

# BODILY PAIN

## TEXTILE STRUCTURES OF BREATH AND REPAIR

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## Abstract

This paper investigates sculptural knit as a site of somatic memory and embodied intelligence, proposing tenderness as an infrastructural logic within fashion textile technology. Grounded in lived experiences of chronic pain, sensory difference, and care, the research adopts a practice-based, research-through-design methodology to examine how industrial knitting and weaving can register breath, pain, and protection through material form. Through the case study *Pain Bodies*, the paper analyzes how knit architectures—through cavities, inlay, and compression—hold, archive, and respond to bodily states that resist linguistic expression. Inlay is articulated as both technique and ethical gesture, embedding memory, grief, and attentiveness directly into textile structure. Drawing on somatics, care ethics, and textile interaction design, the research reframes smart and adaptive textiles not as systems of optimization or spectacle, but as supportive companions for embodied regulation and persistence. By foregrounding inclusive craft, emotional durability, and responsiveness felt rather than measured, the paper contributes an alternative paradigm for fashion technology. It proposes textile technology as tender infrastructure—capable of listening to the body, sustaining vulnerability, and expanding how responsiveness is understood within future fashion textile systems.

**Keywords:** *Sculptural knit; Somatic textiles; Tender infrastructures; Architectures of care; Pain bodies*

## INTRODUCTION: TEXTILES AS EMOTIONAL ARCHITECTURE

This research begins with the body, grounded when it falters—through grief, pain, and the quiet negotiations of breath and pressure. Drawn to soft architecture and tender structures, the work is grounded in warmth.

Knitting is positioned as a way to hold on — an instinctive wrapping, a gesture of protection, a second skin to contain and release. From this grew *Pain Bodies*<sup>1</sup>, a body of work in which sculptural knit forms act as architectures

of memory, sheltering and revealing the body's vulnerabilities. While these works arise from lived experience, they also ask a broader question: how might knit function as a responsive healing structure for the body?

This paper proposes textile as infrastructure—an intimate architecture capable of care, repair, and memory (Townsend, Solomon, & Briggs-Goode, 2022). Historical precedents, notably Bauhaus body culture, similarly frame textiles and movement as sites of somatic training, ritual, and care (Ackermann, 2019; Burchert, 2019). Kathleen James-Chakraborty (2016) and Elizabeth Otto & Patrick Rössler (2019) extend this lineage by situating the body within Bauhaus culture as a site of design, discipline, and

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<sup>1</sup> *Pain Bodies*, a contemplative textile series that transforms bodily pain into soft architecture, gesture and emotional membrane.

performance.

Often, fashion textiles are framed within discourses of optimization and enhancement, where technology extends the body's capacity by regulating function and improving performance (Smelik, 2018a, 2018b; Loke et al., 2021). Within this paradigm, textiles are positioned as instruments of efficiency, while the body is treated as a site of measurement and control. Alongside these approaches, this research situates knit as tender matter—a practice of care within fashion technology debates that are increasingly expanding beyond computation. Holly McQuillan and Elvin Karana's research on multimorphic textile-forms argue that responsiveness can be understood beyond computational layering—emerging instead from textile materiality and structure, a quality which can be poetically understood as material vitality, a liveliness (McQuillan, 2020; McQuillan & Karana, 2023). Tim Ingold (2012) describes materials as “substances-in-becoming,” alive with histories and tendencies, while Karen Barad (2003) frames matter as “a doing, a congealing of agency,” always active in its becoming. Through inlay, cavity structures, and compressive forms, this practice investigates quiet technologies of care—gestures that register breath and pain. Ingold's notion of “meshwork”—entangled lines of material flow and bodily movement—provides a framework for understanding these practices as forms of responsiveness grounded in tenderness rather than optimization. This positioning situates the work within ongoing debates between computation and materiality, and between optimization and care. These questions of responsiveness and care return the analysis to the body itself: the intangible pressing into the physical, asking to be held. Trauma lives in the body, unique to each, where it resists linguistic expression and imprints itself through sensation (van der Kolk, 2014). Textiles, with their ability to press, hold, and shelter, can hold what words cannot. Mengqi Jiang et al. (2021) extend this argument further, showing how movement-based interaction with smart textiles can actively regulate emotion, reframing textiles as affective co-regulators—a logic *Pain Bodies* extend through tenderness and embodied vulnerability. They offer a material language for the invisible: traces—faint, residues—the weight that clings and accumulates. *Pain Bodies*—sculptural knits—attempt to give these forms space, holding what words cannot. Knitwear stretches, compresses,

