"Let us never forget that there is an architecture of architecture. Down even to its archaic foundation, the most fundamental concept of architecture has been constructed. This naturalised architecture is bequeathed to us: we inhabit it, it inhabits us, we think it is destined for habitation, and it is no longer an object for us at all. But we must recognise in it an artefact, a construction, a monument. It did not fall from the sky; it is not natural, even if it informs a specific scheme of relations to *physis*, the sky, the earth, the human and the divine. This architecture of architecture has a history; it is historical through and through. Its heritage inaugurates the intimacy of our economy, the law of our hearth (oikos), our familial, religious and political 'oikonomy', all the places of birth and death, temple, school, stadium, agora, square, sepulchre. It goes right through us [nous transit] to the point that we forget its very historicity: we take it for nature. It is common sense itself."

Thesis Programme 2023 Naomi Nir | 210077 Supervisor: Dag Petersson

Political Architecture : Critical Sustainability The Royal Danish Academy, Copenhagen Derrida, 'POINT DE FOLIE — MAINTENANT L'ARCHITECTURE. Bernard Tschumi', 65.

In most cultures, producing cloth is a symbol of gender and a primary domestic responsibility of women. A 'basic economic task' of women in Classical Greece and Mesopotamia. The importance of this gendered production is denoted by ancient goddesses of spinning and weaving. The Greek god Athena is more commonly known as the goddess of wisdom and war, however she is also the patron of potters, goldsmiths, weavers, and others involved in textile production. The mythological story of the weaving contest between a disguised Athena and mortal Arachne exhibits Athena's weaving skills, a source of pride for the god. This illustrates the importance of the craft in the Ancient Greeks' eyes. During the contest she weaves scenes that exhibit the glory of the gods, while Arachne weaves images depicting the gods' cruel treatment of mortals. As a punishment for Arachne's obvious talent and her unflattering portrayal of the gods, Athena vengefully turns her into a spider, forever producing threads. The spider appears in other cultures as a weaving god; the Navajo worshipped the Spider Woman, who created people and animals from clay, breathing life into them.

Most ancient cultures attributed goddesses to the making of textiles, weaving in particular—the Mesopotamians had *Uttu*, the Egyptians—*Tayet*, and the Canaanites worshipped *Ashera*.² The Mayans had *Ixchel*, the Japanese had *Ukemochi*, and the Russians—*Mokusa*.³ All of these were female gods, representing the female population (fig. 1) which was occupied with supplying the household with fabric for making clothing, bedding, bags and containers, and in the case of nomadic societies, shelter. Woven materials were of utmost importance in the ancient world.⁴ In Egypt, the goddess Tayet was attributed with making the linen shrouds (fig. 2) used during the embalming ritual, as well as clothing for the King—thus she was dubbed the protector of the King and his corpse, and the facilitator of the funerary tasks thought to help achieve the ideal afterlife. She was also in charge of carrying the dead

as a kite bird to heaven, to the goddess Isis. Tayet's anthropomorphic form, a rarity in Egyptian gods, reflected human normality, a god one could easily relate to—which led to acceptance among worshippers. The significance of linen fabric in Egyptian culture transformed weaving into a religious act, one of great importance to the systems of belief of that period, though it is vastly underrepresented in Egyptian art.

The symbolism of the loom plays a part in other cultures. In Norse mythology, it appears as a device for determining destinies during war. The Norns are usually depicted as the deities in charge of passing judgement on the fate of men, however in *Njáls' Saga* the Valkyries collect fallen vikings while singing the song of the spear and weaving on their loom:

Warp is stretched
For those falling in battle
The weft in the loom
is raining blood.
The fight is near
A grey weave
of men is made
Under maidens swift fingers,
Our warp bloodred
Our weft corpse blue.6

The warriors' fate is woven with bloody entrails. Men's heads are used as loom weights, holding down the warp threads. In this instance, weaving serves a higher purpose than mere production, it decides the course of war and determines who shall live and who shall die. The existence of bounteous weaving gods and rich mythologies surrounding weaving exemplify the role it played in these cultures, and the importance it had outside the domestic female realm.

1—Ovidius Naso and Anderson, Ovid's Metamorphoses. Books 6-10.

