

“Studies in Perception 1” and the Objectified Female Nude

[GLORIA NAKAFU]

Studies in Perception 1, a 1967 silkscreen print, was the result of an experiment by Leon Harmon and Ken Knowlton to create computational art. The piece depicts a female nude through the arrangement of computer symbols, and perpetuates traditional art historical patterns of objectifying the female body. An exploration of the artists’ choices of medium and spatial composition, as well as the print’s contextual placement in the MCA Chicago’s exhibition “The Living End” on technology and the reinvention of painting practices, reveals the ways in which the figure is objectified. The piece exemplifies how new technologies and methods of art production can continue to reinforce established conventions of representing the female body and traditional ideas surrounding the value of women in society, contributing to the female nude as a historically misogynistic subject and proving that technological advances do not always equate to more progressive understandings and representations of women. Further, the choice of a classical, humanist subject negates any posthumanist ideas the work may inspire. Thus, despite its groundbreaking use of computational methods, this work promotes the objectification of women in the art historical canon.

Harmon and Knowlton’s choice of medium creates the sense of objectification present in this piece. Form is created not through the use of line, but rather through the multiple small computer symbols that are overlapped on top of each other to create differences in light and dark, thus using tone to reveal the form of the figure. The use of computational data makes for a strange texture, as it imprints on the figure a pattern that highly abstracts her in an unsettling way, removing her connection to humanity by making her body appear visually different from what is typically expected. The uniformity of the texture throughout the entire print results in the figure’s body, and especially her upper arm, blending into the chair that she lays on. This merging of the two into one continuous

form furthers her representation as an object. Through the pattern created by the piece's texture, she is absorbed into a material, functional thing.

The technological components of the piece further posit the figure's objectification. The color scheme of the print is black, white, and grey, because of the limitations in color technology during the late 1960s, but it serves to further the dehumanisation of the figure. There is no sense of the tactility, warmth, or softness of flesh; rather the image feels cold and impersonal, detached from corporeal human experience. The wall text describing the piece states that Harmon worked as a cognitive neuroscience researcher and Knowlton was an artist and an engineer in the Bell Labs of AT&T, so their choice of experimenting with computer art makes sense, and their considerable achievements in their experimentation are worthy of recognition and esteem. However, the medium of computational data results in the upholding of objectification and sexualization in representations of the female body.

The space and scale of the work also play a role in the figure's sexualization and objectification. Space in this image is very cramped, and the figure is pushed to the front of the picture plane such that the only elements in the image are the lying figure and the chair behind her, ensuring that the viewer cannot look anywhere else but at her. Her head is tilted backwards and her legs are out of the frame, so all focus is directed to her torso. The print is quite large, with the figure being a little over lifesize, and is placed slightly lower than eye level, so the viewer is encouraged to examine all of its intricate details. One can easily scrutinize every aspect of the figure's body without shame or fear of retaliation, as she does not confront them with her gaze. Her lack of agency is reminiscent of Tintoretto's *Susanna*, as depicted in his 1556 painting *Susanna and the Elders*. Before *Susanna* sees the elders, she bathes in blissful ignorance of her assaulters, and by extension the viewer of the piece, watching her. The viewer's spatial position over the figure is one of power, which contributes to her depiction as a sexualised and objectified being.

The figure's objectification is reinforced through an understanding of the context of the exhibition. *Studies in Perception 1* is part of a wider exhibition at the Museum of Contemporary Art Chicago entitled "The Living End: Painting and Other Technologies, 1970-2020," which examines the reinvention and redefinition of painting as an artistic medium by numerous artists over the past 50-60 years.¹ The exhibition's aim is to reconsider painting through exploring the impact that new technologies, from the earliest computers to social media, have had on the medium and practice, in which case Harmon and Knowlton's work is a useful example. However, the exhibition states that all of the artists whose work is represented have subverted the traditional ideals and mythologies asso-

1 Museum of Contemporary Art Chicago, "The Living End: Painting and Other Technologies, 1970-2020 - MCA Chicago," *Museum of Contemporary Art Chicago*, October 14, 2024, <https://visit.mcachicago.org/exhibitions/the-living-end-painting-and-other-technologies-1970-2020/>.

ciated with painting, which this specific work fundamentally fails to do.² Female nudes have long been a staple subject in the history of painting, especially those that function as sexualised and objectified images of unwilling women available for consumption primarily by male artists and patrons. This print firmly follows in this tradition, and thus refutes the very purpose of the exhibition through its upholding of the dated ideals of this form of representation regardless of its new and subversive medium.

