

FABRIC FIRST, LANGUAGE LAST?

REFRAMING FASHION'S EPISTEMIC INFRASTRUCTURES THROUGH MATERIAL INTELLIGENCE

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Abstract

This paper examines how certain contemporary design practices constitute a form of material intelligence, situated, process-based knowledge-making that emerges through sustained engagement with materials, and that operates at the productive periphery of fashion's dominant discursive economy. Through close readings of three designer practices, Elena Velez, Craig Green, and Amber Jae Slooten, the paper argues that fabric, whether physical or computational, functions not merely as a medium of expression but as a site of epistemic labour: a way of producing knowledge that precedes and exceeds its linguistic translation. Drawing on feminist materialism (Barad, 2007; Braidotti, 2018), affect theory (Ahmed, 2004), anthropologies of making (Ingold, 2013), resonance theory (Rosa, 2020), and posthuman critique (Haraway, 2016; Bratton, 2016), the paper develops three provisional analytical categories, collapse, ritual, and speculation, to distinguish the distinct epistemic orientations enacted by each practice. Velez transforms industrial debris into a feminist ethics of material survival; Green constructs knowledge through ritual constraint and the patient correspondence of hand and cloth; and Slooten tests the framework's limits by asking what material intelligence looks like when the material is computational. Together, these practices challenge fashion studies to attend not only to what fashion signifies, but to what it makes possible through making, and to recognise design practice as a form of situated inquiry that fashion's accelerationist discursive economy consistently renders peripheral. The paper contributes a sharpened set of conceptual tools for this reorientation, building on and extending existing materialist scholarship in fashion studies.

Keywords: *Material intelligence; Posthuman fashion; New materialism; Epistemology; Material practice.*

FABRIC AS COUNTER-LANGUAGE: REFRAMING FASHION'S EPISTEMIC INFRASTRUCTURES

Fashion's dominant public discourse operates through a remarkably efficient semiotic economy. Each season arrives with its lexicon, disruption, sustainability, authenticity, repeated until vocabulary itself becomes performance. Press releases precede patterns; digital renders eclipse seams; meaning circulates primarily through language and image, and the capacity to produce the right words at the right moment has become, for many practitioners and institutions, difficult to distinguish from the capacity to design. Roland Barthes, in his structural analysis of French fashion media, recognised this logic

early. His Fashion System (1967/1983) diagnosed the apparatus by which garments are translated into signs, signs into statements, and statements into cultural value, not a description of design practice itself, but of the discursive infrastructure that surrounds fashion, shapes its reception, and increasingly determines its legitimacy.

Building on Barthes, the editors of this issue identify a further problem: when that infrastructure achieves full structural coherence, it loses what Lotman (1990, p. 129) called its "inner reserves of indeterminacy," the capacity for flexibility and dynamic development. Wild and Berger (2025) draw directly on this argument in framing their call for new critical languages in fashion studies. The system, in this sense, becomes self-sealing.

Fashion studies has, of course, engaged seriously with the material dimensions of fashion — from Daniel Miller's (2010) accounts of cloth and embodied practice to Joanne Entwistle's (2000) work on the dressed body, to Sophie Woodward's (2007) ethnographic attention to wardrobes and the social lives of garments. The field has not ignored the material. But a specific problem persists: within fashion's contemporary discursive economy, particularly in media, marketing, and industry rhetoric, the intelligence embedded in design process remains largely invisible.

It is absorbed into the language of branding, aestheticised into image, or flattened by the accelerationist logic of seasonal novelty.

The knowledge produced in the studio, through the resistance of cloth, the behaviour of seams, the decisions made in sustained negotiation with materials, does not fit the communicative formats through which fashion currently circulates and legitimates itself.

The paper's second operative term, counter-language, used here not in the linguistic sense of an alternative vocabulary, but in the critical sense of a practice that operates against the grain of a dominant sign system, names the relation between material intelligence and fashion's dominant discursive economy. It is not a metaphor for fabric-as-speech, but a critical category: a way of designating design practices that engage material

process as a mode of inquiry operating from what Lotman (1990) calls the productive periphery of the semiosphere, those marginal zones where new sign systems emerge through contradiction, interruption, and noise rather than through the smooth reproduction of existing codes. Counter-language, in this sense, does not reject fashion's semiotic system from outside; it works at its edges, where coherence breaks down and alternative forms of knowing become possible.