> 2—Ackerman, 'Asherah, the West Semitic Goddess of Spinning and Weaving?'

> > 3—Kruger, Weaving the Word, 24.

4---Kruger, 22.

5—el-Saady, 'Reflections on the Goddess Tayet'.

6—Marius, 'Song of the Spear (Darradarljod) Valkyries Weave the Fates of War'. The only industrial craft in Ancient Egypt in which women are exclusively depicted is the manufacture of linen textiles. The sole area of women's work from which a tangible product survives.

These bandages bear hieratic inscriptions, with excerpts from four chapters of the Book of the Dead. The inscriptions hint to the owner, Harpakhem, son of Taamun.



fig. 1 Weavers, Tomb of Khnumhotep c. 1885 BC



fig. 2 [five out of] Nine Egyptian Linen Mummy Bandages for Harpakhem, c. 664 AD

In the ancient world women produced most of the textiles weaving history is essentially the history of women's work. Gendered textile production encompasses historical, mythical, and societal recordings based on the weave and embroidery of the fabric. Before women began writing, weaving constituted the first textual practices and female authorship. Both *text* and *textile* originate from the latin *texere*—to weave. Kathryn Kruger elaborates on the metaphorical uses of spinning, weaving, and textiles in writing and literature—a written text is often depicted as a fabric which is "spun, woven, knitted, quilted, sewn or pieced together". These analogies between a piece of writing and a piece of fabric might stem from their joint histories in recording, preserving, and passing on knowledge and history. Both forms of expression were utilised in similar ways, though each one by a particular gender. Historical evidence points to a gendered divide—while women did most of the weaving, men were in charge of the written narratives preserved for future males.

All women in Homer's body of work spin or weave, symbolising the domestic order—where women are in charge of the oikos⁸ while men defend the polis. In the Iliad, Helen rendered scenes of Achaeans fighting Trojans in her weaving, preserving the story of the Trojan War on her loom—therefore constructing a voice and identity of her own. Her worries are expressed through her craft, she finds relief and escapes her reality by recording her own history, something she cannot do as men, through writing. Penelope is characterised by her weaving in a different way, not through the subject matter of her art, which is not described, but by way of the act of weaving itself. She weaves a shroud for Odysseus' father, a symbol of loyalty to her husband's family and her concern for the familial order. Her deception of the suitors through the daily unravelling of her weaving cemented her position as Odysseus' worthy wife.9

Since the early days of Weimar Bauhaus the weavers, all of them female, would write essays constantly, forming theories of the materialistic and formal fields their craft enveloped. A Bauhaus theory of weaving emerged, one which would position weaving as a comparable craft to other media. 10 The acts of writing and weaving were tangled in the explorative artistic process, one informing the other. I propose to utilise both these methods in order to probe the relationship between the disciplines of architecture, art and craft. When does weaving morph from craft to art? How do various crafts inform architecture? What is the relationship between art and architecture? After the Bauhaus in Berlin closed down in 1933, the textile artist Anni Albers11 (fig. 3 and 4), escaped Nazi Germany to America with her husband, Joseph Albers. During her first few decades in America she began reflecting on the practices of the Bauhaus weavers, in particular their writings on weaving and the relationship between the two fields of artistic expression. These musings came to light through writing, and were published between 1937 and 1959.12 'On Weaving' came out in 1965, a seminal text which took on the "visual, structural side of weaving" rather than a summary of the history of weaving and textiles. In it she explains the development of looms, the various instruments used in conjecture with weaving, and most importantly, the prevalence of the principles of weaving methodology throughout history. Through its mutations, weaving has, to this day, maintained its most basic properties. The act of "forming a pliable plane of threads", in its simplicity and genius, has not been improved upon yet.13

Writing will be introduced as a complementary strand to weaving, applying the explorative facets of theoretical and historical research to the neighbouring strands of the project. Writing will inform and advance the theoretical basis of the various methodologies, on which I will elaborate shortly, as the more experimental methodologies will dictate and in7-Kruger, Weaving the Word, 22,30.

8—Oikos (οἶκος) in Ancient Greek the basic societal unit, the home, the family and everyone who shares the same home

> 9-Pantelia. 'Spinning and Weaving', 495-97.

