Welcome! Thanks so much for being here today. My name is Lauren, I’m the Gallery Coordinator here at the Center for Craft. It’s been a distinct pleasure of mine to work with Kayleigh Perkov, our 2020 Center for Craft Curatorial Fellow, over the past year on her exhibition The Computer Pays Its Debt: Women, Textiles, and Technology, 1965-1985. This project was supported by the North Carolina Arts Council and the John & Robyn Horn Foundation.

We’re really excited that we have re-opened our gallery spaces to the public, so if anyone is tuned in locally we are open to the public from Tuesday through Friday, from 12-6pm. You can learn more about visiting and how to register for a visit on our website (centerforcraft.org/visit). You can also check out our exhibition page and learn a little bit more about the exhibition. I’ll go ahead and introduce our speakers today.

I’ll start with Kayleigh Perkov [who] is the exhibition curator and our event moderator for today. Kayleigh Perkov specializes in American art viewed through the lens of craft and decorative arts. She received her PHD in visual studies at the University of California Irvine in 2018. Her dissertation, Giving Form to Feedback: Craft and Technological Systems Circa 1968-1974, focuses on pioneering craftspeople who synthesized hand making and technology. This work was supported by the Center for Craft, The Newkirk Center for Science and Society, and a pre-doctoral fellowship at the Smithsonian American Art Museum. Her research has been published in the Journal of Modern Craft, and included in catalogues on queer collage practice and the pattern and decoration movements. Kayleigh has a particular interest in the digital humanities, and has worked on computational projects for the Center of Advanced Study in the Visual Arts, and the Getty Research Institute. She is currently the US Reviews Editor at the Journal of Modern Craft. Welcome Kayleigh.

Next we have Elissa Auther, who is the William and Mildred Lasdon Chief Curator at the Museum of Arts and Design in New York. She has published widely on a diverse set of topics including the history of modernism and its relationship to craft and the decorative, the material culture of the American counterculture, and feminist art. Her most recent exhibition, Surface/Depth: The Decorative After Miriam Shapiro
opened at MAD in 2018. And her newest project, *Queer Maximalism x Machine Dazzle* is a solo exhibition of the genre-defying artist and costume designer Matthew Flower, better known as Machine Dazzle, the theatrical genius behind today’s top cabaret and drag performance stars.

And we’re also welcoming Bobbye Tigerman. Bobbye is the Marilyn B. and Calvin B. Gross Curator of Decorative Arts and Design at the Los Angeles County Museum of Art. Her work examines the parameters and practices of design history, trans-national histories of design, and the intersections of technology and craft. Past exhibitions include *Beyond Bling: Jewelry from the Lois Boardman Collection, California Design 1930-1965: Living in a Modern Way, and From the Spoon to the City: Designs by Architects from the Los Angeles County Museum of Arts Collection*. Her next exhibition, *Scandanavian Design in the United States*, will open in 2021.

And last but certainly not least, we have Lisa Nakamura. Lisa is the Gwendolyn Calvert Baker Collegiate Professor in the Department of American Cultures at the University of Michigan, Ann Arbor, and the Director of the Digital Studies Institute. Nakamura has been writing about digital media, race, and gender since 1994 including books and articles on digital bodies, race and gender in online environments, on toxicity in video game culture, and the many reasons that internet research needs ethnic and gender studies. In November, 2019, Nakamura gave a TED NYC talk about her research titled *The Internet is a Trash Fire, and Here’s How to Fix It.*

Again, I’m so happy you all can be here and join us today. The Center for Craft was so happy that we could gather Lisa, Bobbye, Elissa, and Kayleigh for this conversation. Kayleigh’s going to take the lead from here. If you have any questions for the participants, you’re welcome to drop questions and comments into the chat. Thanks so much!

**Kayleigh Perkov**  
*Curator, Moderator*

00:05:50

I want to thank the Center for Craft for supporting this research, and I’m eager to jump into a conversation with my fellow participants but first I want to just give everyone a little bit of background into the show, and into the research that informed it.

So like many who have interest in the connection between technology and craft, I knew about the story of how the punch card controls of the Jacquard Loom inspired 19th century inventor Charles Babbage’s vision of the first computer which he called the Analytical Engine. Babbage utilized weaving’s binary nature of the under and over interlacing of warp and weft as a means of communication and control...
in his designs. Babbage’s collaborator, the mathematician Ada Lovelace, recognized the Analytical Engines potential to perform a multiplicity of tasks, earning her the title of “the first computer programmer.”

Within this story, we often get a straightforward path of innovation. With the tools of one era, namely the Jacquard Loom, being replaced by the tools of the information age. Yet such a narrative is deeply at odds with my own understanding of contemporary craft, in which technological tools of different eras, along with hand making, coincide alongside each other as opposed to in opposition.