and yields, mapping the body's vulnerabilities. As residue, it archives pain in hollowed cavities and bulging forms—a sculpting of grief into matter, absence and excess entwined. As protection, it shelters, molds and embraces—an architecture of care. Anchoring in this duality of residue and protection, the garments both remember and hold.

Feminist craft traditions offer a further conceptual grounding for understanding textile as infrastructure of care. The methods employed in this research align with this lineage—textile as storied and labored, anatomical and somatic. Jessica Hemmings (2015) and Katherine Townsend and colleagues (2022) suggest fashion textile practices hold what cannot be spoken; *Pain Bodies* operate as extensions of living anatomies. Anusha Alamgir (2022) positions the body as a site where narratives are speculatively redefined, challenging the bodily form. Tenderness here is a dialogue with the body, the haptic—the emotional framework in designing for and with embodied vulnerability. This articulation of lived transformation resonates with the practice underpinning this research, in which knitwear is conceived as an infrastructure of care. Though *Pain Bodies* first arose from grief and somatic inquiry, the research was subsequently reshaped by what is now understood as chronic pain. Experiences of nerve pain and compromised breathing necessitated a slower, more attentive engagement with the body as both fragile and persistent. *Pain Bodies* materialize this condition dually—through sculptural knit structures—as residue, archiving trauma and memory; and as protection offering shelter to embrace, dancing with pressure to steady the body. This duality forms the central analytical thread of the paper, situating the practice within physiological, feminist, and performative frameworks while remaining grounded in lived experience.

## **METHODOLOGY: KNIT AS SOMATIC REGISTER**

This research adopts a practice-based, research-through-design methodology, structured through iterative cycles of somatic inquiry, material experimentation, and performative refinement. The approach draws on Sir Christopher Frayling's (1993) articulation of research through art and design, and is situated alongside contemporary applications of this framework within textile and material-led practice, including Claire Felicity Miller's (2025) experimental materials research and Silke Hofmann's (2025) practice-based

investigations into material systems and embodied design. Rooted in human factors, this methodology extends beyond optimization to include tenderness as a mode of responsiveness. Knitting is situated as a somatic register, something tender—a slow, embodied practice tracing breath, pain, and pressure. As McQuillan & Karana (2023) note, responsiveness can be lived through material itself. The practice is autoethnographic, grounded in bodily experience, extended through dialogue with dance and architecture—blurring boundaries between discipline and living collaborator. Within this research, the act of knitting is less about production than correspondence. Gilles Deleuze and Félix Guattari (2004) describe it as “matter in movement, in flux, in variation,” a flow to follow. Ingold (2012) extends this, framing making as “intuition in action,” an attunement with materials in their unfolding. To knit is to accompany matter, to listen as it stretches, gives, or resists—an ethic of tenderness. In this sense, methodology becomes continuous with the same negotiations of breath and pressure that shape *Pain Bodies*; it is methodology as practice. *Pain Bodies* inscribe somatic states—softness as technology where inlay lingers like scars, cavities holding breath, and compression steadies through pressure. The Pain Body process material—archival scans, body mappings, cavity formations, inlay tests, and bulging structures—makes visible these somatic negotiations (Fig. 03). A practice translating sensation into form—gestures not of ornament, but of register.