Three practices are examined in detail.

Elena Velez works through the collapse of American industrial infrastructure, producing garments that generate knowledge from debris, failure, and feminist endurance (Dodd, 2024).

Craig Green constructs an epistemology of ritual and resonance through repetitive, constrained making that treats fabric as dialogic partner rather than passive medium (Chilvers, 2023).

Amber Jae Slooten, through her work with The Fabricant, tests the limits of the framework itself: whether material intelligence can survive digital translation, and whether computational simulation sustains the same form of process-based knowing or produces something categorically different (Fairs, 2021). Together, these practices do not constitute a movement or a shared style.

They offer three distinct epistemic orientations, collapse, ritual, and speculation, which this paper treats as provisional analytical categories



Fig. 01

derived from close engagement with the practices themselves rather than as a universal typology (Fig. 01). Drawing from feminist materialism (Barad, 2007; Braidotti, 2018), affect theory (Ahmed, 2004), anthropologies of making (Ingold, 2013), resonance theory (Rosa, 2020), and posthuman critique (Haraway, 2016; Bratton, 2016), the paper contributes to fashion studies' ongoing engagement with materiality by sharpening the conceptual tools available for recognising design practice as a form of situated inquiry. Rather than proposing a new epistemological system, it argues for a reorientation of critical attention: from what fashion signifies to what it makes possible, and from the discursive surfaces of fashion to the material processes through which it produces knowledge that those surfaces cannot fully contain.

METHODOLOGY

This paper develops its argument through close readings of three contemporary design practices, selected because each engages material process as a primary mode of inquiry rather than as a means to a representational end. The analysis draws from feminist materialism (Barad, 2007; Braidotti, 2018), systemic design theory (Escobar, 2018), and speculative cultural analysis (Haraway, 2016) as its principal theoretical frameworks. The selection of cases is purposive rather than comprehensive: Velez, Green, and Slooten are not proposed as representative of a trend or generation, but as practices that place particular pressure on the paper's central questions, about what material intelligence is, how it operates, and what it produces, in meaningfully distinct ways. Velez tests the framework under conditions of physical and industrial collapse; Green under conditions of ritual constraint and repetition; Slooten under conditions of full digital mediation, where the physical materiality that underpins the other two cases is absent. The third case is included precisely because it is the most difficult for the argument, not the most convenient. It is worth noting that none of these three practices operates within mainstream or mass-market fashion. All three occupy restricted positions within fashion's field, working at the intersection of practice, critique, and experiment. This is not a limitation but a condition of the argument: it is precisely at fashion's productive periphery, rather than at its commercial centre, that the forms of material intelligence this paper examines become most visible.

Close reading, as used here, draws on the interpretive tradition in cultural and design studies that treats practice as a form of text, not in the sense that making can be reduced to language, but in the sense that it can be read for its logic, its internal tensions, and its implicit claims about how knowledge is produced. In practice this means attending to the material choices designers make and the constraints they accept or refuse; the process documentation, interviews, and show notes through which designers articulate their own methods; and the critical literature through which those methods can be situated theoretically. Designer statements, interviews, and press materials are treated as primary evidence about process and practice, read alongside critical literature to situate and theorise the epistemic orientations they describe, rather than accepted as self-sufficient accounts.

Theoretical concepts are operationalised as analytical lenses rather than interpretive grids. Barad's intra-action, Ingold's correspondence, Rosa's resonance, and Ahmed's affective economies are each applied at the points where they illuminate something specific about the practice under analysis, and are not applied uniformly across all three cases. This selective deployment is deliberate: the argument is that different forms of material intelligence require different theoretical instruments, and that forcing all three practices through the same conceptual framework would flatten precisely the distinctions the analysis seeks to draw.

