Logo Design Based On Artificial Intelligence (AI)

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ABSTRAK

Perkembangan *artificial intellegence* (AI) telah mendistrupsi berbagai aspek kehidupan manusia termasuk bidang seni dan desain. Teknologi ini terbukti mampu menjadi alat yang membantu seseorang menciptakan sebuah *corporate identity* (logo) secara cepat, murah, mudah dan variatif. Sifatnya yang terbuka *(opensource)* memungkinkan semua orang baik yang terampil ataupun tidak terampil, mampu menghasilkan sebuah logo tanpa harus terikat pada metode popular yang cenderung rumit dan bertahap-tahap. Perkembangan aplikasi *logo maker* berbasis *artificial intellegence* yang terus menyempurnakan diri berpeluang menggeser posisi desainer yang cenderung banyak bekerja dengan pendekatan "*critical thinking* dan *creative thinking*". Berangkat dari permasalahan tersebut, penelitian ini berupaya untuk memaknai lebih jauh proses kolaborasi antara manusia dan teknologi *artificial intellegence* sebagai pencapaian kreatif baru yang dapat diterima melalui diskusi akademis dan praktis. Menggunakan pendekatan *Practice -led Research*, penulis akan mengeksplorasi beberapa cara-cara kreatif yang melibatkan kerja kolektif antara desainer dengan *artificial intellegence* untuk menghasilkan sebuah metode baru merancang logo yang dapat memperluas wacana praktis dan akademis. Teori Posthumanisme *(AI Takeover)* dan teori Psikoanalisis (Empat Wacana) dijadikan sebagai alat analisis untuk menguji serta mengungkap potensi-potensi teknologi *artificial intelligence* (AI) sebagai instrumen kreatif merancang logo. Berdasarkan penelitian yang dilakukan, metode yang dinilai efektif untuk merancang logo berbasis *artificial intellegence* dapat dicapai melalui tahapan: 1. Riset, 2. Merumuskan nilai-nilai perusahaan, 3. Menuliskan (Prompt AI-Text), 4. Membuat Logo dengan Aplikasi AI, 5. Logo hasil generate AI dijadikan refrensi merancang secara konvensional, 6. Penentuan dan Penyesuaian Logo, 7. Menyusun makna filosofis, 8. Test, 9. Evaluasi (Perbaikan/ Finalisasi). Selain itu, terungkap bahwa campur tangan manusia (desainer) masih diperlukan untuk menjadikan logo hasil otomatosasi dianggap memenuhi ketentuan sebagai karya seni. Lebih jauh, penelitian ini juga memperjelas posisi teknologi *artificial intellegence* (AI) yang diciptakan sebagai alat untuk mendorong desainer menjadi "mahluk posthuman" yang memiliki kompetensi/ kemampuan baru dalam berkarya (merancang logo).

Kata kunci: *Corporate identity (logo), Artificial intelligence, Practice-led Research,* Posthumanisme, Empat Wacana

Introduction

Artificial intelligence (AI) technology has been developing at a rapid pace, influencing a wide range of creative fields such as photography, architecture, painting, animation, videography, illustration, and especially graphic design (Rezk, 2023); (Dwina Satrinia, 2023); (Enjellina, 2023); (Mehmet Emin Kahraman, 2021); (Manyu Tang, 2024); (Warman, 2024). This technology involves computer systems to create machines with cognitive abilities that can match or surpass human intelligence. AI can adapt human skills to machines, allowing them

to evolve and use these skills beyond the human body. Various AI applications are programmed using algorithms to replicate much of human behavior through machine learning, enabling the technology to accurately analyze and understand human behavior (Karaata, 2018). Furthermore, understanding computational creativity involves a combination of art, science, philosophy, and computer system engineering. According to Boden (2004), computers, as the primary component of AI, can be programmed to understand human creativity and also serve as machines for generating creativity at a certain level (Boden, 2004).

Specifically, this study conducted to discuss the impact of AI technology on the field of graphic design, particularly the creative aspects of corporate identity (logo) design.

