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The Materiality of Tapestry in The Digital Age

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Abstract

Traditional definitions of materiality value physical matter as an essential quality. Because digital images are less physically permanent objects, they are less likely to be classed as “material” in the same way. Yet as contemporary makers increasingly turn to digital content as the source of inspiration or imagery for their works, it is now often possible to experience digital content away from a screen—when translated to a new, more traditionally “material” medium. Artists Erin M. Riley and Phillip David Stearns approach their translations of digital images to fiber quite differently, but their resulting tapestries can be seen as preserving the social interactions that distinguish their original digital context. Paul M. Leonardi defines materiality as the interaction between people and things, and this article uses his approach to consider Riley’s and Stearns’ translated tapestries as both valuations of physical materiality and of the interaction-based social materiality of their original digital context. While digital images and tapestry may in some ways seem to oppose one another, the interconnections between photography, digital images, and tapestry demonstrate the similar histories of these media that explain the material richness to be gained when working across them. These new formations between digital art and craft reveal the ways in which new and old media

borrow from each other's histories and material associations, and how the material shift in the works of Riley and Stearns proves essential to our recognition of these works as art objects.

Keywords: fiber, tapestry, photography, digital, materiality, new media

Whatever it grants to vision and whatever its manner, a photograph is always invisible: It is not it that we see.

Roland Barthes, *Camera Lucida: Reflections on Photography*

Roland Barthes emphasizes in *Camera Lucida* the unique ability of the photograph to appear as a “real” representation that provides the viewer with an immediate encounter with the content of an image.¹ For Barthes, the medium of the photographic object is at first so negligible that the viewer can completely enter its space and directly experience its contents. Recent scholarship regarding the photograph as an actual physical object has complicated this denial of photographic materiality, and it has increasingly addressed its tangible qualities.² Yet, Barthes’ observations on the apparent invisibility of the photograph’s materiality in many ways apply anew to how the digital photograph is commonly experienced. Indeed, disappearance is the ultimate goal of the graphic interface on which digital images are displayed: an ideal interface is one in which the user is “no longer aware of confronting a medium, but instead stands in an immediate relationship to the contents of that medium.”³ How this debate might help

us appreciate the complexity of new formations between the digital realm and craft—its presumed opposite associated with the material, analog realm—is the subject of this analysis. Specifically, I will discuss the work of Erin M. Riley (b. 1985) and Phillip David Stearns (b. 1982), both of whom translate digital imagery into woven tapestries and address the concept of the photographic interface.

While the photograph functioned as the interface between the viewer and content for Barthes, in the case of new media, immediacy is reinforced by the lack of a permanent material object. In order to achieve the same immediacy, new media strives to appear immaterial,⁴ and this appearance fosters a false dichotomy that divides digital ephemera from more permanent material objects. Some scholars have complicated this binary by choosing a more inclusive definition of materiality that considers qualities other than tangible matter as material. For instance, Paul M. Leonardi argues for “alternative, relational” definitions of materiality that focus less on the thing itself but on the space of interaction between people and things: “especially in the case of digital artefacts, what may matter most about ‘materiality’ is that artefacts and their consequences are created and shaped through interaction.”⁵ We can therefore approach digital photographs in much the same way we would photographic prints, as objects whose meaning derives from relationships between content, context, and the interactions that shaped their creation and consumption.⁶ Yet the experience of viewing a digital image always requires a screen as intermediary and necessitates distance—we can touch

a screen, but we can't touch data.⁷ In the work of Riley and Stearns, however, their translations of digital imagery give new physical, material form to this less-permanent data. Their weavings help us to recognize the digital source images as complex, valuable, and, in fact, material in their original screen context.

The translation of objects from one medium to another always has material consequences. Removing a digital image from its original social context and placing it in a new context likewise creates gains and losses. When artists translate digital images to other media, they disrupt the viewer's typical experience of that image: rather than the immediacy of looking through the interface to see only an object's contents, the translated image first confronts the viewer with its media and material (in the sense of physical matter), a phenomenon Jay David Bolter and Richard Grusin refer to as *hypermediacy*.⁸ For these authors, all hypermediated forms—which range from perspective paintings to multimedia theme parks—make us primarily aware of their media rather than their content, and by failing to achieve immediacy, they further reinforce our desire for it.⁹ In a photomontage, for example, “the artist [defines] a space through the disposition and interplay of forms that have been detached from their original context and then recombined.”¹⁰ Rather than looking “through” the photomontage towards a supposed point of contact between the artist and what is depicted, the viewer looks “at” the rearranged surface and recognizes that the photographs are no longer in their original context, reinforcing the perception of the photograph as a material rather than

transparent medium and leading the viewer to imagine the original context for the image. This suggests that the hypermediated form of a digital image translated to a new medium may in some way refer back to the immediacy of its original context on a screen, an essential quality of a digital artefact. How then does this reference occur in Riley's and Stearns' translated tapestries?

Riley sources much of the material for her tapestries through Internet searches, and my analysis will largely focus on a series of tapestries that feature intimate “selfies” of women (Figure 1). By contrast, Stearns manipulates both the hardware and software of digital imaging, disrupting the algorithmically perfect photographic image that appears on a computer screen to create the patterns for what he calls “glitch” textiles (Figure 2). Translating a digital image, whose materiality is perhaps not widely acknowledged or understood, to the traditional craft medium of fiber is both a physical and cultural process. These photographic textiles are not only positive assertions of the value of materiality as matter, but also physical objects that reinforce the interaction-based concept of materiality essential to their digital referents. Because both artists choose source images that take for their subject a *process* of digital image production rather than a product, these woven translations reference the digital world they come from. Process as subject is a familiar discourse within anti-representational traditions of modern art and especially modern and contemporary craft, but this particular depiction of a digital and technological process creates interesting results when translated. In these examples,



Fig 1 Erin M. Riley, *Undressing 4*, 2015. 48" × 48", wool, cotton. Image courtesy of the artist.

digital images, photography, and tapestry borrow from each other's histories and representations: this interconnectedness both asserts the materiality of the digital image and allows these translated tapestries to enter art worlds from which they would otherwise be excluded.