The author writes as a designer-researcher, from within the pedagogical and material culture of fashion education. This position shapes the inquiry in ways that are acknowledged rather than bracketed: familiarity with studio practice informs the readings of process, and engagement with fabric as a speculative and political medium informs the theoretical commitments. The paper does not claim neutrality. It claims rigour, in the precision of its conceptual definitions, the specificity of its textual evidence, and the honesty of its claims about what the analysis can and cannot establish.

ELENA VELEZ: COLLAPSE AS EPISTEMIC METHOD

Elena Velez's work emerges from the wreckage of the American industrial heartland and from a maternal lineage of labour at sea. Born in Milwaukee to a single mother who captained ships

on the Great Lakes, Velez translates that biography of grit and precarity into couture that feels forged rather than sewn. Her garments, corsets cut from waxed canvas, skirts suspended from rebar, bodices assembled from salvaged parachutes, register a politics of making that refuses polish. In an industry obsessed with surface perfection, Velez's practice begins with fracture. She turns collapse itself into method, demonstrating that material breakdown can be a form of knowledge. This section reads that method through feminist materialism and affect theory, arguing that Velez's practice constitutes a form of material intelligence in which the epistemic content is inseparable from the physical residue of making.

Rosi Braidotti's posthuman feminist philosophy provides a framework for reading this practice as an affirmative ethics of material survival. For Braidotti, the subject is "relational, embodied, and embedded, affective and accountable" (Braidotti, 2018). Velez's studio is precisely such an embedded ecology: industrial detritus, domestic craft, and digital mediation coexist without hierarchy (Fig. 02). Her collections construct what Braidotti calls cartographies, situated mappings of power relations that trace how bodies, matter, and social

forces are entangled, in which matter itself thinks and remembers (Braidotti, 2018, pp. 2–4). Steel rods and acetate sheeting become active agents in these cartographies, bearing the traces of gendered labour and regional decline. They are not props in a story about the Midwest; they are the story, continuing the material life of a region that late-capitalist fashion prefers to forget.

If Braidotti gives us a metaphysics of matter, Sara Ahmed offers an affective politics through which to feel it. Ahmed argues that emotions are "impressions left on the surfaces of bodies" (2004, p. 1) and that collective feelings organise social worlds. Velez's work operates through precisely such impressions: rust marks, torn satin, scorched seams. These surfaces do not decorate but record; they capture exhaustion, defiance, and maternal care as tactile residues. Her shows are not celebrations of empowerment but choreographies of vulnerability, "the tender and terrible paradoxes" of motherhood and survival, as she herself describes them (Bobb, 2023). Ahmed's notion of feminist unhappiness, the refusal to conform to a narrative of cheerful productivity (pp. 68–69), resonates here. Velez stages the unhappy labour of fashion: garments that sag, soil, and cry out against the



Fig. 02

fantasy of effortless creation.

Karen Barad's theory of intra-action helps illuminate how this affective materiality becomes epistemic. For Barad, "phenomena are produced through specific material-discursive practices" (2007, p. 170); meaning arises from entanglement rather than representation. In Velez's atelier, material and narrative are inseparable. A corset built from industrial canvas does not signify resilience; it performs it, pulling story and substance into the same gesture. Every weld and stain is a proposition about who gets to make, and under what conditions. To work with damaged cloths and metals is to think through them, to recognise, as Tim Ingold suggests, that making is "a correspondence with materials" (2013, p. 31) rather than their domination.