Industry paradigms explore responsiveness through data-driven precision. This research positions material responsiveness itself as a technological capacity, expanding fashion technology beyond computation toward embodied, material intelligence. Vidya Narayanan et al. (2018) automated 3D mesh workflows; Shahar Asor and Yoav Serman (2023) created parametric punchcard frameworks; Zishun Liu et al. (2021) advanced 4D knits with controlled elasticity; Katja Wolff et al. (2023) developed personalized garments adapting in real time. These projects broaden understandings of responsiveness through precision and adaptability. This contribution enters into a dialogue with such work, reorienting industrial knitting—also drawing from weaving discourse—toward tenderness—translating bodily fragility into architectures of care, locating responsiveness in stretch, compression, and yield in dialogue with the

body. Such projects illustrate how computation and craft need not be opposed. Bine Roth and Kaori Ueda (2023), for instance, extend Nishijin weaving through generative design, not as disembodied code but as a bodily practice. Their work shows how digital logics can remain embedded in tradition and material intimacy—a resonance with this research’s turn from optimization toward tenderness. Performance is central to the methodology, when knit is not only a material but a performer in dialogue with the body. Berit Greinke et al. (2021) extend this logic, showing how knit garments for orchestra conducting perform as co-agents with the body, transforming gesture into shared musical performance—garment as co-performer rather than passive tool. Dance, as Olivia Foster Vander Elst et al. (2023) describe, is purposeful and structured movement that entwines perception, action, and emotion. In working with dance, the sculptural knits of *Pain Bodies* register this embodied temporality: cavities stretch with breath, compressions shift posture, and weight choreographs grief across gesture. Here, textile is not passive but kinesthetic—joining the body’s rhythms of expansion and constraint. Lara Conte and Francesca Gallo (2023) frame performance design as a negotiation between body, material, and environment. In this sense, *Pain Bodies* is an architecture approached not only as built environment but as knit’s own structuring principle—inlays, cavities, and compressions acting as skeletal frameworks that both shape and respond to motion. The textile performs as infrastructure—a stage that moves with the body even as it constrains or supports it. *Pain Bodies* thus move between stage and scaffold, a duality between choreography and structure, cultivating tenderness as a relational practice of textile and body. Underlying the methodology is a commitment to accompaniment. Each stitch is small, repetitive, and durational, embedding attention as its own form of care. To knit in this way is to resist speed and optimization, embracing slowness as both practice and ethic; tenderness as method, a way of attending through soft attention to material, body, and breath. Knitting becomes ritual. The repetition of loops is akin to meditation or prayer, each pass of yarn marking time through touch. It’s not about mastery but about staying-with—allowing material and body to unfold together. The practice holds grief and pain without seeking resolution. Here, methodology

itself becomes an ethic: craft as care, method as tenderness, practice as accompaniment—offering an alternative model for responsive fashion textile technology grounded in embodied and material intelligence.

The wearable and adaptive textile systems discussed in the literature above are referenced as conceptual and contextual precedents, informing *Pain Bodies* possible future orientation toward responsiveness and care, drawing on novel technologies.

## CASE STUDY: PAIN BODIES, THE HAPTIC AND THE HEALING

When the body falters—through grief, breath pressed thin—*Pain Body* ‘One’ (Fig. 01) stages responsiveness through softness. Delicate cavities of silk and cotton expand; the knit stretches and grips, tracing weight and respiration in pliable form along the chest and abdomen. Flavia Mancini et al. (2014) describe how the body is mapped differentially by sensation, neuropathways of haptic acuity—some regions tuned to the faintest brush of touch, others sharpened to pressure and pain. They frame softness as a design quality that exceeds comfort, shaping relation through pliability, pressure, and yield. Within *Pain Bodies*, softness operates as a technological capacity: not passive comfort, but an active system that senses, responds, and stabilizes. And so, knit’s pliability becomes a partner in that cartography: registering respiration through cavities and steadying the body with gentle compressions. This haptic sensitivity stages what others have called textile vitality (McQuillan & Karana, 2023): *Pain Body* structures that yield and press, choreographing absence and pressure as gestures of care. Responsiveness is felt—body and textile listening in tenderness.