A logo is understood as 'a graphic element to support a corporate identity.' It serves as a symbol, a visual sign that plays a crucial role in a company's communication strategy. A logo is a company's signature and acts as a bridge between the public and the company (George Adîr, 2012). Traditionally, logo design has involved a creative process supported by research and a graphic designer's visual skills, ensuring that the resulting logo effectively represents the values of the company or individual using it. Creating a logo that adheres to good design principles typically requires a lengthy and complex process. However, surprisingly, AI technology offers a rapid, easy, and practical approach to logo design, making it accessible to both skilled and unskilled individuals in the field of graphic design (Zhao, 2024). This situation can be seen as a threat to human creativity and the existence of graphic design careers. On the other hand, this technology can also be utilized as a tool to assist graphic designers and elevate the creative process to new heights.

Based on these phenomena, this study aims to reveal three aspects. First, new methods involving a combination of humanistic approaches (creative thinking and critical thinking) with artificial intelligence (AI) technology. Second, to uncover the positions of humans and technology in the creative process of logo design in the contemporary era. Third, to find the essence of artistic value in a logo design generated by artificial intelligence (AI) technology.

To answer these questions and achieve the research objectives, several approaches are involved, such as Posthumanism theory (AI Takeover) by Nick Bostrom and Psychoanalysis theory (Four Discourses) by Jacque Lacan.

Contemporary philosophers Nick Bostrom and Joanna J. Bryson explain that posthumanism is seen as a theory that contradicts the concept of anthropocentrism. Several philosophical perspectives are related to the concept of an "artificial intelligence takeover-posthumanism" as a basis for analysis. Bostrom argues that the potential for a "posthuman takeover" of labor and creativity is detrimental to humans. On the other hand, a significant shift occurs from an anthropocentric to a posthuman-centric position, where posthuman beings will become the

most intelligent and powerful species compared to humans. Since humans are the programmers or creators of these artificial intelligence systems, machines should be positioned as 'servants' or 'slaves' to humans. However, advancements in computation and artificial intelligence technology necessitate a "posthuman takeover," meaning humans are no longer 'masters.' By objectifying human consciousness, artificial intelligence can easily mimic human rational decision-making processes. This establishes artificial intelligence as rational agents that can actively 'think' and 'act,' thereby threatening humanity's position as 'masters.' The objectification of human consciousness creates a 'master-slave' relationship. Joanna J. Bryson suggests that machines should be treated as slaves or servants, and humans should not anthropomorphize them or consider them moral agents. In her view, a "posthuman takeover" could lead to serious conflicts and ethical violations. The view of "weak artificial intelligence" follows; although this technology can simulate conscious activity, it's undeniable that machines are considered capable of achieving true consciousness. Since consciousness is a biological feature, it cannot be artificially produced (Rajakishore Nath, 2021); (Bostrom, 2005).

Jacques Lacan's Psychoanalytic Theory of Four Discourses provides a framework for analyzing the complex interplay between humans and artificial intelligence in the realm of contemporary art. Lacan conceptualized 'discourse' as a social structure shaped by intersubjectivity (humans are influenced by external concepts/entities/values). These discourses are categorized into four schemas: Master, University, Hysteric, and Analyst.

Lacan further argued that the position (variable) in the Four Discourse schema is influenced by psychological factors such as knowledge/belief, values/ideals, self-division, alienation, and jouissance/enjoyment. Moreover, changes in the position of variables in these four discourses have a role in mobilizing, regulating, suppressing, and fostering novel understandings within the psychoanalytic framework.

The Discourse of Master	**The Discourse of Hysteric**	**Description:**
The Discourse of University	**The Discourse of Analyst**	S1 : Primary Signifier/ Value S2 : Knowledge; Signifier Series in Symbolic Order a : Excessive Pleasure; Residue that yearns for Jouissance/ Enjoyment $: Split Subject/ Alienation

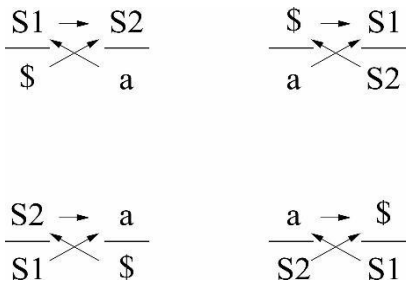
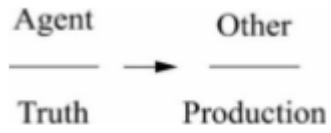


Figure 1. Schematic of the Four Discourses Theory.
Source: Lacanian Theory of Discourse, pp. 115-123.