This correspondence is not only aesthetic but social. Angela McRobbie's critique of the creative industries exposes how the rhetoric of individuality conceals structural precarity, especially for women (2015, pp. 17–18). Velez refuses this neoliberal fantasy of the solitary designer-entrepreneur. Her practice is collective and infrastructural: she collaborates with local metalworkers, seamstresses, and industrial suppliers, re-activating dormant skills within a post-manufacturing economy. The resulting garments are propositions for what McRobbie might call an alternative cultural economy, one grounded in craft, solidarity, and embodied labour rather than spectacle. Each piece literalises Fletcher's "craft of use" (2016, p. 23): garments are not static artefacts but evolving tools, bearing the wear and repair of lived experience. Braidotti's affirmative ethics insists that transformation begins in disintegration, the breaking of anthropocentric and patriarchal forms (Braidotti, 2018). Velez's garments enact this break materially: seams unpick themselves, hems fray into threads, silhouettes refuse vertical aspiration. Out of this disorder she cultivates what this paper calls feminist material intelligence, a capacity to produce knowledge from the debris of systems that have failed to sustain life. Ahmed's "affective economies" (2004, p. 8) clarify how such intelligence circulates: emotions, like fabrics, move between bodies, accumulating meaning through contact. When audiences respond viscerally to the grit and fragility of Velez's collections, they participate in this economy of feeling, recognising, in her materials, the textures of their own experience.

CRAIG GREEN: RITUAL, RESONANCE, AND THE EPISTEMOLOGY OF REPETITION

Craig Green's practice unfolds as a sustained inquiry into the epistemic possibilities of constraint. His studio, half sewing room, half workshop, produces garments that hover between uniform and relic: quilted armour, kite-like tunics, padded structures that cling to the body as though protecting and restraining it at once.

Green's formal language arises from labour, cutting, folding, binding, and from a deliberate refusal of excess. "Limitation," he insists, "is the key to creativity... there are so many possibilities even in the simplest things" (Mower, 2023). This section argues that Green's iterative, constrained making constitutes a specific epistemic orientation, one in which knowledge emerges not from innovation or rupture but from the sustained, dialogic relationship between a practitioner and their materials. Tim Ingold's anthropology of craft helps explain why Green's garments feel contemplative rather than spectacular. Ingold describes making as "a correspondence with materials, a process of answering back to what they do and demand" (2013, p. 31). In Green's collections, cotton, canvas, and jersey speak with their own tonalities: they fold, resist, and crease into meaning.

Sewing becomes a dialogue rather than a design imposition. A padded coat or tented smock is never an object of control but a record of encounter, a garment that knows something the designer learns by touch. Ingold's notion of "thinking through making" (p. 21) finds literal expression in Green's studio, where sketches often begin as draped experiments, the idea emerging from fabric's behaviour rather than from image or moodboard. This slow, dialogic relation to matter situates Green against the acceleration of contemporary fashion. In *The Uncontrollability of the World*, Hartmut Rosa argues that modern societies seek to make the world available, attainable, and usable, thereby extinguishing the very resonance that gives life meaning (2020, pp. 10–12).

Green's work restores that resonance: his garments do not master materials but let them vibrate. He often speaks of wanting viewers to feel something, "even if they don't like it" (AnOther, 2023).

Feeling, for Rosa, marks the point where subject and world meet in mutual transformation. The padded sculptures that open his shows, neither



Fig. 03

clothing nor prop, create such moments of shared vibration, producing empathy through weight rather than spectacle. (Fig. 03)

This ethic of resonance also reshapes masculinity. Green's silhouettes are martial but tender, uniforms remade for softness. "Tea towels decorated with tractors and fire engines," he once recalled, were his childhood images of masculinity (Blanks, 2024). His response has been to re-engineer those codes into garments that cry rather than command. Quilted jackets recall protective gear but read as emotional armour; strings and ties appear more as gestures of care than control. Within the framework of Juri Lotman's semiotics, such gestures operate as explosions, small ruptures that generate new cultural syntax (1990, p. 13). Green's fashion detonates the brittle sign of the heroic male and replaces it with an affective figure of the maker, bound to his tools and fabrics.