Interconnections Between Photography, Digital Images, and Tapestry

Just as Leonardi's operational definition of materiality insists on interactions between

individuals and artefacts, no medium works in cultural isolation: "media are continually commenting on, reproducing, and replacing each other," he argues.¹¹ This borrowing has historical precedents, and Riley and Stearns are certainly not the first artists to create weavings based on photographic images or technologies. French photographer Brassai, for example, created a cartoon in 1968 based on a collage of twenty-three of his graffiti photographs for the tapestry *La Harpie*.¹² Similarly, Jan Yoors shot his own photographs and personally created the

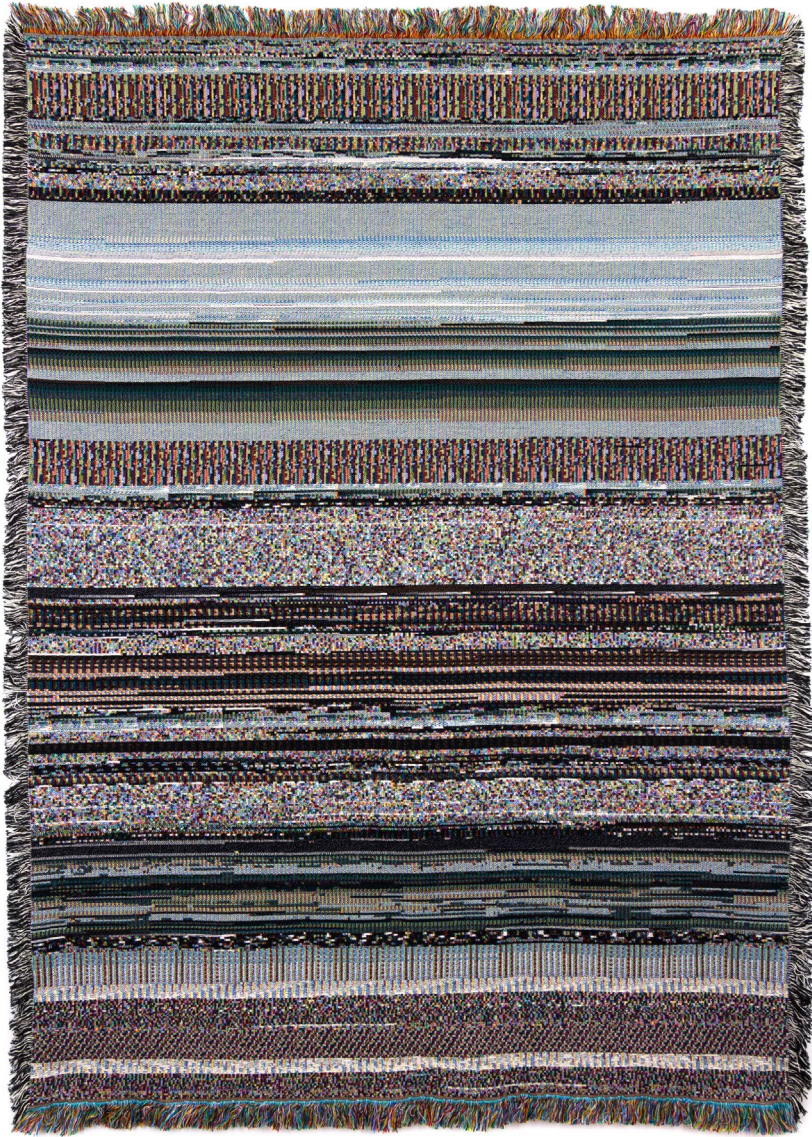


Fig 2 Phillip David Stearns, *Mac OSX dyld No. 12, Binary Blanket*, 2012. Jacquard Woven Blanket. Image courtesy of the artist.

cartoons from them for his studio's weavings. In these examples, artists use the photograph as a reference tool to create woven content,

but the realized tapestries do not call deliberate attention to their photographic origins. The photographic process disappears

while the content remains, leading these objects to read primarily as tapestries rather than as translated photographs. Conversely, Man Ray enlarged certain of his “rayographs” to produce tapestry cartoons—two of which were realized as woven tapestries—as early as the 1920s.¹³ As the rayographs document experimentations with the essential photographic process of writing with light, these examples when woven preserve an aspect of their photographic materiality in much the same way as Riley’s and Stearns’ tapestries do by referring to their means of production.¹⁴ Stearns in fact credits Man Ray as an influence for his recent “high voltage image making” project, in which he explores the application of high voltage and chemical agents to analog film and translates these images to both digital prints and woven textiles.¹⁵ As another example, contemporary tapestry artist Aleksandra Mariczak carefully photographs the subjects of her tapestries and introduces a second warp to create a three-dimensionality that more closely approximates the depth depicted in the photographic print.

While tapestry may not at first seem the logical medium for a translated photographic image, it is a form of making rooted in the history of photography and—in the digital age—in connections between camera, computer, and loom. Photography has had a complicated relationship with both handwork and industrial technology: it has been classed as both an automatic technological process that records and produces images beyond the limits of human handwork and as an artistic process whose every stage of development depends upon a particular individual’s creative

choices, from the framing of the image to its development in the dark room. As physical objects, all photographs to some extent refer to their processes of production, but what is less stable is the photograph’s claim to authenticity or documentary truth. These claims have long been a matter of dispute by scholars and photographers who view photographs as either evidentiary documentary objects that show the world as it is or as an artistic manipulation that represents a particular vision rather than a universal one.¹⁶ However, if photographic objects historically grapple with issues of authenticity and artifice, digital photographs are far more likely to be classed as deliberate fictions. As Geoffrey Batchen has argued, while “photography still claims some sort of objectivity, digital imaging is an overtly fictional process . . . [that] abandons even the *rhetoric* of truth that has been such an important part of photography’s cultural success.”¹⁷ According to him, the photographic object, whether truthfully or not, at least suggests a physical encounter between the medium and what it represents.¹⁸ As digital images are the product of computers rather than traditional cameras, the important photochemical evidence that matters to Batchen ceases to exist in the less-physical digital medium. Regardless of such efforts to make distinctions between the two practices, digital and traditional photography are still inextricably linked: the computer in the digital camera is likewise an apparatus that records light and allows for artistic manipulation and invention.¹⁹ Returning to the shared history of the textile and the photograph, if the computer is the essential

mechanism for the creation of digital images, then the Jacquard loom punch-card system that mechanized and revolutionized the production of textiles (and was the basis of early computer programming) can be viewed as its equivalent.²⁰ With the Jacquard loom, textiles also demonstrate automatic production, and Riley's and Stearns' photographic translations of digital images into textiles perhaps represent a new twist on the modernist mandate for "truth to materials," which privileged an organic relationship between object and material, as the translations recall the history of mechanical manufacture.²¹ Both textiles and photographs therefore share complicated histories as mechanized fabrications and as hand-made art objects.