Additionally I began to wonder what it meant that acknowledging this history is often framed as radical even though it has been acknowledged for fifty years. And just underscoring that, what you see here is an exhibition image from the installation show *Mind Extender* from 1968, which featured a reproduction of one of Babbage’s designs in the foreground along with textiles woven with the aid of computers.

In investigating this connection and the use of computers in textiles I quickly found the work of IBM computer scientist Janice Lourie. As early as 1965, Lourie was developing some of the very first computer-aided design or CAD technology for the mechanized loom. This is particularly impressive when you realize that CAD projects and graphic interfaces were only invented a few years previously.

Lourie realized that a graphical weaving pattern could be represented as binary, and a weaving pattern could therefore be coded as a string of numbers. Conversely, binary code could be represented graphically, meaning that people not trained in computer programming could still use her software.

The celebration of Lourie’s invention by IBM surprised me. Her identification as a woman and the focus on textiles seemed contrary to my understanding of the computing industry. Through my research though, I realized that contrary to common understandings of the computing industry as a white male space, there was a number of women and people of color working intimately at strategic junctures.

Even more surprising were the ways in which a connection to textiles was frequently employed to naturalize the role of women and people of color in the industry. So, for example, computer programmers like Patricia Graves here, from Ebony, there was an ability to be meticulous in programming, such as one might need in following a knitting or sewing pattern. For the many women- often black, brown, and indigenous- hand made computer components such as core memory. Here you see Hilda Carpenter who created some of the very
first computer memory in a process quite similar to weaving, it was used to stress the nimbleness of her fingers.

For computer scientists like Karen Huff, who wrote a program similar to Lourie’s, it was the underlying similarity of textiles and computers, which served as a powerful symbol of her right to be in a sometimes hostile field. I believe it is really important that we are attentive to the ways in which corporations use the connections between textiles and technology to naturalize feminized labor, meaning that the skill with which individual women worked was not viewed as being borne from their own efforts, but something in their biology or social training they received as children.

Such a framing has a number of consequences. Individuals become disposable in this way if their skill is not their own. Yet in curating the show, it became important to me not to solely focus on these exploitative structures, but to highlight makers who found beauty in critique in the intersection of textiles and technology.

The five women profiled all worked in ways that are incredibly pertinent for today’s makers considering the growing accessibility of both technology and the ever-mounting social inequality hastened by digital platforms and labor practices. In addition to Lourie, this show highlights four other women.

In the early 1970s, Sonia Sheridan was a professor and artist in residence at 3M Company where she worked with the newly developed color photocopiers. Sheridan has a keen interest in the ways in which artists can use technology to create systems that can generate novel art. In 1975, she took these ideas to textiles with her idea for the People’s Fabric Project, a center where anyone could use photocopier technology to make personalized cloth. Sheridan was propelled by a faith that the training that many received in following at-home sewing patterns could be harnessed in the creation of art, and potentially empower people to see themselves as makers who could change the future of technology and industry.

Like Sheridan, Katherine Westphal blended the photocopier with textiles. Already a widely recognized and innovative quilter when she first encountered a photocopier in the late 1960s, Westphal used the accumulative tendencies of the photocopier to blend a longer tradition of women’s domestic labor with the standard tool of pink collar labor, the photocopier. This technology was relatively new in the 1960s, and advertisements for it depicted smiling female office workers, often cheerfully hoisting a ream of paper, their ease with the machine communicating its user-friendly appeal. Westphal’s blending of color photocopier technology with the highly venerated tradition of quilting,
links strong notions of women’s work to a new era.

Sonya Rapoport was an artist who explored the aesthetics of data, as well as the informational qualities of pattern. Examples seen here from her yarn drawing series utilized found computer printouts, brightly colored yarn, and stenciled patterns in a way that suggests decipherable codes, but never quite coheres. Even within the world of textiles, surface design is often framed as a merely decorative pursuit in contrast to the structural engagement of weaving. Yet with the rise of computational information science in the 1970s, patterns took on a new meaning as they were used to visualize complex activity. At the same time, the feminist art movement was questioning the cultural assumptions that led pattern and surface ornamentation to be read as less-than. Rapoport’s work represents a levelling of information, with a multiplicity of knowledge structures being framed as fair game for her practice.

Lia Cook’s work refuses to fall for the binary that would separate hand and machine. Works in this exhibition date from the early 1980s and were all made after Cook’s meaningful investigations with the Jacquard. These works were made with an electric Dobby loom, the objects were then also intensely hand-worked. They were washed, pressed, flattened, hammered into their final shape, and painted. The delight in surface and pattern ornamentation in these works have been read as a reaction against machine-age precision. Yet a closer investigation of Cook’s work reveals that they are not a reaction against technology. Rather they demonstrate her commitment to create works that exist in the threshold between hand and machine.