For Karen Barad, matter and meaning are entangled in their very being (2007, p. 33). Green's

practice makes that entanglement visible. When he soaks fabric in water to mould it over wooden forms, "being covered in water is our job at the moment" (Mower, 2023), he laughed, he performs Barad's intra-action: the garment and the maker co-produce each other. Each show becomes a temporary field of relational matter: wet cloth, moving bodies, audience breath. Meaning arises not from narrative but from participation in that field. A legitimate question is whether the counter-language of fabric exists independently of the maker, or only through the act of assembly, styling, and presentation. Green's practice suggests the two are inseparable: fabric does not think independently of the maker, nor does making operate on inert material. The intelligence is produced in the encounter, which is precisely what Barad's intra-action describes. Fabric and practice are co-constitutive; neither is the prior term. Ritual labour is the hinge of this epistemology. The repetition of quilting, strapping, and padding transforms production into devotion. Green has said that "making uniforms is about belonging" (Chilvers, 2023), suggesting that discipline itself can be affective. The studio operates like a monastic workshop: each task finite, purposeful, yet open to improvisation. Rosa would call this resonant practice, a form of work that "touches the world and is touched back by it" (2020, p. 44). In the contemporary fashion system, which fetishises novelty, Green's insistence on iterative making becomes a quiet form of resistance, a temporal slowing that values continuity over acceleration. Angela McRobbie's critique of the creative economy clarifies the political dimension of this ritual. She notes that fashion often demands "aestheticised entrepreneurialism," turning designers into brands (2015, p. 17). Green refuses that posture. His public persona is deliberately reticent; interviews return to teamwork, process, and humility. "It's like being in my home," he said of his studio shows (Blanks, 2024). This domestic metaphor reclaims production as care work, folding masculine authorship back into collective making. In his studio, vulnerability replaces charisma as a measure of leadership. Green's resonance extends from the workshop to the runway. Each presentation functions as a structured encounter between fabric, body, and audience. The opening and closing looks, figures bound in vast textile structures, read as temporary communities of movement rather than as spectacle. They echo Ingold's observation that "lines of

making are lines of life” (2013, p. 40): the threads, straps, and cords that tether models together literalise the relational logic of the practice itself. The garments’ physical weight and resistance, the way they drag, demand space, slow movement, invite spectators into an embodied temporality that stands against the instantaneity of digital fashion. What Green’s practice demonstrates, in the terms of this paper, is that material intelligence does not require novelty or rupture. It can emerge equally from repetition, from the patient accumulation of knowledge through iterative making, from the kind of sustained correspondence with materials that Ingold describes as thinking-through rather than thinking-about. Green’s uniforms discipline only to connect; his rituals of labour produce not a new vocabulary but a deepened relation to an existing one. That deepening is itself an epistemic achievement and one that fashion’s accelerationist economy consistently undervalues. A fair question is whether this form of material intelligence is perceptible beyond the designer and a narrow community of practice. Green’s work suggests it need not be exclusively so: the affective dimension of his shows, the weight, the friction, the slowness, is available to any embodied spectator. The knowledge may not be fully articulable in language, but it is not therefore inaccessible.

AMBER JAE SLOOTEN / THE FABRICANT: SPECULATION, COMPUTATIONAL MATERIALITY, AND DIGITAL CLOTH

If Elena Velez and Craig Green demonstrate what material intelligence looks like when it is physically immediate, held in rust, stitch, and water-soaked canvas, and when the framework is working under its most favourable conditions, Amber Jae Slooten poses the framework’s most demanding question: what happens to material intelligence when the material is computational?

As co-founder of The Fabricant, the world’s first entirely digital fashion house, Slooten describes her project as “a new material reality” (Fairs, 2021) where fabric becomes code and the body becomes an interface. Her avatars move with an uncanny fluency, their garments flickering between texture and light. This section argues that Slooten’s practice does not contradict the paper’s central argument about fabric as a site of knowledge production, it tests it, and in doing so clarifies what material intelligence actually requires. (Fig. 04)

