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4 CRAFTING CONTINGENCY

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 $T_{\rm HIRTEEN\ YEARS\ INTO}$ the twenty-first century, much of the promise of the postmodern era has begun to materialize for the field of architecture. Technology has caught up with imagination, and our tolerance for evanescence, contingency, and multiplicity has found consonances in a world of informatics and bioengineering that transgress old boundaries of form, order, and identity. In the field of architecture, the chaotic character of earlier decades (when we drew sharp angles with dissonant relationships to show that we were no longer seeking a singular truth) is morphing into an appreciation and understanding of deep pattern. In contrast to the formal dissent of ten years ago, architects are now making beautiful sense out of complexity.

This architectural sense is rooted in a growing understanding of pattern, inspired by the work of Gilles Deleuze, pioneered by architectural theorists Greg Lynn and Lars Spuybroek, and given form by architects Lisa Iwamoto, SHoP, and BIG, to name a few. Although at first glance this pattern work's emphasis on mathematics and abstraction may seem out of step with social concerns and deeply out of step with a phenomenological approach such as Maurice Merleau-Ponty's phenomenology of the "flesh," a number of fertile connections exist. Based in an understanding of the social and ethical implications of Merleau-Ponty's flesh, this chapter explores how the principles of parametric architectural design, with its complex structures that draw strength from anomaly and deformation, constructively overlap some of the key tenets of feminism and manifest a productive model for effecting social change. Salient attributes include a dynamic balance between internal logic and outside forces; questions of identity, contingency, and adaptability; applicability to different energetic, material, and life forms; and always change over time as the patterns disperse, disrupt, bifurcate, coalesce, and reconfigure.

RELATIONAL FIELDS

Ilya Prigogine, a Nobel Laureate chemist whose work focuses on systems theory, describes a self-organizing system as a process where local interactions bring large-scale order to a previously disordered system; examples include crystallization, convection patterns, market patterns, neural networks, even animal swarming. The initial local ordering of the system is spontaneous, either stemming from a condition of the system itself or responding to a condition set up by an outside agent. Local ordering springs up in a decentralized way distributed throughout the system, "triggered by random fluctuations [and] amplified by positive feedback." Because it is spontaneous and widespread, a self-organizing system is typically robust and has the energy and the directional focus to repair internal disturbances or damage.¹

When a system's boundaries are permeable to outside influences, they become sites of exchange that allow the system to evolve toward greater complexity and order. We can view life as such an open system and observe its constant and often cataclysmic give-and-take between growth and order.² Nonequilibrium, or open system thermodynamics, provides a framework for observing such complex systems that shift in response to gradients in pressure, temperature, or chemical makeup, and whose degree of disequilibrium may induce "sudden transitions or bifurcations" before the system reconfigures into a new state of stability. Prigogine's description of a self-ordering system is reflected in Deleuze's conception of existence as a sphere of immanence, or "manifold," with a vector field or set of rules for interaction wherein elements of the field move and change in response to a stable attractor or goal. A radical break or bifurcation in the system (Deleuze's "catastrophe") may occur as the evolving pattern moves toward the limits of the system or, alternatively, responds to an exterior force or unstable attractor. After the catastrophe, the system reorients itself and redirects itself to a new attractor.3

Deleuze advocates the destabilization (deterritorialization) of knowledge and of the self, and he describes things as existing in the immanent field with singularity and irreducible alterity by means of differential relations.⁴ His system is formal, universal, and abstract, and unmuddied by questions of the flesh, although its structure can be appropriated into the social and natural realms as enfleshed ideas with each domain differentially structured. The universe is thus a field of difference, "a system of multiple, nonlocalizable, ideal connections, a differential calculus corresponding to each Idea, where each Idea differentiates the field" and all of its elements.⁵ In this system, as Dorothea Olkowski characterizes it in *Postmodern Philosophy and the Scientific Turn*, "every subject or

object is an event, . . . the result of the contingent encounters of [transcendent] affects and percepts," and the world is "an ongoing process of trajectories differentiating themselves [through] predictable motions and unpredictable perturbations" that cause or allow events and intelligence.

Merleau-Ponty's flesh is just such a dynamic system, whose myriad elements seek encounter, difference, and mutual transformation. Envisioned as a continually evolving relational field, the flesh is a medium of transformative encounter founded in the body's sensory openness to, and interrogative attitude toward, the lived world. "My body, the human other, and material things are variations" of this "general relational condition," and there is no emphasis on binary oppositions or cataclysmic bifurcations as the flesh undergoes a continual process of transformation based on both difference and assimilation.⁷ Other elements of the flesh, along with (myself as) a perceiver, are participants in an enveloping perceptual field, and perceptual interaction with them results in a paradoxical doubling in which perceived things breach the perceiver's boundaries to exist simultaneously in the world and within the perceiver's own carnal schema.8 And yet the doubling happens with an offset or écart (Deleuze's non-gathering), and so, for Merleau-Ponty, Deleuze's bifurcation and catastrophic systemic restructuring are continual small restructurings, the mutual transformation that results from every interaction in the "strange proximity" between perceiver and (an often co-perceiving) perceived.9

Écart, a concept that is central to Merleau-Ponty's vision of relationships in the flesh, describes an offset, an interval or distance, a difference in value, and even restructuring one's direction to gain such an interval. In *Merleau-Ponty's Philosophy*, Lawrence Hass describes écart as "a difference-spacing-openness at the heart of perceptual experience" enfolded in a condition of reversibility that intertwines and coheres difference without opposition. The flesh understands contradictory elements as ongoing enigmas that enable growth, not oppositions to resolve, as its conceptualization remains mired in carnality.¹⁰

