Like most painters of her generation, Joan Semmel, who was born in the Bronx in 1932, started off painting abstractly. In the 1970s, however, she returned to the figure — and a new set of problems. Not only was she working in a supposedly moribund medium — the radical ’60s were filled with calls for the “death of painting” — but she was returning to a fraught traditional form. As a feminist, how could Ms. Semmel paint the female figure — particularly the female nude — without returning it to its old role as a passive object presented to a historically male viewer?

Her solutions were daring: Ms. Semmel painted figures copulating, and herself nude. In that era of so-called sexual liberation, erotic content was logical as well as topical.

Ms. Semmel first tried drawing, and then turned to photography, to capture the figures who volunteered to “model” for her. Thus began her engagement with another fruitful avenue of late-20th-century painting: the relationship between photography and painting.

The few dozen paintings in “Joan Semmel: The Lucid Eye,” at the Bronx Museum, described by the curator, Antonio Sergio Bessa, as a “project show” rather than a retrospective, were all made after 2001. They are less titillating than Ms. Semmel’s earlier work, but together they create a coherent conceptual project that is also — as one would expect from a painter who started off as an abstract expressionist — still highly engaged with the tactility of paint and the possibilities of color.

Only a few of the canvases feature Ms. Semmel naked, but with these she is breaking new ground, since there are relatively few examples in the history of art of nudes of the aging female (and almost none are self-portraits). In this regard, “Centered” (2002) is a masterwork of both figurative and conceptual painting. The canvas features Ms. Semmel sitting naked before a mirror, her face obscured by a camera, her flanks and buttocks the most prominently visible feature of her body.
The painting is an ingenious representation of the artist as both painter and model and it showcases the technological tool — the camera — painters have been using, often covertly, ever since it was invented. (The camera functions as a sort of art-historical pun: Renaissance painters used the camera obscura, a proto-photographic device, to help them with perspective and composition.)

“Cornered” (2006) features Ms. Semmel crouching nude before a mirror, while three other large canvases in the “The Lucid Eye” use a camera flash reflected in the mirror as one of their primary devices. “Double X” (2005) finds Ms. Semmel sitting before a mirror, clothed on top and with bare legs and a camera flash at the spot between her legs where her genitalia would be. The “X” of the title, however, refers not just to the pattern made by the chair’s frame, and to the pornographic film rating, but also to a traditional compositional structure in painting.

“Light on Glass” (2005) and “Mirrored Screen” (2005), with their flashes glowing in a darkened room, also suggest historical precedents, calling to mind Baroque paintings by artists like Caravaggio or Georges de La Tour that feature dramatic contrasts of dark and light or a single, glowing light source.

A long wall of small, close up self-portraits shows Ms. Semmel not as an idealized figure — as she stresses in the video interview that accompanies the exhibition — or a generic model of femininity, but as a “specific person” captured at different moments. Among these is an “Untitled” self-portrait from 2010 that offers a perfectly recognizable and contemporary version of self-photography: the artist sitting in the green glow of the computer, captured via webcam.

The roundup of paintings here draw comparison to other contemporary projects: the realist nudes of Philip Pearlstein and Lucien Freud; the self-photography of Cindy Sherman — which now has come to include her own aging; and the serial lineup of images of the same woman, photographed at different intervals, by Roni Horn.

“The Lucid Eye” presents a wonderful view of the culmination of a career spent thinking seriously about what it means to paint (and to photograph) the human figure in this era.

Now, to the list of taboo subjects she’s taken on, Ms. Semmel can include representing herself matter-of-factly as a naked, older woman. But even this is overshadowed by the realization that her real subject is painting and how the medium can be revitalized by social change and the advent of new visual technologies.

“Joan Semmel: The Lucid Eye” is on view through June 9 at the Bronx Museum of the Arts, 1040 Grand Concourse, at 165th Street, the Bronx. Information: (718) 681-6000 or bronxmuseum.org.