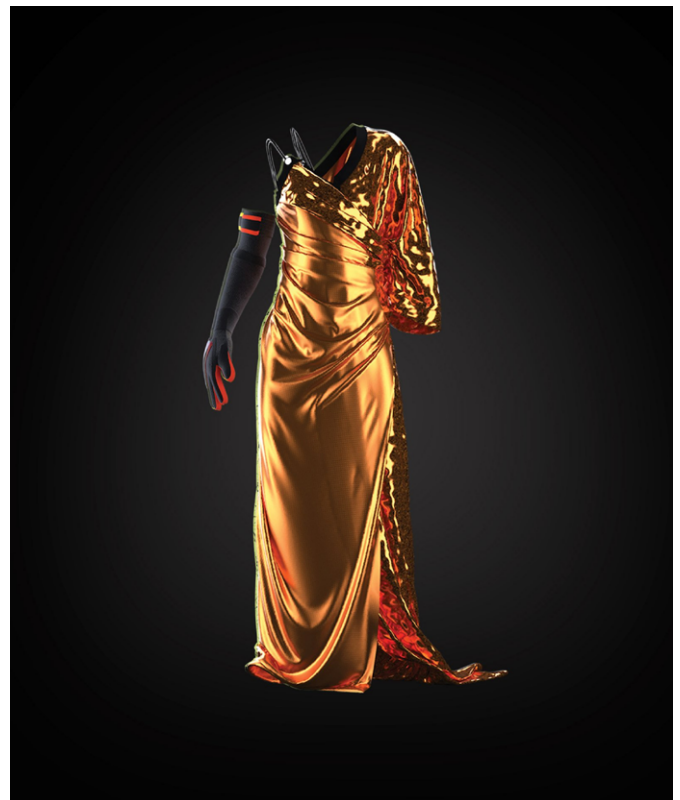


Fig. 04

The test begins with Kate Crawford’s (2021) insistence that digital systems are never immaterial. Crawford argues that AI and computational infrastructure constitute “a planetary network built from earth, labour, and data” (p. 5), dependent on mined minerals, global supply chains, carbon-intensive servers, and the invisible work of programmers and data workers.

The Fabricant’s aesthetic of weightlessness, its rhetoric of “non-physical fashion” (Fairs, 2021), rests on precisely these material foundations. This is not a reason to dismiss Slooten’s practice, but it is an essential starting point: the digital is always already material, even when its materiality is concealed. Crawford’s framework positions computational systems not as the absence of matter but as a different, distributed, and largely invisible form of it, one whose political and ecological implications are, if anything, more consequential than those of physical textiles.

This reframing allows Slooten’s studio process to be read differently. Her work begins with simulated draping in CLO3D or Blender, where the software’s physics engine introduces unpredictable folds, tensions, and falls that the designer must negotiate rather than control. This is not the passive

execution of a pre-formed idea; it is a form of correspondence with a computational material that has its own behaviour, its own resistance, its own affordances. Karen Barad's insistence that matter is "not a thing but a doing, a congealing of agency" (2007, p. 183) applies here with particular force: the digital cloth enacts agency through simulation, responding to parameters in ways that exceed the designer's intentions. Each render is an intra-action between human decision and machinic suggestion. The result is a form of speculative material intelligence, process-based, negotiated, and epistemically productive, that operates through code rather than fibre, but is structurally analogous to the physical making practices described in earlier sections. Where it differs is in what it produces.

Velez's collapse generates knowledge through residue, the stain, the fray, the structural failure that remains. Green's ritual generates knowledge through duration, the accumulated memory of repetitive making held in the body and the cloth. Slooten's speculation generates knowledge through simulation: the exploration of forms, affects, and relational possibilities that do not yet exist in the physical world and may never need to. Donna Haraway's figure of the cyborg, "a creature of social reality and fiction" (2016, p. 6), born from the productive collapse of binaries between human and machine, nature and culture, offers the most useful lens here. The Fabricant's avatars are cyborgian in precisely this sense: they are neither representations of existing bodies nor pure fantasy, but speculative propositions about what bodies, garments, and the relations between them might become. To dress an avatar is, as Haraway suggests of all cyborg practice, to perform "ironic faith," believing in the liberatory potential of the technology while remaining alert to its complicity in the systems it inhabits (Haraway, 2016).