In curating this exhibition, I kept coming back to a quote by Lourie in which she said “it seemed to me that it was about time that computing’s debt to the weaving trade was paid back...it also seemed about time to bring a woman’s touch to the computer age.” I took these words to heart. What would it mean for the computer to pay back textiles, and to whom was this debt owed?

So with this question in mind, I want to open it up to our participants and get a conversation going.

As I chatted about, one of the major catalysts for this project was to trace how feminized work in the innovation sector drew upon the perceived feminine qualities of textile work. And while it’s enticing to unite these stories under a banner of women working in tech, these jobs garnered different levels of value, often along racial lines.

So how do we discuss women’s labor while still respecting specificities of race, class, physical ability, sexuality, and other nuances of
personal identity? For those in the museum world, how might we do this in the space of the gallery?

**Elissa Author**  
*Chief Curator, MAD*  
00:15:09  
I don’t want to jump in quite yet. I’m hoping that one of my co-panelists could start this off because I want to talk about something slightly related without completely derailing the conversation from the get-go.

**Bobbye Tigerman**  
*Curator, LACMA*  
00:15:24  
I can get it started Elissa, as the other curator on the panel. So Kayleigh I give you a lot of credit because finding objects by some of these women who have not been acknowledged, like objects by Hilda Carpenter, are very hard to find.

And so you’ve been very resourceful in using the things, like, period images and magazines, magazine articles, and period brochures. So I think being resourceful and creative in finding objects for an exhibition is one of the places to start in talking about these things.

But it’s just really important to keep these distinctions at the forefront. And name them. Often. And one of the most obvious ways is to use it as your organizing principle. I’m not sure, since we haven’t been to see the show, if that is how you organized the show, or what your sort of structure was.

**Kayleigh Perkov**  
*Curator, Moderator*  
00:16:27  
So right now, the show tries to center the work of women working in the industry quite literally by having this archival material you’re alluding to physically in the middle of the gallery. And on the walls around it are the work by the five female artists I’m highlighting.

So it was really important to me to physically center that, in the story, in the gallery space. But it is really tricky as you’re saying to find objects that speak to this history, and will speak to this history in a way that’s engaging to a visitor of the space. It’s tricky work.

**Lisa Nakamura**  
*Professor, U-M LSA*  
00:17:10  
Kayleigh, I was struck by so many things that you said, and, thinking of 1965-85 which is your period. In 1965, the Civil Rights Movement was going full swing, and computerization was still pretty localized in California, a little bit in Maine, and not yet outsourced so that all Asian women were making all everything which is kind of where we are now.
And ending in ’85 which is when computers enter the home. People weren’t quite sure what to do with them, and sometimes they were called “Ataris”, but they were computers, and people owned them, and were struggling to find the correct uses for what they could do.

So I think that craft is such a great way to talk about the back-end or the back-story of this revolution. You and I both talked about the Computer History Museum, and how they have gathered all these industrial documents to celebrate the rise of the computer industry, and I think they’re not quite aware that computing is a craft.

It has a guild, you know. Most of the programmers are men, but everybody that makes the innovation possible, making parts cheap, making them quickly, making them accurately with a high degree of precision, is women’s work. And if it weren’t for cheap parts we wouldn’t have innovation.

I’ve heard some Bell Lab engineers reminisce about how great it was to have access to masses and masses of chips to experiment with. So I love the story you’re telling which is a different side of the hidden figure story. Not so much that women were the engines or the programmers behind the programmers, but that the price of innovation is actually in this case women’s labor, literally. Keeping it cheap, keeping it ubiquitous, keeping it plentiful. Without those things I don’t think we would have the internet.

And I think one of the other sides of the coin, Lisa, to what you’re highlighting is the ways in which craft and textiles in particular were sometimes harnessed to make computing seem less intimidating. So for example when IBM’s really highlighting the work of Janice Lourie, they’re doing it at this moment of very intense social protest, and a lot of mistrust and suspicion towards these larger technological corporations.

I found this great quote from someone in the computing industry who was talking about highlighting the artistic capabilities of computers who said something to the effect of “if we can’t show people that computers are for them, people won’t be for computers.” So I’m fascinated by this way that textiles and art-making was seen as a way to make computers less intimidating. And I actually think that’s something we see up until today as well.
of this perceived feminine qualities of textile work because I’m much more familiar with it coming from feminist artists in the 60s and 70s, right, which you mentioned. And I had to really think about the relationship between these two, arenas, let’s say.

Because there was a vocal contingent of women artists in the late 60s and 70s who participated in second-wave feminist efforts to recover or re-position women’s experience as central to the human story. And artists involved in that launched an analysis of the history of women’s creative practices, areas of artmaking that were hardly respected as such or understood at the time that way because they were connected to women’s work in the home. And women’s textile-based arts, too, from sewing to quilting to weaving were politicised in this context and they played a crucial role in the feminist critique of the art world’s hierarchies of exclusion especially as it relates to gender and race.