10-Smith, Bauhaus Weaving Theory, 16-17.

11—Anni Albers began her studies in the weaving workshop at the Bauhaus in Dessau in 1920 and eventually became the head of the weaving workshop in 1931. Her husband was a visual artist who also studied and taught at the Bauhaus.

12-Smith, Bauhaus Weaving Theory, 141-42.

13—Albers, On Weaving.

Anni Albers would begin the designing process with drawing or painting the desired patterns before beginning to weave said design.

fig. 3

1925

Anni Albers, Desian

for Wallhanging,

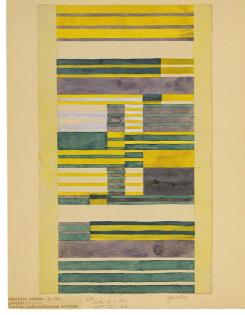






fig. 4 Anni Albers. Wallhanging, 1925

form my writing in return. I wish to further investigate the relationships between weaving, writing, architecture (education and practice), and art.

Weaving has been practised for around 25,000 years. The earliest evidence of woven fabric are impressions of woven fibres on clay fragments found in the Czech Republic.¹⁴ Textiles used as protection from the elements, whether as clothing or shelter, are a basic necessity; their significance is emphasised by their existence at such an early period of human existence. In addition to making fabrics by weaving, they can be made using other techniques such as nålebinding (or knotless knit ting). One of the oldest remaining examples of which is a neolithic linen textile fragment from c. 6500 BC, found in the Nahal Hemar cave in Israel, alongside various woven textiles.¹⁵ In Denmark nålebinding textile fragments from c. 4200 BC were found in a mesolithic fishing village, *Tybrind Via*. This ancient method of making fabric was primarily performed by women, although not exclusively—for example, men would make themselves 'work mittens' in Finland. The only tool required for nålebinding is a needle, one which was traditionally passed down from mother to daughter or given to a bride by her father, brother, or groom. 16 This example of a different method for producing fabric by women showcases the role gender has historically played in textile manufacturing of all kinds. Making fabric using a needle alone has its advantages, however the importance of the loom in producing large expanses of fabric, faster, is undeniable.

Looms and spindles were developed by different cultures simultaneously throughout history. The essential principles of looms have remained constant since antiquity—modern textile machines are a natural evolution of those used thousands of years ago.¹⁷ Looms are composed of a few physical elements which facilitate the intersection of weft threads on top of and below warp threads, their entanglement creating

cloth. Most comprise a wooden frame, some are horizontal and some vertical, some utilise a single heddle-rod and others double heddles operated by the weaver's feet. 18 A Jacquard loom utilises binary punch cards to make patterns, which inspired early computer design. The prototype hand frame loom I made (fig. 5) consists of a recycled HDF frame that can hold 30 warp threads, and can produce fabric measuring a maximum of 18x30 cm (fig. 6). The rigid heddle alternates which warp threads are pulled up or down, creating the shed for inserting the shuttle through it. One of the methods I plan to use is weaving, during my 100 days of weaving, in which I intend to weave daily, at a ~2xm recycled standing loom I constructed out of pine and HDF, using traditional wooden joinery for the frame as well as laser-cutting for the warp rulers and heddle. Mortise and tenon joints, one of the strongest methods for joining wood, keep the flexible pine frame rigid. This joinery technique is one of the oldest and most durable methods of creating a perpendicular joint. Laser cutting the toothed-ruler on which the warp is threaded helps keep the intervals between the warp threads precise. My weaving will be inspired by techniques I hope to learn through experimentation and theoretical research. Using craft to inform my architectural education and practice by trial and error. I plan to live-stream this journey online, where I will turn the act into a performance. Each day I will tell a story or discuss a topic related to my research. These narratives will be partly planned and partly adaptive-reactive. I hope to gather an audience which will be able to converse with me through the live-streaming platform, contributing to my web of knowledge and responding to the stories being told.