The female nude as an intentional choice of subject also contributes to the piece's inherent objectification, which can be understood through a history of this specific subject matter. In her seminal 1971 article "Why Have There Been No Great Women Artists," Linda Nochlin writes that proponents of traditional styles of painting believed representations of the nude, and especially of the female nude, to be the most essential elements of great painting, as clothing impaired the "universality and idealization" of great art.³ For artists, mastering depictions of the nude figure was key to achieving the status of history painter, an honor that very few women artists attained because of their lack of access to nude models to learn from.⁴ The fact that for most of history, only male artists could work from the nude consequently resulted in the genre of history painting, and the subject of the nude, becoming an inherently male sphere. This is exemplified in Alexandre Cabanel's 1863 painting *The Birth of Venus*, which depicts the moment that Venus is born from seafoam. As the main figure in the composition, Venus's dominance of the picture plane and the limited background force the viewer to focus on her. Venus' eyes, though not quite closed, do not directly address the viewer. Rather, her position opens her up completely for the viewer's satisfaction, and her pale skin contrasts with the blue surrounding to highlight her supple flesh. She is, before the artist and viewer, rendered completely exposed and completely powerless.⁵

Harmon and Knowlton's figure lies in a position similar to Cabanel's *Venus*, and her head is tilted even further backwards, which completely takes away the viewer's access to her identity as a person and makes her body the centre of the image. Her chest is accentuated through the curve of her arm, and emphasis is drawn to her pubic area, as it is the darkest part of the composition, with the triangle of deep black functioning almost as a covering to preserve the figure's modesty while still retaining an element of mystery and sexuality. Both of these areas face the viewer directly, and because her personhood is completely erased, the figure is, as Whitney Chadwick writes, transformed into a sexual object organ-

2 Museum of Contemporary Art Chicago, "The Living End."

3 Linda Nochlin, "Why Have There Been No Great Women Artists?" *ARTnews* vol. 37, (January 1971), 12.

4 Nochlin, "No Great Women Artists," 12.

5 Whitney Chadwick, *Women, Art, and Society*, 6th ed. (London: Thames & Hudson, 2020), 293.

ised for the (male) audience's viewing pleasure.⁶ If Cabanel's Venus was a manifestation of the Renaissance humanist exercise of portraying the human body as a means of reflecting on the divine's perfect and heavenly beauty, then perhaps this nude figure fulfils a similar purpose. In Harmon and Knowlton's case, the divine is switched out for technological innovation, but the form of worship remains the same. The female body is still dehumanized and objectified, reduced to a vessel through which human adoration is expressed.

The objectification and abstraction of the nude in *Studies in Perception 1* exemplifies the persistence of a sexualising way of seeing even in a new technological medium. The computer processing involved in this piece greatly constrains and objectifies the female form. The figure's lack of identity universalizes her as a figure representing all women, and Harmon and Knowlton enforce gender essentialism in this image through the idea of a female "central core."⁷ As has been stated, the viewer's attention is pulled toward the figure's pubic area because it is the darkest section of the picture plane, simultaneously highlighting and mystifying her sexual and reproductive qualities, and suggesting that these qualities and the experiences related to them are the singular factor uniting all women. Because this area is centred and put on display while the figure's face remains hidden, there is a suggestion that her sexuality and procreative capabilities are all that matter about her.

Amelia Jones, in her article "Essentialism, Feminism, and Art," discusses the concept of woman "oozing away," which involves the ideas that female identity resists any form of fixed or archetypal representation, and that non-traditional portrayals of women complicate societal understandings of "woman" by either enforcing or dismantling essentialist gender ideologies.⁸ Harmon and Knowlton reinforce essentialist ideas with their nude through its medium, as the reduction of the woman into discrete data points while retaining her sexuality and feminine coding acts as a visualization of female representation "oozing away." The nude still reads as a woman, and carries with it all of the conventional notions associated with female nudes, even though its medium is novel. This is not new, as the development of new art movements, as Chadwick writes, often relied on erotically based assaults on female form for their formal and stylistic innovations.⁹ Willem de Kooning's 1952 painting *Woman I* epitomizes this, as he represents a woman so incredibly abstracted and sexualised that it reads as cruel caricature rather than a genuine exploration of female form. Through different methods, Harmon and Knowlton's nude fragments and distorts the female body in a similar way to de Kooning; essentializing them until they become degraded concepts of "woman" and mere visual and sexual objects.