And by politicise I know you’re talking about this in the exhibition, too. There’s this historical relationship between women and fiber or textile, at least in the Western world where it was really computized. And so even though we know that men around the world are involved in textile production, that equation between women and fiber was, and remains, something that’s talked about in a positive way as women’s work.

So I was thinking about that in relation to the wonderful examples of advertising copy that you brought to light in the exhibition where there’s this emphasis on women’s natural ability to carry out detail-oriented work that’s very suited to tech manufacturing. And thinking about the ways, to what extent does the feminist critique of the late 60s and 70s intersect or counteract or actually promote that in some way, and I think it’s complicated, right?

They’re both trying to celebrate women’s craft and artistic traditions, but then at the same time acknowledge that connection. Or the ways in which women’s work has often been dismissed within the art world as too detail-oriented or too myopic, or too dedicated to the surface or something like that. To deflate that, at the same time as celebrate this connection between women and craft and textiles.

It’s very complicated. And partly driven because they’re looking to intervene in an art-historical world where those same things that the tech companies were promoting, [are things] that dismiss women from the canon [and, of course,] their work [as well].

Yeah, a hundred percent, I would say. There’s a kind of double edginess to it, where you need to be hesitant of boosterism. Right?
And actually I wonder if, Lisa, if you might use this time to talk a little bit about your work on the Fairchild plant because I think that's a really great example of how this discourse of women's textile work isn't only gender but also racialized and how that could lead to exploitative structures?

Lisa Nakamura  
*Professor, U-M LSA*

Sure! Thank you very much.

From 1965 to 1975 the founding company of Silicon Valley was Fairchild Semiconductor. It was founded by William Shockley who was a Nobel Prize winner who invented the transistor, so, you know, kind of at the beginning of it all. And in an effort to cut costs, they were opening plants in places outside of California.

So they had one in Maine, they had one in Korea, and they opened one on the Navajo reservation in Shiprock, New Mexico, to get around labor laws so they didn’t have to pay minimum wage. They didn’t have to regulate in the same way because it’s a different country. But they could keep within the structure to only manufacture weapons such as things for the space program, in US borders.

That plant had over a thousand women who worked for almost ten years making semiconductors, chips, by hand. So soldering by hand, testing by hand, everything was done with a microscope, 100% Navajo workforce. And this was something they really wanted to spread around because, again, 1965, indigenous women, affirmative action, in some ways it was a better time for women in tech than it is now. There was an acknowledgement that there was an imbalance and that it needed to be fixed, and that it could be fixed. Not by the free market, but by governance. I was able to go interview some of the women, which was great.

But I think the piece that you and I both saw was an annual report, so again looking for women’s craft in strange places like archives and company annual reports. They’re glitzy, they’re a little bit content-light, but they had a big picture of a Navajo rug, which a woman was weaving, and then a big picture of their flagship chip, which I think went into the Apollo, and they look exactly the same. They really closely resemble each other. And what they were telling us or showing us is that Navajo women are innately patternists, they are innately interested and already gifted at memorizing shapes that look just like chips. So here they are innately, already assembly workers.

Of course that wasn’t true, those rugs are way older than chips, those
chip makers weren’t looking at those rugs. It was a kind of aesthetic resemblance that was just striking. So the justification was Indian women don’t need to be paid because they’re already making these things. You know? This is an innate capacity of indigenous women, which is to create intricate patterns and to do them faithfully the same way in different media.

They then closed the plant when the American-Indian movement took it over because they were trying to unionize it. So there’s this weird, fascinating history of indigenous women as innately digital workers, which I think is very little known about because everything went to Asia, after that, Korea, and eventually Malaysia, which is where the industry is now.

So the link between indigenous women, Asian women, as you say the “nimble fingers” discourse, the Navajo story is interesting. Because now people don’t think of Navajos as docile, hard working, industrious people. But the way the annual report wanted to say they were was that Shiprock had harnessed the individual feminine capacity to endure and to be stoic, and to not complain. Because that work was boring. It was really, as you can imagine, eight hours of looking at a microscope and doing the same thing exactly the same way every single time because the failure rate for the Apollo infrastructure, as you know, it had to be better than before.

So it was about the re-branding of the Navajo women as Silicon people. And there was some complicity from the Navajo nation who wanted to become self-supporting, obviously, and self-determining. So I was interested in how you could see how the identity of some races being good for some things and some being good for other things shifts, depending on who’s cheap right now, and who’s available to work.

So the visual arguments again made around women in tech production are really interesting and often not what you’d expect them to be. I mean, it’s not part of the official Silicon Valley story, which is about men in garages. It’s not about women on Navajo reservations.