Storytelling will link the performative and informative in this venture. Hannah Arendt's theory of storytelling depicts the act as a bridge between the private and public realms, a result of action and speech. Arendt's stories are not bound by writing, they manifest in art and are worked into material,

14—Soffer, Adovasio, and Hyland, 'Perishable Technologies and Invisible People'.

15—Schick, 'Perishable Remains from the Nahal Hemar Cave'.

16—Kaukonen, Toini-Inkeri, 'Kinnasompelun Levinneisyys Ja Työtavat Suomessa'.

17—Hooper, 'THE LOOM AND SPINDLE', 947.

18—Benson and Warburton, Looms and Weaving, 3–4. By changing the heddle's design, a different weave is achieved. For example, a simple alternating 1x1 heddle where one thread is pushed up and the next pushed down produces a plain weave.







fig. 6 First Weave

recorded, told and retold.¹⁹ The anthropologist Michael Jackson altered Arendt's model in 'The Politics of Storytelling', attempting to bridge between microcosm and macrocosm. He weaves together the visible and invisible, the familiar and foreign, and the living and the dead. Experiencing-with rather than converting terms like private and public into ontological entities.²⁰ Telling the stories of others may be a way of giving agency to those not usually heard, connecting the long forgotten and always-forgetting. Storytelling is not limited to vocalisation, it can take form using different media, such as the case with written and woven stories. Architecture carries within it historical, situated narratives. A building contains the particularities of its inception, the context in which it was erected, the ideologies of the ones involved in its erection, and the planning policies of the governing bodies. A city can tell long, complex stories of development and destruction, revealing and hiding its character and the character of all those who built it. Can architecture be another medium for storytelling of a different persuasion? A kind of storytelling which, as Arendt alludes to, can be a political gesture, linking the physical and immaterial. I intend to continue asking this question throughout the semester, prodding and pushing the architectural boundaries through various lenses.

The first fibres to be woven some 25,000 years ago were of plant origin—twigs, leaves, roots, and grasses. These include flax, jute, and hemp among many others. Flax has been cultivated for thousands of years, grown for both its seed and bast fibre, which runs from the root to the upper tip of the plant and is used to weave linen cloth. Processing the flax fibres into yarn consists of a series of processes which remove the cellular tissue that surrounds the fibres. Silk production (fig. 7) originated in China, about 8,500 years ago. The fibres are extracted from cultivated silkworms' cocoons by dissolving the pupate worms in boiling water. During the Warring State period in China, 475–221 BC, silk was also used as a

surface for writing, a physical integration of weaving and writing. Wool is produced from mammals' fleece, mostly from sheep and goats. Evidence for woven wool dates back to around 3,000 BC. The Spanish brought rough sheep to the Americas in the 16th century—Navajo herders curated their adaptations to the Colorado Plateau, creating the climate-adaptable, enduring Navajo-Churro sheep.

The Navajo were taught how to weave by the Rio Grande Pueblo Indigenous Americans, working with a vertical blanket loom. They used a plain-weave tapestry technique to create their patterns from the Navajo-Churro sheep's wool.²² Donna Haraway uses Navajo weaving as a model system for sympoiesis, "making-with"—humans and non-humans living and dying together on earth. She asserts that the cosmological performance of weaving is crucial for "...thinking/making for more livable politics and ecologies in the times of burning and extraction called the Anthropocene and Capitalocene."23 Herding of Churro sheep by the Navajo is fundamental to their way of life. The relationship between weaving wool blankets and sheep-care constitute patterns of Navajo pastoralism.²⁴ I suggest furthering this concept using weaving-with, an assemblage of methods and ways of thinking, acting, and crafting. I will utilise weaving and the loom not as instruments of production, not by using the woven fabric as inspiration for new architectural materials, but as a meshwork through which one can rework architecture. I will attempt to work with a few different strands simultaneously—which I hope to collect and form a cohesive proposal, entwining the strands around each other. Through an introspective design process I will endeavour to weave together disparate elements, which will be expressed through a speculative architecture.

My Grandfather, Tomáš Weisz, was born in Nové Zámky, Czechoslovakia in 1923. In 1938, proceeding the Munich Agreement in which the demarcation of Hungary included 19—Arendt, The Human Condition, 182–84.

20—Jackson and Arendt, *The Politics of Storytelling.*

21—Baines, Flax and Linen, 3–7.