In contrast to Deleuze's formal and abstract viewpoint that allows difference to remain unreconciled, Merleau-Ponty takes multiple interior viewpoints that allow for the same enigma. Deleuze's manifold, on the molar or general level, contains machines that may be social, technical, or organic, and these machines manifest on the molecular or particular level "as single objects and living organisms that appear as single subjects." Merleau-Ponty's flesh (the general field) has social, technical, and organic aspects as well, and its elements can appear as single perceivers and perceived things. Despite their many similarities, the two systems are somewhat oppositional, for in each philosopher's work the other's principal construct is considered secondary. To Deleuze, Merleau-

Ponty's flesh is one of many molar machines with its own particular relational calculus, not sufficiently formal to ground a universal or grand style of thought. Pet Deleuze's pure, formal, un-enfleshed system operates on a level that to Merleau-Ponty is a subset of the larger flesh, a manifestation of embodied intellect that has emancipated itself from its carnal origin through abstraction. In the flesh, Deleuze's manifold is a "singing of the world" that, like a geometric proof, once it has taken shape, seems self-evident and inevitable but is one of many possible secondary constructs springing from the pre-personal, anonymous level of the flesh.

Hass calls perceptual experience "a field of contact" where we mingle with things, others, and the larger environment. In this vital, carnal coupling, the things we experience have "sense-directions," an "open . . ., charged indeterminacy" with inherent logic that suggests pragmatic and ideational possibilities. The field of possibilities is always in motion, and Hass sees a pulse from "indeterminacy to configuration and back again [as] the living body [organizes] coherent things into sense-laden configurations" in an ongoing state of receptive communication.¹⁴ Once a certain sense is made of the possible directions offered up by the perceived, a new idea "transcends and transfigures' the initial situation" and reorganizes it into an ideational sense that brings with it a certain sense of inevitability, often obscuring its own contingency.¹⁵ Such momentary crystallizations of the lived world's contingent meanings can also take on a semblance of purity and permanence, and Merleau-Ponty invites us "to discern beneath thinking that basks in its acquisitions, and offers merely a brief resting-place in the unending process of expression, another thought which is struggling to establish itself." Any formalizations or abstractions are "not a genuine eternity and a participation in the One, but concrete acts of taking up and carrying forward by which, through time's accidents, we are linked in relationships with ourselves and others."16 As long as we understand its carnal origins and its carnal contingency (insisted on by Merleau-Ponty and denied by Deleuze), a formalized expression or concept such as Deleuze's manifold fits within Merleau-Ponty's thought, allowing for a fruitful furtherance of the consideration of becoming.

Painter and art theorist György Kepes, whose work investigates the visual logic of scientific and industrial processes, construes patterns as temporary boundaries between past and future acts or states of energy, and characterizes patterns as "meeting-points of action." Informed by physicist Fotini Markopoulou, Olkowski discusses Deleuze's manifold in terms of quantum causal histories in which actors and stage evolve together. Drawing from Merleau-Ponty and Simone de Beauvoir, she reconfigures Deleuze's "crowd" as "a point

of view according to which different observers 'see' or 'live' [partial and overlapping] views of the universe." Olkowski restyles Deleuze's manifold as crowd-sourced reality, a field whose attributes (patterns and particles) create a point of view made of "a crowd of influences." Changes in the particulars can alter the field as a whole, and the arrangement suggests the possibility of an ethics in which we view others as opportunities for transformation and mutual influence rather than opposition.¹⁷

Merleau-Ponty's philosophy of interrogation opens us to the Other, to the crowd-sourced field. In the flesh, he maintains, "there is an intersection of my universe with that of the other" in which "we must understand life as the opening of a field of action."18 In this field, "I experience my own body as the power of adopting certain forms of behavior and a certain world . . . now, it is precisely my body that perceives the body of another, and discovers in that other body a miraculous prolongation of my own intentions, a familiar way of dealing with the world. . . . The anonymous existence of which my body is the ever-renewed trace henceforth inhabits both bodies simultaneously."19 In The Retrieval of the Beautiful, Galen A. Johnson elucidates: "The lines of my life are overlaid with the 'dotted lines' inscribed by others. . . . So we are drawn and in a double sense. We are drawn upon by Others as they shape our lives, and we are drawn toward Others as we encounter them in our world."20 Thus we see Merleau-Ponty's flesh providing the framework for Olkowski's "crowd of influences" and Kepes's patterns as "meeting-points of action," as different bodies in the flesh influence both one another and the larger field.