Description:

a. Agent (top left), the speaker of the discourse.

b. Other (top right), where the discourse is directed.

c. Production (bottom right), what is created by the discourse.

d. Truth (bottom left), what the discourse wants to express.

Figure 2. Position of the Agent in the Four-Discourse Schema.
Source: Lacanian Theory of Discourse, p. 252.

Lacan argues that the positions (variables) in the Four Discourses model are influenced by psychological factors such as knowledge/ beliefs (S2), values /ideals (S1), split subject/ alienation ($), and jouissance/enjoyment (a). Furthermore, each change in the position of the variables in these four discourses has a role in mobilizing, regulating, suppressing, and generating new understandings from a psychoanalytic perspective. In each discourse, each agent has a role in conveying a message to the other agents, and truth can be achieved through a certain production. The interconnection between the symbols S1, S2, $, and a in the discourse schema is essential in reconstructing a new meaning. Lacan also emphasized that these four variables have a vital position in the formation of the communication process (Mark Bracher, 1994); (Lacan, 1970).

In the future, humans as graphic designers inherently anthropocentric, will occupy the position of agents within a four-discourse schema. This includes the paradigm of humans as ‘masters’ over artificial intelligence, the contemporary society’s objective consciousness shaping AI as rational agents, and the essence of creating AI with all its flaws. This future positioning will be analyzed to identify trends as a philosophical foundation, clarifying the position of humans and technology in contemporary civilization.

Meanwhile, the "Practice-led Research" method was used as a tool to explore new methods of designing logos by combining AI and designer skills. Practice-led research is a series of processes involving practical activities in a studio or laboratory, supported by theoretical analysis, to achieve a specific creative process (Chris Rust, 2007). In the future, researchers and practitioners using the practice-led research approach will need to meticulously document every step of the creative process, including sketches, writings, documentation, and other supporting materials. These records help in formulating the critical aspects when engaging in the practical process of logo design. A key characteristic of this method is its research objective, which aims to develop a new understanding of practices integrated with the creative/design process (Hendriyana, 2022). It is anticipated that this research will contribute significantly to the academic field and can be practically applied, particularly in the domain of graphic design. This research offers new perspectives on the logo design process, specifically exploring the integration of artificial intelligence.

Research Methods

Practice-led Research is considered a method that can assist the author, who is also a designer, in examining the logo design process through constant recording of the design practices as part of the effort to generate new knowledge (Gray, 2018); (Laurene Vaughan, 2017); (Candy, 2006). Supported by qualitative research data and processes, the author aims to uncover the potential of the creative process involving the human "designer" and the machine "artificial intelligence (AI).

As an initial step in operationalizing the Practice-led Research method, the researcher collected data to be used as design material for a logo. This data was subsequently analyzed using posthumanism theory and four discourse schemas. The data collection stage involved observation, and literature review. The observation object is the experiment of creative process designing logos involving artificial intelligence, while the observation subject is the researcher. The literature study involved relevant logo design publications and works related to the topic. As a limitation, the implementation of the practice-led research method only focused on the logo design process carried out after the research and determination of corporate values, as well as before the formulation of philosophical meaning, testing, and evaluation. This is because those stages do not involve visual processing practice as an implementation of the creative process of designing logos.

Results and Study

1. Creative experimentation in AI-based logo design

In this research, a logo as a formal object is defined as "The logo design is a creative work which allows a company to be seen through a symbol as a visual and graphic message" (George Adîr, 2012). This definition reinforces the rationale for improvisation and elaboration as a form of implementing a designer's creativity, specifically in logo design.

