate in national design competitions?		
Is there anything else that you find relevant, and you'd like to share that I have not asked you about?		
Demographic questions		
What is your gender?		
What is your age?		
How many years of Graphic Design professional experience do you have?		

What is your job title?
What is your level of graphic design-related education? Diploma Degree Advanced Diploma BTech Degree Postgraduate Diploma Postgraduate Degree (M or D)
Thank you for your time.

ANNEXURE 4 SAMPLE PARTICIPANT LETTER OF CONSENT

FID/REC/ICv0.1

FACULTY OF INFORMATICS AND DESIGN

Individual Consent for Research Participation

Title of the study: The position of human-centred graphic design in a posthumanist context.

Name of researcher: Katarzyna Anna Chmela-Jones

Contact details: email: kate@vut.ac.za phone: 0833994131

Name of supervisor: Prof Johannes C Cronje

Contact details: email: cronjej@cput.ac.za phone: 082 558 5311

Purpose of the Study: The study aims to explore how an expanded view of graphic design practice might be reimagined through the lens of posthumanism. The purpose of the phenomenological interpretivist study is to contribute to the body of knowledge and to uncover a current and future agenda for graphic design from a posthuman perspective.

Participation: Participation will consist of one-on-one or focus group interviews.

Confidentiality: The information shared by the participants will remain strictly confidential. The contents serve the purpose of PhD thesis completion, journal article(s) and that pseudonyms will protect confidentiality.

Anonymity: The following method (unless noted below): will protect anonymity in a comparable way.

The survey instrument will collect data anonymously necessary explanations before the interviews takes place. No names or any means of identifying the participants nor their place of employment will materialise in the thesis.

Conservation of data: The study includes secure data collection measures.

The researcher will store all electronic data using a password-protected computer. Digitally recorded and encrypted interviews will remain in a password-controlled environment. The storage of original data remains an audit commitment. Permanent deletion of the data occurs after three years from the date of research publishing.

Voluntary Participation: Participants are under no obligation to participate and may choose to participate or withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequences. If a participant chooses to withdraw, the destruction of all data gathered forms [art of the research process.

Additional consent: I make the following stipulations (please tick as appropriate):

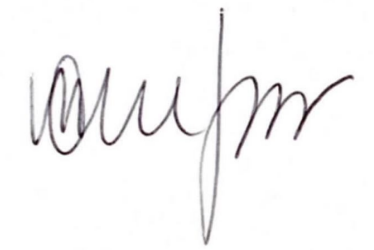
	In thesis	**In research publications**	**Both**	**Neither**
My name may be used:				x
My exact words may be used:				x
Any other (stipulate):				x

ACCEPTANCE: I (FULL NAME) ……

agree to participate in the above research study conducted by Katarzyna Anna Chmela-Jones of the Faculty of Informatics and Design, Department of Applied Design, at the Cape Peninsula University of Technology (CPUT), which research is under the supervision of Prof Johannes C. Cronje.

If I have any questions about the study, I may contact the researcher or the supervisor. If I have any questions regarding the ethical conduct of this study, I may contact the secretary of the Faculty Research Ethics Committee at 021 469 1012, or email naidoove@cput.ac.za.

Participant's signature: Date: 01 Dec 2022



Researcher's signature: Date: 01 Dec 2022

ANNEXURE 5 EDITING CERTIFICATE

DR PATRICIA HARPUR

B.Sc Information Systems Software Engineering, B.Sc Information Systems (Hons)
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To Whom It May Concern

This document certifies I have copy-edited the following thesis by Katarzyna Anna Chmela-Jones:

THE POSITION OF HUMAN-CENTRED GRAPHIC DESIGN IN A POSTHUMANIST CONTEXT

Please note this does not cover any content, conceptual organisation, or textual changes made after the editing process.

Best regards

Dr Patricia Harpur

6 February 2024