THE AESTHETICS OF RELATION

These strong interconnections are echoed in the ideas of anthropologist, linguist, and cyberneticist Gregory Bateson, who worked in a sustained way to connect systems theory with the social-behavioral sciences, and who contends that "patterns operate according to an aesthetic logic—one that is based on 'recognition and empathy' rather than rationality." Bateson's thinking frames pattern theory in a way that highlights the visual and spatial aspects of pattern and thus brings it into the realm where we can examine it architecturally. In describing the tendency of patterned systems to proliferate while maintaining their dynamic equilibrium, he characterizes them as generally recursive (manifesting or responding repeatedly to the same rule or motif, even if across different scales), redundant, and predictable. A pattern's repetition and redundancy allow us to observe and understand—or at least intuit—the rules for interaction between pattern components. Once we understand the system, "any deviation

[in the pattern] will stand out (and is coded positively as information or negatively as a mistake)."21

It is the dynamic balance between repetition and anomaly, between the predictable and the unexpected, that links pattern work to creativity, as Paul Andersen and David Salomon explain in *The Architecture of Patterns*. The predictability and redundancy of a pattern allow it to receive and accommodate new information, which in its turn morphs the pattern into something new but still coherent by either inflecting or disrupting it. "Thus," according to Andersen and Salomon, "far from maintaining homogeneity or encouraging pandemonium, patterns establish favorable conditions for creativity and learning to occur." We read and assimilate any new information against the previously understood background pattern and reconceive the meaning of the larger pattern along with its informational interlocutor.²² The ability of the pattern's internal logic to accommodate deformation in the face of an external force (in this case, the new information) gives it an adaptive, contingent identity that can flex to meet a variety of demands and accommodate difference with relative equanimity. Thus a balance between stasis and transformation, between overarching idea and individual goals makes a strong architectural patterned system. Order is needed; too much entropy makes a system unremarkable or useless, and complexity demands intricate and ordered relations.²³

Olkowski, through Beauvoir, asks that we come to understand the Other as "a crowd and not an atom" and to live in a state of mutual influence accepting the trajectories of others and allowing them to change us and take our work forward. She asks us to (make systems that do) not exploit others or deprive them of opportunities for meaningful cultural and social contribution. She also advocates for openness and ambiguity in our projects, which allows others in the crowd to transform them, echoing Merleau-Ponty's discussion of the carnal linkages in expressively "taking up and carrying forward" ideas.²⁴

Perception in the flesh is characterized by the same openness, ambiguity, and adaptive contingency. Merleau-Ponty says that perceived things "offer themselves . . . only to someone who wishes not to have them but to see them, not to hold them as with forceps, or to immobilize them as under the objective of a microscope, but to let them be and to witness their continued being—to someone who therefore limits himself to giving them the hollow [le creux], the free space they ask for in return, the resonance they require."25 Johnson expressly links this posture to the ethics that pervades Merleau-Ponty's work: "In between the heat of grasping and the cold of indifference, there is a kind of caring for things and others that opens up both self and other to an uncharted richness."26

Bateson's "aesthetic logic . . . based on 'recognition and empathy'" resonates with this view and with that of mathematician Norbert Weiner, the originator of cybernetics, who views pattern as "an arrangement of information" that transforms in response to interaction with other patterns. To Weiner, information exists not as a stable identity or static essence, but as a flexible pattern or message that interacts with and transmits to surrounding patterns. Both internal properties and external forces determine the pattern's degree of environmental flexibility and its ability to self-organize, which Weiner views in terms of homeostasis.²⁷

FEMINIST ETHICS: THRIVING WITHIN A STRONG SYSTEM

Strong external environments make it more difficult for local patterns to maintain self-determination in their identity. Negative or neutral feedback from its external environment may dampen a system to a state of insignificance or oblivion. And as Andersen and Salomon point out, even positive feedback, which reinforces and magnifies attributes of the system, "actively adds destabilizing information into exchanges between organisms and their environments, producing states that are far from equilibrium, far from the status quo, and hard to predict."²⁸ In the face of destabilizing positive feedback, homeostasis may convert to a dynamic equilibrium, with change built in as system components, organisms, or people make choices about the best configuration to maintain their purpose or identity—alternatively, the pattern may cataclysmically disrupt or simply phase out of existence.

In these dynamic states, a pattern is dependent, though not entirely, on its environment within yet larger systems. Patterned systems, especially those involving human lives and thus agency, can adapt according to their own interior logic—if they are not "too simple or inflexible"—to exist as active arrangements that are "more than just the index of other forces." Patterns lacking flexibility will break against the force of larger systems, becoming isolated or disappearing altogether, and those too similar to their enveloping systems are also likely to be subsumed.²⁹ These outcomes apply to natural interactions, chemical reactions, political organizations, neighborhood groups, building panel systems, and urban landscapes alike.

One of the central tenets across a broad spectrum of feminism thought is robust accommodation of difference. We have already discussed, if briefly, Olkowski's advocacy of approaching the Other in a spirit of transformation rather than opposition. In consonance with pattern theory, Donna Haraway's "Cyborg Manifesto" emphasizes the dynamic balance between internal logic

and outside forces, questions of identity, contingency, and adaptability. Taking the mechanical-biotic hybrid cyborg as an instructive form, she envisions a politics that enfolds "permanently partial identities and contradictory standpoints" and calls for feminism to form alliances and contingent unities that transgress and knit together previous boundaries of identity. Rather than appealing to categories of truth or falsity, Haraway asks that we eschew grand bargains and elegantly simple solutions to attune to the subtle, shifting matrix of "emerging pleasures, experiences, and powers with serious potential for changing the rules of the game." She calls for noise, imperfection, and pollution in our communications and stresses that feminism must avoid casting its aims as a revolutionary struggle in which we have staked out a position of moral superiority. Instead, she advocates assuming the contingent identity of a "bastard race" that "teaches about the power of the margins."30