If pliability registers touch and pressure, then cavities register breath. Here, the cavities in *Pain Bodies* are a deliberate design strategy, translating physiological respiration into a spatial and tactile structure. Regulating the body, these voids are architectures of respiration, contracting with each breath. Bruno Bordoni et al. (2018) demonstrate how breath extends into the central nervous system, shaping posture, emotion, and pain perception. Valentin Magnon et al. (2021) and Marc Russo et al. (2017) show how slow deep breathing modulates the vagal tone, reducing anxiety and stabilizing cardiovascular rhythms. Apostolina Foskolou et al. (2022) explain how abdominal breathing grounds postural stability



Fig. 01

and engages muscular activation, while Marcin Sikora et al. (2024) reveal how patterned breathing reshapes pulmonary function and endurance. *Pain Body* cavities embody this notion: each hollow a dwelling for breath, an expansion of architecture and persistence—breath becomes physiological and poetic, an intimate infrastructure steadying a faltering body.

If cavities hold breath, compressions embody pressure. Compression is employed here as an infrastructural element, modulating bodily perception through sustained, distributed force rather than rigid constraint. The bodily folds of *Pain Body* ‘draped’ (Fig. 02, Fig. 04) weigh from below, across the shoulders and down the torso as grief made material. *Pain Body* ‘draped’ is a developed configuration of *Pain Body* ‘One’, intensifying compression and weight to foreground gravity and suspension as modes of tender support. And yet, ever so steady, a counterforce constrains as it supports. Marianna Halász et al. (2021) show compression garments shape physiological response—modulating circulation and stabilizing recovery. Jonathon Weakley et al. (2022) frame compression as infrastructure influencing



Fig. 02

hemodynamics, recovery, and proprioception. Trevor Barss et al. (2018) show compression alters the transmission of sensory feedback in the upper limb, re-tuning the body's haptic dialogue. Eric Harbour et al. (2025) show sports bra tightness alters respiratory muscle fatigue, breathing patterns, and subjective perception—reminding us that compression is never neutral but always embodied and contingent. Tomas Venckūnas et al. (2014) further highlight its cardiovascular dimensions: lower-body compression garments enhance venous return and circulation during running, integrating pressure as a mode of efficiency. By contrast, Theodora Kyrgia & Marina Toeters (2014) treat wearables as social-expressive companions in dance; these compressive knits reorient that performativity toward tenderness. Stitched bulges, tightened gathers, and weighted shoulders make compression visible, surfacing pressure as both care and constraint. These are not mechanical braces but tender architectures from within. To wear *Pain Bodies* is to experience compression not only as regulation but as kinship: an embrace that steadies as it remembers the body's fragility.

Pain is not only neurological but relational. Maral Tajerian & Jaqueline Garcia (2021) argue that environments and objects shape how pain is lived, expanding therapy beyond medicine into companionship. Garments are not inert layers but partners in care. *Pain Bodies* embody this: folds press, cavities respond, and compressions steady, creating structures that sustain rather than restrain. They do not demand but hold, offering continuity when the body falters. To wear these garments is to experience care, the tactility of weight. They do not erase pain but accompany it, shifting endurance from solitary struggle to shared persistence. This companionship is haptic, material, lived. *Pain Bodies* thus act as therapeutic companions, architectures of tenderness that intervene not with cure but with presence. The performative is approached not as presentation layered onto dress but as a register where body and garment co-become. Corneliu Bodiciu (2022) introduces symbiosis as a paradigm for understanding dress: the body is never isolated from what it wears, and garments are not inert shells but active companions. The dressed body is an ecosystem of material and immaterial agencies, where fabric, posture, memory, and sensation form a living whole. *Pain Bodies* echo this symbiotic entanglement. Each gesture subtly redirected, each inhalation finds a cavity that responds, each compression steadies movement. To perform in these garments is to enter a dialogue: not a theatrical projection, but a mutual becoming where grief, tenderness, and resilience are co-written by body and textile. Tenderness is not fragile—it is tensile, reconciling residue and protection. Resilience emerges where the folds and hollows accumulate the weight of memory; they are traces of what the body has endured. It is the grief that lingers, the embrace that steadies it, the inlays running deep. This duality aligns with vestments, amulets, and ritual garments—clothes that carry residues of belief while protecting the wearer. They sanctify vulnerability, reframing care in fabric and form. *Pain Bodies* join this lineage, reframing fashion as infrastructure of tenderness: remembering and protecting at once. Through *Pain Body* 'One', tenderness is demonstrated as a viable infrastructural strategy in fashion design—materializing care through breath, pressure, and proximity rather than through optimization or control. Through these material strategies, *Pain Bodies* demonstrate how tenderness operates as



Fig. 03

infrastructure: not as sentiment or aesthetic quality, but as a distributed system of breath, pressure, and support that stabilizes the body while holding traces of what it has endured.