Textiles and photographs differ significantly in the time required for their production: tapestries are the result of slow, repetitive work, but photography has been considered an instantaneous process since the early twentieth century.²² The static and instant nature of photographic images has traditionally been interpreted as a metaphor for the passing of time, as in Susan Sontag's formulation that "to take a photograph is to participate in another person's (or thing's) mortality, vulnerability, mutability. Precisely by slicing out this moment and freezing it, all photographs testify to time's relentless melt."²³ Photographs are therefore *in* time and also *of* time. Although digital photography has extended our ability to immediately capture images, for Geoffrey Batchen, this joint status is the unique condition of the photographic object and does not apply to digital images. Instead, digital images are "representations of

what is already perceived to be a series of representations. This is why digital images remain untroubled by the future anterior, the 'this has been' and 'this will be' that so animates the photograph."²⁴

If we follow Batchen's argument that a digital image occurs in time but does not represent its passing, the choice to translate the digital image to a traditional craft medium suggests a strong desire to anchor these images in the past. As Glenn Adamson has argued, craft has always faced the problem of "imminent disappearance," and the solution implemented by craft revivalists has always been to return to the past.²⁵ New media, precisely in the way it erases its materiality with the relentless pace of new technological advancement, guarantees its disappearance. The tapestry that translates a digital image is thus in, of, and about time: the instantaneity of the digital image, the placement of that image in the past, the consumption of time required to produce the textile, and the historic timelessness of the medium itself. The translated tapestries are therefore a new social form brought about through remembering the very recent past.²⁶ Remembering is an essential aspect of interacting with these translated tapestries. As the imagery of these textiles refers to digital artefacts, remembering becomes a feature of the materiality (based on interaction) of the digital image as well, further reinforcing the connection between the digital image and the passing of time it now represents. To better understand how translated tapestries assert and complicate our understanding of digital materiality, I will turn to case studies of works by Erin M. Riley and Phillip David Stearns.

Case Study: Erin M. Riley

Riley's translated tapestries are socially rooted: much of her work is figural, often taking as their subject semi-nude selfies of her body or similar images of other women found online.²⁷ More than sources for her woven artworks, these digital images are objects of social exchange. They represent a range of relationships more complex than the interaction between female subject and digital camera—they are symbols of what Guy Debord defined as spectacle, "a social relation among people mediated by images."²⁸ If we use Leonardi's definition of digital materiality as the space of interaction between person and thing, the spectacle of social relationship Riley captures is essential to understanding the materiality of these digital images. Shared intimately with romantic partners as well as virally among a large Internet audience, these digital images carry a particular immediacy. Like other forms of erotic imagery, they are intended to sexually arouse the viewer; a physical response to a less physically material object. The representation of the body acts as a substitute for the tangible body; this is the apex of Debord's concept of spectacle and the principle of commodity fetishism, "where the tangible world is replaced by a selection of images which exist above it."²⁹ For Debord, these social relationships of the spectacle represent the "loss of the unity of the world."³⁰ Images alone do not create the crisis of the spectacle; it is also new technologies of exchange that allow for separate and perhaps isolating experiences of shared, intangible content. As new media unifies populations, it does so while maintaining distance between individuals. For Debord, "the spectacle reunites the separate, but reunites it *as separate*."³¹

Riley's digital source images exemplify Debord's theory of the spectacle, but they also address the series of steps that create the conditions of spectacle. Riley is drawn to source images that include women holding cell phones and cameras (Figure 3).³² This iconography when woven provides evidence of the tapestry's digital origins and reinforces the materiality of the digital artefact as an interaction between person and thing—the cell phone represents both the means of the image's documentation and its circulation. While most images that Riley finds include similarly streamlined modern cell phones, she expresses interest in finding examples that feature older technologies—actual cameras or older-generation "flip phones"—to present greater variety.³³ These outdated technological objects signal an earlier stage in the development of the selfie as spectacle, a moment that occurred before an enormous increase in cell phone users, selfie participants, and selfie images.

In the instances where cameras are not depicted, digital photos can still be recognized as the source material for Riley's tapestries, particularly when the woven works are seen in a series and directed toward an audience that participates in selfie exchange. Even to an audience of non-participants, the use of mirrors, shallow depth of field, and the cropping of body parts in these tapestries all refer to their photographic production (Figure 4). In instances in which she turns to herself as subject, Riley is careful to weave only those images of her body that she has shared with past romantic partners, viewing the shared status of these images as a badge of their authenticity to the digital environment (Figure 5).³⁴ This aspect of choosing images



Fig 3 Erin M. Riley, *Nudes 17*, 2014. 48" × 45", wool, cotton. Image courtesy of the artist.

based on evidence of their exchange further asserts the importance of social interaction in defining digital materiality. Margaret Olin describes the interactivity taking place in such exchanges of digital self-images:

When the teenager holds a cell phone at arm's length to capture herself on its screen and message[s] the image to her boyfriend, she is not first and foremost making a representation, but rather enacting an accepted genre of courtship behavior; teleporting herself as a gift to her boyfriend.³⁵

By calling attention to the social and technological processes of the production of these digital images, Riley's tapestries can be interpreted as preserving the legibility of the digital–social relation and therefore this aspect of digital materiality.