Kayleigh Perkov
Curator, Moderator
00:28:16

It always brings me back, there’s this amazing quote by the feminist historian of technology Cynthia Cockburn. She’s tracing the movement of women into garment manufacturing in early 80s Britain and particularly the use of computers.

She talks about the ways in which these corporations basically hire women expecting that they’ve already received training in textile
production at home, in their upbringing as women. And she has this wonderful quote of how corporations can take advantage of this domestic training without having any care for continued domestic obligations for their female employees. And I think that really gets at the heart of a lot of this work.

Elissa Auther  
*Chief Curator, MAD*  
00:29:02

What’s the title of that book again, Kayleigh?

Kayleigh Perkov  
*Curator, Moderator*  
00:29:06

*Machinery of Dominance*

So several women in this exhibition recognized the binary logic underlying both weaving and computing. Examples include Janice Lourie and Lia Cook, but there are many others. For example Betty Shannon was the wife and collaborator of one of the most famous computer scientists of the 20th century, and she was a very ardent weaver and active in many weaving guilds. So how might we mobilize the connection in logic between weaving and computing to tell a more robust history?

Bobbye Tigerman  
*Curator, LACMA*  
00:29:54

I can start off, again.

So this observation about the binary nature of both Jacquard weaving and early computers seems to tap into a very deep well of creativity that has inspired many, many artists.

There were the forerunners like Janice Lourie and Lia Cook like you mentioned and there are several others, you know Beryl Korot, she grew up as a weaver, but then she also made videos. She made multi-channel room installations that she conceived of as weavings. The way that she played them, they were woven together. And so she thought of them as weavings. Or Elaine Reichek, who used embroidery to comment on scientific phenomena. So she was trying to undermine this association, like you were saying Lisa, between technology and masculinity.

And it was such a powerful observation that contemporary artists continue to riff on it. There’s so many examples like Guillermo Bert who is an LA artist. He makes woven hangings that have in the center a QR code, and you can scan that code, and it will take you to a site
that will have a testimonial that he’s recorded that links thematically to the piece. So if it’s a piece that’s woven by an indigenous Mapuche weaver, the testimonial is from an indigenous Mapuche person. Or LACMA just acquired a piece called *La Bestia* that has an image of the train, La Bestia, that travels through Mexico and migrants ride that train, often in very deadly circumstances. So when you click on the QR code, you’re taken to a testimonial of a Guatemalan immigrant who rode that train and ultimately his account of coming to the United States.

There’s Analia Saban, who is really interested in this too. She weaves representations of 1970’s circuit boards using linen and dried acrylic ink so they look like circuit boards, they kind of look like those things that are in that brochure, but they’re made today, and they’re using materials obviously that are not at all associated with technology.

So I guess the point is that this impulse to connect textiles and technology is very strong, and persists across generations.

**Elissa Author**  
*Chief Curator, MAD*  
00:32:49

I don’t know if this is any help expanding the conversation necessarily between textiles and technology but I was interested in the way the whole exhibition has an overriding mission of looking at the way that intellectual or the conceptual is separated from the hand in the making.

And I really like that because of course I recognize a similar critique in the work of a great number of women artists who are interested in the history of women’s craft because there’s a hierarchical relationship that appears in lots of different forms that are connected to that separation of the mind and the hand. It can be the separation of surface from depth, it can be the separation of the detail from the center, or even the separation of ornament from Art with a capital “A.”

And like the binary that you’re talking about between the weaving and computing it is gendered, that binary, and it’s very much related to social hierarchies of gender and race and class that we grapple with today. It appears in so many, there’s just a broader constellation that it’s a part of that’s really fascinating to me and I’m very interested in artists who try to intervene in those binaries for those reasons.

**Kayleigh Perkov**  
*Curator, Moderator*  
00:34:09

Yeah, to your point Elissa, in coming, doing some more historicization of the early computing industry, I was shocked by how manual early programming was. I think now when we think of computer
programming, we think of someone sitting at a computer keyboard, you know purely conceptual effort, but a lot of early computer programming was very manual, there was the actual laying out of circuits and thinking how things would flow was manual work. So to separate these two things, it’s a work of history, and it’s a work of contextualization rather than it is a reflection of the roots of these things.

And I think pointing to artists like you and Bobbye did who do the work of undermining that is really essential and helping to re-approach this history.

One of the pieces we have in the show, the Core Memory Quilt, by a team of engineers as well as a weaver, is really wonderful in the ways in which it venerates making through knowing. So a big part of this historical investigation to the work of women computer manufacturing was the actual physical creation today of these computer components. And really valuing making as a form of knowledge acquisition. Which I thought was a really beautiful way to get at this history and to valorize making alongside conceptual knowledge.