Furthermore, the Practice-led Research method has proven to be invaluable in assisting the author to elaborate on creative methods of designing a logo by involving artificial intelligence (AI). Before delving into the technical aspects, the author needs to emphasize that to design a logo, a designer must involve research as an initial stage before engaging in creative work. designing a logo is divided into two stages:

1. The first stage (Research and market projection), this stage aims to set the theme; To identify existing logos in the gainer domain; To realize a competition study of existing logos in the market; To fix the target public of the presumptive logo; To specify the support elements of the logo; To analyze the creative graphic possibilities in the demanded domain.
2. The second stage (Creative graphic work), this stage aims to sketch some examples for the demanded logo; To achieve a brainstorming session to obtain 2-3 solutions; To set the best graphic-visual logo solution; To convey a first graphic print to the gainer; To create the computer graphic design logo (George Adîr, 2012).

Despite using different terminology, these two stages are consistently present in any logo design method, as illustrated in Table 1. The blue table is the research stage, the red table is the creative work stage, while the black table is the logo production and managing stage (testing, evaluation, publication/ implementation).

Table 1. Logo Design Method

(a)	(b)	(c)	(d)
1. Conducting Research	1. Brief	1. Strategy	1. The analysis of the logos in the market related to a same activity as our client company
2. Clarifying	2. Research	2. Concept	
3. Designing Identity	3. Study	3. Applications	2. To make sketches for the required logo
4. Creating Touchpoint	4. Development	4. Implementation	3. Brainstorming to identify 2-3 variant of logos
5. Managing Assets	5. Visual Identity Manual	(by: Landa)	4. The analysis together with the client
(by: Alina Wheeler)	(by: Mesquita)		5. Computer graphic design for the selected logo
			(by: Victor Adîr, George Adîr, Nicoleta E.P)
Summary	Finding and Defining the Problem	Creation	Production and Managment

Source: a, b, c (Filipa, 2020); d (Victor Adîr, 2014)

Practice-led research is positioned as a method allowing the author, as both a researcher and designer practitioner, to make the practice of designing a logo a driving force for

conducting research. The author employs an experimental approach to elaborate on the creative possibilities of designing a logo. Each stage of the logo design practice (linear-iterative) is recorded as data to be analyzed to generate new knowledge. Specifically, the author sets three forms of logo design experiments with distinct stages as follows:

Table 2. Experimentation of Artificial Intelligence (AI)-Based Logo Design Method

Experiment 1	Experiment 2	Experiment 3
1. Research	1. Research	1. Research
2. Formulate company values	2. Formulate company values	2. Formulate company values
3. Write (AI text prompt)	3. Write (AI text prompt)	3. Iconization (form study) - determine image for logo visual preference
4. Create a logo using AI applications	4. Create a logo using AI applications	4. Upload AI image prompt
5. Logo selection and adjustment	5. Use an AI-generated logo as a reference for conventional design	5. Create a logo using AI applications
6. Develop philosophical meaning	6. Logo selection and adjustment	6. Logo selection and adjustment
7. Test	7. Develop philosophical meaning	7. Develop philosophical meaning
8. Evaluation (Improvement/Finalization)	8. Test	8. Test
	9. Evaluation (Improvement/Finalization)	9. Evaluation (Improvement/Finalization)

Source: (AI-based logo design method, Namuri Migotuwio, 2024)

Table 3. Experiment 1 Designing a Logo with AI-based Applications

Table 4. Experiment 2 Designing a Logo with AI-based Applications

Table 5. Experiment 3 Designing a Logo with AI-based Applications

In a practical logo design experiment involving an AI-based logo maker application, the author chose to simulate designing a logo for an automotive company named 'SKY MACH'. The keywords used as a prompt are: Automotive, Cars, Racing, Transportation, Innovation, Strength, Excellence, Bright Color, Masculine, Spirit. The goal at this stage was not to create an aesthetically universal logo but to demonstrate the methods a graphic designer can employ when designing a logo with the aid of artificial intelligence technology. In the future, the design methods can be used as discussion material in the practical and academic realms to achieve the expected maximum potential.

In terms of tools used in this study, the author utilized four freely accessible logo maker applications powered by artificial intelligence. These applications were selected based on their highest ratings and user counts. The applications are as follows:

a. Looka, https://looka.com, with a rating of 4.9 from 11,906 users
b. Shopify (Hatchful), https://www.shopify.com, with a rating of 4.9 from 11,010 users
c. BrandCrowd, https://www.brandcrowd.com, with a rating of 4.9 from 977 users

d. Playground, https://playground.com, with a rating of 4.6 as one of the Artificial Intelligence (AI) platforms capable of image-to-image generation.