Feminist author bell hooks also writes powerfully about impure identities, reminding us that in order to effect social change, we must position ourselves at once on society's margin and at its center. Cultivating a position in the center gives us the power to effect change, but remembering our position in the margin allows us to recall that change is necessary.³¹ Drawing from Elizabeth Janeway's Powers of the Weak, hooks contends that recreation of one's own identity outside of the tropes given by voices of power is one of the most fundamental freedoms we possess.32

In addition to the importance of an Other surviving within a strong external system, hooks understands that the system itself will thrive by fostering the flexibility to embrace difference. Unless we redefine power from its traditional form, we will be seduced and corrupted by it. Instead of power as the ability to dominate and control, hooks, following Nancy Hartsock, promotes "understandings of power that are creative and life-affirming," aligned with energy, action, and accomplishment. She further believes that groups struggling for societal change will gain momentum insofar as they manifest the life-affirming power that aims to transform and benefit society as a whole.³³ The écart at the heart of the flesh allows for the offset of identities in which such difference can thrive, and pattern theory underscores the importance of both flexibility and difference in the continued evolution of a system.³⁴

Finally, in terms of creative expression, allowing the differences among gendered, ethnic, classed, abled, and aged bodies to inform our society and our phenomenology feeds the creative, transformational, sense-making capacities of the lived body. Merleau-Ponty writes, "We are collaborators in a consummate reciprocity. In the present dialogue, I am freed from myself, for the other person's thoughts are certainly his. . . . And indeed, the objection which my



FIG. 4.1. NOX/Lars Spuybroek, The Three Graces, hotel and conference center, Dubai, 2007 (by permission of NOX/Lars Spuybroek).

interlocutor raises to what I say draws from me thoughts that I had no Idea I possessed, so that at the same time that I lend him thoughts, he reciprocates by making me think too."³⁵ True creativity is a vulnerable, dangerously open state where one's world can be flipped, leading to a catastrophe in the manifold. This vulnerability lies at the heart of artistic endeavor, which Johnson discusses in terms of beauty: "Human self-awareness requires being questioned and challenged from the outside, even obstruction by the outside, and this is a gift of the beautiful. . . . The experience of the beautiful is the experience of a fundamental openness to Being."³⁶ As Merleau-Ponty sums it up, "love . . . leads us just to what can tear us."³⁷

ARCHITECTURE AND PATTERN LOGIC

The profound recent shift in architectural design methods reflects the complexity, contingency, and impure identity of the different threads this chapter has drawn together. In the new paradigm of parametric design, old categories of floor and ceiling, wall and window are no longer stable concepts. Architects'

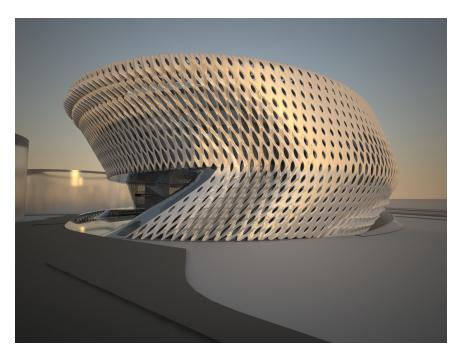


FIG. 4.2. Zaha Hadid Architects, Madrid Civil Courts of Justice, Madrid, 2007 (by permission of Zaha Hadid Architects).

questioning of such givens as horizontal and vertical, opaque and transparent has transformed our understanding of perceiving and inhabiting space. Lynn's and Spuybroek's inquiries into computer-generated pattern (fig. 4.1) are paralleled by designs from architecture firms such as Zaha Hadid Architects (fig. 4.2) and Iwamoto Scott (fig. 4.3) for civil buildings and skyscrapers that transgress even abandon at times—the boundaries of these age-old categories. Traditional proportion systems and spatial visualization from hand-drawn perspectives are no longer adequate design devices in the postmodern era, where emphasis has shifted from proportionally regulating Platonic masses and volumes to tweaking computer-generated, asymmetrical, amorphous, and dynamic forms. Structure is no longer limited to bearing wall or post and beam, but has now been reconfigured into thin webs that can track the surface of a wall or even become tubes of space. And above all, architects are filling the surfaces of their unorthodox forms with intricate patterns.

In consonance with the systems discussed above, parametric architecture achieves strength through deformation—structural, spatial, and ideational.



FIG. 4.3. Iwamoto Scott, Edgar Street Towers, New York, 2009 (by permission of Iwamoto Scott).

Lynn refers to parametric design as "animate" because its formal conception is based in the intertwining of motion and force. As intersecting forces generate mathematical information stored as three-dimensional form, architecture changes from a static geometric frame for the movement of time and space to something that, as Lynn phrases it, "can be modeled as a participant immersed in dynamical flows."38 Formal abstraction based on the x, y, and z axes gives way to "gradients, flexible envelopes, temporal flows and forces," allowing the architect to include "issues of force, motion, and time" in her design process.³⁹ The process gives architectural form flexibility in responding to multiple generative forces, and it finds middle ground between the extremes of either standing firm against the "stress of difference" or breaking under its tide. Allowing for deformations under force adds to the complex intricacy of the system, leading Lynn to describe its pliancy as "a cunning submissiveness." The dynamic origins of parametric design and the resultant form's contingency and flexibility allow architecture to become dynamically complex. 40 The resultant form is often beautiful, resists conceptualization, is structurally strong, and generates unexpected and surprising reformulations of onceinviolate categories. As such, it provides an instructive model for its larger society.