Yet while the image of exchange represents a visible action in a social relationship, the reception of that image by an intended or anonymous audience is not evident in the image's content. Once exchanged, an image may only be acknowledged for seconds or minutes. The violence of this genre of digital image occurs for Riley after its reception, when



Fig 4 Erin M. Riley, *Serenity*, 2012. 42" × 34", wool, cotton. Image courtesy of the artist.

the image is more likely to be deleted or put aside until the next one is shared.³⁶ Rather than merely echo Sontag's claim that "to photograph is to violate," the violation in these particular digital images is also exacerbated through their circulation, during the process that transforms the digital image from photograph to spectacle.³⁷ Riley reports that she "treasures" the women she depicts, and in the time spent weaving their images seeks to give them the attention and connection she feels they were seeking.³⁸ Valuing physical materiality is likewise about creating stability for the images and thus humanity for their makers. We can read the hours associated with the production of Riley's tapestries as a means of healing the

trauma of the spectacle and the translated tapestries as a therapeutic response to the vulnerability and violence associated with this type of spectacular digital image circulation. Adamson puts it succinctly when he asserts that trauma and craft revival "are reactions to a kind of rupture, or tear, within a fabric; and both operate by reframing the past."³⁹ Like the metaphor of the tear within the fabric, the repetitive, cumulative techniques of weaving contribute to its therapeutic value.

Riley's tapestries have always addressed photography, and her first weavings translated photographs of her childhood (Figure 6). Her decision to focus on depictions of a family from whom she had



Fig 5 Erin M. Riley, *Purple Panties*, 2014. 48" × 35", wool, cotton. Image courtesy of the artist.

always felt isolated reflected her desire to better understand how the family dynamics of her past caused trauma in the present. Both of her sisters suffered from addiction when Riley first encountered looms, and weaving photographs functioned as a personal form of therapy.⁴⁰ Part of that therapeutic association may derive from the body's physiological response to weaving on a loom: motion involves the whole body in a process that is repetitive, immersive, time-consuming, and logical. Riley describes her work as "an escape ... it's like my addiction, it's ... what keeps me safe ... Rather than spinning out of control or even giving myself the option to ... I just weave."⁴¹ As Riley has moved from personal to public images as the sources of her content, I believe that her therapeutic healing project is likewise

a collective one. In translating these digital images to tapestry, Riley draws attention to their original digital contexts and the complex ways that people typically interact with such images. While preserving this digital materiality, the medium of tapestry provokes a new type of interaction that requires Riley's audience to both remember the recent past and to consider the reception of these images as a spectacle that has occurred in time and as an event that will continue to occur.

Case Study: Phillip David Stearns

While the figural source images for Riley's tapestries clearly make connections to a recent photographic genre, Stearns' source images demonstrate a greater departure from traditional photography and an



Fig 6 Erin M. Riley, *You Had a Happy Childhood*, tapestry, 2007. 48" × 60". Image courtesy of the artist.

embrace of digital visualizations for which "there is potentially no direct referent in an outside world."⁴² Stearns takes as his subject the photographic "glitch." While glitch art has phonographic rather than photographic beginnings, connections between these recording technologies help to explain why

glitch artists work in both visual and sonic representation. Just as photography changed how we understood what the eye could see and gave us the capability to document a bodily vision, audio recording similarly transformed our understanding of sound. Both technologies moved the experiences

of vision and sound away from the body and to a new medium, and each has struggled with concepts of documentary truth and fidelity connected to this formation. Experiments in glitch sound led artists to work in glitch visualization, and glitch artists often work across these media to create new glitches, forcing an audio file to appear as an image, and vice versa.⁴³

At its base, a glitch is a symbol of technological malfunction: when the glitch emerged in 1990s computer-composed music, composers implemented audio glitches by physically damaging CDs, overloading processors, reducing bit rates, and forcing non-audio files such as text documents and images to run in audio programs.⁴⁴ Composers would then arrange these and other similar sounds into compositions, producing a genre of music that aestheticizes error. Glitch music is therefore the sound of the machinery of sound-making rather than the recording of sound. When audio technology fails to deliver a seamless playback, we see the process that leads to the malfunction rather than the functioning recording.⁴⁵ This awareness of process in Stearns' work is essential to preserving the digital materiality of his source images when he translates them to textiles.

Martin Heidegger's theory of technology asserts that a functioning tool, like an ideal interface, is essentially invisible. A broken tool, however, renders technology unfamiliar and forces greater awareness of its construction and design. By addressing process rather than content, a glitch reveals technology's *techné*—its "material, structural, and ideological foundations."⁴⁶ Heidegger's *techné* directs us to the physical

materiality of hardware rather than to the interaction between person and object that characterizes Leonard's concept of digital materiality. However, the intention of Stearns and other glitch artists to deliberately manipulate technological function signals a very specific interaction between individual and object to reveal the materiality of the machine. Producing a glitch event necessitates such interaction, and that action establishes the digital artefact's materiality. Although the production processes behind Riley's and Stearns' digital source images are quite different, the works of both artists similarly assert digital materiality by addressing these methods of construction. Stearns' glitch images first and foremost show the materials of digital image-making: we see pixels that create patterns, rather than an image made up of pixels. For Stearns, "an image on the screen isn't really compelling unless it's addressing the screen," and this self-consciousness of Stearns' digital images is essential to preserving their digital materiality when he translates them to textiles.⁴⁷ By using mechanized looms and weaving processes, Stearns further ensures that his glitch textiles preserve the digital and mechanical context of their source images.