While not elaborated on further, the author revealed that several variables such as Legible - a very good writing; Coherent - clear, easy to understand; Adaptable - to be designed in horizontal and vertical formats, in any size; Reproducible - easy to be copied, black and white or colored; Memorable - never forget it; Timeless - means a test to survive in time; Simple - to be easily recognized; Good Logo Variables during testing: Simple, Original, Memorable, Timeless, Scalable, Visible can be employed by a graphic designer when aiming to design an effective logo. Thus, this study examines key aspects, including 'Size, colors, and shape are three important elements in a design activity' (George Adîr, 2012); (Bokhua, 2022).

Based on several experiments in logo design using AI, the author found four key points. First, regarding the aspect of fulfilling the principles of a good logo when designing a logo using AI applications (before testing stage). To create a logo that meets the "legible" and "reproducible" principles, a designer must have a solid understanding of size, color, and shape. Understanding the basics of composition and good visual processing becomes a skill and sensitivity for creating easily recognizable logos. 'Simplicity' is a key factor in achieving this; Based on the practice of designing logos involving several AI applications, it was found that using clear and concise prompts (either textual or visual) can help generate simpler designs. By providing specific keywords and shape preferences, the researcher can guide the AI to generate logo variations. As shown in the table above, the AI can generate a decent variety of designs based on our input. However, the generated designs are often limited in terms of shape variations, typically only altering the composition and color of the icon. This suggests that AI is not yet capable of creatively generating entirely new and varied shapes. Therefore, additional visual refinements are often necessary to achieve the desired shape, composition, and color. To ensure the logo is 'coherent' (clear and understandable), 'timeless' (enduring), and 'memorable' (easy to remember), it requires additional testing to validate the designs. Relying solely on the designer's or company representative's perception as the user is insufficient. Testing with a representative sample of respondents (the larger the sample, the more valid the results) is crucial for strengthening the logo design process.

Second, based on the findings from experimenting with logo design using several AI applications, it is evident that the role of a graphic designer remains indispensable. The consistent prompts given to various machine learning models reveal inherent flaws, both in terms of aesthetics and creativity (the ability to create something new). Nevertheless, logos generated by AI applications tend to be consumable or usable for the general public who do not have a preference for high-quality logos and do not require in-depth conceptual analysis (philosophical meaning). Since, as a visual marker or image of a company, the

keywords provided (prompts) serve as the basis for the logo that appears to represent the values we want to showcase in the machine learning-based work. Therefore, logo designs with an automated machine approach tend to be industrial in nature and cannot yet be considered as a form of creative artwork.

Third, based on three experiments involving four Artificial Intelligence (AI) applications, the author assesses that the design method with Experiment 1 tends to require fewer revisions by the designer compared to Experiments 2 and 3. This is due to the selection of only one logo shape, resulting in adjustments focused solely on repositioning the shape, color, and size of the chosen logo. Although it is generally considered quicker and easier, a drawback of the Experiment 1 approach is its limited creative potential. This is because a designer does not open up opportunities for other elements to generate new logo shape configurations. However, experiments 2 and 3 tend to require a significantly larger role for designers to visually refine and reconstruct the desired logo. This is because logos generated by artificial intelligence (AI), with all their limitations and shortcomings, serve merely as references that accelerate the exploration of new forms based on the machine learning process's interpretation of our prompts or instructions. The advantage of the methods used in experiments 2 and 3 is that the resulting logos are relatively more creative and varied. Nevertheless, graphic designer's skills in using visual components generated by logo or image creation machines are crucial in determining the quality (aesthetics and creativity) of the final logo. Furthermore, to enrich and equip a logo to be valuable and high-quality, it is crucial to formulate a philosophical meaning based on the shape, size, and color produced after the logo design process. This should be followed by validation through testing and evaluation as a subsequent series of steps to produce a complete logo. These various stages indicate that in the creative visual process of designing a logo, research, and analysis are necessary as an academic narrative. Therefore, in the field of visual communication design, the creative process involves the cross or multidisciplinary integration of other sciences as supporting tools to sharpen the research and analysis results conducted by academic graphic designers.