So since COVID-19, many homestitchers have digitally collaborated to produce personal protective equipment like masks and to organize memorial quilts dealing with racial injustice. These projects force historians and curators like us to consider social digital platforms as technical tools.

How might we theorize the work of building and participating in these networks as a form of craft labor? How does this intersect with longer histories of gendered and racialized craft labor?

And I know this is a weighty question. I wonder if you at all, Lisa, would mind starting us off with your work on digital effective labor and thinking through ways we might consider that?

Lisa Nakamura
Professor, U-M LSA
00:36:42

Okay, thank you.

When I think about affective labor, with an “a,” it often has to do with the labor of not just having feelings but of showing feelings and of externalizing them in the form of objects or other work. So the labor of love, like cooking, or childcare, or elder-care, is often not seen as a labor at all because it’s both too valuable to put a price tag on, and too cheap to pay anyone for.

So I think that’s a way to think about COVID time as well; whose time
is innately available during the moment? And whose skills are already both so undervalued that they’re not getting paid for them, and so over-valued that they’re pressed into service as “essential” at the same time. And that would be mask-sewing.

And so I think societies have the capacity to re-classify what is a labor of love versus what is paid labor, and I think a lot of Italian Marxist Feminists like Silvia Federici wanted women to get paid for housework, and that conversation is coming back. And housework, a lot of it is craft. You know, it’s production, a kind of exquisite detail and sensitivity to the occasion, which is very much what I think of when I think of what art is, a repeated act.

And so I think that’s the paradox of women’s labor and craft in a post-digital age. The digital already does so many things for us, but the things it can’t do are the things that are both too valuable to pay anyone for, and no one’s getting paid for. So acts of care, acts of just-in-time production, which I think masks were just-in-time production, the supply chain had failed, and so who steps into the breach when the gears of capital aren’t able to move fast enough to meet a need? Which is an unanticipated need.

I’ve never been to a crafts museum I don’t think, I have to say I wish I had gone more, but I wonder how many things in those museums were made under those conditions?

Kayleigh Perkov  
Curator, Moderator  
00:39:10  
Yeah, I mean there’s definitely been really good work about craft making under wartime constraint, and this kind of idea of the muster, like how does one muster forces together?

Elissa Auther  
Chief Curator, MAD  
00:39:33  
I’m trying to think if I can answer that question in relation to MAD’s collection, but I’m also processing, very quickly, your descriptions of affective labor. It’s not about just having the feeling, you have to be able to show it, and it has to be manifested in some kind of object.

I mean, in terms of MAD’s collection, my mind immediately goes to what might sound like a cliche, like quilts in the collection which have long historically been described as labors of love because they are connected to the domestic realm, right?

And of course you have numerous interventions on the part of artists to undercut that as well. Not necessarily dismiss it altogether, but to also attempt to present that tradition as part of a broader art-historical
And I think, too to jump off of what Elissa’s saying, this also doesn’t just have a feminized history, it also has a racialized history thinking about quilts in particular.

There’s a really great body of scholarship about the work of black female quilters, particularly in regards to Gee’s Bend and the ways in which that labor is used by the art historical discourse for uplifting certain narratives of modernism and abstraction. Bridget Cooks is an art historian who has written about that in really beautiful ways.

Yeah, I think that speaks to the heart of women’s production in a way is that these things are often stop-gapped kind of what Heidegger called the standing reserve. You know, it’s what can be there when other things aren’t sufficient. When modernity doesn’t provide everything everybody needs it to provide, which is mass-produced goods or whatever.

But at the same time they’re so devalued, as having too much value “this is my family’s quilt, it is unique, there is none other like it, it is worth more than anything,” yet having no value meaning “I’m not going to pay an anonymous person X-amount of money when I could have a Frank Stella, or I could have a something that someone’s heard of before.

So it’s the kind of anonymity of women’s labor and its production within a web of familiar relations, which makes it very hard for women artists to monetize it in any way. And that is also part of the affective labor that women provide in the world of material goods, which is on the one hand, super exploitative of individual makers, but keeps it permanently outside of the realm of money. So that’s another reason why it’s so hard for people to make a living doing these kinds of things.

It’s very interesting to hear you put it in these terms. So, for you, one of the key features of affective labor is something that can’t be monetized, or is very difficult to monetize.

Right, and I think by design. To monetize those things would be to
Elissa Auther  
*Chief Curator, MAD*  
00:42:55

I mean that’s at the crux of a lot of the issues we have with the history of craft as well, and its attempts to re-make it as a form of high art but also respect those traditions where it’s coming from which is often connected to affective labor. It’s very difficult to navigate that.

Bobbye Tigerman  
*Curator, LACMA*  
00:43:16

And especially right now in this moment when a lot of the material being produced is, immaterial, is digital, you’ve been thinking about how to preserve this moment and both responses to the pandemic and also to police brutality against communities of color, and just sort of endemic racism in our society.