Stearns has implemented a wide range of hardware- and software-based approaches to creating glitch images. He began circuit bending in 2008, a process he defines as that "creative act where you take a simple electronic device and short circuit it."⁴⁸ His early experiments in destroying and rewiring digital cameras to make glitch images left him unsatisfied: bending the circuits of cameras created compelling glitch images, but the translation

of the glitch events to the pixels of a screen demonstrated too much loss of detail and unintentional modification of the image by the screen.⁴⁹ To avoid these problems, Stearns began printing his images directly from the camera's broken circuits, but he believed these prints too closely imitated the format of traditional photographs, an association Stearns had no intention of making: "In taking apart the cameras, I began to understand that digital cameras ... are just computers that are creating images based on sensor data, but they bear little resemblance to actual photography as ... a tradition involving photochemical processes."⁵⁰ Batchen's earlier analysis therefore serves as a successful explanation of the distinction between photochemical and digital photography on account of their differing materiality. Stearns turned instead to textiles, first producing woven blankets (Figure 7) from certain of his glitch images through online vendors and eventually creating Kickstarters that allowed him to use the Audax Textielmuseum's Textiellab in the Netherlands to produce large tapestries whose material woven structure he found better matched the structure of a digital image—as Stearns directly maps binary data to an image and the image to the woven pattern, the final weaving is still legible as code.⁵¹

Although Stearns tends to describe his work as having moved away from a traditional photographic convention, he considers the tapestry triptych *Fragmented Memory* (Figure 8 and 9) and the five panels of *Vestigial Data* (Figure 10) to be forms of contemporary portrait photography.⁵² In order to create these series, Stearns

first extracted a reading of his computer's physical memory at a particular moment in time. Using custom software to convert that data to an image and then mapping the sixty-four image colors to a yarn palette for weaving, the resulting tapestries were fabricated on a computerized industrial Jacquard loom.⁵³ Returning to Batchen's argument that the passing of time is what animates photographic objects, for Stearns these tapestries represent not only an instant in time, but also a pattern of individual behavior on computer memory over time:

every action that you perform [on a computer] shifts the contents of memory, and ... your activities are unique to you. Maybe not all of your applications are, but how you use them, when you use them, what you do with them ... that information is dynamic. It shifts day to day.⁵⁴

Stearns' approach to self-portrait photography therefore emulates a "visual inscription of the passing of time," an essential photographic impulse.⁵⁵ This contemporary approach to self-portraiture in some ways approximates nineteenth-century spirit photography: both methods strive to create a visual articulation for a phenomenon or entity without physical material form in order to generate truth claims about that which we cannot see.⁵⁶ Although photographic objects are most obviously read as works on paper, choosing tapestry as medium strengthens the perception of *Fragmented Memory* and *Vestigial Data* as depictions of time. Because the panels clearly translate digital content,

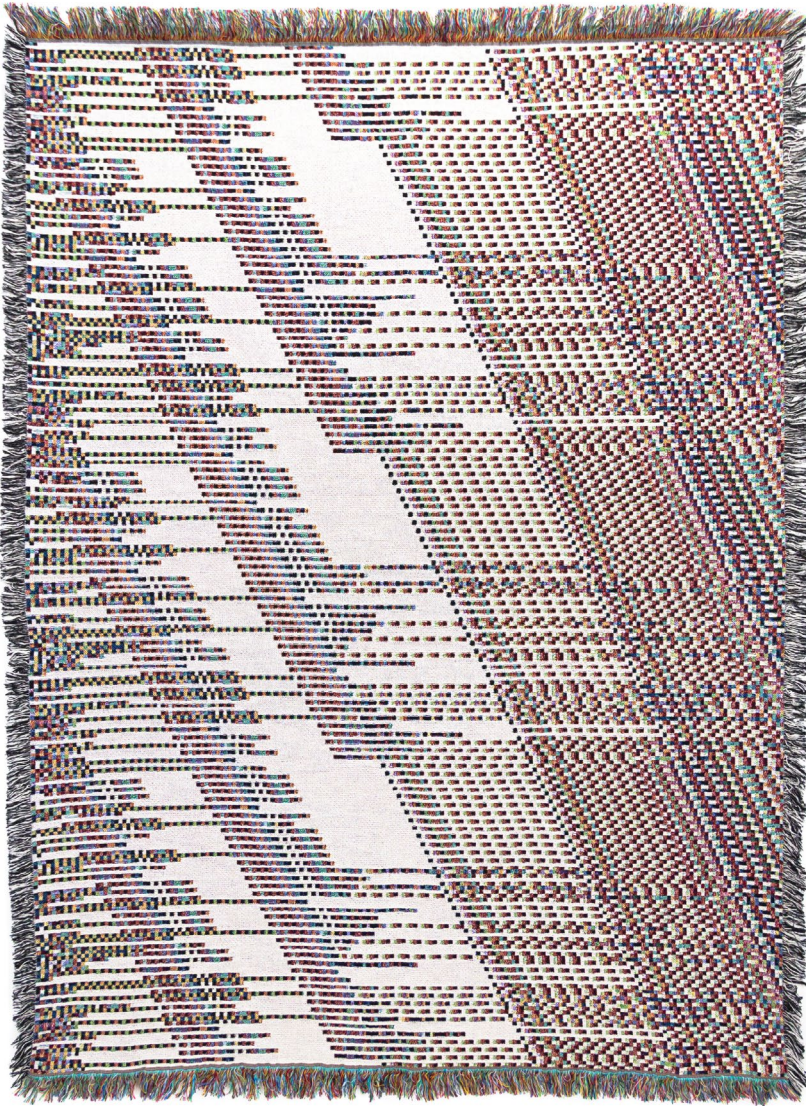


Fig 7 Phillip David Stearns, *Nativistic, A Year in Code*, 2012. Jacquard Woven Throw, 53" × 71". Made in the USA by Pure Country Weavers. Image courtesy of the artist.

this aspect of time's passing translates to how we understand the materiality of the original digital images. These woven

translations thus influence how we understand both the digital image and the tapestry as photographic objects.



Fig 8 Phillip David Stearns, *Fragmented Memory*, May 2013. Digitally designed and woven cotton textile, 160 cm × 205 cm. Image courtesy of the artist.

Translation as Art Making

As we've seen, both Riley and Stearns use translation to create physical textiles from immaterial digital sources. While this process of translation complicates and enriches the materiality of these textile objects and their digital referents, translation also influences how we understand both the woven tapestries and their digital referents as art or non-art. Riley considers the digital images she works from to be non-art objects, even in cases when she is both subject and photographer of a digital image that she weaves (Figure 11).⁵⁷ Stearns' work does not present such a strict dichotomy. He controls all aspects of image production, and each step is an artistic choice. Stearns' transla-

tions allow artistic associations to move in the opposite direction: if we understand his tapestries to be art objects, we are then more inclined to consider the artistic value of the digital image in its original context on a screen. Riley and Stearns transform the value of these digital objects through their individual creative processes and the functioning conditions or rules of value in art worlds.⁵⁸

For Riley, the translation of her subject's medium is an essential aspect of its ability to be understood as art: "for me, maybe what makes them art is that I've woven them."⁵⁹ Riley's process begins by narrowing the digital images she selects from to those she considers non-art digital photography.