## THEORETICAL FRAMEWORK: BREATH, PRESSURE, AND MEMORY

*Pain Bodies* are also situated within broader dialogs of breath, pressure, and memory. Bessel Van der Kolk (2014) argues that trauma imprints itself into the body, shaping sensation and memory beyond language. Textiles archive this somatic memory, offering material forms for what resists. James Krasner (2020) shows how Lia Cook’s textiles hold memory and emotion in fiber as sites of embodied craft. Jessica Bugg (2014) frames clothing as performance that stores affective residues of lived experience; and Laura Salisbury (2021) extends this by studying knitted wearable technologies as therapeutic systems, evaluating how softness mediates recovery with stroke survivors. *Pain Bodies* inhabit this lineage: cavities and bulges archive grief, folds retain weight, and compressions remember pressure. They are

but mnemonic architectures, holding traces of pain, offering shelter. Within fashion technology debates, this framing extends textiles beyond surface or spectacle: they become archives that both remember and respond, proposing material memory as a form of digital craft.

Breath, too, is a site of memory and regulation. Bruno Bordoni et al. (2018) demonstrate respiration as it extends into the central nervous system—shaping posture, pain, and emotion. Roderik Gerritsen & Guido Band (2018) describe the “respiratory vagal stimulation model,” showing how controlled breathing modulates vagal tone to support resilience. Neil Cherniack (1990) intricately traces the coordination of respiratory muscles with neural control, situating breath as both physiological and neurological. The knitted cavities of *Pain Bodies* materialize this regulation. Structures expand with inhalation, contract with exhalation, embodying respiration as both infrastructure and intimacy. They do not adorn but register—a somatic architecture where physiology and poetics meet. Joan Tronto (1993) articulates an ethic of care grounded in attentiveness, responsibility, and responsiveness. Sonja Jerak-

Zuiderent (2018) drawing on Maria Puig de la Bellacasa (2017) expands this toward speculative ethics in more-than-human worlds, where care is not sentimental but infrastructural. Within this framing, tenderness becomes ethical and material: each stitch a residue of care, each compression a trace of accompaniment. *Pain Bodies* embody this ethic. They reconcile protection with residue, holding vulnerability without erasing. Knit becomes a practice of tenderness: sustaining presence, sanctifying fragility, and embedding care in form.

Breath is not only physiological but ritual and spiritual. Ute Ackermann (2019) shows how early Bauhaus body culture linked breath and nudity to ideals of freedom, framing respiration as transformation. Otto & Rössler (2019) and Juliet Koss (2006) extend this lineage, documenting how Bauhaus body culture engaged sexuality, movement, and design as inseparable—an important context for situating my practice in care and somatics—linking body, movement, and breath. This practice holds breath as a site of personal ritual. Kristina Höök (2024) aligns with this in somaesthetic interaction design, grounding

bodily technologies in contemplative, felt practices. Aglaia Zafeiroudi (2021) extends breath into choreography, showing how yoga and dance interlace respiration with spirituality. *Pain Bodies* join this lineage: cavities expand with inhalation, compressions steady exhalation, garments acting as ritual architectures. These perspectives frame breath as an infrastructural, ritual, and relational phenomenon. *Pain Bodies* becomes vestment—an infrastructure of tenderness where breath is sanctified, grief is carried, and persistence is honored.

## DISCUSSION: RESPONSIVENESS, TENDERNES, AND ETHICS

Fashion textiles have often been defined by optimization, positioning garments as tools for efficiency, measurement, and control. Yet lived experience of pain and fragility demands another register—one where responsiveness is not calculated but cared for, where tenderness itself becomes an infrastructure. In this discussion, this paper reframes responsiveness, craft, and durability through the lens of care ethics, situating *Pain Bodies* as counterpoints to paradigms of optimization.