22—Benson and Warburton, Looms and Weaving, 5.

23—Haraway, Staying with the Trouble, 90.

24—Haraway, 92.

The Japanese silk industry acted as a primary catalyst in the rapid modernisation and industrialisation of the country.



fig. 7 Kitagawa Utamaro, Women Weaving Silk Cloth

southern Slovakia, his hometown in effect became Hungarian. His parents were textile merchants, and so at the age of 15, he and his younger brother were sent to Budapest to study the manufacturing of fabric. In 1943 Tomáš was enlisted to the Hungarian Jewish Labour Corps, but after a few months he and a friend he made there decided to defect. They ran away at first to a relative's summer house, and later on to various refuges, including the Swedish Embassy and abandoned apartments in Budapest. After the war ended, he returned home to discover his parents and little sister did not make it out of Auschwitz. He worked at a Textile Factory in the Czech Republic until 1948, at which point he immigrated to Israel.²⁵ He would never speak of his experiences during the war, the tiny bits of information we have are attributed to my Grandmother's soft persistent questioning during their first few weeks together. Anytime the subject would come up he would leave the room, angrily. After he left Europe, his textile education, which was mostly focused on weaving, was completely abandoned. The only loose threads left from his weav ing background were his attentiveness to the fabrics he wore and the ones used in his home.

Since the Industrial Revolution²⁶, crafts have undergone gargantuan changes, mass-production transforming the landscape completely, mostly rendering crafts futile. In the textile industries, women who would learn to weave or spin from their mothers and grandmothers, and hone their craft through years of experience would now work at a massively scaled, mechanised spindles or looms (fig. 8). The industrial work would be more akin to maintenance than craft, the workers having no say on what they are in charge of making. On one hand, craft was disappearing from culture, but on the other, some crafts would find their way into an artistic discourse. However, even within the Bauhaus, where weaving was part of the fine arts rhetoric, it was looked down upon by the other departments, perhaps because of its feminine as-

sociations and its gendered history. Since then, the art world has begun recognising weaving as art, aided by artists such as Anni Albers, who was instrumental in both her weaving and her writings on weaving. Has weaving been ignored as an important catalyst of culture and as an art form because of its female character? I would say that is highly likely. I would even go so far in saying that the association of weaving with 'non-western' and 'primitive' cultures was a factor in its lowart status. Why did a brush stroke bear more significance than a woven yarn?

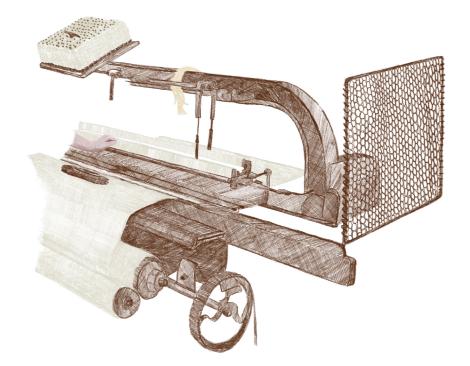
Weaving has been used as a metaphor for creating, not only cloth but also plots, stories, and worlds. The weaver is thus the creator, ravelling and unravelling entire worlds on her loom.²⁷ Of course, this form of creation eventually became a profitable endeavour and what was once domestic women's work soon became a marketable tool of production, creating a source of income from gendered labour.²⁸ Continuing to work from their looms at home, women wove textiles to be used both by their family and to generate earnings. During the industrial revolution their creative autonomy had already become smothered by the cogs of capitalism. As the making of fabric moved outside the domestic realm, the self-anointed 'western world' at first, and then most of the rest of civilization, ceased producing cloth at home. Weaving slowly became a pastime, a hobby practised by humans, most of them women, whether alone or in groups, for fun or as an artistic pursuit. A form of activism utilising crafts as a subversive tactic, and in particular forms of needlework and weaving, was coined craftivism by Betsy Greer in 2003. Most craftivists are women, their activism goes hand in hand with feminism, environmentalism, anti-capitalism and other social movements of the past twenty years. The non-violent ways of protest and awareness-raising promote positive means of activism, where craft is the message-spreading tool.29 I believe the care in a craftivist project has the potential of showcasing the impor25— Eldar (Weisz), Biography—End of the Second World War.