For example, Lynn describes formal systems where "a point change is distributed smoothly across a surface so that its influence cannot be localized at any discrete point" and "vector sequences whose regions of inflection produce singularities on a continuous surface."41 He could just as well be writing of the dynamics of social change when he describes architecture: "It may be possible to neither repress the complex relations of differences with fixed points of resolution nor arrest them in contradictions, but sustain them through flexible, unpredicted, local connections. . . . A more pliant architectural sensibility values alliances, rather than conflicts, between elements [and benefits from] first an internal flexibility and second a dependence on external forces for selfdefinition."42 Internal flexibility allows feminism to work with partial identities and contingent partnerships, and dependence on external forces allows feminist ideals and actions to effect a slow but steady deformation and reshaping of societal patterns.

DAMPENING AND DOUBLING WITHIN A SYSTEM

Thus far we have been considering a pattern's ability to incorporate the effect of an external force. But such forces are often systems in themselves, and the negotiations between repetition and difference become even more intricate when two systems of influence overlap, or when a pattern's intrinsic systems intersect multiple external forces. The "aesthetic logic of connection" can yield unexpected and intricate beauty as multiple systems reinforce and magnify one another in some ways and dampen or de-articulate in others. Andersen and Salomon see these interactions as "point[ing] the way toward new forms of identity and intelligence in architecture in particular and in culture in general." In pattern-based design, the greatest beauty often comes from "impure and complex blends," and Andersen and Salomon contend that "combining multiple patterns . . . opens up a project's aesthetic identity and organizational logic" and gives an intricate postmodern complexity to the work.⁴³

The work of the designer often involves creative leaps in which she adapts a pattern to fit a new set of contingencies, or adjusts the scale of a component to fit in with or transform the overall pattern. Andersen and Salomon call this way of working a "productive misalignment," in which the architect exploits the tension of overlapping patterns and puts it to productive use. In their words, "Establishing links between otherwise disparate cultural, intellectual, and technological categories has long been the job of the architect. . . . The ability to produce relationships where none existed before is endemic to both the production and experience of architecture, [and] the aesthetic power of patterns promotes this synthetic activity." It is just this sort of categorical slippage that infuses the relational thinking of Haraway and hooks.

The architectural patterns of today's intricate buildings and landscape interventions respond to multiple demands at once: structure, climate response, light conduction, thermal insulation, ventilation, electrical and mechanical systems, solar collection, exhaust, and circulation, to name a few. Once a pattern is engineered to function structurally, its redundancies form a field for the overlaying of additional functions. As these additional functions are overlaid on the structural pattern, it morphs—sometimes imperceptibly and sometimes quite noticeably—to incorporate them. Depending on how the systems overlap, these deformations can be localized or distributed throughout the pattern. When layered functions coincide or double (with positive interference), they may produce moments or areas of high intensity or large inflection; when they offset (with misalignments or negative interference), effects can dampen each other to provide very subtle articulation or a small disruptions on the surface. Sometimes the patterns syncopate enough to produce anomalies that seem idiosyncratic but are in fact integral to the form's aesthetic logic.

All of these effects can be adjusted with precision by designers adjusting code. 46 With the right degree of redundancy and complexity, patterned systems can simultaneously contain both short- and long-term aspects that accommo-

date fluctuating needs and desires ranging from changes in the physical site to societal shifts. Their coherence persists in the face of complexity, anomaly, and the shifting perceptions of their observers and inhabitants.

The pattern's redundancy and complexity give it "the capacity to simultaneously blur, reveal, gradate, and accentuate distinctions" among its parts. And since they can be infinitely reproduced, they are always open systems. Finally, form doesn't follow function, nor is it always indicative of the underlying structure of the pattern itself, so the pattern does not essentialize. Its structure assembles connections between "typically discordant . . . systems" and mediates gradations between typically binary oppositions.⁴⁷

CREATIVE SOCIETAL MISALIGNMENTS

Such a structuring of society would allow for diverse discourses and interests to inform the public sphere. Devonya N. Havis outlines the benefits of richly articulated societal patterns that allow space for multiple voices. She characterizes black feminism as drawing from ancestral and communal as well as mainstream and academic sources, blending "varied contexts for making sense of the world" that include the lives and decisions of ordinary women. These varied sources of knowledge, which thread through the black community in both formal and informal ways, provide "a repository of ideas and practices, strategies, and tactics for negotiating life and framing experiences associated with living in a racialized context." This layered communal wisdom considers the wider implications of ideas and actions, and Havis calls on us to identify "blind spots" and understand the personal, relational, and communal implications of our thoughts and deeds.48

Any ethnic or gendered minority understands how to navigate within society on dual levels. hooks describes switching back and forth between black and white dialects when operating in academia and in home communities.⁴⁹ Sarah L. Webb's evocative poetry delineates the constrictive act of dwelling in societal structures built for others. "By Design" describes how the architects of culture "blocked our vision with exquisite facades" while "the public pupil adjusted to the blight"—a culture that then urges its occupants "decorate these hollow structures."50 "Invisible Buildings" concretizes the struggle of outgrowing an oppressive structure's confines:

Sometimes my limbs don't fit inside of these spaces. I try to gather myself in, tuck everything really tight, and suck in my breath. But I'm suffocating inside of this grand palazzo. And why, when there is so much sky outside?⁵¹