6 Chadwick, *Women*, 293.

7 Amelia Jones, "Essentialism, Feminism, and Art: Spaces Where Woman 'Oozes Away,'" in *A Companion to Feminist Art* (Newark: John Wiley and Sons, Incorporated, 2019), 161.

8 Jones, "Essentialism, Feminism, and Art," 174.

9 Chadwick, *Women*, 292.

The exploration of technological art in the print further serves to objectify the figure, as it lacks a feminist, posthumanist lens. Maria Fernandez, writing specifically through the lens of technology and the integration of humans and machines in her article “Reading Posthumanism in Feminist New Media Art”, states that through the theory of posthumanism, subjects of art enact “ethics of relationality” by connecting humans and nonhumans.¹⁰ This connection appears to be present in *Studies in Perception 1*, as the human subject matter depicted through non-human technology could make for a posthumanist approach to art production. However, if posthumanism, according to Katherine Hayles as quoted by Fernandez, is defined as the deconstruction of the classic humanist subject and its associations, then one cannot claim this print to be a posthumanist piece.¹¹ As has already been discussed, Harmon and Knowlton present a traditional nude, in which the figure is afforded neither self-determination nor free will, but rather is forced to remain an object of visual pleasure for the viewer.

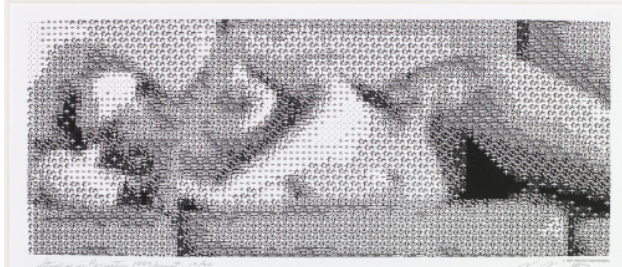
Fernandez discusses the work of Lynn Herschman Leeson as an example of a truly posthuman approach to art, which requires the development of a new kind of subjectivity in which human bodies and nonhuman objects are united through a feminist lens.¹² Leeson’s 1988 photographic series *Phantom Limb*, which depicts woman-machine hybrids posed in a variety of seductive ways, explores the ways that women’s bodies are impacted by media and technology. Female identity and form transcend the boundaries of the human body to become united with machines, prompting the viewer to consider the distortion of the female body and female identity by technology and media. Leeson’s photographs imitate traditional depictions of the female form to criticize female objectification, but her figures retain their humanity. This contrasts with Harmon and Knowlton’s print, where the figure is stripped of her humanity and objectified through her computerization.

Studies in Perception 1, completed just before the surge of feminist dialogue in artistic, art historical, and gender studies spaces in the 1970s, demonstrates how the advent of technological and social innovation does not always result in more progressive representations of women. Examining the print’s medium, spatial composition, and exhibition context reveals the persistence of female objectification by male artists. Although the piece does merge human and nonhuman form through technology, the sustenance of the classical humanist subject refutes any claims to posthumanism that the piece may present. Thus, although they pioneered a new art style, Harmon and Knowlton upheld traditional forms of representing the female nude, serving as a reminder to maintain critical analysis of the ways in which new art mediums may support old art ideas.

10 Maria Fernandez, “Reading Posthumanism in Feminist New Media Art,” in *A Companion to Feminist Art* (Newark: John Wiley and Sons, Incorporated, 2019), 300.

11 Fernandez, “Reading Posthumanism,” 299.

12 Fernandez, “Reading Posthumanism,” 303.



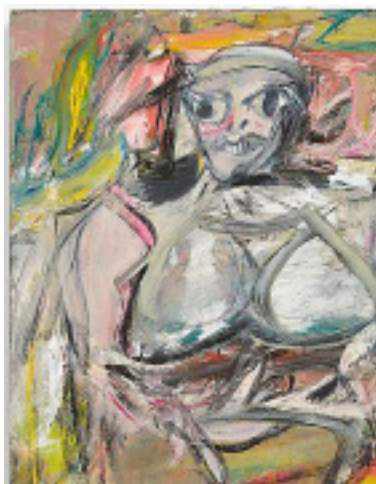
Studies in Perception 1, Leon Harmon and Ken Knowlton,
American, silkscreen print, 1967, 34" x 72".



Susanna and the Elders, Tintoretto,
Italian, oil on canvas, 1555-56, 57" x 76.2".



The Birth of Venus, Alexandre Cabanel,
French, oil on canvas, 1863, 59" x 98".



Woman I, Willem de Kooning, American,
oil and metallic paint on canvas, 1950-52, 75.8" x 58".