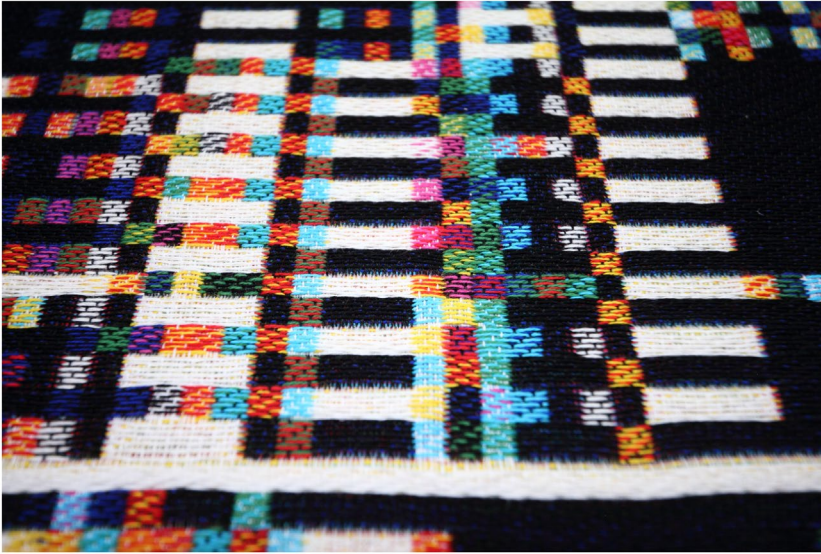


Fig 9 Phillip David Stearns, *Detail, Fragmented Memory*, May 2013. Digitally designed and woven cotton textile, 160 cm × 205 cm. Image courtesy of the artist.



Fig 10 Phillip David Stearns, *Vestigial Data*, 2015. Digitally designed and woven cotton textile, 5 panels each 165 cm × 205 cm. Image courtesy of the artist.

Weaving a photograph that she already views as art in its own right resembles theft: “It feels more like stealing when you’re using a photo that’s been composed and ... lit and ... thought about in a way, and chosen, because I feel like in a lot of ways part of that is my process.”⁶⁰ Although the

female subjects of Riley’s tapestries pay great attention to the display of their bodies, Riley believes that these images lack artistic intention.⁶¹ Digital photographs within this genre could certainly be art objects, and the female nude has obviously been an icon of art history for centuries, but salient to Riley’s



Fig 11 Selfie source image for Erin M. Riley, *Purple Panties*, 2014. Image courtesy of the artist.

process is the fact that she seeks source images that belong to a *social* context of spectacle and inserts them within an artistic context through weaving.

After Riley spends time with an image and commits to weaving a particular piece, she traces the digital photographs onto transparency paper and then uses an overhead projector to make an enlarged tapestry cartoon, which stays underneath the warped loom during weaving as reference. She dyes her yarn, warps her loom, and flies the yarn, a process that mixes yarns together to create multiple colors while she weaves. She completes all of her weaving by hand, and each tapestry consumes a minimum of fifty to sixty hours work.⁶² Although Riley seems

to operate alone, her work depends on a “network of cooperating people” that helps to define the tapestry’s function as art and supply the images that spark its creation.⁶³ The handwork and labor of Riley’s tapestries oppose the documentary speed of her original source images, but to label her tapestries as art based merely on these criteria reduces the complexity of translation to the classic modernist belief that intentional intervention creates an artistic truth that supersedes documentary truth. Equally compelling is the way in which these digital images, once removed from the immediacy of their original context, lose their intended social function. The intangible spectacular body is now a much less seamless substitute for a physical body,

although a significantly more physical, new tactile object. Translation moves these digital images from a private, distant social interaction to a public, in-person interaction, and that interaction in tandem with Riley's process and artistic choices help to define her work as art.

While the physical presence of Riley's hand in her work may help to justify its label as art, Stearns' dependence on the computer as a tool of production makes his case towards artistic claims inevitably more difficult. The computer has absorbed and renewed many of the debates that surrounded photography when it emerged as a medium, when audiences critical of photographs believed all the work of image making to have been completed by the camera alone. Stearns is similarly frustrated by the tendency of a contemporary audience to assume that the creation of his work is so automatic that his individual creative judgments play no role:

Ultimately I had to make some choices. Not just in what you're seeing but how I got there ... the machine, it's people. People made the machine. People made it with very specific constraints. And those constraints [reflect] the society in which it came about.⁶⁴

Stearns' artistic choices determine not only his method of producing a glitch image—which take on seemingly infinite forms of production processes as he constantly experiments with various hardware and software—but also the simple act of his choosing one image of the more than 65,000 possible outcomes he can

rapidly generate or the assigning of such outcomes to a color palette for weaving.⁶⁵

Translation is perhaps a curious metaphor for glitch, a process that is meant to introduce error rather than produce a faithful rendering of one form into another; but Stearns' direct glitch translations help to elevate the perception of both his woven works and his digital images as art. Stearns does not point to a specific stage in his process as essential to making his textiles art objects.⁶⁶ Unlike Riley, who moves non-art images into an art context, Stearns' glitch images are art objects from the moment he makes his first decisions about how to form them. In glitch art across media, the conceptual aspect is an important and strong constant: most glitch artists are

not satisfied with random unmediated glitch, but try instead to synthesize the sounds; to actually construct music out of the clicks, squeaks and fragments. They are often preoccupied with media critique and aesthetic qualities as part of the same creative process.⁶⁷

Stearns relies on this art world network, one made up of fellow glitch artists and appreciators that see glitch as a desirable product rather than a representation of what is wrong in music or visual arts.⁶⁸ The medium of tapestry in Stearns' work is important precisely because of the way his weaving process on a mechanical loom mimics the process of his digital image creation. Stearns creates both his glitch textiles and his glitch images through interacting with a mechanical mediator. If the medium of fiber allows the tapestry to be

understood as an art object, Stearns' work reinforces the validity of the artistic status of his digital work as well. While digital images still struggle to be unanimously understood as material art objects, Stearns' translations certainly assert a valuation of both digital materiality and digital art.