Alisa Bierria describes the divide between the intentional acts of societally disenfranchised minorities and the construal of those acts by the dominant social discourse. In particular, she takes up the "criminalization of black action" within existing American patterns of power.⁵² She cites the example of Janice Wells, a black schoolteacher who called the police to report a prowler and was herself tasered by the responding police officers. Bierria details the reasonable sequence of actions Wells took as the encounter unfolded and the misinterpretation of those actions by the responding police officers due to the "historically constituted, socially reinforced, and institutionally authorized" view of black women as "criminal, uncontrollable, untrustworthy, and pathological." In the encounter, Wells's personhood, authority, and intentions were erased and written over by a dominant social narrative underpinned by a systemic structure of "violence and domination."⁵³

Bierria asserts that women of color live "within political and theoretical frameworks unequipped to reflect their experiences and insights."⁵⁴ Drawing from Angela Y. Davis, she points out that "action meant to meaningfully transform oppression is regularly and actively countered with state violence," and "even those actions that are within the boundaries of the law remain vulnerable to being criminalized and punished."⁵⁵

Bierria proposes that such exterior-imposed narratives can be resisted and destabilized by "a heterogeneous framework of agency—agencies" that takes into account the enveloping social structure: "whether an agent's action will be legible to others as she intends, whether she has institutional backup for her account of her actions . . ., and if the agent's intention is vulnerable to being replaced by some other constructed explanation of her action that conforms to an oppressive schema." Such a schema might describe the officers' actions as "hegemonic agency." In contrast, "black women who act intentionally within [a dominant power structure] must discern how to employ agency on the margins of legibility and legitimacy, in the context of different kinds of resistance, and, sometimes, with the expectation of certain failure." Bierria describes "insurgent agency" as "a kind of resistant agency that does not aim to transform the conditions of oppression, but instead temporarily destabilizes, circumnavigates, or manipulates those conditions in order to reach specific ends." 56

Havis describes the lives and actions of black women as "creative negotiations" within oppressive societal structures.⁵⁷ She draws from Audre Lorde (and aligns with bell hooks) in advocating for "difference and creativity" within a relational community, urging us to allow our differences with others to spark creativity and form community.⁵⁸



FIG. 4.4. Ieshia Evans and Baton Rouge police, Baton Rouge, Louisiana, 2016 (© Jonathan Bachman, Reuters).

Havis draws from Saidiya Hartman, who proposes "simulated compliance" as a means to challenge structures of domination by manipulating appearances.⁵⁹ Havis also cites Lisa Jones's notion of the "Bulletproof Diva," who uses power creatively "to contest and disrupt" societal ideas of her place, her role, and her intrinsic dignity. She dwells within the boundaries she is not allowed to cross, but creatively reconfigures them, and "she could be any Black woman who chooses to invent, fashion, and refashion herself with a liberatory interest." All such liberation eventually positively restructures the larger world.⁶⁰

The "productive misalignment" that architects use creatively to exploit the tension of overlapping patterns resonates with these visions of civic agency and resistance. One brief, salient example arose during a period of heightened racial tension between the police force and the black community in Baton Rouge in the summer of 2016. Divergent views of agency and intention led the Baton Rouge police force to respond in riot gear to a black community protest of prior police brutality. In a stunning and literal example of a Bulletproof Diva, Ieshia Evans stood peacefully and gracefully before a host of riot-clad officers and instantly became an emblem of peaceful yet powerful resistance to authority (fig. 4.4).

The events in Baton Rouge leading up to this iconic moment can be viewed in terms of pattern theory, as a series of local interactions that formed a dynamic balance between the internal logic of black community, in pain over the loss of yet one more of their own at the hands of police, and outside forces of state-sanctioned power. Questions of identity and strategies of contingency and adaptability governed the coalescing protest and the police response to it. Prigogine's notion of a robust, self-organizing system aptly describes the ongoing events in Baton Rouge, as local actions coalesced in a decentralized fashion throughout the system, "amplified by positive feedback," culminating in a massive protest met by a massive police response.⁶¹ The system's boundaries became sites of (potentially cataclysmic) exchange that continually reconfigured the evolving pattern of local actions along with the larger pattern of world opinion about American racial relations and systems of power. The "charged indeterminacy" of Merleau-Ponty's flesh is very much in play in this series of fundamentally carnal encounters with injury and even death on the line, but his vision of coexistence within the flesh also contains the potential for mutually transformative, positive encounters with Others and with the pattern as a whole.62

To some extent, the social patterns here are recursive, redundant, and predictable, following Bateson's characterization of patterns in general, as people on all sides reiterate entrenched ideologies. But the creative misalignments of a few intentional agents can tweak the predictability and redundancy of the pattern, prodding it to subtly reconfigure and opening cracks in the system that allow a greater number of people to move society forward in a meaningful way. Thus, Merleau-Ponty's "consummate reciprocity" allows an Other to plant seeds of change within each of us as we creatively and collectively reconfigure existing patterns, upending age-old categories, reconceptualizing orthodox systems of power, forming contingent partnerships, creatively deforming a constantly evolving pattern. As in architectural design, the overall pattern morphs to assimilate and accommodate new events and actions. If a society's patterns are sufficiently flexible to permit creative deformation, yet stable enough to avoid collapse under the deformation, they can change and thrive while responding to typically binary oppositions.