And sometimes the more physical things, those are masks and PPE and protest objects and things like that, but often they are digital. They are the digital file to print the face-shield, which is something that we would be interested in collecting, and preserving. Or they are Instagram posts, Tweets, or memes, and how do we valorize and preserve those immaterial objects?

We don’t have the pathway, but we actually have a really cooperative department at LACMA that are willing to go on this kind of journey with us and think about what it means to collect Tweets or something like that, and therefore give it whatever value a museum can confer on it.

Elissa Auther  
*Chief Curator, MAD*  
00:44:42

And I guess also back to the question of “how are these platforms forms of craft labor?”

They do connect historically I think to forms of writing about craft which appear in how-to guides or other transmission of knowledge and technique that’s specific to craft. I haven’t thought that out, it’s just an observation. You know, like this is just an expansion of this long history of publishing in craft.

Bobbye Tigerman  
*Curator, LACMA*  
00:45:16

Elissa the kind of things you were referring to about feminist art in the late 60s and 70s reflecting the realities of everyday life, the drudgery of housework, or injustices that people routinely endure, there’s a through-line I think between those things and the work being produced
Kayleigh Perkov  
*Curator, Moderator*  
00:45:43

One of the things I was thinking about in relation to this question is the fact that three of the women profiled in the show were professors at art schools, and I mean, studio craft in the post-war era, it's cliche now to almost say that it boomed because of the GI bill and all of these people going back to school and the work of craftspeople also teaching.

And I thought about this form of scholarly labor existing alongside the production of craft objects as being a throughline throughout the 20th century, and how these digital platforms are also a form of teaching, right? This affective labor of teaching, whether or not that's always valued.

Sometimes when we think about the work of, I’m thinking, Lisa I think you wrote about this a little bit in your Precarity Manifesto with your collaborators, but this labor that’s not always not only valued, but not always wanted [either]. Of pointing out moments of racism and thinking about that as a form of teaching labor.

So that was something I’ve been thinking through, still nascent, obviously, still new thoughts. But I think there’s a connection there.

Lisa Nakamura  
*Professor, U-M LSA*  
00:47:09

Yeah, you know, if you study tech, you really get used to this language of innovation. Everything has to be innovation. And so much of what is in your show is about open access too. You know, sharing the innovation which might be a pattern, or might be a print, or a particular technique of making.

And to go back to the mask question, there was so much innovation going on around that, and it was circulating on social media, mostly. It was Instagram. It was not the State Department that was deciding they were going to be the locus for that, though they have been for other things. So the labor that women produce in our moment is essential labor, but it’s also, again, not monetized. No one is paying anyone to make masks, and they easily could have done so.

So, not to be obsessed with masks, I’m really interested that people might even think of collecting them. I think that’s a fantastic idea. So interesting. I’d like to see those now, actually.
I’m cognisant of the time and I’m wondering if we want to potentially open it up for questions at this point? And if not we can also just keep chatting. Lauren, do you want to open it up for questions?

Absolutely, yeah y’all are welcome to ask questions in the chat. Comments, as well, are welcome. It doesn’t have to be a direct question. Kayleigh, you’re welcome to keep the conversation rolling, and I can stop you when I see questions come in if that works with you.

Sure, that’s great. So maybe we’ll hop onto our next question. Which is, so the show looks at a twenty year period, and the reason why I chose this period is because it seemed really nascent. The computing industry was still in flux, it was before ideas became kind of hard and set in our imagination.

Here’s this one book from the early 80s that kind of just threw me by surprise, of already assuming that women needed confidence and lacked confidence in computers before, which coincided exactly with the historic downshift of women in computing science majors.

So, today a new generation of makers are working in e-textiles to once again reshape the public’s imagination. So as historians who have thought about these fields, are there lessons that you think today’s makers might draw upon.

Hmmm, that’s a hard one.

I know! I’m sorry.

I think when you were preparing for this I brought up that I had taken a look at some of MAD’s past exhibitions like Mind Extenders which you
opened up with, but also one that was called *Body Coverings*. It’s this great catalogue. This is from 1968 because, strangely enough it appeared in a Wikipedia entry on e-textiles. And I don’t know who wrote that entry, but this is a really interesting, sort of, part of the conversation that I don’t even think I made the connection to, even knowing about this exhibition, to e-textiles.

But, I mean we were talking a little bit about it, Kayleigh, because you said that you had gone back to it as well, and it’s really instructive to think about what was being celebrated at this moment versus what we understand now about, especially the fashion and textile industry.

Right, so there’s a lot of celebration of innovation in textiles, things that are impervious and soundproof and grease-proof and stain-proof, and there’s a line that I’ll quote here that’s “What needs to be celebrated is more chemistry, more chemical refinement, and less physical and psychological dependence on cotton and wool.”