Conclusion

Both Stearns and Riley defamiliarize digital images by translating them to woven tapestries, permitting viewers to contemplate their source images in a more traditionally material state rather than in their original context on a screen. Although each artist uses different criteria to create and select these digital images, the tapestries clearly reference digital processes of production. Riley's work highlights practices of digital image making and circulation, emphasizing a social interaction of spectacle that occurs online and at a distance. Stearns' glitch textiles point to a moment of interaction between artist and machine, to a deliberate disruption of technology by an individual in order to expose a visualization of mechanical materiality. Translating the less physically material digital image to the medium of fiber suggests a valuation of materiality, but analysis of the interconnections between photography, digital images, and tapestry demonstrates that this translation is more complex than simply moving an image from an immaterial to a material state.

The physical materiality of a translated tapestry asserts the value of digital materiality as an interaction between person and thing. These translated tapestries question the relationships between the materiality of media, the selves we

encounter through digital images, the selves we construct through digital images, and how transformations of digital photographic forms enter art worlds. In these case studies, new media continues a historic process of borrowing from older media, as in the way tapestry signals a desire to understand digital images as representations of time. Certainly, these examples cannot speak for all genres of digital images or all examples that translate digital images to other contexts. However, the attention of these artists to the processes of digital image production suggests a need to revalue how we understand the materiality of new media. Although both Riley and Stearns choose looms for different reasons and ultimately achieve different results, their translations reassess the qualities that distinguish materiality, photographic objects, art, and craft.

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Notes

- 1 Roland Barthes, *Camera Lucida: Reflections on Photography* [1980] trans. by Richard Howard (New York: Hill and Wang, 2010), p. 6.
- 2 See Elizabeth Edwards and Janice Hart (eds.), *Photographs Objects Histories: On the Materiality of Images* (New York; London: Routledge, 2004).

- 3** Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge, MA: MIT Press, 1999), pp. 23–24.
- 4** Ibid.
- 5** Paul M. Leonardi, “Digital Materiality? How Artefacts Without Matter, Matter,” *First Monday* 15(6) (2010). Available at <http://firstmonday.org/article/view/3036/2567> (accessed February 23, 2016).
- 6** Coming from a different perspective, Joanna Sassoon has explored the losses that occur in digitizing photographic objects for online archives. This article will consider different consequences of material translations as both Riley and Stearns translate images from the digital realm to tapestry with artistic rather than archival intentions. See Joanna Sassoon, “Photographic Materiality in the Age of Digital Reproduction,” in Edwards and Hart, *Photographs Objects Histories*, p. 189.
- 7** Leonardi, “Digital Materiality?”
- 8** Bolter and Grusin, *Remediation*, p. 34.
- 9** Ibid.
- 10** Ibid., p. 39.
- 11** Ibid., p. 55.
- 12** See Simon Hewitt, “Brassaï Estate Sale Fetches \$6.5 M in Paris,” *Artnews* (October 17, 2006). Available at www.artnews.com/2006/10/17/brassai-estate-sale-fetches-6-5-m-in-paris/ (accessed February 23, 2016).
- 13** The Metropolitan Museum of Art provides the following explanation of a “rayograph”: “Man Ray made his ‘rayographs’ without a camera by placing objects—such as the thumbtacks, coil of wire, and other circular forms used here—directly on a sheet of photosensitized paper and exposing it to light.” “Rayograph,” *The Collection Online: The Metropolitan Museum of Art*. Available at www.metmuseum.org/collection/the-collection-online/search/265487 (accessed February 23, 2016).
- Sotheby’s listed several such cartoons by Man Ray in an October 2009 auction, clarifying that Man Ray created the original illustration for the cartoon in the 1920s but did not create its enlargement until 1938. Steven Manford, “Man Ray: Enlargement of ‘Projet Pour Une Tapisserie,’” *Sotheby’s* (October 9, 2009). Available at www.sothebys.com/fr/auctions/ecatalogue/2009/photographs-n08575/lot.124.html (accessed February 23, 2016).
- 14** See Aleksandra Mariczak, “Photography and Textile Art: Tapestry in the Form of a Triptych,” *Leonardo*, 20(1) (1987).
- 15** Phillip David Stearns, “High Voltage Images,” *Kickstarter* (November 25, 2015). Available at www.kickstarter.com/projects/phillipstearns/high-voltage-image-making (accessed February 23, 2016).
- 16** This division is apparent from the moment of photography’s development in the mid-nineteenth century. William Henry Fox Talbot, inventor of the calotype photographic process, called the photograph the “pencil of nature” and completely removed humans (and especially artists) from its process, explaining that the photographic plates in his publication: “have been obtained by the mere action of Light upon sensitive paper: They have been formed or depicted by optical and chemical means alone, and without the aid anyone acquainted with the art of drawing. It is needless, therefore, to say that they differ in all respects, and as widely as possible, in their origin, from plates of the ordinary kind, which owe their existence to the united skill of the Artist and the Engraver.” William Henry Fox Talbot, *The Pencil of Nature* [1844] (London: Longman, Brown, Green and Longmans, 2011), p. 1. However, artists in the 1840s were already using photography as an art-making tool, painting portraits from photographs whose sitters they posed. As the photographer’s role in creating the photographic image expands, the photograph is seen less as a vision of the world as it appears to the human eye and more as an artistic vision. See