LACE-WORKS

Beauvoir, hooks, and other feminists call for feminism as an open system that answers to multiple demands and diverse identities—structural and functional redundancies built on a broad commitment to giving to others "the hollow . . .,

the free space," and the safety they need to participate meaningfully in the larger culture. A strong armature then allows layering of other actions and ideas to morph the overall pattern in subtle and salient ways.

In the unfinished draft of his final work, Merleau-Ponty compares our relational existence in the flesh to "lace-works." 64 This arresting image for interacting and creating within the flesh calls to mind the intricate patterns and adaptability of parametric architecture. Strong, flexible, beautiful, and economical of material but requiring an eye for design and care in construction, lace simultaneously veils and transmits light, covers and allows air to pass through its porous boundaries. It flexes in response to external forces, admits variety in its pattern, and draws strength from a web of connections.

Of the intimacy and transformative power of fleshly connections, Merleau-Ponty writes, "If I am close enough to the other who speaks to hear his breath and feel his effervescence and his fatigue, I almost witness, in him as in myself, the awesome birth of vociferation."65 If I am close enough to a voice, I feel the breath and energy behind it, I witness the beginning point of the clamor that the whole world makes together, I feel it echo with my own voice. This close, dangerously open creative state is a structure that can create and sustain social justice.

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NOTES

- 1. Paul Andersen and David Salomon, The Architecture of Patterns (New York: W. W. Norton, 2010), 54, 56.
- 2. Dorothea E. Olkowski, Postmodern Philosophy and the Scientific Turn (Bloomington: Indiana University Press, 2012), 53.
 - 3. Ibid., 62-67.
 - 4. Ibid., 70-72.
- 5. Gilles Deleuze, Difference and Repetition, trans. Paul Patton (New York: Columbia University Press, 1995), 81; cited in Olkowski, Postmodern Philosophy, 73-74.
 - 6. Olkowski, Postmodern Philosophy, 75.
- 7. Maurice Merleau-Ponty, The Prose of the World, trans. John O'Neill (Evanston, IL: Northwestern University Press, 1973), 136-37. Merleau-Ponty's "variations" could be construed to correspond to Deleuze's molecular realm of constant differentiation, and his "general relational condition," or flesh, sets out overarching principles in the same manner as Deleuze's molar level. But Merleau-Ponty's flesh differs fundamentally from Deleuze's manifold in ways that will be discussed below.

- 8. I have previously taken up this theme at length along with its ethical implications for social interaction. See Rachel McCann, "A Sensuous Ethics of Difference," in "Ethics of Embodiment," special issue, *Hypatia* 26, no. 3 (2011): 497–517.
- 9. Maurice Merleau-Ponty, *Signs*, trans. Richard C. McCleary (Evanston, IL: Northwestern University Press, 1964), 15.
- 10. Lawrence Hass, *Merleau-Ponty's Philosophy* (Bloomington: Indiana University Press, 2008), 137, 128. Hass says that Merleau-Ponty's phenomenology attempts to "honor and express the enigmatic weave of 'wild being' without... deforming it."
 - 11. Olkowski, Postmodern Philosophy, 80.
 - 12. Ibid., 64.
 - 13. Hass, Merleau-Ponty's Philosophy, 152-54.
- 14. Ibid., 59–61, 63, 79. Note the similarities to an open or nonequilibrium thermodynamic system in this conceptualization.
- 15. Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London: Routledge and Kegan Paul, 1962), 388; cited in Hass, *Merleau-Ponty's Philosophy*, 151, 164, 155, 160. Hass considers expression an "embodied, creative way of arriving at truths and communicating with others." He stresses that, for creators, "the work of expressing the world is contingent through and through, . . . contingent upon their ability and commitment to being creative, when so much around them is mimetic. And it is contingent upon previous cultural acquisitions, upon the material and political conditions amid which such people are thinking."
- 16. Maurice Merleau-Ponty, *The Visible and the Invisible*, ed. Claude Lefort and trans. Alphonso Lingis (Evanston, IL: Northwestern University Press, 1968), 389, 394–95; cited in Hass, *Merleau-Ponty's Philosophy*, 161–63.
 - 17. Olkowski, Postmodern Philosophy, 142-43, 152.
- 18. Merleau-Ponty, *Visible and the Invisible*, 80; Maurice Merleau-Ponty, *Nature*, trans. Robert Vallier (Evanston, IL: Northwestern University Press, 2003), 173; cited in Galen A. Johnson, *The Retrieval of the Beautiful: Thinking through Merleau-Ponty's Aesthetics* (Evanston, IL: Northwestern University Press, 2010), 176.
- 19. Merleau-Ponty, *Phenomenology of Perception*, 354. Or, as Johnson puts it, "When we think of the Other, it must be the case that there is a divergence (*écart*) between the opening onto the world experienced by each of us, but also a fundamental common envelopment shared between us from which the divergence originates. Merleau-Ponty expresses this in terms of interrogation, the question mark. The other is a question mark that puts to the test the right I might arrogate to think the world for all: 'The other's gaze on the things is a second openness.'" Merleau-Ponty, *Visible and the Invisible*, 58; cited in Johnson, *Retrieval of the Beautiful*, 152.
- 20. Merleau-Ponty, *Phenomenology of Perception*, 61; cited in Johnson, *Retrieval of the Beautiful*, 155.
 - 21. Andersen and Salomon, Architecture of Patterns, 56-58.
- 22. Ibid., 60–61. The response recalls Merleau-Ponty's transformative flesh and Deleuze's crowd.
 - 23. Olkowski, Postmodern Philosophy, 52-53.
 - 24. Ibid., 152–55; Merleau-Ponty, *Phenomenology of Perception*, 394–95.
- 25. Merleau-Ponty, *Visible and the Invisible*, 101; cited in Johnson, *Retrieval of the Beautiful*, 159.
- 26. Johnson, Retrieval of the Beautiful, 159. Johnson posits "the essential relation to things and others," then, "not as indifference, or as grasping, whether physical or intel-

lectual, but as letting appearances, aspects, perspectives, and nuances—what Merleau-Ponty noted as the hollows, free space, and resonance of things—be nourished in the process of sensitive questioning and appreciation" (160).