26— During the Industrial Revolution the textile industry was a driving force of mechanical and social change, textile factories acting as catalysts for engineering development and production management.

27— Kruger, Weaving the Word, 23.

28— Auslander, 'Deploying Material Culture to Write the History of Gender and Sexuality', 160.

29— Corbett and Housley, 'The Craftivist Collective Guide to Craftivism'.



A Mechanic Loom

tance that subject has in the eyes of its maker, who took the time to craft a subversive object in order to relay a message.³⁰

Donna Haraway tells the story of Christine and Margaret Wertheim, twin sisters, the former a crafter and poet and the latter a mathematician and artist, both of whom use crocheting as a form of protest. Working with around eight thousand people from around the world, and using various materials to crochet, including trash and discarded plastic bags, they created perhaps the world's largest collaborative art project. The exploratory Crochet Coral Reef (fig. 9) is continuously morphing as more and more crafters add their interpretations of the reef to the assemblage. "The crochet reef is a practice of caring without the neediness of touching by camera or hand and vet another voyage of discovery." The project is very much aware of the disturbances ecological activism can sometimes cause to the very ecosystem it is trying to protect. A "speculative fabulation" is formed by practising this subtle, delicate, craft which engages people with the urgency of the state of precarity in which the Great Barrier Reef exists.³¹ The collaborative-communal properties of this type of activism and its reappropriation of space accommodate novel approaches to contemporary activism.32 Perhaps weaving-with can adopt these properties to become a collaboration among people from different fields, in both the online and physical spheres.

"Architect-weaver. He plots grids, twining the threads of a chain, his writing holds out a net. A weave always weaves in several directions, several meanings, and beyond meaning."33

Jacques Derrida uses weaving as a metaphor in his 13th point of *POINT DE FOLIE* — *MAINTENANT L'ARCHITECTURE*— describing the grid formed by Tschumi's plan for *Parc de la Villette* as a weaver of texture, one who invents the histological structure of a text, or a fabric. The multiplicity of red points existing at the core of the fabric. To begin with, Der-

rida, too, makes the connection between weaving and writing. He expands weaving into architecture, mirroring the grid of threads in the city.34 There is a particular method to weaving. Laying down the warp asserts a commitment to the weave, and must be done before any weaving can commence. The material of the yarn which is woven has a similar effect, completely changing the look and feel of the finished fabric. The weaving itself can mutate and evolve throughout the weaving process—changing the type of weave, the material, the direction and so on. While we may look at the work of an architect in the same manner, comparing a drawn plan or section to a weave for example, the foundations of the architect's work, especially in the digital age of architecture, are not quite so solid as the weaver's. This lays down an interesting speculation: what if they were more similar? What can we take from weaving into the practice and education of an architect?

Tim Ingold has already decided on the concept of Architecture as weaving. He builds upon the assertion of the ground as a permeable zone, where earthy substances bind with atmospheric conditions, continuously forming life. "Is not everything that lives and grows a place where this binding—this knotting—is going on? If so, then the same, perhaps, could be said of buildings."35 In his ontology, knotting is the central principle of coherence, a holding together of forms within a formless flux. A "sympathetic union" and an interiority of flexibility.36 If mountains are the complete opposition to skyscrapers, emerging from the ground upwards, rather than being dropped down onto the ground-perhaps some form of architecture which is not burrowed into the ground per se can be more extrusion-based and less in contradiction to the very land on which it manifests. This hypothetical architecture might be able to be more in-tune with existing ecologies and non-human actors, expressing care and attention to the fragile, delicately balanced terra. Weaving opposing manifesting

environmental, and political concerns my thesis is entangled with are addressed throughout this programme. I will not be referring to the 17 UN Global Goals as I do not feel I require the UN's greenwashing stamp of approval to make a genuine effort to better the World.

30— The social,

31— Minahan and Cox, 'Stitch'nBitch'.

32— Haraway, Staying with the Trouble, 76–81.

33— Derrida,
'POINT DE FOLIE
— MAINTENANT
L'ARCHITECTURE.
Bernard Tschumi', 73.