- Walter Benjamin, *The Work of Art in the Age of Its Technological Reproducibility, and Other Writings on Media*, Michael W. Jennings, Brigid Doherty, and Thomas Y. Levin (eds.), trans. by Edmund Jephcott (Cambridge, MA: Belknap Press of Harvard University Press, 2008).
- 17** Geoffrey Batchen, "Ectoplasm: Photography in the Digital Age," in Carol Squiers (ed.) *Over Exposed: Essays on Contemporary Photography* (New York: New Press, 1999), p. 15.
- 18** Bolter and Grusin, *Remediation*, p. 30.
- 19** Batchen argues in the previously cited article that digital images should be viewed as separate from photographic objects because of their ability to represent invented content. Stearns is also keen to separate the traditions and in working with textiles moves away from "the lie that digital photography is traditional photography." Phillip David Stearns in discussion with the author, April 15, 2015.
- 20** Carol Armstrong, "Automatism and Agency Intertwined: A Spectrum of Photographic Intentionality," *Critical Inquiry* 38(4) (Summer 2012), part of Diarmud Costello, Margaret Iverson, and Joel Snyder (eds.) special issue "Agency and Automatism: Photography as Art Since the Sixties": 726. The choice of textiles by Stearns was a deliberate one precisely for this connection: "We were drawn to the mechanical apparatus ... because it's programmable in the same way that a computer is, and in fact, if you go back far enough, Jacquard looms were programmed with punch cards." Phillip David Stearns in discussion with the author, April 15, 2015.
- 21** See Edgar Kaufmann, Jr., *What is Modern Design?* (New York: Museum of Modern Art, 1950).
- 22** Armstrong, "Automatism and Agency Intertwined": 721.
- 23** Susan Sontag, "In Plato's Cave," in *On Photography* [1973] (New York: Picador: Farrar, Straus and Giroux, 1990), p. 15.
- 24** Batchen, "Ectoplasm: Photography in the Digital Age," p. 19.
- 25** Glenn Adamson, *The Invention of Craft* (London; New York: Bloomsbury Academic, 2013), p. 184.
- 26** *Ibid.*, p. 212.
- 27** Erin M. Riley in discussion with the author, April 10, 2015.
- 28** Guy Debord, *The Society of the Spectacle* [1967], trans. by Donald Nicholson-Smith (New York: Zone Books, 1994), p. 12.
- 29** *Ibid.*, p. 26.
- 30** *Ibid.*, p. 22.
- 31** *Ibid.*
- 32** Erin M. Riley in discussion with the author, April 10, 2015.
- 33** *Ibid.*
- 34** *Ibid.*
- 35** Margaret Olin, "Introduction: Tactile Looking," in *Touching Photographs* (Chicago: University of Chicago Press, 2012), p. 16.
- 36** Erin M. Riley in discussion with the author, April 10, 2015.
- 37** Sontag, "In Plato's Cave," p. 14.
- 38** Erin M. Riley in discussion with the author, April 10, 2015.
- 39** Adamson, *The Invention of Craft*, p. 185.
- 40** Craft as a form of therapy is a growing topic in current literature. For example, see Fiona Hackney's work on the craftivist garden. Available at <http://projects.falmouth.ac.uk/craftivistgarden/project-team/project-team/> (accessed July 11, 2016). This method of reliving photographs of a traumatic past in order to emotionally move forward in the present recalls other forms of photographic therapy. Riley's approach in her early work was a way of reliving her childhood past not altogether dissimilar from artist Jo Spence's reliving of family roles in "Beyond the Family Album." Instead of posing again the way she did as a child, Riley translates the photos to another

- medium in a time-consuming process that allows her to cope with traumatic events. See Rosy Martin and Jo Spence, "Photo-therapy: Psychic Realism as a Healing Art?" in Liz Wells (ed.) *The Photography Reader* (New York: Routledge, 2003).
- 41** Erin M. Riley in discussion with the author; April 10, 2015.
- 42** Batchen, "Ectoplasm: Photography in the Digital Age," p. 18.
- 43** Phillip David Stearns in discussion with the author; April 15, 2015.
- 44** Torben Sangild, "Glitch—The Beauty of Malfunction," in Christopher J. Washburne and Maiken Derno (ed.) *Bad Music: The Music We Love to Hate* (New York; London: Routledge, 2004), p. 259.
- 45** Janne Vanhanen, "Virtual Sound: Examining Glitch and Production," *Contemporary Music Review* 22(4) (2003): 48–49.
- 46** Sangild, "Glitch—The Beauty of Malfunction," p. 266.
- 47** Phillip David Stearns in discussion with the author; April 15, 2015.
- 48** Ibid.
- 49** Ibid.
- 50** Ibid.
- 51** Ibid.
- 52** Ibid.
- 53** Ibid.
- 54** Ibid.
- 55** Batchen, "Ectoplasm: Photography in the Digital Age," p. 13.
- 56** See Tom Gunning, "Invisible Worlds, Visible Media," in Corey Keller (ed.) *Brought to Light: Photography and the Invisible, 1840–1900* (San Francisco Museum of Modern Art; New Haven: Yale University Press, 2008).
- 57** Erin M. Riley in discussion with the author; April 10, 2015.
- 58** Arthur Danto first used the word "artworld" to describe the atmosphere of artistic theory and knowledge of art history that allows a viewer to see something as art, borrowing from a religious context the term "transfiguration" to refer to this moment of value transformation. Howard Becker later used Danto's term "art world" to describe the collective activity necessary to creating a thing considered "art." Arthur Danto "The Artworld." *The Journal of Philosophy* 61 (19) American Philosophical Association Eastern Division Sixty-First Annual Meeting (Oct. 15, 1964): 571–84.
- 59** Erin M. Riley in discussion with the author; April 10, 2015.
- 60** Ibid.
- 61** Ibid.
- 62** Ibid.
- 63** Howard S. Becker, "Art Worlds and Collective Activity," *Art Worlds*, (Berkeley: University of California Press, 1982), p. 25.
- 64** Phillip David Stearns in discussion with the author; April 15, 2015.
- 65** Ibid.
- 66** Ibid.
- 67** Sangild, "Glitch—The Beauty of Malfunction," pp. 261–62.
- 68** Eliot Bates, "Glitches, Bugs, and Hisses: The Degeneration of Musical Recordings and the Contemporary Musical Work," in Washburne and Derno, *Bad Music: Music We Love to Hate*, p. 277.