- 27. Anderson and Salomon, Architecture of Patterns, 57, 63.
- 28. Ibid., 50.
- 29. Ibid., 50-54.
- 30. Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," Simians, Cyborgs, and Women: The Reinvention of Nature (New York: Routledge, 1991), 154, 173, 176.
- 31. bell hooks, "Choosing the Margin as a Space of Radical Openness," Yearning: Race, Gender, and Cultural Politics (Boston: South End Press, 1990), 145-53.
- 32. bell hooks, Feminist Theory: From Margin to Center (New York: South End Press, 2000), 92. Otherwise, cultural restraints will continue to limit expressive human agency. Gail Weiss illuminates the dangers of cultural devaluing of difference, arguing that such devaluation engenders a destructive, rather than therapeutic, kind of impure identity. See Gail Weiss, Body Images: Embodiment as Intercorporeality (New York: Routledge, 1999).
- 33. hooks, Feminist Theory, 90–92. She is drawing from Nancy Hartsock, "Political Change: Two Perspectives on Power," Quest: A Feminist Quarterly 1 (1974).
 - 34. Andersen and Salomon, Architecture of Patterns, 54.
 - 35. Merleau-Ponty, Phenomenology of Perception, 354.
 - 36. Johnson, Retrieval of the Beautiful, 176, 192.
- 37. Maurice Merleau-Ponty, In Praise of Philosophy and Other Essays, trans. John Wild and James Edie (Evanston, IL: Northwestern University Press, 1963), 75; cited in Johnson, Retrieval of the Beautiful, 196.
 - 38. Greg Lynn, Animate Form (New York: Princeton Architectural Press, 1999), 11.
 - 39. Ibid., 17.
- 40. Greg Lynn, "Architectural Curvilinearity: The Folded, the Pliant, and the Supple," Architectural Design 63, no. 3-4 (1993): 8-15, 8, 10.
 - 41. Lynn, Animate Form, 29.
 - 42. Ibid., 8. The emphasis on flexible alliances recalls Haraway's approach.
- 43. Andersen and Salomon, Architecture of Patterns, 68, 79. This open "identity and organizational logic" resulting in a beautiful, strong, and "intricate postmodern complexity" applies equally to the work of social transformation.
 - 44. Ibid., 72-73, 92.
 - 45. Ibid., 108.
 - 46. Ibid., 96, 107.
 - 47. Ibid., 118, 121, 132, 125.
- 48. Devonya N. Havis, "'Now, How You Sound': Considering a Different Philosophical Praxis," Hypatia 29, no. 1 (2014): 238, 240, 246.
 - 49. hooks, "Choosing the Margin," 146-48.
 - 50. Sarah L. Webb, "By Design" (unpublished poem).
 - 51. Sarah L. Webb, "Invisible Buildings" (unpublished poem).
- 52. Alisa Bierria, "Missing in Action: Violence, Power, and Discerning Agency," Hypatia 29, no. 1 (2014): 131.
 - 53. Ibid., 132-34.
- 54. Ibid., 138. Inspired by Norma Alarcón, "The Theoretical Subject(s) of This Bridge Called My Back and Anglo-American Feminism," in Making Face, Making Soul/Haciendo

- Caras; Creative and Critical Perspectives by Feminists of Color, ed. Gloria Anzaldúa (San Francisco: Aunt Lute Books, 1990), 359.
- 55. Angela Y. Davis, "Political Prisoners, Prisons, and Black Liberation," in The Angela Y. Davis Reader, ed. Joy James (1971; Malden, MA: Blackwell, 1998); cited in Bierria, "Missing in Action," 139.
 - 56. Bierria, "Missing in Action," 137, 139-40.
 - 57. Havis, "'Now, How You Sound," 239.
- 58. Ibid., 247. Drawing from Audre Lorde, Sister Outsider: Essays and Speeches (Berkeley, CA: Ten Speed Press, 1984), 113.
- 59. Saidiya V. Hartman, Scenes of Subjection: Terror, Slavery, and Self-Making in Nineteenth-Century America (New York: Oxford University Press, 1997), 8; cited in Havis, "'Now, How You Sound," 249.
- 60. Havis, "'Now, How You Sound," 244-45. Drawing from Lisa Jones, Bulletproof Diva: Tales of Race, Sex, and Hair (New York: Anchor Books, 1995).
 - 61. Andersen and Salomon, Architecture of Patterns, 56.
 - 62. Hass, Merleau-Ponty's Philosophy, 59-61.
- 63. Merleau-Ponty, Phenomenology of Perception, 61; cited in Johnson, Retrieval of the Beautiful, 155.
 - 64. Merleau-Ponty, Visible and the Invisible, 270.
 - 65. Ibid., 144; cited in Johnson, Retrieval of the Beautiful, 124.

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