Fourth, the weakness of originality as an implementation of moral and ethical concepts within a creative process is apparent. From a legal standpoint, logos purely generated by AI cannot be considered legal subjects. This is because AI essentially operates as an algorithm engineered and developed by humans to perform specific tasks. Furthermore, since no legal entity can identify the status of creations produced by AI applications, this technology is deemed to fail to meet the criteria for classification as a legal subject. Consequently, logos generated by AI applications are not considered eligible for copyright protection. Under Indonesia's Copyright Law No. 28 of 2014, copyright claims are exclusively granted to works imbued with human creativity (Muh Ersandi Rizki Pratama, 2024). However, if AI-generated logos are positioned as materials for further development and improvement, then this legal perspective does not apply. Especially now that technologies using SURF

(Speeded Up Robust Features) and kNN (k-nearest neighbor) approaches have been created to identify the similarity level of visual logo images (Sai Mukesh Reddy Gutha, 2022). The existence of such technologies is deemed to assist graphic designers in identifying and minimizing plagiarism of logos generated by both AI and humans.

2. Claiming AI-generated logos as artwork and their ability to shift the position of graphic designers

The discussion over whether logos are commodities or works of art can lead us to understand the urgent need for human involvement in the creative process. Furthermore, graphic design as an applied science under the visual arts discipline has strong reasons to position all of its outputs, including logos, as valuable artistic works. Additionally, based on the definition of art as an expression reflecting the inner and outer states of the human mind (artist/creator), art is specifically related to feelings (Hospers, 2022). This strengthens the narrative of the concept of "human element" connectivity in graphic design/artwork. This aligns with the view of George Adîr, Victor Adîr, and Nicoleta Elisabeta Pascu, stating that logos, when functioning as visual communication tools, are required to reach the emotional "feeling" aspect of the target audience. "The logo functions are those who assure the graphic, visual and feeling communication and allow the translation of the message to the public." It is further explained that "Logo functions: 1. Contact function - assures and sustains the contact to the public; 2. Explain function - specifies the identity and the personality of the organization; 3. Denotative function - offers information about the product/service/event; 4. Identification function - indicates the target public; 5. Signification function - follows to add emotion; 6. Translation function - explains the code of the message; 7. Esthetics function - inspires pleasure, sensibility" a strong identity of a company/service/product" (George Adîr, 2012); Furthermore, logos inherently carry the traits of their creators (designers). They are influenced by human elements such as "emotions, feelings, and fantasies", both consciously and subconsciously expressed in the work. The creative process thus transforms subjective elements into objective ones, "logo design elements into subjective and objective" (Erjansola, 2023).

From the perspective that the 'human element' is essential and holds a crucial position in the creative process of designing visual communication works (logos), the discussion on how artificial intelligence (AI) technology can be understood as a form of art becomes a crucial finding. This is because, as we know, this technology is capable of creating graphic design works (logos) without direct human intervention.

The rise of logo maker apps, capable of producing logo designs swiftly and tailored to various needs, poses a potential threat to the traditional role and creative processes of conventional graphic designers in the years to come. Various literatures state that AI

technology has the same characteristics as machines, namely, it is created by humans to help work become faster, more efficient, cheaper, and easier. Because of this goal, various things or products (logos) produced by AI technology will have a status as commodities. On the other hand, the fact that machines do not have the power/initiative to create because they are not equipped with biological and psychological elements such as imagination, desire, emotion, and feeling, makes them limited and unable to fully replace the position of humans. The absence of a "human element" in the creative process with artificial intelligence (AI) technology causes logos to be unable to meet the requirements of works of art.

Given the paramount importance of the 'human element' in shaping the essence of art, a visual communication work (logo) can be considered a work of art when human involvement is present, even if the work is generated by a machine (non-human). Thus, in experiments 1, 2, and 3 on logo design using artificial intelligence (AI)-based logo maker applications, the author involved processes such as research, value determination, logo selection and adjustment, testing to target audiences and users, as well as evaluation as a series of processesundertaken solely by humans (designers). Therefore, designing a logo is not merely about visualization, which a machine (AI) could potentially complete. Rather, it is a holistic process that indirectly represents a collaboration between humans and machines. Consequently, this approach can be adopted to address the position of humans and machines in the creative process of AI-based logo design.