Which is such an amazing statement, right, because at the same time we also have artists in the show who are all about the psychological relationship with the human body to textiles and understanding the body in relationship to the environment, I mean, they both think of body in relationship to the environment, but, they’re looking at it from completely different perspectives.

And I wanted to think about what was missing from the conversation, and it is largely, as you can imagine, the phenomenon, and impact of globalization. And, especially as it relates to the textile and garment industries and areas of labor exploitation and environmental devastation that we’re much, much more aware of at this point [compared to between the years of 1965-1985]. And, I mean to me those problems and catastrophes have really shifted the field with contemporary fiber art to where it’s like designed solutions and activist intervention, those are the things I’m most aware of.

And, in terms of e-textiles specifically, I would really need to spend several months catching up with the industry because there’s just a tremendous amount of experimentation out there.

Maybe Bobbye? Bobbye you probably pay much more attention to e-textiles than I do.

*Bobbye Tigerman*  
*Curator, LACMA*

00:52:19

I confess, I don’t. But I will, now.

(both laugh)
Because my focus is on artist-created textiles in the past, but what it seems to me is there, again, there is a throughline, because most of the projects I’ve done have been about the 20th century, but what has really spurred my excitement about this area has been contemporary artists exploring this relationship between textiles and technology.

And so that fearlessness that the forerunners had, they were transgressing disciplinary boundaries, sort of ignoring what was okay to do and not do. And experimenting with new technologies, everything from the copy machine with Katherine Westphal to all kinds of advanced computer-weaving software, and not just limited to weaving. I’m sure that if you look into e-textiles, you know, the range of fiber optics, and things that you can embed in fabrics. And that just sort of continues, and that to me is very exciting. The story is ongoing.

Kayleigh Perkov  
Curator, Moderator  
00:53:36

And it is interesting to trace how CAD was made more available for the at-home weaver in the early 80’s. E-textiles [have] already kind of entered this moment where it’s entering the hobbyist market.

So I have a kit waiting for me at home- Leah Buechley’s Lilypad Arduino- which is this very nifty little sewable, programmable circuit that you can embed lights and different sensors in your embroidery projects. So that’s going to be my summer evening craft project starting soon. But it’s already entered the commercial hobbyist market at this point.

Really quick, Elissa, do you know if Paul Smith wrote the quote that you, was that a Paul Smith quote?

Elissa Auther  
Chief Curator, MAD  
00:54:29

Ah, no, actually I was just texting Aaron Mcintosh because he asked me [the same question], I responded privately and I should have gone to the whole group. It’s a man by the name of Cecil Lovell, who was the editor of American Fabrics Magazine at the time.

And then, there’s also another really fascinating essay written by Alexander Weatherson, who, I’m pretty sure, just based on the content, is a strict Freudian psychoanalyst and he’s talking about sort of the psychological and erotic elements of textiles.

So, it’s a classic Paul Smith project where he’s brought together someone from the industry, someone, this psychologist, and someone, I think it’s a costume designer. I can’t, let me look at the
third essay...or an artist who’s involved in environmental installations...oh, it’s a dance choreographer, Alwin Nikolais Dance Company, who writes about a variety of textiles and costumes, kind of avant-garde costuming for dancers.

Lisa Nakamura  
*Professor, U-M LSA*  
00:55:54

I’m still thinking about that really resonant quote from *Body Covering* about synthetic fabrics, or synthetic materials. And how artists like Janelle Monae have really made friends with the synthetic, and, gender, this idea that women are somehow connected to the earth, you know, unnatural objects or fibers are man-made (it’s not a coincidence it’s called “man”-made) are somehow alien to women’s worlds.

But when you talk about this [lilypad] arduino project and also the way you see a lot of Afro-punk women who are grabbing onto the possibilities of the artificial, and are taking that as a scaffold to build a new kind of gender, or a new kind of justice even.

Elissa Auther  
*Chief Curator, MAD*  
00:56:41

I’m sure we have numerous artists in the audience who have also embraced some synthetics for these reasons, right, and have very consciously and have very consciously worked with them because of a range of different meanings that they can produce.

Lauren Roquemore  
*Gallery Coordinator, CFC*  
00:57:04

Well I think it’s about time that we wrap it all up, and I want to start by thanking Kayleigh for coordinating this really fantastic conversation, and thank you to Lisa, Elissa, and Bobbye for giving us your time and your expertise.

I think I speak for everyone who attended today when I say that my brain is about to explode with new information. Every time I talk to Kayleigh about this exhibition I learn something new, and today is no different.

So thank you all so much for joining us today and talking with our attendees, and thank you to everyone who registered for this event today. Hopefully we’ll talk again soon!

End