Smart garments frequently pursue responsiveness through optimization. Catherine Elliot et al. (2019) validate the Hexoskin biometric vest by measuring its accuracy during maximal aerobic testing, framing textile as an instrument of performance and control. Alice Haynes & Jürgen Steimle (2024) extend this paradigm with Flextiles, programmable shape-changing textiles designed with actuators—garments that move because computation instructs them to. In each case, responsiveness is measured, calibrated, and validated through efficiency. This research enters into dialogue with these approaches, proposing tenderness as a complementary mode rather than an oppositional one. *Pain Bodies* depart from this paradigm. Responsiveness here is tender, grounded in the lived body. By shifting emphasis from performance toward care, this research reframes responsiveness as accompaniment—garments that sustain the body through attentive material presence. Responsiveness becomes less about ‘what the garment does’ than about ‘how it listens.’ This listening is haptic intelligence—responsiveness felt through touch, not measured in data. If optimization frames responsiveness as data-driven control, this work situates it in sensation itself. Responsiveness is not computed but felt: the



Fig. 04

stretch of knit, the pressure of compression, the hollow that registers breath. This is a form of haptic intelligence—body and textile co-sensing, co-responding—what McQuillan & Karana describe as textile vitality. *Pain Bodies* are activated through cavities, folds, and compressions—structures that sense through touch. This resonates with Ruojia Sun et al. (2020), who describe woven “second skin” interfaces that collapse body and textile into a single haptic infrastructure. Haptic intelligence is relational, not instrumental. It is a dialogue of steadiness and care, where textile and body listen together in tenderness. Yet such computational approaches need not stand apart from tenderness. Liu et al. (2021) show how elasticity-controlled 4D knits merge precision with pliability, suggesting optimization can be reoriented through care. Building on this, Luo et al. (2021) propose conformal tactile textiles that learn from human–environment interactions, pushing responsiveness into adaptive, intelligent terrains. Even as these examples are framed within optimization, they can be read as invitations to rethink responsiveness as accompaniment: textiles that learn with us, shaping tenderness through shared adaptation.

Tenderness is tensile, not fragile.

Tronto (1993) defines care as attentiveness and responsibility, while Puig de la Bellacasa (2017) reframes it as speculative and infrastructural. These ideas are extended materially through garments of *Pain Bodies*: folds archive grief, compressions steady breath, cavities sanctify fragility. In doing so, they echo ritual garments—vestments and amulets—that hold belief, memory, and protection together. If optimization offers precision and control, *Pain Bodies* tenderize, introducing tenderness as a parallel choreography of responsiveness. Responsiveness here becomes less about calibration than accompaniment, less about efficiency than intimacy. Tenderness itself emerges as an infrastructure—haptic, ethical, spiritual—that reframes what it means for fashion to care. Taken together, these threads articulate an alternative paradigm for fashion textile technology: responsiveness as accompaniment, craft as care, and durability as attachment.

## CONCLUSION: TOWARD RESPONSIVE CRAFT

In concluding, this paper returns to the central provocation: what if textiles, rather than optimizing performance, could sustain tenderness as infrastructure? The following reflections draw together the strands of responsiveness, memory, and care, situating this practice within both historical and visionary lineages. Knitwear is often framed as surface—decoration, fashion, or spectacle—but here it becomes infrastructure: an intimate architecture that steadies and shelters the body. Townsend et al. (2022) describe textiles as anatomical, working not only across but with the body, embedding themselves into lived experience. Where buildings enclose, knit enfolds; where scaffolds brace, knit yields and compresses. Its loops create elastic architectures that move with the body, shaping touch, breath, and pressure. *Pain Bodies* extend this infrastructural quality. Cavities are not ornament but breathing chambers; folds are not drape but weights that anchor posture; compressions are not restraints but steadying forces. These garments do not sit outside the body but act as companions—an intimate support. Knit here is less of a garment than it is an architecture—it is composed of an elastic infrastructure that listens, steadies, and remembers. This reframing of knit resonates with broader conversations in fashion and design, yet redirects these logics toward tenderness rather than performance.