34— Derrida, 70–73.

35—Ingold, 'Of Blocks and Knots'.

36— Ingold, *The Life of Lines*,
22–26.

Every time the Crochet Reef is exhibited, its formation is mutated and changed by the artists. Just as its real counterpart adapts to the changing fluid landscape in which it is situated.



fig. 9 Christine Wertheim and Margaret Wertheim, *The Crochet Coral Reef*

vectors together through architecture can be an interesting challenge to take on.

One can observe the city as a multilayered architectural weave—the parcels of land, the grids they adhere to, the streets and alleys, are all a base on which to add to and subtract from. Anni Albers likens both weaving and architecture to a kind of assemblage, a whole constructed from separate parts which retain their identity.³⁷ One can view the site or architectural context as part of the assemblage, a speculative metaphysical or physical space which comes into focus as the assemblage is formed. While experimenting with assembling using the various methodologies discussed, a more or less concrete site might arise, or materialise. Grounding an architectural project within a contextual matrix is necessary, however, it might take different forms, not necessarily a position within the constraints of the physical realm. The existing context encompasses academic research in the Royal Danish Academy, the role of architecture in society, and the interweaving of crafting within architectural design and production. These will serve as the base of the palimpsest, accumulating layers that meet as time progresses, some remaining visible and others fading away. I will tackle weaving-with the various threads of storytelling and writing, weaving as methodology, craft within architecture, and weaving as design in a multiplicity of scales—from non-human-human-architecture interactions to urban planning. Some scales will be used as stepping stones on the way to others, while some will become the basis for intervention and propositional work. I hope to build a meshwork of the methodologies I will develop and practise, and use these in establishing a framework for designing and planning.

Suppose the architect becomes a weaver and vice versa. How would both architecture and weaving change? *Would* they change? A hybrid architect-weaver may be able to utilise the

myriad of techniques used by both architects and weavers, merging them as they mutate into novel approaches. I foresee many different ways to arrive at a new modus operandi—weaving can be simplified or complicated, used as a framework or mechanism, and understood as a metaphor or taken more literally. Exploring these paths will be the driver of my investigatory proposal. Perhaps weaving will once again become an important facilitator and political tool.

37— Albers, 'The Pliable Plane; Textiles in Architecture', 36.

The 'Disparates' series showcases ways in which the representation of power is over-thrown, humiliated, ignored, or ridiculed.



fig. 10 Francisco de Goya y Lucientes, 'Feminine Folly' from the 'Disparates'

Albers, Anni. On Weaving. Middleton, Conn: Wesleyan, 1965.

———. 'The Pliable Plane; Textiles in Architecture'. *Perspecta* 4 (1957): 36–41.

Arendt, Hannah. *The Human Condition*. 2nd ed. Chicago: University of Chicago Press, 1998.

Auslander, Leora. 'Deploying Material Culture to Write the History of Gender and Sexuality: The Example of Clothing and Textiles'. Clio. *Women, Gender, History*, no. 40 (2014): 157–78.

Baines, Patricia. *Flax and Linen*. Shire Albums 133. Princes Risborough: Shire Publications Ltd, 1985.

Benson, Anna P., and Neil Warburton. *Looms and Weaving*. Shire Album 154. Princes Risborough: Shire Publications Ltd, 1986.

Corbett, Sarah, and Sarah Housley. 'The Craftivist Collective Guide to Craftivism'. *Utopian Studies* 22, no. 2 (2011): 344–51.

Derrida, Jacques. 'POINT DE FOLIE — MAINTENANT L'AR-CHITECTURE. Bernard Tschumi: La Case Vide — La Villette, 1985'. *AA Files*, no. 12 (1986): 65–75.

Eldar (Weisz), Tomáš Zvi. Biography—End of the Second World War, 9 February 1997.

Haraway, Donna Jeanne. *Staying with the Trouble: Making Kin in the Chthulucene.* Experimental Futures: Technological Lives, Scientific Arts, Anthropological Voices. Durham: Duke University Press, 2016.

Hooper, Luther. 'THE LOOM AND SPINDLE: PAST, PRESENT AND FUTURE. Lecture I'. *Journal of the Royal Society of Arts* 60, no. 3120 (1912): 947–59.

