

Abstract
The Aesthetics of Digital Weaving
Tactile Sensibility in the Art of Lia Cook and Grethe Sørensen
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Fifty years ago, Anni Albers, the preeminent twentieth-century weaver, identified the primary aesthetic feature of woven art as the cloth's texture or "tactile sensibility," an aesthetic that demands the closest interaction between medium and design.

Today, artists Lia Cook and Grethe Sørensen create woven textiles using digital Jacquard handlooms that exemplify Albers' aesthetic with visual programs firmly rooted in the formal materiality of woven cloth.

Digital-loom technology facilitates the rendering of complex weave structures thus increasing the range of visual and tactile programs that can be expressed in the woven form and the ability to align the visual with the structural form of the textile.

This paper explores Albers' weaving aesthetic, as she explains it in her essays, *On Weaving*. It positions the digital Jacquard hand loom in a continuum of weaving technologies that spans thousands of years, seeking to achieve what Albers described as a balance between speed and freedom of design.

The paper discusses the transition of digital jacquard loom technology from industrial to artistic uses and provides a history of the invention and introduction of the Thread Controller loom, the first digital hand loom, along with an explanation of the Thread Controller Loom's functionality and capabilities.

The paper then examines how each of Cook and Sørensen embrace Albers' aesthetic of tactile sensibility in their approach to their work. It includes a detailed analysis of key works by each artist, the visual and tactile program of these works, and the digital techniques used to create them. Adobe Photoshop, which is used by each artist as a digital design tool in creating weave files for the digital loom, plays a critical role.

Each artist uses digital tools to create woven art that exemplifies Albers' aesthetic of tactility in distinctively different ways. However, their success is, in each case, a function of the artist's skill and expertise in traditional weaving and her ability to seamlessly integrate digital tools into an existing body of material-based craft knowledge. By maintaining an immediate relationship with material and process, Cook and Sørensen use digital technologies to expand the horizons for the traditional woven form and give new life to Albers' aesthetic. Throughout, the discussion is contextualized with reference to key writings on weaving, craft, and digital art by Anni Albers, Glenn Adamson, Peter Dormer, Malcolm McCullough, and others.