Benjamin Bratton's account of the Stack, the layered planetary megastructure of Earth, Cloud, City, Address, Interface, and User, provides the infrastructural map for this practice (2016, p. 5). The Fabricant's garments exist as software objects in the Cloud, circulate through digital platforms at the Interface layer, and are worn by the User, an avatar that is itself a software construct. Slooten's claim that "we are designing the new digital bodies we will inhabit" (Freunde von Freunden, 2022) situates this work within Bratton's vision of users nested within planetary computation. But where Bratton analyses this as an emergent form of

sovereignty, Slooten approaches it as a question of intimacy and care: what does it mean to dress a body that exists only in code, and can that act produce genuine affective and epistemic content? The question of resonance is, here, genuinely open. Rosa (2020) defines resonance as the moment when subject and world meet in mutual transformation (p. 44). In The Fabricant's digital shows, bodies do not touch, and the physics are simulated rather than felt. Yet designers report negotiating with the behaviour of the software in ways that feel dialogic; viewers describe affective responses to garments that exist only as rendered light. Whether this constitutes resonance in Rosa's full sense, or whether it is a mediated approximation of it, is a question the paper does not need to resolve, but it is one that Slooten's practice makes newly pressable. The limits of material intelligence under conditions of full digital mediation are themselves a productive site of inquiry. This section does not argue that digital practice is equivalent to physical making; it argues that it is the most demanding test of whether the concept of material intelligence has genuine analytical reach beyond its most intuitive applications.

What remains important is that Slooten's work does not resolve the tensions it inhabits. The Fabricant's renders rely on carbon-intensive computation; its earlier engagement with NFTs fed speculative financial economies; and its rhetoric of inclusivity and decentralised authorship risks, as Haraway warned of all cyborg politics, reproducing "the god-trick of seeing everything from nowhere" (Haraway, 2016). These are not incidental complications. They are the conditions under which speculative material intelligence operates in the digital domain and attending to them honestly is part of what the close reading of this practice requires. The challenge is not to reject the digital as a site of material intelligence, but to hold its promises and its costs in the same analytical frame. In the wider argument of this paper, Slooten's practice completes a movement from the physically immediate to the computationally speculative. Velez finds knowledge in collapse; Green in ritual; Slooten in simulation. Each redefines what it means to think through fabric.

For The Fabricant, fabric is computed rather than woven, but it is not, for that reason, epistemically empty. It still demands negotiation, still resists simple control, still produces knowledge that exceeds the intentions brought to it. That, this

paper argues, is what material intelligence looks like at fashion's speculative periphery.

MATERIAL INTELLIGENCE AND THE PRODUCTIVE PERIPHERY: TOWARD A CRITICAL REORIENTATION

Across the practices of Elena Velez, Craig Green, and Amber Jae Slooten, fabric emerges as more than matter or medium, it functions as a mode of inquiry, a form of situated knowledge-making that operates at the productive edges of fashion's dominant discursive economy. Each designer refuses the smoothness of fashion's semiotic grammar: they work through friction, failure, iteration, and code to produce knowledge that cannot be reduced to slogans, campaigns, or visual polish. This concluding section draws the three case studies into direct comparison, identifies what they share and where they diverge, and repositions their collective significance within the theoretical framework established at the outset.

The clearest point of convergence is temporal. Velez, Green, and Slooten each refuse fashion's accelerationist logic, the fantasy of seamless production, instant response, and frictionless engagement. Velez works through decay and duration, allowing industrial materials to carry their own historical time. Green works through repetition and ritual, treating the iterative act of making as epistemically productive in itself. Slooten works through latency and simulation, inhabiting a digital temporality that is neither immediate nor embodied but is nonetheless affectively charged. Rosa's (2020) concept of resonance, the responsive, dialogic mode of being with the world that resists acceleration, applies differently to each, but all three practices enact a version of it. What links them is not style but a shared orientation toward slowness, uncertainty, and material resistance as generative conditions.

They diverge, however, in what their respective forms of material intelligence produce.

Velez's practice of collapse generates knowledge through breakdown: her garments are propositions about survival, feminist endurance, and the politics of who gets to make and under what conditions.

The epistemic content is inseparable from the material residue, rust, fraying, scorched seams are not illustrations of an argument but the argument itself, made physical. Green's ritual practice

generates knowledge through relation: between hand and cloth, maker and process, garment and body. Slooten's speculative practice generates knowledge through a different kind of entanglement: between human intention and computational behaviour, between the physics of simulation and the affects it nonetheless produces.