Ingold, Tim. 'Of Blocks and Knots: Architecture as Weaving'. *Architectural Review* (blog), 25 October 2013. https://www.architectural-review.com/essays/of-blocks-and-knots-architecture-as-weaving.

Jackson, Michael, and Hannah Arendt. *The Politics of Storytelling: Variations on a Theme by Hannah Arendt.* Second edition. Critical Anthropology, Vol. 3. Copenhagen: Museum Musculanum Press, University of Copenhagen, 2013.

Kaukonen, Toini-Inkeri. 'Kinnasompelun Levinneisyys Ja Työtavat Suomessa'. *Suomen Museo* 67 (1960): 44–71.

Kruger, Kathryn Sullivan. Weaving the Word: The Metaphorics of Weaving and Female Textual Production. Selinsgrove, [Pa.]: London: Susquehanna University Press; Associated University Presses, 2001.

Marius. 'Song of the Spear (Darradarljod) Valkyries Weave the Fates of War'. *Norse Mythology & Viking History* (blog), 14 January 2023. https://vikingr.org/other-beings/song-of-spear.

Minahan, Stella, and Julie Wolfram Cox. 'Stitch'nBitch: Cyberfeminism, a Third Place and the New Materiality'. *Journal of Material Culture* 12, no. 1 (1 March 2007): 5–21.

Ovidius Naso, Publius, and William Scovil Anderson. *Ovid's Metamorphoses*. Books 6-10. 12th ed. Norman: University of Oklahoma Press, 2016.

Pantelia, Maria C. 'Spinning and Weaving: Ideas of Domestic Order in Homer'. *The American Journal of Philology* 114, no. 4 (1993): 493–501.

Saady, Hassan el-. 'Reflections on the Goddess Tayet'. *The Journal of Egyptian Archaeology* 80 (1994): 213–17.

Schick, T. 'Perishable Remains from the Nahal Hemar Cave'. Mitekufat Haeven: Journal of the Israel Prehistoric Society / האבן י"ט (1986): 95*-97*.

Smith, T'ai Lin. Bauhaus *Weaving Theory: From Feminine Craft to Mode of Design*. Minneapolis; London: University of Minnesota Press. 2014.

Soffer, O., J.M. Adovasio, and David Hyland. 'Perishable Technologies and Invisible People: Nets, Baskets and "Venus" Wear ca. 26,000 BP', 233–45, 2001.

fig. 1— Davies, Norman de Garis. *Weavers, Tomb of Khnumhotep c. 1885 BC.* 1933. Paper, tempera paint, ink. Original from Egypt, Middle Egypt, Beni Hasan, Tomb of Khnumhotep (Tomb 3), MMA graphic expedition. The Metropolitan Museum of Art, New York.

fig. 2— *Nine Egyptian Linen Mummy Bandages for Harpakhem.* c. 664 AD. Linen, ink. Private collection.

fig. 3—Albers, Anni. *Design for Wallhanging*. 1925. Gouache on paper. MOMA, New York.

fig. 4—Albers, Anni. *Wallhanging*. 1925. Silk, cotton, and acetate. Die Neue Sammlung, Munich.

fig. 5—Nir, Naomi. *Prototype Hand Loom.* 2022. HDF. The Royal Danish Academy, Copenhagen.

fig. 6—Nir, Naomi. *First Weave*. 2022. Linen, wool, and cotton. The Royal Danish Academy, Copenhagen.

fig. 7—Utamaro, Kitagawa. *Women Weaving Silk Cloth.* c. 1800. Ink and colour on paper. Japan.

fig. 8—Nir, Naomi. *Mechanic Loom.* 2022. Digital. The Royal Danish Academy, Copenhagen.

fig. 9— Wertheim, Christine and Wertheim, Margaret. *The Crochet Coral Reef.* 2010. Mixed media. Science Gallery, Dublin.

fig. 10—Goya, Francisco de. *Feminine Folly'* from the *'Disparates'*. c. 1815-1819 (published 1864). Etching, aquatint, drypoint. The Metropolitan Museum of Art, New York.