Tenderness emerges through a duality: residue and protection. Folds and hollows accumulate the weight of memory, carrying grief and traces of what the body has endured—compressing, enclosing, and steadying. Tenderness is tensile rather than fragile: it reconciles memory with shelter, grief with embrace. In *Pain Bodies*, this duality becomes tactile. Hollowed cavities archive breath, while weighted folds embrace fragility. The garments sanctify vulnerability rather than erase it, reframing fashion textile as a structure where residue and protection coexist. This duality of residue and protection echoes long-standing histories of garments as spiritual infrastructures. Throughout history, garments have operated as spiritual infrastructures of care: vestments, amulets, and ritual attire carry residues of belief while protecting the wearer. Their sanctity lies in their dual role as both material protection and symbolic memory—linking Annette Messager (1992) speaking of the evaporated body, Julia

Bryan-Wilson writings of Ana Mendieta (2013), and Johnson and Bayley speaking of Carolee Schneemann (2022). This practice joins this lineage. Each stitch in *Pain Bodies* is labored attention, a haptic act of accompaniment. Like amulets, the garments carry grief and memory; like vestments, they enfold the body in protection. protection. This spiritual and ritual dimension is extended in the installation of *Pain Bodies*, where the suspended knitted forms hover above madder root and powder, staging textile as residue, offering, and protective presence (Fig. 05). Knit here is sacred labor, embedding tenderness in form.

If ritual garments anchor tenderness in tradition, visionary designers push it into futurity. *Pain Bodies* stand in dialogue with both—and within a lineage of visionary design that reconceives garments as infrastructures of life. Issey Miyake et al. (1999) sculpted pleats and folds as living forms, architectures in dialogue with the body. Marta Muñoz and Ángel Cordero (2024) deepen this by showing how Miyake’s folds resonate with architectural strategies, shaping garments as spatial environments. Nicholas de Monchaux’s *Spacesuit* (2011) reminds that even technologies of survival are crafted with care: the Apollo suits embody how intimate labor and somatic understanding underpin structures of protection. Neri Oxman’s contribution to CNSILK (Tsai et al. 2013) and her project *The Wanderers* as discussed by Yasmine Chacour (2020) extend this futurity, proposing garments as material ecologies, symbiotic organisms at once biological, computational, and architectural. Within this visionary lineage, this practice contributes tenderness. Alongside Miyake, Monchaux, and Oxman—who propose infrastructures of efficiency or futurity, *Pain Bodies* offer infrastructures of care. They reframe knit not as surface but as memory-bearing shelter—garments that archive grief while steadying the body.

At the end of this inquiry, *Pain Bodies* are understood as carrying forward propositions for futures of care in textiles for the body, in all of its diverse forms. Sculptural knits as proponents of tenderness in a multidimensional sense, bridging the poetic and the scientific, the crafted and the physiological. It is the linking of the artist’s labor with meaning and memory, *Pain Bodies* is the connecting of performance and somatics with rehabilitation, breath, and resilience. In them, textile art, fashion, craft, design, and



Fig. 05

science meet—not as separate categories but as collaborators. A terrain in which practice and research reside: tenderness as infrastructure—remembering, protecting, and accompanying the body through responsive craft.

## CAPTIONS

- [Fig. 01] *Pain Body 'One'*; Emily Sarah Trenton  
 [Fig. 02] *Pain Body 'draped'*; Emily Sarah Trenton  
 [Fig. 03] *Pain Body process*—archival scans, iterations, inlay tests; Emily Sarah Trenton, *Pain Bodies* is a compilation of my practice and research investigating the dialogue of knitted textile structures through body, movement, and pain. It is a contemplative textile series that transforms bodily pain into soft architecture, gesture and emotional membrane.  
 [Fig. 04] *Pain Body 'draped'*—archival scan; Emily Sarah Trenton  
 [Fig. 05] *Pain Bodies* (Left-right—*Pain Body 'Two'*, *Pain Body 'draped'*, *Pain Body 'One'*); Emily Sarah Trenton; *Pain Bodies* installation, suspended over madder root and powder.

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