The concept of posthumanism in this study attempts to reveal the position of humans in the age of automation. It offers a positive perspective, suggesting that the presence of AI can empower humans, elevating them to a higher level of existence compared to before. However, the study also acknowledges potential negative consequences such as increased dependency and reliance on AI, which could potentially degrade human existence in certain areas.

Based on this study, the author found that from a posthumanist perspective, no matter how advanced AI technology is, it cannot design a logo that fulfills the essence of a work of art without human (designer) intervention. Therefore, the position of AI in a posthumanist perspective is merely as a tool that assists in shaping humans (designers) into stronger/ reinforce and more intelligent posthuman species (in the context of the creative process: AI technology helps a designer produce logo designs more quickly, effectively, variably, cheaply, and easily, thus aiding in gaining new experiences and achievements in the creative process). Additionally, society also tends to wish to keep positioning artificial intelligence as a tool that must be subject to cultural norms and values that uphold "humanity", thus machines will remain "servants" or "slaves" while designers remain "masters".

Several findings have refuted the claim that artificial intelligence (AI) will completely replace humans (designers) in the creative process, particularly in logo design. Instead, it has become a form of collaboration (machine-human) that allows humans (designers) to gain new creative experiences and artistic achievements.

3. The bargaining position of graphic designers in the automation era

Lacan explains that "discourse" is a structure (of language and action) that encompasses fundamental relationships, including intra-subjective (designer's psychology), intersubjective (social order in the creative field), and non-human relationships (artificial intelligence) elements that play a formative and transformative role in changing creative behaviors and paradigms. AI is one part of the constitutive discourse structure of the social and psychological order related to the interests of the "subject," including elements of thought, influence, enjoyment, meaning, sense of existence, and self-identity as "being" (human) in the posthuman era.

Within the four-discourse structure, the positions of agents such as knowledge (S2), master-signifier (S1), divided/ split subject ($), and object of desire (a) are occupied by factors interconnected in shaping the discourse structure. Furthermore, in the context of this study, the Knowledge Agent (S2) is represented by the factor 'artificial intelligence (AI) systems in generating logos,' which is intangible/inarticulate, resulting from the articulation of signification (S1); and is capable of producing a concept of enjoyment-jouissance through a dominant subject position when experiencing cycles of liking-disliking/ally-enemy. The working system of AI technology in generating logos through prompts often incomprehensible to designers requires them to rely on the articulation of signification (S1) to gain recognition/meaning as an accepted work of art. The Master Signifier Agent (S1) is represented by the "academic and industry code of ethics for graphic design", including both positive and negative values, and emerges from the drive to be "oneself". The concept of being "one self" in the academic and graphic design industry is interpreted as the agreement of the actors to determine the code of ethics (a system of positive and negative values) in the creative practice of logo design through a distinctive approach from other scientific disciplines. The Divided Subject/ Split Subject Agent ($) is represented by the "AI-based graphic designers" as a subject considered to have failed to identify themselves. The role of AI-based graphic designers is considered to have undergone a degradation of existence and emasculation when working involving automated machines. On the other hand, the divided subject ($) becomes an arena where incompatible systems coexist, while also conflicting with each other. The object of desire (a) is represented by the factor of accessible logo design (easy, affordable, quick, aesthetic, and adhering to good logo principles). The "object of desire" (a) within the four-discourse structure is characterized as a missing or lacking subject; and also serves as the "cause of

desire". In this study, a good logo becomes the "object of desire (a) that cannot be achieved through an instant process, as it requires a lengthy series of processes. This condition causes the logo to occupy the position of the cause of desire for both designers and the general public, making artificial AI technology a crucial and influential variable in the formation of the object of desire (a).

Furthermore, the existence of designers and the position of artificial intelligence (AI) technology in the creative process of logo design are explained through the four-discourse scheme as follows.

Based on the analysis process, Hysteric's discourse is considered the most appropriate structure to explain the position of designers and AI technology in the field of graphic design.