The material is not fabric but code, and yet, as Barad (2007, p. 183) insists, matter is "not a thing but a doing," the digital cloth enacts agency, introduces unpredictability, and demands negotiation in ways that are structurally analogous to physical making, even if categorically distinct. This divergence matters for how the three categories, collapse, ritual, and speculation, should be understood. They are not stages in a progression, nor positions on a spectrum. They are distinct epistemic orientations, each with its own logic, each illuminating a different dimension of what material intelligence can mean in contemporary practice. Their value as analytical categories lies precisely in this distinctiveness: they allow us to ask not just whether a design practice engages materiality, but how, toward what ends, and with what relationship to the discursive economy that surrounds it.

Situating these practices within fashion studies requires care. Bourdieu's (1993) analysis of the field of cultural production shows how symbolic capital accumulates through position-taking within a field structured by competing logics, commercial versus autonomous, mass-produced versus restricted. Within fashion's field, the logic of the restricted subfield, where cultural legitimacy rather than commercial reach is the primary stake, does create conditions in which certain forms of knowledge, particularly those that resist easy communication, are structurally devalued. Rocamora (2009) traces a related dynamic in her analysis of Paris fashion media, showing how the city's fashion press constructs and reproduces a particular image of fashion that marginalises alternative practices and non-Western aesthetics. Neither Bourdieu nor Rocamora argues directly that embodied or material knowledge is suppressed by linguistic forms; but both provide frameworks for understanding the structural conditions under which material intelligence, as described in this paper, tends to remain peripheral, visible within restricted subcultural circuits but largely illegible to fashion's dominant self-description.

That illegibility is itself significant. As Wild (2024)

argues, fashion's dominant discourses, structured by Western aesthetic paradigms, English-language media, and the commercial imperatives of global industry, consistently marginalise forms of knowing that do not translate into its communicative formats. This structural condition has been addressed within fashion studies specifically by Smelik (2018), whose account of new materialism in fashion argues that the field has been slow to theorise the agency of materials and technologies on their own terms, rather than as surfaces for the inscription of cultural meaning. Material intelligence, as this paper defines it, is one such form. By attending to the epistemic labour embedded in the practices of Velez, Green, and Slooten, this paper does not claim to resolve that structural problem. It claims something more modest: that the conceptual tools of fashion studies can be sharpened to recognise what material intelligence is and does, and that close engagement with design practice at fashion's productive periphery offers one route toward that sharpening. The implications extend to fashion research and pedagogy alike. In scholarship, the argument supports a turn toward fashion-as-process: attending to material duration, iterative making, and epistemic entanglement alongside the interpretation of objects and images. In education, it proposes the studio not merely as a site of production but as a thinking environment, one in which students negotiate the ethical, sensory, and political implications of material decisions in real time. These are not large claims. But they are, this paper argues, grounded ones.

CAPTIONS

[Fig.01] Comparative composite illustrating epistemic modes of *collapse, ritual, and speculation* across three design practices. Elena Velez, *Spring 2025 Ready-to-Wear* (2024); Craig Green, *Spring-Summer 2017 Menswear* (2016); The Fabricant, *Season 0* (2021). Composite by Matthew Coats (2025). Courtesy of Elena Velez Studio, Craig Green Studio, and The Fabricant / Dezeen.

[Fig.02] Elena Velez, *Spring 2025 Ready-to-Wear*. Backstage image showing garments marked by environmental staining, distressed textiles, and industrial construction. Photographed by Jason Renaud for *Sleek Magazine* (2024). Courtesy of Elena Velez Studio.

[Fig.03] Craig Green, *Spring-Summer 2017 Menswear*. Canvas ensemble with contrast lacing and soft utility silhouette. Photographed by Indigital Ltd (2016). Courtesy of Craig

Green Studio.

[Fig.04] The Fabricant Studio, *Season 0* digital garment render. Virtual couture dress from *Pluriform* collection, designed by Amber Jae Slooten. Courtesy of The Fabricant / Dezeen (2021).

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