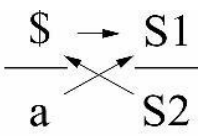


Figure 3. Schematic of The Discourses of Hysteric. **Source:** Lacanian Theory of Discourse, pp. 115-123.

Within this discourse, the identity of graphic designers working with AI is distorted. As subjects, their existence and bargaining position as designers undergo a division/ alienation ($). This is triggered by the high demands of society for logos that can be created quickly, easily, cheaply, aesthetically, and adhere to good logo principles. These societal demands serve as an unseen but powerful force influencing designers to meet these expectations by collaborating with automation machines. Psychologically, a designer is required to be able to meet market needs becoming 'The Other' (A) and customer-oriented creative workers. This paradigm indirectly affects the behavior and creative process of AI-based designers.

On the other hand, the intricate workings of AI technology, involving algorithms and computational systems to generate logos (S2), make it seem complex and difficult to articulate. This, in turn, influences the behavior and bargaining position of a designer working with this technology.

From a posthumanist perspective, the dominant position of designers also affects the code of ethics in graphic design recognized in the academic and creative industry (S1) in both academic and creative industry settings, adhering to ethical codes that consider acknowledging the output of non-human creation as the work of a designer or individual is a form of plagiarism – an immoral and negative behavior. Moreover, the absence of clear

regulations governing the position of logo designs produced by AI automation systems results in knowledge systems occupying the position of products. This further clarifies the previous analysis that the absence of human involvement in AI-based logo design processes places it in a position suppressed by the master signifier (S1), namely the code of ethics, making anything produced by the machine a product; it cannot be equated with a work of art.

Based on the analysis of hysteric's discourse, it is revealed that AI-based graphic designers experience alienation/identity division due to the degradation caused by machines. This status arises because the code of ethics that has been the basis for working is no longer relevant to the public's need for logos. Furthermore, AI-generated logos (a) will continue to find a place in the general public as a product, but cannot be considered as a work of art because they are suppressed by the code of ethics as a value system (S1).

Conclusions and Recommendations

Based on experiments in logo design involving collaboration between designers with inherent humanistic qualities and artificial intelligence (AI), it was found that the design method with the stages of:

1. Research, 2. Formulating company values, 3. Writing (AI-Text Prompt), 4. Creating Logos with AI Applications, 5. AI-generated logos used as references for manual design process, 6. Logo Selection and Adjustment, 7. Compiling philosophical meaning, 8. Testing, 9. Evaluation (Improvement/Finalization) is the most effective creative approach to generating exploratory logos.

Furthermore, based on the four-discourse analysis and a study with a posthumanist approach, it is revealed that the role of a graphic designer with research (critical thinking) skills and expertise in visual processing is necessary to produce aesthetically pleasing logos that meet the principles of a good logo. While AI-based logo makers can handle some tasks, they are limited by their reliance on prompts and their inability to replicate human creativity (fantasy, feelings, sensations, emotions). This results in designs that are unable to generate new creativity needed to effectively connect with people on a human level, as a fundamental element in the visual communication process.

Therefore, AI-based logo maker applications, from a posthumanist perspective, are merely positioned as a tool that shapes humans (designers) into posthuman species capable of designing logos more efficiently, as well as assisting in gaining new creative experiences and artistic achievements. Furthermore, based on the analysis of hysteric's discourse, the creative process in the contemporary era tends to position graphic designers working with AI

technology to experience alienation/ identity division due to the influence of technology's existence in the series of creative logo design processes. This status is formed by the beliefs/value system adopted by the practitioners, as formulated in the code of ethics of creative work, despite this order being considered less relevant to current industry needs.

Nevertheless, AI-generated logos (a) will still find a place among the general public positioning logos as products or commodities. However, logos cannot be considered works of art due to the constraints of the code of ethics as a system of values (S1) that considers human involvement as the primary element in forming the essence of a work of art. Furthermore, graphic design, as an applied science under the umbrella of fine arts, inherently possesses artistic qualities; thus, it is highly reasonable and acceptable to claim that everything it produces, including logos, is a work of art. However, logos generated by AI applications are considered not to meet the requirements to be considered works of art and to be granted copyright protection because, based on the applicable laws in Indonesia in particular, exclusive copyright claims are only granted to works imbued with human creative elements.

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